A CUSTOMIZED SCRUM FRAMEWORK FOR AGILE IMPLEMENTATION OF CUSTOMER RELATIONSHIP MANAGEMENT SYSTEMS: A QUALITATIVE STUDY WITH A MALAYSIAN SALESFORCE IMPLEMENTATION PARTNER

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DECLARATION

I hereby declare that this project report is based on my original work except for citations and quotations which have been duly acknowledged. I also declare that it has not been previously and concurrently submitted for any other degree or award at UTAR or other institutions.

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APPROVAL FOR SUBMISSION

I certify that this project report entitled "A CUSTOMIZED SCRUM FRAMEWORK FOR AGILE IMPLEMENTATION OF CUSTOMER RELATIONSHIP MANAGEMENT SYSTEMS: A QUALITATIVE STUDY WITH A MALAYSIAN SALESFORCE IMPLEMENTATION PARTNER" was prepared by JULIAN GOH TOK MIN has met the required standard for submission in partial fulfilment of the requirements for the award of Master of Information Systems at Universiti Tunku Abdul Rahman.

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ABSTRACT

Despite extensive research on CRM, a critical gap exists – the influence of real-world CRM implementation frameworks on project success. This study addresses this gap alongside the lack of an integrated, agile framework for CRM implementations within Information Systems research. This qualitative case study, which was conducted with a Malaysian Salesforce implementation partner, addresses this gap. It employs a multi-phased approach and includes a pilot study, an in-depth interview with an experienced professional, followed by thematic analysis. This analysis reveals eleven key insights crucial for CRM implementation. Leveraging these insights, this study then proposes a customized Scrum framework specifically designed for agile CRM projects. The framework seamlessly integrates core Scrum principles with the unique needs of CRM implementations. Expert validation further refines the framework and offers a potentially valuable tool for organizations seeking to leverage Scrum for agile CRM projects. This research contributes to the field by:

- Unveiling the critical role of CRM implementation frameworks in project success.
- Developing a customized Scrum framework for agile CRM implementations.
- Expanding the understanding of critical success factors in CRM projects.

Future work could investigate aligning Scrum values with the process model for a more comprehensive framework. It could also explore strategies to address challenges like resource limitations and user documentation needs in real-world implementations. In conclusion, the findings of this study provide valuable insights for practitioners and pave the way for continued advancements in agile CRM implementation strategies.

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1.0 INTRODUCTION

1.1 Overview

In the early 1990's, software development was primarily done using plan-driven or heavyweight methodologies such as waterfall. These plan-driven methodologies consist of distinct and linear stages. The emphasis was on completing each stage before moving to the next, up-front planning and detailed documentation. This makes it very difficult to accommodate changes to user requirements midway through a project as costs can increase exponentially (Alsaqqa, et al, 2020).

Due to these challenges, a group of software practitioners started exploring value-driven or lightweight methodologies. These approaches placed a strong emphasis on self-organizing teams, regular delivery of functional software and close engagement between development teams and business stakeholders. Eventually, all these lightweight methodologies were grouped under the broader umbrella of the Agile framework (Gunal, 2012).

Although, the Agile framework and practices have its roots in software development, it soon attracted the attention of people outside the software development realm. They began looking for ways to see how Agile values and principles could be adopted for their own domain areas. Today, Agile methods are being used in Project Management, Business Analysis and various other domains beyond software development (Agile Alliance, 2019).

However, the use of Agile methods (such as Scrum) in the implementation of Customer Relationship Management (CRM) systems has received little attention in the field of Information Systems research (Meena & Sahu, 2021).

To address this gap, a qualitative case study will be conducted in collaboration with an experienced Malaysian Salesforce Implementation Partner. The selected partner has successfully completed numerous CRM implementation projects over a span of several years.

This research project aims to deliver valuable insights into real-world CRM implementation practices by providing an in-depth analysis. The study aims to offer practical perspectives on the frameworks employed in these implementations by shedding light on their nuances and effectiveness. Furthermore, it seeks to unravel the impact of CRM implementation on project success. This will help in contributing to a comprehensive understanding of the intricate dynamics involved in deploying CRM systems in practical business contexts. The findings are

expected to provide businesses and professionals with actionable knowledge to enhance the efficiency and success of their CRM initiatives.

The findings derived will then serve as input to a proposed customized Scrum framework, which will be specifically tailored to CRM implementations.

1.2 Importance of the Study

This research is crucial because it explores how agile methods like Scrum can be adapted and used in CRM system implementation, an area often overlooked in Information Systems research.

The aim is to gain practical insights into real-world CRM implementation practices and understand the impact of CRM implementation frameworks on project success. Ultimately, this study aims to provide organizations with an agile methodology that improves the efficiency and success of agile CRM implementations.

This methodology will bridge the gap between agile practices in new software development and CRM implementation, making it a valuable resource for organizations.

1.3 Problem Statement

Implementing a CRM system is a very involved process that requires significant change management. It also impacts different aspects of an organization such as business processes, people and technology. The two problem statements that are covered in this research are:

1. *Knowledge gap in understanding how real-world CRM implementation frameworks impact project success.* While extensive research has been conducted on the adoption and impact of CRM systems in organizations, little attention has been given to the examination of real-world CRM implementation frameworks and their influence on project success (Meena & Sahu, 2021). According to Raaijen (2018), critical success factors (CSF) for CRM implementations can be grouped into 5 categories - i) employee attitude factors, ii) employee skills factors, iii) implementation related factors, iv) organizational design factors and v) strategic management factors. However, the impact of the CRM implementation framework as a CSF has not been considered.

2. *The lack of an agile framework for CRM implementations in Information Systems research.* There is no integrated conceptual framework to lead organisations through successful CRM implementation (Garrido-Moreno & Padilla-Melendes, 2011). Furthermore, there is also limited research exploring the adaptation and customization of Agile methods, particularly Scrum, to cater to the unique requirements of CRM implementations (Meena & Sahu, 2021).

1.4 Research Objectives and Research Questions

The end goal of this research is to bridge the gap between agile usage in new software development and agile usage in CRM implementation.

Shown below are the problem statements, research objectives and research question which are addressed in this study.

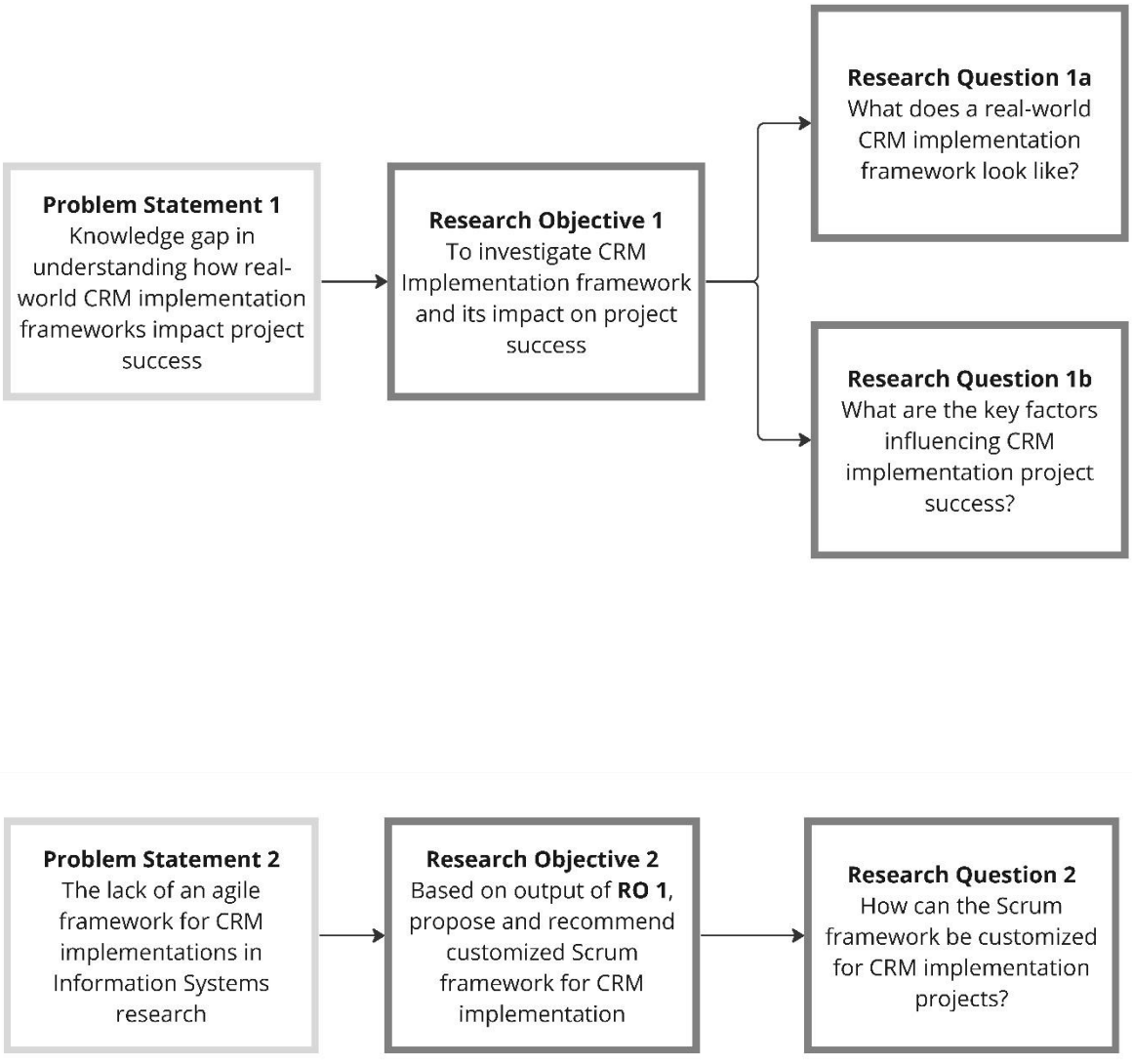

Figure 1: Research Objectives 1 and 2

1.5 Scope and Limitation of the Study

The purpose of this research is to propose and recommend a customised Scrum framework for agile implementation of Customer Relationship Management (CRM) systems. This research is carried out in partnership with an experienced Salesforce Implementation Partner, with a track record of successful CRM implementation projects.

This research adopts a qualitative approach to gather practical insights and gain a deeper understanding of real-world CRM implementation practices. The research investigates the implementation frameworks currently employed by the selected partner and their impact on project success through interviews and examination of project documents.

This research contributes to bridging the current gap in Information Systems research by exploring the application of Agile methodologies, particularly Scrum, in CRM implementation. The research proposes a customized Scrum framework specifically tailored for CRM projects. The aim is to enhance the efficiency, effectiveness, and overall success of agile CRM implementation projects.

It is important to note that this research does not cover other agile methodologies such as Extreme Programming (XP) or Dynamic Systems Development Method (DSDM). This research focuses on Scrum and its adaptation for CRM systems within the Malaysian context, leveraging the expertise of the selected Salesforce Implementation Partner.

The research scope excludes quantitative analysis or large-scale generalizations. Instead, it offers detailed qualitative insights into the practices, frameworks, and project outcomes associated with agile CRM implementations. Building upon these qualitative findings, the research proposes a customized Scrum framework that serves as a practical guide for organizations seeking to adopt agile methodologies in their CRM implementation projects.

The research recognises that the findings and proposed framework may be limited in their applicability to situations other than Malaysia and Salesforce implementations. However, the research aims to contribute to the existing body of knowledge by addressing the gap in research on agile CRM implementations and providing practical insights that can be adapted and applied in similar contexts.

1.6 Contribution of the Study

This research aims to bridge the gap between Scrum methodology used in new software development and their application in the implementation of Customer Relationship Management (CRM) systems.

By conducting a qualitative study in collaboration with a Malaysian Salesforce Implementation Partner, this research seeks to:

- Understand and analyse real-world CRM implementation practices
- Gain insights into the implementation frameworks used
- Evaluate their impact on project success

The findings are then used to propose and recommend a customized Scrum framework for CRM implementation.

1.7 Outline of the Report

This research comprises seven chapters, each addressing distinct aspects of the study.

Chapter 1 serves as an introduction, delving into the background, significance, and motivation behind the research. It explores problem statements, research objectives, questions, and outlines the study's scope of work and contributions.

Chapter 2 conducts an extensive literature review covering Agile methodologies in software development with a focus on the Scrum framework, Agile in CRM implementation, and existing frameworks for enterprise applications implementation.

Moving on to Chapter 3, a detailed examination of the qualitative research methodology is provided. This section introduces the operational research framework, pilot study, qualitative research method, data analysis method, and tools employed.

In Chapter 4, the focus shifts to presenting findings and discussions related to research objective 1, incorporating insights gained from the pilot study, interviews, and analysis.

Chapter 5 continues the exploration, delving into findings and discussions pertaining to research objective 2. The outcomes of research objective 1 serve as inputs for developing a customized Scrum framework for agile CRM implementations.

In Chapter 6, the focus is on securing expert validation and feedback and recommendations shaping its refinement.

Finally, Chapter 7 discusses the limitations and recommendations for future work. It ends with a conclusion by revisiting the accomplishments of research objectives and addressing the research questions comprehensively.

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter presents a comprehensive literature review and examines key areas relevant to this research. The chapter begins by examining agile methodologies within software development, specifically the Scrum framework. Next, it explores existing literature on the application of agile approaches in CRM implementation. Then, it analyses existing frameworks designed for enterprise application implementation. Finally, the chapter concludes with an exploration of thematic analysis.

By establishing a comprehensive understanding of these areas, this chapter lays the groundwork for the research questions and objectives outlined in subsequent chapters.

2.2 Agile in Software Development

To understand the popularity of Agile methods in software development today, one must first go back in history to understand the events that led up to it.

In 1970, Dr. Winston Royce published an IEEE paper entitled “Managing the Development of Large Software Systems” (Royce, 1987). It describes the idea of a formal software development process with 7 sequential steps. In this paper, Dr. Winston Royce acknowledged that the implementation is risky and invites failure. He then goes on to propose additional features that must be added to this process to eliminate most of the development risk. Many of the additional features were to make the processes more iterative and incremental (Morgan, 2018). Unfortunately, his paper was misunderstood and misinterpreted as an endorsement of the 7 sequential steps, which is known today as the Waterfall methodology (Booch, 2018).

The waterfall methodology gained popularity in the 1970’s and 1980’s, specifically in large and complex projects that required well-defined deliverables, milestones and documentation. It was widely adopted in industries such as defense, aerospace and government software development projects. It appealed to these customers as they could clearly see progress and results by stage and have more control over the project (Linkedin, n.d.).

However, in the 1990’s, the waterfall methodology faced many criticisms with the emergence of new technologies and customer expectations. It was seen as too slow and too rigid, unable to cope with changing customer requirements in a dynamic market. It also increased the risk of delivering a system that was late or irrelevant (Făgărășan, et al, 2021).

Faced with these difficulties, groups of software practitioners began to investigate value-driven or lightweight techniques. These approaches emphasised self-organizing teams, regular delivery of functioning software and close collaboration between development teams and business stakeholders. As a result, frameworks like Dynamic Systems Development Method (DSDM), Extreme Programming (XP) and Scrum emerged (Gunal, 2012).

With a desire to find common ground amongst the different lightweight methodologies that existed, seventeen software practitioners met up for a two-day gathering on Feb 11-13, 2001 in Utah. What emerged was the Agile Software Development Alliance and the accompanying Manifesto for Agile Software Development. In the following months, the twelve agile principles were also spelt out in full (Fowler & Highsmith, 2001).

2.2.1 Scrum Framework

Today, Scrum has emerged as one of the most popular agile methodologies. According to the 16th State of Agile Report (2022), Scrum dominates with a significant 87% share based on a survey of user responses (State of Agile, n.d.).

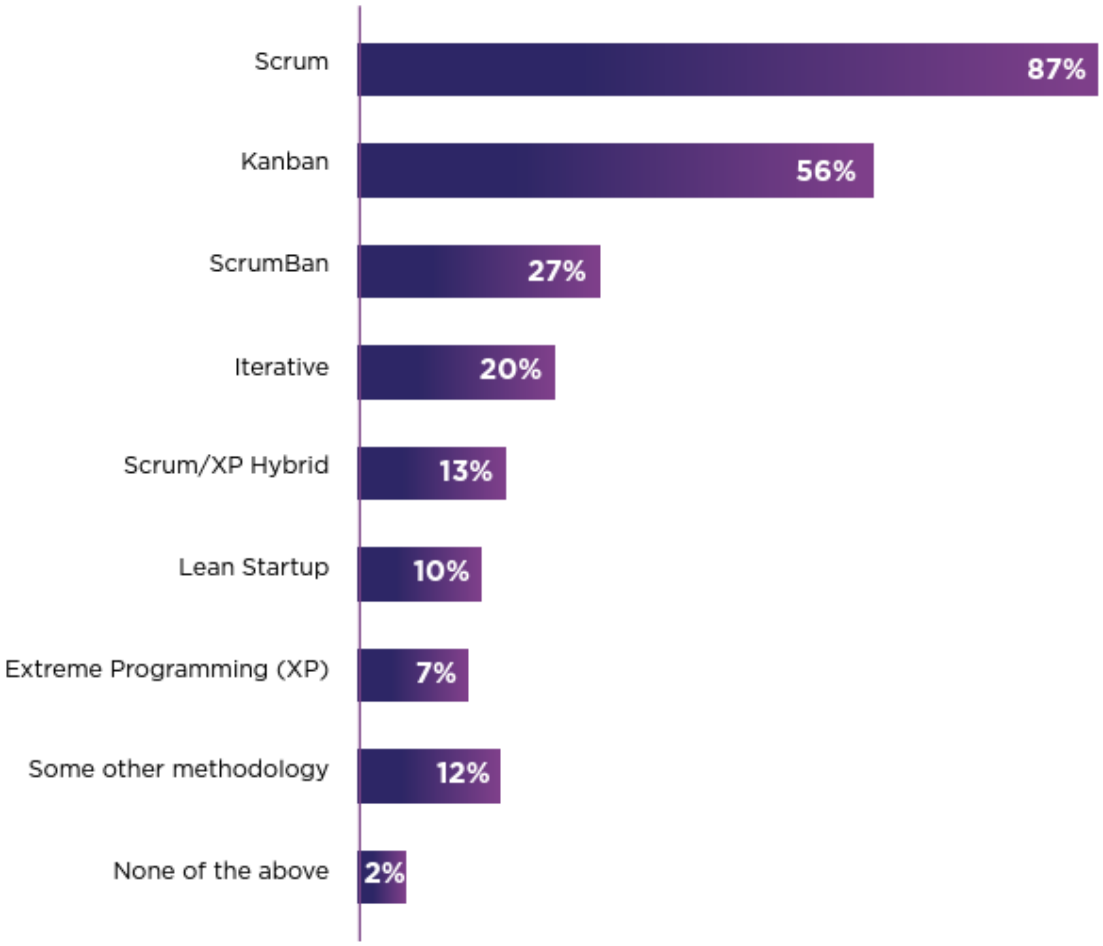

Figure 2: The 16th Annual State of Agile (2022) report (State of Agile, n.d.)

The term “Scrum” first appeared in a paper written by Takeuchi and Nonaka, that was published in the Harvard Business Review. The article was entitled "The New New Product Development Game". It discussed how innovative products have been created by top businesses like Honda, Canon and Fuji-Xerox by employing a team-based approach to product development. The significance of self-organized teams and management's function in this new approach are both emphasised (Salimi, n.d.).

They compared this new approach to the scrum formation in rugby, where players from both teams come together in a tight formation to work together to move the ball forward. This concept of collaboration, teamwork and self-organization is what influenced the adoption of the term in the Scrum methodology (Schwaber & Beedle, 2002).

In the early 1990s, Jeff Sutherland and Ken Schwaber, both software development practitioners, began refining and formalizing the Scrum methodology. They drew on the ideas presented by Takeuchi and Nonaka and combined them with their own experiences in managing complex software projects. In 1995, Sutherland and Schwaber presented Scrum as a formalized methodology at the OOPSLA conference (Object-Oriented Programming, Systems, Languages and Applications) (Schwaber, 1997).

“The 2020 Scrum Guides”, defines Scrum as “a lightweight framework that helps people, teams and organizations generate value through adaptive solutions for complex problems”. The guide also highlights the Scrum theory, values, team roles, events and artifacts (Schwaber & Sutherland, 2020). In essence, Scrum is an agile-based, project management methodology that follows a set of guidelines that emphasizes collaboration, teamwork and promotes the self-organization of teams.

The Scrum framework (Scrum.org, n.d.) as shown in Figure 3, visually demonstrates how the Scrum practices come together. The scrum framework is simple and is described using the 3-5-3 structure (Herel, 2020).

- Three (3) job roles: Product Owner, Scrum Master, Developer (see section 2.2.2)
- Five (5) events: The Sprint, Sprint Planning, Daily Scrum, Sprint Review, Sprint Retrospective (see section 2.2.3)
- Three (3) artifacts: Product Backlog, Sprint Backlog, Increment (see section 2.2.4)

All the components described in the 3-5-3 structure are needed in the Scrum framework. Ken Schwaber describes Scrum akin to a game of chess (Schwaber, 2011) with specific rules to

follow. To put the Scrum framework into use, the 3-5-3 structure are the basic rules that needs to be followed.

2.2.2 Three (3) Job Roles

In Scrum, there are three main job roles: the Product Owner, the Scrum Master, and the Development Team. Together, they make up the Scrum Team. Each team has one Product Owner and one Scrum Master, and a Development Team consisting of three to nine members with different skills.

2.2.2.1 The Product Owner

The *Product Owner* holds the position of an executive stakeholder. They are the primary decision maker, and their main objective is to ensure that the product developed by the Development Team brings maximum value. The Product Owner bears the responsibility for the products success by overseeing the tasks to be completed and serving as the sole individual accountable for managing the Product Backlog (Campbell, 2020).

2.2.2.2 The Scrum Master

The *Scrum Master* plays a critical role in ensuring that the team follows the Scrum framework diligently. They are responsible for overseeing task completion, providing support, and ensuring that the team adheres to processes. They serve as a vital link between the Product Owner and the Development Team. As an appointed member of the Development Team, the Scrum Master assumes a "player-coach" role and actively participates in tasks while also providing guidance and leadership. They also take proactive measures to identify and remove obstacles that may slow down the team's progress. They prioritize transparency in the team's work and ensures that progress and challenges are visible to all stakeholders (Campbell, 2020).

2.2.2.3 The Development Team

The *Development Team* is accountable for completing the tasks listed in the Sprint Backlog as they have complete ownership over it. They operate as a self-organizing and self-managing unit and determine their workflow and prioritize their tasks to maximize value creation. The team collaborates with the Product Owner to define sprint goals and ensure alignment with the product goal. They are cross-functional, collaborative, and leverage their collective expertise to deliver high-quality code. Each member typically possesses a broad skill set and this enables them to contribute to different aspects of the project (Herel, 2020).

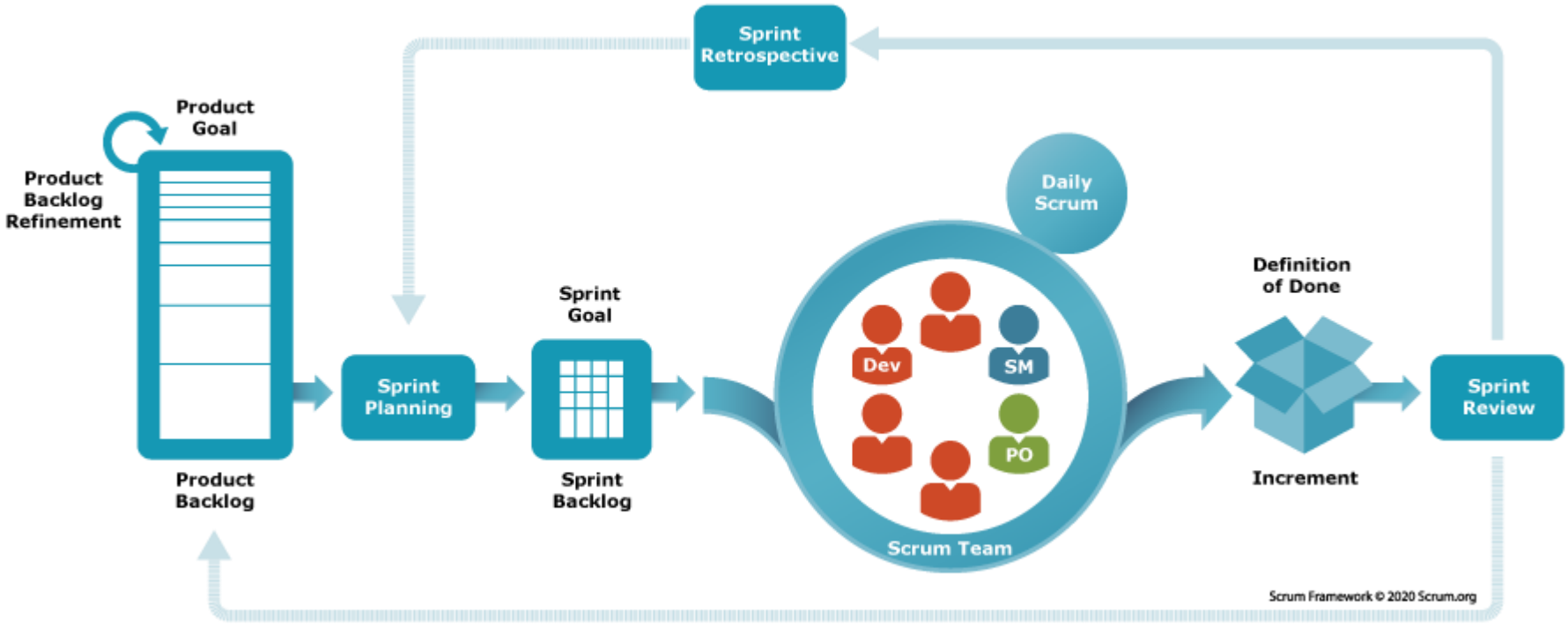

Figure 3: The Scrum Framework (Scrum.org, n.d.)

2.2.3 Five (5) Events

2.2.3.1 The Sprint: Focusing on completing selected tasks within the sprint

The Sprint acts as the overarching event that all other Scrum events rely on. It refers to a short iterative period of time (i.e. timeboxed between two to four weeks), when the Scrum team works on specific tasks (i.e. an increment of value) to achieve the Sprint Goal. The series of iterations during the sprint help to break down large products into smaller, more manageable sections (Quick, 2024).

The Sprint provides clear boundaries for the team and enables a regular feedback loop to ensure the Development team is delivering value on a regular interval. The concept of sprinting involves careful planning to keep the team constantly moving without feeling overwhelmed.

2.2.3.2 Sprint Planning: Selecting tasks for the upcoming sprint

Each sprint starts with a sprint planning event. This is a collaborative effort involving the entire Scrum team. During this event, the Scrum Master and the Development Team, works with the Product Owner to select high-value tasks (i.e. PBI's or Product Backlog Items) for the sprint. Together, they decide what tasks to prioritize and outline a plan for completing them. The end goal of this event is to get a Sprint Goal and a Sprint Backlog that is realistic and doable for the fixed amount of time (Kneafsey, 2015).

2.2.3.3 Daily Scrum: Brief daily meetings to synchronize progress and address obstacles

The Daily Scrum is a short meeting (i.e. about 15 minutes) held by the Development team every day. Its purpose is to review the work completed, plan tasks for the next 24 hours, and ensure everyone is aligned with the Sprint Goal. It's an opportunity for the Development team to provide / receive feedback and make adjustments quickly if needed (Herel, 2020).

2.2.3.4 Sprint Review: Demonstrating completed work to stakeholders and gathering feedback

The Sprint Review is when the Scrum team showcases the work completed during the sprint, to stakeholders. The goal is to seek their input to improve the product and generate excitement. This feedback also guides future Sprint planning events, product direction and ensures that stakeholder expectations are met. During the Sprint Review, stakeholders see the final product increment for the first time and provide essential insights. This event is led by the Product Owner with contributions from the Development Team (Herel, 2020).

2.2.3.5 Sprint Retrospective: Reflecting on the sprint and identifying areas for improvement

The Sprint Retrospective is a key meeting for the Scrum Team to review the past Sprint and improve for the next one. It aims for self-improvement and collaboration, with a focus on positive outcomes. The Scrum Master leads the meeting and ensures everyone's input is heard. In the meeting, the team discusses what worked well, what didn't, and how to enhance processes for continuous improvement. The meeting should be conducted in a supportive environment without blame as successful retrospectives lead to better teamwork and ultimately, satisfied users (Herel, 2020).

2.2.4 Three (3) Artifacts

2.2.4.1 Product Backlog: Capturing and prioritizing project requirements

The Product Backlog is the Product Owner's roadmap as it represents the vision for the product. It's regularly updated and prioritized to ensure only the most valuable tasks are at the top. PBI's, or Product Backlog Items, are refined and estimated during the product backlog refinement process to help maintain clarity and order. PBI's are typically expressed in terms of user stories and are pulled into Sprints by the Development Team during the Sprint Planning event based on their priority and capacity. The product backlog refinement process is not an official Scrum event, but it is vital for keeping the product backlog healthy and ensuring the product roadmap maintains its clarity (Johannes, et al, 2020).

2.2.4.2 Sprint Backlog: List of tasks to complete for current sprint

The Sprint Backlog is a subset of the Product Backlog as it contains only the PBI's the Development Team plans to complete in the current Sprint. The team collaborates with the Product Owner to prioritize tasks based on value. The Scrum Master oversees to ensure the Development Team does not overcommit and ensures tasks are manageable. This short-term planning leads to an updated Product Increment (Johannes, et al, 2020).

2.2.4.3 Increments: Iterating through sprint cycles and continuously delivering increments while adapting to feedback and changes

The primary outcome of a Sprint is a Product Increment. It's a completed piece of work (i.e. Done) that has been thoroughly reviewed by the Product Owner and stakeholders. The Product Increment represents the value committed by the Development Team and is aligned with the Sprint Goal and their Definition of Done. (Johannes, et al, 2020).

2.3 Agile in CRM Implementation

According to Grand View Research, the market size for CRM worldwide was valued at USD58.82 billion in 2022 and expected to grow at a CAGR of 13.9% from 2023 to 2030. According to the report, the primary factors driving CRM growth are hyper-personalization of customer service, the use of AI and automation and the implementation of robust social media customer service." (Grandviewresearch, 2018).

Given the importance and growth of CRM worldwide, there are numerous CRM research areas being pursued. A CRM literature review and classification study conducted by Meena & Sahu, 2021 has shown that one hundred and four (104) pieces of CRM literature published from the year 2000 to 2020, has focused on three categories of variables – Relationship, Technology and Strategy & Management. Based on this study and this authors research, there is limited literature on the application of agile methods, specifically Scrum, for CRM implementation.

One of the few and earliest research projects on using agile methodologies for implementation for enterprise systems, was a study by Stender, 2002. In the research Stender outlined a new implementation methodology named "AI^2M" – agile incremental implementation methodology. This proposed "AI^2M" methodology incorporates agile practices from the Extreme Programming (XP) methodology and Results Drive Incrementalism (RDI).

Another recent study (Eriana & Zein, 2022) briefly discussed using Scrum and SWOT analysis as an implementation framework for CRM systems. However, a generic Scrum framework was used with no specific customizations applied for the CRM implementation. The focus on the study was more skewed towards the SWOT analysis and its outcome.

Another study (Haqqizar, et al, 2023) discussed using the Scrum model to implement a Warehouse Rental Service. This study goes into more details of the Scrum framework components and how the product backlog and burndown charts were utilized. Again, a generic Scrum framework was used with no specific customizations applied.

The high rate of failure for CRM projects have also been well documented (Skuid, n.d.). It has been noted that one of the main reasons for this is because existing methodologies are lacking for CRM project implementations (Awasthi & Sangle, 2012).

2.4 Existing Enterprise Applications Implementation Frameworks

This section provides a critical analysis of frameworks currently designed for enterprise application implementation. By exploring the strengths and weaknesses of various approaches, we can identify potential areas for improvement and establish a strong foundation upon which to build our customized Scrum framework for agile CRM implementation.

Table 2.1: Analysis of Enterprise Applications Implementation Frameworks

No	Framework / Methodology	Overview	Process Model	Strengths	Weaknesses
1.	**AI²M - Agile Incremental Implementation Methodology** (Stender, 2002), (Fichman & Moses, 2000)	• The main objective of AI²M is to provide an incremental implementation approach for Enterprise Applications such as CRM. • Based on their business needs, users can choose which functionality should be deployed first. • This methodology is based on ideas from RDI (Results Driven Incrementalism) as	Phase 1: Analysis - Business Analysis - Cycle Goal Definition Phase 2: Process Design & System Customization - Planning Game - Business Design - User Testing - System Customization Phase 3: System Rollout	• Practical application combining an agile approach (using XP) and business-driven priorities (using RDI) for enterprise systems/ application implementation. • Support for iterative and incremental approach in implementation.	• Limited validation of the methodology in the field. • Effectiveness of RDI approach is dependent on level of divisibility of technology / organization e.g. works better if design of software

No	Framework / Methodology	Overview	Process Model	Strengths	Weaknesses
		well as agile software development practises, specifically XP.			was componentized vs monolithic.
2.	**CRM-Iris Methodology** (Rababah, 2013), (Chalmeta, 2006)	• A methodology for CRM implementation that integrates various aspects including: • Defining customer strategy • Re-engineering customer-oriented business process • Human resources management • Computer systems • Change management • Continuous improvement	Phase 1: Project Management and Prerequisites Phase 2: Definition of the Organizational Framework Phase 3: Definition of Customer Strategy Phase 4: Designing a Customer Relationship Assessment System Phase 5: Process Map Phase 6: Human Resources Organization and Management	• Holistic integration of strategic and technological aspects of CRM implementation. • Methodology has been used in small and medium businesses from various industries.	• Limited / No explicit support for iterative and incremental approach in implementation. • Users play a very limited role in the design of the CRM system. • No formal techniques for measuring user acceptance.

No	Framework / Methodology	Overview	Process Model	Strengths	Weaknesses
			Phase 7: Construction of the Information System Phase 8: Implementation Phase 9: Monitoring		

3.	**CRM-Six Sigma Methodology**
	(Rababah, 2013),
	(Zhedan, et al, 2007)
		• A methodology for CRM implementation that identifies and considers critical success factors (CSF) in every phase of the methodology.
		  • Measurements
		  • Management involvement
		  • Training of CRM concepts
		  • Time and Budget management
			Phase 1: Define Phase
			Phase 2: Measure Phase
			Phase 3: Analyze Phase
			Phase 4: Improve Phase
			Phase 5: Control Phase
				• Identification of important critical success factors (CSF) for a CRM implementation.
				• CRM implementation process model is aligned with well-accepted Six-Sigma (DMAIC) methodology.
					• Limited / No explicit support for iterative and incremental approach in implementation.
					• Users play a very limited role in the design of the CRM system.
					• No formal techniques for measuring user acceptance.

No	Framework / Methodology	Overview	Process Model	Strengths	Weaknesses
		• Minimizing customization • Process model groups all steps based on Six-Sigma (DMAIC) methodology as the overarching framework.		• Mapping and consideration of CSF at each Phase.	• Limited validation of the methodology in the field
4.	**Jun-Wu Methodology** (Rababah, 2013), (Jun, 2008)	• A methodology for holistic CRM implementation that identifies critical success factors (CSF) from 3 key perspectives which are then applied to the process model. • People • Process • Technology	Phase 1: Explore and Analyze Phase 2: Vision Phase 3: Build business case Phase 4: Plan and design solution Phase 5: Implement and Integrate Phase 6: Realize value	• Holistic approach (3 key perspectives) for finding the major factors affecting CRM implementation. • Support for Iterative approach in CRM implementation.	• Users play a very limited role in the design of the CRM system. • No formal techniques for measuring user acceptance. • Limited validation of the methodology in the field

2.5 Thematic Analysis

2.5.1 Introduction

In qualitative research, thematic analysis is a foundational method for analyzing and synthesizing qualitative data (i.e. interviews, focus groups), to develop themes (Morgan, 2022). The article 'Using thematic analysis in psychology' (Braun & Clarke, 2006) introduced thematic analysis to a wide range of audiences. In the year it was published, the article had the highest number of citations in Google scholar.

Thematic analysis offers versatility and allows researchers to present findings in a descriptive, explanatory, or critical manner. This approach enables researchers to understand and depict participants' realities based on their own written or spoken words (Lochmiller, 2021).

2.5.2 Six-step process

Thematic analysis is outlined as a six-step process (Humble & Mozelius, 2022).

1. Familiarizing oneself with the data. This involves transcription, immersion and noting down initial ideas
2. Generating initial codes from the data that identify a feature of the data, semantic content or latent, that appears interesting
3. Searching for themes by collating codes into potential themes
4. Reviewing themes, and checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2)
5. Defining and naming themes, and refine the specifics of each theme, and the overall story the analysis tells
6. Writing up the presentation of the found theme and fine-tuning the overall story

2.5.3 Three approaches to thematic analysis

Thematic analysis (TA) approaches have been categorized based on their alignment with qualitative research principles (Braun & Clarke, 2022) (Morgan, 2022). Three main approaches have been identified (Braun et al., 2019).

2.5.3.1. Reflexive Approach

This fully qualitative approach allows themes to surface naturally from the data, without any predetermined categories. Researchers acknowledge their own biases and even view them as a valuable asset for interpreting deeper meanings within the data. The coding process is inductive

(i.e. meaning it's driven by the data itself) and explores underlying patterns that are not seen on the surface. Themes are seen as "shared meaning-based patterns" and capture richer insights beyond simple summaries.

2.5.3.2. Coding Reliability Approach

This approach incorporates elements of "postpositive" research, which emphasizes objectivity and replicability. Themes are typically established beforehand, and researcher subjectivity is seen as a potential source of bias that needs to be minimized. This may involve using intercoder reliability tests to ensure consistency in coding.

2.5.3.3. Codebook Approach

This structured approach utilizes a pre-defined codebook, which might include some or all of the anticipated themes. While researcher subjectivity is acknowledged, the focus is on applying the established codes consistently throughout the analysis. Unlike the Coding Reliability approach, formal reliability tests may not be employed.

2.5.4 Advantages

Thematic analysis allows for deeper insights from qualitative data. This approach helps to develop a more thorough understanding and extraction of richer, nuanced insights. (Humble & Mozelius, 2022).

Unlike some other qualitative methods, thematic analysis doesn't necessitate a deep understanding of complex theories or advanced technologies (Braun & Clarke, 2006). This accessibility makes thematic analysis a particularly attractive option for researchers new to qualitative research methods.

2.5.5 Disadvantages

However, thematic analysis can be impacted by the researcher's perspective and potential biases. This is because interpreting data involves some level of personal judgement. Organizing the information gathered in thematic analysis, coming up with clear categories, and knowing the difference between codes and themes can be challenging.

There's also a risk of getting too caught up in labelling everything (overcoding). This can lead to creation of a lot of unnecessary categories. To avoid this, it's important to stay focused on the original research questions throughout the thematic analysis process (Humble & Mozelius, 2022).

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This study employs a qualitative research methodology to explore and develop a customized Scrum framework for the agile implementation of CRM systems. The research methodology follows several key steps, as described below and illustrated in Figure 4, the Operational Research Framework.

3.2 Conduct Pilot Study

Prior to gathering qualitative data, a pilot study is conducted. This pilot study involves testing the interview questions on a small group of participants to assess their effectiveness and identify any areas for improvement. This practice round helps refine the interview questions and ensures they are clear and appropriate for the target audience.

3.3 Collect Qualitative Data

These interviews aim to gather detailed information about the Salesforce partner organization's CRM implementation practices, frameworks, and project outcomes. The semi-structured interviews are conducted with key individuals involved in CRM implementation projects, including project managers, implementation specialists, and developers.

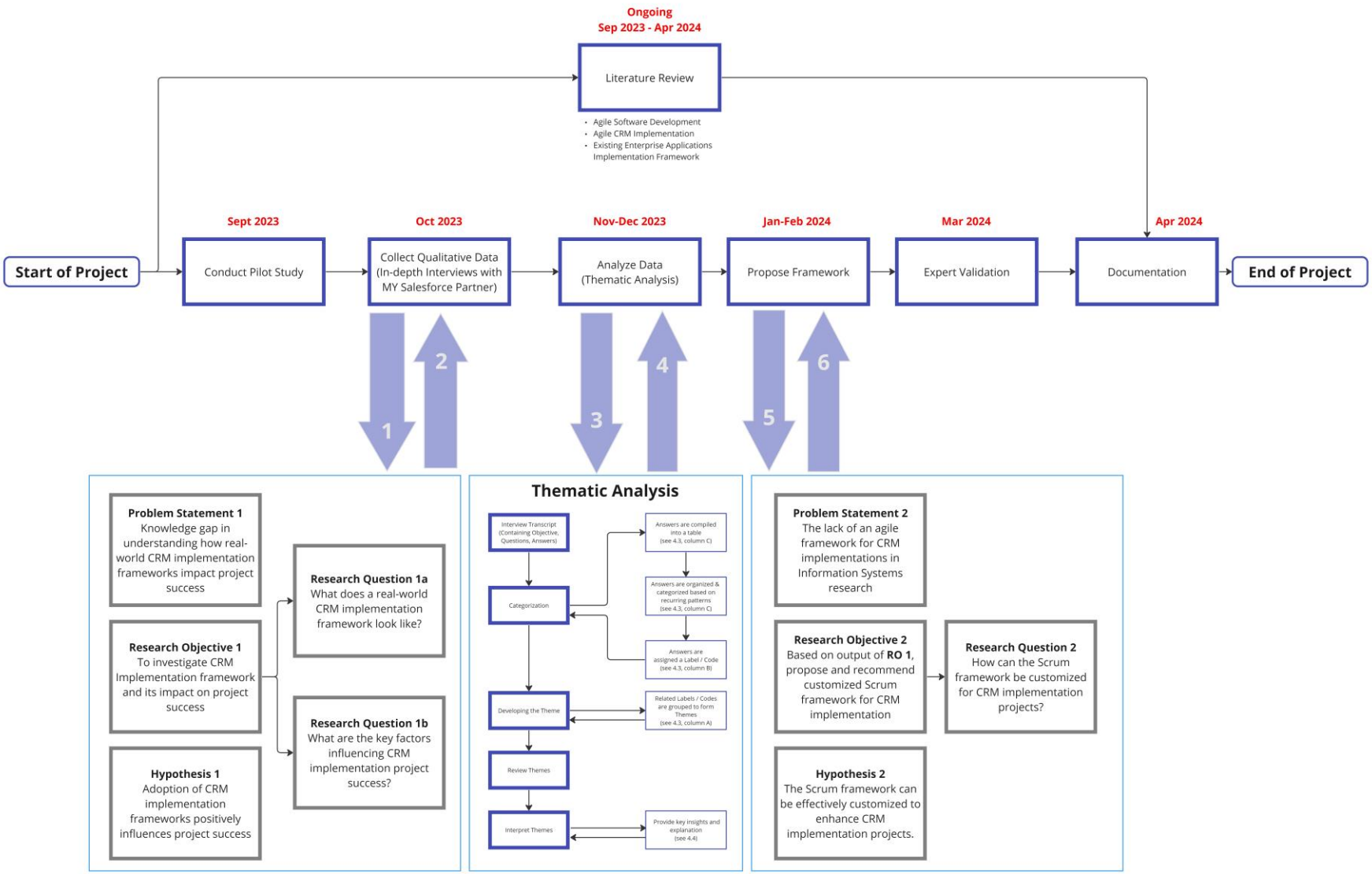

Figure 4: Operational Research Framework

3.4 Analyze Data

The qualitative data collected undergoes thematic analysis to identify recurring themes, patterns, and relationships within the data. This process helps extract deeper insights from the collected information.

Thematic analysis was chosen because it provides a highly flexible technique that can be tailored to the needs of numerous research, offering a rich and detailed yet complex description of data (Braun & Clarke, 2006) (King, 2004). In addition, thematic analysis also does not require the comprehensive theoretical and technological understanding required by other qualitative methodologies. Hence, it makes thematic analysis more accessible, particularly for those just starting out in their research career (Braun & Clarke, 2006).

Microsoft Excel is used to help organize the data. The data is organized and categorized based on recurring themes and patterns (see section 3.4.1). Next, related codes are grouped to form high-level themes that represent broader patterns within the data (see section 3.4.2). Themes are then reviewed for accuracy and relevance (see section 3.4.3). Finally, the identified themes are interpreted to provide insights (see section 3.4.4) and support the conclusions made. The detailed steps are visually illustrated in Figure 5.

3.4.1 Categorization

In this step, labels are assigned to different parts of the data that represent important concepts, ideas or patterns. This categorization process involves systematically organizing and categorizing the data based on recurring themes and patterns.

3.4.2 Developing the Theme

This step involves grouping related codes together to form high-level themes. Themes represent broader patterns or topics that emerge from the data. The process requires careful consideration of the relationships and connections between different categories and their relevance to the research objectives.

3.4.3 Review

This step involves reviewing the identified themes to ensure they accurately reflect the data and align with the research questions. The review process may lead to the reorganization of themes for clarity and alignment.

3.4.4 Interpretation

Finally, the themes are interpreted to provide explanations and key insights derived from the data analysis. This interpretation process also involves relating the themes back to the research objectives and the conclusions drawn to ensure findings are supported by the evidence. The focus here is on emphasizing the key insights gained from the thematic analysis.

3.5 Propose Framework

Based on the insights gained from the qualitative data collected from the interviews (see section 3.3) and data analysis (see section 3.4), this research proposes a customized Scrum framework specifically tailored to CRM implementations. This framework aims to address the identified challenges and optimize the efficiency and effectiveness of agile CRM implementation projects.

The proposed Scrum framework incorporates all the essential Scrum events and artifacts. Scrum events include the Sprint, Sprint Planning, Daily Scrum, Sprint Review, and Sprint Retrospective. These events facilitate collaboration, progress updates, feedback exchange, and team reflection. All of these enhances the CRM implementation process.

Core Scrum artifacts such as the Product Backlog, Sprint Backlog, and Increment are also defined within the framework. The Product Backlog serves as a prioritized list of CRM implementation requirements. The Sprint Backlog outlines the activities for each iteration or sprint, and the Increment represents the deliverable outcome of each Sprint.

The proposed framework integrates changes and recommendations based on the qualitative findings and ensures it aligns with the unique requirements of CRM implementations. This ensures the framework's practical application and effectiveness in real-world scenarios.

3.6 Expert Validation

To ensure the effectiveness of the proposed framework, this research seeks validation from two experts – one expert from the industry and another from academia. These experts play a crucial role by reviewing the framework and offering valuable feedback and suggestions. This validation process is vital as it allows for refinement and enhancement of the framework. This ultimately leads to a solution that is more practical and applicable in real-world agile CRM implementation scenarios.

The identified experts receive the proposed framework and are encouraged to provide feedback through open discussions. Their insights directly contribute to:

- Assessing the Framework's Practicality and Feasibility: The experts evaluate how well the framework can be implemented in real-world agile CRM projects.
- Ensuring Alignment with Scrum Principles: The expert assesses how effectively the framework aligns with the fundamental principles and values of Scrum methodology.
- Identifying Areas for Improvement: Expert feedback helps pinpoint areas where the framework can be further enhanced or refined for optimal effectiveness.

This expert validation process also enhances the credibility and reliability of the proposed agile CRM framework, thereby increasing its potential for real-world application.

3.7 Documentation

This final step involves documenting the entire research process, including the methodologies employed, the findings discovered, and the conclusions drawn. This documentation offers a comprehensive record of the research journey by allowing others to understand the research approach and its outcomes. Finally, by addressing the existing gap in research on agile CRM implementations, this documentation contributes to the advancement of knowledge within the field.

4.0 FINDINGS AND DISCUSSIONS FOR RESEARCH OBJECTIVE 1

4.1 Introduction

This chapter explores the findings and discussions related to research objective 1, investigating the impact of CRM implementation frameworks on project success (see Figure 1). Research questions 1a and 1b guide this exploration and focuses on understanding the characteristics of real-world CRM implementation frameworks and the critical elements influencing project success.

This chapter presents empirical evidence and thematic analysis to highlight the complex nature of CRM implementation and its significance for project success.

4.2 Pilot Study Findings

In the pilot study, a Marketing professional with thirteen years of experience was engaged. This marketing professional is well versed in CRM use, CRM implementation, and Digital Marketing. The interview areas and questions (see Appendix A) were shared, and the feedback received offered valuable insights into refining the interview questions based on the outlined research objectives.

4.2.1 Thorough coverage of CRM implementation

Feedback confirms that the interview questions comprehensively addressed critical facets of CRM implementation, from Project Management to Continuous Improvement and Customization. Refer to Appendix A for the original list of interview areas and interview questions.

4.2.2 Setting clear objectives for each interview area

The pilot study participant suggested defining simple objectives for each interview area. This clarity aids both interviewer and interviewee and ensures focused discussions. Clearly stated objectives help in achieving the desired intention of the questions and keeping responses within the intended scope.

4.2.3 Optimizing number of questions for each interview area

The participant also recommended a reduction in the number of questions for each area. Originally ranging from two to seven questions, the suggestion was to maintain two to three key questions per area. This consolidation of questions would force the interviewer to focus on

important aspects and remove any unnecessary excess. Emphasis was also placed on simplicity of language and the use of open-ended queries that align with research objective 1.

4.2.4 Focus on Malaysia-specific scope

Acknowledging the Malaysia-centric focus of this research, the participant advises omitting the interview area related to Cultural and Regional Considerations (Question 11 in Appendix A). This streamlining ensures alignment with the geographical scope and enhances the study's relevance.

These insights from the pilot study guide in refining the interview questions and ensures they are succinct, clear, and tailored to the unique aspects of CRM implementation within the Malaysian context. The goal is to facilitate meaningful discussions while adhering to the objectives of the research.

4.3 Interview Findings

After the completion of the Pilot Study (see section 4.2). the insights gained were applied when refining the interview questions. For each interview area, an objective was set, and the number of interview questions were consolidated. A minimum of two questions and a maximum of three questions were designed for each interview area. For a detailed list of the revised interview questions, please refer to Appendix B.

The interviews were conducted via three face-to-face meetings and over electronic communications in the month of September 2023. After the interviews were conducted, the outcome of the interview was documented in Microsoft Word. To view the detailed interview transcript containing objectives, questions, and answers from the Malaysian Salesforce partner, please refer to Appendix C.

After this was completed, the process of Thematic Analysis began. The thematic analysis process is visually illustrated in Figure 5.

The relevant sentences from the interview transcript were then compiled in a table, where it was organized and categorized based on recurring patterns (see section 4.4, column C) and subsequently assigned a label / code (see section 4.4, column B).

Related labels / codes were then grouped together to form high-level themes (see section 4.4, column A) that represent broader patterns. An explanation is written to summarize each theme. These themes were then reviewed for accuracy and relevance.

Finally, the themes were interpreted to provide key insights (see section 4.5) and demonstrate how it relates back to Research Objective 1 (To investigate CRM Implementation framework and its impact on project success).

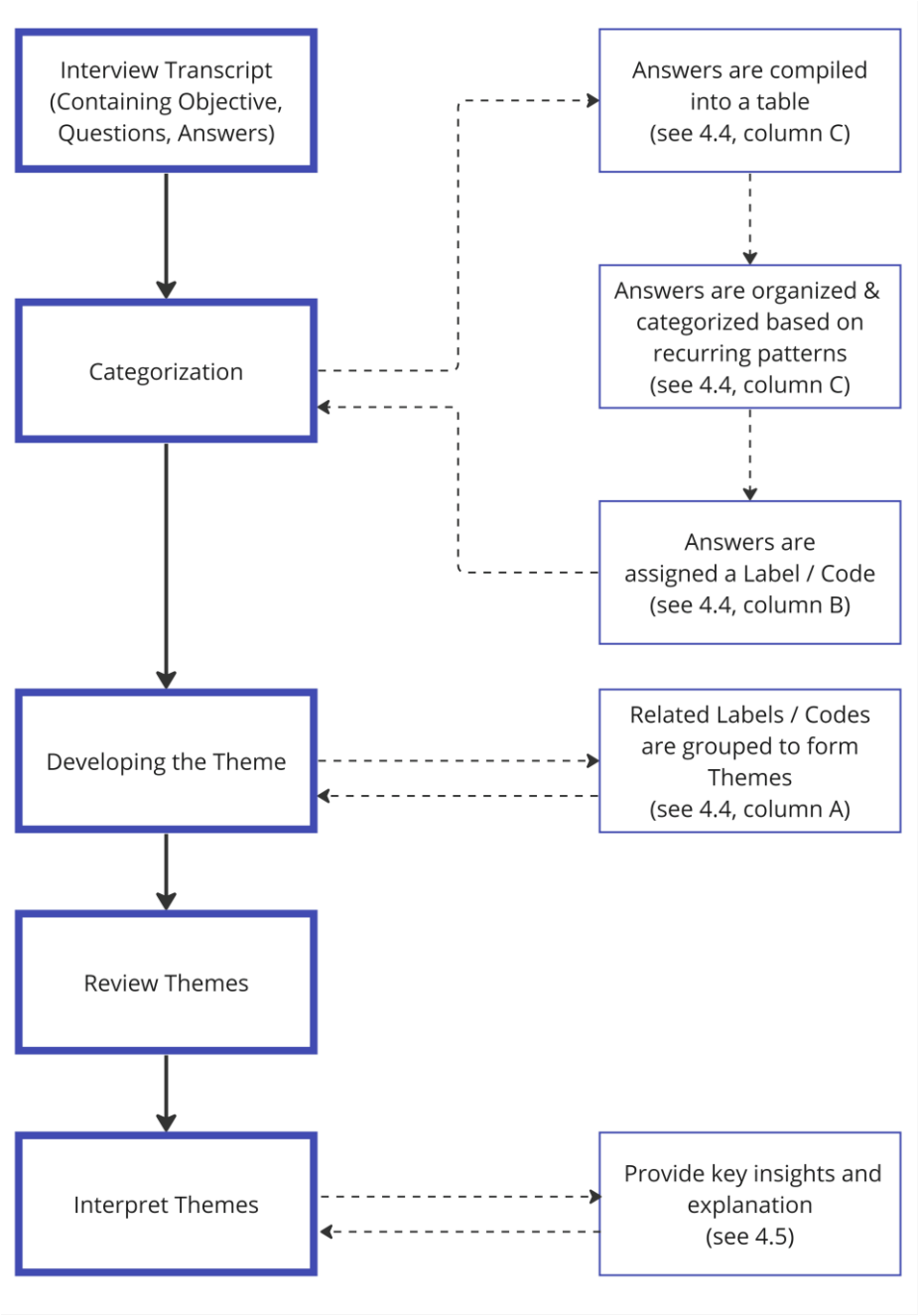

Figure 5: Thematic Analysis

4.4 Thematic Analysis: Categorization of data via Interview (C) using Label/Codes (B) AND grouping related codes to form Themes (A)

In this section of Thematic Analysis, the input from the interview transcript were systematically organized, categorized (column C), and labelled using codes (column B). These labels / codes which reflected related themes, were then grouped together to highlight broader patterns and themes (column A). A concise summary was crafted for each theme (column A) to provide a more holistic view of the data. These themes were then subjected to a thorough review to ensure accuracy and relevance. This thematic analysis process uncovered fifteen meaningful themes from the interview data.

Table 4.1: Categorization of data for Thematic Analysis

No	Themes (A)	Label / Codes (B)	Sentences from Interviews (C)
1	**Client Approach and Assessment** In the initial phase of client engagement, understanding business pain points is key for tailoring the CRM solution to meet specific challenges and strategic goals. Assessing the client's comfort level with similarly priced systems guides the implementation strategy, aligning it with their expectations. Additionally, gauging the client's technical familiarity, particularly with cloud-based setups like Office	*Business_Pain_Points*	1a - Key pain points that made them look for CRM, or what strategic advantages they hope to gain
		Commercial_Comfort_Level	1a - Whether the client has implemented similar priced systems whether its ERP or CRM, that would let me know their comfort level of onboarding Salesforce CRM

No	Themes (A)	Label / Codes (B)	Sentences from Interviews (C)
	365, ensures that users are familiar with cloud computing SaaS applications in general. This client-centric approach lays the groundwork for a customized and effective CRM implementation.	*Technical_Familiarity_Cloud*	1a - Do they have a cloud-based IT setup such as Office 365 so as to let me know how familiar they are with the Cloud
2	**Client Readiness Assessment** Before implementing CRM, an assessment of how the client sells is done - whether it's relationship-based or account-based. This helps in customizing the CRM to fit the client's sales style. Checks are also done on whether the client has clarity on their goals and processes. This would lead to better CRM alignment with what the client wants to achieve in sales, services, and/or marketing. Lastly, the support processes are looked at, making sure the CRM suits their specific customer interaction needs.	*Sales_Approach_Assessment*	1b - Are they doing relationship-based selling or account based?
		KPI_and_Processes_Assessment	1b - Do they have a clear KPI to improve sales/services or marketing?
		Sales_Team_Support_Assessment	1b - Do they have any processes in place to help the sales team in closing or serving customers?

No	Themes (A)	Label / Codes (B)	Sentences from Interviews (C)
3	**Project Initiation Objectives** When starting a CRM project, it's crucial to track how users adopt and use the system. This helps continually assess and improve user engagement. Cleaning up customer data ensures accurate analytics for better decisions. Recording all sales activities, especially in B2B scenarios, makes the CRM more effective. Regular weekly assessments using Salesforce dashboards align with agile principles, allowing quick adjustments based on user feedback for ongoing improvement.	*Adoption_and_Usage_Metrics*	1c - Look at 2 key metrics, one is the adoption/usage and second would be how CRM helps them improve sales
		Clean_Customer_Data_Strategy	1c - Clean up the customer/account table so that no rubbish or stale data in CRM
		Record_Sales_Activities_Strategy	1c - Record all sales activities in CRM and make sure there's follow up plan for every opportunity (B2B) or proper segment of customers (B2C)
		Continuous_Assessment_Strategy	1c - Continuous weekly assessment of adoption using Salesforce adoption dashboard
4	**CRM Implementation Methodology** In the CRM Implementation Methodology theme, workshops play a crucial role by engaging key users early and turning them into	*Workshop_Introduction*	2a - Get a workshop to introduce CRM to all key users
		Existing_Customer_Database_Integration	2a - Get hold of their existing customer's database and have them inside the CRM

No	Themes (A)	Label / Codes (B)	Sentences from Interviews (C)
	CRM advocates. Integrating the existing customer database ensures a seamless transition with consistent data. Emphasizing daily activities in CRM usage enhances data accuracy. Identifying processes and governance aligns the CRM with specific business needs. Finally, recognizing and addressing productivity bottlenecks ensures user satisfaction by tackling specific challenges.	*Daily_Activities_Capture*	2a - Make sure everyone login and start capture their daily activities in CRM
		Identify_Processes_Governance	2a - Identify processes and governance to incorporate into CRM
		Productivity_Bottleneck_Identification	2a - Identify where are the productivity bottleneck and how we can customize CRM to enhance their adoption
5	**Implementation Phases and Milestones** The Implementation Phases and Milestones theme follows a systematic process crucial for CRM success. To set the foundation, a Requirement Workshops is conducted to get a thorough understanding of client needs.	*Requirement_Workshop_Process*	2b - Requirement workshop for team to know the CRM environment and understand their requirements
		Solution_Design_Process	2b - Come out with the solution design to capture all the data to be available inside CRM, how are the data got ingested into CRM and identify how these data will be consumed

No	Themes (A)	Label / Codes (B)	Sentences from Interviews (C)
	Then, a Solution Design process helps to create a comprehensive plan for data management. Next, the Initial Data Migration fosters early user adoption. Customization ensures CRM precision, followed by a Final Data Migration check. The Key User Testing process validates customization before sign-off and helps to reduce post-implementation hiccups. Finally, Continuous Assessment echoes agile principles, facilitating swift improvements based on user feedback over the next three months. This sequential approach ensures a seamless and tailored CRM implementation.	*Initial_Data_Migration_Process*	2b - For smaller projects, we will do some initial data migration and user adoption of CRM within the first few weeks for the team to come onboard
		Customization_Process	2b - Proceed with the customization of the CRM which involves some flow design or scripting
		Final_Data_Migration_Process	2b - Final round of data migration if needed before the final training
		Key_User_Testing_Process	2b - Key users are gathered for one round of testing and training before they sign off the customization
		Continuous_Assessment_Process	2b - Continuous assessment on adoption and usages for the next 3 months
6	**Project Management Techniques**	*Trello_Task_Tracking*	3a - Make use of Trello to track our task items

No	Themes (A)	Label / Codes (B)	Sentences from Interviews (C)
	Using Trello for task tracking boosts project transparency and accountability through visual progress monitoring. When coupled with MS Teams for communication, this cultivates collaboration and help form a practical and transparent communication strategy. Engaging clients in weekly or biweekly updates, demos, and progress meetings ensures transparency, early feedback, and alignment, reducing misunderstandings. This comprehensive project management approach enhances efficiency and client engagement during implementation.	*MS_Teams_Communication*	3a - Tasks will be monitored on every other day, and we have short calls over MS Teams for progress updates or group troubleshooting
		Client_Involvement	3b - Updates with clients will be mostly on a weekly or biweekly basis. There will be demos to show them our progress. We will try to get the client to try out the sandbox as well.
7	**Roles and Responsibilities** In the world of CRM implementation, key roles drive success. The Project Manager oversees expectations and secures signoffs, ensuring smooth communication. CRM Consultants translate customer needs into system	*Project_Manager_Role*	3c - Project Manager - To manage customer's expectation and sign off
		CRM_Consultants_Role	3c - CRM Consultants - Translate customer's requirements into configuration and documentation. Sometimes there are 2-3 of them depending on the project

No	Themes (A)	Label / Codes (B)	Sentences from Interviews (C)
	configurations, aligning with client expectations. CRM Developers manage the technical aspects, from coding to customization. This helps ensure the system's adaptability. Together, they form a dynamic team, harmonizing efforts for a seamless CRM integration.	*CRM_Developer_Role*	3c - CRM Developer - Anything that requires coding will be done by the developer. Ideal break down is 2 developers to 1 consultant
8	**Customization and Configuration** In the Customization and Configuration theme, Salesforce CRM adopts user-friendly low-code methods. This enables swift adjustments to meet evolving client needs. The platform's versatility shines in crafting tailored user interfaces through Lightning Web Components, allowing developers to meet specific requirements with ease. Tackling integration challenges involves a strategic approach. This includes evaluating	*Low_Code_Customization_Methods*	4a - There are a few ways to customize Salesforce CRM because it is a low code platform.
		Custom_UI_Coding_Examples	4a - Anything that requires unique custom UI would have to be coded in Lighting Web Component and this is done by the developers
		Integration_Challenges_Resolution	4a - Any integration with 3rd party systems, we will evaluate whether there are any tools we can purchase before we use APEX to program the integration. We always suggest the customer

No	Themes (A)	Label / Codes (B)	Sentences from Interviews (C)
	tools for third-party system integration and resorting to APEX programming only if necessary. Complex scenarios, such as linking on-premises systems to the cloud, are met with innovative solutions like building data tunnels using Python or .NET. Change requests are captured in Trello, where their impacts on schema and processes are methodically assessed. Prior to implementation, solutions undergo thorough cost evaluation, ensuring a prudent approach before development and testing in the sandbox.		build their IT within well-established systems so it's easier to talk to each other
		Challenging_Integration_Example	4b - Any on-prem system that is not connected to the cloud, we have to build a tunnel outside of Salesforce to manage the data flow, this may be done in Python or .NET
		Change_Request_Management	4c - All change requests will be captured in Trello, and they definitely have to be evaluated based on the following criteria: What is the business and technical impact on the CRM? We have to evaluate based on Schema changes, System process changes, User experience on the system, Impact on customization, i.e., this will break certain features
		Solution_and_Cost_Evaluation	4c - Do we have a solution or idea how to implement it. What will be the estimated effort? So, the next question will be, is it chargeable? Once agreed on the impact and costing, we will

No	Themes (A)	Label / Codes (B)	Sentences from Interviews (C)
			develop the change in the sandbox to be tested by users.
9	**Testing and Quality Assurance** In the Testing and Quality Assurance theme, a meticulous approach is taken to ensure the reliability of Salesforce CRM. The adoption of early-round testing, particularly after showcasing features to users, stands out as a strategy for prompt issue detection. This provides a proactive stance toward quality assurance. The Code Unit Testing Process plays a pivotal role in code readiness and contributing to a dependable CRM system. The User Acceptance Testing (UAT) process, involving a broad user base, serves as a final litmus test. It helps check that the CRM aligns with user expectations before full deployment. Employing Trello for task acceptance proves instrumental in	*Early_Round_Testing_Methods*	5a - Depends on the client, but we prefer early round testing once we demo the feature to the users. In this case, the user will appoint a key stakeholder or dedicated tester to test out the changes
		Code_Unit_Testing_Process	5a - For code changes, we have to write our own Unit Test to be ready for deployment as per the requirement from Salesforce
		UAT_Phase_Process	5a - A final round of testing with most users will be done in a UAT phase
		Task_Acceptance_Methods	5b - Since our tasks are all captured on Trello, every “card” would be accepted by the tester and the final end-users
		Task_Mapping_to_User_Story	5b - All tasks would need to map to a detailed user story on the card, and if this is related to

No	Themes (A)	Label / Codes (B)	Sentences from Interviews (C)
	systematic tracking, fostering transparency, and collaborative user validation. Furthermore, the emphasis on identifying critical data issues and pre-emptively addressing licensing challenges underscores a commitment to a robust CRM foundation.		integration, an interface contract has to be defined
		Critical_Issue_During_Testing	5c - Data issues are always the major upset in any CRM project, especially as we discovered at a later stage during data migration where data from legacy systems do not fit our schema
		Licensing_Issues_During_Testing	5c - Being a platform there are also issues on licensing that the client didn't foresee and procurement of additional licenses cause delay in the project
10	**Deployment and Go-Live** In the Deployment and Go-Live theme, the utilization of Salesforce's DevOps platform ensures a systematic process for migrating changes. The adoption of a phased deployment strategy every two weeks minimizes system disruption, particularly during weekend	*Deployment_Management_Process*	7a - Salesforce provides a Devops platform for us to migrate changes from the sandbox to the production environment. All code changes will need to go through a unit test with 75% code coverage
		Disruption_Minimization_Strategies	7b - Instead of big bang deployment, we try to have deployments every 2 weeks at a minimum

No	Themes (A)	Label / Codes (B)	Sentences from Interviews (C)
	deployments in non-peak hours. Additionally, storing metadata in GitHub as part of contingency planning ensures a safeguarded recovery mechanism. This helps enhance preparedness for unforeseen issues during the critical go-live phase.		to minimize the impact on the system. This could be downtime during weekends so as not to impact the users
		Go-Live_Contingency_Plans	7c - Salesforce allows developers not only to keep their code using Visual Studio Code but also metadata of all data schema and settings down to the profile security setup. They are defined in XML format and on a weekly basis, we will extract the metadata and store them in source code in the form of GitHub
11	**Change Management and User Adoption** In the Change Management and User Adoption theme, a strategic process involves early user involvement in testing and system demos. This is done to facilitate smoother transitions. Meetings discussing feature usage and utilizing adoption dashboards promote ongoing user engagement. Notably, success hinges on having	*Change_Management_Process*	8a - Involve users early in testing and demo of the system during development. When possible, help users onboard to make use of features that are out of the box. This minimizes training time and eases their familiarization with the system
		User_Adoption_Meetings	8b - I will run meetings with all users to talk about what features they use most, and what features they are not using. We make use of the

No	Themes (A)	Label / Codes (B)	Sentences from Interviews (C)
	project sponsors present during progress meetings. This ensures that their insights and authoritative responses bolster the overall success of change initiatives. This proactive approach fosters a collaborative atmosphere, minimizes resistance and maximizes the effectiveness of CRM system integration.		Adoption Dashboard and Kanban Board in Salesforce to demonstrate how fast users progress with the CRM
		Successful_Change_Initiatives	8c - Change management always works best when the project sponsor i.e., the head of sales or even the C level are on board during progress meetings. With them having firsthand knowledge about the system, they not only provide valuable feedback in the project, but also, they will be able to give authoritative answers to users' pushback on adopting the CRM
12	**Monitoring and Post-Implementation Support** In the Monitoring and Post-Implementation Support theme, conducting weekly bug fixes	*Support_and_Maintenance_Services*	9a - We still do weekly updates for usual bugs and issues review. Identify what works, what doesn't in terms of functionality of the CRM, and see what we can do to improve. Adoption issues such as what users are not using in the

No	Themes (A)	Label / Codes (B)	Sentences from Interviews (C)
	provides continuous support and a basis for improvement. The efficient resolution of identified issues within 48 hours is due to Salesforce's low-code capabilities and a streamlined process. Leveraging out-of-the-box dashboards for performance monitoring allows data-driven decision making and improving user experience.		CRM, help them with additional demo and walkthroughs
		Ongoing_Updates_and_Bug_Fixes	9b - Log everything via the PM, and he will enter them into Trello to be tracked. Fix them based on the severity of the issue, and because Salesforce is low code, then the fixes seldom go beyond 48 hours. The SaaS Cloud nature of Salesforce CRM also means we don't need downtime to deploy new fixes or features. However, for certain issues that require data patching, we will do it during non-peak hours
		Performance_Monitoring_Methods	9c - There are a lot of out-of-the-box dashboards from Salesforce to measure, of course, that's very dependent that everyone cooperates and tries to use the CRM system. So, we can make data-driven decisions to improve the user experience

No	Themes (A)	Label / Codes (B)	Sentences from Interviews (C)
13	**Documentation and Knowledge Transfer** In the Documentation and Knowledge Transfer theme, comprehensive documentation is achieved through capturing requirements in Word files and processes in PowerPoint presentations. This fosters transparency as client's own all customization. The Knowledge Transfer Process involves a one-day Salesforce Admin training which will enable clients to manage the CRM system effectively. The provided Word documents, PowerPoint presentations, and Teams recordings, serve as accessible references. This promotes ongoing self-reliance for clients in utilizing the Salesforce CRM.	*Documentation_Methods*	10a - We capture requirements such as schema and processes in a Word file, normally required by the client to sign off the phase 1 payment to us. We document all training in point form using Power Point, and we will do an MS Teams call with recording to outline the workshop. And the nature of script and metadata-driven design of Salesforce CRM, the client owns all customization together with the code base
		Knowledge_Transfer_Process	10b - Yes, we normally run a one-day training as Salesforce Admin intro to the customer
		Provided_Resources_for_Reference	10c - As mentioned in the first question, one Word, one PowerPoint, and one Teams recording

No	Themes (A)	Label / Codes (B)	Sentences from Interviews (C)
14	**Continuous Improvement** In the Continuous Improvement theme, the incorporation of feedback is a weekly ritual. This promotes ongoing enhancements driven by data-driven insights from user engagement and sales funnel metrics. Extracting valuable lessons from CRM, particularly industry-specific processes and data schema provides the foundation for future project efficiency. This proactive stance is evident in the team's integration of feedback and lessons into GitHub. This in turn, could potentially pave the way for a Knowledge Management system or the evolution of intellectual properties into tangible products as the team grows.	*Feedback_Incorporation_Process*	11a - Weekly meeting and get feedback, before the meeting, we will look at adoption numbers and the sales funnel to determine the success of CRM. Whether sales improve or drop, they are always learning from it, and in the meeting, we will go through with them
		Valuable_Lessons_From_CRM	11b - There's a lot of processes and data schema that are specific to certain industry, which we certainly can reuse in similar clients, this forms our set of intellectual properties
		Integration_of_Feedback_and_Lessons	11c - GitHub is our knowledge base, where all metadata and codes are available as our reference. We don't have yet any proper KM system in place but as the team grows, we look forward to that or produce certain IPs into products

No	Themes (A)	Label / Codes (B)	Sentences from Interviews (C)
15	**CRM Implementation Framework & Success Metrics** The success of CRM implementation relies on measuring user adoption and tangible ROI. This user-centric approach emphasizes active system use and aligns success metrics with broader business goals. This indicates a strategic perspective beyond technical aspects. The framework's success contributions include the swift delivery enabled by Salesforce CRM's customization ease, reducing resistance through existing CRM knowledge, and effective industry-focused communication. These elements underscore adaptability, industry expertise, and user acceptance as crucial for ensuring CRM implementation success. Ultimately, it is a balance between both technical and strategic considerations.	*Metrics_of_Success*	12a - Adoption of users' usage on the system, and of course there are actual ROI from using the CRM. Expansion of the process, as CRM covers marketing, sales, and service, normally a client starts with one pillar, but we want them to expand to other pillars or adopt one of the Salesforce industry clouds
		Framework_Contributions_to_Success	12b - The ease of customization on Salesforce CRM helps us deliver quickly and allow clients to actualize their ROI and better time to market. A team with existing knowledge on Salesforce or other CRMs does help sometimes, as the resistance to CRM is lesser than otherwise. Our focus on industries, namely manufacturing, property development and retail B2C helps us to pick the customer's language, and this lessens a lot of misunderstandings during development

4.5 Thematic Analysis: Uncovering Key Insights based on Analysis of Themes

In the final part of Thematic Analysis, the fifteen themes (see section 4.4) were analyzed and interpreted to uncover eleven key insights. These eleven key insights provide an in depth understanding and appreciation of how CRM implementation frameworks can influence and impact project success (Research Objective 1).

Table 4.2: Uncovering key insights based on Thematic Analysis

No	Key Insights	Explanation	Themes (See 4.4)
1	**Align CRM with client's strategic goals and objectives**	Adopting a client-centric approach in the context of CRM implementation implies prioritizing the unique needs and strategic goals of the client. It means understanding not just what the client wants in terms of features but understanding their broader business objectives. This is crucial because a CRM system should not only be a technical solution but a strategic partner. Aligning the CRM with the client's strategic goals ensures that the implemented solution not only meets immediate needs but contributes meaningfully to the client's long-term success. This emphasis on strategic alignment forms the foundation of a successful CRM implementation and elevates it from a mere technical solution into a strategic enabler.	1 - Client Approach and Assessment 2 - Client Readiness Assessment

No	Key Insights	Explanation	Themes (See 4.4)
		This insight directly addresses research objective 1 by emphasizing the importance of aligning CRM strategies with the broader business objectives of the client, highlighting its impact on CRM project success.	
2	**A user-first approach promotes seamless user adoption of CRM**	Taking a user-first approach means placing the end-users at the forefront of the CRM implementation strategy. It involves not just implementing features but ensuring that these features are user-friendly, aligned with actual user needs, and promote seamless adoption. In a dynamic business environment, prioritizing continuous user engagement and transparent communication is critical. This approach ensures that each iteration of the CRM resonates with the end-users, fostering a sense of ownership and satisfaction. After all, a CRM is only as effective as its adoption by the users it serves. This insight directly contributes to research objective 1 by emphasizing the critical role of a user-first approach in ensuring the successful adoption of the CRM, thus influencing overall project success.	3 - Project Initiation Objectives 6 - Project Management Techniques 11 - Change Management and User Adoption

No	Key Insights	Explanation	Themes (See 4.4)
3	**A well-defined CRM implementation process minimizes disruption and maximizes efficiency**	A systematic implementation involves breaking down the CRM implementation process into well-defined, sequential phases. Each phase builds upon the previous one in a structured manner, ensuring an optimal progression. By systematically approaching the implementation, disruptions are minimized, and efficiency is maximized. It provides a clear roadmap for development, testing, and deployment, reducing the likelihood of oversights or errors. This systematic approach ensures that each phase contributes to the overall success of the CRM implementation. This insight aligns with research objective 1 by highlighting the significance of a well-structured CRM implementation process in maximizing efficiency and minimizing disruptions, ultimately impacting the overall success of the project.	5 - Implementation Phases and Milestones
4	**Collaborative roles are key to overcoming stumbling blocks**	Collaborative roles within the CRM team recognize success as a collective effort. A project manager oversees expectations and communication, CRM consultants translate client needs into configurations, and developers ensure technical adaptability. Each role collaborates to address challenges collectively, ensuring that the team operates seamlessly. This collaborative synergy is essential for overcoming hurdles and achieving a success CRM implementation.	4 - CRM Implementation Methodology

No	Key Insights	Explanation	Themes (See 4.4)
		This insight directly contributes to research objective 1 by emphasizing the critical role of collaborative teamwork in overcoming challenges and ensuring the success of the CRM implementation framework.	7 - Roles and Responsibilities
5	**Flexible customization approaches contribute to business agility**	Versatile customization is the ability to adapt quickly to changing business needs. The CRM must be crafted with low-code methods, utilize Lightning Web Components, and strategically integrate to ensure adaptability. This versatility enables the CRM to evolve with the dynamic nature of businesses, meeting unique requirements promptly. It transforms the CRM into an agile and responsive asset to meet business needs. This insight directly addresses research objective 1 by emphasizing the importance of flexible customization in enhancing business agility, a critical factor in understanding the impact of CRM implementation on project success.	8 - Customization and Configuration
6	**Extensive testing leads to better reliability**	Extensive testing plays a critical role in ensuring the robustness of a CRM implementation. The various testing phases, including early-round testing, code unit testing, and User Acceptance Testing (UAT), serve as quality assurance checkpoints throughout the development journey. By subjecting the CRM to rigorous testing, organizations can verify its reliability, minimize post-implementation issues, and	9 - Testing and Quality Assurance

No	Key Insights	Explanation	Themes (See 4.4)
		instil confidence in end-users. This deliberate investment in thorough testing contributes significantly to the long-term success and stability of the CRM system. This insight directly contributes to research objective 1 as it underscores the importance of thorough testing in ensuring the reliability and stability of CRM, crucial factors in evaluating its impact on project success.	
7	**A proactive approach to change management can result in more seamless transitions**	Proactive change management involves anticipating and effectively managing changes before they disrupt the system. By involving users early, discussing feature usage, and actively engaging project sponsors, organizations can expedite decision-making and minimize resistance. This proactive approach ensures that changes are not obstacles but rather opportunities for enhancing CRM functionality. This insight aligns with research objective 1 by highlighting the significance of proactive change management in optimizing transitions during CRM implementation, ultimately influencing project success.	11 - Change Management and User Adoption
8	**Providing continuous support can lead to increased user satisfaction**	Providing continuous support is the one of the key foundations of a stable CRM environment. Techniques used include weekly bug fixes, rapid issue resolution, and data-driven decision-making through dashboards. This dynamic process ensures the CRM remains stable, improves progressively, and increases user satisfaction.	12 - Monitoring and Post-Implementation Support

No	Key Insights	Explanation	Themes (See 4.4)
		This insight directly contributes to research objective 1 by emphasizing how continuous support is integral to CRM success, impacting user satisfaction and overall project success.	
9	**Client independence can be achieved via comprehensive documentation**	Comprehensive documentation (i.e. capture of requirements and processes), serves as a crucial reference point for clients. It not only ensures transparency and collaboration but also empowers clients to effectively manage their CRM systems. The knowledge transfer process, which includes Salesforce Admin training and access to relevant resources, equips clients with self-reliance, thereby reducing their dependency on external support. Beyond mere documentation, this approach aims to empower clients, enabling them to navigate and manage their CRM confidently. This insight aligns with research objective 1 by highlighting how client empowerment, achieved through robust documentation, is crucial for the success of CRM implementations.	13 - Documentation and Knowledge Transfer
10	**Continuous Improvement and Iterative Learning are synonymous**	Incorporating weekly feedback, extracting key lessons, and incorporating them into GitHub demonstrate a proactive approach to continuous improvement. This approach guarantees that the CRM adapts to changing demands and promotes long-term success. It's not simply about addressing problems; each iteration is about	14 - Continuous Improvement

No	Key Insights	Explanation	Themes (See 4.4)
		evolving, adapting, and learning from past lessons. This insight directly contributes to research objective 1 by emphasizing that continuous improvement and iterative learning are pivotal for the success of CRM projects.	
11	**Measure CRM implementation success holistically, not just the technical aspects**	Holistic metrics go beyond just tracking technical aspects. Instead, they align CRM success with broader business goals. Measuring user adoption and tangible ROI ensures that the CRM outcomes contribute meaningfully to the organization's overall success. This approach goes beyond technical functionalities, delivering a comprehensive view of success essential for business alignment. This insight directly supports research objective 1 by emphasizing the importance of measuring CRM success in a comprehensive manner, ensuring its meaningful impact on overall project success.	10 - Deployment and Go-Live 15 - CRM Implementation Framework & Success Metrics

4.6 Conclusion

The findings and discussions for research objective 1 (To investigate CRM implementation framework and its impact on project success) has encompassed a pilot study, a detailed interview and case study of a Malaysian Salesforce Partner and finally, Thematic Analysis based on the interview transcript.

The outcome of this comprehensive approach has resulted in:

- Documentation of a real-world CRM implementation framework. This answers research question 1a ‘What does a real-world CRM implementation framework look like?’ as shown in Figure 6.
- Identification of fifty eight (58) codes/labels, fifteen (15) unique themes, synthesized into eleven (11) key insights. This answers research question 1b ‘What are the key factors influencing CRM implementation project success?’ as shown in Figure 7.

In conclusion, the successful implementation of a CRM system extends beyond just technical functionalities. It is an evolution of a strategic partnership with clients. The key insight of aligning the CRM with clients' strategic goals establishes the foundation for a win-win relationship, transforming the CRM from a mere tool into a strategic asset. The prioritization of a user-first approach also ensures a seamless adoption process, recognizing that the effectiveness of a CRM is intricately linked to user engagement.

A well-defined implementation process minimizes disruptions and maximizes efficiency, providing a clear roadmap for success. The collaborative efforts within the CRM team become very important and acts as the backbone for overcoming obstacles and achieving success. The recognition of the importance of flexible customization underscores its role in enhancing business agility – a critical factor in understanding the CRM's broader impact.

Emphasis on extensive testing serves as a safeguard for reliability, a cornerstone for CRM stability and success. Proactive change management optimizes transitions, transforming changes into opportunities for CRM enhancement. Continuous support is identified as foundational for stability and heightened user satisfaction.

The empowerment of clients through comprehensive documentation ensures self-reliance and reduces dependency. Continuous improvement and iterative learning emerge as synonymous, guaranteeing CRM adaptation and long-term success. Finally, holistic metrics provide a comprehensive view of success by aligning CRM outcomes with broader business goals.

Collectively, these insights significantly contribute to research objective 1 (To investigate CRM implementation framework and its impact on project success) by highlighting the multifaceted nature of CRM implementation and its profound impact on overall project success.

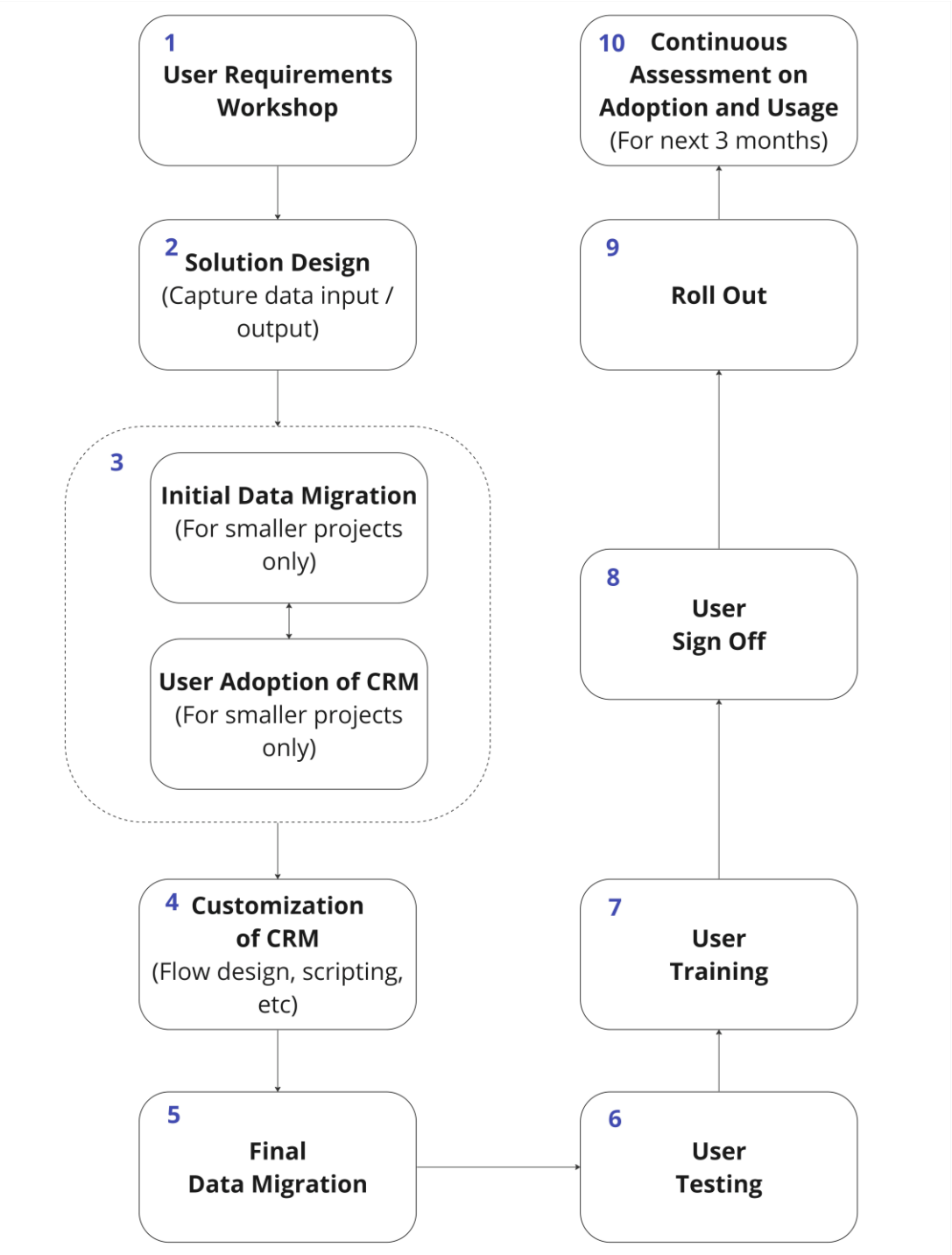

Figure 6: Answer to Research Question 1a 'What does a real-world CRM implementation framework look like?'

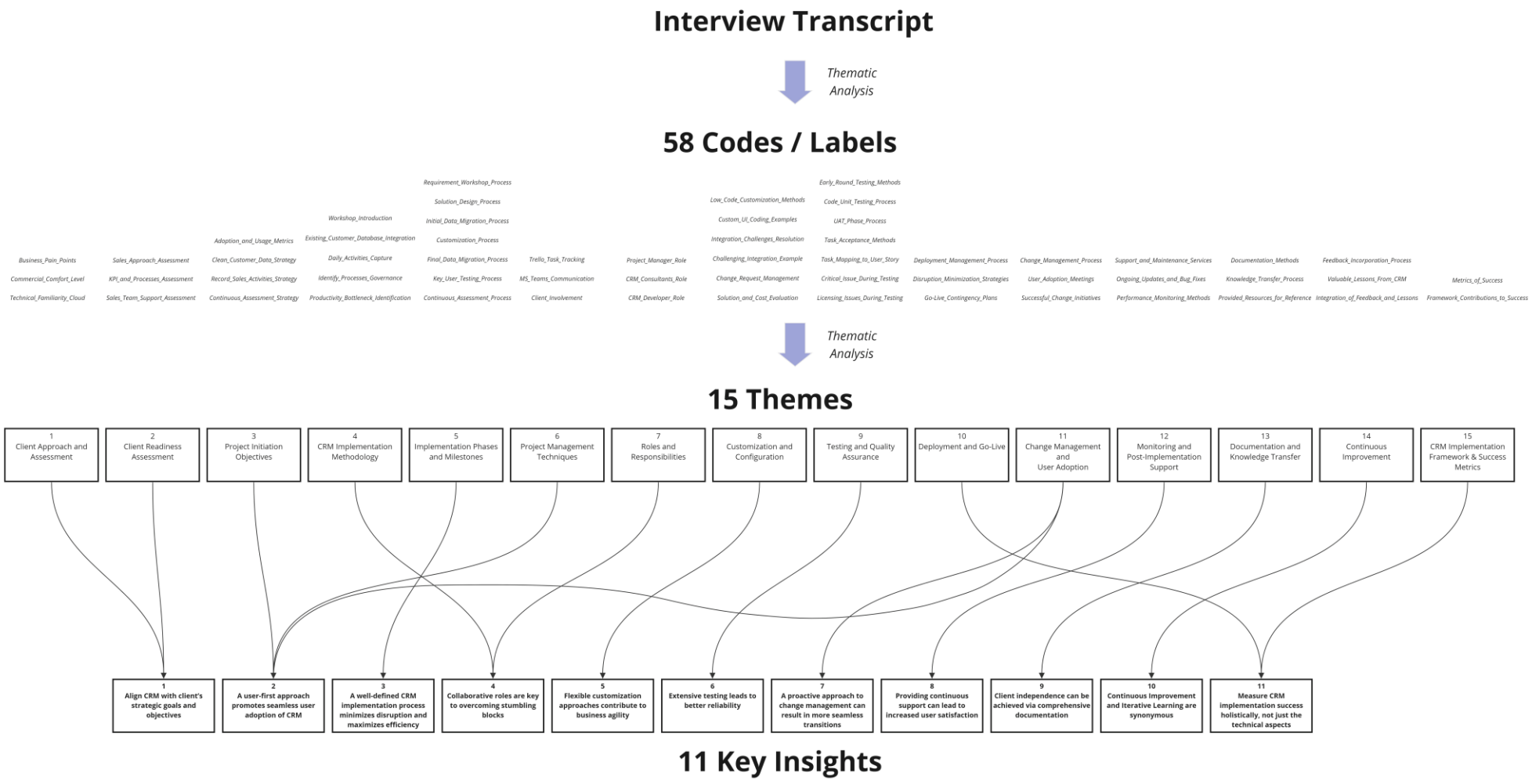

Figure 7: Answer to Research Question 1b ‘What are the key factors influencing CRM implementation project success?’

5.0 FINDINGS AND DISCUSSIONS FOR RESEARCH OBJECTIVE 2

5.1 Introduction

This chapter focuses on research objective 2, which is to propose and recommend a customized Scrum framework for CRM implementations (see Figure 1). Leveraging the eleven key insights from research objective 1, this chapter explores the framework's creation and presents it as a potential tool for organizations undertaking agile CRM projects.

5.2 Analysis of eleven key insights and its influence on the Scrum Framework

This section analyzes how each of the eleven key insights intersect with and apply to the original Scrum framework. The operational research framework for research objective 2 is illustrated in Figure 8. The analysis examines the implications of these insights on:

- The Scrum Process Model, encompassing its events and artifacts.
- The Scrum Values of Commitment, Courage, Focus, Openness, and Respect.
- The Scrum Job Roles of Product Owner, Scrum Master, and Developers.

Each of the eleven key insights are analyzed to understand its implication on the Scrum Process Model, Scrum Values, and Scrum Job Roles. The analysis is documented in Table 5.1 and serves as the foundation for proposing a Customized Scrum framework.

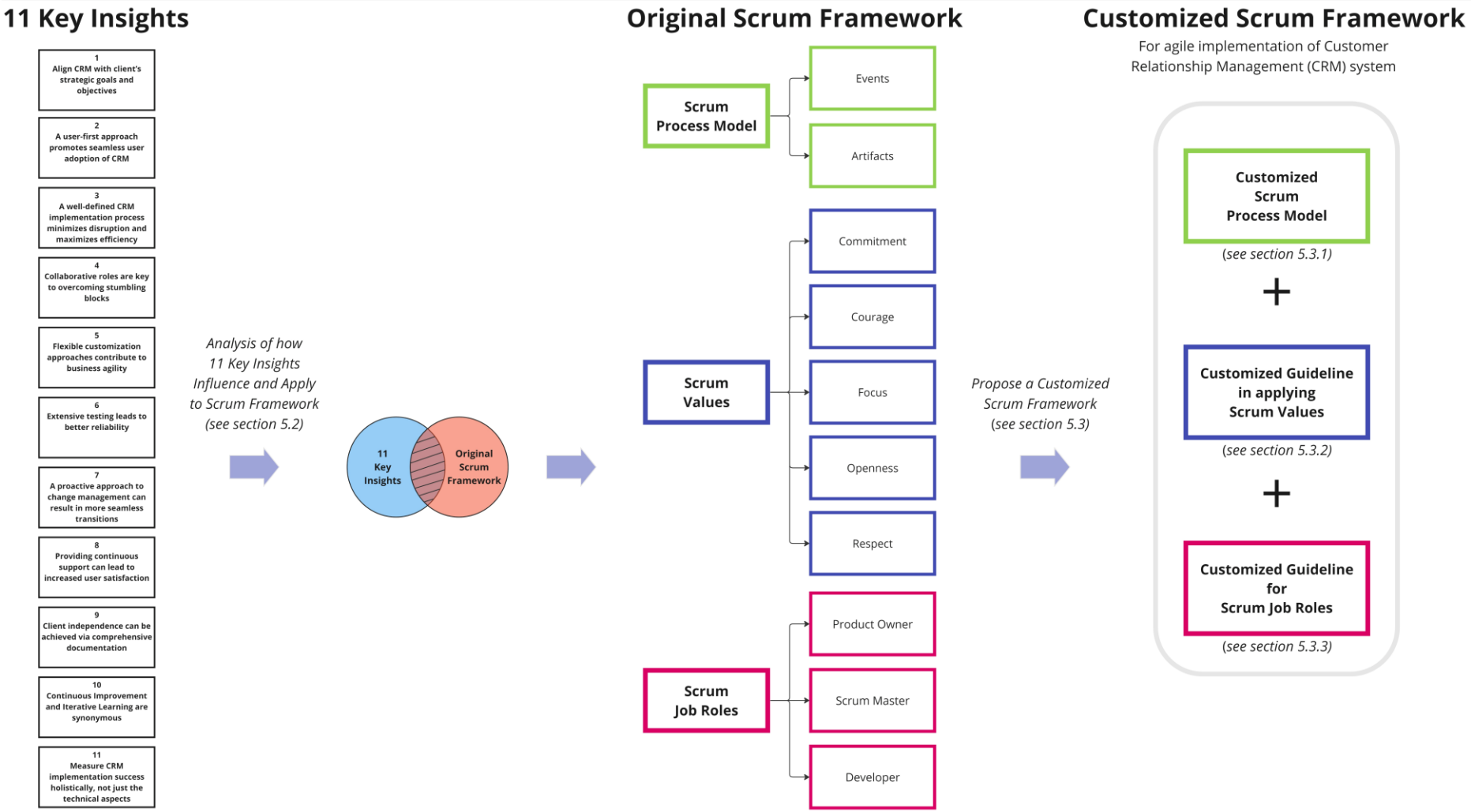

Figure 8: Operational Research Framework for Research Objective 2 'Propose and recommend customized Scrum framework for CRM implementation'

Table 5.1: Analysis of eleven key insights and its implication on Scrum Process Model, Scrum Values and Scrum Job Roles

Key Insight No. 1		
Align CRM with client's strategic goals and objectives Insight 1 emphasizes the importance of aligning CRM implementation with the client's strategic goals and objectives. It aligns with SCRUM values by promoting focus and commitment. Job roles, events, and artifacts within the SCRUM framework provide structured opportunities to ensure that each sprint increment contributes meaningfully to the client's strategic objectives.		
Scrum Process Model (Events and Artifacts)	**Scrum Values**	**Scrum Job Roles**
Product Backlog: Prioritize user stories and features in the product backlog that align with the client's strategic goals and objectives. *Sprint Planning:* During sprint planning, emphasize tasks that directly contribute to aligning the CRM with strategic goals. *Sprint Reviews:* Showcase how each sprint increment aligns with and contributes to the client's strategic goals.	*Focus:* Promote focus on delivering increments that align with the client's strategic goals, ensuring meaningful contributions. *Commitment:* Build commitment to client satisfaction by aligning the implementation process with strategic objectives.	*Product Owner:* Act as the liaison between the client and the Developer, ensuring strategic goals are well-represented in the product backlog. *Developer:* Understand and align implementation efforts with the strategic goals outlined by the client.

Sprint Retrospectives: Reflect on how well the team aligned with strategic goals and identify areas for improvement. *Definition of Done (DoD):* Include alignment with strategic goals as part of the DoD, ensuring the completeness of each increment. *Sprint Backlog:* Align sprint tasks with client priorities and strategic objectives, providing a clear roadmap.		
Key Insight No. 2		
A user-first approach promotes seamless user adoption of CRM Insight 2 underscores the importance of a user-first approach in promoting seamless user adoption of CRM. It aligns with SCRUM values by promoting commitment and respect. The roles and events within the SCRUM framework provide structured opportunities to prioritize and implement a user-first approach for enhanced user adoption.		
Scrum Process Model (Events and Artifacts)	**Scrum Values**	**Scrum Job Roles**

Sprint Reviews: Emphasize the importance of a user-first approach during sprint reviews, showcasing features that enhance user adoption. *Sprint Planning:* Prioritize user-centric stories in the product backlog during sprint planning, ensuring a focus on seamless user adoption. *Daily Scrum:* Encourage discussions on how daily tasks contribute to the user-first approach and seamless adoption. *Sprint Retrospectives:* Dedicate time to reflect on how well the team adhered to a user-first approach and identify areas for improvement. *Product Backlog:* Prioritize user stories in the product backlog, ensuring a consistent focus on a user-first approach.	*Commitment:* Demonstrate commitment to delivering a product that prioritizes user needs, fostering seamless adoption. *Respect:* Respect user perspectives by integrating their feedback into the implementation process.	*Product Owner:* Represents the voice of the user in backlog prioritization. *Developer:* Actively engages with end-users during sprint reviews, incorporating feedback.

Sprint Backlog: Align sprint tasks with user-centric features, contributing to seamless user adoption.		
Key Insight No. 3		
A well-defined CRM implementation process minimizes disruption and maximizes efficiency Insight 3 emphasizes the significance of a well-defined CRM implementation process in minimizing disruption and maximizing efficiency. It aligns with SCRUM values by promoting focus and commitment. The roles and events within the SCRUM framework provide structured opportunities to discuss, plan, and implement the CRM implementation process for optimal efficiency.		
Scrum Process Model (Events and Artifacts)	**Scrum Values**	**Scrum Job Roles**
Sprint Planning: Ensure that the CRM implementation process is well-defined and understood by the team during sprint planning. *Sprint Reviews:* Showcase how the defined process minimizes disruptions and maximizes efficiency in achieving sprint goals.	*Focus:* Emphasize the importance of a well-defined process in maintaining focus on sprint objectives. *Commitment:* Demonstrate commitment to following the well-defined process to achieve efficient outcomes.	*Scrum Master:* Facilitate the definition and understanding of the CRM implementation process, ensuring it aligns with SCRUM principles. *Product Owner:* Collaborate with the team to align the CRM implementation process with the product vision and goals.

		Developer: Follow the well-defined process to streamline development tasks, minimizing disruptions.
Key Insight No. 4		
Collaborative roles are key to overcoming stumbling blocks Insight 4 underscores the importance of collaborative roles in overcoming stumbling blocks. It aligns with SCRUM values by promoting respect and openness. The roles and events within the SCRUM framework provide structured opportunities for collaborative problem-solving, ensuring that stumbling blocks are addressed collectively.		
Scrum Process Model (Events and Artifacts)	**Scrum Values**	**Scrum Job Roles**
Daily Scrum: Enhance collaboration by discussing stumbling blocks, fostering a collective approach to problem-solving. *Sprint Reviews:* Showcase how collaborative roles have contributed to overcoming stumbling blocks and achieving goals.	*Respect:* Foster respect among team members, recognizing the value each role brings to overcoming challenges. *Openness:* Encourage openness in sharing stumbling blocks during the Daily Scrum, enabling collaborative problem-solving.	*Developer:* Collaborate with other roles to overcome technical stumbling blocks, ensuring a unified team effort. *Scrum Master:* Facilitate collaboration among roles, ensuring that stumbling blocks are addressed collectively.

Sprint Retrospectives: Dedicate time to discuss the effectiveness of collaborative roles in overcoming challenges and identify areas for improvement. *Sprint Backlog:* Reflect stumbling blocks in the sprint backlog, ensuring they are addressed collaboratively. *Product Backlog:* Collaboratively prioritize backlog items based on the impact on overcoming stumbling blocks.		*Product Owner:* Collaborate with stakeholders to align priorities and overcome business-related stumbling blocks.
Key Insight No. 5		
Flexible customization approaches contribute to business agility Insight 5 emphasizes the role of flexible customization approaches in contributing to business agility. It aligns with SCRUM values by promoting openness. The roles and events within the SCRUM framework provide structured opportunities to discuss, plan, and implement customization strategies that enhance overall business agility.		
Scrum Process Model (Events and Artifacts)	**Scrum Values**	**Scrum Job Roles**

Sprint Planning: Discuss and plan for flexible customization approaches in each sprint. *Sprint Reviews:* Showcase the business agility achieved through flexible customizations to stakeholders.	*Openness:* Foster openness to alternative customization approaches that contribute to business agility.	*Product Owner:* Collaborate with stakeholders to prioritize flexible customization tasks that align with business goals. *Developer:* Implement flexible customization approaches, ensuring they contribute to overall business agility. *Scrum Master:* Facilitate discussions on how customization approaches impact the team's agility and suggest adaptations.
Key Insight No. 6		
Extensive testing leads to better reliability Insight 6 highlights the critical role of extensive testing in achieving better reliability. It aligns with SCRUM values by emphasizing commitment, focus, and courage. The roles and events within the SCRUM framework provide structured opportunities to discuss, plan, and implement testing strategies that contribute to the overall reliability of the product.		
Scrum Process Model (Events and Artifacts)	**Scrum Values**	**Scrum Job Roles**

Sprint Reviews: Showcase the reliability achieved through extensive testing, gaining stakeholder confidence. *Sprint Retrospectives:* Discuss and refine testing processes to further improve the reliability of future increments. *Definition of Done (DoD):* Include comprehensive testing criteria in the DoD, ensuring each increment meets the reliability standards. *Sprint Backlog:* Allocate capacity for testing tasks within each sprint, emphasizing their role in achieving reliability.	*Commitment:* Demonstrate commitment to delivering a reliable product through rigorous testing practices. *Focus:* Focus on the reliability aspect in sprint goals, emphasizing its importance to the team. *Courage:* Have the courage to invest time and resources in comprehensive testing for better reliability.	*Developer:* Take ownership of testing practices, ensuring extensive coverage for reliable increments. *Scrum Master:* Facilitate discussions on how testing practices impact the reliability of the product. *Product Owner:* Collaborate with the team to prioritize testing tasks, recognizing their crucial role in ensuring reliability.
Key Insight No. 7		
A proactive approach to change management can result in more seamless transitions Insight 7 underscores the importance of a proactive stance towards change management for seamless transitions. It aligns with SCRUM values by encouraging courage and openness. The roles and events within the SCRUM framework provide structured opportunities to discuss, plan, and implement proactive change management measures, contributing to project success.		

Scrum Process Model (Events and Artifacts)	**Scrum Values**	**Scrum Job Roles**
Sprint Reviews: Use this event to discuss and plan for changes, ensuring they are seamlessly integrated into upcoming sprints. *Sprint Retrospectives:* Reflect on change management processes and identify proactive measures for even smoother transitions. *Product Backlog:* Use the backlog to prioritize and plan for changes, ensuring they are seamlessly integrated. *Sprint Backlog:* Allocate capacity for addressing changes within each sprint, balancing them with planned work.	*Courage:* Have the courage to embrace change and proactively address potential challenges. *Openness:* Embrace an open mindset, proactively identifying and addressing changes to enhance project outcomes.	*Scrum Master:* Facilitate discussions on change management strategies during sprint planning and retrospectives. *Product Owner:* Work closely with stakeholders to proactively identify changes that align with business objectives. *Developer:* Embrace a proactive mindset, anticipating changes and adjusting plans accordingly.

Key Insight No. 8		
Providing continuous support can lead to increased user satisfaction Insight 8 emphasizes the importance of continuous support for user satisfaction. It aligns with SCRUM values by demonstrating commitment and respect for users. The roles and events within the SCRUM framework provide structured opportunities to discuss, plan, and implement continuous support measures, fostering increased user satisfaction over time.		
Scrum Process Model (Events and Artifacts)	**Scrum Values**	**Scrum Job Roles**
Sprint Retrospectives: Discuss and strategize ways to enhance support mechanisms and user satisfaction in each iteration. *Daily Scrum:* Use this event to address immediate user concerns and plan support actions within the sprint. *Product Backlog:* Include user support tasks and enhancements in the backlog based on user feedback.	*Commitment:* Demonstrate commitment to user satisfaction by allocating resources and time for continuous support. *Respect:* Show respect for users by actively listening to their needs and providing ongoing assistance.	*Product Owner:* Collaborate with the team to prioritize user support tasks and align them with business objectives. *Scrum Master:* Facilitate discussions on continuous support strategies during sprint planning and retrospectives. *Developer:* Allocate time for addressing user support needs and actively participate in resolving issues.

Sprint Backlog: Allocate capacity for user support tasks in each sprint, balancing them with new features.		
Key Insight No. 9		
Client independence can be achieved via comprehensive documentation Insight 9 highlights the importance of comprehensive documentation for achieving client independence. Reconciling “comprehensive documentation” with the agile principle of "working software over comprehensive documentation" involves finding a balance that respects agile values and principles while meeting the need for client independence and client empowerment. Integrating GitHub as a collaborative documentation platform, where multiple stakeholders can contribute, helps strike a delicate balance between agile principles and client independence. This insight also aligns with SCRUM values by emphasizing courage and openness. Job roles, events, and artifacts within the SCRUM framework provide structured opportunities to prioritize and deliver documentation that supports client independence.		
Scrum Process Model (Events and Artifacts)	**Scrum Values**	**Scrum Job Roles**
Product Backlog and Sprint Backlog: Utilize GitHub for storing essential documentation, such as user stories,	*Courage:* Have the courage to explore and adopt modern documentation practices, leveraging GitHub as a collaborative platform.	*Product Owner:* Work closely with the Developer to structure GitHub repositories for clear and accessible documentation.

acceptance criteria, and technical specifications. Encourage the team to use GitHub Wiki for collaborative documentation. *Sprint Reviews:* Showcase GitHub repositories during sprint reviews to demonstrate how documentation evolves. *Sprint Retrospectives:* Discuss GitHub's effectiveness in supporting documentation needs and make adaptations as necessary. *Increment:* GitHub serves as a living documentation space, allowing clients to explore the evolving product increment. Keep documentation within GitHub concise, focusing on essential details tied to specific functionalities.	*Openness:* Embrace the openness of GitHub, where team members and clients can access and contribute to documentation.	*Scrum Master:* Facilitate the team's learning and adaptation to GitHub for documentation purposes.

Key Insight No. 10		
Continuous Improvement and Iterative Learning are synonymous Insight 10 emphasizes that continuous improvement is inherent in the agile and SCRUM philosophy. It encourages a culture of learning, where each iteration is an opportunity to enhance processes, products, and collaboration. This mindset aligns with SCRUM values and the roles and events within the SCRUM framework.		
Scrum Process Model (Events and Artifacts)	**Scrum Values**	**Scrum Job Roles**
Sprint Retrospectives: Actively incorporate lessons learned from each sprint into subsequent planning. Use retrospectives to identify areas for improvement and iterate on processes. *Sprint Reviews:* Showcase improvements made since the last review, highlighting the commitment to continuous enhancement. *Daily Scrum:* Briefly discuss improvements made or identified during the day, fostering a culture of continuous adjustment.	*Courage:* Have the courage to experiment with new ideas and processes. *Openness:* Foster an open environment where team members feel comfortable sharing insights for continuous improvement.	*Scrum Master:* Facilitate retrospectives, ensuring they are constructive and focused on continuous improvement. Mentor the team on the importance of iterative learning and adaptation. *Product Owner:* Engage with the team during retrospectives to understand areas for improvement in product development. *Development Team:* Actively participate in retrospectives, contributing insights and suggestions for continuous improvement.

Sprint Backlog and Increment: Use these artifacts to visually represent how continuous improvement is integrated into the implementation process. Document lessons learned and improvements within these artifacts.		
Key Insight No. 11		
Measure CRM implementation success holistically, not just the technical aspects Insight 11 underscores the importance of looking beyond technical achievements to evaluate the overall success of CRM implementation. It aligns with SCRUM values by emphasizing commitment to delivering holistic value. The roles and events within the SCRUM framework provide avenues for incorporating and discussing non-technical success factors, fostering a more comprehensive approach to project success.		
Scrum Process Model (Events and Artifacts)	**Scrum Values**	**Scrum Job Roles**
Sprint Reviews: Evaluate and showcase not only technical achievements but also user adoption, client satisfaction, and overall project success.	*Focus:* Shift the focus beyond technical metrics to user satisfaction, business value, and alignment with strategic goals.	*Product Owner:* Collaborate with stakeholders to define success criteria that go beyond technical functionality.

Sprint Retrospectives: Discuss and measure success holistically, incorporating non-technical aspects into the team's improvement strategies. *Product Backlog and Sprint Backlog*: Include user stories and tasks that reflect not only technical requirements but also business objectives. Document and track success criteria within these artifacts.	*Commitment:* Commit to delivering value to clients, acknowledging that success is not solely defined by technical accomplishments.	*Scrum Master:* Facilitate discussions on holistic success during sprint reviews and retrospectives. *Developer:* Understand and consider non-technical success factors in their work, ensuring that technical solutions contribute to overall success.

5.3 The customized SCRUM framework for agile implementation of CRM systems

Drawing upon the insights gained from the successful CRM implementation experiences of the Malaysian Salesforce partner and the influence on the application of Scrum (see section 5.2), this section proposes a customized Scrum framework specifically tailored for agile CRM implementations. This framework differentiates itself by incorporating insights from real-world CRM projects and comprises three key components:

- A *customized Scrum Process Model* for agile implementation of CRM systems. (See section 5.3.1)
- A *customized guideline in applying Scrum Values* for agile implementation of CRM systems. (See section 5.3.2)
- A *customized guideline for Scrum Job Roles* for agile implementation of CRM systems. (See section 5.3.3)

5.3.1 A customized Scrum Process Model

Here are the key highlights of this customized Scrum process model.

- The original Scrum process model remains intact, and this includes all the Scrum events and artifacts. This is important as it ensures that the Scrum principles and practices continue to be upheld as what the original authors intended.
- 4 New steps have been added into the Scrum process model. It's important to note that these steps do not interfere with the original Scrum process model. The *New* steps added includes Strategic Goals (1), Pre-Deployment Preparation (2), Post-Deployment Verification (3) and Go Live (4).
- Details of each process step, existing and new, are visualized in Figure 9 (Overview) and Figure 10 (Detailed). The contents from Figure 9 and Figure 10 are then documented in a Table 5.2. Where appropriate, examples have also been provided specific to CRM implementation to aid clarity and understanding.
- The influence of key insights on the Scrum process model has also been mapped out and detailed in Figure 10 and documented in a Table 5.2.

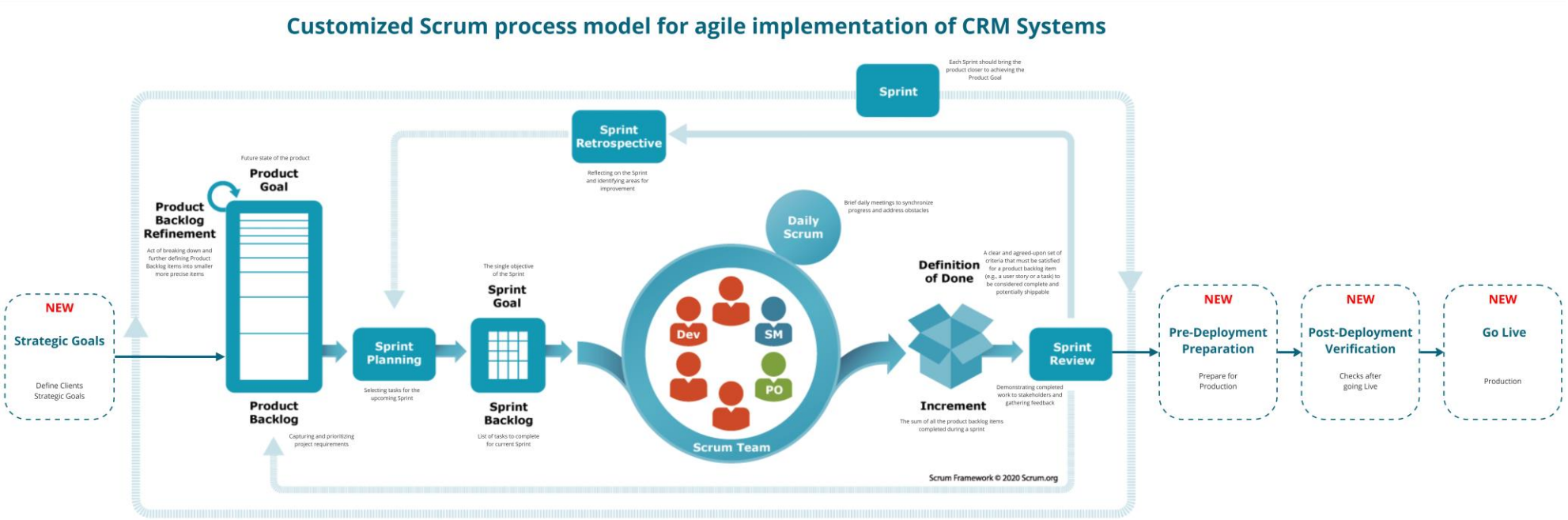

Figure 9: Overview of customized Scrum process model steps

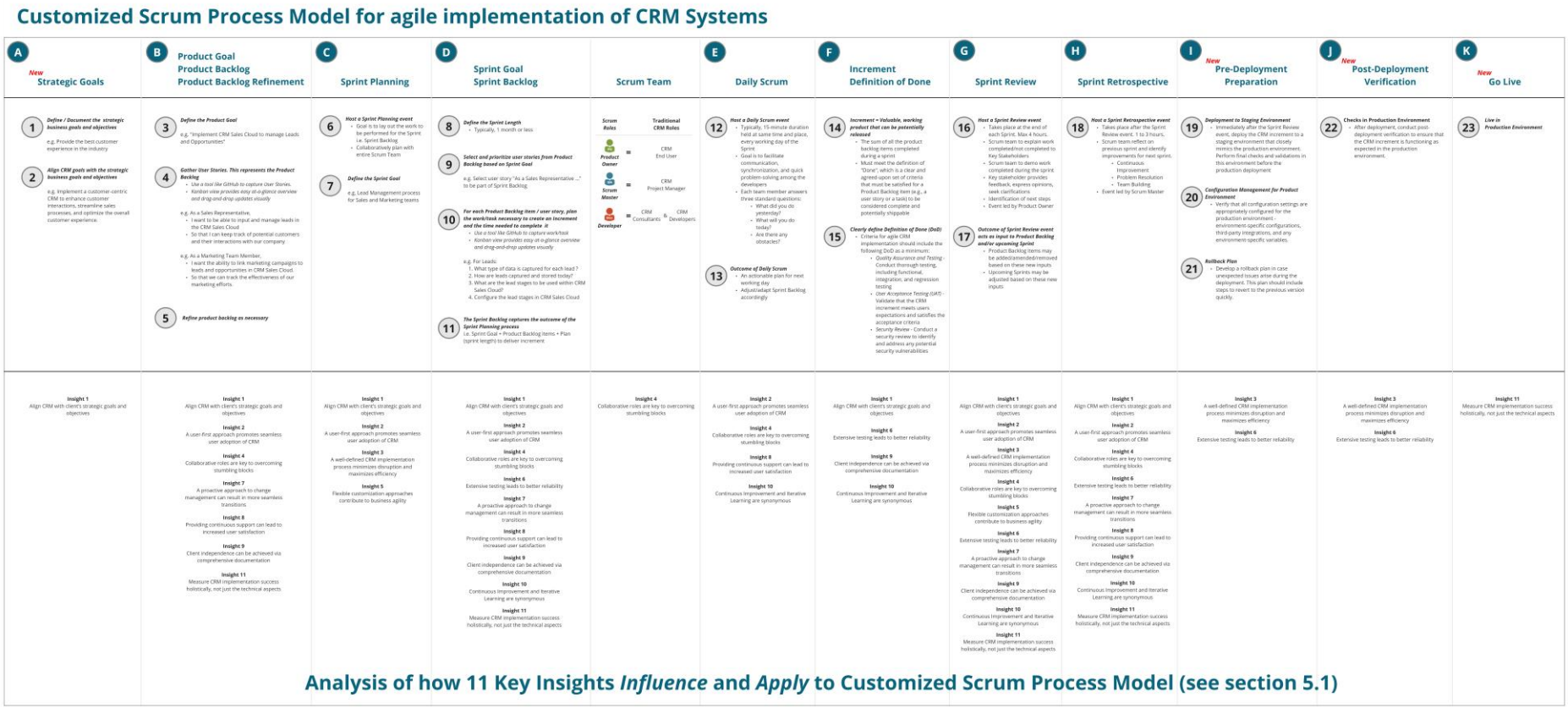

Figure 10: Detailed Steps and Impact of 11 Key insights on Customized Scrum Process Model

Table 5.2: Customized Scrum Process Model

No	Scrum Process Model Steps	Based on Analysis of 11 Key Insights and its influence on the Scrum Framework (see section 5.2)	Customized Scrum Process Model
A	**Strategic Goals** **(New)**	**Insight 1:** Align CRM with client's strategic goals and objectives	**1. Define / Document the strategic business goals and objectives** e.g. Provide the best customer experience in the industry **2. Align CRM goals with the strategic business goals and objectives** e.g. Implement a customer-centric CRM to enhance customer interactions, streamline sales processes, and optimize the overall customer experience. This new step is important because: • It prioritizes the unique needs and strategic goals of the business. • It guides and help align the CRM goals with the strategic business goals and objectives. • It ensures that the implemented solution not only meets immediate needs but contributes meaningfully to the business's long-term success. • It elevates CRM from a mere technical solution into a strategic enabler.

No	Scrum Process Model Steps	Based on Analysis of 11 Key Insights and its influence on the Scrum Framework (see section 5.2)	Customized Scrum Process Model
			• It contributes to overall project success.
B	**Product Goal** **Product Backlog** **Product Backlog Refinement**	**Insight 1:** Align CRM with client's strategic goals and objectives **Insight 2:** A user-first approach promotes seamless user adoption of CRM **Insight 4:** Collaborative roles are key to overcoming stumbling blocks **Insight 7:** A proactive approach to change management can result in more seamless transitions **Insight 8:** Providing continuous support can lead to increased user satisfaction	**3. Define the Product Goal** e.g. "Implement CRM Sales Cloud to manage Leads and Opportunities" **4. Gather User Stories. This represents the Product Backlog** Use a tool like GitHub to capture User Stories. Kanban view provides easy at-a-glance overview and drag-and-drop updates visually e.g. As a Sales Representative, I want to be able to input and manage leads in the CRM Sales Cloud, so that I can keep track of potential customers and their interactions with our company e.g. As a Marketer, I want the ability to link marketing campaigns to leads and opportunities in CRM Sales Cloud, so that we can track the effectiveness of our marketing efforts.

No	Scrum Process Model Steps	Based on Analysis of 11 Key Insights and its influence on the Scrum Framework (see section 5.2)	Customized Scrum Process Model
		Insight 9: Client independence can be achieved via comprehensive documentation **Insight 11:** Measure CRM implementation success holistically, not just the technical aspects	**5. Refine product backlog as necessary**
C	**Sprint Planning**	**Insight 1:** Align CRM with client's strategic goals and objectives **Insight 2:** A user-first approach promotes seamless user adoption of CRM **Insight 3:** A well-defined CRM implementation process minimizes disruption and maximizes efficiency	**6. Host a Sprint Planning event** Goal is to lay out the work to be performed for the Sprint i.e. Sprint Backlog. Collaboratively plan with entire Scrum Team **7. Define the Sprint Goal** e.g. Lead Management process for Sales and Marketing teams

No	Scrum Process Model Steps	Based on Analysis of 11 Key Insights and its influence on the Scrum Framework (see section 5.2)	Customized Scrum Process Model
		Insight 5: Flexible customization approaches contribute to business agility	
D	**Sprint Goal** **Sprint Backlog**	**Insight 1:** Align CRM with client's strategic goals and objectives **Insight 2:** A user-first approach promotes seamless user adoption of CRM **Insight 4:** Collaborative roles are key to overcoming stumbling blocks **Insight 6:** Extensive testing leads to better reliability	**8. Define the Sprint Length** Typically, 1 month or less **9. Select and prioritize user stories from Product Backlog based on Sprint Goal** e.g. Select user story "As a Sales Representative ..." to be part of Sprint Backlog **10. For each Product Backlog item / user story, plan the work/task necessary to create an Increment and the time needed to complete it** Use a tool like GitHub to capture work/task. Kanban view provides easy at-a-glance overview and drag-and-drop updates visually e.g. For Leads: • What type of data is captured for each lead?

No	Scrum Process Model Steps	Based on Analysis of 11 Key Insights and its influence on the Scrum Framework (see section 5.2)	Customized Scrum Process Model
		Insight 7: A proactive approach to change management can result in more seamless transitions **Insight 8:** Providing continuous support can lead to increased user satisfaction **Insight 9:** Client independence can be achieved via comprehensive documentation **Insight 10:** Continuous Improvement and Iterative Learning are synonymous **Insight 11:** Measure CRM implementation success holistically, not just the technical aspects	• How are leads captured and stored today? • What are the lead stages to be used within CRM Sales Cloud? • Configure the lead stages in CRM Sales Cloud **11. The Sprint Backlog captures the outcome of the Sprint Planning process** i.e. Sprint Goal + Product Backlog items + Plan (sprint length) to deliver increment

No	Scrum Process Model Steps	Based on Analysis of 11 Key Insights and its influence on the Scrum Framework (see section 5.2)	Customized Scrum Process Model
E	**Daily Scrum**	**Insight 2:** A user-first approach promotes seamless user adoption of CRM **Insight 4:** Collaborative roles are key to overcoming stumbling blocks **Insight 8:** Providing continuous support can lead to increased user satisfaction **Insight 10:** Continuous Improvement and Iterative Learning are synonymous	**12. Host a Daily Scrum event** Typically, 15-minute duration held at same time and place, every working day of the Sprint. Goal is to facilitate communication, synchronization, and quick problem-solving among the developers. Each team member answers three standard questions: • What did you do yesterday? • What will you do today? • Are there any obstacles? **13. Outcome of Daily Scrum** An actionable plan for next working day. Adjust/adapt Sprint Backlog accordingly.
F	**Increment Definition of Done**	**Insight 1:** Align CRM with client's strategic goals and objectives **Insight 6:** Extensive testing leads to better reliability	**14. Increment = Valuable, working product that can be potentially released** The sum of all the product backlog items completed during a sprint. Must meet the definition of "Done", which is a clear and agreed-upon set of

No	Scrum Process Model Steps	Based on Analysis of 11 Key Insights and its influence on the Scrum Framework (see section 5.2)	Customized Scrum Process Model
		Insight 9: Client independence can be achieved via comprehensive documentation **Insight 10:** Continuous Improvement and Iterative Learning are synonymous	criteria that must be satisfied for a Product Backlog item (e.g., a user story or a task) to be considered complete and potentially shippable **15. Clearly define Definition of Done (DoD)** Criteria for agile CRM implementation should include the following DoD as a minimum: • Quality Assurance and Testing - Conduct thorough testing, including functional, integration, and regression testing • User Acceptance Testing (UAT) - Validate that the CRM increment meets users' expectations and satisfies the acceptance criteria • Security Review - Conduct a security review to identify and address any potential security vulnerabilities
G	**Sprint Review**	**Insight 1:** Align CRM with client's strategic goals and objectives	**16. Host a Sprint Review event** Takes place at the end of each Sprint. Max 4 hours. Scrum team to explain work completed/not completed to Key Stakeholders. Scrum team to demo work completed during the sprint. Key stakeholder provides

No	Scrum Process Model Steps	Based on Analysis of 11 Key Insights and its influence on the Scrum Framework (see section 5.2)	Customized Scrum Process Model
		Insight 2: A user-first approach promotes seamless user adoption of CRM **Insight 3:** A well-defined CRM implementation process minimizes disruption and maximizes efficiency **Insight 4:** Collaborative roles are key to overcoming stumbling blocks **Insight 5:** Flexible customization approaches contribute to business agility **Insight 6:** Extensive testing leads to better reliability	feedback, express opinions, seek clarifications. Identification of next steps. Event led by Product Owner **17. Outcome of Sprint Review event acts as input to Product Backlog and/or upcoming Sprint** Product Backlog items may be added/amended/removed based on these new inputs. Upcoming Sprints may be adjusted based on these new inputs.

No	Scrum Process Model Steps	Based on Analysis of 11 Key Insights and its influence on the Scrum Framework (see section 5.2)	Customized Scrum Process Model
		Insight 7: A proactive approach to change management can result in more seamless transitions **Insight 9:** Client independence can be achieved via comprehensive documentation **Insight 10:** Continuous Improvement and Iterative Learning are synonymous **Insight 11:** Measure CRM implementation success holistically, not just the technical aspects	
H	**Sprint Retrospective**	**Insight 1:** Align CRM with client's strategic goals and objectives	**18. Host a Sprint Retrospective event** Takes place after the Sprint Review event. 1 to 3 hours. Scrum team reflect on previous sprint and identify improvements for next sprint. • Continuous Improvement

No	Scrum Process Model Steps	Based on Analysis of 11 Key Insights and its influence on the Scrum Framework (see section 5.2)	Customized Scrum Process Model
		Insight 2: A user-first approach promotes seamless user adoption of CRM **Insight 4:** Collaborative roles are key to overcoming stumbling blocks **Insight 6:** Extensive testing leads to better reliability **Insight 7:** A proactive approach to change management can result in more seamless transitions **Insight 8:** Providing continuous support can lead to increased user satisfaction	• Problem Resolution • Team Building Event led by Scrum Master.

No	Scrum Process Model Steps	Based on Analysis of 11 Key Insights and its influence on the Scrum Framework (see section 5.2)	Customized Scrum Process Model
		Insight 9: Client independence can be achieved via comprehensive documentation **Insight 10:** Continuous Improvement and Iterative Learning are synonymous **Insight 11:** Measure CRM implementation success holistically, not just the technical aspects	
I	**Pre-Deployment Preparation (New)**	**Insight 3:** A well-defined CRM implementation process minimizes disruption and maximizes efficiency **Insight 6:** Extensive testing leads to better reliability	**19. Deployment to Staging Environment** Immediately after the Sprint Review event, deploy the CRM increment to a staging environment that closely mimics the production environment. Perform final checks and validations in this environment before the production deployment **20. Configuration Management for Production Environment**

No	Scrum Process Model Steps	Based on Analysis of 11 Key Insights and its influence on the Scrum Framework (see section 5.2)	Customized Scrum Process Model
			Verify that all configuration settings are appropriately configured for the production environment - environment-specific configurations, third-party integrations, and any environment-specific variables. **21. Rollback Plan** Develop a rollback plan in case unexpected issues arise during the deployment. This plan should include steps to revert to the previous version quickly. This new step is critical because: • Testing the CRM in a controlled environment ensures readiness for production and reduces unexpected issues. • Accurate setup of CRM configurations is crucial for seamless and smooth operations. • Planning for potential issues during deployment helps ensure quick resolutions and prevents disruptions. • Matching test and live environments closely guarantee a consistent user experience.

No	Scrum Process Model Steps	Based on Analysis of 11 Key Insights and its influence on the Scrum Framework (see section 5.2)	Customized Scrum Process Model
J	**Post-Deployment Verification** **(New)**	**Insight 3:** A well-defined CRM implementation process minimizes disruption and maximizes efficiency **Insight 6:** Extensive testing leads to better reliability	**22. Check Production Environment** After deployment, conduct post-deployment verification to ensure that the CRM increment is functioning as expected in the production environment. This new step is critical because: • It verifies the CRM system's reliability in the live production environment. • It validates the user experience in real-world scenarios and ensures that the CRM system meets user expectations and contributes to high satisfaction. • It proactively identifies and addresses potential issues by mitigating business risks and maintaining operational continuity.
K	**Go Live** **(New)**	**Insight 11:** Measure CRM implementation success holistically, not just the technical aspects	**23. Live in Production Environment**

5.3.2 A customized guideline of Scrum Values

Leveraging the insights gained from the successful CRM implementation experiences of the Malaysian Salesforce partner and the influence and application of these insights on SCRUM (see section 5.2), this section proposes a customized guideline for applying Scrum Values within the context of agile CRM implementations. This tailored approach ensures these core Scrum Values remain central throughout the CRM implementation process.

An overview of the analysis is shown in Figure 11. A detailed analysis is documented in Table 5.3.

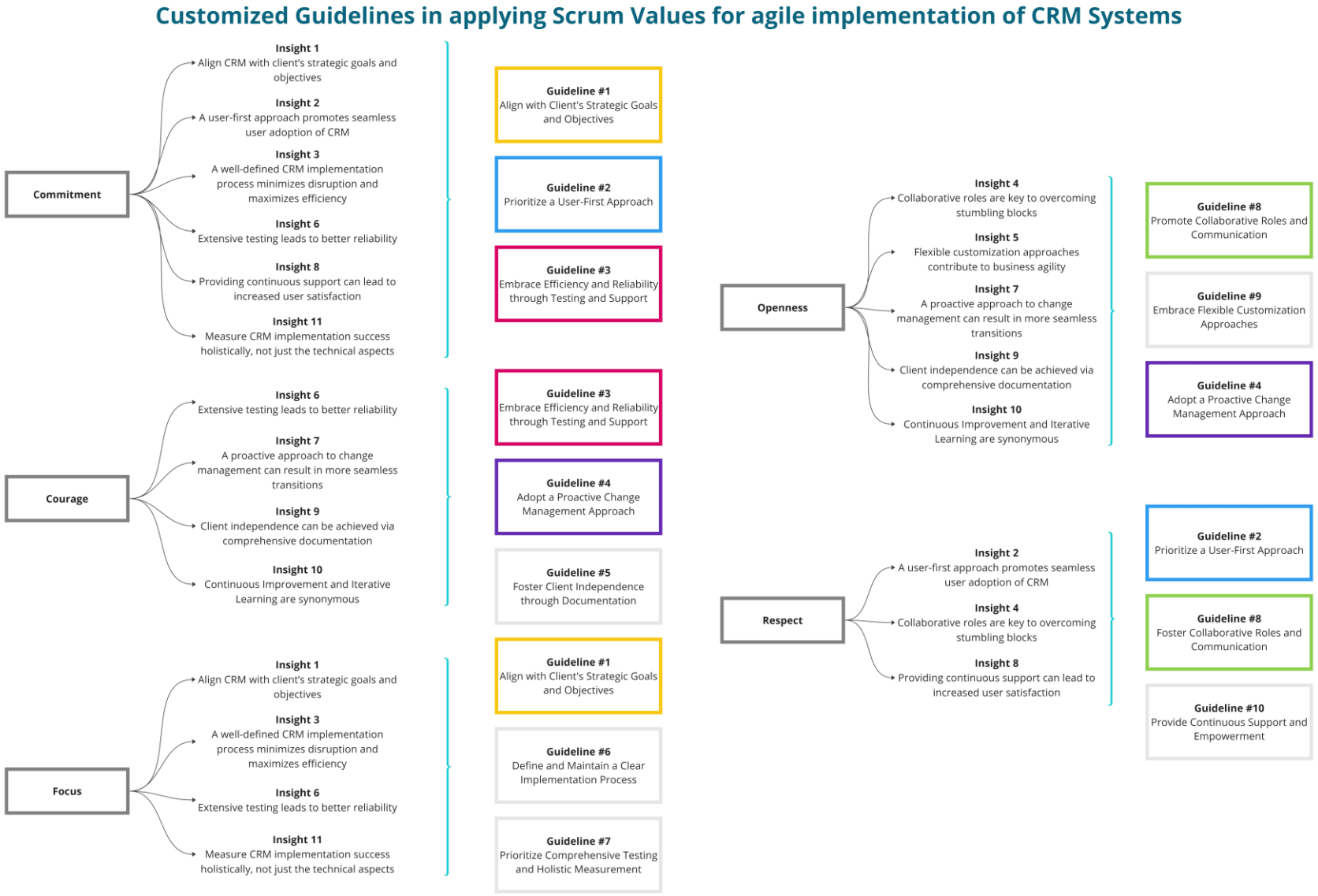

Figure 11: Customized Guidelines in applying Scrum Values

Table 5.3: Customized Guidelines in applying Scrum Values

No	Scrum Values	Based on *Analysis of 11 Key Insights and its influence on the Scrum Framework* (see section 5.2)	Customized Guidelines in applying Scrum Values
1	Commitment	**Insight 1:** Align CRM with client's strategic goals and objectives **Insight 2:** A user-first approach promotes seamless user adoption of CRM **Insight 3:** A well-defined CRM implementation process minimizes disruption and maximizes efficiency **Insight 6:** Extensive testing leads to better reliability **Insight 8:** Providing continuous support can lead to increased user satisfaction	**Guideline #1: Align with Client's Strategic Goals and Objectives** • Demonstrate commitment to aligning the CRM implementation with the client's strategic goals and objectives. • Ensure that every aspect of the project, from planning to execution, is directed towards fulfilling these strategic objectives. • Regularly assess and reassess the alignment of the CRM implementation with the client's strategic vision to maintain focus and commitment throughout the project. **Guideline #2: Prioritize a User-First Approach** • Commit to a user-first approach throughout the CRM implementation process to promote seamless user adoption. • Place a strong emphasis on understanding the needs and preferences of end-users and prioritizing their experience.

No	Scrum Values	Based on *Analysis of 11 Key Insights and its influence on the Scrum Framework* (see section 5.2)	Customized Guidelines in applying Scrum Values
		Insight 11: Measure CRM implementation success holistically, not just the technical aspects	• Continuously solicit feedback from users and incorporate their input to enhance the usability and effectiveness of the CRM system, demonstrating ongoing commitment to user satisfaction. **Guideline #3: Embrace Efficiency and Reliability through Testing and Support** • Show commitment to efficiency and reliability by conducting extensive testing throughout the implementation lifecycle. • Allocate sufficient time and resources to testing efforts to ensure the reliability and functionality of the CRM system. • Provide continuous support to users throughout and after the CRM implementation, offering training, documentation, and assistance to ensure their success and satisfaction.
2	Courage	**Insight 6:** Extensive testing leads to better reliability	**Guideline #3: Embrace Efficiency and Reliability through Testing and Support** • Demonstrate courage by advocating for and conducting extensive testing throughout the CRM implementation process.

No	Scrum Values	Based on *Analysis of 11 Key Insights and its influence on the Scrum Framework* (see section 5.2)	Customized Guidelines in applying Scrum Values
		Insight 7: A proactive approach to change management can result in more seamless transitions **Insight 9:** Client independence can be achieved via comprehensive documentation **Insight 10:** Continuous Improvement and Iterative Learning are synonymous	• Challenge the status quo by ensuring that thorough testing protocols are in place to validate the reliability and functionality of the CRM system. • Allocate sufficient time and resources to testing efforts, acknowledging that courage is required to confront potential issues and ensure the success of the CRM implementation. **Guideline #4: Adopt a Proactive Change Management Approach** • Show courage by adopting a proactive approach to change management to facilitate more seamless transitions. • Anticipate and address potential changes early on by engaging stakeholders and keeping them informed throughout the project. • Encourage a culture of openness and adaptability, where team members are receptive to change and actively contribute to finding solutions to challenges. **Guideline #5: Foster Client Independence through Documentation** • Show courage by balancing the agile principle of prioritizing working software over documentation.

No	Scrum Values	Based on *Analysis of 11 Key Insights and its influence on the Scrum Framework* (see section 5.2)	Customized Guidelines in applying Scrum Values
			• Provide clients with the resources and knowledge they need to manage and maintain the CRM system independently, acknowledging that courage is required to trust clients with this responsibility. • Integrate collaborative documentation platforms, such as GitHub, where multiple stakeholders can contribute, to strike a delicate balance between agile principles and client independence.
3	Focus	**Insight 1:** Align CRM with client's strategic goals and objectives **Insight 3:** A well-defined CRM implementation process minimizes disruption and maximizes efficiency **Insight 6:** Extensive testing leads to better reliability **Insight 11:** Measure CRM implementation success holistically, not just the technical aspects	**Guideline #1: Align with Client's Strategic Goals and Objectives** • Focus on aligning the CRM implementation with the client's strategic goals and objectives from the outset. • Ensure that every aspect of the project is directed towards fulfilling these strategic objectives. • Regularly revisit and reassess the alignment of the CRM implementation with the client's strategic vision throughout the project lifecycle. **Guideline #6: Define and Maintain a Clear Implementation Process** • Maintain a well-defined CRM implementation process that minimizes disruption and maximizes efficiency.

No	Scrum Values	Based on *Analysis of 11 Key Insights and its influence on the Scrum Framework* (see section 5.2)	Customized Guidelines in applying Scrum Values
			• Clearly outline the steps, roles, and responsibilities involved in the implementation process. • Continuously refine and improve the implementation process based on feedback and lessons learned to maintain focus and efficiency. **Guideline #7: Prioritize Comprehensive Testing and Holistic Measurement** • Focus on conducting extensive testing throughout the implementation lifecycle to ensure better reliability of the CRM system. • Prioritize both technical and non-technical aspects of testing to ensure the overall success of the CRM implementation. • Measure the success of the CRM implementation holistically, considering factors beyond just technical aspects, such as user satisfaction and business impact, to maintain a focus on delivering value to the client.
4	Openness	**Insight 4:** Collaborative roles are key to overcoming stumbling blocks	**Guideline #8: Promote Collaborative Roles and Communication** • Encourage collaborative roles and open communication among team members to overcome stumbling blocks effectively.

No	Scrum Values	Based on *Analysis of 11 Key Insights and its influence on the Scrum Framework* (see section 5.2)	Customized Guidelines in applying Scrum Values
		Insight 5: Flexible customization approaches contribute to business agility **Insight 7:** A proactive approach to change management can result in more seamless transitions **Insight 9:** Client independence can be achieved via comprehensive documentation **Insight 10:** Continuous Improvement and Iterative Learning are synonymous	• Foster an environment where team members feel comfortable sharing ideas, feedback, and concerns openly. • Regularly hold collaborative sessions, such as daily stand-ups and sprint reviews, to facilitate transparent communication and decision-making. **Guideline #9: Embrace Flexible Customization Approaches** • Embrace flexible customization approaches to contribute to business agility and responsiveness. • Encourage experimentation and innovation in customizing the CRM system to meet evolving business needs. • Involve stakeholders in the customization process to gather feedback and ensure alignment with business objectives. **Guideline #4: Adopt a Proactive Change Management Approach** • Take a proactive approach to change management to facilitate more seamless transitions. • Anticipate and address potential changes early on by engaging stakeholders and keeping them informed throughout the project.

No	Scrum Values	Based on *Analysis of 11 Key Insights and its influence on the Scrum Framework* (see section 5.2)	Customized Guidelines in applying Scrum Values
			• Encourage a culture of openness and adaptability, where team members are receptive to change and actively contribute to finding solutions to challenges.
5	Respect	**Insight 2:** A user-first approach promotes seamless user adoption of CRM **Insight 4:** Collaborative roles are key to overcoming stumbling blocks **Insight 8:** Providing continuous support can lead to increased user satisfaction	**Guideline #2: Prioritize a User-First Approach** • Demonstrate respect for users by prioritizing their needs and preferences throughout the CRM implementation process. • Conduct user research and involve users in the design and implementation phases to ensure that the CRM system meets their requirements and expectations. • Continuously solicit feedback from users and incorporate their input to improve the usability and effectiveness of the CRM system, fostering a culture of respect for user perspectives. **Guideline #8: Foster Collaborative Roles and Communication** • Promote collaborative roles and foster respectful communication among team members to overcome stumbling blocks effectively. • Encourage an environment where team members feel valued and respected, regardless of their role or level of expertise.

No	Scrum Values	Based on *Analysis of 11 Key Insights and its influence on the Scrum Framework* (see section 5.2)	Customized Guidelines in applying Scrum Values
			• Actively listen to and consider diverse viewpoints, recognizing the value that each team member brings to the project and demonstrating respect for their contributions. **Guideline #10: Provide Continuous Support and Empowerment** • Demonstrate respect for users by providing continuous support and resources to help them succeed with the CRM system. • Offer training, documentation, and user assistance to empower users to effectively utilize the CRM system and address any challenges they encounter. • Actively engage with users to understand their needs and challenges, and proactively address them to enhance user satisfaction and demonstrate ongoing respect for their success.

5.3.3 A customized guideline of Scrum Job Roles

Leveraging the insights gained from the successful CRM implementation experiences of the Malaysian Salesforce partner and the influence and application of these insights on SCRUM (see section 5.2), this section proposes a customized guideline for Scrum Job Roles within the context of agile CRM implementations.

An overview of the analysis is shown in Figure 12 (Product Owner), Figure 13 (Scrum Master), and Figure 14 (Developer). A detailed analysis is documented in Table 5.4.

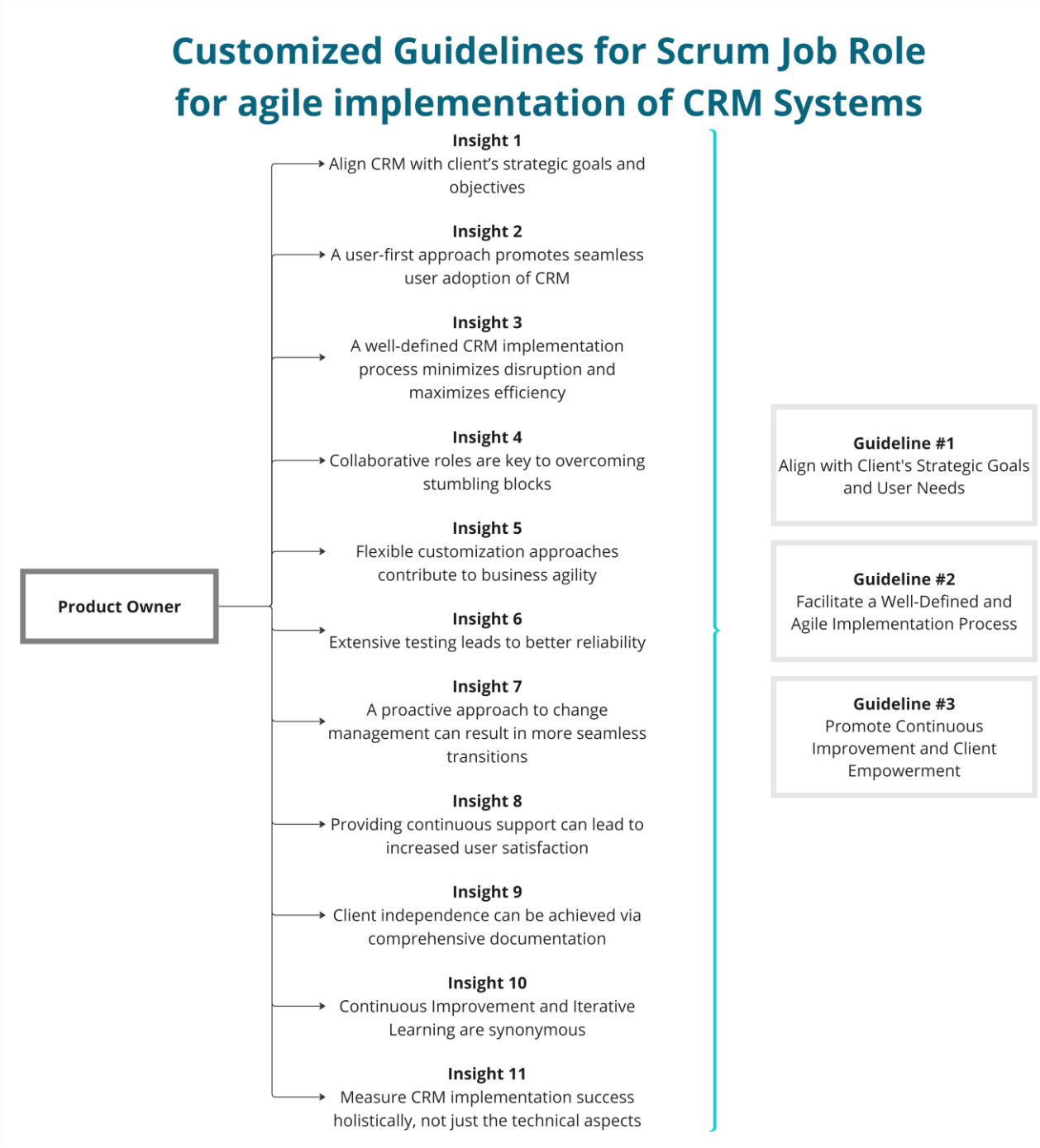

Figure 12: Customized Guidelines for Scrum Job Roles (Product Owner)

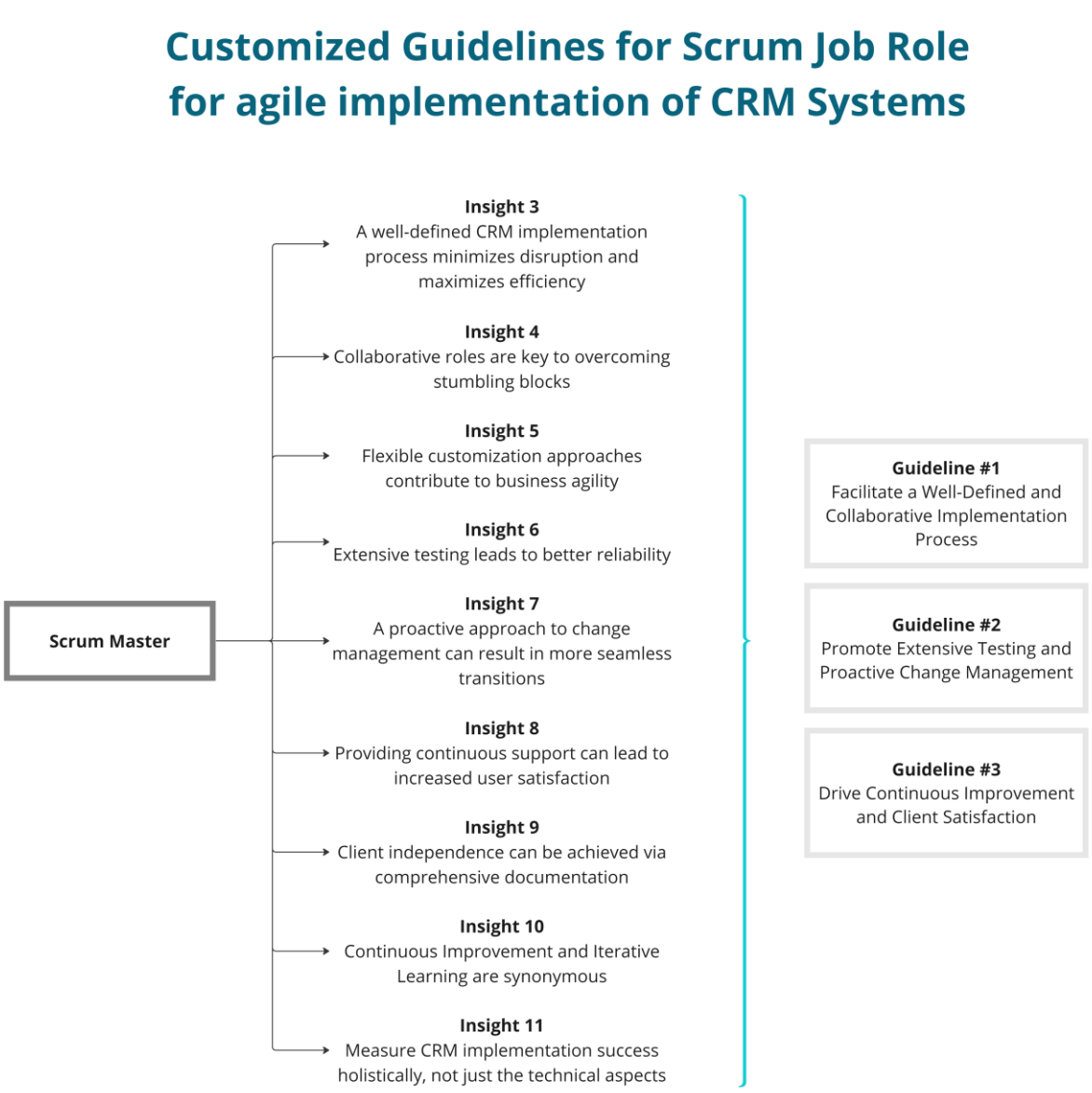

Figure 13: Customized Guidelines for Scrum Job Roles (Scrum Master)

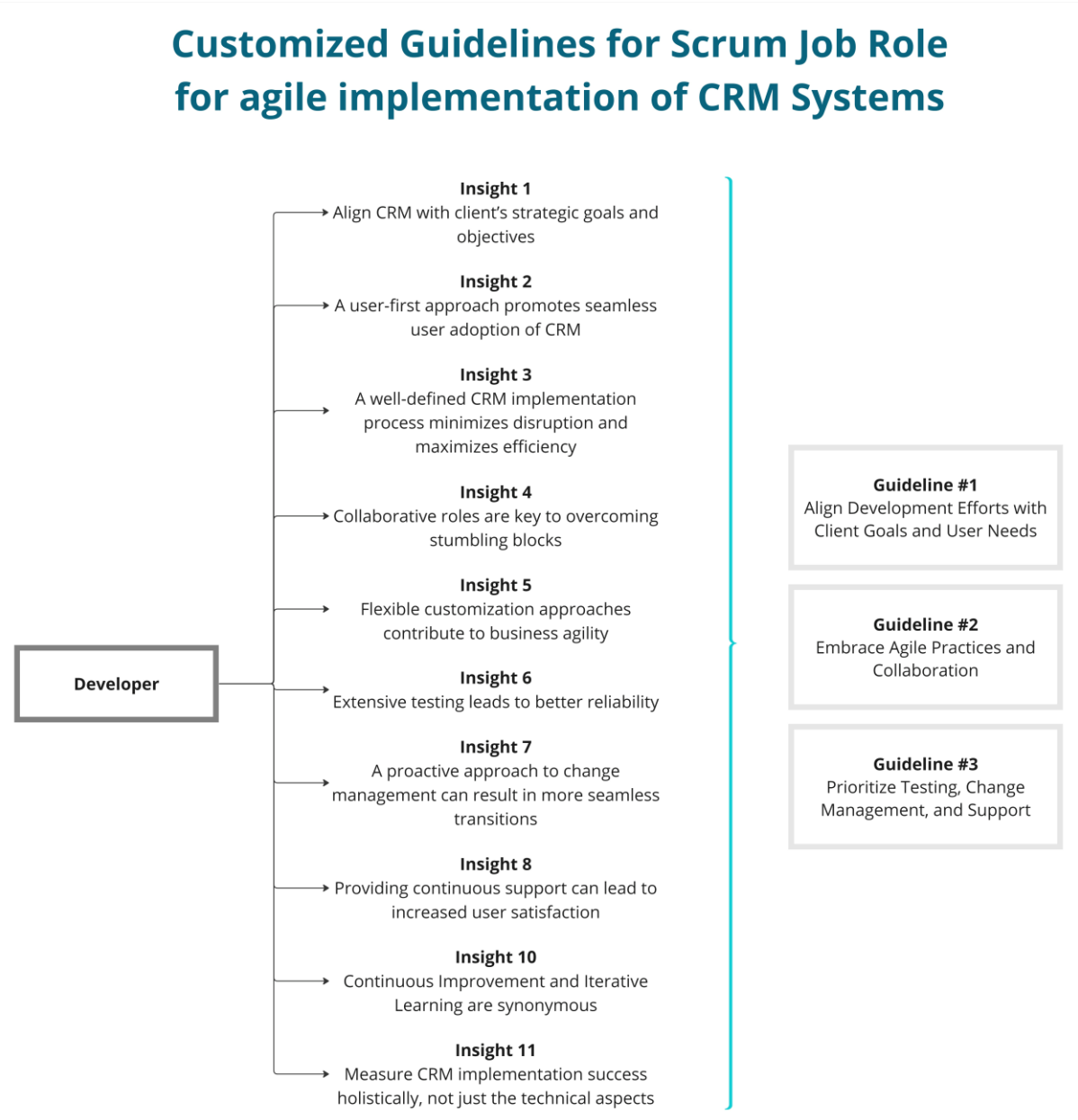

Figure 14: Customized Guidelines for Scrum Job Roles (Developer)

Table 5.4: Customized Guidelines for Scrum Job roles

No	Scrum Job Roles	Based on *Analysis of 11 Key Insights and its influence on the Scrum Framework* (see section 5.2)	Customized Guidelines for Scrum Job roles
1	Product Owner	**Insight 1:** Align CRM with client's strategic goals and objectives **Insight 2:** A user-first approach promotes seamless user adoption of CRM **Insight 3:** A well-defined CRM implementation process minimizes disruption and maximizes efficiency **Insight 4:** Collaborative roles are key to overcoming stumbling blocks **Insight 5:** Flexible customization approaches contribute to business agility	**Align with Client's Strategic Goals and User Needs** • Prioritize aligning the CRM implementation with the client's strategic goals and objectives. • Ensure that every feature and functionality added to the CRM system serves a strategic purpose and addresses the needs of end-users. • Actively engage with stakeholders to gather requirements and feedback and use this information to guide the direction of the CRM implementation, fostering a user-first approach. **Facilitate a Well-Defined and Agile Implementation Process** • Define and maintain a well-defined CRM implementation process that minimizes disruption and maximizes efficiency. • Embrace flexible customization approaches to contribute to business agility and responsiveness. • Foster collaborative roles and teamwork to overcome stumbling blocks and drive continuous improvement through iterative learning.

No	Scrum Job Roles	Based on *Analysis of 11 Key Insights and its influence on the Scrum Framework* (see section 5.2)	Customized Guidelines for Scrum Job roles
		Insight 6: Extensive testing leads to better reliability **Insight 7:** A proactive approach to change management can result in more seamless transitions **Insight 8:** Providing continuous support can lead to increased user satisfaction **Insight 9:** Client independence can be achieved via comprehensive documentation **Insight 10:** Continuous Improvement and Iterative Learning are synonymous	**Promote Continuous Improvement and Client Empowerment** • Encourage a proactive approach to change management to facilitate seamless transitions and address evolving client needs. • Provide continuous support to users throughout and after the CRM implementation to ensure increased user satisfaction and adoption. • Foster client independence by providing comprehensive documentation and resources, while also recognizing the importance of measuring CRM implementation success holistically, beyond just technical aspects.

No	Scrum Job Roles	Based on *Analysis of 11 Key Insights and its influence on the Scrum Framework* (see section 5.2)	Customized Guidelines for Scrum Job roles
		Insight 11: Measure CRM implementation success holistically, not just the technical aspects	
2	Scrum Master	**Insight 3:** A well-defined CRM implementation process minimizes disruption and maximizes efficiency **Insight 4:** Collaborative roles are key to overcoming stumbling blocks **Insight 5:** Flexible customization approaches contribute to business agility **Insight 6:** Extensive testing leads to better reliability	**Facilitate a Well-Defined and Collaborative Implementation Process** • Ensure the CRM implementation process is well-defined to minimize disruption and maximize efficiency. • Foster collaborative roles among team members to overcome stumbling blocks and drive continuous improvement. • Encourage open communication and teamwork to facilitate flexible customization approaches that contribute to business agility. **Promote Extensive Testing and Proactive Change Management** • Advocate for extensive testing throughout the CRM implementation process to ensure better reliability. • Take a proactive approach to change management to facilitate more seamless transitions and address potential challenges early on.

No	Scrum Job Roles	Based on *Analysis of 11 Key Insights and its influence on the Scrum Framework* (see section 5.2)	Customized Guidelines for Scrum Job roles
		Insight 7: A proactive approach to change management can result in more seamless transitions **Insight 8:** Providing continuous support can lead to increased user satisfaction **Insight 9:** Client independence can be achieved via comprehensive documentation **Insight 10:** Continuous Improvement and Iterative Learning are synonymous **Insight 11:** Measure CRM implementation success holistically, not just the technical aspects	• Provide continuous support to the team and stakeholders, ensuring they have the resources and assistance needed to navigate changes and challenges effectively. **Drive Continuous Improvement and Client Satisfaction** • Embrace a culture of continuous improvement and iterative learning, recognizing that they are synonymous and essential for successful CRM implementation. • Work closely with stakeholders to measure CRM implementation success holistically, beyond just technical aspects, to ensure client satisfaction. • Support efforts to achieve client independence through comprehensive documentation while actively seeking opportunities for improvement and innovation.

No	Scrum Job Roles	Based on *Analysis of 11 Key Insights and its influence on the Scrum Framework* (see section 5.2)	Customized Guidelines for Scrum Job roles
3	Developer	**Insight 1:** Align CRM with client's strategic goals and objectives **Insight 2:** A user-first approach promotes seamless user adoption of CRM **Insight 3:** A well-defined CRM implementation process minimizes disruption and maximizes efficiency **Insight 4:** Collaborative roles are key to overcoming stumbling blocks **Insight 5:** Flexible customization approaches contribute to business agility **Insight 6:** Extensive testing leads to better reliability	**Align Development Efforts with Client Goals and User Needs** • Prioritize aligning implementation efforts with the client's strategic goals and objectives for the CRM system. • Adopt a user-first approach by focusing on implementing features and functionalities that promote seamless user adoption and address user needs effectively. • Collaborate closely with the Product Owner and stakeholders to understand requirements and ensure that implementation efforts are aligned with business objectives and user expectations. **Embrace Agile Practices and Collaboration** • Embrace a well-defined CRM implementation process that minimizes disruption and maximizes efficiency, working collaboratively with other team members in a SCRUM environment. • Recognize the importance of flexible customization approaches in contributing to business agility and responsiveness and be open to adapting implementation strategies based on evolving requirements and feedback.

No	Scrum Job Roles	Based on *Analysis of 11 Key Insights and its influence on the Scrum Framework* (see section 5.2)	Customized Guidelines for Scrum Job roles
		Insight 7: A proactive approach to change management can result in more seamless transitions **Insight 8:** Providing continuous support can lead to increased user satisfaction **Insight 10:** Continuous Improvement and Iterative Learning are synonymous **Insight 11:** Measure CRM implementation success holistically, not just the technical aspects	• Work collaboratively with other team members to overcome stumbling blocks and drive continuous improvement through iterative learning and experimentation. **Prioritize Testing, Change Management, and Support** • Prioritize extensive testing throughout the sprint to ensure better reliability of the CRM system, collaborating closely with QA team members to identify and address potential issues. • Support a proactive approach to change management by being receptive to changes in requirements and actively contributing to seamless transitions during the implementation process. • Provide continuous support to users and stakeholders by addressing their concerns and questions, contributing to increased user satisfaction and overall project success.

5.4 Conclusion

In conclusion, the findings from research objective 2 (Propose and recommend customized Scrum framework for CRM implementation) have resulted in the development of a customized Scrum framework specifically designed for agile CRM implementations. Through an in-depth analysis of eleven key insights, this customized framework has been designed to seamlessly integrate with the existing Scrum principles while addressing the unique requirements of agile CRM implementation projects.

The customized Scrum process model retains the integrity of the original framework while introducing four new steps: Strategic Goals (1), Pre-Deployment Preparation (2), Post-Deployment Verification (3), and Go Live (4). Steps 2-4 constitutes the Release Management process which is critical for high-quality software, lower costs, minimized release risks, and faster feedback loops (Aytekin, 2014). This is essential for successful CRM implementation.

These additions add on to the adaptability and effectiveness of the Scrum framework without disrupting its core principles. Detailed documentation of each process step has also been provided to aid clarity together with specific examples tailored to CRM implementation scenarios.

Furthermore, the influence of the key insights on the Scrum values and job roles has been thoroughly examined and integrated into the framework. Guidelines for commitment, courage, focus, openness, and respect have been defined to ensure alignment with client goals, promote collaboration, and foster continuous improvement. The roles of Product Owner, Scrum Master, and Developer have also been refined to emphasize client-centricity, agile practices, and proactive management.

Overall, this customized Scrum framework offers a robust and agile approach to CRM implementation.

6.0 EXPERT VALIDATION OF CUSTOMIZED SCRUM FRAMEWORK FOR AGILE CRM IMPLEMENTATION

6.1 Introduction

This chapter transitions to the crucial stage of securing expert validation and feedback. This feedback plays a vital role in shaping the refinement of the proposed framework. The chapter details the process of obtaining expert input and analyzes the feedback and recommendations received. These insights contribute significantly to enhancing the framework's practical application and overall effectiveness.

6.2 Experts selection and background

Experts have been selected from the industry (Expert #1) and academia (Expert #2). Validation from both industry and academic experts can help strengthen the alignment of the proposed framework with industry best practices and academic rigor. This can ensure that the framework meets the highest standards of quality and relevance.

Expert #1 is a certified Scrum@Scale Practitioner, Scrum Master, Product Owner and PMP. She is an experienced Agile Practitioner with over twenty years of experience. She is currently working as the Head of Software and Services at a large global, multinational corporation using Salesforce CRM extensively.

Expert #2 is an Assistant Professor at a renowned Malaysian university. Her area of expertise includes Artificial Intelligence, Component-based Software Development, Machine Learning and Mathematical Verification of Software Systems. She graduated with a Bachelor of Computer Science (Azad University), Master of Computer Science (Tabriz University) and a Doctor of Philosophy in Software Engineering (Universiti Putra Malaysia).

6.3 Feedback from experts

The expert validation was done over a period of two weeks over a face-to-face feedback session and via email feedback. Four diagrams from this research were shared with the experts for their validation of the customized Scrum Framework. As the focus was on the customized Scrum framework, the eleven key insights uncovered from Research Objective 1 were omitted.

1. OVERVIEW - Customized Scrum Process Model (see Appendix F)
2. DETAILED - Customized Scrum Process Model (see Appendix G)
3. Customized Guidelines for Scrum Values (see Appendix H)

4. Customized Guidelines for Scrum Job Role (see Appendix I)

The feedback received from the expert validation were then categorized into three different areas.

a) *Practical Implementation:* Assess how practical and feasible the framework is for real-world agile CRM projects.
b) *Alignment with Scrum Principles:* Evaluate how well the framework aligns with the fundamental principles and values of Scrum.
c) *Improvement Opportunities:* Identify areas where the framework could be enhanced or refined for better effectiveness.

Details of the feedback are documented in Table 6.1. Table 6.2 provides a bird's eye view of how the expert feedback has been incorporated into the revised framework (see section 6.4) or identified for future research.

Table 6.1: Expert Validation and Feedback

Feedback No	Category	Feedback Received	Changes to be made
FB01	Practical Implementation	All references to "customized" Scrum methodology / framework should be repositioned as "adapting" or "applying" Scrum methodology / framework to agile CRM implementation instead. Scrum is a very lightweight framework and hence, it is easily adapted and applied to all types of software projects. "Customized" or customization of the Scrum methodology implies modifying and changing the framework. This has a negative connotation and will be perceived unfavourably by Scrum practitioners.	All references to customization of the Scrum methodology / framework will be changed to reflect this feedback.
FB02	Alignment with Scrum Principles	Incorporate the "Strategic Goals" into the Scrum "Product Goal" instead of having it as an external step outside Scrum. Include "Strategic Vision (i.e. Strategic Goals)" and "Product Vision" within the "Product Goal". All 3 are important in ensuring that the product development efforts and progress are aligned with the organization's strategic vision.	Amend the overview and detailed Scrum Process Model to reflect this feedback. Provide CRM specific examples within the guidelines.

Feedback No	Category	Feedback Received	Changes to be made
FB03	Alignment with Scrum Principles	Incorporate "Definition of Ready" (DOR) into the Scrum "Product Backlog Refinement". Product Backlog (PBI) must be "Ready" (DOR) in terms of being sufficiently well described and understood before it can flow into the Sprint Planning event.	Amend the overview and detailed Scrum Process Model to reflect this feedback. Process Model. Provide CRM specific examples.
FB04	Alignment with Scrum Principles	Release Management processes has nothing to do with Scrum methodology.	The Release management process plays a critical role in delivering high quality software and services, lower the development costs, minimize the risk of release failures, and provide faster feedback loops to the business (Aytekin, 2014). It is essential in completing the CRM implementation. The author will update the section on Scrum process model to clearly reflect that the Release Management process is external to Scrum. However, but is required after the Sprint Review event

Feedback No	Category	Feedback Received	Changes to be made
			in order to complete the CRM implementation.
FB05	Improvement Opportunities	Align 5 Scrum Values with the Scrum Process Model. This will demonstrate how values can be applied across the Scrum framework.	The recommendation to align the 5 Scrum values with the Scrum Process Model presents a valuable addition to the methodology's evolution. While this feedback is acknowledged as valuable, it will be earmarked for future research to evaluate its potential impact and integration into the Scrum Process Model.
FB06	Improvement Opportunities	Position the steps outlined in the Scrum process model as guidelines for agile CRM implementation steps.	Amend the detailed Scrum Process Model to reflect this feedback.
FB07	Alignment with Scrum Principles	Recommend not creating guidelines for the 5 Scrum values as it is the foundational principles upon which the entire Scrum framework is built. Recommended moving the guidelines to Strategic Goals / Vision.	The guidelines are not meant to replace the original Scrum values. Instead, these guidelines act as additional recommended guidance when applying

Feedback No	Category	Feedback Received	Changes to be made
			Scrum methodology for agile CRM implementations. The author will update the section on Scrum values to clearly reflect that it does not replace the scrum values but is intended as recommended guidelines (based on 11 key insights) only.
FB08	Alignment with Scrum Principles	For Scrum Job Roles, remove all references to process in Product Owner job roles. The Product Owner role is all about Product and not Process. Process is the Scrum Master's role.	Updated the guidance to Scrum job roles to reflect the feedback.
FB09	Improvement Opportunities	Recommend changing each Scrum job role to reflect its responsibilities and personality traits, instead of guidelines.	The guidelines are not meant to replace the original Scrum Job Roles and responsibilities. Instead, these guidelines act as additional guidance for these Scrum job roles when applying Scrum methodology for agile CRM implementations.

Feedback No	Category	Feedback Received	Changes to be made
			The author will update the section on Scrum job roles to clearly reflect that it does not replace the original definition of scrum job roles but is intended as recommended guidelines (based on 11 key insights) only.
FB10	Practical Implementation	The framework's real-world implementation depends on factors like available resources and team expertise. Here are some aspects to consider: • Embrace Efficiency and Reliability through Testing and Support and Prioritize Comprehensive Testing and Holistic Measurement require resources. • Adopting a Proactive Change Management Approach requires strong communication and stakeholder engagement. • Foster Client Independence through Documentation must be balanced with agile principles.	The feedback highlights potential challenges in the framework's real-world implementation success as it has not considered resource and team expertise as key factors. Future research could explore strategies to mitigate these challenges, such as optimizing resource allocation, enhancing communication channels, developing guidelines for balancing documentation with agile principles, fostering supportive cultures within

Feedback No	Category	Feedback Received	Changes to be made
		• Promote Collaborative Roles and Communication require a supportive culture. • Embracing Flexible Customization Approaches requires careful planning.	organizations, and refining planning processes. Additionally, investigating case studies or conducting empirical studies in organizations facing these challenges could offer valuable insights and practical solutions for overcoming these limitations in real-world scenarios.
FB11	Improvement Opportunities	Consider providing specific examples or case studies.	Based on the literature review conducted, there are presently no acknowledged adaptations of Scrum methodology tailored specifically for the implementation of agile Customer Relationship Management (CRM) systems. In future research, exploration could focus on identifying any emerging case studies that may offer insights into the

Feedback No	Category	Feedback Received	Changes to be made
			adaptation of Scrum methodology for agile CRM systems.
FB12	Improvement Opportunities	Offer templates or guidelines for creating user-friendly documentation that empowers clients or resources without overwhelming them with unnecessary details. Because mostly people refuse to create or read documents and this framework includes multiple documentation related parts.	While the framework offers valuable insights and guidelines, the feedback highlights a limitation in providing user-friendly documentation templates. This limitation highlights the need for strategies to streamline and simplify documentation processes and ensure that they empower users without overwhelming them with unnecessary details. Future research could focus on developing templates or guides tailored for different user groups (e.g. technical vs. business users) that are user-friendly and less intimidating.

Table 6.2: Impact of Expert Validation and Feedback

Figure	Revised Scrum framework	Feedback from Expert Validation (see section 6.3)											
		FB01	FB02	FB03	FB04	FB05	FB06	FB07	FB08	FB09	FB10	FB11	FB12
16	Scrum process model for agile CRM implementation	✓	✓	✓	✓	🔍					🔍	🔍	🔍
17	Recommended guidelines for agile CRM implementation (Process Model)	✓	✓	✓	✓	🔍	✓				🔍	🔍	🔍
18	Recommended guidelines for agile CRM implementation (Scrum Values)	✓						✓			🔍	🔍	
19	Recommended guidelines for agile CRM implementation (Scrum Job Roles)	✓							✓	✓	🔍	🔍	

Practical Implementation
Assess how practical and feasible the framework is for real-world agile CRM projects

Alignment with Scrum Principles
Evaluate how well the framework aligns with the fundamental principles and values of Scrum

Improvement Opportunities
Identify areas where the framework could be enhanced or refined for better effectiveness

✓ **Incorporated into revised Scrum framework**

🔍 **Future research opportunity**

6.4 The revised Scrum framework for agile CRM implementation

The revised, customized Scrum framework for agile CRM implementation is presented visually across Figures 15, 16, 17, and 18. Key changes based on the expert validation and feedback are also highlighted in shaded yellow areas across Figures 15, 16, 17, and 18. Collectively, this section showcases the revised, customized Scrum framework for agile CRM implementation, after the expert validation and feedback.

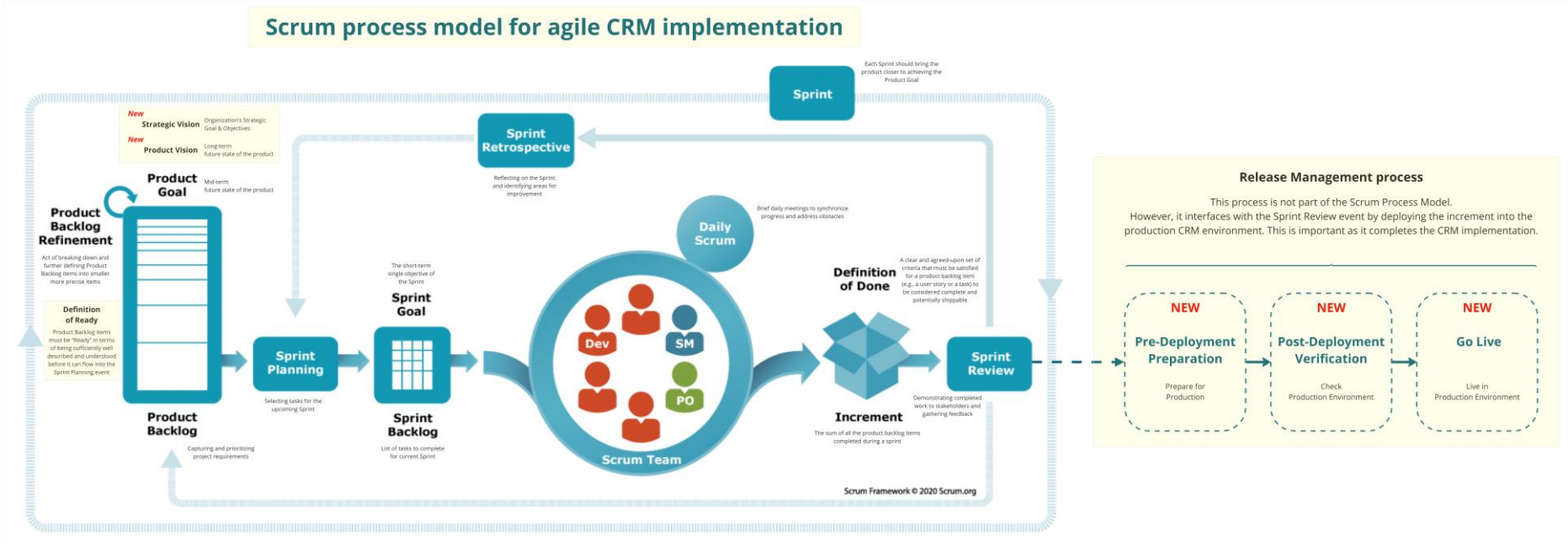

Figure 15: Scrum process model for agile CRM implementation

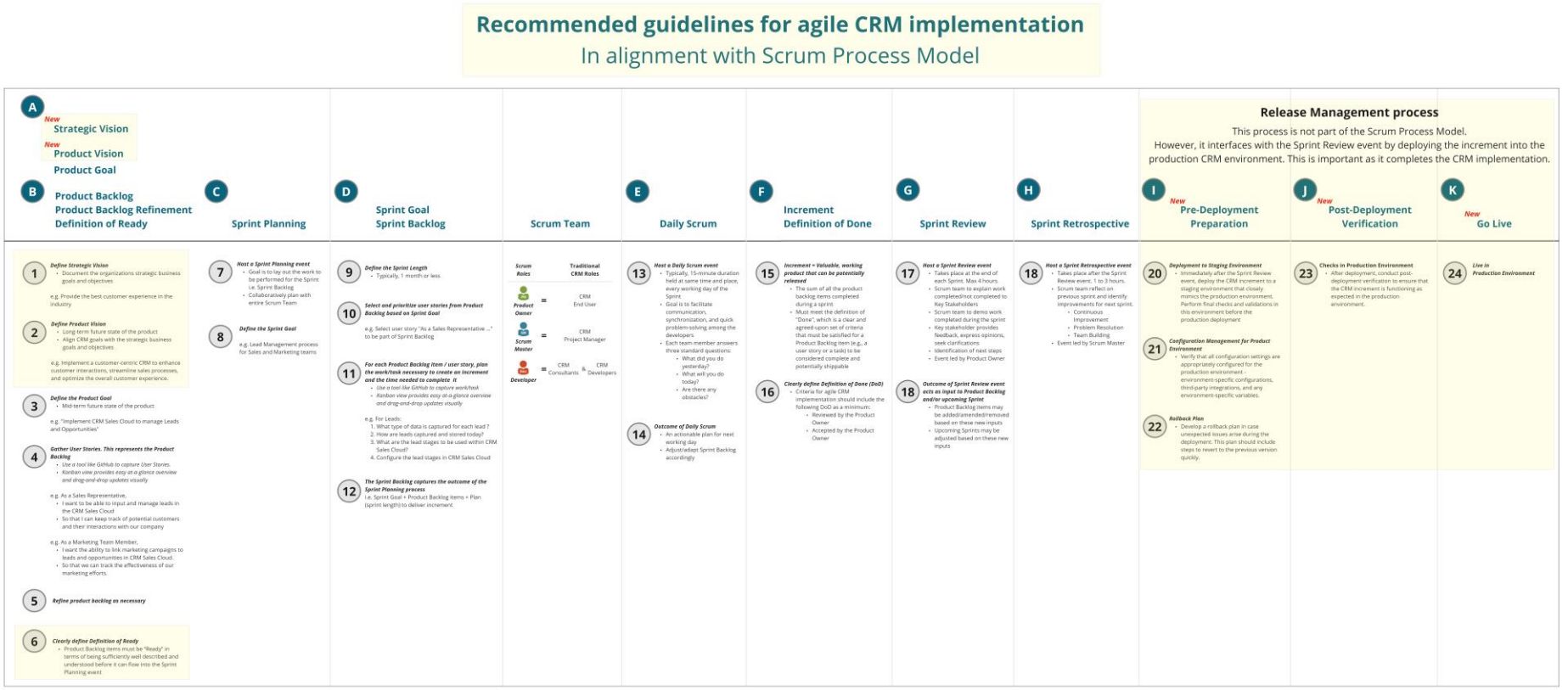

Figure 16: Recommended guidelines for agile CRM implementation (Process Model)

Figure 17: Recommended guidelines for agile CRM implementation (Scrum Values)

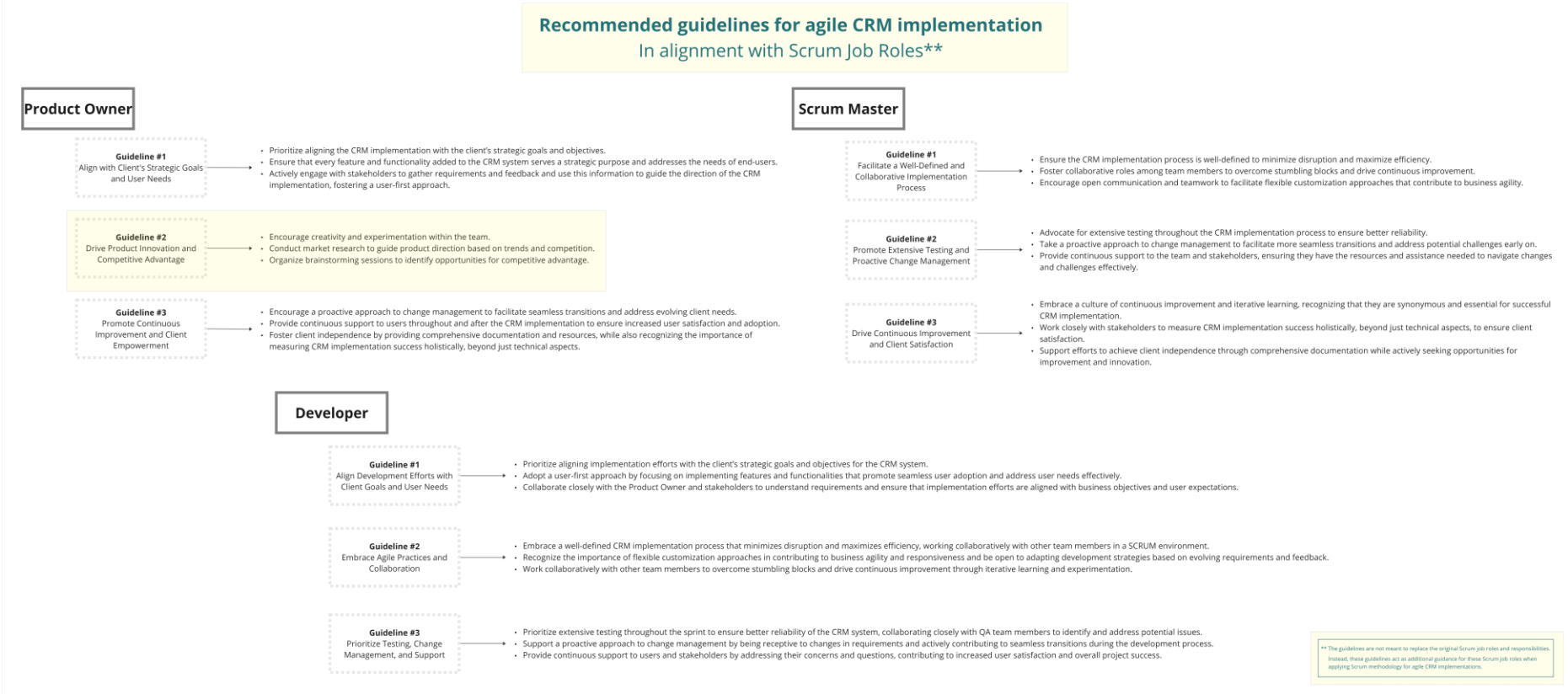

Figure 18: Recommended guidelines for agile CRM implementation (Scrum Job Roles)

6.5 Conclusion

The insightful and constructive feedback provided by the two experts has significantly contributed to the development of the revised, customized Scrum framework for agile CRM implementation.

Their input has facilitated the refinement of the framework and made it more practical and feasible for application in real-world projects. In addition, their assessment of alignment with Scrum principles has reinforced the framework's conceptual integrity. Finally, the experts' candid feedback regarding areas for improvement has also provided valuable insights for enhancing the framework's effectiveness.

Although not all suggestions were incorporated into the revised framework, they have prompted further consideration of potential areas for future research.

In summary, the feedback from the experts has advanced the evolution of the framework by identifying limitations in the proposed framework and ensuring its practicality in real-world scenarios.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

This chapter provides an in-depth analysis of the research conducted in accordance with the predefined objectives and research questions. It systematically addresses each objective and its related questions and offers a comprehensive analysis of the findings. It also examines limitations encountered during the research process and proposes recommendations for future research. The chapter concludes by summarizing the achievements of the research objectives and addressing the research questions in a comprehensive manner.

7.2 Discussion on Research Objectives and Questions

Research Objective 1:

- To investigate CRM Implementation framework and its impact on project success

Research Question 1a:

- What does a real-world CRM implementation framework look like?

Research Question 1b:

- What are the key factors influencing CRM implementation project success?

This research successfully achieved its primary objective of investigating a CRM implementation framework and its impact on project success.

By employing a pilot study, detailed interviews with a Malaysian Salesforce Partner, and a case study analysis, the author was able to document a real-world CRM implementation framework (see Figure 6). This framework provides a practical roadmap for organizations considering implementing a CRM system. This addresses research question 1a by clarifying what such a framework looks like.

Through thematic analysis of the interview transcript, we identified 58 codes, 15 unique themes, and ultimately synthesized 11 key insights (see Figure 7) influencing CRM implementation success. These insights go beyond technical considerations and highlights the importance of strategic client partnerships, user-centric design, well-defined processes, collaborative teams, flexible customization, and robust testing.

Furthermore, the research emphasizes the value of proactive change management, continuous support, user empowerment through documentation, iterative learning, and holistic success metrics aligned with broader business goals. This addresses research question 1b, by offering

insights which provide a comprehensive understanding of the multifaceted nature of CRM implementation and its critical role in project success.

Research Objective 2:

- Based on output of RO 1, propose and recommend customized Scrum framework for CRM implementation

Research Question 2:

- How can the Scrum framework be customized for CRM implementation projects?

As shown in Figure 8, a significant milestone was reached as the eleven key insights formed the basis for proposing and recommending a customized Scrum framework for CRM implementation. The customized Scrum framework for CRM implementation is discussed in Chapter 5 (see Figures 9,10,11,12,13,14).

The customized Scrum framework seamlessly integrates core Scrum principles with the unique needs of CRM implementation. The enhancements increase adaptability and effectiveness without compromising core Scrum values. Where possible, each stage is documented with CRM-specific examples for clarity.

In addition, the framework incorporates the key insights into Scrum values and Scrum job roles. The author defined specific guidelines for fostering commitment, courage, focus, openness, and respect to align client goals, promote collaboration, and drive continuous improvement. The roles of Product Owner, Scrum Master, and Developer are also provided with guidelines to emphasize client-centricity, agile practices, and proactive management.

Expert Validation

To ensure its real-world practicality, the proposed framework was validated by two experts – one from industry and one from academia. Their valuable feedback contributed significantly to the revised framework. Their input refined the framework for practical application, strengthened its conceptual integrity, and identified potential areas for future research. While not all suggestions were directly implemented, they provided valuable insights in potential areas for future research. The revised, customized Scrum framework for agile CRM implementation is discussed in Chapter 6 (see Figures 15,16,17,18).

Overall, this research successfully addressed both objectives and produced a novel framework tailored for agile CRM implementation.

7.3 Limitations and Recommendations for Future Work

While this research has addressed the objectives as discussed in the previous section, valuable feedback from experts has identified areas of limitation. By exploring these areas for future research, the revised framework can continue to be refined and enhanced to ensure its effectiveness and practical application in real-world agile CRM implementations.

7.3.1 Aligning Scrum Values with the Process Model (FB05)

One expert suggested aligning the five Scrum Values with the Scrum Process Model for a more comprehensive framework. This feedback holds merit and warrants further investigation to evaluate its potential impact and integration into the model.

7.3.2 Challenges in Real-World Implementation (FB10)

The framework's success in real-world scenarios may be influenced by factors like resource availability and team expertise. Future research could explore strategies to address these challenges. This might involve optimizing resource allocation, enhancing communication channels, and developing guidelines for balancing documentation with agile principles. Additionally, case studies or empirical studies in organizations facing these challenges could offer practical solutions for overcoming these limitations.

7.3.3 Need for Specific Examples and Case Studies (FB11 & FB12)

The lack of readily available case studies on adapting Scrum for CRM implementation was identified. Future research could focus on identifying emerging case studies that showcase successful adaptations of the Scrum methodology for agile CRM projects. Additionally, developing user-friendly documentation templates or guides tailored for different user groups (technical vs. business) could address the feedback regarding documentation complexity. This would empower users and streamline the documentation process.

7.4 Conclusion

This research contributes to the evolving body of knowledge surrounding agile CRM implementation.

Firstly, by documenting a real-world CRM implementation framework, the research offers a practical roadmap for organizations considering implementing a CRM system. This framework can assist organizations in navigating the complexities of CRM implementation with greater clarity and direction. The framework also enhances existing literature in bridging theory and practice by providing actionable guidance for successful CRM adoption.

Secondly, the research uncovers and identifies eleven key insights that extend beyond technical considerations. Highlighting the importance of strategic client partnerships, user-centric design, and collaborative teams elevates the conversation and provides a more holistic understanding of project success factors. In addition, these insights also emphasize the value of proactive change management, continuous support, and user empowerment through documentation. Collectively, these insights offer valuable knowledge for practitioners. These eleven key insights also enhance existing literature in reshaping the understanding of what makes projects successful by providing a broader perspective beyond technical considerations.

Finally, building upon these newly identified eleven key insights and feedback from two experts, the research proposes a revised, customized Scrum framework specifically for agile CRM implementation. This revised framework seamlessly integrates core Scrum principles with the unique needs of CRM projects. This could potentially offer a valuable framework for organizations wanting to use the Scrum framework for agile CRM projects. This revised framework also enhances existing literature in effective CRM implementation strategies by adapting and applying Scrum for agile CRM projects.

In conclusion, this research addresses a gap in the understanding of CRM implementation success factors and equips practitioners with a potential framework to achieve greater success in their agile CRM implementations. The findings of this research may also contribute to continued advancements in agile CRM implementation strategies.

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APPENDIX A: Original Interview Questions used during Pilot Study (Questions ONLY)

A. Overview	
1	**Background**
	i. Can you provide an overview of your experience as a Salesforce Implementation Partner? ii. How many CRM implementation projects have you been involved in? iii. Can you describe the typical industries or sectors where you have implemented Salesforce CRM systems?
2	**Project Initiation**
	i. What are the initial steps you take when a client approaches you for a CRM implementation? ii. How do you assess a client's readiness for CRM implementation? iii. What key objectives or goals do you aim to achieve during the project initiation phase?
B. CRM Implementation Methodology	
1.	**Background**
	i. Can you describe the methodology or approach your organization typically uses for CRM implementations? ii. Is your implementation methodology based on a recognized framework such as Scrum, Agile, or do you have a proprietary methodology? iii. How does your chosen methodology align with the goals and needs of your clients?

	iv. What are the key steps or phases involved in your CRM implementation methodology? v. Can you provide an overview of the typical sequence of activities from project initiation to completion? **vi.** Are there specific milestones that clients can expect during the implementation process?
2.	**Project Management**
	i. What project management techniques or tools do you use to keep a CRM implementation on track? ii. How do you monitor progress and ensure that the project stays within scope, time, and budget? iii. Can you share a case where you had to manage unexpected project challenges effectively? iv. How do you plan and prepare for a CRM implementation project? v. What activities are typically undertaken during the project kickoff phase? vi. Do you involve the client in project planning and, if so, to what extent? vii. Can you describe the roles and responsibilities of team members involved?
3.	**Customization and Configuration**
	i. How do you approach customization and configuration within your methodology? ii. Can you give examples of how you tailor CRM systems to meet unique client requirements? iii. How do you ensure that Salesforce CRM integrates smoothly with a client's existing systems and technologies? iv. Can you share a challenging integration scenario you've encountered and how you resolved it? v. How do you handle change requests related to customization during the project?
4.	**Testing and Quality Assurance**

	i. What are your testing and quality assurance processes/tools within your implementation methodology? ii. How do you ensure that the CRM system meets quality standards and functional requirements? iii. Is there a dedicated testing phase, and if so, what does it entail? iv. Can you share an example of a critical issue you've uncovered during testing and how you addressed it?
5.	**User Training and Adoption**
	i. What strategies do you use to ensure effective user training and adoption of the new CRM system? ii. Can you describe any common challenges you've faced in getting users to embrace the new CRM platform?
6.	**Deployment and Go-Live**
	i. How do you manage the deployment of the CRM system to ensure a smooth go-live process? ii. Are there specific strategies or best practices you follow to minimize disruptions during the transition? iii. What contingency plans do you have in place for potential issues at the go-live stage?
7.	**Change Management and User Adoption**
	i. How does your methodology address change management and user adoption challenges? ii. What strategies do you employ to ensure that end-users embrace the new CRM system effectively? iii. Can you share examples of successful change management initiatives you've implemented?
8.	**Monitoring and Post-Implementation Support**

	i. What kind of support and maintenance services do you provide to clients after the CRM system is live? ii. How do you address ongoing updates, bug fixes, and evolving business needs? iii. What measures do you take to monitor the performance and success of the implemented CRM system?
9.	**Documentation and Knowledge Transfer**
	i. How do you document the processes and configurations of the CRM system for clients? ii. Is there a knowledge transfer process to ensure clients can manage the system independently? iii. What resources or materials do you provide to clients for ongoing reference?
10.	**Continuous Improvement**
	i. How do you incorporate feedback from clients and project retrospectives into improving your methodology? ii. Are there mechanisms for continuous improvement and refinement of your implementation approach? iii. Based on your experiences, what are some valuable lessons learned in CRM implementations? iv. How do you incorporate feedback and lessons learned into improving your CRM implementation framework?
11.	**Cultural and Regional Considerations**
	i. Are there any cultural or regional factors unique to Malaysia that you considered in your CRM implementations? ii. How do you adapt your approach to accommodate these factors?
C. Impact on Success	

1.	**CRM Implementation Framework & Success Metrics**
	i. How do you define success metrics for CRM implementation projects? e.g. factors like time, scope, and cost ii. How do you measure success metrics for CRM implementation projects? iii. What are the key factors in the CRM implementation framework that have contributed to the success of the CRM project? iv. Can you share specific examples based on your past projects?

APPENDIX B: Revised Interview Questions used with Malaysian Salesforce Partner (Objectives and Questions ONLY)

1. Overview	
Objective 1:	The objective of this category is to understand the initial steps and processes followed by the Salesforce Implementation Partner when a client approaches them for CRM implementation. Additionally, it aims to identify how the interviewee assesses client readiness and the key objectives they set during the project initiation phase.
Question 1a:	What are the initial steps you take when a client approaches you for a CRM implementation?
Question 1b:	How do you assess a client's readiness for CRM implementation?
Question 1c:	What key objectives or goals do you aim to achieve during the project initiation phase?
2. Background	
Objective 2:	To gain an understanding of the interviewee's organization's CRM implementation methodology, its alignment with client needs, and the key steps involved, including milestones.
Question 2a:	Can you describe your organization's CRM implementation methodology, including any recognized frameworks or proprietary approaches, and how it aligns with client goals and needs?
Question 2b:	Could you outline the key steps or phases within your CRM implementation methodology and provide an overview of the typical sequence of activities from project initiation to completion?
Question 2c:	Are there specific milestones or key deliverables that clients can expect during the CRM implementation process?
3. Project Management	
Objective 3:	To explore the project management techniques, tools, and strategies employed to ensure successful CRM implementations, including managing challenges.

Question 3a:	Could you describe your project management approach for CRM implementations, including techniques, tools, and strategies to ensure project success within scope, time, and budget?
Question 3b:	How do you plan and prepare for CRM implementation projects, and to what extent do you involve clients in project planning? Additionally, what activities typically occur during the project kick-off phase?
Question 3c:	Can you provide insights into the roles and responsibilities of team members involved in CRM implementations to ensure effective project management and execution?
4. Customization and Configuration	
Objective 4:	To understand how customization and configuration are approached within the methodology, with a focus on tailoring CRM systems and addressing integration challenges.
Question 4a:	How do you approach customization and configuration within your CRM implementation methodology, and can you provide examples of tailoring CRM systems to meet unique client requirements? Additionally, how do you ensure smooth integration with a client's existing systems and technologies?
Question 4b:	Could you share an example of a challenging integration scenario you've encountered in CRM implementations and how you successfully resolved it?
Question 4c:	How do you handle change requests related to customization during the project, ensuring they align with the project's scope and objectives?
5. Testing and Quality Assurance	
Objective 5:	To delve into the testing and quality assurance processes/tools used to ensure the CRM system meets quality standards and functional requirements, including dealing with critical issues.

Question 5a:	Could you describe your testing and quality assurance processes and tools within your CRM implementation methodology, including whether there's a dedicated testing phase?
Question 5b:	How do you ensure that the CRM system meets quality standards and functional requirements, and could you provide examples of how this has been achieved in previous projects?
Question 5c:	Can you share an example of a critical issue you've encountered during testing, along with the steps taken to address and resolve it, highlighting your approach to maintaining system integrity?
6. User Training and Adoption	
Objective 6:	To learn about strategies for effective user training and adoption and to identify common challenges faced during this phase.
Question 6a:	What strategies do you use to ensure effective user training and adoption of the new CRM system?
Question 6b:	Can you describe any common challenges you've faced in getting users to embrace the new CRM platform?
7. Deployment and Go-Live	
Objective 7:	To understand how the deployment process is managed to ensure a smooth go-live and the contingency plans in place for potential issues.
Question 7a:	How do you manage the deployment of the CRM system to ensure a smooth go-live process?
Question 7b:	Are there specific strategies or best practices you follow to minimize disruptions during the transition?
Question 7c:	What contingency plans do you have in place for potential issues at the go-live stage?
8. Change Management and User Adoption	

Objective 8:	To explore how the methodology addresses change management and user adoption challenges and to highlight successful initiatives.
Question 8a:	How does your methodology address change management and user adoption challenges?
Question 8b:	What strategies do you employ to ensure that end-users embrace the new CRM system effectively?
Question 8c:	Can you share examples of successful change management initiatives you've implemented?
9. Monitoring and Post-Implementation Support	
Objective 9:	To gather information on post-implementation support services, ongoing updates, and measures taken to monitor system performance and success.
Question 9a:	What kind of support and maintenance services do you provide to clients after the CRM system is live?
Question 9b:	How do you address ongoing updates, bug fixes, and evolving business needs?
Question 9c:	What measures do you take to monitor the performance and success of the implemented CRM system?
10. Documentation and Knowledge Transfer	
Objective 10:	To examine how the interviewee's organization documents CRM processes, configurations, and ensures knowledge transfer to clients.
Question 10a:	How do you document the processes and configurations of the CRM system for clients?
Question 10b:	Is there a knowledge transfer process to ensure clients can manage the system independently?
Question 10c:	What resources or materials do you provide to clients for ongoing reference?
11. Continuous Improvement	

Objective 11:	To understand how feedback from clients and project retrospectives contribute to continuous improvement and how lessons learned are incorporated into the CRM implementation framework.
Question 11a:	How do you gather and incorporate feedback from clients and project retrospectives to enhance your CRM implementation methodology, and are there specific mechanisms in place for continuous improvement?
Question 11b:	Based on your experiences, what are some valuable lessons you've learned from CRM implementations, and how do you apply these lessons to refine and improve your approach?
Question 11c:	Can you describe the process by which feedback and lessons learned are integrated into your CRM implementation framework, emphasizing how these insights lead to ongoing improvements in your methodology?
12. CRM Implementation Framework & Success Metrics	
Objective 12:	To understand the influence / impact of the CRM Implementation framework on project success metrics (i.e., scope/time/cost)
Question 12a:	Besides traditional success factors for a project (i.e., time, scope, and cost), do you have other metrics of success for your CRM implementation projects?
Question 12b:	What are the key factors in the CRM implementation framework that have contributed to the success of the CRM project? Can you share specific examples based on your past projects?

APPENDIX C: Revised Interview Questions used with Malaysian Salesforce Partner (Objectives, Questions AND Answers)

1. Overview			
Objective 1:	The objective of this category is to understand the initial steps and processes followed by the Salesforce Implementation Partner when a client approaches them for CRM implementation. Additionally, it aims to identify how the interviewee assesses client readiness and the key objectives they set during the project initiation phase.		
Question 1a:	What are the initial steps you take when a client approaches you for a CRM implementation?	Answer 1a:	There are 3 areas that I look at: • Business – Key pain points that made them look for CRM, or what strategic advantages they hope to gain • Commercial – Whether the client has implemented similar priced systems whether its ERP or CRM, that would let me know their comfort level of onboarding Salesforce CRM • Technical – Do they have a cloud-based IT setup such as Office 365 so as to let me know how familiar they are with the Cloud

Question 1b:	How do you assess a client's readiness for CRM implementation?	Answer 1b:	• Are they doing relationship-based selling or account based? • Do they have a clear KPI to improve sales / services or marketing? • Do they have any processes in place to help the sales team in closing or serving customers?
Question 1c:	What key objectives or goals do you aim to achieve during the project initiation phase?	Answer 1c:	I will look at 2 key metrics, one is the adoption / usage and second would be how CRM helps them improve sales • Clean up the customer/ account table, so that no rubbish or stale data in CRM • Record all sales activities in CRM and make sure there's follow up plan for every opportunity (B2B) or proper segment of customers (B2C) • Continuous weekly assessment of adoption using Salesforce adoption dashboard, first look at the

			existing low hanging fruits the sales or marketing can target
2. Background			
Objective 2:	To gain an understanding of the interviewee's organization's CRM implementation methodology, its alignment with client needs, and the key steps involved, including milestones.		
Question 2a:	Can you describe your organization's CRM implementation methodology, including any recognized frameworks or proprietary approaches, and how it aligns with client goals and needs?	Answer 2a:	It is very much depending on industry but here is a high-level methodology • Get a workshop to introduce CRM to all key users • Get hold of their existing customer's database and have them inside the CRM • Make sure everyone login and start capture their daily activities in CRM • Identify processes and governance to incorporate into CRM

			• identify where are the productivity bottleneck and how we can customize CRM to enhance their adoption
Question 2b:	Could you outline the key steps or phases within your CRM implementation methodology and provide an overview of the typical sequence of activities from project initiation to completion?	Answer 2b:	We will normally have the following phases • Requirement workshop for team to knows the CRM environment and understand their requirements • Then we will come out with the solution design to capture all the data to be available inside CRM, how are the data got ingested into CRM and identify how these data will be consumed • For smaller projects we will do some initial data migration and user adoption of CRM within the first few weeks for the team get come onboard • Then we will proceed with the customization of the CRM which involves some flow design or scripting

			• Final round of data migration if needed before the final training • Then key users are gathered for one round of testing and training before they sign off the customization • Finally, we will do a roll out • Continuous assessment on adoption and usages for next 3 months
Question 2c:	Are there specific milestones or key deliverables that clients can expect during the CRM implementation process?	Answer 2c:	Goes back to original 2 key purpose • Improvement in sales numbers - Whether sales improve, or sales number becomes more visible to the team • Improvement in customer experience -Many customers look at how sales processes will get cut short and seamless

			• Single source of truth of the Sales team - This improves sales team adoption of CRM because all their information will be from the CRM
3. Project Management			
Objective 3:	To explore the project management techniques, tools, and strategies employed to ensure successful CRM implementations, including managing challenges.		
Question 3a:	Could you describe your project management approach for CRM implementations, including techniques, tools, and strategies to ensure project success within scope, time, and budget?	Answer 3a:	• We make use of Trello to track our task items. There is a set of templates for every industry, and we will add on to it after requirement understanding. The Trello board will be shared with our client. • Tasks will be monitored on every other day, and we have short calls over MS Teams for progress updates or group troubleshooting.
Question 3b:	How do you plan and prepare for CRM implementation projects, and to what extent do you involve clients in project planning? Additionally, what	Answer 3b:	• Preparation has to start from the onboarding workshop, and we will need key stakeholders to be in the workshop to understand they goals on the CRM project

	activities typically occur during the project kick-off phase?		• All development is done on Salesforce sandboxes, so mistakes can be quickly taken down for revamp if necessary. • Updates with clients will be mostly on a weekly or biweekly basis. There will be demos to show them our progress. We will try to get the client to try out the sandbox as well.
Question 3c:	Can you provide insights into the roles and responsibilities of team members involved in CRM implementations to ensure effective project management and execution?	Answer 3c:	We will have 3 roles in the team • Project Manager - To manage customer's expectation and sign off • CRM Consultants - Translate customer's requirements into configuration and documentation. Sometimes there are 2-3 of them depending on project • CRM Developer - Anything that requires coding will be done by the developer. Ideal break down is 2 developers to 1 consultant.

4. Customization and Configuration			
Objective 4:	To understand how customization and configuration are approached within the methodology, with a focus on tailoring CRM systems and addressing integration challenges.		
Question 4a:	How do you approach customization and configuration within your CRM implementation methodology, and can you provide examples of tailoring CRM systems to meet unique client requirements? Additionally, how do you ensure smooth integration with a client's existing systems and technologies?	Answer 4a:	• There are a few ways to customize Salesforce CRM because it is a low code platform. We will evaluate whether a requirement can be achieved with the no-code capabilities i.e., Salesforce Flow. Normally this allows us to roll out a feature within just few hours • Anything that require unique custom UI would have to be coded in Lighting Web Component and this is done by the developers • Any integration with 3rd party systems, we will evaluate whether there are any tools we can purchase before we use APEX to program the integration. We always suggest customer to build their IT within well-established systems so it's easier to talk to each other

Question 4b:	Could you share an example of a challenging integration scenario you've encountered in CRM implementations and how you successfully resolved it?	Answer 4b:	• Any on prem system that is not connected to the cloud, we have to build a tunnel outside of Salesforce to manage the data flow, this may be done in Python or .NET • Any system that doesn't have proper REST API for integration, we have to manipulate the database directly. This present certain risk especially the other vendor is not involved.

Question 4c:	How do you handle change requests related to customization during the project, ensuring they align with the project's scope and objectives?	Answer 4c:	All change request will be captured in Trello, and they definitely have to be evaluated based on the following criteria
			• What is the business and technical impact on the CRM? We have to evaluate based on
			  ○ Schema changes
			  ○ System process changes
			  ○ User experience on the system

			○ Impact on customization, i.e., this will break certain features. • Do we have a solution or idea how to implement it • What will be the estimated effort? So, the next question will be, is it chargeable? • Once agreed on the impact and costing, we will develop the change in the sandbox to be tested by users.
5. Testing and Quality Assurance			
Objective 5:	To delve into the testing and quality assurance processes/tools used to ensure the CRM system meets quality standards and functional requirements, including dealing with critical issues.		
Question 5a:	Could you describe your testing and quality assurance processes and tools within your CRM implementation methodology, including whether there's a dedicated testing phase?	Answer 5a:	• Depends on the client, but we prefer early round testing once we demo the feature to the users. In this case user will appoint a key stakeholder or dedicated tester to test out the changes

			• For code changes we have to write out own Unit Test to be readied for deployment as per requirement from Salesforce • A final round of testing with most users will be done in a UAT phase
Question 5b:	How do you ensure that the CRM system meets quality standards and functional requirements, and could you provide examples of how this has been achieved in previous projects?	Answer 5b:	• Since our tasks are all captured on Trello, every "card" would be acceptance by the tester and the final end users • All task would need to map to a detail user story on the card, and if this is related to integration, a interface contract has to be defined. • Some client requested us to use their own project management system such as Azure Devops or Jira, but they function quite similar to Trello
Question 5c:	Can you share an example of a critical issue you've encountered during testing, along with the steps taken to address and resolve it, highlighting your approach to maintaining system integrity?	Answer 5c:	• Data issues are always the major upset in any CRM project, especially as we discovered at a later stage during data migration where data from legacy systems do not fit our schema. We have the most

			challenges here and many times customers are understanding, and they help with data cleansing. • Being a platform there are also issues on licensing that the client didn't foresee and procurement of additional licenses cause delay in the project.
6. User Training and Adoption			
Objective 6:	To learn about strategies for effective user training and adoption and to identify common challenges faced during this phase.		
Question 6a:	What strategies do you use to ensure effective user training and adoption of the new CRM system?	Answer 6a:	See answers in Question 8
Question 6b:	Can you describe any common challenges you've faced in getting users to embrace the new CRM platform?	Answer 6b:	See answers in Question 8
7. Deployment and Go-Live			
Objective 7:	To understand how the deployment process is managed to ensure a smooth go-live and the contingency plans in place for potential issues.		

Question 7a:	How do you manage the deployment of the CRM system to ensure a smooth go-live process?	Answer 7a:	• Salesforce provides a Devops platform for us to migrate changes from sandbox to production environment, all code changes will need to go thru a unit test with 75% code coverage.
Question 7b:	Are there specific strategies or best practices you follow to minimize disruptions during the transition?	Answer 7b:	• Instead of big bang deployment, we try to have deployments every 2 weeks at minimum to minimize the impact on the system. This could be down time during weekends so not to impact the users.
Question 7c:	What contingency plans do you have in place for potential issues at the go-live stage?	Answer 7c:	• Salesforce allows developers not only keep their code using Visual Studio Code, but also metadata of all data schema and settings down to the profile security setup. They are defined in XML format and on weekly basis we will extract the metadata and store them in source code in form of GitHub.
8. Change Management and User Adoption			
Objective 8:	To explore how the methodology addresses change management and user adoption challenges and to highlight successful initiatives.		

Question 8a:	How does your methodology address change management and user adoption challenges?	Answer 8a:	• Involve users early in testing and demo of the system during development • When possible, help users onboard to make use of features that are out of the box. This minimizes training time and ease their familiarization of the system • Above activities help users get use the system fast and get them to extract value from the CRM, this also trains their mindset that a cloud-based CRM is always getting improvements.
Question 8b:	What strategies do you employ to ensure that end-users embrace the new CRM system effectively?	Answer 8b:	• I will run meetings with all users in to talk about what features their use most, and what features they are not using. • We make use of the Adoption Dashboard and Kanban Board in Salesforce to demonstrate how fast are users progress with the CRM.
Question 8c:	Can you share examples of successful change management initiatives you've implemented?	Answer 8c:	• Change management always works best when the project sponsor i.e., head of sales or even the C

			level are on board during progress meetings. With them having firsthand knowledge about the system, they don't only provide valuable feedback in the project, but also, they will be able to give authoritative answers to users' pushback on adopting the CRM.
9. Monitoring and Post-Implementation Support			
Objective 9:	To gather information on post-implementation support services, ongoing updates, and measures taken to monitor system performance and success.		
Question 9a:	What kind of support and maintenance services do you provide to clients after the CRM system is live?	Answer 9a:	• We still do weekly update for o Usual bugs and issues review o Identify what works what doesn't in terms of functionality of the CRM, and see what we can do to improve o Adoption issue such as what users are not using in the CRM, help them with additional demo and walk throughs

Question 9b:	How do you address ongoing updates, bug fixes, and evolving business needs?	Answer 9b:	• Log everything via the PM, and he will enter them into Trello to be tracked. Fix them based on severity of issue, and because Salesforce is low code, then the fixes seldom go beyond 48 hours. • The SaaS Cloud nature of Salesforce CRM also means we don't need down time to deploy new fixes or features. However, for certain issue that require data patching, we will do it during non-peak hours.
Question 9c:	What measures do you take to monitor the performance and success of the implemented CRM system?	Answer 9c:	• There are a lot of out of the box dashboard from Salesforce to measure, of course that very dependent that everyone cooperates and try to use the CRM system. So, we can make data driven decision to improve the user experience.
10. Documentation and Knowledge Transfer			
Objective 10:	To examine how the interviewee's organization documents CRM processes, configurations, and ensures knowledge transfer to clients.		

Question 10a:	How do you document the processes and configurations of the CRM system for clients?	Answer 10a:	• We capture requirements such as schema and processes in a Word file, normally required by client to sign off the phase 1 payment to us • We document all training in point form using Power Point and we will do a MS Teams call with recording to outline the workshop. • And the nature of script and metadata driven design of Salesforce CRM, client owns all customization together with the code base.
Question 10b:	Is there a knowledge transfer process to ensure clients can manage the system independently?	Answer 10b:	• Yes, we normally run a one-day training as Salesforce Admin intro to the customer.
Question 10c:	What resources or materials do you provide to clients for ongoing reference?	Answer 10c:	• As mentioned on first question, one Word, one PowerPoint and one Teams recording
11. Continuous Improvement			
Objective 11:	To understand how feedback from clients and project retrospectives contribute to continuous improvement and how lessons learned are incorporated into the CRM implementation framework.		

Question 11a:	How do you gather and incorporate feedback from clients and project retrospectives to enhance your CRM implementation methodology, and are there specific mechanisms in place for continuous improvement?	Answer 11a:	• Weekly meeting and get feedback, before the meeting we will look at adoption numbers and the sales funnel to determine success of CRM. • Whether sales improve or drops, they are always learning from it, and in the meeting, we will go thru with them.
Question 11b:	Based on your experiences, what are some valuable lessons you've learned from CRM implementations, and how do you apply these lessons to refine and improve your approach?	Answer 11b:	• There's a lot of processes and data schema that are specific to certain industry, which we certainly can be reuse in similar clients, this forms our set of intellectual properties
Question 11c:	Can you describe the process by which feedback and lessons learned are integrated into your CRM implementation framework, emphasizing how these insights lead to ongoing improvements in your methodology?	Answer 11c:	• GitHub is our knowledge base, where all metadata and codes are available as our reference. • We don't have yet any proper KM system in place but as the team grows, we look forward to that or produce certain IPs into products.
12. CRM Implementation Framework & Success Metrics			
Objective 12:	To understand the influence / impact of the CRM Implementation framework on project success metrics (i.e., scope/time/cost)		

Question 12a:	Besides traditional success factors for a project (i.e., time, scope, and cost), do you have other metrics of success for your CRM implementation projects?	Answer 12a:	• Adoption of users' usage on the system, and of course there are actual ROI from using the CRM • Expansion of process, as CRM covers marketing, sales, and service, normally a client starts with one pillar, but we want them to expand to other pillars or adopt one of the Salesforce industry clouds.
Question 12b:	What are the key factors in the CRM implementation framework that have contributed to the success of the CRM project? Can you share specific examples based on your past projects?	Answer 12b:	• The ease of customization on Salesforce CRM help us deliver quickly and allow clients to actualize their ROI and better time to market • A team with existing knowledge on Salesforce or other CRMs does help sometimes, as the resistance on CRM is lesser than otherwise • Our focus on industries, namely manufacturing, property development and retail B2C helps us to pick the customer's language, and this lessen a lot of misunderstandings during development

APPENDIX D: Personal Profile of Pilot Study Participant

I. Introduction

a) Name: Mustaza

b) Position: Head of Digital Marketing (Digital Business)

c) Company/Organization: Hong Leong MSIG Takaful Berhad

d) Educational Background:

i. MBA, University of East London (2021-2022)

ii. Post Graduate Certificate, Business Admin (2020-2021)

II. Professional Experience

1. Overview of Career Path:

Head of Digital Marketing (Digital Business)

Hong Leong MSIG Takaful Berhad

Aug 2021 - Apr 2023

- Aligned strategic digital marketing strategies with business goals by partnering with management and stakeholders.
- Successfully acquired over 190,000 new customers for Online Insurance/Takaful products by establishing new partnerships and launching various online/offline campaigns and channels.
- Improved online customer conversion by 18% by utilizing data-driven insights, CRM & platform enhancement and marketing automation.
- Reduced steps to conversion for Insurance/Takaful products by 30% by reassessing Risk and Compliance and partnering with stakeholders.
- Successfully internalized and operationalized the regulator's policy by launching internal policy and SOP.

Head of Marketing

The Center of Applied Data Science

Jun 2018 - Aug 2021

- Aligned strategic B2B and B2C marketing strategies with business goals by partnering with management, BOD and stakeholders.
- Successfully acquired over 500 targeted B2B leads with over RM10 million sales-recognized pipeline by launching demand generation activities which include sales

enablement, industry expert roundtable discussions, webinars and case study development.

- Successfully acquired over 15,000 new B2C users and customers by launching new platforms which include online learning, learning path recommender and certification platforms and partnering with stakeholders.
- Improved website conversion by 15% through website, platform and CRM capability enhancement by partnering with data scientists and utilizing data-driven insights.
- Increased lead-to-sales flow efficiencies from manual to automated by partnering with sales and management and launching marketing automation and CRM capability enhancements.

Head of Digital Marketing, Asia
Yonder Music
Jan - March 2018

- Achieved 30% new user growth and reduced CAC by 40% in 2 months (800k to 1.2m) by improving overall performance marketing and advertising experience.
- Improved monthly active users (MAU) by optimizing CRM and launching user engagement activities which include content strategy and location-based engagement.
- Disclaimer: Yonder Music suspended its operation and dismissed all employees across 6 countries on 23rd March 2018, 2 months after joining.

Digital Business Director
Leo Burnett
Nov 2016 - Jan 2018

- Achieved 200% digital department revenue target through strategy alignment initiatives by partnering with clients and internal stakeholders from various business specializations (Brands, PR, Social Media and Events).

Digital Marketing Director

Mintsprout Sdn Bhd

Jul 2014 - Oct 2016

- Drive business development initiatives by partnering with multiple award-winning Creative, PR and event agencies.
- Successfully drive client's social media engagement and increased followers from 1,000 to over 200,000 by partnering with clients and launching various social media & digital marketing engagement and awareness campaigns.
- Successfully launched and sold out client's triathlon participation tickets by partnering with clients and stakeholders and launching various social media and digital marketing campaigns.
- Successfully launched first real-time social media engagement and achieved intended result for a global client by partnering with stakeholders from main agency partner and clients.

Associate Digital Account Director

Leo Burnett

Nov 2013 - Jun 2014

- Improved client's overall advertising performance by 30% through various optimization activities for SEO, SEM and PPC marketing by partnering with clients and stakeholders.

Digital Account Manager

Ogilvy & Mather

Aug 2012 - Oct 2013

- Improved client's PPC advertising performance by 60% by partnering with clients and launching optimization initiatives.
- Improved regional client's sales enablement development efficiencies by partnering with client and stakeholders from various region.

2. Years of Experience:
   - 13 years of experience
3. Specific Roles Related to CRM Implementation:
   i. Analyze and capture user requirements for CRM Marketing
   ii. Implemented CRM Marketing Automation

iii. Training Sales team on usage of CRM Sales

4. Industries Worked In:
    i. Media and Entertainment
    ii. Education Technology
    iii. Financial Services
    iv. Healthcare

III. Expertise in CRM Implementation

1. Key Skills:
    i. Marketing Automation techniques
    ii. Marketing and Sales Processes
    iii. CRM products – Salesforce, Hubspot
2. Certifications or Training:
    - Credential of Readiness, Harvard Business School Online (2019)
3. Successful CRM Projects Led:
    i. KPJ Healthcare
    ii. The Center of Applied Data Science

APPENDIX E: Personal Profile of Case Study Participant

I. Introduction

a) Name: Patrick
b) Position: Director
c) Company/Organization: Tentspark Sdn Bhd
d) Educational Background:
   i. Diploma in Computer Science

II. Professional Experience

1. Overview of Career Path:

Patrick is a founder and product architect at Tentspark Sdn Bhd, a company that provides consultancy, training, and solutions for the Microsoft SharePoint platform. He has been a Microsoft SharePoint MVP since 2008 and has multiple project implementation experiences with enterprises in the Asia region, including one listed in Fortune 500. He also has expertise in Salesforce CRM and Marketing Automation and has obtained several certifications from Salesforce Trailhead.

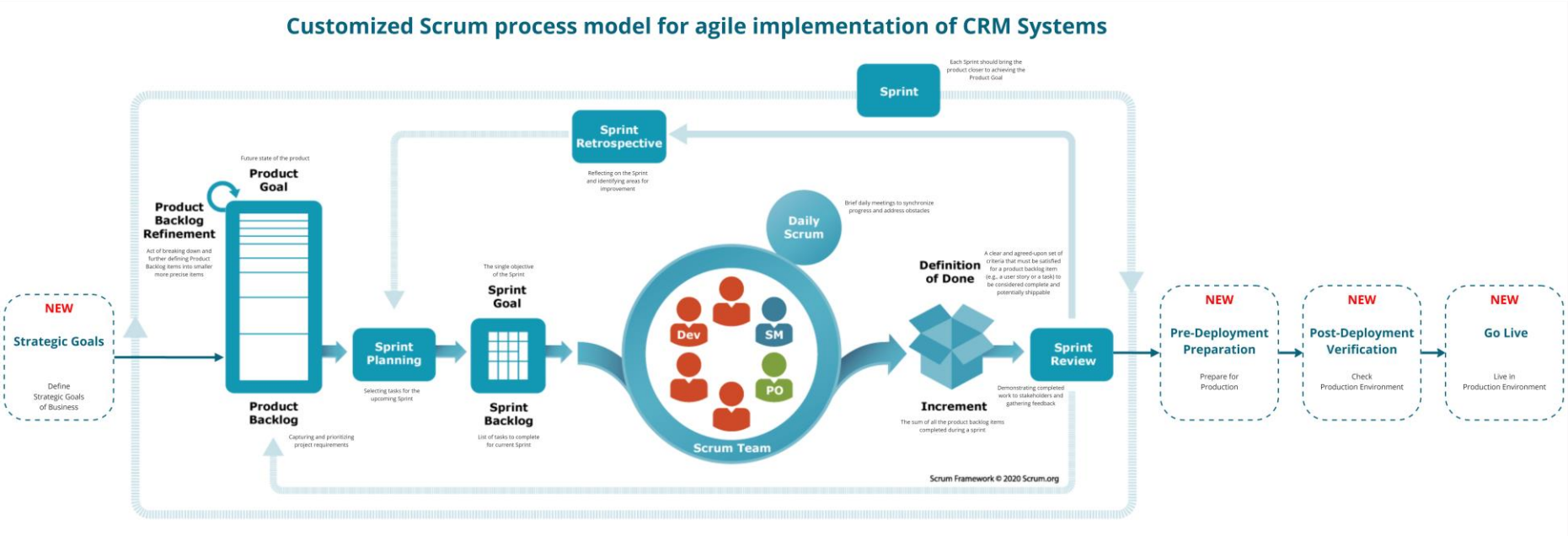
With more than 20 years of experience as a software architect and technical sales, Patrick has helped over 30 clients from CxO to end users to align business goals and use technology to solve business challenges. He has delivered successful projects across Asia, ranging from MYR 250k to MYR 10mil in value, that have enabled clients to 10x their capabilities in go-to-market and improve their top line and profit. He has also developed and led teams of up to 100 developers across 3-4 time zones, working on low code and process automation platforms for various industries, such as financial services, stockbroking, and sales and marketing. Patrick's mission is to use his deep knowledge of engineering and his mindset of generating profit to help companies reach their goals.

2. Years of Experience:
   - 24 years of experience
3. Specific Roles Related to CRM Implementation:
   - CRM Practice Lead
4. Industries Worked In:
   - FSI, High Tech, Manufacturing

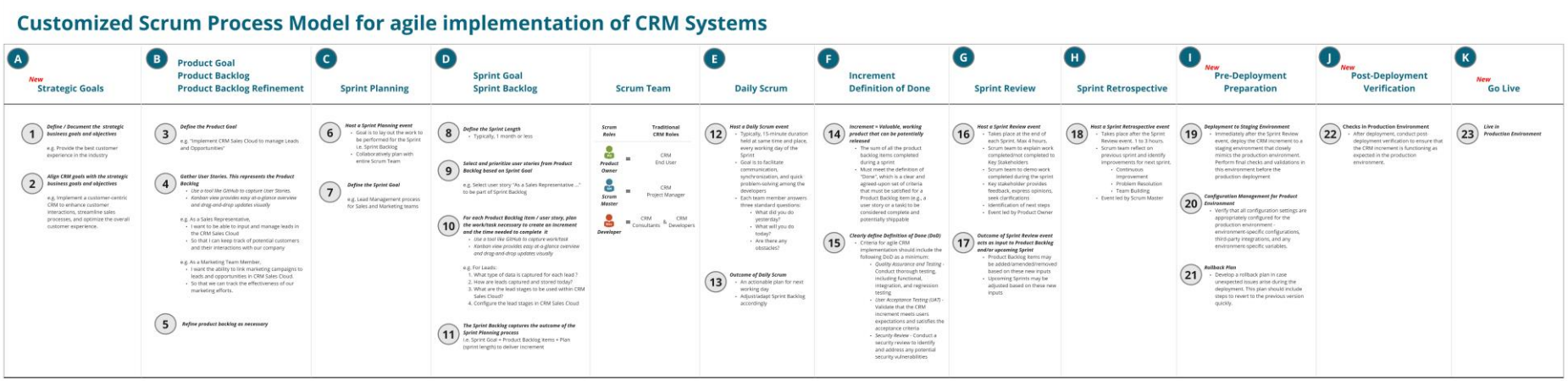
III. Expertise in CRM Implementation

1. Key Skills:
    - CRM
    - Marketing Automation
    - Software Architecture
2. Certifications or Training:
    - Salesforce Sales Cloud Certified Consultant
    - Salesforce Service Cloud Certified Consultant
3. Successful CRM Projects Led:
    - Sime Darby Property
    - IJM Land
    - Adtek AICA
    - Tonik Asia
    - Scientex Bhd

APPENDIX F: OVERVIEW - Customized Scrum Process Model



APPENDIX G: DETAILED - Customized Scrum Process Model



APPENDIX H: Customized Guidelines for Scrum Values

APPENDIX I: Customized Guidelines for Scrum Job Role