Incorporation of adaptive management strategies for agile project success.

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The above candidate has carried out research for the Masters thesis under my supervision.

ENG. DR. Indika Perera Date

Signature of the Supervisor 25.11.2020

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Date

Signature of the Co-Supervisor

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ABSTRACT

The software industry has become one of the fastest-growing industries worldwide over the past decades. Even though the Software development technologies have changed in a significant manner, but management methodologies have not changed significantly. This leads to a high percentage of unsuccessful software projects even with good financial support. Therefore, the Software industry requires new effective methods for managing software projects. The agile systems development approach is such a methodology used in the software industry in recent years.

Agile software development emphasizes the development of a software product in an agile and flexible environment, further it facilitates the project to be completed in a compressed time frame and in an efficient way. Agile software development refers to a group of methodologies based on iterative development where prerequisites and solutions evolve through the cooperation of different teams. (Leffingwell, 2007). Hence Management role and their adaptive management strategies and support processes play a major role in managing and achieving the success of agile-based projects in an organization. Thus identifying, improving, incorporating, and applying those adaptive management strategies of an organization will lead to the success of agile-based projects and ultimately lead the organization to success.

This research focused on identifying those adaptive management strategies which support agile project success. Hence a comprehensive literature review was carried out on the agile approach along with required adaptive management strategies for agile-based projects' success. A questionnaire-based online survey was done with IT professionals who work in agile-based IT firms to identify the adaptive management strategies which impact agile project success. The research findings revealed that the management strategies of Risk Management, Appropriate Resource assignment, and Adaptability for technological upgrades have a positive impact on the agile project success. This research brings out valuable results that can be incorporated in improving the performance of the software industry. Further, this research hints on other avenues that could be explored further as future research in the field of agile project success in terms of customer satisfaction and improving adaptive management strategies in an organization.

Keywords: Agile approach, project initiation, Resource Assignments, Communication, Risk Management, technology

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS

ASD - Agile software deployment

DAD - Disciplined Agile Delivery

SDLC - System Development Life Cycle

PMBOK - Project Management Body of Knowledge

IT - Information Technology

1. INTRODUCTION

1.1. Background

Over the past decades, the Software industry has become one of the fastest-growing industries worldwide. When it is considered recent history in the software industry technology has changed drastically. This has brought various new programming languages and various devices into the industry. For example, 30 years before there was no android OS and there were no smartphones in the industry. Like this, through hardware and software components changed, management methodologies haven't changed in a noticeable manner. Because of this lack of changes in management methodologies has played a major role to deliver ineffective projects though they had significant financial support. Therefore, this has pinpointed the necessity of a new management methodology for managing software operation.

Today, organizations commit significant investments for software projects as it could give great value addition to the business. But according to research most of the software projects are not delivered within the agreed time frame or in the agreed budget. Other than that most significant issue is thus these project does not deliver the intended value for the customer. According to the literature, approximately sixty percent of software projects not able to complete within the agreed timeline or budget constraints. And most of the time these project does not deliver intended business value addition to the companies. There could be various reasons ar argument to justify the reason for the project not becoming unsuccessful, many studies have found out that software projects are failing as a result of the inappropriate selection of project management approaches.

Clearly, as there are several alternative project management methodologies to select when delivering a project. This makes it difficult to make the decision about what is the best and most suitable project management style for each project. Therefore users, software developers, and other system implementation parties tend to go with the project management style that they are most experience with rather than going with the most suitable one for the project.

Due to the particularly volatile nature of software projects, organizations are expected to be more proactive and dynamic, and software is expected to be more resilient and robust. However, traditional software implementation approaches are criticized, for being non-incremental, and for

being inflexible and unable to adjust to the system deployment process which has a high tendency for change.

Agile approaches were thus proposed to mitigate this situation of concern, Agile methods are used to develop a system or a solution it tends to deliver solution more rapidly and efficiently. The agile methodology uses the iteration approach for software development. Because of using iteration methodology, it could deliver customer requirements more rapidly. Thus making the customer more satisfied. When considering Agile software deployment (ASD) it is a relatively new software deployment methodology compare to traditional waterfall software deployment methodologies. This agile software deployment represents new methods of planning software development and managing software development.

As per the software Magazine published online. The top 500 companies which involve in computer software development and implementing industry have an income of $640 billion in the year 2012. In those companies, there are over 4.1 million people employed in those companies. These employes involve in software designing, Software programming, Software Maintainance such as patch update bug fixes, software selling, or support computer software and services. In the software industry software methodology is the key factor that binds people, Processes, technology, and tools. This key factor is the secret of making the software industry success. Because of this, it is essential to maintain proper methodologies in each project. In proper software methodology, it makes delivering quality software to the end-user as it's the priority. This provides a constant and standard delivery approach for software.

1.1.1. Motivation

When analyzing the software industry, it is identified that 2/3 of software projects get failed when they are delivered. These failed projects could be either agile or non-agile projects. Therefore, it is not guaranteed that the project will not fail if it is agile. Project success or failure may be due to various reasons. It has been observed that there is a firm relationship between the involvement of the management and the success rate of agile software operations of an organization. Further, it is also observed that there is a high probability of failure for the projects which are not getting management support effectively. Hence this research is designed to recommend a solution to handle such a situation which will be helpful for the management of the company in order to mitigate agile project failures with adaptive management strategies.

1.1.2. Research Scope

When considering software development and implementing processes it is a process that has spread in deferent areas. It contains various kinds of tools and Various kinds of technologies. To improve the software development and implementing process it is needed to examine all these tools and technologies. As the nature of the study author will not examine all the tools and techniques. And the author will focus on agile base software development methodology. And will only concentrate on one specific factor which impacting agile software project success. The author has selected several software developing and implementing companies as a population to carry out this research. This selection was made due to the limited time period available to conduct the research and there approximately more than 250 software Companies in Sri Lanka. Thus, practically it is not possible to reach such a big population. With a limited period of time. Because of that Author selected several software developments and implementation companies that operate within Sri Lankan and overseas. It is noted that many critical success factors may contribute to software project success. However, this study was intended to look at one such critical success factor, which is management support to the project. The findings presented in this thesis may not be applicable to all other contexts. As an example, a study carried out on the construction industry or other industry projects may find different managerial roles as important and supportive roles than the roles which identified in this study. When it searches many studies have been carried out by the researchers about the agile projects and the methodology. According to research articles, identified drawbacks are a problem in communication this includes internal communication and external communication. This may lead to misunderstood the requirement and thus make develop systems not par with business requirements. And some projects will encounter some other issues and one project success factor will not fit all the other projects also. Therefore, this author will analyze the Incorporation of adaptive management strategies for the success rate of agile software operation projects while proposing a model to enhance a success rate.

1.2. Problem Statement

In the past, so many studies have been carried out by the researchers about agile projects and the methodology. Ramesh, B. Et all (2006) has conducted a great study on agile projects, Rayside, D., et all (2009) have conducted another study about agile specifications, and recently Singh, A. (2012) also, has conduct research on the problem in agile methodology. Some of these drawbacks have been mentioned as internal and external communication problems, misunderstandings in requirements, and some others (Singh, A., 2012). By overviewing nearly most of the research works which have been done in this area it's clear that agile challenges have become almost obvious. However, when it comes to a practical scenario, still there are some projects which face challenges during their process and some success factors don't seem to be effective enough.

- Can management support improve the success of agile projects?
- Can Incorporation adaptive management strategies in organization support for agile project success?

1.2.1. Research Objectives

In the below research author, will achieve the below objectives

- To identify the strategies and support processes carried out by the management of organizations.
- To evaluate the most significant adaptive management strategies which improve the success of agile software projects
- To make recommendations to get management involvement to lead the success in agile software projects.

1.2.2. Research Significance

This research intends to identify the gaps in current management support. By identifying the gaps in management support and it is easy to resolve those gaps and make a positive effect on agile project success. Other than that, through this research, it will be identified the managerial roles and adaptive strategies of the management which affect the agile project success rate. So, through that, it is easy to identify how many levels of support that project should get when making the project successful. Does it need full-time involvement of the management or less partial involvement. By identifying those it will be proposed a strong agile software implementation model to enhance the success rate of the project.

2. CRITICAL REVIEW OF LITERATURE

2.1. A general introduction to agile methodology

Agile is a project management methodology it uses an iterative approach to deliver a project or develop the software. The agile methodology gives flexibility and simplicity to develop and deploy the software in a given environment. The agile methodology comes with readiness for motion, nimbleness, activity, dexterity in motion (Abrahamsson, 2017)

When Consider recent years we could observe there is a trend to move into agile software development methodology. This is a major improvement in software development when it is considered past years (Leffingwell, 2007). The agile-based software development process is a software development procedure is a very flexible procedure compare to previous traditional software project methodologies. Using agile software methodology, we could deliver the project in a more compressed timeframe in an efficient procedure. This could not be achieved using traditional software development methodologies. When software development practices agile process it runs it there software development projects in iterations. In each iteration, new requirement gathering occurred, and based on those new updates apply to the software. Therefore it is easy to integrate agile software development into company business processes (Leffingwell, 2007).

2.1.1. Agile System Development life cycle

According to **Ambler and Lines** (Ambler S. W., 2012) the scope of life cycles is different based on the agile framework this occurs due in each iteration of software development, or the solution delivery team may face deferent kind of issues in each iteration. Due to this, it could not fit one lifecycle used iteration to all remaining iteration. In the below section is to discuss the concept of full delivery lifecycle, an overview of each lifecycle supported by Disciplined Agile, and how to select and progress with the lifecycles.

When it is considering the major characteristic of Disciplined Agile Delivery (DAD) it describes the agile life cycle start to end. It could be used in software development projects where new enhancement needs to be done and the project team well aware of agile software methodologies.

As figure 2.1 shows the when considering the DAD lifecycle we could derive three main phases at a high level, such as Inception, Construction, and Transition. Further, this lifecycle promotes the fact that incrementally build a consumable solution over time.

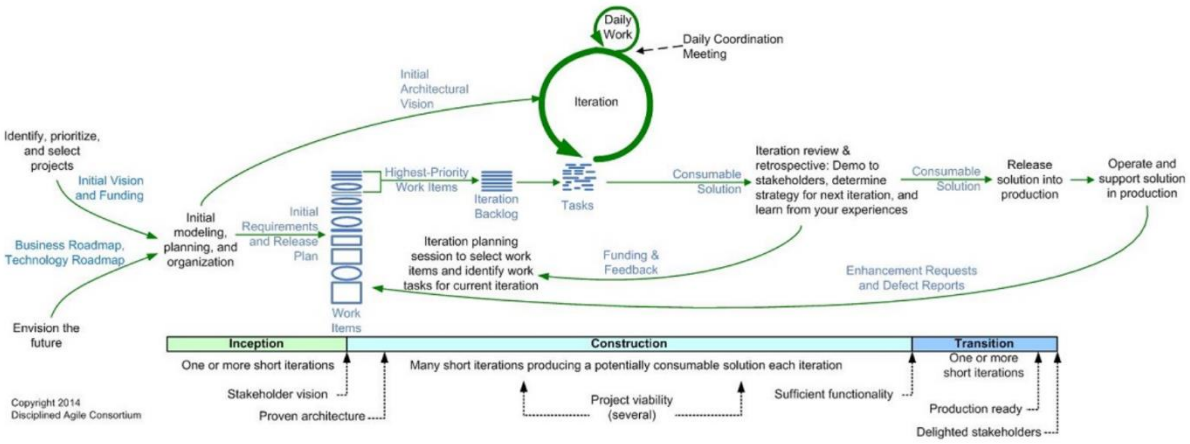

Figure 2.1: DAD Life Cycle (Ambler S. W., 2009)

Inception Phase

Project initiation activities occur during this phase. When it is considered a project most of the teams carry out initial work beginning of commencing the project. According to the Agile Project Initiation survey (2013) the majority of time in their project in the Inception phase. This is because they need to do upfront work on the project. When it is considered on the numbers project team spends around one month in this stage where iteration time length will be two weeks. Because of this Inception phase in the DAD lifecycle, it is advised to do few activities to properly frame and arrange the project. According to figure 2.1, there are few pre-project concerns to handle with portfolio management where potential products or projects are identified, prioritized, and sufficiently funded to start the Inception phase while business and technical roadmaps guide the team.

Construction Phase

In the construction phase delivery team will work on developing a consumable product and it will be developed on an incremental basis within the phase. This deliverable will be done using in iterations. The number of iterations may vary with the requirement and scale of the project.

Transition Phase

In this Phase Deploying the solution will be taken place. Deploying it to stakeholders in enterprise agile projects is not an easy task. It will streamline the deployment processes of delivery teams, as well as the enterprise overall. Therefore, this phase becomes shorter over time and ideally disappears by adopting continuous deployment strategies.

It was identified that there are more in the agile SDLC than the above-mentioned phases. Figure 2.2 illustrates a more realistic life cycle that overviews the full agile SDLC. When it is considered Full agile SDLC it is consisting of several phases. We could divide it into main six phases: Concept Phase, Iteration /Inception, Construction, Transition/Release, Production, and Retirement Phase.

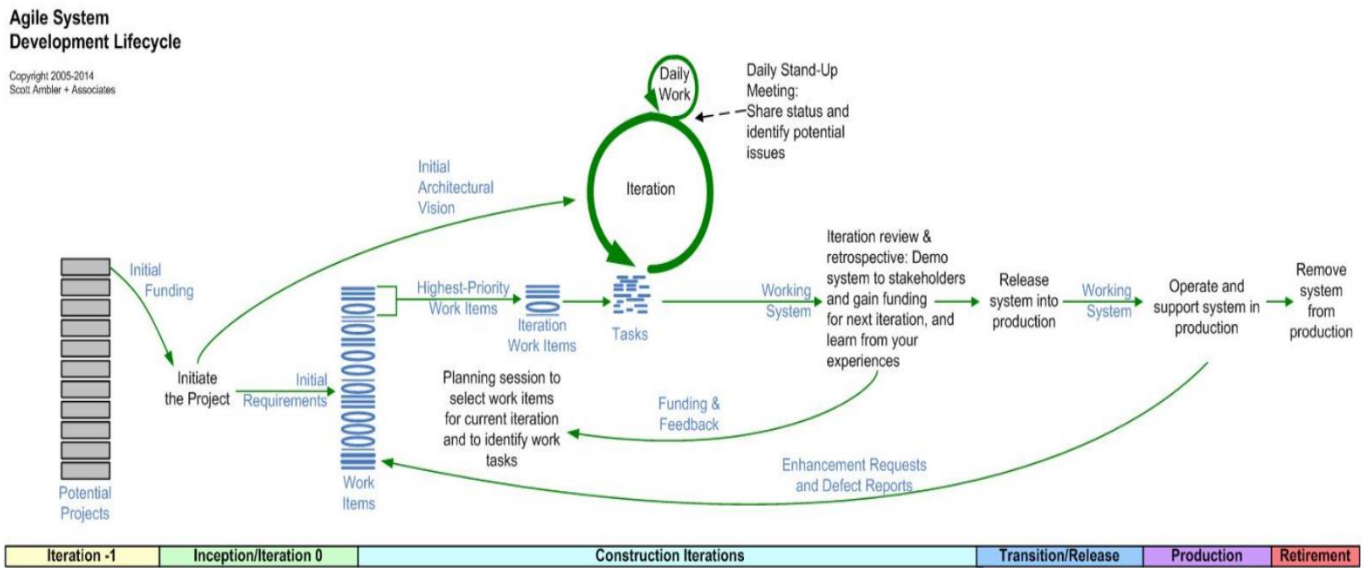

Figure 2.2: Detail view of Agile SDLC (Ambler S. W., 2009)

Though below Figure 2.3 looks similar to traditional SDLC, when it is considered the agile process it is very incremental, collective, and iterative And when considering the roles the roles where people have taken and participate are strong and more unique to each other. In traditional projects, SLDC Requirement Specification is created by a Business analyst which is present to Software Architect to create the System Design. The system design is handed over to Software Developer and then the developed solution is tested by QA Engineers using various techniques.

The most important part of agile software development is that the developer works very closely with each stakeholder to understand and verify requirements, to implement it in the code, and test

the solution after deployment. Once the solution is deployed it will be demonstrated to each stakeholder for their feedback. This approach will fast track the SDLC.

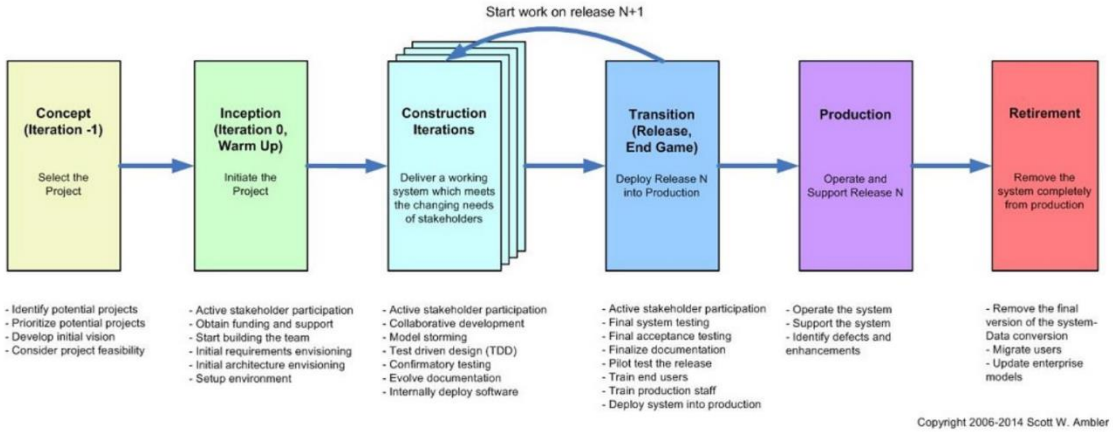

Figure 2.3: High level view of Agile SDLC (Ambler S. W., 2009)

2.1.2. The Concept Phase: Pre-Project Planning

This is also known as Iteration -1. The following actions will be carried out during the Concept Phase.

Define the business opportunity – In this iteration, it is focused on spotting new functionality requirements and how those could improve the organization footprint in the market to improve the business, how it could improve profit margins of a product of the organization, and how that functionality effect on employees in the organization.

Identify a viable for the project – When deciding a project strategy it is needed to consider Several Factors from many combinations of strategies available.

Assess the feasibility – It is required to do feasibility analysis to determine the profitability in investing in the potential project. The feasibility analysis should consider economic viability, technical viability, operational viability, and political viability.

2.1.3. Inception/Warm Up: Project Initiation

This phase is also known as "Iteration 2". The following actions will be executed during the above phase.

Garnering initial support and funding for the project – It is required to provide reasonable answers on the scope of work, duration, and budget of the project.

Actively working with stakeholders to initially model the scope of the system – In agile practice, it is very essential to take stakeholders' active participation to have a clear understanding of the problem and its solution domain. When modeling the requirement, it is used Just In Time (JIT) mechanism in each brainstorming session carried out with stakeholders.

Starting to build the team – In iteration 2 another main process carried out is Identifying important team members for the project. The team should consist of Senior developers, Project Manager, and Stakeholder representatives.

Modeling an initial architecture for the system – In this process, all the developers involved in the project will get together and discuss the initial requirements and sketch an initial architecture for the proposed new system. This system architecture will base on all the development and it will evolve with new features added to the system. Detail design of the system will be done during the development cycle later stage of the project with the help of a model brainstorming session.

Setting up the environment – In this process it will streamline the working environment for the project. This will include arranging a proper place for the team to work, Setup workstation and installing required development tools and etc. These preparations are essential for the project.

Estimating the project – As the last process of Project Initiation, it will estimate the cost for the project. This estimate will be calculated based on the initial requirement given, initial identified architecture and skill of the teams required, and many more.

2.1.4. Construction Iterations

In this phase, it will be delivered High-quality software that is working according to requirements gathered and And in this phase, it is trying to meet the changing requirements of project end-users and stakeholders. The processes involved in the construction phase as follows:

Collaborating closely with both stakeholders and developers – In this process, it is intended to tighten the cooperation with stakeholders to get better feedback. By this, it will provide less risk to the project.

Implementing functionality in priority order – By creating priority order it allows stakeholders to change the requirement and allow them to gain control of the scope, control of the budget, and schedule of the project.

Analyzing and designing – In the model storming process individual requirement analysis is carried out on a just-in-time (JIT) basis. An approach of highly collaborative and test-driven (TDD) design for development will be guided by the architecture models and diagrams.

Ensuring quality – In the Construct iteration, it is essential to ensure that coding conventions and modeling style guidelines are predefined at the beginning of the project or company standards guidelines are followed and its solution make sure delivered iteration has the best possible design. By doing this it could deliver more successful and robust software.

Regularly delivering working solutions – It is recommended to demonstrate a working solution at the end of each development cycle/iteration. According to agile methodology, It should be able to deploy or deliver the solution into a pre-production testing/QA or Staging environment sandbox for performing a thorough system integration testing with the help of the client.

Testing, testing, and yes, testing – In the construction phase there are few tests to be carried out. The main test carried out is confirmatory testing. In this testing design level, developer testing will be carried out with combined to requirement level agile acceptance testing. In agile

terms, this testing will be called as a “Testing against the specification”. This testing confirms the solution meets stakeholder's requirements and ambition. Other than that another investigative testing will be done by testing a professional person to identified issues missed by developers.

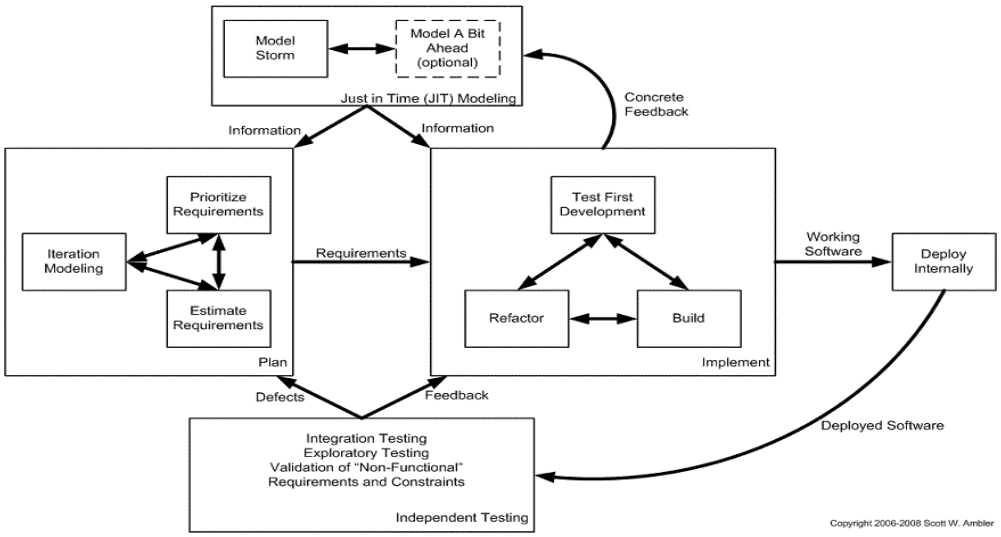

Figure 2.4: Agile software development process during a construction phase (Ambler S. W., 2009)

2.1.5. Transition: The "End Game"

Transition is a process of releasing develop solutions into the production system. The following key aspects should be considered during this phase.

Final testing of the system – In the transition phase final testing will be carried out. The main purpose of the below testing is to get acceptance for the project from stakeholders. This test is beta or a pilot testing where it gets involved end-users.

Rework – It is required to fix the defects which have been found in system testing. Fixing critical defects as soon as possible is a must.

Finalization of any system and user documentation – In the transition process it is essential to finalize all the relevant documentation including a clear definition for the scope of work is a must. This will avoid unnecessary rework. And the additional requirements that are not included in the initial documentation also needed to be considered and cost should be calculated and need to

identify the priority of those and then created and develop them only if stakeholders are believing those will improve the business and willing to invest in that development.

Training – In the transition process, it is required to train the end-users of the system, and also it needs to train operational staff such as IT helpdesk personal to identify and rectify day-to-day issues this will make the system to work effectively.

Deploy the system – Deploy the system successfully without any issues that will complete the transition phase.

2.1.6. Production

The next phase of the project is the production phase. Once the system is deployed to in production environment it is essential to make it productive, efficient, and useful to the users of the system. The main objective of this phase to maintain in the above state and focused to keep the system up and running without errors. This process is a long-running process because this is stopped when the system is to be retired or once support for the specific version ends.

2.1.7. Retirement

The final phase of software development is retirement. The primary purpose of having a retirement process in the system development lifecycle is to remove existing release from the production. The retirement of systems is a serious matter due to the technology revolution where legacy systems are replaced by new systems. This removal or retirement of older systems handled by implementing a newer version of the current system. This implementation process will include steps to remove the previous release (Ambler S. W., 2009).

Based on the findings of the Literature, it was identified that the management involvement, participation, and incorporation of adaptive management strategies are essential to complete every phase. Therefore, this study is carried out to identify the management support processes and management strategies to improve the success in agile software operations (Chow, 2008).

2.2. Agile Project Management

2.2.1. Aspects Of Agile Project Management

Customer Satisfaction

In agile project management, customer satisfaction is key. Initially, agile project management was introduced to achieve this objective keeping in mind. In software, most of the time the development customer is referring to the end-user as they are the main party who uses the system. So they play a key role by providing process information and feedback on delivered software. Ultimately when deciding an agile project's success, it mainly refers to customer satisfaction with the software.

Fast Delivery Times

Another main characteristic of an agile project is the lesser delivery time of applications. Other than the faster delivery time agile projects are more predictable to delivery on time. This is because the project team does not require to deliver the product 100 at one time. It is required only to deliver working functionality at each iteration. Because of this, it is possible to deliver functional software in a much shorter time frame compared to traditional software development.

Continuous Adaptation

In Agile project management changes in the scope are accepted throughout the full project lifecycle. In agile practice, project teams are capable of handling these changes and agile project teams should expect these changes. These changes that request in the middle of the project may be relatively small but on some occasions, these changes may change the whole direction of the project.

Focus on Collaboration

Collaboration is another more important characteristic of agile project management. This collaboration refers to not only team collaboration but also a collaboration with the client also. These collaborations help the project team to be on track with the project. This will greatly help to avoid the project failing. An agile project is more tends to succeed when the whole project team and customer working under the same roof. That is because it will improve collaboration among them.

Greater Transparency

As above described agile projects collaborate with the customer. This allows for greater transparency of the project with the customer. End-users could see a continuous development of the project as it delivers each iteration to them for test for functionality. Because of this end-user could identify the mistakes before the end of the project and then get those rectified. This will allow building a trust relationship with the customer and the product. Thus it made the customer use the product with more confidence.

Test Early and Often

In any software project testing is crucial. In agile project management, it allows testing the project at every iteration. The product can be tested thoroughly because testing occurs throughout the lifecycle of the project and problems can be identified quickly and efficiently. This will allow fixing complex coding and bugs can be identified at an early stage and can be rectified easily.

One Step at a Time.

Agile project management delivers the project as iterations. Therefore, agile project management will target one feature by one feature approach. Therefore, the project should complete one feature development before moving to develop the next feature. By doing this project management could keep the project going on track without deviating. Other than that, when developing one feature by one will deliver a solid foundation for each iteration of the project. Because of this, it could deliver a more robust environment.

Self-Motivated Workforce

In agile project management, another critical characteristic is it's self-motivated team members. Because of these self-motivated team members, it does not require to micro-manage the individual team members. Because of this, it is easy to work with the team and deliver a successful project.

Efficient Communication

Efficient communication also another key characteristic of agile projects. This efficient communication is an essential attribute for not only the agile project but also for all the projects for the success of that projects. But in agile project management, effective communication is prioritized. In communication, best media is face to face communication. Because in the face to

face communication both party could easily express ideas and the other party could get his concerns clarified right away.

The Right Final Product

The most important and critical characteristic in agile project management is to deliver the correct project. That means delivering a product with features requested by the end-user. This focus on customer satisfaction. If the project is delivered on time but the user doesn't not comfortable with the features and functionality of the project, then it will not be considered a successful project. Thus commercially successful will not be always considered as a successful project in agile project management.

2.2.2. Project Management

According to (Banerjee, Soumita, 2016), project management should manage and should involve in deciding project scope, cost timeline, and overall quality of the project accurately. They manage multiple projects at a time, and they manage the budget and the risks of the projects well. Project management focuses on project processes and allocating tasks to team members in a productive way. The management team should act as a good communicator between the project team members, stakeholders, and the other layers of the organization. Further they always monitor the project progress and coordinates with other teams and updates the higher management on project status.

2.2.3. Project Management In An Agile Project

In agile project management, the most critical activity is managing the people. It is the most challenging task in both traditional and agile projects. In an agile project delivering relevant product iteration on time is very crucial. Therefore, managers should have the ability to manage people in these stressful and volatile situations to deliver a successful project on time.

In agile project management, it is crucial to stay focused within the whole iteration to deliver a successful product. As requirements and situations change rapidly in agile project management it

is made very stressfully situations to team members. This will cause to develop frustration among team members. It makes team members less productive. In this moment management should be involved and motivate team members to stay focus on their targets.

In agile projects, management needed to balance the workload on individual team members. Management should have a clear idea of the capability of resources and ability of them to perform tasks. By having clear ideas management could allocate tasks based on their capabilities. This method will reduce the pressure on team members, and it will be distributed among team members evenly. In agile project management, each management party should have knowledge of which party that they need to forward the issue to get it resolved. They should have a clear idea of who is having authority to which task. Thus, they could effectively communicate the issue and get it resolved.

Another key point that management work in agile project management is to allocate the right resources to the project. Management should have the ability to convince the importance of the project and allocate correct resources to the project. By doing this they can manage resources equally among team members and deliver the right product on time.

Project management is required to prepare the project plan and make the amendment whenever required then management wants to make sure that all parties are following the project plan. If any party is deviating from the project plan, they should have the ability to intervene and bring the project back to according to plan. Other than the project plan they should work on implementing a risk management plan and risk mitigation plan according to identified risk in the project. This will help to overcome any crisis easily and effectively. And finally, in agile project management, management should actively involve and resolve any interpersonal conflicts, organizational political issues, Issues in technical competency, and issues in any budget shortage.

2.3. Agile Project Critical Success Factors

2.3.1. Management support processes in agile projects

Based on the literature of past research it was identified that management involvement, participation, and incorporation of adaptive management strategies are required to lead agile software projects to success. Because Agile projects are highly dynamic, iterative, collective, and incremental. Hence the management involvement in project design, quick and accurate decision making, most suitable resource allocation, prioritizing activities, etc in an agile project, are important factors but they are rather management strategies that lead to agile projects' success. Hence this section is to discuss such management support processes, activities, and management strategies in agile projects which lead to agile project success.

Involvement of the Management in project initiation

The purpose of the project, scope of work, deliverable of the final product, and the project approach is decided in the project initiation stage. The approach to manage and execute is the key to its success. The involvement of the right people for decision making is vital. Therefore, the active involvement of the management through project initiation is crucial for project success. Participation in each and every project initiation and planning meetings, active involvement in decision making, giving suggestions and guidance based on the experience, and giving a better understanding to the project team about project significance are important activities that management should focus on during the project initiation stage.

Appropriate Resource Assignments

People, materials, equipment, knowledge, and time are considered as project resources. There are limited resources that can be utilized during the project life cycle. Therefore, an appropriate resource assignment approach is important for project success. The duration of the resource requirement should be determined within the project schedules. A resource plan is critical to effective resource management. In agile software projects as the project schedule changes, the resource plan should also be flexible enough to alter as changes occur. An appropriate resource

assignment is vital for project execution. The involvement of the management in this process will make it more effective. In order to make decisions on resource assignments, the management should have a proper understanding of the scope of the project while having a proper understanding of the capability of the resources. Further, the management should be aware of critical activities of the project and they should provide additional resource requirements when essential.

Communication between the Management and other layers

To deliver a successful project it is essential to have proper communication with other layers. This proper communication will drive the project to its success smoothly. And proper communication will keep every project member in a single group while achieving project goals. Management should spend most of their time in communication with stakeholders of the project, especially all layers of the project team. According to the PMBOK guide, 70 -90 % of the time has been spent on communication by project managers while achieving a successful project. The project status needs to be monitored effectively by the management by actively involved in following up tasks and works to be done. The Management should maintain close relationships with all operational levels into outcome a successful result in agile software projects. Further, they should be accessible and approachable easily when the project team is required to discuss critical activities or decisions of the project. (Goudar, 2010)

Risk Management

Risk management is another key factor in agile project management. In this risk management process, there are main 3 components. Those are identifying the risk. Analyzing the risk and its impacts then finally responding to the risk. If it is possible to treat Risks according to the above method effective risk management is possible and it will eliminate future risks also. This method has to be proactive rather than reactive. Because risk is an unexpected situation. If it is treated using a reactive mechanism it may have done the harm when it is eliminating. Therefor risk has to be handle proactively. Therefore, management should actively involve in risk management processes which improve the probability of successful project completion and reduce the consequences of those risks. (Odzaly[1], 2014)

Management should have the ability to understand the situation and risk involved in it and should involve in Risk assessment processes such as Risk Identification, Risk Analysis, and Risk Prioritization to establish an effective risk management approach. Further management should also involve in Risk Controlling processes such as Risk management planning, Risk Resolution, and Risk Monitoring in order to get the expected outcome of it. (Krishnan, 2015)

Adaptability for technological upgrades

In the IT industry technology is changing very rapidly. Therefore new systems and technologies were introduced from time to time. Therefore, earning a new system and technology has to be mastered by managers. By mastering new technology managers could guide their subordinates to move to new technologies very easily. Management should have good interest, knowledge, and understanding of modern technologies. Showing their willingness to experiment or move on to modern technologies will encourage other project members to learn modern technologies. The management should always give guidance and support to move on to modern technologies which are an essential requirement for the success of agile software projects in the rapidly growing IT industry.

The Management strategies and related management activities which were identified from the research findings are illustrated below in the table

Table 2.1: Management strategies and related management activities

Concepts	Management Strategy	Related Management Activity
Project Planning	Involvement of management in project initiation	Participation in the meetings and discussions. Active involvement in decision making.
	Appropriate Resource Assignments	Understanding the scope of the project and capability of resources. Knowledgeable of critical activities in the project

Project Execution, Monitoring, and Control	Communication between the management and other layers	Active involvement for following up. Easily accessible and available to contact.
	Risk Management	Ability to understand situations and propose alternatives. Ability and availability to involve in risk management.
	Adaptability for technological upgrades	Willingness to learn new technology Ability to implement new technology Interest and knowledge in new technology.

2.3.2. Agile Project success

Project success is traditionally measured using the "golden triangle", which means completing the project on time, within budget, and according to specification. However, several studies support the inclusion of customer satisfaction as the fourth dimension of success (Zwikael O. , 2008). Other than the golden triangle according to Tsun Chow and Dac-Buu Cao in there survey study of critical success factors in agile software projects has identified that in terms of attributes of agile project success, which illustrate the overall perception of success of a particular project, Cohn and Ford (2003) and Lindvall et al. (2004) suggest Quality (i.e. delivering a good working product), Scope (delivering each product requirement customer requested), Timeliness (delivering the project on agreed time frame), and Cost (maintain the cost constraints decide initially). As per the above article it could derive the agile project success Scope Time and Cost. Because of the complexity and difficulty of collecting data on customer satisfaction and product quality from the IT firms due to their confidentiality, the Customer Satisfaction indicator was not considered in this research.

Dimension	Attribute
Overall perceived level of success	Quality (delivering good product or project outcome)
	Scope (meeting all requirements and objectives)
	Time (delivering on time)
	Cost (delivering within estimated cost and effort)

Table 2.2: Agile Project Success attributes

In agile software development identifying customer requirements and meeting customer requirements in a flexible manner is the main objective. Hence achieving customer requirements and the project scope within the given timeline without missing and misunderstanding any requirement is essential. In the current IT industry, there is a trend that software development projects become commercially successful even though the project does not meet the timeline, budget, and scope specification. But only a commercially successful project cannot decide that project is a success when it is analyzed in a broader angle. A company is spending for software development to achieve a process improvement in their business. By improving these business processes, the company will try to gain a completive advantage for them compared to other competitors.

Consider an instance where the project exceeds the planned time frame that the project needs to be delivered. In that time competitor can achieve the competitive advantage that busines intended to gain. Therefore, it is crucial to deliver the project on time. Similar to this when a project does not cover the intended scope it will not deliver the exact business value proposition thus it will not give the intended business process improvement and competitive advantage. Therefore, it is crucial to maintain and achieve planned project scope, time, and budget specifications to be a successful project.

3. RESEARCH METHODOLOGY

In this chapter, it is described as the approach and methodology taken for data gathering and analyzing gathered data in this research. As per the finding from the literature review, it will design independent variables and dependent variables in the conceptual framework. And addition to the above details justification for population selection and sampling selection will be given in the below chapter.

3.1. Conceptual Framework

The conceptual framework is derived via analyzing the main findings obtained through the critical review of the literature.

In this study, the Incorporation of adaptive management strategies is defined as a critical and important factor that has a significant impact on the success of an agile project. Hence, the independent variables are adaptive management strategies, and the dependent variables are project success measures. Project success is traditionally measured using the "golden triangle", which means completing the project on time, within budget, and according to specification. However, several studies support the inclusion of customer satisfaction as the fourth dimension of success (Zwikael O. , 2008).

Accordingly, the dependent variable which is project success can be measured using four major indicators Cost Status (planned vs actual), Schedule status, Scope status, Customer Satisfaction. Because of the complexity and difficulty of collecting data on customer satisfaction from the IT firms due to their confidentiality, the Customer Satisfaction indicator was not considered in this research.

In the current IT industry, there is a trend that software development projects become commercially successful even though the project does not meet the timeline, budget, and scope specification. But only a commercially successful project cannot decide that project is a success when it is analyzed in a broader angle. A company is spending for software development to achieve a process improvement in their business. By improving these business processes, the company will try to gain a completive advantage for them compared to other competitors.

Consider an instance where the project exceeds the planned time frame that the project needs to be delivered. In that time competitor can achieve the competitive advantage that busines intended to gain. Therefore, it is crucial to deliver the project on time. Similar to this when a project does not cover the intended scope it will not deliver the exact business value proposition thus it will not give the intended business process improvement and competitive advantage. Therefore, it is crucial to maintain and achieve planned project scope, time, and budget specifications to be a successful project.

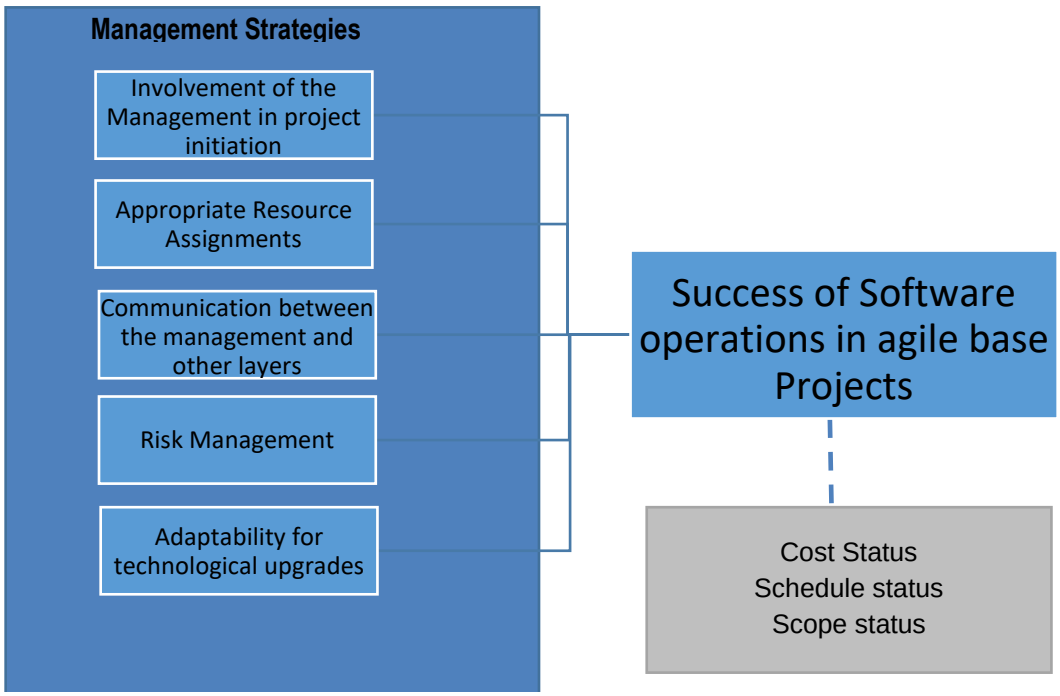

Figure 3.1: Conceptual Framework

3.1.1. Development of Hypotheses

"Hypothesis is a formal statement that presents the expected relationship between an independent and dependent variable." (Creswell, 1994). The following hypotheses have been derived based on the conceptual framework in Figure 3.1.

H_a: - Alternative Hypothesis

H_0: - Null Hypothesis

Hypotheses 01

$H1_a$: There is a relationship between Management Involvement in project initiation and success of software Operation in agile Based projects

$H1_0$: There is no relationship between Management Involvement in project initiation and success of software Operation in agile Based projects

Hypotheses 02

$H2_a$: There is a relationship between Management Involvement in Appropriate Resource Assignments and success of software Operation in agile Based projects.

$H2_0$: There is no relationship between Management Involvement in Appropriate Resource Assignments and success of software Operation in agile Based projects.

Hypotheses 03

$H3_a$: There is a relationship between Management Involvement in Communication between the management and other layers and success of software Operation in agile Based projects

$H3_0$: There is no relationship between Management Involvement in Communication between the management and other layers and success of software Operation in agile Based projects

Hypotheses 04

$H4_a$: There is a relationship between Management Involvement in Risk Management and success of software Operation in agile Based projects

$H4_0$: There is no relationship between Management Involvement in Risk Management and success of software Operation in agile Based projects

Hypotheses 05

$H5_a$: There is a relationship between Management Involvement in Adaptability for technological upgrades and success of software Operation in agile Based projects

$H5_0$: There is no relationship between Management Involvement in Adaptability for technological upgrades and success of software Operation in agile Based projects

3.1.2. Operationalization

Operationalization mainly focuses on the assignment of suitable definitions for the constructs being studied and presents the methods that are appropriate for these concepts.

Table 3.1: Content of the questionnaire

	Concepts	Variable	Indicator	Measure	Question
Dependent Variable	Project Success	Success of operations in the agile base project	1. Cost Status 2. Schedule status 3. Scope status	Whether Cost, Schedule, and Scope was delivered as planned according to customer requirement	No 23 to 25
Independend	Project Planning	Involvement of management in project initiation	Participation in meetings and discussions. Active involvement in decision making.	5-point Likert scale	No 6 to 9

e n t V a ri a b le		Appropriate Resource Assignments	Understanding the scope of the project and the capability of resources.	5-point Likert scale	No 10 to 12
	Project Execution, Monitoring, and Control	Communicatio n between the management and other layers	Active involvement for following up	5-point Likert scale	No 13 to 15
		Risk Management	Ability to understand the situation and propose alternatives	5-point Likert scale	No 16 to 18
		Adaptability for technological upgrades	Interest and knowledge in new technology.	5-point Likert scale	No 19 to 21

3.1.3. Data Collection

There were two types of data that was collected in this research study which are primary data and secondary data. Primary data is the first-hand data collected by a survey while secondary data is based on previous research work. Secondary data is typically collected by summarizing existing literature in the form of academic research articles, industry reports and web sites etc. Primary data for the survey is collected by two online questionnaires.

41 companies' company profiles were initially analyzed to identify agile based IT firms, but not only that separate questionnaire (Questionnaire 1) was distributed among those 41 organizations to identify the IT firms who really use agile practices in their projects. Hence Questionnaire 1 was distributed among contacts who work in the said different 41 IT firms in the industry to identify the IT firms who really apply agile approach. Distributing a questionnaire (Questionnaire 2) among IT professionals who involved with the said agile software projects was the main data collection instrument in this research.

A pilot survey was prepared and distributed among sample of 23 IT professionals and 2 Top management personnel to ensure the validity and the relevance of questions. Suggestions and feedbacks received were considered when preparing the final questionnaires.

Questionnaire 1 was used to identify the IT firms who have agile practices and the Questionnaire 2 was distributed among IT professionals work in those agile-based IT firms which were identified through Questionnaire 1. Two questionnaires and survey data are attached in Appendix.

3.1.4. Population and Sample Selection

According to National ICT Work Force Survey 2013 by Information and Communication Technology Agency of Sri Lanka (ICTA), it is estimated that ICT sector employee population to become 124,873 by 2018 (ICTA, 2019).

According to the simple random sampling method by considering a confidence level of 95 and margin of error as 5, sample size for above population is result 383. The online survey on "Adaptive management strategies for agile project success" was distributed among 400 IT professionals who work in 34 Agile based IT firms and 378 responses were received. Thus, the testing sample of 378 consists of Project Managers, Software Architects, Software Engineers, QA Engineers and Business Analysts from agile practicing organizations.

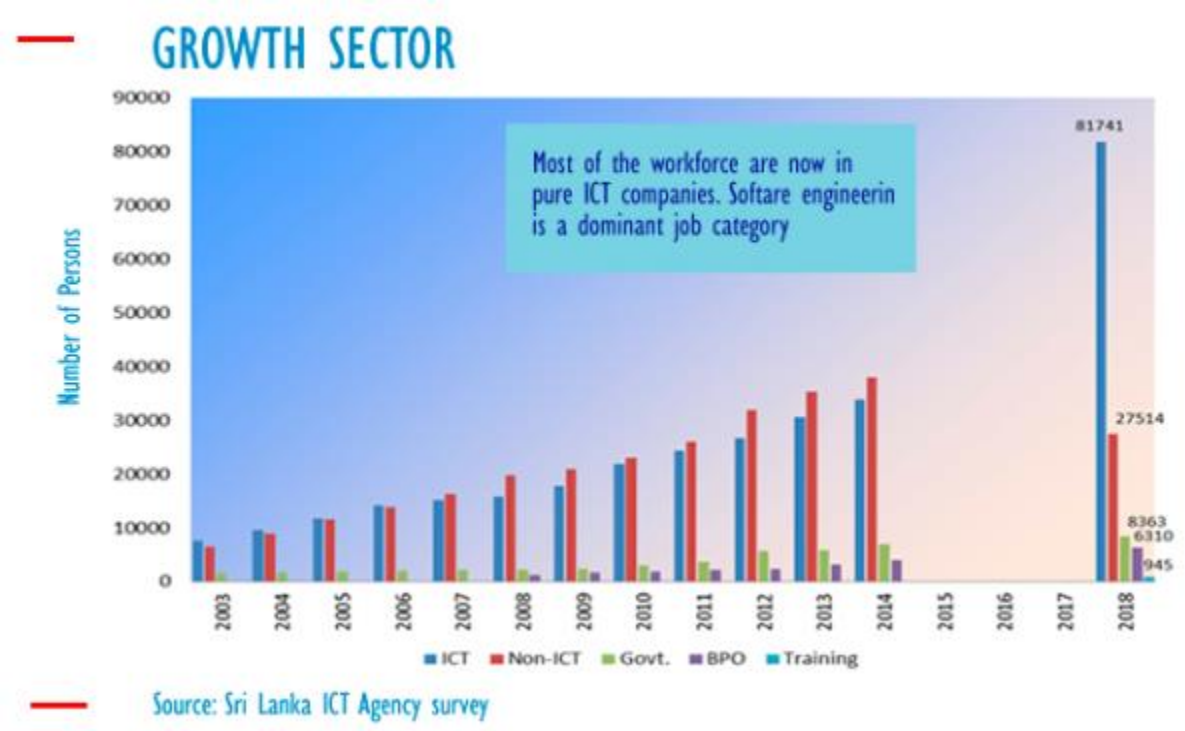

Figure 3.2: Sri Lanka ICT Agency Survey 2

3.1.5. Process of Data Collection

The data collection instruments of this research were two questionnaires which were distributed among IT professionals. A pilot study was carried out in order to analyze the internal consistency of the research instrument and to fine tune the questionnaires to eliminate ambiguity and misunderstanding of the questions. The pilot survey was done to random 25 individuals in different IT organizations in different job roles.

41 companies' company profiles were initially analyzed to identify agile based IT firms. Questionnaire 1 with 12 questions was distributed among those 41 organizations to identify the IT firms who really use agile practices in their projects. Thus 34 companies were selected among those 41 companies who scored more than 80% and have a agile based business profile.

The Questionnaire 2 contains 25 questions to gather data on the impact of adaptive management strategies for agile project success. Thus Questionnaire 2 was distributed among 400 respondents who are IT professionals, work in agile based IT firms that were identified using questionnaire 1 and 378 valid responses were collected out of them. This data was used to measure the relationship between independent and dependent variables. Five-point Likert scale was used to measure the statements in the questionnaires which range 1-5 representing 1 - Strongly Disagree and 5 - Strongly Agree and accordingly.

4. DATA ANALYSIS

This chapter discusses about the statistical approach that was used to analyze the data collected through the survey. First descriptive statistical analysis was applied on the responses collected from the study sample and then the reliability of the research instruments was tested using Cronbach's alpha. Then Pearson correlation, simple and multiple regression analysis was used to measure relationships between the independent and dependent variables. SPSS statistical computer package was used to carry out all the statistical analysis.

4.1. Data Preparation for Analysis

Survey responses were collected through the online questionnaire created using google forms and respondents were followed up until collecting the responses. The survey on "Adaptive management strategies for agile project success" was done by distributing Questionnaire 2 among the employees in Sri Lankan IT companies with agile approaches, to find the relationship between Involvement of management to the success rate of agile software projects. The respondents were employees in IT companies which practice agile approaches and these organizations were selected based on the Questionnaire 1 which was distributed among IT professionals through personal contacts in IT industry.

4.2. Descriptive Analysis

The first part of the questionnaire is concerned with employee's demographic characteristics which are: gender, reporting level, experience years in total, number of employees in a project team and project type. In below topic we analyzed the contribution of each demographic characteristic base on the collected data.

4.2.1. Gender Distribution

Results explores that about 67% of study respondents are males and the rest are females.

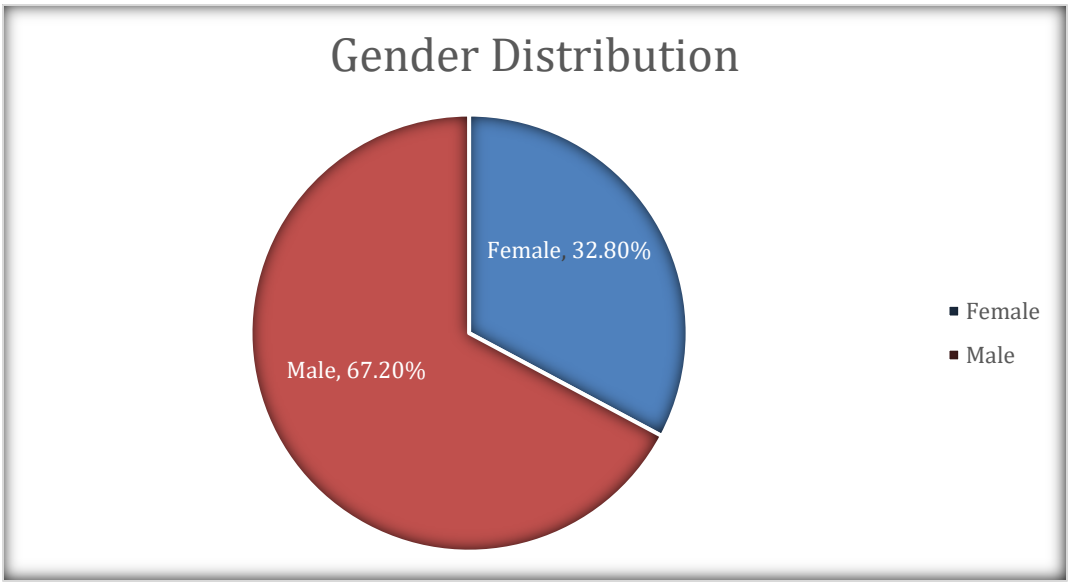

Figure 4.1: Gender Distribution

4.2.2. Reporting Level

According to the results, sample has covered main job areas in IT industry. 163 (43%) of study sample were reporting to senior managers and 88 (23.3%) included the respondents who report to team leads. There were 82 (21.7%) who report to Managers and there were 45 (11.9%) who report to CXO level.

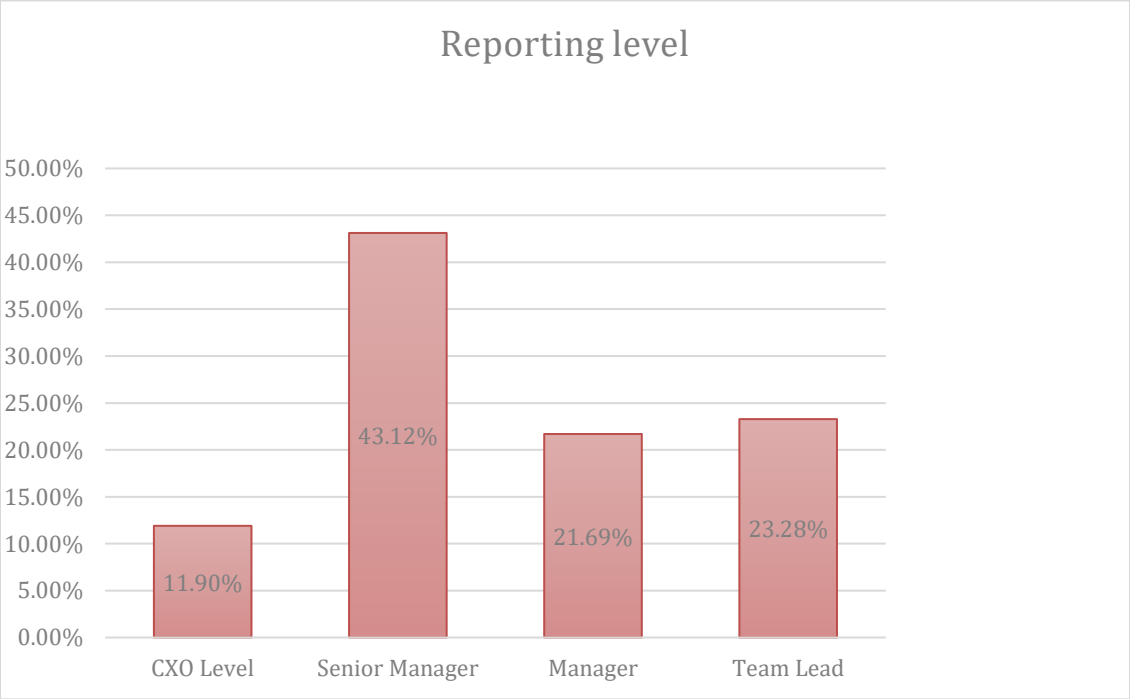

Figure 4.2: Reporting Level

4.2.3. Work Experience

Regarding the respondent's total working experience, results show that 153 (40.5%) of respondents have more than 4 years of experience and 82 (21.7%) of them have from 1 to 2 years of experience. 77 (20.4%) respondents have less than 1-year experience and 66 (7.5%) respondents have 2 to 4 years' experience in current job.

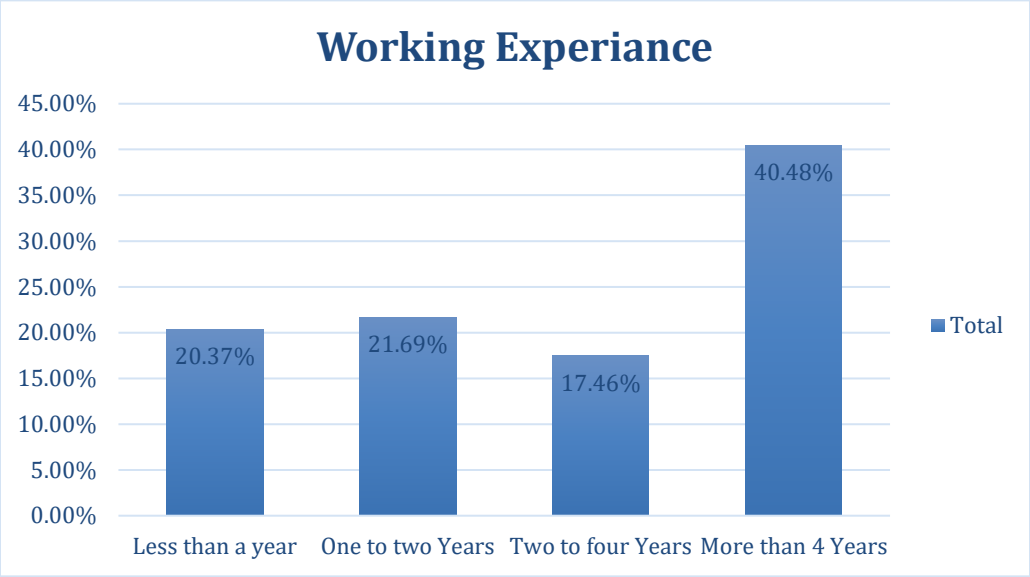

Figure 4.3: Working experience

4.2.4. Number of Employees assigned in a project team

Majority of the respondents 111 in number are in less than 5 category which is 29.3% as a percentage. 101 which is 26.7% of respondents are in 10 to 20 team members category. 98 which is 25.7% respondents have 5 to 10 team members and 60 (15.9%) respondents have 20 to 50 members. Further only 2.1% which is 8 of the respondents have more than 50 team members and it was only 8 respondents.

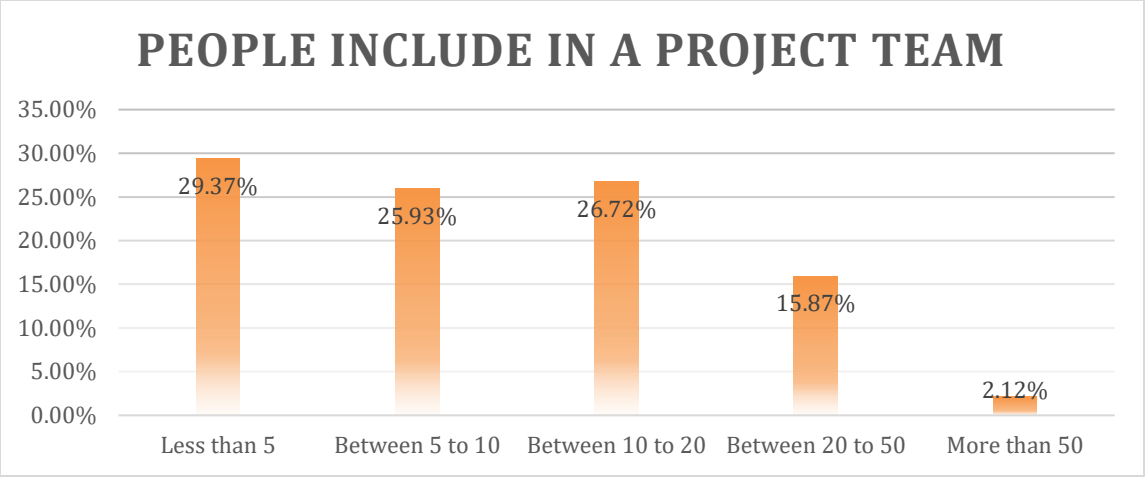

Figure 4.4: Number of Employees assigned in a project team

4.2.5. Type of Projects

According to the survey results, sample has covered main software project types of IT industry. 135 which is 35.7% of the sample were in Software development projects and 112 respondents that was 29.6% included in Software implementation projects. 98 respondents which is 25.9% were in Other types of software projects and 33 respondents were in Software Upgrading projects which represented 8.7% of the sample.

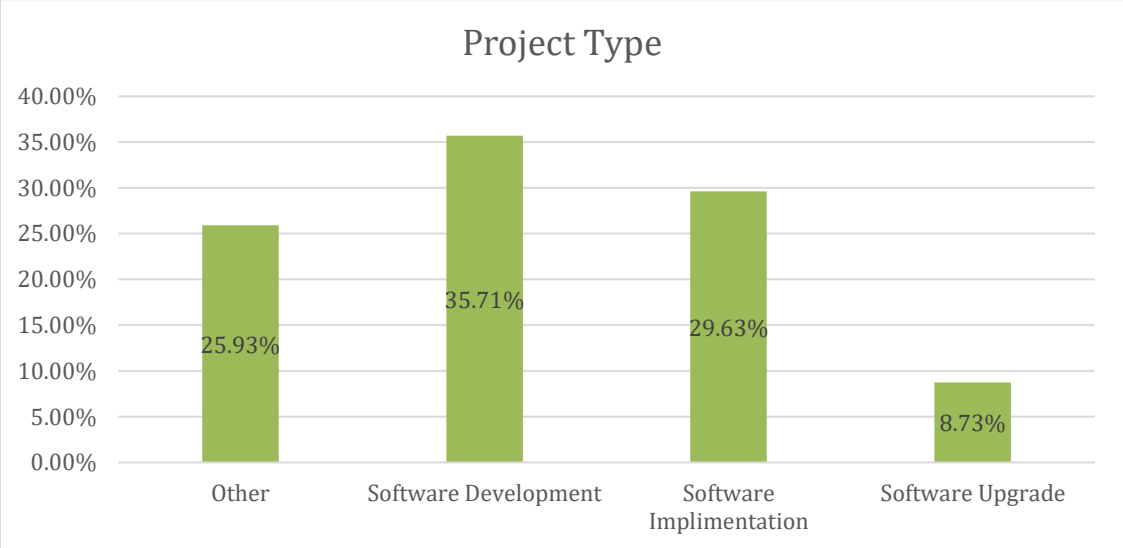

Figure 4.5: Project Type

4.3. Reliability Analysis

Cronbach's Alpha was used to investigate the internal consistency and the reliability of the research instruments in relation to the study sample. The reliability analysis proved that there is a high reliability in the research instruments.

Table 4.1 below illustrates reliability analysis done with Cronbach Alpha calculation for the research instrument - Questionnaire 1. The Cronbach's alpha is 0.739 > 0.7, which indicates an acceptable level of reliability and an acceptable level of internal consistency among the measures that were used in Questionnaire 1.

Table 4.1: Reliability of Questionnaire 1

Case Processing Summary

		N	%
Cases	Valid	41	100.0
	Excluded[a]	0	.0
	Total	41	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.739	.754	9

Following section illustrates the results of Cronbach Alpha calculation done for the data collected from Questionnaire 2 on each independent variable.

4.3.1. Involvement in project initiation

The Cronbach's alpha of Adaptive management strategies in project initiation is 0.835 > 0.7, which indicates a high level of reliability and a high level of internal consistency among the measures that were used in Questionnaire 2.

Table 4.2: Involvement in Project initiation

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	378	100.0
	Excluded[a]	0	.0
	Total	378	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.835	4

4.3.2. Appropriate Resource Assignments

The Cronbach's alpha of Appropriate Resource Assignment is 0.812 > 0.7, which indicates a high level of reliability and a high level of internal consistency among the measures that were used.

Table 4.3: Appropriate Resource Assignment

Case Processing Summary

		N	%
Cases	Valid	378	100.0
	Excluded[a]	0	.0
	Total	378	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.812	.816	2

4.3.3. Communication between the management and other layers

The Cronbach's alpha of Communication between the management and the other layers is 0.757 > 0.7, which indicates an acceptable level of reliability and an acceptable level of internal consistency among the measures that were used.

Table 4.4: Communication between the management and the other layers

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	378	100.0
	Excluded[a]	0	.0
	Total	378	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.757	2

4.3.4. Risk Management

The Cronbach's alpha of Risk Management is 0.878 > 0.7, which indicates a high level of reliability and a high level of internal consistency among the measures that were used in survey.

Table 4.5: Risk Management

Case Processing Summary

		N	%
Cases	Valid	378	100.0
	Excluded[a]	0	.0
	Total	378	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.878	.878	2

4.3.5. Adaptability for new technological Upgrades

The Cronbach's alpha of Adaptability for technological upgrades is 0.887 > 0.7, which indicates a high level of reliability and a high level of internal consistency among the measures that were used in questionnaire.

Table 4.6: Adaptability for new technological upgrades

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	378	100.0
	Excluded[a]	0	.0
	Total	378	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.887	4

4.4. Correlation Analysis of Variables

Pearson's correlation coefficient is a statistical measure of the strength of a linear relationship between paired data. In a sample it is denoted by r and is by design constrained as -1<= r <=1. Pearson's r can range from -1 to 1. An r of -1 indicates a perfect negative linear relationship between variables, an r of 0 indicates no linear relationship between variables, and an r of 1 indicates a perfect positive linear relationship between variables. The direction and the strength among dependent and independent variables are measured in this analysis.

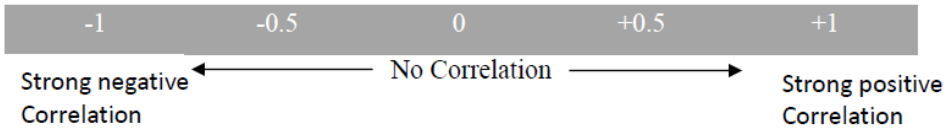

Figure 4.6: Measurement of Correlation

Table 4.6, 4.7, 4.8, 4.9 and 4.10 illustrate the correlation among all variables in this study.

4.4.1. Involvement of management in project initiation

Table 4.7: Involvement in Project initiation

Correlations

		Involment_in Project_Initiation	Project_success
Involment_in Project_Initiation	Pearson Correlation	1	.388**
	Sig. (2-tailed)		.000
	N	378	378
Project_success	Pearson Correlation	.388**	1
	Sig. (2-tailed)	.000	
	N	378	378

**. Correlation is significant at the 0.01 level (2-tailed).

4.4.2. Appropriate Resource Assignments

Table 2.8:Appropriate Resource allocation

Correlations

		Appropriate_Resource_Assignments	Project_sucess
Appropriate_Resource_Assignments	Pearson Correlation	1	.712**
	Sig. (2-tailed)		.000
	N	378	378
Project_sucess	Pearson Correlation	.712**	1
	Sig. (2-tailed)	.000	
	N	378	378

**. Correlation is significant at the 0.01 level (2-tailed).

4.4.3. Communication between the Management and other layers

Table 4.9: Communication between the Management and other layers

Correlations

		Communication_between_Other_Layer	Project_success
Communication_between_Other_Layer	Pearson Correlation	1	.167**
	Sig. (2-tailed)		.001
	N	378	378
Project_success	Pearson Correlation	.167**	1
	Sig. (2-tailed)	.001	
	N	378	378

**. Correlation is significant at the 0.01 level (2-tailed).

4.4.4. Risk Management

Table 4.10: Risk Management

Correlations

		Risk_Management	Project_sucess
Risk_Management	Pearson Correlation	1	.739**
	Sig. (2-tailed)		.000
	N	378	378
Project_sucess	Pearson Correlation	.739**	1
	Sig. (2-tailed)	.000	
	N	378	378

**. Correlation is significant at the 0.01 level (2-tailed).

4.4.5. Adaptability for new technological upgrades

Table 4.11: Adaptability for new technology

Correlations

		New_technology	Project_sucess
New_technology	Pearson Correlation	1	.518**
	Sig. (2-tailed)		.000
	N	378	378
Project_sucess	Pearson Correlation	.518**	1
	Sig. (2-tailed)	.000	
	N	378	378

**. Correlation is significant at the 0.01 level (2-tailed).

The adaptability for technological upgrades and agile project success has a positive direction and has a statistically significant linear relationship ($p < .01$) which is positively correlated. The adaptability for technological upgrades and agile project success is approximately moderate since $r = 0.518$ ($.5< | r | < .7$). Hence

The Pearson correlation $r = 0.739$ indicates that there is a positive correlation between Risk Management and agile project success. This means that both variables are changing in the same direction. The relationship between these two variables can be considered as a high correlation and it is significant at $p < 0.01$.

Considering the Communication between the management and agile project success, the correlation $r = 0.167$ indicates that there is a weak to negligible positive correlation between these independent and dependent variables.

Appropriate Resource Assignment and agile project success also have a high positive correlation ($r= 0.712$) which is significant at p-value < 0.01.

Further the Involvement in project initiation has a weak positive correlation ($r= 0.388$) with agile project success.

4.5. Regression Analysis

In this step basic linear regression analysis is used to analyze the data. This linear regression analysis method is basic and very commonly used predictive analyses type of analysis. Overall idea of this analyze is to examine two things. Does set of independent variables do good job in predicting depending variable out come and if predict from above independent variable which variables made significant contribution to the dependent variable outcome. And this prediction is used to explain the relationship between dependent variable and independent variable.

4.5.1. Involvement of management in project initiation

Table 4.12: Involvement in project initiation

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.388[a]	.150	.148	3.247

a. Predictors: (Constant), Involment_in_Project_Initiation

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	702.251	1	702.251	66.592	.000[b]
	Residual	3965.135	376	10.546		
	Total	4667.386	377			

a. Dependent Variable: Project_sucess

b. Predictors: (Constant), Involment_in_Project_Initiation

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.592	.581		1.019	.309
Involment_in_Project_Initiation	.405	.050	.388	8.160	.000

a. Dependent Variable: Project_sucess

The correlation coefficient R= 0.388 indicates that there is a positive correlation between Involvement of management in project initiation and success of agile Based projects. This indicates that when independent variable changes the dependent variable change in the same direction. When analyzing involvement of management in project initiation R square represent how much contribution made by that to project success. In above R square 0.150, indicate that 15% of success of agile Based projects is explained by involvement of management in project initiation. In the adjusted R square reveals the impact when generalized the model to the population. In this case its adjusted R square 0.148 almost same as R.

The analysis using of ANOVA (variance) will statistically test the null hypothesis. When we have a look on above ANOVA analysis F-ratio for the data is 66.592 and is significant at $p < 0.05$ (Alpha in this case equals sig= 0.000). As significant below 0.05 indicate that there is less than a 0.005% chance that an F- ratio of this value could happen. Because of that we could conclude that there is statistically significant relationship between involvement of management in project initiation and project success. Then we could reject the null hypothesis of Hypotheses 01. As R square is for above is low 0.15 it will be reconsidered with multiple regression analysis.

4.5.2. Appropriate Resource Assignments

Table 4.13: Appropriate Resource Assignment

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.709[a]	.503	.502	2.483

a. Predictors: (Constant), Resource_alocation

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2349.162	1	2349.162	381.018	.000[b]
	Residual	2318.224	376	6.165		
	Total	4667.386	377			

a. Dependent Variable: Project_sucess

b. Predictors: (Constant), Resource_alocation

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.589	.265		2.219	.027
	Resource_alocation	.763	.039	.709	19.520	.000

a. Dependent Variable: Project_sucess

The correlation coefficient R= 0.709 indicates that there is a positive correlation between Appropriate Resource Assignments and success of agile Based projects. This indicates that when independent variable changes the dependent variable change in the same direction. When analyzing Appropriate Resource Assignments R square represent how much contribution made by that to success of agile Based projects. In above R square 0.503, indicate that 50% of success of agile Based projects is explained by Appropriate Resource Assignments. In the adjusted R square

reveals the impact when generalized the model to the population. In this case its adjusted R square 0.502 almost same as R.

The analysis using of ANOVA (variance) will statistically test the null hypothesis. When we have a look on above ANOVA analysis F-ratio for the data is 381.018 and is significant at $p < 0.05$ (Alpha in this case equals sig= 0.000). As significant below 0.05 indicate that there is less than a 0.005% chance that an F- ratio of this value could happen. Because of that we could conclude that there is statistically significant relationship between Appropriate Resource Assignments and success of agile Based projects. Then we could reject the null hypothesis of Hypotheses 02

4.5.3. Communication between Management and other layers

Table 4.14: Communication between the management and other layers

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.167[a]	.028	.025	3.474

a. Predictors: (Constant), Comunication_between_Other_Layer

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	129.945	1	129.945	10.768	.001[b]
	Residual	4537.441	376	12.068		
	Total	4667.386	377			

a. Dependent Variable: Project_sucess

b. Predictors: (Constant), Comunication_between_Other_Layer

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.257	.599		5.438	.000
Comunication_between_Other_Layer	.232	.071	.167	3.281	.001

a. Dependent Variable: Project_sucess

The correlation coefficient R=.167 indicates that there is a positive correlation between Communication between management and other layers and success of agile Based projects. This indicates that when independent variable changes the dependent variable change in the same direction. When analyzing Communication between management and other layers R square represent how much contribution made by that to success of agile Based projects. In above R square 0.028, indicate that 2.8% of success of agile Based projects is explained by Communication between management and other layers. In the adjusted R square reveals the impact when generalized the model to the population. In this case its adjusted R square 0.025 almost same as R.

The analysis using of ANOVA (variance) will statistically test the null hypothesis. When we have a look on above ANOVA analysis F-ratio for the data is 10.768 and is significant at $p < 0.05$ (Alpha in this case equals sig= 0.001). As significant below 0.05 indicate that there is less than a 0.005% chance that an F- ratio of this value could happen. Because of that we could conclude that there is statistically significant relationship between Communication between management and other layers and success of agile Based projects. Then we could reject the null hypothesis of Hypotheses 03. As R square is for above is low 0.028 it will be reconsidered with multiple regression analysis.

4.5.4. Risk Management

Table 4.15: Risk Management

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.753[a]	.567	.565	2.319

a. Predictors: (Constant), Risk_managemetn

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2644.679	1	2644.679	491.618	.000[b]
	Residual	2022.708	376	5.380		
	Total	4667.386	377			

a. Dependent Variable: Project_sucess

b. Predictors: (Constant), Risk_managemetn

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.097	.257		.377	.706
	Risk_managemetn	.843	.038	.753	22.172	.000

a. Dependent Variable: Project_sucess

The correlation coefficient R=.753 indicates that there is a positive correlation between Risk Management and success of agile Based projects. This indicates that when independent variable changes the dependent variable change in the same direction. When analyzing Risk Management R square represent how much contribution made by that to success of agile Based projects. In above R square 0.567, indicate that 56.7% of success of agile Based projects is explained by Risk Management and other layers. In the adjusted R square reveals the impact when generalized the model to the population. In this case its adjusted R square 0.565 almost same as R.

The analysis using of ANOVA (variance) will statistically test the null hypothesis. When we have a look on above ANOVA analysis F-ratio for the data is 491.618 and is significant at $p < 0.05$

(Alpha in this case equals sig= 0.001). As significant below 0.05 indicate that there is less than a 0.005% chance that an F- ratio of this value could happen. Because of that we could conclude that there is statistically significant relationship between Risk Management and success of agile Based projects. Then we could reject the null hypothesis of Hypotheses 04

4.5.5. Adaptability for new Technological upgrades

Table 4.16: Adaptability for new technological upgrades

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.518[a]	.268	.266	3.015

a. Predictors: (Constant), New_technology

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1250.293	1	1250.293	137.576	.000[b]
	Residual	3417.094	376	9.088		
	Total	4667.386	377			

a. Dependent Variable: Project_sucess

b. Predictors: (Constant), New_technology

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.408	.353		3.983	.000
	New_technology	.397	.034	.518	11.729	.000

a. Dependent Variable: Project_sucess

The correlation coefficient R=.518 indicates that there is a positive correlation between Adaptability for technological upgrades and success of agile Based projects. This indicates that when independent variable changes the dependent variable change in the same direction. When analyzing Adaptability for technological upgrades R square represent how much contribution made by that to success of agile Based projects. In above R square 0.268, indicate that 26.8% of success of agile Based projects is explained by Adaptability for technological upgrades. In the adjusted R square reveals the impact when generalized the model to the population. In this case its adjusted R square 0.266 almost same as R.

The analysis using of ANOVA (variance) will statistically test the null hypothesis. When we have a look on above ANOVA analysis F-ratio for the data is 491.618 and is significant at $p < 0.05$

(Alpha in this case equals sig= 0.001). As significant below 0.05 indicate that there is less than a 0.005% chance that an F- ratio of this value could happen. Because of that we could conclude that there is statistically significant relationship between Adaptability for technological upgrades and success of agile Based projects. Then we could reject the null hypothesis of Hypotheses 05

4.5.6. Multiple Regression Analysis

In the multiple regression analysis, the values are calculated considering all the variables together. As a predictive analysis, multiple linear regression analysis was used to describe data and to explain the relationship between one dependent variable and two or more independent variables

Table 4.17: Multiple Regression Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.783[a]	.613	.608	2.202

a. Predictors: (Constant), New_technology, Involment_in_Project_Initiation, Resource_alocation, Comunication_between_Other_Layer, Risk_managemetn

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2862.986	5	572.597	118.048	.000[b]
	Residual	1804.400	372	4.851		
	Total	4667.386	377			

a. Dependent Variable: Project_sucess

b. Predictors: (Constant), New_technology, Involment_in_Project_Initiation, Resource_alocation, Comunication_between_Other_Layer, Risk_managemetn

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.629	.434		-1.447	.149
	Involment_in_Project_Initiation	.013	.052	.012	.248	.805

	Resource_alocation	.332	.058	.308	5.688	.000
	Comunication_between_Other_Layer	-.013	.066	-.009	-.189	.850
	Risk_managemetn	.504	.064	.450	7.874	.000
	New_technology	.078	.035	.102	2.238	.026

a. Dependent Variable: Project_sucess

The Management Involvement in Appropriate Resource Assignments, Management Involvement in Risk Management, and Management Involvement in Adaptability for New technological upgrades are significant because both of their p-values are 0.000. However, the p-value for Management Involvement in project initiation (0.805) and Management Involvement in Communication between the management and other layers (0.850) are greater than the common alpha level of 0.05, which indicates that they are not statistically significant. So, these two variables cannot be included in the model for success of agile Based projects. As p-values are 0.000 for remaining independent variables we could consider null hypothesis for Management Involvement in Appropriate Resource Assignments, Management Involvement in Risk Management and Management Involvement in Adaptability for New technological upgrades could be rejected. As a summery we could accept below hypothesis

$H1_0$: There is no relationship between Management Involvement in project initiation and success of software Operation in agile Based projects

$H2_a$: There is a relationship between Management Involvement in Appropriate Resource Assignments and success of agile Based projects

$H3_0$: There is no relationship between Management Involvement in Communication between the management and other layers and success of software Operation in agile Based projects

$H4_a$: There is a relationship between Management Involvement in Risk Management and success of software Operation in agile Based projects

$H5_a$: There is a relationship between Management Involvement in Adaptability for new technological upgrades and success of software Operation in agile Based projects

5. RECOMMENDATIONS AND CONCLUSION

5.1. Conclusion

The primary goal of this study was to determine adaptive management strategies for agile project success. There can be several strategies practiced by managers which affect agile project success of an organization. With a thorough analysis on literature such management strategies which support agile project success were categorized as Involvement of the management in project initiation, Appropriate Resource Assignments, Communication between management and other layers, Risk Management and Adaptability for technological upgrades. Thus, most affected strategies identified according to the literature, were considered to carry out this study to find the relationship of those strategies and agile project success.

When all the required data was gathered using questionnaires, Pearson's Correlation, Reliability analysis and Regression Analysis were applied to analyze the data. This chapter discusses the information derived from analyzing that data and suggestions were made based on that.

Based on the reliability analysis of the survey, the validity and consistency of the research instruments were revealed since, the Cronbach's alpha value for all variables are around the threshold value of 0.7.

As per the Descriptive analysis, the sample contains 67% of male and the rest is female. 43% of the respondents report to senior managers and next highest number of respondents report to team leads who represent 23.3% of the sample and rest of the respondents report to Managers and CXO level. According to the working experience, 40.5% of employees have more than 4 year working experience and the next highest number of respondents of 21.7% from the total have from 1 to 2 years of experience. According to the analysis on number of employees assigned to a project team, 29.3% of employees of the sample are in less than 5 members (in a project team) teams and the next highest percentage of 26.7% of respondents are in 10 to 20 team members category. According to the analysis on software project types, highest percentage of 35.7% of the sample are in Software development projects and 29.6% of respondents are in Software implementation projects. 25.9% were in Other types of software projects and 8.7% of the sample were in Software Upgrading projects.

According to the Pearson's correlation analysis all five independent variables of Involvement of the management in project initiation, Appropriate Resource Assignments, Communication between management and other layers, Risk Management and Adaptability for technological upgrades are positively correlated with agile project success. Accordingly, there is a strong positive correlation between Risk Management and agile project success with correlation coefficient r value = 0.753. Appropriate Resource Assignment and agile project success also have a strong positive correlation with r= 0.709. The adaptability for technological upgrades and agile project success is moderate positive correlated with r = 0.518. Further the Involvement in project initiation has a weak positive correlation (r= 0.388) with agile project success. Considering the Communication between the management and agile project success, the correlation r = 0.167 indicates that there is a weak to negligible positive correlation with agile project success. Thus, it can be concluded that Risk Management, Appropriate Resource assignment and adaptability for technological upgrades have a positive impact for the agile project success.

Hence, we could summarize the regression analysis as below.

Table 5.1: Summery of Regression Analysis

Variable	**Pearson Correlation**	**Description**
Management Involvement in Appropriate Resource Assignments	0.709	High
Management Involvement in Risk Management	0.753	High
Management Involvement in Adaptability for technological upgrades	0.518	Moderate

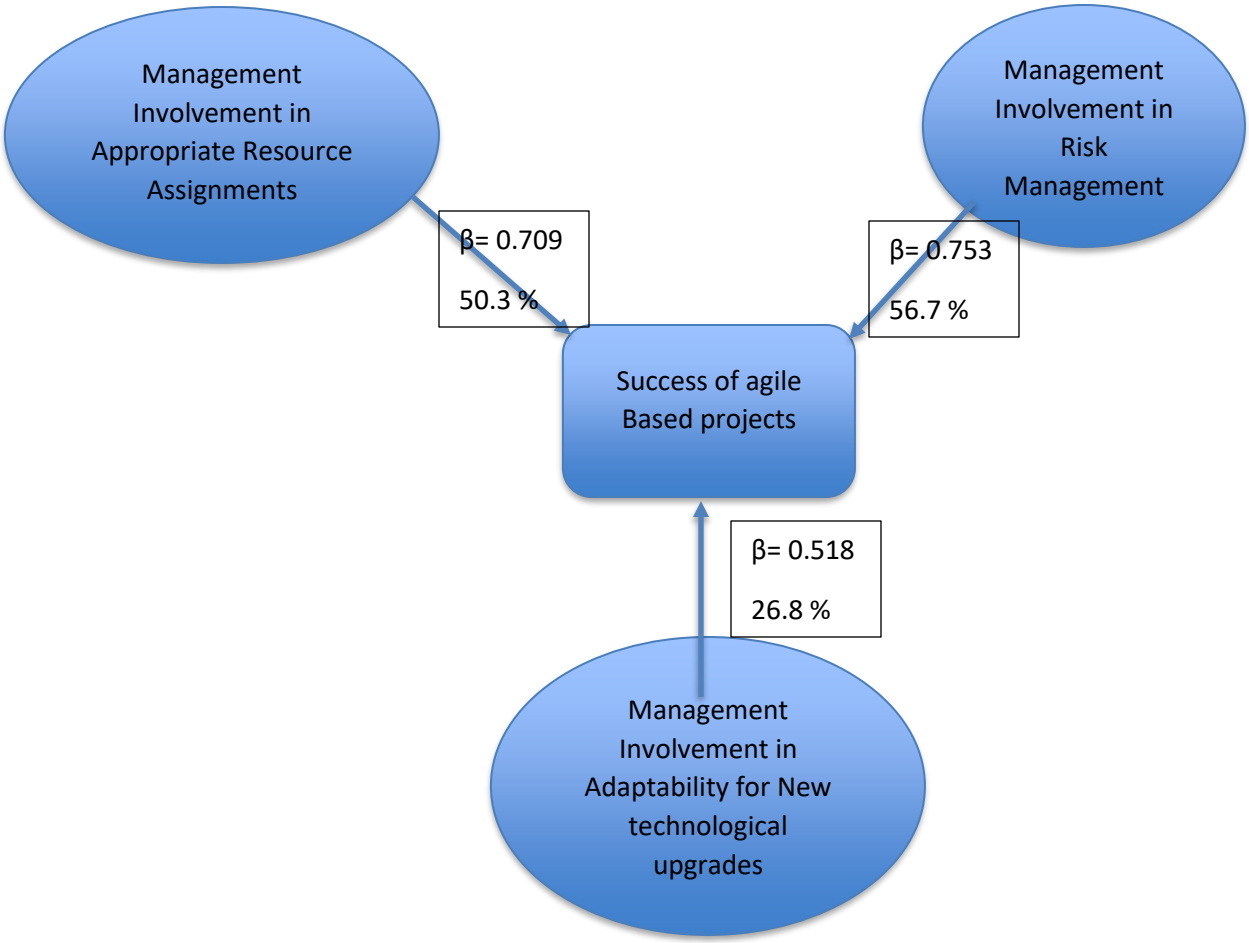

Figure 5.1: Summery of the data analysis

In above table it could be observed that Management Involvement in Risk Management has highest correlation of 0.753 to the Success of agile based projects compared to other two variables. This indicate that Management involvement in Risk Management has positive relationship to success of agile based projects. In other words, if a company management have high involvement in risk management it can impact to increase the success rate of agile based projects. And it is revealed through the regression analysis that Management Involvement in Risk management cause 56.7 % of agile based project success.

Other than Management Involvement in Risk Management, Management Involvement in Appropriate Resource Assignments also having positive high relationship to the success of agile based project according to correlation analysis. This indicate that when in Management organization involve much in appropriate resource assignment it helps to increase the success rate of agile base projects. And when we consider regression analysis together, we could see that 50.3% of agile project success could be explain through Management Involvement in Appropriate

Resource Assignments. Other than that, above table indicate Management Involvement in Adaptability for New technological upgrades also made moderate correlation for success rate of agile base projects. According to regression analysis it has contributed by 26.8% to the success of agile based projects.

5.2. Recommendations

Data analysis has revealed several key highlights which would be useful for management decision-making and operations in IT firms. Therefore, the following recommendation can be concluded from this research.

These research findings revealed that the incorporation of adaptive management strategies of Risk Management, Appropriate Resource assignment and Adaptability for new technological upgrades significantly impact for the agile based project success in an IT firm. Hence these variables can be included into a model of adaptive management strategies that enhances agile project success. Hence Agile based IT firms can practice, develop, and monitor this model of management strategies to improve their agile project success.

As per the research findings Risk Management has a strong positive correlation with agile project success. Since agile projects are highly dynamic and customer requirements can change quickly, those projects and the project team have to be flexible, but still they have to meet target deadlines as well. Hence there is a high probability that a project does not meet target deadline and project may become a failure. Hence management should be able to manage this risk of project failure. Organizations should invest on recruiting such talented employees and managers who has experience, skills, knowledge and ability to manage risk.

Appropriate Resource assignment has strong positive correlation with agile project success because to avoid agile project failure, agile project team should consist of most suitable resources of people, materials, equipment, knowledge, money and time for that project. In agile software projects as the project schedule changes due to customer requirements, the resource plan should also be flexible enough to alter as changes occur. Hence when a project scope is changed it is important to meet project deadline. In such a challenging situation the most appropriate resources allocation should be decided by the management. According to the survey data analysis most of the agile based projects

have less team members hence, all members of the team should be well skilled, well knowledgeable. Hence recruiting such team members and training them and assigning them to right project is crucial in an agile based IT firm. Hence appropriate resource assignment is vital for agile project execution. Involvement of the management in this process will make it more effective and efficient.

There are limited resources which can be utilized during project life cycle. Therefore, appropriate resource assignment is important for an agile project success. The duration of the resource requirement should be determined within the project schedules. A resource plan is critical to effective resource management. In order to make decisions on resource assignments the management should have proper understanding on scope of the project while having proper understanding on capability of the resources. Further the management should be aware about critical activities of the project and they should provide additional resource requirement when essential. Further management should invest on acquiring and recruiting the most suitable resources at the right time depending on their agile projects. Thus, management should recruit skilled, knowledgeable team members and train them to develop their skills and knowledge and assign them to the most appropriate projects.

Adaptability for new technological upgrades significantly impact for the agile based project success. Because IT industry is highly volatile since it depends on rapid technology changes. The latest technology that is currently used can obsolete in few months. Since agile based projects are carried out in a highly dynamic environment and customer requirement can be changed and updated with the new technology , the ability to adapt and learn new systems and technologies quickly is a skill that the management must have to succeed in the agile software projects. Management should have good interest, knowledge and understanding on latest and upcoming technologies. Showing their willingness to experiment or move on to modern technologies will encourages other project members to learn new technologies. The management should always give guidance and support to move on to modern technologies which is an essential requirement for success of agile software project in rapidly growing IT industry. Unless it will cause project failures and ultimately poor performance of the organization.

6. LIMITATIONS OF THE STUDY

Model limitations

The model of adaptive management strategies was identified by referring to the literature. Hence all the management strategies which affect to the success of the agile project may not have been identified. Also, all the literature used were foreign information, hence the relevance of the conceptual model developed using the literature may not have completely matched with Sri Lankan context in practical scenario. However, a pilot survey was done to validate the questionnaires to fine-tune the survey.

Tool limitations

Since a questionnaire-based survey was done, the respondent rate for the questionnaire was so low. Many responses had to be rejected because some of the respondents are not from agile based IT firms. Further since questionnaires are on rather confidential information of the organizations the response rate was low when the questionnaires were distributed online. Further in developing the questionnaires, practical problems were faced because the questionnaires had to be too long to clearly identify the strategies of the management of the organizations which impact the agile project success. If the questionnaires were made to be too long, then the respondent rate would have been lower. Further the qualitative data gathered by Likert scales may not have represented the true meaning which the person wanted to express; this may cause inaccurate results. Though a pilot survey was done to verify the ambiguities, still there may be uncertainty issues with the problems.

Issues in selecting the sample

Even though the sample of respondents was selected from agile IT firms in Sri Lanka, still there can be cultural factors in terms of national culture and organizational cultural and all so the individual characteristics of the employees and leaders that affect agile projects success of an organization. But it might slightly affect the outcome of the research. If those factors were fully controlled the accuracy would have been improved in the research outcome.

7. FUTURE WORK

The Research findings can be further improved through eliminating the limitations of the research and its weak points mentioned under limitations. Mainly if the sample size can be further increased the accuracy of the data can be further improved.

The tool used to gather data in this study was a closed ended questionnaire which did not allow the respondents to provide their ideas and feedback in their own words since the questions provided already specified lists of answers to select an option among them. An open-ended questionnaire which gives the respondents to provide their ideas and feedback in their own words will be another way to gather data. In an anonymous survey, respondents will be tempted to express their actual ideas and feelings in the open-ended form. But there will be a high possibility to get ambiguous and irrelevant answers. As well, there will be difficulties in assessing completely different answers which are in a wide range of response for the same question.

This research can be headed far beyond this scope that this can be extended further to study Organizational cultural factors and also the individual characteristics affecting agile project success and further agile project success can be measured in terms of Customer satisfaction measured through customer feedback and their behavior in future research. Moreover, how to improve adaptive management strategies in an organization also can be studied in future research work.

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9. APPENDIX

9.1. Questioner 1

Identifying agile practices Organization

This is questionnaire is to determine whether your organization follow agile practices.

1. Your Name.

_____

2. What is the Manager level that you are reporting?

Mark only one oval.

- ◯ CXO Level
- ◯ Senior Manager
- ◯ Manager
- ◯ Team Lead

3. How long you have been working in the company?

Mark only one oval.

- ◯ Less than 3 years
- ◯ 3 to 6 years
- ◯ 6 to 10 Years
- ◯ 10 to 15 years
- ◯ More than 15 years

4. Our company encourages constant gathering of requirements and continuous updates throughout the life cycles of their IT projects

Mark only one oval.

- Strongly agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

5. Our company encourages to use modern technology for developing high-quality systems

Mark only one oval.

- Strongly agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

6. Our company encourages and give guidance to its team to make every effort to improve the process

Mark only one oval.

- Strongly agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

7. Our company put the right people in the right roles based on their experience, skills, and knowledge

* *Mark only one oval.*

- Strongly agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

8. In Our company Project teams are fully confident and knowledgeable about their products

Mark only one oval.

- Strongly agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

9. Our company always encourages and supports a collaborative environment in the organization

Mark only one oval.

- Strongly agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

10. In a crisis situation such as interrupt deadline or goal, our company will buckle down and embrace agile approaches. **Mark only one oval.*

- Strongly agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

11. Our company utilizes time boxes to control scope and reduce the risk of scope creep * *Mark only one oval.*

- Strongly agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

12. Our Organization always value Customer/user feedback and their participation In Construction state of the project * *Mark only one oval.*

- Strongly agreed
- Agreed
- Neutral
- Disagreed
- Strongly
- Disagreed

9.2. Questioner 2

Incorporation of adaptive management strategies for agile project success

1. Gender.

   Mark only one oval.

   - ◯ Male
   - ◯ Female

2. How many Years did you work in current position.

   Mark only one oval.

   - ◯ Less than a year
   - ◯ One to two Years
   - ◯ Two to four Years
   - ◯ More than 4 Years

3. What is the Manager level that you are reporting.

   Mark only one oval.

   - ◯ CXO Level
   - ◯ Senior Manager
   - ◯ Manager
   - ◯ Team Lead

4. Approximate Number of people that assign to a project that you are involving

   Mark only one oval.

- ◯ Less than 5
- ◯ Between 5 to 10
- ◯ Between 10 to 20
- ◯ Between 20 to 50
- ◯ More than 50

5. What type of project that you involve.

Mark only one oval.

- ◯ Software Implementation
- ◯ Software Upgrade
- ◯ Software Development
- ◯ Other

Involvement of management in project initiation

Answer below questions based on your experience in management involvement in project initiation that you are working or worked on.

6. My Management Participate in the each and every project meeting.

Mark only one oval.

- ◯ Strongly Agreed
- ◯ Agreed
- ◯ Neutral
- ◯ Disagreed
- ◯ Strongly Disagreed

7. My Management Actively involved in decision making.

Mark only one oval.

- Strongly Agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

8. My Management gave suggestions based on their experience in the meetings.

Mark only one oval.

- Strongly Agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

9. In the project initiation My Management gave better understanding to project team about project significant.

Mark only one oval.

- Strongly Agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

Appropriate Resource Assignments

Answer below questions based on your experience of management involvement in resource allocation for a projects.

10. My Management has proper understanding on scope of the project.

Mark only one oval.

- ◯ Strongly Agreed
- ◯ Agreed
- ◯ Neutral
- ◯ Disagreed
- ◯ Strongly Disagreed

11. My Management has proper understanding on capability of the resources.

Mark only one oval.

- ◯ Strongly Agreed
- ◯ Agreed
- ◯ Neutral
- ◯ Disagreed
- ◯ Strongly Disagreed

12. My Management is aware about critical activities and provide additional resource.

requirement when essential * *Mark only one oval.*

- Strongly Agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

Communication between Management and other layers

Answer below questions based on your experience how management maintain Communication between other layers and other parties.

13. My Management actively involved in following up tasks and works to be done.

Mark only one oval.

- Strongly Agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

14. My Management has a close relationship with all operational levels.

Mark only one oval.

- Strongly Agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

15. My management is not easily accessible and approachable.

Mark only one oval.

- Strongly Agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

Risk Management

Answer below questions based on your experience how management involve in risk management in project.

16. My Management has ability to understand situation and risk involve in it.

Mark only one oval.

- Strongly Agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

17. My management is involved in Risk assessment processes such as Risk Identification, Risk Analysis and Risk Prioritization

Mark only one oval.

- Strongly Agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

18. My Management is involved in Risk Controlling processes such as Risk management planning, Risk Resolution and Risk Monitoring.

Mark only one oval.

- Strongly Agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

Adaptability for technological upgrades

Answer below questions based on your experience how management adaptability to new technology and willingness to move to new technology.

19. My management had good interest in new technology.

Mark only one oval.

- Strongly Agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

20. My management had good Knowledge and understanding in new technology.

Mark only one oval.

- Strongly Agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

21. My management was willing to move on to new technology.

Mark only one oval.

- Strongly Agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

22. My management was giving guidance and support to move on to new technology.

Mark only one oval.

- Strongly Agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

Project Success

Answer below question based on your experience previous projects.

23. I believe project cost was exceeded more than budgeted.

Mark only one oval.

- Strongly Agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

24. Project was not delivered according to plan time lines.

Mark only one oval.

- Strongly Agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

25. I believe full proposed project scoped was achieved.

Mark only one oval.

- Strongly Agreed
- Agreed
- Neutral
- Disagreed
- Strongly Disagreed

9.3. Questioner 1 Survey data

What is the Manager level that you are reporting?	How long you have been working in the company?	Our company encourages constant gathering of requirements and continuous updates throughout the life cycles of their IT projects	Our company encourages to use modern technology for developing high-quality systems	Our company encourages and give guidance to its team to make every effort to improve the process
Team Lead	Less than 3 years	Agreed	Strongly agreed	Strongly agreed
Team Lead	Less than 3 years	Strongly agreed	Neutral	Agreed
Team Lead	Less than 3 years	Agreed	Strongly agreed	Agreed
Team Lead	Less than 3 years	Agreed	Agreed	Strongly agreed
Team Lead	3 to 6 years	Agreed	Neutral	Strongly agreed
Team Lead	Less than 3 years	Strongly agreed	Strongly agreed	Agreed
Team Lead	Less than 3 years	Strongly agreed	Agreed	Strongly agreed
Team Lead	Less than 3 years	Neutral	Neutral	Neutral
CXO Level	6 to 10 Years	Agreed	Strongly agreed	Agreed
Team Lead	Less than 3 years	Strongly agreed	Strongly agreed	Strongly agreed
Manager	Less than 3 years	Agreed	Agreed	Agreed
Team Lead	3 to 6 years	Agreed	Agreed	Agreed
Team Lead	Less than 3 years	Agreed	Agreed	Strongly agreed
Team Lead	6 to 10 Years	Agreed	Strongly agreed	Neutral
Team Lead	3 to 6 years	Agreed	Agreed	Strongly agreed
Manager	3 to 6 years	Agreed	Agreed	Agreed
Team Lead	Less than 3 years	Strongly agreed	Strongly agreed	Agreed
Team Lead	6 to 10 Years	Neutral	Agreed	Agreed
Team Lead	Less than 3 years	Agreed	Agreed	Agreed
Manager	10 to 15 years	Agreed	Agreed	Agreed
Team Lead	Less than 3 years	Agreed	Agreed	Agreed
Manager	Less than 3 years	Agreed	Agreed	Agreed
Team Lead	Less than 3 years	Agreed	Agreed	Agreed
Team Lead	Less than 3 years	Agreed	Agreed	Neutral
Manager	3 to 6 years	Agreed	Agreed	Strongly agreed
Team Lead	Less than 3 years	Agreed	Agreed	Strongly agreed
Team Lead	Less than 3 years	Agreed	Agreed	Agreed
Team Lead	3 to 6 years	Agreed	Agreed	Agreed
Team Lead	Less than 3 years	Agreed	Agreed	Neutral
Manager	Less than 3 years	Agreed	Agreed	Agreed
Team Lead	Less than 3 years	Agreed	Agreed	Agreed
Manager	3 to 6 years	Disagreed	Neutral	Agreed
Manager	Less than 3 years	Agreed	Agreed	Strongly agreed
CXO Level	3 to 6 years	Agreed	Agreed	Agreed
Team Lead	Less than 3 years	Strongly agreed	Strongly agreed	Strongly agreed
Team Lead	Less than 3 years	Agreed	Agreed	Neutral
Manager	3 to 6 years	Strongly agreed	Strongly agreed	Strongly agreed
Team Lead	Less than 3 years	Agreed	Agreed	Agreed
Manager	Less than 3 years	Strongly agreed	Strongly agreed	Strongly agreed
Team Lead	Less than 3 years	Agreed	Neutral	Agreed
Manager	6 to 10 Years	Strongly agreed	Strongly agreed	Strongly agreed

Our company put the right people in the right roles based on their experience, skills, and knowledge	In Our company Project teams are fully confident and knowledgeable about their products	Our company always encourages and supports a collaborative environment in the organization	In a crisis situation such as interrupt deadline or goal, our company will buckle down and embrace agile approaches.	Our company utilizes time boxes to control scope and reduce the risk of scope creep	Our Organization always value Customer/user feedback and their participation In Construction state of the project
Neutral	Agreed	Agreed	Neutral	Agreed	Agreed
Agreed	Neutral	Agreed	Strongly agreed	Neutral	Strongly agreed
Agreed	Neutral	Agreed	Neutral	Strongly agreed	Agreed
Strongly agreed	Strongly agreed	Agreed	Agreed	Agreed	Agreed
Disagreed	Agreed	Strongly agreed	Neutral	Agreed	Neutral
Neutral	Agreed	Agreed	Neutral	Neutral	Agreed
Strongly agreed	Agreed	Strongly agreed	Strongly agreed	Strongly Disagreed	Strongly agreed
Disagreed	Agreed	Agreed	Agreed	Agreed	Strongly agreed
Neutral	Neutral	Agreed	Agreed	Disagreed	Agreed
Strongly agreed	Strongly agreed	Strongly agreed	Agreed	Neutral	Strongly agreed
Neutral	Agreed	Agreed	Neutral	Agreed	Agreed
Agreed	Agreed	Neutral	Neutral	Neutral	Disagreed
Strongly agreed	Agreed	Strongly agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Neutral	Neutral	Agreed	Neutral
Strongly agreed	Agreed	Strongly agreed	Strongly agreed	Strongly agreed	Strongly agreed
Agreed	Agreed	Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed	Agreed	Strongly agreed
Agreed	Agreed	Agreed	Neutral	Agreed	Agreed
Neutral	Agreed	Neutral	Neutral	Agreed	Strongly agreed
Agreed	Agreed	Agreed	Neutral	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed	Agreed	Agreed
Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
Agreed	Agreed	Agreed	Agreed	Agreed	Agreed
Agreed	Neutral	Agreed	Agreed	Neutral	Agreed
Agreed	Strongly agreed	Agreed	Agreed	Neutral	Neutral
Strongly agreed	Neutral	Agreed	Disagreed	Agreed	Strongly agreed
Neutral	Agreed	Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed	Agreed	Agreed
Agreed	Neutral	Agreed	Agreed	Agreed	Strongly agreed
Agreed	Agreed	Agreed	Agreed	Agreed	Agreed
Neutral	Agreed	Agreed	Neutral	Agreed	Neutral
Agreed	Neutral	Agreed	Agreed	Disagreed	Agreed
Agreed	Strongly agreed	Strongly agreed	Agreed	Agreed	Strongly agreed
Agreed	Neutral	Neutral	Neutral	Disagreed	Neutral
Strongly agreed	Strongly agreed	Strongly agreed	Strongly agreed	Strongly agreed	Strongly agreed
Disagreed	Agreed	Agreed	Neutral	Neutral	Strongly agreed
Agreed	Agreed	Agreed	Disagreed	Neutral	Agreed
Agreed	Agreed	Neutral	Disagreed	Neutral	Agreed
Strongly agreed	Agreed	Strongly agreed	Strongly agreed	Strongly agreed	Strongly agreed
Agreed	Neutral	Agreed	Agreed	Neutral	Agreed
Agreed	Agreed	Agreed	Agreed	Agreed	Agreed

9.4. Questioner 2 Survey data

9.4.1. Demography

Gender	How many Years did you work in current position	What is the Manager level that you are reporting	Approximate Number of people that assign to a project that you are involving	What type of project that you involve
Male	One to two Years	Team Lead	Between 5 to 10	Software Implementation
Male	One to two Years	Manager	Less than 5	Other
Male	Less than a year	Team Lead	Between 5 to 10	Software Upgrade
Female	One to two Years	Senior Manager	Between 10 to 20	Other
Male	Two to four Years	Manager	Less than 5	Other
Male	Less than a year	Team Lead	Less than 5	Other
Female	Less than a year	Team Lead	Less than 5	Software Development
Male	More than 4 Years	Team Lead	Less than 5	Software Development
Male	More than 4 Years	Team Lead	Between 10 to 20	Other
Male	Less than a year	Team Lead	Less than 5	Other
Male	More than 4 Years	Senior Manager	Between 5 to 10	Software Development
Female	Less than a year	Senior Manager	Between 10 to 20	Other
Female	Two to four Years	Team Lead	Less than 5	Other
Male	One to two Years	Team Lead	Less than 5	Other
Male	Less than a year	Manager	Between 5 to 10	Other
Female	More than 4 Years	Manager	Less than 5	Other
Male	Less than a year	Senior Manager	Between 5 to 10	Software Implementation
Male	Two to four Years	Manager	Less than 5	Software Upgrade
Female	More than 4 Years	Senior Manager	Between 10 to 20	Software Implementation
Male	More than 4 Years	Senior Manager	Between 10 to 20	Software Implementation
Female	Less than a year	Manager	Between 10 to 20	Software Implementation
Male	Less than a year	Manager	Between 10 to 20	Software Development
Male	More than 4 Years	Senior Manager	Less than 5	Software Upgrade
Female	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Male	More than 4 Years	Senior Manager	Between 20 to 50	Other
Male	More than 4 Years	Senior Manager	Between 20 to 50	Software Development
Male	One to two Years	Team Lead	Between 5 to 10	Software Development
Female	Two to four Years	Team Lead	Between 10 to 20	Software Development
Male	More than 4 Years	Senior Manager	Between 5 to 10	Software Implementation
Male	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Female	One to two Years	Manager	Between 5 to 10	Software Development
Male	One to two Years	Manager	Between 5 to 10	Software Implementation
Male	More than 4 Years	Senior Manager	Between 5 to 10	Software Development
Male	Two to four Years	Senior Manager	Between 20 to 50	Software Implementation
Female	More than 4 Years	Senior Manager	Less than 5	Software Implementation
Male	One to two Years	Senior Manager	Between 10 to 20	Software Implementation
Male	Two to four Years	Manager	Less than 5	Software Upgrade
Male	More than 4 Years	CXO Level	Between 20 to 50	Software Development
Female	Two to four Years	CXO Level	Less than 5	Other
Male	More than 4 Years	CXO Level	Between 5 to 10	Software Implementation
Male	More than 4 Years	CXO Level	Between 20 to 50	Software Development
Male	More than 4 Years	CXO Level	More than 50	Software Development
Female	More than 4 Years	CXO Level	More than 50	Software Development
Male	More than 4 Years	Senior Manager	Between 20 to 50	Software Upgrade
Female	Less than a year	Team Lead	Between 10 to 20	Software Development
Male	Two to four Years	Manager	Between 10 to 20	Software Implementation

Female	Two to four Years	CXO Level	Between 20 to 50	Software Development
Male	More than 4 Years	Manager	Between 10 to 20	Software Development
Male	More than 4 Years	Manager	Between 5 to 10	Software Implementation
Male	One to two Years	Manager	Between 10 to 20	Software Development
Male	More than 4 Years	CXO Level	Between 20 to 50	Software Implementation
Male	Less than a year	CXO Level	Between 20 to 50	Software Implementation
Male	Two to four Years	CXO Level	Between 20 to 50	Software Implementation
Male	One to two Years	Team Lead	Between 5 to 10	Software Implementation
Male	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Female	Less than a year	Manager	Between 10 to 20	Software Development
Male	Two to four Years	Team Lead	Between 5 to 10	Software Development
Female	More than 4 Years	Senior Manager	Between 20 to 50	Software Development
Female	More than 4 Years	Senior Manager	Between 10 to 20	Other
Male	One to two Years	Senior Manager	Less than 5	Other
Male	Two to four Years	CXO Level	Less than 5	Other
Male	One to two Years	Team Lead	Between 5 to 10	Software Upgrade
Female	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Female	One to two Years	Senior Manager	Between 10 to 20	Software Implementation
Male	Less than a year	Senior Manager	Between 5 to 10	Software Implementation
Male	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Female	More than 4 Years	Senior Manager	Between 5 to 10	Software Upgrade
Male	More than 4 Years	Senior Manager	Between 20 to 50	Software Implementation
Male	Two to four Years	Senior Manager	Less than 5	Software Implementation
Male	More than 4 Years	Manager	Less than 5	Software Development
Female	One to two Years	Manager	Less than 5	Software Implementation
Male	Less than a year	Senior Manager	Between 10 to 20	Software Implementation
Male	Less than a year	Team Lead	Between 5 to 10	Software Development
Female	One to two Years	Manager	Less than 5	Software Development
Female	More than 4 Years	Senior Manager	Between 5 to 10	Other
Male	Less than a year	Senior Manager	Between 20 to 50	Software Implementation
Male	Two to four Years	Team Lead	Less than 5	Other
Female	One to two Years	Senior Manager	Less than 5	Other
Female	More than 4 Years	Senior Manager	Between 5 to 10	Software Development
Male	One to two Years	Team Lead	Less than 5	Software Implementation
Male	Two to four Years	Senior Manager	Between 5 to 10	Software Development
Male	More than 4 Years	Senior Manager	Between 5 to 10	Software Development
Female	One to two Years	Team Lead	Between 20 to 50	Other
Male	One to two Years	Team Lead	Between 5 to 10	Software Implementation
Male	One to two Years	Manager	Less than 5	Other
Male	Less than a year	Team Lead	Between 5 to 10	Software Upgrade
Female	One to two Years	Senior Manager	Between 10 to 20	Other
Male	Two to four Years	Manager	Less than 5	Other
Male	Less than a year	Team Lead	Less than 5	Other
Female	Less than a year	Team Lead	Less than 5	Software Development
Male	More than 4 Years	Team Lead	Less than 5	Software Development
Male	More than 4 Years	Team Lead	Between 10 to 20	Other
Male	Less than a year	Team Lead	Less than 5	Other
Male	More than 4 Years	Senior Manager	Between 5 to 10	Software Development
Female	Less than a year	Senior Manager	Between 10 to 20	Other
Female	Two to four Years	Team Lead	Less than 5	Other
Male	One to two Years	Team Lead	Less than 5	Other
Male	Less than a year	Manager	Between 5 to 10	Other
Male	More than 4 Years	Manager	Less than 5	Other
Male	Less than a year	Senior Manager	Between 5 to 10	Software Implementation
Female	Two to four Years	Manager	Less than 5	Software Upgrade
Female	More than 4 Years	Senior Manager	Between 10 to 20	Software Implementation
Male	More than 4 Years	Senior Manager	Between 10 to 20	Software Implementation

Female	Less than a year	Manager	Between 10 to 20	Software Implementation
Male	Less than a year	Manager	Between 10 to 20	Software Development
Male	More than 4 Years	Senior Manager	Less than 5	Software Upgrade
Female	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Male	More than 4 Years	Senior Manager	Between 20 to 50	Other
Male	More than 4 Years	Senior Manager	Between 20 to 50	Software Development
Male	One to two Years	Team Lead	Between 5 to 10	Software Development
Female	Two to four Years	Team Lead	Between 10 to 20	Software Development
Male	More than 4 Years	Senior Manager	Between 5 to 10	Software Implementation
Male	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Female	One to two Years	Manager	Between 5 to 10	Software Development
Male	One to two Years	Manager	Between 5 to 10	Software Implementation
Male	More than 4 Years	Senior Manager	Between 5 to 10	Software Development
Male	Two to four Years	Senior Manager	Between 20 to 50	Software Implementation
Female	More than 4 Years	Senior Manager	Less than 5	Software Implementation
Male	One to two Years	Senior Manager	Between 10 to 20	Software Implementation
Female	Two to four Years	Manager	Less than 5	Software Upgrade
Male	More than 4 Years	CXO Level	Between 20 to 50	Software Development
Female	Two to four Years	CXO Level	Less than 5	Other
Male	More than 4 Years	CXO Level	Between 5 to 10	Software Implementation
Male	More than 4 Years	CXO Level	Between 20 to 50	Software Development
Male	More than 4 Years	CXO Level	More than 50	Software Development
Female	More than 4 Years	CXO Level	More than 50	Software Development
Male	More than 4 Years	Senior Manager	Between 20 to 50	Software Upgrade
Female	Less than a year	Team Lead	Between 10 to 20	Software Development
Male	Two to four Years	Manager	Between 10 to 20	Software Implementation
Female	Two to four Years	CXO Level	Between 20 to 50	Software Development
Male	More than 4 Years	Manager	Between 10 to 20	Software Development
Male	More than 4 Years	Manager	Between 5 to 10	Software Implementation
Male	One to two Years	Manager	Between 10 to 20	Software Development
Male	More than 4 Years	CXO Level	Between 20 to 50	Software Implementation
Female	Less than a year	CXO Level	Between 20 to 50	Software Implementation
Male	Two to four Years	CXO Level	Between 20 to 50	Software Implementation
Male	One to two Years	Team Lead	Between 5 to 10	Software Implementation
Male	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Female	Less than a year	Manager	Between 10 to 20	Software Development
Male	Two to four Years	Team Lead	Between 5 to 10	Software Development
Female	More than 4 Years	Senior Manager	Between 20 to 50	Software Development
Female	More than 4 Years	Senior Manager	Between 10 to 20	Other
Male	One to two Years	Senior Manager	Less than 5	Other
Male	Two to four Years	CXO Level	Less than 5	Other
Male	One to two Years	Team Lead	Between 5 to 10	Software Upgrade
Female	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Female	One to two Years	Senior Manager	Between 10 to 20	Software Implementation
Male	Less than a year	Senior Manager	Between 5 to 10	Software Implementation
Male	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Female	More than 4 Years	Senior Manager	Between 5 to 10	Software Upgrade
Male	More than 4 Years	Senior Manager	Between 20 to 50	Software Implementation
Male	Two to four Years	Senior Manager	Less than 5	Software Implementation
Male	More than 4 Years	Manager	Less than 5	Software Development
Female	One to two Years	Manager	Less than 5	Software Implementation
Male	Less than a year	Senior Manager	Between 10 to 20	Software Implementation
Male	Less than a year	Team Lead	Between 5 to 10	Software Development
Male	One to two Years	Manager	Less than 5	Software Development
Female	More than 4 Years	Senior Manager	Between 5 to 10	Other
Male	Less than a year	Senior Manager	Between 20 to 50	Software Implementation
Male	Two to four Years	Team Lead	Less than 5	Other

Female	One to two Years	Senior Manager	Less than 5	Other
Female	More than 4 Years	Senior Manager	Between 5 to 10	Software Development
Male	One to two Years	Team Lead	Less than 5	Software Implementation
Male	Two to four Years	Senior Manager	Between 5 to 10	Software Development
Male	More than 4 Years	Senior Manager	Between 5 to 10	Software Development
Female	One to two Years	Team Lead	Between 20 to 50	Other
Male	One to two Years	Team Lead	Between 5 to 10	Software Implementation
Male	One to two Years	Manager	Less than 5	Other
Male	Less than a year	Team Lead	Between 5 to 10	Software Upgrade
Male	One to two Years	Senior Manager	Between 10 to 20	Other
Female	Two to four Years	Manager	Less than 5	Other
Male	Less than a year	Team Lead	Less than 5	Other
Female	Less than a year	Team Lead	Less than 5	Software Development
Male	More than 4 Years	Team Lead	Less than 5	Software Development
Male	More than 4 Years	Team Lead	Between 10 to 20	Other
Male	Less than a year	Team Lead	Less than 5	Other
Male	More than 4 Years	Senior Manager	Between 5 to 10	Software Development
Female	Less than a year	Senior Manager	Between 10 to 20	Other
Female	Two to four Years	Team Lead	Less than 5	Other
Female	One to two Years	Team Lead	Less than 5	Other
Female	Less than a year	Manager	Between 5 to 10	Other
Male	More than 4 Years	Manager	Less than 5	Other
Male	Less than a year	Senior Manager	Between 5 to 10	Software Implementation
Male	Two to four Years	Manager	Less than 5	Software Upgrade
Female	More than 4 Years	Senior Manager	Between 10 to 20	Software Implementation
Male	More than 4 Years	Senior Manager	Between 10 to 20	Software Implementation
Female	Less than a year	Manager	Between 10 to 20	Software Implementation
Male	Less than a year	Manager	Between 10 to 20	Software Development
Male	More than 4 Years	Senior Manager	Less than 5	Software Upgrade
Female	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Male	More than 4 Years	Senior Manager	Between 20 to 50	Other
Male	More than 4 Years	Senior Manager	Between 20 to 50	Software Development
Male	One to two Years	Team Lead	Between 5 to 10	Software Development
Female	Two to four Years	Team Lead	Between 10 to 20	Software Development
Male	More than 4 Years	Senior Manager	Between 5 to 10	Software Implementation
Male	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Female	One to two Years	Manager	Between 5 to 10	Software Development
Male	One to two Years	Manager	Between 5 to 10	Software Implementation
Male	More than 4 Years	Senior Manager	Between 5 to 10	Software Development
Male	Two to four Years	Senior Manager	Between 20 to 50	Software Implementation
Female	More than 4 Years	Senior Manager	Less than 5	Software Implementation
Male	One to two Years	Senior Manager	Between 10 to 20	Software Implementation
Male	Two to four Years	Manager	Less than 5	Software Upgrade
Male	More than 4 Years	CXO Level	Between 20 to 50	Software Development
Female	Two to four Years	CXO Level	Less than 5	Other
Male	More than 4 Years	CXO Level	Between 5 to 10	Software Implementation
Male	More than 4 Years	CXO Level	Between 20 to 50	Software Development
Male	More than 4 Years	CXO Level	More than 50	Software Development
Female	More than 4 Years	CXO Level	More than 50	Software Development
Male	More than 4 Years	Senior Manager	Between 20 to 50	Software Upgrade
Female	Less than a year	Team Lead	Between 10 to 20	Software Development
Male	Two to four Years	Manager	Between 10 to 20	Software Implementation
Female	Two to four Years	CXO Level	Between 20 to 50	Software Development
Male	More than 4 Years	Manager	Between 10 to 20	Software Development
Male	More than 4 Years	Manager	Between 5 to 10	Software Implementation
Male	One to two Years	Manager	Between 10 to 20	Software Development
Male	More than 4 Years	CXO Level	Between 20 to 50	Software Implementation

Male	Less than a year	CXO Level	Between 20 to 50	Software Implementation
Male	Two to four Years	CXO Level	Between 20 to 50	Software Implementation
Male	One to two Years	Team Lead	Between 5 to 10	Software Implementation
Male	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Female	Less than a year	Manager	Between 10 to 20	Software Development
Male	Two to four Years	Team Lead	Between 5 to 10	Software Development
Female	More than 4 Years	Senior Manager	Between 20 to 50	Software Development
Female	More than 4 Years	Senior Manager	Between 10 to 20	Other
Male	One to two Years	Senior Manager	Less than 5	Other
Male	Two to four Years	CXO Level	Less than 5	Other
Male	One to two Years	Team Lead	Between 5 to 10	Software Upgrade
Female	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Female	One to two Years	Senior Manager	Between 10 to 20	Software Implementation
Male	Less than a year	Senior Manager	Between 5 to 10	Software Implementation
Male	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Female	More than 4 Years	Senior Manager	Between 5 to 10	Software Upgrade
Male	More than 4 Years	Senior Manager	Between 20 to 50	Software Implementation
Male	Two to four Years	Senior Manager	Less than 5	Software Implementation
Male	More than 4 Years	Manager	Less than 5	Software Development
Female	One to two Years	Manager	Less than 5	Software Implementation
Male	Less than a year	Senior Manager	Between 10 to 20	Software Implementation
Male	Less than a year	Team Lead	Between 5 to 10	Software Development
Male	One to two Years	Manager	Less than 5	Software Development
Female	More than 4 Years	Senior Manager	Between 5 to 10	Other
Male	Less than a year	Senior Manager	Between 20 to 50	Software Implementation
Male	Two to four Years	Team Lead	Less than 5	Other
Female	One to two Years	Senior Manager	Less than 5	Other
Female	More than 4 Years	Senior Manager	Between 5 to 10	Software Development
Male	One to two Years	Team Lead	Less than 5	Software Implementation
Male	Two to four Years	Senior Manager	Between 5 to 10	Software Development
Male	More than 4 Years	Senior Manager	Between 5 to 10	Software Development
Female	One to two Years	Team Lead	Between 20 to 50	Other
Female	More than 4 Years	Senior Manager	Between 20 to 50	Software Development
Female	More than 4 Years	Senior Manager	Between 10 to 20	Other
Male	One to two Years	Senior Manager	Less than 5	Other
Male	Two to four Years	CXO Level	Less than 5	Other
Male	One to two Years	Team Lead	Between 5 to 10	Software Upgrade
Female	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Female	One to two Years	Senior Manager	Between 10 to 20	Software Implementation
Male	Less than a year	Senior Manager	Between 5 to 10	Software Implementation
Male	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Female	More than 4 Years	Senior Manager	Between 5 to 10	Software Upgrade
Male	More than 4 Years	Senior Manager	Between 20 to 50	Software Implementation
Male	Two to four Years	Senior Manager	Less than 5	Software Implementation
Male	More than 4 Years	Manager	Less than 5	Software Development
Female	One to two Years	Manager	Less than 5	Software Implementation
Female	Less than a year	Senior Manager	Between 10 to 20	Software Implementation
Male	Less than a year	Team Lead	Between 5 to 10	Software Development
Male	One to two Years	Manager	Less than 5	Software Development
Female	More than 4 Years	Senior Manager	Between 5 to 10	Other
Male	Less than a year	Senior Manager	Between 20 to 50	Software Implementation
Male	Two to four Years	Team Lead	Less than 5	Other
Female	One to two Years	Senior Manager	Less than 5	Other
Male	One to two Years	Team Lead	Between 5 to 10	Software Implementation
Male	One to two Years	Manager	Less than 5	Other
Male	Less than a year	Team Lead	Between 5 to 10	Software Upgrade
Male	One to two Years	Senior Manager	Between 10 to 20	Other

Male	Two to four Years	Manager	Less than 5	Other
Male	Less than a year	Team Lead	Less than 5	Other
Female	Less than a year	Team Lead	Less than 5	Software Development
Male	More than 4 Years	Team Lead	Less than 5	Software Development
Male	More than 4 Years	Team Lead	Between 10 to 20	Other
Male	Less than a year	Team Lead	Less than 5	Other
Male	More than 4 Years	Senior Manager	Between 5 to 10	Software Development
Female	Less than a year	Senior Manager	Between 10 to 20	Other
Female	Two to four Years	Team Lead	Less than 5	Other
Male	One to two Years	Team Lead	Less than 5	Other
Male	Less than a year	Manager	Between 5 to 10	Other
Male	More than 4 Years	Manager	Less than 5	Other
Male	Less than a year	Senior Manager	Between 5 to 10	Software Implementation
Male	Two to four Years	Manager	Less than 5	Software Upgrade
Female	More than 4 Years	Senior Manager	Between 10 to 20	Software Implementation
Male	More than 4 Years	Senior Manager	Between 10 to 20	Software Implementation
Female	Less than a year	Manager	Between 10 to 20	Software Implementation
Male	Less than a year	Manager	Between 10 to 20	Software Development
Male	More than 4 Years	Senior Manager	Less than 5	Software Upgrade
Female	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Male	More than 4 Years	Senior Manager	Between 20 to 50	Other
Male	More than 4 Years	Senior Manager	Between 20 to 50	Software Development
Male	One to two Years	Team Lead	Between 5 to 10	Software Development
Female	Two to four Years	Team Lead	Between 10 to 20	Software Development
Male	More than 4 Years	Senior Manager	Between 5 to 10	Software Implementation
Male	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Female	One to two Years	Manager	Between 5 to 10	Software Development
Male	One to two Years	Manager	Between 5 to 10	Software Implementation
Male	More than 4 Years	Senior Manager	Between 5 to 10	Software Development
Male	Two to four Years	Senior Manager	Between 20 to 50	Software Implementation
Female	More than 4 Years	Senior Manager	Less than 5	Software Implementation
Male	One to two Years	Senior Manager	Between 10 to 20	Software Implementation
Male	Two to four Years	Manager	Less than 5	Software Upgrade
Male	More than 4 Years	CXO Level	Between 20 to 50	Software Development
Female	Two to four Years	CXO Level	Less than 5	Other
Male	More than 4 Years	CXO Level	Between 5 to 10	Software Implementation
Male	More than 4 Years	CXO Level	Between 20 to 50	Software Development
Male	More than 4 Years	CXO Level	More than 50	Software Development
Female	More than 4 Years	CXO Level	More than 50	Software Development
Male	More than 4 Years	Senior Manager	Between 20 to 50	Software Upgrade
Female	Less than a year	Team Lead	Between 10 to 20	Software Development
Male	Two to four Years	Manager	Between 10 to 20	Software Implementation
Female	Two to four Years	CXO Level	Between 20 to 50	Software Development
Male	More than 4 Years	Manager	Between 10 to 20	Software Development
Female	More than 4 Years	Manager	Between 5 to 10	Software Implementation
Male	One to two Years	Manager	Between 10 to 20	Software Development
Male	More than 4 Years	CXO Level	Between 20 to 50	Software Implementation
Male	Less than a year	CXO Level	Between 20 to 50	Software Implementation
Male	Two to four Years	CXO Level	Between 20 to 50	Software Implementation
Male	One to two Years	Team Lead	Between 5 to 10	Software Implementation
Male	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Female	Less than a year	Manager	Between 10 to 20	Software Development
Male	Two to four Years	Team Lead	Between 5 to 10	Software Development
Female	More than 4 Years	Senior Manager	Between 20 to 50	Software Development
Female	More than 4 Years	Senior Manager	Between 10 to 20	Other
Male	One to two Years	Senior Manager	Less than 5	Other
Male	Two to four Years	CXO Level	Less than 5	Other

Male	One to two Years	Team Lead	Between 5 to 10	Software Upgrade
Female	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Female	One to two Years	Senior Manager	Between 10 to 20	Software Implementation
Male	Less than a year	Senior Manager	Between 5 to 10	Software Implementation
Male	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Female	More than 4 Years	Senior Manager	Between 5 to 10	Software Upgrade
Male	More than 4 Years	Senior Manager	Between 20 to 50	Software Implementation
Male	Two to four Years	Senior Manager	Less than 5	Software Implementation
Male	More than 4 Years	Manager	Less than 5	Software Development
Female	One to two Years	Manager	Less than 5	Software Implementation
Male	Less than a year	Senior Manager	Between 10 to 20	Software Implementation
Male	Less than a year	Team Lead	Between 5 to 10	Software Development
Male	One to two Years	Manager	Less than 5	Software Development
Female	More than 4 Years	Senior Manager	Between 5 to 10	Other
Male	Less than a year	Senior Manager	Between 20 to 50	Software Implementation
Male	Two to four Years	Team Lead	Less than 5	Other
Female	One to two Years	Senior Manager	Less than 5	Other
Female	More than 4 Years	Senior Manager	Between 5 to 10	Software Development
Male	One to two Years	Team Lead	Less than 5	Software Implementation
Male	Two to four Years	Senior Manager	Between 5 to 10	Software Development
Male	More than 4 Years	Senior Manager	Between 5 to 10	Software Development
Female	One to two Years	Team Lead	Between 20 to 50	Other
Male	One to two Years	Team Lead	Between 5 to 10	Software Implementation
Male	One to two Years	Manager	Less than 5	Other
Male	Less than a year	Team Lead	Between 5 to 10	Software Upgrade
Female	One to two Years	Senior Manager	Between 10 to 20	Other
Male	Two to four Years	Manager	Less than 5	Other
Male	Less than a year	Team Lead	Less than 5	Other
Female	Less than a year	Team Lead	Less than 5	Software Development
Female	More than 4 Years	Team Lead	Less than 5	Software Development
Male	More than 4 Years	Team Lead	Between 10 to 20	Other
Male	Less than a year	Team Lead	Less than 5	Other
Male	More than 4 Years	Senior Manager	Between 5 to 10	Software Development
Female	Less than a year	Senior Manager	Between 10 to 20	Other
Female	Two to four Years	Team Lead	Less than 5	Other
Male	One to two Years	Team Lead	Less than 5	Other
Male	Less than a year	Manager	Between 5 to 10	Other
Male	More than 4 Years	Manager	Less than 5	Other
Male	Less than a year	Senior Manager	Between 5 to 10	Software Implementation
Male	Two to four Years	Manager	Less than 5	Software Upgrade
Female	More than 4 Years	Senior Manager	Between 10 to 20	Software Implementation
Male	More than 4 Years	Senior Manager	Between 10 to 20	Software Implementation
Female	Less than a year	Manager	Between 10 to 20	Software Implementation
Male	Less than a year	Manager	Between 10 to 20	Software Development
Male	More than 4 Years	Senior Manager	Less than 5	Software Upgrade
Female	More than 4 Years	Senior Manager	Between 10 to 20	Software Development
Male	More than 4 Years	Senior Manager	Between 20 to 50	Other

9.4.2. Management Involvement in project initiation

My Management Participate in the each and every project meeting	My Management Actively involved in decision making	My Management gave suggestions based on their experience in the meetings	9. In the project initiation My Management gave better understanding to project team about project significant.
Neutral	Agreed	Agreed	Disagreed
Neutral	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Neutral	Neutral	Agreed	Agreed
Strongly Agreed	Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Agreed	Neutral	Neutral
Neutral	Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed	Agreed
Agreed	Agreed	Agreed	Agreed
Neutral	Agreed	Agreed	Agreed
Strongly Disagreed	Neutral	Agreed	Strongly Agreed
Disagreed	Disagreed	Agreed	Neutral
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Strongly Agreed	Strongly Agreed
Agreed	Strongly Agreed	Agreed	Agreed
Disagreed	Disagreed	Agreed	Agreed
Neutral	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Agreed	Agreed	Agreed
Disagreed	Agreed	Agreed	Agreed
Disagreed	Disagreed	Disagreed	Disagreed
Neutral	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Neutral
Agreed	Strongly Agreed	Strongly Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Strongly Agreed	Agreed
Strongly Disagreed	Neutral	Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Agreed	Agreed	Neutral
Neutral	Strongly Agreed	Agreed	Neutral
Disagreed	Strongly Agreed	Strongly Agreed	Disagreed
Agreed	Strongly Agreed	Strongly Agreed	Neutral
Disagreed	Agreed	Neutral	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed	Neutral
Agreed	Disagreed	Disagreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed

Strongly Agreed	Strongly Agreed	Strongly Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Disagreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed	Neutral
Agreed	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Disagreed	Neutral	Disagreed
Neutral	Agreed	Agreed	Agreed
Strongly Disagreed	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Neutral
Neutral	Neutral	Agreed	Strongly Agreed
Neutral	Agreed	Agreed	Agreed
Neutral	Neutral	Agreed	Agreed
Neutral	Disagreed	Agreed	Agreed
Neutral	Agreed	Disagreed	Agreed
Disagreed	Neutral	Agreed	Neutral
Agreed	Disagreed	Agreed	Disagreed
Disagreed	Disagreed	Neutral	Neutral
Strongly Agreed	Agreed	Agreed	Agreed
Neutral	Strongly Agreed	Strongly Agreed	Agreed
Neutral	Agreed	Agreed	Neutral
Agreed	Neutral	Disagreed	Neutral
Agreed	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Neutral	Agreed	Agreed	Disagreed
Neutral	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Neutral	Neutral	Agreed	Agreed
Strongly Agreed	Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Agreed	Neutral	Neutral
Neutral	Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed	Agreed
Agreed	Agreed	Agreed	Agreed
Neutral	Agreed	Agreed	Agreed
Strongly Disagreed	Neutral	Agreed	Strongly Agreed
Disagreed	Disagreed	Agreed	Neutral
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Strongly Agreed	Strongly Agreed
Agreed	Strongly Agreed	Agreed	Agreed
Disagreed	Disagreed	Agreed	Agreed
Neutral	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed

Disagreed	Agreed	Agreed	Agreed
Disagreed	Agreed	Agreed	Agreed
Disagreed	Disagreed	Disagreed	Disagreed
Neutral	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Neutral
Agreed	Strongly Agreed	Strongly Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Strongly Agreed	Agreed
Strongly Disagreed	Neutral	Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Agreed	Agreed	Neutral
Neutral	Strongly Agreed	Agreed	Neutral
Disagreed	Strongly Agreed	Strongly Agreed	Disagreed
Agreed	Strongly Agreed	Strongly Agreed	Neutral
Disagreed	Agreed	Neutral	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed	Neutral
Agreed	Disagreed	Disagreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Disagreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed	Neutral
Agreed	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Disagreed	Neutral	Disagreed
Neutral	Agreed	Agreed	Agreed
Strongly Disagreed	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Neutral
Neutral	Neutral	Agreed	Strongly Agreed
Neutral	Agreed	Agreed	Agreed
Neutral	Neutral	Agreed	Agreed
Neutral	Disagreed	Agreed	Agreed
Neutral	Agreed	Disagreed	Agreed
Disagreed	Neutral	Agreed	Neutral
Agreed	Disagreed	Agreed	Disagreed
Disagreed	Disagreed	Neutral	Neutral

Strongly Agreed	Agreed	Agreed	Agreed
Neutral	Strongly Agreed	Strongly Agreed	Agreed
Neutral	Agreed	Agreed	Neutral
Agreed	Neutral	Disagreed	Neutral
Agreed	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Neutral	Agreed	Agreed	Disagreed
Neutral	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Neutral	Neutral	Agreed	Agreed
Strongly Agreed	Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Agreed	Neutral	Neutral
Neutral	Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed	Agreed
Agreed	Agreed	Agreed	Agreed
Neutral	Agreed	Agreed	Agreed
Strongly Disagreed	Neutral	Agreed	Strongly Agreed
Disagreed	Disagreed	Agreed	Neutral
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Strongly Agreed	Strongly Agreed
Agreed	Strongly Agreed	Agreed	Agreed
Disagreed	Disagreed	Agreed	Agreed
Neutral	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Agreed	Agreed	Agreed
Disagreed	Agreed	Agreed	Agreed
Disagreed	Disagreed	Disagreed	Disagreed
Neutral	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Neutral
Agreed	Strongly Agreed	Strongly Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Strongly Agreed	Agreed
Strongly Disagreed	Neutral	Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Agreed	Agreed	Neutral
Neutral	Strongly Agreed	Agreed	Neutral
Disagreed	Strongly Agreed	Strongly Agreed	Disagreed
Agreed	Strongly Agreed	Strongly Agreed	Neutral
Disagreed	Agreed	Neutral	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed	Neutral
Agreed	Disagreed	Disagreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Disagreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed

Strongly Agreed	Strongly Agreed	Strongly Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed	Neutral
Agreed	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Disagreed	Neutral	Disagreed
Neutral	Agreed	Agreed	Agreed
Strongly Disagreed	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Neutral
Neutral	Neutral	Agreed	Strongly Agreed
Neutral	Agreed	Agreed	Agreed
Neutral	Neutral	Agreed	Agreed
Neutral	Disagreed	Agreed	Agreed
Neutral	Agreed	Disagreed	Agreed
Disagreed	Neutral	Agreed	Neutral
Agreed	Disagreed	Agreed	Disagreed
Disagreed	Disagreed	Neutral	Neutral
Strongly Agreed	Agreed	Agreed	Agreed
Neutral	Strongly Agreed	Strongly Agreed	Agreed
Neutral	Agreed	Agreed	Neutral
Agreed	Neutral	Disagreed	Neutral
Agreed	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed	Neutral
Agreed	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Disagreed	Neutral	Disagreed
Neutral	Agreed	Agreed	Agreed
Strongly Disagreed	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Neutral
Neutral	Neutral	Agreed	Strongly Agreed
Neutral	Agreed	Agreed	Agreed
Neutral	Neutral	Agreed	Agreed
Neutral	Disagreed	Agreed	Agreed
Neutral	Agreed	Disagreed	Agreed
Disagreed	Neutral	Agreed	Neutral
Agreed	Disagreed	Agreed	Disagreed
Disagreed	Disagreed	Neutral	Neutral
Strongly Agreed	Agreed	Agreed	Agreed
Neutral	Agreed	Agreed	Disagreed
Neutral	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Neutral	Neutral	Agreed	Agreed

Strongly Agreed	Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Agreed	Neutral	Neutral
Neutral	Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed	Agreed
Agreed	Agreed	Agreed	Agreed
Neutral	Agreed	Agreed	Agreed
Strongly Disagreed	Neutral	Agreed	Strongly Agreed
Disagreed	Disagreed	Agreed	Neutral
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Strongly Agreed	Strongly Agreed
Agreed	Strongly Agreed	Agreed	Agreed
Disagreed	Disagreed	Agreed	Agreed
Neutral	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Agreed	Agreed	Agreed
Disagreed	Agreed	Agreed	Agreed
Disagreed	Disagreed	Disagreed	Disagreed
Neutral	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Neutral
Agreed	Strongly Agreed	Strongly Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Strongly Agreed	Agreed
Strongly Disagreed	Neutral	Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Agreed	Agreed	Neutral
Neutral	Strongly Agreed	Agreed	Neutral
Disagreed	Strongly Agreed	Strongly Agreed	Disagreed
Agreed	Strongly Agreed	Strongly Agreed	Neutral
Disagreed	Agreed	Neutral	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed	Neutral
Agreed	Disagreed	Disagreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Disagreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed

Agreed	Agreed	Agreed	Neutral
Agreed	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Disagreed	Neutral	Disagreed
Neutral	Agreed	Agreed	Agreed
Strongly Disagreed	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Neutral
Neutral	Neutral	Agreed	Strongly Agreed
Neutral	Agreed	Agreed	Agreed
Neutral	Neutral	Agreed	Agreed
Neutral	Disagreed	Agreed	Agreed
Neutral	Agreed	Disagreed	Agreed
Disagreed	Neutral	Agreed	Neutral
Agreed	Disagreed	Agreed	Disagreed
Disagreed	Disagreed	Neutral	Neutral
Strongly Agreed	Agreed	Agreed	Agreed
Neutral	Strongly Agreed	Strongly Agreed	Agreed
Neutral	Agreed	Agreed	Neutral
Agreed	Neutral	Disagreed	Neutral
Agreed	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Neutral	Agreed	Agreed	Disagreed
Neutral	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Neutral	Neutral	Agreed	Agreed
Strongly Agreed	Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Agreed	Neutral	Neutral
Neutral	Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed	Agreed
Agreed	Agreed	Agreed	Agreed
Neutral	Agreed	Agreed	Agreed
Strongly Disagreed	Neutral	Agreed	Strongly Agreed
Disagreed	Disagreed	Agreed	Neutral
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Strongly Agreed	Strongly Agreed
Agreed	Strongly Agreed	Agreed	Agreed
Disagreed	Disagreed	Agreed	Agreed
Neutral	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Agreed	Agreed	Agreed
Disagreed	Agreed	Agreed	Agreed
Disagreed	Disagreed	Disagreed	Disagreed
Neutral	Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed

9.4.3. Management Involvement in Appropriate Resource Assignments

My Management has proper understanding on scope of the project	My Management has proper understanding on capability of the resources	My Management is aware about critical activities and provide additional resource requirement when essential
Agreed	Disagreed	Neutral
Agreed	Neutral	Neutral
Agreed	Agreed	Agreed
Neutral	Neutral	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Neutral	Agreed
Neutral	Disagreed	Disagreed
Strongly Disagreed	Strongly Disagreed	Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Disagreed	Neutral	Strongly Agreed
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Strongly Agreed
Agreed	Neutral	Disagreed
Neutral	Neutral	Agreed
Agreed	Agreed	Agreed
Agreed	Agreed	Neutral
Agreed	Neutral	Neutral
Neutral	Disagreed	Disagreed
Agreed	Neutral	Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Agreed	Neutral	Neutral
Strongly Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Neutral
Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Neutral	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Neutral
Agreed	Agreed	Neutral
Disagreed	Disagreed	Strongly Disagreed
Agreed	Neutral	Neutral
Agreed	Neutral	Agreed
Agreed	Disagreed	Agreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Neutral	Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed

Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Neutral
Disagreed	Disagreed	Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Neutral	Disagreed	Strongly Disagreed
Agreed	Neutral	Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Agreed	Neutral	Agreed
Agreed	Neutral	Neutral
Agreed	Agreed	Agreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Agreed
Neutral	Disagreed	Strongly Disagreed
Agreed	Neutral	Neutral
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Agreed
Neutral	Disagreed	Agreed
Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Disagreed	Strongly Disagreed	Disagreed
Disagreed	Agreed	Neutral
Agreed	Agreed	Disagreed
Disagreed	Agreed	Agreed
Neutral	Neutral	Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Neutral	Agreed	Neutral
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Neutral
Agreed	Agreed	Agreed
Agreed	Disagreed	Neutral
Agreed	Neutral	Neutral
Agreed	Agreed	Agreed
Neutral	Neutral	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Neutral	Agreed
Neutral	Disagreed	Disagreed
Strongly Disagreed	Strongly Disagreed	Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Disagreed	Neutral	Strongly Agreed
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Strongly Agreed
Agreed	Neutral	Disagreed
Neutral	Neutral	Agreed
Agreed	Agreed	Agreed
Agreed	Agreed	Neutral
Agreed	Neutral	Neutral
Neutral	Disagreed	Disagreed
Agreed	Neutral	Disagreed

Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Agreed	Neutral	Neutral
Strongly Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Neutral
Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Neutral	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Neutral
Agreed	Agreed	Neutral
Disagreed	Disagreed	Strongly Disagreed
Agreed	Neutral	Neutral
Agreed	Neutral	Agreed
Agreed	Disagreed	Agreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Neutral	Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Neutral
Disagreed	Disagreed	Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Neutral	Disagreed	Strongly Disagreed
Agreed	Neutral	Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Agreed	Neutral	Agreed
Agreed	Neutral	Neutral
Agreed	Agreed	Agreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Agreed
Neutral	Disagreed	Strongly Disagreed
Agreed	Neutral	Neutral
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Agreed
Neutral	Disagreed	Agreed
Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Disagreed	Strongly Disagreed	Disagreed
Disagreed	Agreed	Neutral
Agreed	Agreed	Disagreed
Disagreed	Agreed	Agreed
Neutral	Neutral	Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed

Neutral	Agreed	Neutral
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Neutral
Agreed	Agreed	Agreed
Agreed	Disagreed	Neutral
Agreed	Neutral	Neutral
Agreed	Agreed	Agreed
Neutral	Neutral	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Neutral	Agreed
Neutral	Disagreed	Disagreed
Strongly Disagreed	Strongly Disagreed	Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Disagreed	Neutral	Strongly Agreed
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Strongly Agreed
Agreed	Neutral	Disagreed
Neutral	Neutral	Agreed
Agreed	Agreed	Agreed
Agreed	Agreed	Neutral
Agreed	Neutral	Neutral
Neutral	Disagreed	Disagreed
Agreed	Neutral	Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Agreed	Neutral	Neutral
Strongly Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Neutral
Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Neutral	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Neutral
Agreed	Agreed	Neutral
Disagreed	Disagreed	Strongly Disagreed
Agreed	Neutral	Neutral
Agreed	Neutral	Agreed
Agreed	Disagreed	Agreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Neutral	Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Neutral
Disagreed	Disagreed	Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Neutral	Disagreed	Strongly Disagreed

Agreed	Neutral	Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Agreed	Neutral	Agreed
Agreed	Neutral	Neutral
Agreed	Agreed	Agreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Agreed
Neutral	Disagreed	Strongly Disagreed
Agreed	Neutral	Neutral
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Agreed
Neutral	Disagreed	Agreed
Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Disagreed	Strongly Disagreed	Disagreed
Disagreed	Agreed	Neutral
Agreed	Agreed	Disagreed
Disagreed	Agreed	Agreed
Neutral	Neutral	Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Neutral	Agreed	Neutral
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Neutral
Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Agreed	Agreed	Agreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Agreed
Neutral	Disagreed	Strongly Disagreed
Agreed	Neutral	Neutral
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Agreed
Neutral	Disagreed	Agreed
Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Disagreed	Strongly Disagreed	Disagreed
Disagreed	Agreed	Neutral
Agreed	Agreed	Disagreed
Disagreed	Agreed	Agreed
Neutral	Neutral	Disagreed
Agreed	Agreed	Agreed
Agreed	Disagreed	Neutral
Agreed	Neutral	Neutral
Agreed	Agreed	Agreed
Neutral	Neutral	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Neutral	Agreed

Neutral	Disagreed	Disagreed
Strongly Disagreed	Strongly Disagreed	Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Disagreed	Neutral	Strongly Agreed
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Strongly Agreed
Agreed	Neutral	Disagreed
Neutral	Neutral	Agreed
Agreed	Agreed	Agreed
Agreed	Agreed	Neutral
Agreed	Neutral	Neutral
Neutral	Disagreed	Disagreed
Agreed	Neutral	Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Agreed	Neutral	Neutral
Strongly Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Neutral
Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Neutral	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Neutral
Agreed	Agreed	Neutral
Disagreed	Disagreed	Strongly Disagreed
Agreed	Neutral	Neutral
Agreed	Neutral	Agreed
Agreed	Disagreed	Agreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Neutral	Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Neutral
Disagreed	Disagreed	Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Neutral	Disagreed	Strongly Disagreed
Agreed	Neutral	Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Agreed	Neutral	Agreed
Agreed	Neutral	Neutral
Agreed	Agreed	Agreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed

Strongly Agreed	Strongly Agreed	Agreed
Neutral	Disagreed	Strongly Disagreed
Agreed	Neutral	Neutral
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Agreed
Neutral	Disagreed	Agreed
Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Disagreed	Strongly Disagreed	Disagreed
Disagreed	Agreed	Neutral
Agreed	Agreed	Disagreed
Disagreed	Agreed	Agreed
Neutral	Neutral	Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Neutral	Agreed	Neutral
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Neutral
Agreed	Agreed	Agreed
Agreed	Disagreed	Neutral
Agreed	Neutral	Neutral
Agreed	Agreed	Agreed
Neutral	Neutral	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Neutral	Agreed
Neutral	Disagreed	Disagreed
Strongly Disagreed	Strongly Disagreed	Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Disagreed	Neutral	Strongly Agreed
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Strongly Agreed
Agreed	Neutral	Disagreed
Neutral	Neutral	Agreed
Agreed	Agreed	Agreed
Agreed	Agreed	Neutral
Agreed	Neutral	Neutral
Neutral	Disagreed	Disagreed
Agreed	Neutral	Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed

9.4.4. Management Involvement in Communication between the management

My Management actively involved in following up tasks and works to be done	My Management has a close relationship with all operational levels	My management is not easily accessible and approachable.
Disagreed	Disagreed	Disagreed
Neutral	Neutral	Neutral
Agreed	Neutral	Neutral
Neutral	Agreed	Neutral
Neutral	Agreed	Disagreed
Agreed	Agreed	Disagreed
Neutral	Neutral	Neutral
Agreed	Neutral	Strongly Agreed
Agreed	Neutral	Disagreed
Agreed	Agreed	Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Agreed	Neutral
Neutral	Neutral	Disagreed
Disagreed	Disagreed	Strongly Agreed
Neutral	Agreed	Neutral
Neutral	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Neutral	Disagreed	Neutral
Disagreed	Neutral	Neutral
Disagreed	Neutral	Neutral
Neutral	Neutral	Agreed
Neutral	Strongly Agreed	Strongly Agreed
Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Neutral	Strongly Disagreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Agreed
Neutral	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Neutral	Strongly Disagreed	Strongly Agreed
Neutral	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed

Agreed	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Agreed	Agreed	Strongly Disagreed
Strongly Agreed	Agreed	Strongly Disagreed
Agreed	Neutral	Disagreed
Agreed	Agreed	Disagreed
Agreed	Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Agreed	Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Neutral	Neutral
Agreed	Disagreed	Strongly Disagreed
Disagreed	Disagreed	Agreed
Agreed	Neutral	Agreed
Neutral	Agreed	Strongly Agreed
Agreed	Agreed	Disagreed
Agreed	Neutral	Agreed
Agreed	Neutral	Agreed
Neutral	Agreed	Disagreed
Agreed	Neutral	Neutral
Neutral	Neutral	Disagreed
Neutral	Neutral	Neutral
Agreed	Disagreed	Disagreed
Strongly Agreed	Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Disagreed
Neutral	Neutral	Disagreed
Neutral	Agreed	Disagreed
Agreed	Agreed	Disagreed
Neutral	Disagreed	Disagreed
Disagreed	Disagreed	Disagreed
Neutral	Neutral	Neutral
Agreed	Neutral	Neutral
Neutral	Agreed	Neutral
Neutral	Agreed	Disagreed
Agreed	Agreed	Disagreed
Neutral	Neutral	Neutral
Agreed	Neutral	Strongly Agreed
Agreed	Neutral	Disagreed
Agreed	Agreed	Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Agreed	Neutral
Neutral	Neutral	Disagreed
Disagreed	Disagreed	Strongly Agreed
Neutral	Agreed	Neutral
Neutral	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Neutral	Disagreed	Neutral
Disagreed	Neutral	Neutral

Disagreed	Neutral	Neutral
Neutral	Neutral	Agreed
Neutral	Strongly Agreed	Strongly Agreed
Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Neutral	Strongly Disagreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Agreed
Neutral	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Neutral	Strongly Disagreed	Strongly Agreed
Neutral	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Agreed	Agreed	Strongly Disagreed
Strongly Agreed	Agreed	Strongly Disagreed
Agreed	Neutral	Disagreed
Agreed	Agreed	Disagreed
Agreed	Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Agreed	Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Neutral	Neutral
Agreed	Disagreed	Strongly Disagreed
Disagreed	Disagreed	Agreed
Agreed	Neutral	Agreed
Neutral	Agreed	Strongly Agreed
Agreed	Agreed	Disagreed
Agreed	Neutral	Agreed
Agreed	Neutral	Agreed
Neutral	Agreed	Disagreed
Agreed	Neutral	Neutral
Neutral	Neutral	Disagreed
Neutral	Neutral	Neutral
Agreed	Disagreed	Disagreed
Strongly Agreed	Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Disagreed

Neutral	Neutral	Disagreed
Neutral	Agreed	Disagreed
Agreed	Agreed	Disagreed
Neutral	Disagreed	Disagreed
Disagreed	Disagreed	Disagreed
Neutral	Neutral	Neutral
Agreed	Neutral	Neutral
Neutral	Agreed	Neutral
Neutral	Agreed	Disagreed
Agreed	Agreed	Disagreed
Neutral	Neutral	Neutral
Agreed	Neutral	Strongly Agreed
Agreed	Neutral	Disagreed
Agreed	Agreed	Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Agreed	Neutral
Neutral	Neutral	Disagreed
Disagreed	Disagreed	Strongly Agreed
Neutral	Agreed	Neutral
Neutral	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Neutral	Disagreed	Neutral
Disagreed	Neutral	Neutral
Disagreed	Neutral	Neutral
Neutral	Neutral	Agreed
Neutral	Strongly Agreed	Strongly Agreed
Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Neutral	Strongly Disagreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Agreed
Neutral	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Neutral	Strongly Disagreed	Strongly Agreed
Neutral	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed

Agreed	Agreed	Strongly Disagreed
Strongly Agreed	Agreed	Strongly Disagreed
Agreed	Neutral	Disagreed
Agreed	Agreed	Disagreed
Agreed	Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Agreed	Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Neutral	Neutral
Agreed	Disagreed	Strongly Disagreed
Disagreed	Disagreed	Agreed
Agreed	Neutral	Agreed
Neutral	Agreed	Strongly Agreed
Agreed	Agreed	Disagreed
Agreed	Neutral	Agreed
Agreed	Neutral	Agreed
Neutral	Agreed	Disagreed
Agreed	Neutral	Neutral
Neutral	Neutral	Disagreed
Neutral	Neutral	Neutral
Agreed	Disagreed	Disagreed
Strongly Agreed	Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Disagreed
Neutral	Neutral	Disagreed
Neutral	Agreed	Disagreed
Agreed	Agreed	Disagreed
Neutral	Disagreed	Disagreed
Agreed	Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Agreed	Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Neutral	Neutral
Agreed	Disagreed	Strongly Disagreed
Disagreed	Disagreed	Agreed
Agreed	Neutral	Agreed
Neutral	Agreed	Strongly Agreed
Agreed	Agreed	Disagreed
Agreed	Neutral	Agreed
Agreed	Neutral	Agreed
Neutral	Agreed	Disagreed
Agreed	Neutral	Neutral
Neutral	Neutral	Disagreed
Neutral	Neutral	Neutral
Agreed	Disagreed	Disagreed
Strongly Agreed	Agreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Neutral	Neutral	Neutral
Agreed	Neutral	Neutral
Neutral	Agreed	Neutral
Neutral	Agreed	Disagreed
Agreed	Agreed	Disagreed

Neutral	Neutral	Neutral
Agreed	Neutral	Strongly Agreed
Agreed	Neutral	Disagreed
Agreed	Agreed	Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Agreed	Neutral
Neutral	Neutral	Disagreed
Disagreed	Disagreed	Strongly Agreed
Neutral	Agreed	Neutral
Neutral	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Neutral	Disagreed	Neutral
Disagreed	Neutral	Neutral
Disagreed	Neutral	Neutral
Neutral	Neutral	Agreed
Neutral	Strongly Agreed	Strongly Agreed
Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Neutral	Strongly Disagreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Agreed
Neutral	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Neutral	Strongly Disagreed	Strongly Agreed
Neutral	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Agreed	Agreed	Strongly Disagreed
Strongly Agreed	Agreed	Strongly Disagreed
Agreed	Neutral	Disagreed
Agreed	Agreed	Disagreed
Agreed	Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Agreed	Agreed	Disagreed
Agreed	Agreed	Disagreed

Strongly Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Neutral	Neutral
Agreed	Disagreed	Strongly Disagreed
Disagreed	Disagreed	Agreed
Agreed	Neutral	Agreed
Neutral	Agreed	Strongly Agreed
Agreed	Agreed	Disagreed
Agreed	Neutral	Agreed
Agreed	Neutral	Agreed
Neutral	Agreed	Disagreed
Agreed	Neutral	Neutral
Neutral	Neutral	Disagreed
Neutral	Neutral	Neutral
Agreed	Disagreed	Disagreed
Strongly Agreed	Agreed	Strongly Disagreed
Agreed	Strongly Agreed	Disagreed
Neutral	Neutral	Disagreed
Neutral	Agreed	Disagreed
Agreed	Agreed	Disagreed
Neutral	Disagreed	Disagreed
Disagreed	Disagreed	Disagreed
Neutral	Neutral	Neutral
Agreed	Neutral	Neutral
Neutral	Agreed	Neutral
Neutral	Agreed	Disagreed
Agreed	Agreed	Disagreed
Neutral	Neutral	Neutral
Agreed	Neutral	Strongly Agreed
Agreed	Neutral	Disagreed
Agreed	Agreed	Disagreed
Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Agreed	Neutral
Neutral	Neutral	Disagreed
Disagreed	Disagreed	Strongly Agreed
Neutral	Agreed	Neutral
Neutral	Agreed	Strongly Disagreed
Agreed	Agreed	Strongly Disagreed
Neutral	Disagreed	Neutral
Disagreed	Neutral	Neutral
Disagreed	Neutral	Neutral
Neutral	Neutral	Agreed
Neutral	Strongly Agreed	Strongly Agreed

9.4.5. Management Involvement in Risk Management

My Management has ability to understand situation and risk involve in it	My Management is involved in Risk assessment processes such as Risk Identification, Risk Analysis and Risk Prioritization	My Management is involved in Risk Controlling processes such as Risk management planning, Risk Resolution and Risk Monitoring
Agreed	Disagreed	Disagreed
Agreed	Neutral	Agreed
Agreed	Agreed	Agreed
Agreed	Agreed	Neutral
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Neutral
Strongly Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Neutral	Agreed	Neutral
Agreed	Neutral	Neutral
Agreed	Neutral	Agreed
Strongly Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Neutral	Disagreed	Disagreed
Agreed	Neutral	Neutral
Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Neutral
Agreed	Neutral	Neutral
Agreed	Neutral	Disagreed
Strongly Agreed	Agreed	Agreed
Disagreed	Agreed	Neutral
Agreed	Neutral	Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Disagreed
Neutral	Disagreed	Disagreed
Agreed	Neutral	Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Neutral	Neutral
Strongly Agreed	Agreed	Neutral
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Strongly Agreed	Agreed	Neutral
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed

Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Neutral
Disagreed	Disagreed	Strongly Disagreed
Neutral	Neutral	Disagreed
Disagreed	Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Strongly Agreed	Agreed	Neutral
Agreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Disagreed	Disagreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Neutral	Disagreed	Disagreed
Agreed	Agreed	Neutral
Agreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Neutral	Agreed	Neutral
Agreed	Neutral	Neutral
Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Neutral
Neutral	Agreed	Neutral
Neutral	Neutral	Neutral
Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed
Disagreed	Neutral	Neutral
Agreed	Neutral	Neutral
Agreed	Neutral	Neutral
Neutral	Disagreed	Disagreed
Neutral	Neutral	Neutral
Agreed	Neutral	Neutral
Strongly Agreed	Strongly Agreed	Agreed
Agreed	Disagreed	Disagreed
Agreed	Neutral	Agreed
Agreed	Agreed	Agreed
Agreed	Agreed	Neutral
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Neutral
Strongly Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Neutral	Agreed	Neutral
Agreed	Neutral	Neutral
Agreed	Neutral	Agreed
Strongly Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Neutral	Disagreed	Disagreed

Agreed	Neutral	Neutral
Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Neutral
Agreed	Neutral	Neutral
Agreed	Neutral	Disagreed
Strongly Agreed	Agreed	Agreed
Disagreed	Agreed	Neutral
Agreed	Neutral	Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Disagreed
Neutral	Disagreed	Disagreed
Agreed	Neutral	Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Neutral	Neutral
Strongly Agreed	Agreed	Neutral
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Strongly Agreed	Agreed	Neutral
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Neutral
Disagreed	Disagreed	Strongly Disagreed
Neutral	Neutral	Disagreed
Disagreed	Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Strongly Agreed	Agreed	Neutral
Agreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Disagreed	Disagreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Neutral	Disagreed	Disagreed
Agreed	Agreed	Neutral
Agreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Neutral	Agreed	Neutral
Agreed	Neutral	Neutral
Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Neutral
Neutral	Agreed	Neutral
Neutral	Neutral	Neutral
Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed
Disagreed	Neutral	Neutral
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Neutral	Disagreed	Disagreed
Neutral	Neutral	Neutral
Agreed	Neutral	Neutral
Strongly Agreed	Strongly Agreed	Agreed
Agreed	Disagreed	Disagreed
Agreed	Neutral	Agreed
Agreed	Agreed	Agreed
Agreed	Agreed	Neutral
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Neutral
Strongly Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Neutral	Agreed	Neutral
Agreed	Neutral	Neutral
Agreed	Neutral	Agreed
Strongly Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Neutral	Disagreed	Disagreed
Agreed	Neutral	Neutral
Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Neutral
Agreed	Neutral	Neutral
Agreed	Neutral	Disagreed
Strongly Agreed	Agreed	Agreed
Disagreed	Agreed	Neutral
Agreed	Neutral	Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Disagreed
Neutral	Disagreed	Disagreed
Agreed	Neutral	Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Neutral	Neutral
Strongly Agreed	Agreed	Neutral
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Strongly Agreed	Agreed	Neutral
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Neutral
Disagreed	Disagreed	Strongly Disagreed
Neutral	Neutral	Disagreed

Disagreed	Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Strongly Agreed	Agreed	Neutral
Agreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Disagreed	Disagreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Neutral	Disagreed	Disagreed
Agreed	Agreed	Neutral
Agreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Neutral	Agreed	Neutral
Agreed	Neutral	Neutral
Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Neutral
Neutral	Agreed	Neutral
Neutral	Neutral	Neutral
Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed
Disagreed	Neutral	Neutral
Agreed	Neutral	Neutral
Agreed	Neutral	Neutral
Neutral	Disagreed	Disagreed
Neutral	Neutral	Neutral
Agreed	Neutral	Neutral
Strongly Agreed	Strongly Agreed	Agreed
Agreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Disagreed	Disagreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Neutral	Disagreed	Disagreed
Agreed	Agreed	Neutral
Agreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Neutral	Agreed	Neutral
Agreed	Neutral	Neutral
Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Neutral
Neutral	Agreed	Neutral
Neutral	Neutral	Neutral
Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed
Disagreed	Neutral	Neutral
Agreed	Neutral	Neutral
Agreed	Disagreed	Disagreed
Agreed	Neutral	Agreed
Agreed	Agreed	Agreed
Agreed	Agreed	Neutral
Agreed	Agreed	Agreed

Agreed	Agreed	Agreed
Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Neutral
Strongly Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Neutral	Agreed	Neutral
Agreed	Neutral	Neutral
Agreed	Neutral	Agreed
Strongly Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Neutral	Disagreed	Disagreed
Agreed	Neutral	Neutral
Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Neutral
Agreed	Neutral	Neutral
Agreed	Neutral	Disagreed
Strongly Agreed	Agreed	Agreed
Disagreed	Agreed	Neutral
Agreed	Neutral	Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Disagreed
Neutral	Disagreed	Disagreed
Agreed	Neutral	Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Neutral	Neutral
Strongly Agreed	Agreed	Neutral
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Strongly Agreed	Agreed	Neutral
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Neutral
Disagreed	Disagreed	Strongly Disagreed
Neutral	Neutral	Disagreed
Disagreed	Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Strongly Agreed	Agreed	Neutral
Agreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Disagreed	Disagreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed

Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Neutral	Disagreed	Disagreed
Agreed	Agreed	Neutral
Agreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Neutral	Agreed	Neutral
Agreed	Neutral	Neutral
Agreed	Strongly Agreed	Agreed
Agreed	Agreed	Neutral
Neutral	Agreed	Neutral
Neutral	Neutral	Neutral
Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed
Disagreed	Neutral	Neutral
Agreed	Neutral	Neutral
Agreed	Neutral	Neutral
Neutral	Disagreed	Disagreed
Neutral	Neutral	Neutral
Agreed	Neutral	Neutral
Strongly Agreed	Strongly Agreed	Agreed
Agreed	Disagreed	Disagreed
Agreed	Neutral	Agreed
Agreed	Agreed	Agreed
Agreed	Agreed	Neutral
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed
Agreed	Agreed	Agreed
Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Neutral
Strongly Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed
Neutral	Agreed	Neutral
Agreed	Neutral	Neutral
Agreed	Neutral	Agreed
Strongly Agreed	Agreed	Agreed
Agreed	Neutral	Neutral
Neutral	Disagreed	Disagreed
Agreed	Neutral	Neutral
Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed
Agreed	Neutral	Neutral

9.4.6. Management Involvement in Adaptability for technological upgrades

My Management had good interest in new technology	My Management had good Knowledge and understanding in new technology	My Management was willing to move on to new technology	My Mmanagement was giving guidance and support to move on to new technology
Agreed	Agreed	Disagreed	Disagreed
Agreed	Agreed	Agreed	Agreed
Neutral	Neutral	Neutral	Neutral
Agreed	Agreed	Agreed	Agreed
Disagreed	Disagreed	Neutral	Neutral
Agreed	Agreed	Neutral	Neutral
Neutral	Neutral	Neutral	Neutral
Strongly Agreed	Agreed	Strongly Agreed	Neutral
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Disagreed	Neutral
Neutral	Neutral	Agreed	Disagreed
Strongly Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Neutral	Agreed	Agreed
Disagreed	Disagreed	Neutral	Neutral
Strongly Agreed	Agreed	Agreed	Neutral
Neutral	Disagreed	Neutral	Disagreed
Disagreed	Disagreed	Neutral	Neutral
Strongly Disagreed	Disagreed	Disagreed	Disagreed
Disagreed	Neutral	Disagreed	Disagreed
Strongly Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Neutral	Neutral	Disagreed	Disagreed
Strongly Disagreed	Neutral	Disagreed	Strongly Disagreed
Strongly Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Agreed	Neutral
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Disagreed	Strongly Disagreed	Disagreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Strongly Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Disagreed	Strongly Disagreed	Disagreed	Strongly Disagreed
Neutral	Strongly Disagreed	Disagreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Neutral	Agreed
Agreed	Agreed	Agreed	Neutral
Agreed	Neutral	Disagreed	Strongly Disagreed
Disagreed	Neutral	Disagreed	Strongly Disagreed

Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Neutral	Neutral
Disagreed	Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Neutral	Neutral	Disagreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed	Disagreed
Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Neutral	Disagreed	Neutral	Neutral
Neutral	Agreed	Agreed	Agreed
Disagreed	Disagreed	Neutral	Neutral
Agreed	Neutral	Neutral	Neutral
Agreed	Neutral	Disagreed	Neutral
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Agreed	Agreed	Strongly Agreed
Neutral	Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed	Neutral
Neutral	Neutral	Disagreed	Agreed
Agreed	Agreed	Neutral	Neutral
Agreed	Agreed	Strongly Disagreed	Strongly Disagreed
Neutral	Neutral	Neutral	Disagreed
Neutral	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Disagreed	Neutral	Disagreed
Disagreed	Neutral	Disagreed	Disagreed
Agreed	Agreed	Strongly Agreed	Neutral
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Disagreed	Disagreed
Agreed	Agreed	Agreed	Agreed
Neutral	Neutral	Neutral	Neutral
Agreed	Agreed	Agreed	Agreed
Disagreed	Disagreed	Neutral	Neutral
Agreed	Agreed	Neutral	Neutral
Neutral	Neutral	Neutral	Neutral
Strongly Agreed	Agreed	Strongly Agreed	Neutral
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Disagreed	Neutral
Neutral	Neutral	Agreed	Disagreed
Strongly Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Neutral	Agreed	Agreed
Disagreed	Disagreed	Neutral	Neutral
Strongly Agreed	Agreed	Agreed	Neutral
Neutral	Disagreed	Neutral	Disagreed
Disagreed	Disagreed	Neutral	Neutral
Strongly Disagreed	Disagreed	Disagreed	Disagreed
Disagreed	Neutral	Disagreed	Disagreed
Strongly Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed

Strongly Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Neutral	Neutral	Disagreed	Disagreed
Strongly Disagreed	Neutral	Disagreed	Strongly Disagreed
Strongly Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Agreed	Neutral
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Disagreed	Strongly Disagreed	Disagreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Strongly Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Disagreed	Strongly Disagreed	Disagreed	Strongly Disagreed
Neutral	Strongly Disagreed	Disagreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Neutral	Agreed
Agreed	Agreed	Agreed	Neutral
Agreed	Neutral	Disagreed	Strongly Disagreed
Disagreed	Neutral	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Neutral	Neutral
Disagreed	Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Neutral	Neutral	Disagreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed	Disagreed
Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Neutral	Disagreed	Neutral	Neutral
Neutral	Agreed	Agreed	Agreed
Disagreed	Disagreed	Neutral	Neutral
Agreed	Neutral	Neutral	Neutral
Agreed	Neutral	Disagreed	Neutral
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Agreed	Agreed	Strongly Agreed
Neutral	Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed	Neutral
Neutral	Neutral	Disagreed	Agreed
Agreed	Agreed	Neutral	Neutral
Agreed	Agreed	Strongly Disagreed	Strongly Disagreed
Neutral	Neutral	Neutral	Disagreed
Neutral	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Disagreed	Neutral	Disagreed

Disagreed	Neutral	Disagreed	Disagreed
Agreed	Agreed	Strongly Agreed	Neutral
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Disagreed	Disagreed
Agreed	Agreed	Agreed	Agreed
Neutral	Neutral	Neutral	Neutral
Agreed	Agreed	Agreed	Agreed
Disagreed	Disagreed	Neutral	Neutral
Agreed	Agreed	Neutral	Neutral
Neutral	Neutral	Neutral	Neutral
Strongly Agreed	Agreed	Strongly Agreed	Neutral
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Disagreed	Neutral
Neutral	Neutral	Agreed	Disagreed
Strongly Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Neutral	Agreed	Agreed
Disagreed	Disagreed	Neutral	Neutral
Strongly Agreed	Agreed	Agreed	Neutral
Neutral	Disagreed	Neutral	Disagreed
Disagreed	Disagreed	Neutral	Neutral
Strongly Disagreed	Disagreed	Disagreed	Disagreed
Disagreed	Neutral	Disagreed	Disagreed
Strongly Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Neutral	Neutral	Disagreed	Disagreed
Strongly Disagreed	Neutral	Disagreed	Strongly Disagreed
Strongly Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Agreed	Neutral
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Disagreed	Strongly Disagreed	Disagreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Strongly Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Disagreed	Strongly Disagreed	Disagreed	Strongly Disagreed
Neutral	Strongly Disagreed	Disagreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Neutral	Agreed
Agreed	Agreed	Agreed	Neutral
Agreed	Neutral	Disagreed	Strongly Disagreed
Disagreed	Neutral	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Neutral	Neutral
Disagreed	Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed

Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Neutral	Neutral	Disagreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed	Disagreed
Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Neutral	Disagreed	Neutral	Neutral
Neutral	Agreed	Agreed	Agreed
Disagreed	Disagreed	Neutral	Neutral
Agreed	Neutral	Neutral	Neutral
Agreed	Neutral	Disagreed	Neutral
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Agreed	Agreed	Strongly Agreed
Neutral	Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed	Neutral
Neutral	Neutral	Disagreed	Agreed
Agreed	Agreed	Neutral	Neutral
Agreed	Agreed	Strongly Disagreed	Strongly Disagreed
Neutral	Neutral	Neutral	Disagreed
Neutral	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Disagreed	Neutral	Disagreed
Disagreed	Neutral	Disagreed	Disagreed
Agreed	Agreed	Strongly Agreed	Neutral
Agreed	Agreed	Agreed	Agreed
Neutral	Neutral	Disagreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed	Disagreed
Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Neutral	Disagreed	Neutral	Neutral
Neutral	Agreed	Agreed	Agreed
Disagreed	Disagreed	Neutral	Neutral
Agreed	Neutral	Neutral	Neutral
Agreed	Neutral	Disagreed	Neutral
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Agreed	Agreed	Strongly Agreed
Neutral	Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed	Neutral
Neutral	Neutral	Disagreed	Agreed
Agreed	Agreed	Neutral	Neutral
Agreed	Agreed	Strongly Disagreed	Strongly Disagreed
Neutral	Neutral	Neutral	Disagreed
Neutral	Agreed	Agreed	Agreed
Agreed	Agreed	Disagreed	Disagreed
Agreed	Agreed	Agreed	Agreed
Neutral	Neutral	Neutral	Neutral
Agreed	Agreed	Agreed	Agreed
Disagreed	Disagreed	Neutral	Neutral
Agreed	Agreed	Neutral	Neutral
Neutral	Neutral	Neutral	Neutral

Strongly Agreed	Agreed	Strongly Agreed	Neutral
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Disagreed	Neutral
Neutral	Neutral	Agreed	Disagreed
Strongly Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Neutral	Agreed	Agreed
Disagreed	Disagreed	Neutral	Neutral
Strongly Agreed	Agreed	Agreed	Neutral
Neutral	Disagreed	Neutral	Disagreed
Disagreed	Disagreed	Neutral	Neutral
Strongly Disagreed	Disagreed	Disagreed	Disagreed
Disagreed	Neutral	Disagreed	Disagreed
Strongly Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Neutral	Neutral	Disagreed	Disagreed
Strongly Disagreed	Neutral	Disagreed	Strongly Disagreed
Strongly Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Agreed	Strongly Agreed	Agreed	Neutral
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Disagreed	Strongly Disagreed	Disagreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Agreed	Strongly Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Agreed
Disagreed	Strongly Disagreed	Disagreed	Strongly Disagreed
Neutral	Strongly Disagreed	Disagreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Neutral	Agreed
Agreed	Agreed	Agreed	Neutral
Agreed	Neutral	Disagreed	Strongly Disagreed
Disagreed	Neutral	Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Neutral	Neutral
Disagreed	Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Neutral	Neutral	Disagreed	Disagreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Disagreed	Strongly Disagreed	Strongly Disagreed	Strongly Disagreed
Disagreed	Disagreed	Disagreed	Disagreed
Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed

Neutral	Disagreed	Neutral	Neutral
Neutral	Agreed	Agreed	Agreed
Disagreed	Disagreed	Neutral	Neutral
Agreed	Neutral	Neutral	Neutral
Agreed	Neutral	Disagreed	Neutral
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Agreed	Agreed	Strongly Agreed
Neutral	Neutral	Neutral	Neutral
Disagreed	Disagreed	Disagreed	Neutral
Neutral	Neutral	Disagreed	Agreed
Agreed	Agreed	Neutral	Neutral
Agreed	Agreed	Strongly Disagreed	Strongly Disagreed
Neutral	Neutral	Neutral	Disagreed
Neutral	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Disagreed	Disagreed	Neutral	Disagreed
Disagreed	Neutral	Disagreed	Disagreed
Agreed	Agreed	Strongly Agreed	Neutral
Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Disagreed	Disagreed
Agreed	Agreed	Agreed	Agreed
Neutral	Neutral	Neutral	Neutral
Agreed	Agreed	Agreed	Agreed
Disagreed	Disagreed	Neutral	Neutral
Agreed	Agreed	Neutral	Neutral
Neutral	Neutral	Neutral	Neutral
Strongly Agreed	Agreed	Strongly Agreed	Neutral
Agreed	Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Agreed	Strongly Agreed
Agreed	Agreed	Disagreed	Neutral
Neutral	Neutral	Agreed	Disagreed
Strongly Agreed	Agreed	Agreed	Agreed
Agreed	Agreed	Agreed	Agreed
Agreed	Neutral	Agreed	Agreed
Disagreed	Disagreed	Neutral	Neutral
Strongly Agreed	Agreed	Agreed	Neutral
Neutral	Disagreed	Neutral	Disagreed
Disagreed	Disagreed	Neutral	Neutral
Strongly Disagreed	Disagreed	Disagreed	Disagreed
Disagreed	Neutral	Disagreed	Disagreed
Strongly Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Strongly Disagreed	Disagreed	Strongly Disagreed	Strongly Disagreed
Agreed	Agreed	Agreed	Agreed

9.4.7. success of agile Based projects

I believe project cost was exceeded more than budgeted	Project was not delivered according to plan time lines.	I believe full proposed project scoped was achieved
Strongly Agreed	Agreed	Disagreed
Agreed	Agreed	Agreed
Disagreed	Neutral	Strongly Agreed
Neutral	Neutral	Neutral
Neutral	Strongly Disagreed	Agreed
Agreed	Agreed	Neutral
Neutral	Neutral	Neutral
Strongly Agreed	Neutral	Agreed
Neutral	Neutral	Agreed
Agreed	Disagreed	Agreed
Neutral	Neutral	Agreed
Agreed	Agreed	Disagreed
Neutral	Neutral	Agreed
Agreed	Agreed	Agreed
Neutral	Neutral	Disagreed
Neutral	Neutral	Agreed
Neutral	Strongly Agreed	Neutral
Strongly Agreed	Strongly Agreed	Agreed
Agreed	Disagreed	Agreed
Disagreed	Strongly Disagreed	Strongly Agreed
Strongly Agreed	Agreed	Neutral
Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Agreed
Neutral	Agreed	Strongly Agreed
Neutral	Agreed	Strongly Agreed
Disagreed	Disagreed	Strongly Agreed
Neutral	Agreed	Strongly Agreed
Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Neutral
Agreed	Strongly Agreed	Disagreed
Agreed	Neutral	Agreed
Neutral	Disagreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Neutral	Disagreed	Agreed
Disagreed	Disagreed	Agreed
Agreed	Strongly Disagreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Disagreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed

Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Agreed
Disagreed	Disagreed	Agreed
Neutral	Disagreed	Strongly Agreed
Neutral	Neutral	Neutral
Strongly Disagreed	Strongly Disagreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Disagreed	Agreed
Strongly Disagreed	Strongly Disagreed	Strongly Agreed
Agreed	Agreed	Disagreed
Disagreed	Disagreed	Agreed
Disagreed	Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Agreed
Agreed	Disagreed	Agreed
Agreed	Disagreed	Agreed
Agreed	Strongly Agreed	Agreed
Disagreed	Agreed	Agreed
Disagreed	Disagreed	Neutral
Neutral	Disagreed	Agreed
Neutral	Agreed	Neutral
Disagreed	Agreed	Agreed
Agreed	Disagreed	Strongly Disagreed
Disagreed	Neutral	Agreed
Neutral	Neutral	Neutral
Agreed	Agreed	Disagreed
Agreed	Agreed	Neutral
Neutral	Disagreed	Agreed
Disagreed	Disagreed	Agreed
Strongly Agreed	Agreed	Disagreed
Agreed	Agreed	Agreed
Disagreed	Neutral	Strongly Agreed
Neutral	Neutral	Neutral
Neutral	Strongly Disagreed	Agreed
Agreed	Agreed	Neutral
Neutral	Neutral	Neutral
Strongly Agreed	Neutral	Agreed
Neutral	Neutral	Agreed
Agreed	Disagreed	Agreed
Neutral	Neutral	Agreed
Agreed	Agreed	Disagreed
Neutral	Neutral	Agreed
Agreed	Agreed	Agreed
Neutral	Neutral	Disagreed
Neutral	Neutral	Agreed
Neutral	Strongly Agreed	Neutral
Strongly Agreed	Strongly Agreed	Agreed
Agreed	Disagreed	Agreed
Disagreed	Strongly Disagreed	Strongly Agreed
Strongly Agreed	Agreed	Neutral
Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Agreed

Neutral	Agreed	Strongly Agreed
Neutral	Agreed	Strongly Agreed
Disagreed	Disagreed	Strongly Agreed
Neutral	Agreed	Strongly Agreed
Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Neutral
Agreed	Strongly Agreed	Disagreed
Agreed	Neutral	Agreed
Neutral	Disagreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Neutral	Disagreed	Agreed
Disagreed	Disagreed	Agreed
Agreed	Strongly Disagreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Disagreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Agreed
Disagreed	Disagreed	Agreed
Neutral	Disagreed	Strongly Agreed
Neutral	Neutral	Neutral
Strongly Disagreed	Strongly Disagreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Disagreed	Agreed
Strongly Disagreed	Strongly Disagreed	Strongly Agreed
Agreed	Agreed	Disagreed
Disagreed	Disagreed	Agreed
Disagreed	Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Agreed
Agreed	Disagreed	Agreed
Agreed	Disagreed	Agreed
Agreed	Strongly Agreed	Agreed
Disagreed	Agreed	Agreed
Disagreed	Disagreed	Neutral
Neutral	Disagreed	Agreed
Neutral	Agreed	Neutral
Disagreed	Agreed	Agreed
Agreed	Disagreed	Strongly Disagreed
Disagreed	Neutral	Agreed
Neutral	Neutral	Neutral
Agreed	Agreed	Disagreed
Agreed	Agreed	Neutral
Neutral	Disagreed	Agreed

Disagreed	Disagreed	Agreed
Strongly Agreed	Agreed	Disagreed
Agreed	Agreed	Agreed
Disagreed	Neutral	Strongly Agreed
Neutral	Neutral	Neutral
Neutral	Strongly Disagreed	Agreed
Agreed	Agreed	Neutral
Neutral	Neutral	Neutral
Strongly Agreed	Neutral	Agreed
Neutral	Neutral	Agreed
Agreed	Disagreed	Agreed
Neutral	Neutral	Agreed
Agreed	Agreed	Disagreed
Neutral	Neutral	Agreed
Agreed	Agreed	Agreed
Neutral	Neutral	Disagreed
Neutral	Neutral	Agreed
Neutral	Strongly Agreed	Neutral
Strongly Agreed	Strongly Agreed	Agreed
Agreed	Disagreed	Agreed
Disagreed	Strongly Disagreed	Strongly Agreed
Strongly Agreed	Agreed	Neutral
Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Agreed
Neutral	Agreed	Strongly Agreed
Neutral	Agreed	Strongly Agreed
Disagreed	Disagreed	Strongly Agreed
Neutral	Agreed	Strongly Agreed
Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Neutral
Agreed	Strongly Agreed	Disagreed
Agreed	Neutral	Agreed
Neutral	Disagreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Neutral	Disagreed	Agreed
Disagreed	Disagreed	Agreed
Agreed	Strongly Disagreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Disagreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Agreed
Disagreed	Disagreed	Agreed

Neutral	Disagreed	Strongly Agreed
Neutral	Neutral	Neutral
Strongly Disagreed	Strongly Disagreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Disagreed	Agreed
Strongly Disagreed	Strongly Disagreed	Strongly Agreed
Agreed	Agreed	Disagreed
Disagreed	Disagreed	Agreed
Disagreed	Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Agreed
Agreed	Disagreed	Agreed
Agreed	Disagreed	Agreed
Agreed	Strongly Agreed	Agreed
Disagreed	Agreed	Agreed
Disagreed	Disagreed	Neutral
Neutral	Disagreed	Agreed
Neutral	Agreed	Neutral
Disagreed	Agreed	Agreed
Agreed	Disagreed	Strongly Disagreed
Disagreed	Neutral	Agreed
Neutral	Neutral	Neutral
Agreed	Agreed	Disagreed
Agreed	Agreed	Neutral
Neutral	Disagreed	Agreed
Disagreed	Disagreed	Agreed
Neutral	Neutral	Neutral
Strongly Disagreed	Strongly Disagreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Disagreed	Agreed
Strongly Disagreed	Strongly Disagreed	Strongly Agreed
Agreed	Agreed	Disagreed
Disagreed	Disagreed	Agreed
Disagreed	Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Agreed
Agreed	Disagreed	Agreed
Agreed	Disagreed	Agreed
Agreed	Strongly Agreed	Agreed
Disagreed	Agreed	Agreed
Disagreed	Disagreed	Neutral
Neutral	Disagreed	Agreed
Neutral	Agreed	Neutral
Disagreed	Agreed	Agreed
Agreed	Disagreed	Strongly Disagreed
Disagreed	Neutral	Agreed
Strongly Agreed	Agreed	Disagreed
Agreed	Agreed	Agreed
Disagreed	Neutral	Strongly Agreed
Neutral	Neutral	Neutral
Neutral	Strongly Disagreed	Agreed
Agreed	Agreed	Neutral
Neutral	Neutral	Neutral
Strongly Agreed	Neutral	Agreed
Neutral	Neutral	Agreed

Agreed	Disagreed	Agreed
Neutral	Neutral	Agreed
Agreed	Agreed	Disagreed
Neutral	Neutral	Agreed
Agreed	Agreed	Agreed
Neutral	Neutral	Disagreed
Neutral	Neutral	Agreed
Neutral	Strongly Agreed	Neutral
Strongly Agreed	Strongly Agreed	Agreed
Agreed	Disagreed	Agreed
Disagreed	Strongly Disagreed	Strongly Agreed
Strongly Agreed	Agreed	Neutral
Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Agreed
Neutral	Agreed	Strongly Agreed
Neutral	Agreed	Strongly Agreed
Disagreed	Disagreed	Strongly Agreed
Neutral	Agreed	Strongly Agreed
Agreed	Agreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Agreed	Agreed	Neutral
Agreed	Strongly Agreed	Disagreed
Agreed	Neutral	Agreed
Neutral	Disagreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Neutral	Disagreed	Agreed
Disagreed	Disagreed	Agreed
Agreed	Strongly Disagreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
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Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Disagreed	Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Strongly Disagreed	Strongly Agreed
Disagreed	Disagreed	Agreed
Neutral	Disagreed	Strongly Agreed
Neutral	Neutral	Neutral
Strongly Disagreed	Strongly Disagreed	Strongly Agreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Strongly Agreed	Strongly Agreed	Strongly Disagreed
Disagreed	Disagreed	Agreed
Strongly Disagreed	Strongly Disagreed	Strongly Agreed
Agreed	Agreed	Disagreed
Disagreed	Disagreed	Agreed

Disagreed	Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Agreed
Agreed	Disagreed	Agreed
Agreed	Disagreed	Agreed
Agreed	Strongly Agreed	Agreed
Disagreed	Agreed	Agreed
Disagreed	Disagreed	Neutral
Neutral	Disagreed	Agreed
Neutral	Agreed	Neutral
Disagreed	Agreed	Agreed
Agreed	Disagreed	Strongly Disagreed
Disagreed	Neutral	Agreed
Neutral	Neutral	Neutral
Agreed	Agreed	Disagreed
Agreed	Agreed	Neutral
Neutral	Disagreed	Agreed
Disagreed	Disagreed	Agreed
Strongly Agreed	Agreed	Disagreed
Agreed	Agreed	Agreed
Disagreed	Neutral	Strongly Agreed
Neutral	Neutral	Neutral
Neutral	Strongly Disagreed	Agreed
Agreed	Agreed	Neutral
Neutral	Neutral	Neutral
Strongly Agreed	Neutral	Agreed
Neutral	Neutral	Agreed
Agreed	Disagreed	Agreed
Neutral	Neutral	Agreed
Agreed	Agreed	Disagreed
Neutral	Neutral	Agreed
Agreed	Agreed	Agreed
Neutral	Neutral	Disagreed
Neutral	Neutral	Agreed
Neutral	Strongly Agreed	Neutral
Strongly Agreed	Strongly Agreed	Agreed
Agreed	Disagreed	Agreed
Disagreed	Strongly Disagreed	Strongly Agreed
Strongly Agreed	Agreed	Neutral
Agreed	Agreed	Neutral
Strongly Agreed	Strongly Agreed	Disagreed
Strongly Agreed	Strongly Agreed	Disagreed
Strongly Disagreed	Strongly Disagreed	Strongly Agreed

9.5. CAC and correlation Testing

When analyzing the Cronbach alpha for the independent variable “Appropriate Resource Allocation” it was noted that Cronbach's Alpha value is greater than 0.9 thus indicate one or few questions are "not good" in capturing the nuances from the population. Because of that experimental analysis done by removing each question out of the calculation.

Appropriate Resource Allocation

Removed Question: - My Management has proper understanding on capability of the resources

Reliability analysis

Inter-Item Correlation Matrix

	Management_has_proper_understanding_on_scope_of_the_project	Management_provide_additional_resource_requirement_when_need
Management_has_proper_understanding_on_scope_of_the_project	1.000	.689
Management_provide_additional_resource_requirement_when_need	.689	1.000

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.812	.816	2

Correlation analysis

Correlations

		RA_ADDRESOURCE_SCOPE	Project_sucess
RA_ADDRESOURCE_SCOPE	Pearson Correlation	1	.712**
	Sig. (2-tailed)		.000
	N	378	378
Project_sucess	Pearson Correlation	.712**	1
	Sig. (2-tailed)	.000	
	N	378	378

**. Correlation is significant at the 0.01 level (2-tailed).

Removed Question:- My Management is aware about critical activities and provide additional resource. requirement when essential

Reliability analysis

Inter-Item Correlation Matrix

	Management_has_proper_understanding_on_scope_of_the_project	Management_has_proper_understanding_on_capability_of_the_resour
Management_has_proper_understanding_on_scope_of_the_project	1.000	.804
Management_has_proper_understanding_on_capability_of_the_resour	.804	1.000

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.890	.891	2

Correlation

Correlations

		RA_CAPABILITY_SCOPE	Project_sucess
RA_CAPABILITY_SCOPE	Pearson Correlation	1	.665**
	Sig. (2-tailed)		.000
	N	378	378
Project_sucess	Pearson Correlation	.665**	1
	Sig. (2-tailed)	.000	
	N	378	378

**. Correlation is significant at the 0.01 level (2-tailed).

Removed Question:- My Management has proper understanding on scope of the project

Reliability analysis

Inter-Item Correlation Matrix

	Management_has_proper_understanding_on_capability_of_the_resour	Management_provide_additional_resource_requirement_when_need	
Management_has_proper_understanding_on_capability_of_the_resour	1.000	.788	
Management_provide_additional_resource_requirement_when_need	.788	1.000	

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.880	.882	2

Correlation

Correlations

		RA_ADDRESOURCE_CAPABILITY	Project_sucess
RA_ADDRESOURCE_CAPABILITY	Pearson Correlation	1	.701**
	Sig. (2-tailed)		.000
	N	378	378
Project_sucess	Pearson Correlation	.701**	1
	Sig. (2-tailed)	.000	
	N	378	378

**. Correlation is significant at the 0.01 level (2-tailed).

According to above analysis though each question removed from the calculation it does not make significant effect on correlation analysis. According to correlation analysis in each 3 occasion above has high positive correlation with Appropriate Resource Assignment and agile project success. Though there is noticeable effect on Cronbach alpha when removed "My Management has proper understanding on capability of the resources". Thus, we could consider above question is bias to some extent.

Risk management

Removed Question:- My Management is involved in Risk Controlling processes such as Risk management planning, Risk Resolution and Risk Monitoring

Reliability analysis

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.881	.881	2

Inter-Item Correlation Matrix

	Management_able_to_understand_situation_and_risk_involve_in_it	Management_is_involved_in_Risk_assessment_processes
Management_able_to_understand_situation_and_risk_involve_in_it	1.000	.787
Management_is_involved_in_Risk_assessment_processes	.787	1.000

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.878	.878	2

Correlation

Correlations

		RM_Understanding_Assesment	Project_sucess
RM_Understanding_Assesment	Pearson Correlation	1	.739**
	Sig. (2-tailed)		.000
	N	378	378
Project_sucess	Pearson Correlation	.739**	1
	Sig. (2-tailed)	.000	
	N	378	378

**. Correlation is significant at the 0.01 level (2-tailed).

Removed Question:- My management is involved in Risk assessment processes such as Risk Identification, Risk Analysis and Risk Prioritization

Reliability analysis

Inter-Item Correlation Matrix

	Management_able_to_understand_situation_and_risk_involve_in_it	Management_is_involved_in_Risk_Controlling_processes
Management_able_to_understand_situation_and_risk_involve_in_it	1.000	.783
Management_is_involved_in_Risk_Controlling_processes	.783	1.000

Correlation

Correlations

		RM_Understanding_Control	Project_sucess
RM_Understanding_Control	Pearson Correlation	1	.745**
	Sig. (2-tailed)		.000
	N	378	378
Project_sucess	Pearson Correlation	.745**	1
	Sig. (2-tailed)	.000	
	N	378	378

**. Correlation is significant at the 0.01 level (2-tailed).

Removed Question: - My Management has ability to understand situation and risk involve in it.

Reliability analysis

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.949	.949	2

Inter-Item Correlation Matrix

	Management_is_involved_in_Risk_Controlling_processes	Management_is_involved_in_Risk_assessment_processes
Management_is_involved_in_Risk_Controlling_processes	1.000	.902
Management_is_involved_in_Risk_assessment_processes	.902	1.000

Correlation

Correlations

		RM_Assesment_Control	Project_sucess
RM_Assesment_Control	Pearson Correlation	1	.738**
	Sig. (2-tailed)		.000
	N	378	378
Project_sucess	Pearson Correlation	.738**	1
	Sig. (2-tailed)	.000	
	N	378	378

**. Correlation is significant at the 0.01 level (2-tailed).

According to above analysis though each question removed from the calculation it does not make significant effect on correlation analysis. According to correlation analysis in each 3 occasion above has high positive correlation with Risk management and agile project success. Though there is noticeable effect on Cronbach alpha when removed "My Management is involved in Risk Controlling processes such as Risk management planning, Risk Resolution and Risk Monitoring
". Thus, we could consider above question is bias to some extent.