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Implementing Project Management Integrated with ITIL: Case Study in a Fast-Moving Consumer Goods Company

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Abstract

At the last phase of an IT project, it will transfer to the operations team. It is critical to ensure the change management process integrated between project and operations is working smoothly. The study highlights lessons from implementing project management integrated with ITIL. This research is conducted on a multinational Fast-Moving Consumer Goods (FMCG) company that has already implemented project management integrated with ITIL. The study adopts PMBOK and ITIL frameworks, previous studies, and guided interviews, which are then analyzed using socio-technical aspects. This research can enrich existing literature, especially regarding IT project management and service areas. The study concludes that implementing project management integrated with ITIL brings a steadier process to IT projects. One of the socio-technical aspects changed, and the others should be adjusted. Each implementation phase results in different Socio-Technical Systems (STS) components. Nevertheless, as a whole implementation project, the company has already completed all components required.

A. Introduction

The nature of the Information Technology (IT) project is handed over to service processes for operations and maintenance—as the phase after development and implementation [1]. The transition process involves moving to the desired future and is part of change management [2]. This study will focus on transitioning IT projects to operations by implementing project management integrated with IT service management (ITSM). Project and IT service management have change management but with different definitions.

AXELOS ITSM Benchmarking survey 2022 found that 70% of organizations had already chosen or planned to implement ITIL (Information Technology Infrastructure Library) practices as their ITSM framework. In that survey, ITSM practice for Change Enablement scored 64% as needing improvement. Change management—or enablement—plays a crucial role in the success of IT projects [3]. Change enablement maximizes successful IT changes by ensuring the risks have been adequately measured, authorizing changes to proceed, and managing the change schedule [4]. Change enablement focuses more on the system, which may impact IT services [4]. Project management also has guidance to manage changes, called change management. Unlike change enablement, change management focuses on managing change in an individual (people) [5].

By having an integrated PM with ITSM, managing changes can be more comprehensive. Both the system and the people's perspectives can be covered. This is also the starting point at which the project will be handled as usual—IT service. Project Management is a valuable tool for organizing processes, time, crisis, and risk management (Vrchota et al., 2021). It is used as a guidance process to plan the project and comply with limits. Project management is crucial in accomplishing enterprises' projects, including activities for developing IT services, designing, and building information systems (IS)— IT project management [7]. Regarding information systems or information technology, IT service management (ITSM) and project management are connected areas. This research will focus on the connection between project management with PMBOK and ITSM with ITIL practices implementation.

ITSM (Information Technology Service Management) is a customer-centric method that focuses on IT Services, service level agreements, and handling Business as Usual (BaU) activities [8]. Some ITSM frameworks consist of service management best practices provided by some institutes/communities, e.g., ITIL, PRINCE2, COBIT, etc. This research will use ITIL as the most well-known and comprehensive framework to cover a hundred percent of ITSM aspects [9].

The study was conducted in a multinational fast-moving consumer goods (FMCG) company that has implemented ITIL as its benchmark for delivering its IT services and uses PMBOK as a reference for project management. As the company is in the biggest archipelago, they have 5000++ employees all around Indonesia and more than 20 applications for supporting business. Projects are running one after another, but daily support needs remain. Thus, project management with service transition has been implemented in their everyday work since 2010's ITIL v3 was released. The FMCG company—as the subject case study in this paper—will be addressed as "The Company."

The old way of working was scattered from an interview with the company's senior manager. There is no guidance or straightforward procedure for IT project change management. The project team handling the project will provide application support after going live, which will be parallel with another new project. Because the top management level considered it ineffective, The Company tried to adopt ITIL 4 as a service management process. It is integrated with the project management process. Hoping that could help to manage projects and IT applications, also boost customer satisfaction with The Company's IT services.

The importance of service management in an organization has emerged, including the related factors of changes that are integrated within project and service management. There is some previous research regarding ITIL or project management implementation. However, no academic studies have focused on organizational change activities, especially the transition process from project to service. As Zalozhnev & Peremezhko (2022) stated in their research, operations and maintenance are the next phase after implementation [1]. That is the nature of IT projects, happens in every IT project management cycle, and plays a crucial part in project succession. The state-of-the-art study brings together project management integrated with ITIL. This research aims to identify socio-technical aspects and lessons learned from project management integrated with ITIL service management—which was taken from the company's case study model. Thus, it will fill in the existing literature gap regarding the problem. This research will also classify the process into three phases: pre-implementation, during the implementation, and post-implementation. The company has been acclaimed for thoroughly implementing ITIL and project management on their system. To address this research problem, we focused on answering the following research questions (RQs):

RQ1. How are socio-technical aspects of organizational change in each phase addressed in the successful implementation of project management integrated with ITIL service management?
RQ2. What lessons can we take from implementing project management integrated with ITIL service management in this case study?

This research brings a real case of an organization implementing project management integrated with ITIL service management. Hope this can be a reference for other organizations and contribute to academics, especially in project and IT service management.

The remainder of this paper is organized as follows. The next section reviews relevant literature on project management, ITIL service management, socio-technical systems (STS), and implementation phases. In Section 3, we provide details of the research design and methods. In Section 4, we present the findings from the research. Then will have conclusion in the last Section 5.

B. Literature Review

Project Management

In an organization, there is always a project—in all areas—whether it is Information System or others. Project is several activities aimed at meeting business

goals, which can be obtained through application and integration processes of initiation, planning, execution, monitoring, and closure [10]. To achieve a successful project management implementation, policies and procedures must be built, as is the management's commitment [11]. IT project management is valued as effectively structuring and controlling tasks to convert resources into IT products, developing IT services, designing and building IS, and implementing organizational change [7].

There are several popular frameworks for project management, such as PRINCE2, PMBOK, etc. PRINCE2 was developed by the UK government (Lecomber, 2020) with seven themes, including business case, organization, quality, plan, risk, change, and progress. The theme of change is enabling the team to assess and overcome unanticipated problems [12].

PMBOK (Project Management Body of Knowledge) from Project Management Institute (PMI) is the most adopted project management technique. An organization will have various components for delivering value that align with the organization's strategy. The components are portfolios, programs, projects, and operations—they work together and influence each other [5]. This includes how operations support and influence other components, such as how they may influence business functions.

The dynamic business environment encourages organizations to continually strive to change and adapt their operations [13]. This is becoming the reason an organization makes IT investments and implements organizational changes. According to PMBOK 7, principles are the foundational guidelines for strategy, decision-making, and problem-solving; there are 12 project management principles, and the change principle is one of them [5]. Change management is a structured approach to transitioning individuals, groups, and organizations from the current state to the future state [5]. It manages change by focusing more on people.

ITIL Service Management

ITSM guides the delivery of IT services that focus on customer satisfaction by establishing quality agreements [14]. New processes and tools are needed to implement ITSM. This includes alignment between business and IT in the organization [14], [15]. As some facts are found in the Introduction section, the highest rate of adoption of the ITSM framework is ITIL.

ITIL stands for Information Technology Infrastructure Library. ITIL is claimed to be the most adopted framework for IT Service Management (ITSM). ITIL contains a set of best practices on ITSM, first used in the 1980s. In 2000 ITIL v2 was released, and ITIL v3 emerged in 2007. The latest version is the ITIL 4 module, released throughout 2019-2020.

The ITIL 4 framework introduces Service Value System (SVS) and Four dimensions model. SVS illustrates how the components and activities of the organization work together as a system to enable value creation where opportunity/demand is input and value is output [16]. In the middle of SVS, there is service value chain. It comprises six activities required to respond to demand and enable value creation by forming and managing products and services [16]. For each activity, it has its purpose.

There are 26 processes in ITIL v3, and practically, organizations do not implement all of them—only some that they need [14]. ITIL 4 provides 34 practices

instead of processes, each practice is depicted as a heat map of the service value chain. Each practice has its high concentration in one value but lower in the others. That heat map could make users more easily understand which to focus on for each practice. The practices are categorized into three primary practices, those are general management, service management, and technical management practices [16]. An organization can implement and tailor practices only those aligned with their business.

ITIL 4 practices regarding smooth transition on project change are change enablement and release management. Change enablement practice focuses more on internal IT to ensure all the changes will not impact the remaining applications or business transactions. Change enablement is responsible for ensuring risk is appropriately measured, having the authority to proceed and manage the change schedule, and then assisting communication with IT stakeholders (ITIL Foundation, 2020)—business communication is still on the PM's plate. Change enablement focuses more on the system, ensuring no change impacts existing IT services [4]. Release management aims to make new or changed features and services available for use [4]. A release plan will consist of the timing for their release. It may include documentation, training (for users and IT support), updated processes, applications or tools, and any other components from the project that deliver the new service.

This research brings together the ideas from PMBOK and ITIL. The different focuses between them can provide comprehensive guidance on managing changes from people's perspectives and systems. The integration between them is depicted in Figure 1. Change enablement is like the bridge between project and IT service management. Once the project is closed, then it will go to the IT service area as Business as Usual. The implementation of their integration may lead to a more successful project.

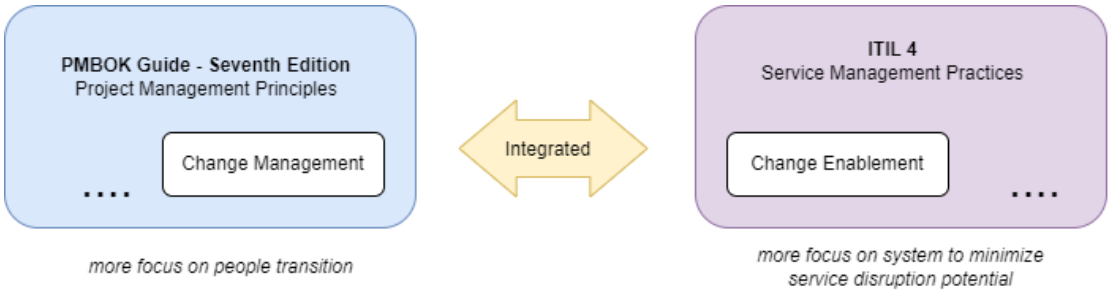

Figure 1. PM and ITIL Integration on Managing Changes

Socio-Technical Systems

Socio-Technical Systems (STS) framework provides a model which captures social and technical aspects that need to be considered in a process, where a change in one part may result a change in the other part of the system [17]. The core values of STS are human and technology, with the task and function combined into the organizational structure.

The STS will consider both interaction socio and technical components as adopting the frameworks into an organization [18]. Applicability from socio-technical systems has already been confirmed in numerous previous studies, such as digital servitization [18], industry 4.0 [19], sustainable development [20], social media adoption [21]. In this modern era, as higher technology is adopted, it is

increasingly intertwined with human organizations and processes. This STS framework can show how tight the boundaries between the social and technical spheres are [21].

There are some versions of the STS framework, but the most used is proposed by Leavitt [22][23]. The importance of the connection of the four components is provided in Leavitt's Diamond [24]. When there is a change in one component, the others need to be adjusted to keep them equally aligned [24]. The technical and social components must be considered if any organizational changes impact how the organization performs. In previous research, Blumberg et al. (2019) mapped the model proposed by El Sawy into Leavitt's Diamond, as displayed in Figure 2. This research used the STS framework for analysis. A comprehensive view of people, business processes, organizational structures, and technological aspects of implementation project management integrated with ITIL service management can be obtained.

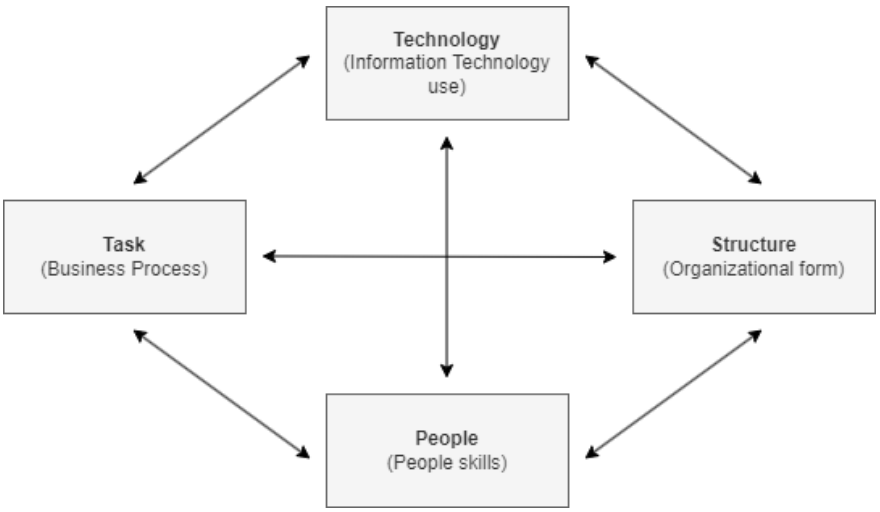

Figure 2. Leavitt's Diamond

Three-Phase Implementation Process

The implementation of ITIL and ERP were found to have many similarities [25]. Therefore, the implementation process of ITIL can be divided into three phases.

1. *Pre-implementation phase*

This phase is the "starting point," which determines the shape of the future implementation. The pre-implementation phase includes planning, deciding vendors, roles, and road map [26]. All the related stakeholders are already involved and aware of the future project.

2. *Implementation phase*

The implementation phase includes the new system's construction, testing, and adoption. This also covers the change management activities such as communication, training, legacy system replacement, etc. [27]. Support and commitment from top management about the change is an important key for a successful implementation [6].

3. Post-implementation phase

The journey begins with the new system. The next phase is to evaluate the effectiveness and reliability of this new system [28]. In this phase, the review will go through the process of how the project is done and what benefits realization from the project [29].

C. Research Method

The study adopted PMBOK and ITIL frameworks, previous studies, and guided interviews, which were then analyzed using socio-technical aspects. The author split the implementation process into three phases they are pre-, during, and post-implementation. These three phases are reflected from the interview until the analysis process.

The study is categorized as qualitative research. Interviews have been performed with some interviewees from The Company. In order to get a full comprehensive result, interviewees are from IT with the job title regarding change management, service area support, and project area. Criteria for this interview are working as part of the Information Technology (IT) department from ITSM, support, or project delivery function, and having experienced at least one full cycle project this year. Minimum three criteria above should be fulfilled by the interviewees. The last criterion—"project in this year"—is to get a view from the most recent update on project management and ITSM policy, as the company is still continuously improving its process. For your information, the company has recently integrated their project management with change enablement—ITIL v4.

Interview protocol has been prepared before the interview process. Literature studies from previous research were used as the reference for composing the interview protocol. The list of the questions is divided into three parts of sequence, pre-implementation, during the implementation, and post-implementation. Relevant questions have been listed for each role, as different roles may have different perspectives. The interview was held for an hour using a Microsoft Teams meeting. All the conversations were recorded and transcribed.

The transcriptions from the interviews were analyzed using manual coding techniques. Important points from each question and answer have been extracted. The result will be provided in Section IV. The overall research methodology can be seen in Figure 3.

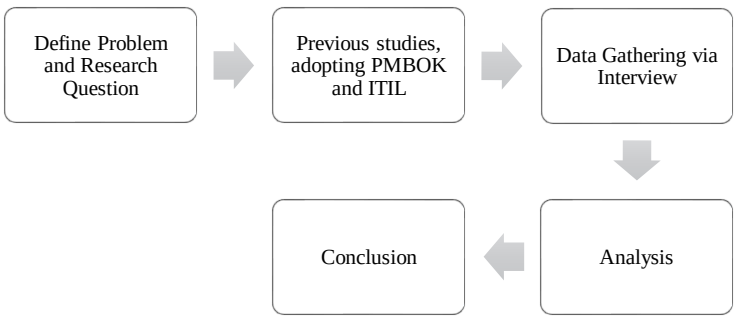

Figure 3. Research Methodology

D. Result and Discussion

The company has implemented project management integrated with ITIL service management for years. Since the latest ITIL is version 3. However, the implementation process has been performed gradually and continuously; not all ITSM processes are fully implemented. Lately, the company has been acquired, which triggered a transformation process. Throughout this transformation, one of the focuses is ensuring that all the processes are in the most effective state. Thus, some additional practices from ITIL 4 have been implemented. This time, it is will also be integrated with project management using PMBOK as the reference. In the interview process, the list of questions is divided into three parts of a sequence, which are phases of implementation: pre-implementation, during the implementation, and post-implementation. Also, the STS framework is used as the reference for pointing focus on the interview questions. The STS analysis is conducted at each process. It is to evaluate which STS components are being affected in each phase; it is depicted in Figure 4.

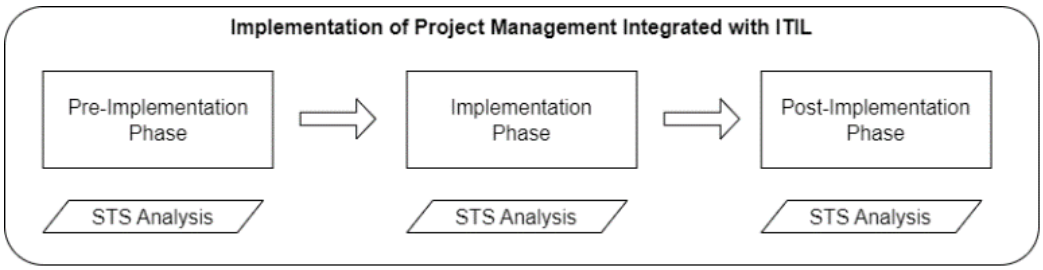

Figure4. Flow Process Analysis of Result

Three interviewees from the company have been approached. Three of them are willing to be interviewed. They are Change Manager (R1), Application Management Services Manager (R2) from the service area, and Solution Delivery Manager (R3) from the project area.

Pre-Implementation Phase

Pre-implementation in this research means all the processes until the organization arrives at the current point, including the implementation of the ITIL v3 process. So, it will be the condition right before implementation.

From R1, the company already has started implementing ITIL since 2011, but the changes are gradual from time to time. At first, they implemented a service desk and incident management by creating a new structure to create a support team. However, this support team only handles a few applications, each project team still manages the rest. There was no guidance from top management on that ITIL implementation. In that era, they only thought the most important thing business could run.

After 2020, another team was created for handling applications by having a support team. Then, more real steps happened after the organization was acquired. This is because of the different top management structures, visions/missions, and many different minds/goals. Due to management reasons, it just needs to be done.

The implementation of ITIL 4 does not come from a business case. The case may already have been run daily, but the procedure was still messed up. Therefore to fill

in the gap, management demands to implement ITIL 4. Thus, we can conclude from R1 answer that top management support is important. This also aligned with previous research, in which organizational commitment is a critical success factor in project implementation [30].

Before the implementation process of ITIL, prioritization of what practice should be implemented was first made. According to R1, all the practices that directly impact users are being prioritized, like incident management, change enablement, problem management, etc. The transition process from the project team to the support team is part of change enablement and release management. This statement is aligned with the heat map of value chain activities, and the design and transition activity scores are high on change enablement and release management practice [4]. So, the transition process is not the number one priority, but still on top. How the company arranges the priority is also on the right ground, as Lema et al. (2015) have found in their research that the sequence of practice implementation is determined by business needs—using the quick wins method to be categorized [8]. R1, as part of Service Management, also has a voice in the tailoring process for each practice that is planned to be implemented, while this tailoring process should also be aligned with business needs [8].

On the other hand, R3 also gave a view that project management has already been implemented. Nevertheless, it was never told to use PMBOK, no training by professional. How to project life cycle, based on each project manager's experience. Change manager is usually also the project manager. The administrative work to be done is more focused on the Capex (Capital Expenditure) budget to get funding. Big projects may have weekly updates with business stakeholders. Although the whole project was not yet regulated properly, the company already had strong procedures in technical aspects. They have a design council team to review the project changes and tools for project management, such as JIRA and Confluence for repository. According to R3, existing tools are being reviewed and continuously utilized. Reviewing the current condition is part of ITIL 4 guiding principle to start where you are—for the sake of efficiency not to have redundant processes (ITIL Foundation, 2020). After the transformation process, top management of the company's group level took initiative to standardize the process. Roles were being appointed, training and socialization were planned, tools planned to be set up, and repositories for guidance were being prepared.

This pre-implementation phase focuses more on the conditions before the implementation and what the organization did before the project ran. From the STS perspective, we can see this in Table 1. Each activity is coded to map action to each STS component.

The company implemented this new process as a proactive change. R1 categorized all the basic processes like procedure planning, technology used, etc., as planned (proactive) change. However, minor changes that just happened after implementation may lead to reactive changes. It is so good to take a proactive way—because the potential issue/crisis can be avoided [31]. But, at some point the reactive mode may need to perform because it cannot be predicted from the start. Along with the process change, new roles and tools also emerged. In this phase, the platform used as the tool was being reviewed and assessed for expansion. Given

that, new skills may also need to be fulfilled by training. The change in one of Leavitt's Diamonds needs to adjust in other components to keep them stable [24].

Table 1. Pre-Implementation STS Analysis Mapping

Component	Actions Taken
Technology	• Existing technology was assessed and shows that it needs to be expanded, e.g. some features or access to setup [PR1]
Task	• Define stakeholders and each responsibility [PR2] • Define scope, timeline, and planning of the project changes (proactive change) [PR3] • Some prioritization on ITIL practices to be implemented to be arranged as what the business needs most [PR4] • The different practices, may have a different approach [PR5]
Structure	• The new role had been appointed, and a new team had been created for both service management and project management. [PR7] • Top management support is something important in the ITIL implementation process [PR8] • Organizational strategy can support the change, e.g. communication strategy to all related parties [PR9]
People	• The staff is also having a voice in tailoring ITIL practice to the organization's needs [PR10] • Training for new skills in the new role, especially who is in charge of the project implementation [PR11]

Implementation Phase

In this phase, implementation was being performed. According to R1, the implementation process was done gradually. Different practices and different strategies are approached. For example, incident management was a big bang on all ops for all applications. Nevertheless, change enablement is still partially done. Because it used the phase method, only ERP modules were applied in phase 1; non-ERP applications may need to change the process and technology. An approach selected during the implementation process should consider an organization's culture [22]. Specific to the transition process, change enablement has been implemented, but release management has not. This happened because the role of Release Management has not been appointed yet, and the tools are not yet ready. Therefore, the organization does not force this practice to be implemented without the role and tools provided. The company enables the process under supervision of Change Manager, but it is not fully implemented. This is just an effort to make it easier when the tools are ready, the user is already getting used to it.

A core strategy used by the company during the implementation is communication. R1 said that the communication would be performed in some activities, starting from socialization meetings and announcement blasts until the knowledge base is provided. Using some communication methods, I hope the information can be entirely accepted by related users. R3 agreed that the communication for the change is already good. However, R2, against their

statements, R2 felt they were not receiving the complete information needed. R2 suggested that the change manager needs a parameter to calculate and monitor the success of information delivery to audiences. Open communication is needed during the implementation process, and it cannot be denied that poor communication may lead to implementation failure [23]. On the other hand, the learning curve after the information blast depends on each person's desire to learn. Nevertheless, R2 thought everyone could master something when they got used to it. That being said, learning by doing is a natural phenomenon that reduces the time it takes for every repetition [32].

Unlike Project Management, the implementation of new processes—integrated with ITIL- uses the approach big bang in one go. From R3, the PMO team created a new process, which is at the group level. However, professionals trained all project managers to standardize the basic concepts and introduce the new business flow. Internal socialization is also being held to introduce the tool the organization uses. The opportunity was also used to get to know the PMO team as Subject Matter Expert (SME). If the participants missed the session, they could still access the recording and visit the repositories being built for knowledge management. According to R3, the new thing in project management area is tollgate project and change advisory call—which connects the project team and all stakeholders, including the operations team. At the end of the project, after the complete project cycle has been done—from planning, development, transition, and hypercare—there will be a project toll gate, which is the last call. Can this project be moved to Business as Usual (BaU) or not. ITIL v4 and PMBOK have the theory about change advisory board calls [5][16]. Yet, it is being implemented by the company and is the intersection point between the project and the operational team.

Table 2. Implementation STS Analysis Mapping

Component	Actions Taken
Technology	• New tools being used, after all the setups are done [IM1]
Task	• Communication on the new process was released, then socialization was held [IM2] • Project rolled out, then users were introduced with the new business processes (after socialization) [IM3] • Project management is now running with the new tailored practices of ITIL [IM4] • Release management practices have not yet been fully implemented because roles and tools are not ready. It is now double-handled by Change Manager [IM5]
Structure	• The new team and roles are now being activated. [IM6] • Learning by doing is a natural phenomenon and can speed up the learning curve [IM7]
People	• Socialization to all users and stakeholders was being held regarding the new tools [IM8]

Implementing ITIL 4 practices—also integrated with project management—is considered a change with so many benefits that all the informants just said so. R2 thinks this change will make everything more structured before the project is handed over to the support team. They can ensure no carry-over functional issues; only low-priority issues might occur. R3 admitted they are happy with this arrangement on the change. They do not need daily support, so they can focus on the next project after the other one, which might bring a better product. R1 agreed that this change would benefit the business because the project team could deliver a better solution/product and support the team in having a proper transition process. ITSM has a good influence, such as being standardized and improving service quality [33]. Activities on change management as part of project management can help with stakeholder, resistance, and communication, thus improving the project's success rate [13]. From the interviewees' information, STS mapping for the implementation process will be in Table 2, including each code.

Post-Implementation Phase

The post-implementation phase is more about discussing the interviewees' reviews regarding implementing this ITIL transition process. R1, as the Change Manager, is doing a review every week. When they find something is wrong, they will try to find a solution and mitigation plan so the issue will not repeat. This post-implementation review (PIR) is one of the mandatory activities in the IT change management process [34]. Currently, the company is still more focused on tidying up and standardizing processes to achieve the best practice approach.

The informants suggest some improvements, R1 suggested to speed up the change enablement process in non-ERP applications. R2 thought it would be nice if the change manager could control the hypercare period to ensure that transactions performed during the hypercare period are the actual conditions that will happen daily. According to R3, there might be a standardized checklist on closing tollgate, and additional conditions from other parties are prohibited. All these suggestions are based on their experience on the last project they joined.

Besides all the benefits achieved, there is still some room for improvement that the company can do. These inputs will go through the vertical layer to be recognized by authorized personnel and management team. From the informants, the author did not see any difficulties in raising any issues regarding ITIL implementation, whether on the ITIL implementation itself or as mere project implementation. As stated in a previous study, designing and creating mechanisms for failure reports and emergency responses are necessary [34]. In an unprecedented situation, everything can be handled quickly and precisely—less impact for the business. From the PM perspective, after project closure, it is essential to review the business realization benefits harvested [35]. This is also to measure the project's investment success [35].

STS mapping analysis on the post-implementation process can be found in Table 3. In this phase, it turns out that the components of technology and people are not part of the focus.

Table 3. Post-Implementation STS Analysis Mapping

Component	Actions Taken
Technology	-
Task	• Reviewing process on ITIL is being held internally by service management team [PS1] • Reviewing process which intersects with project management is being held internally by PMO team [PS2] • All stakeholders can raise if any issues happen [PS3]
Structure	• Escalation process regarding any issues that happened is [PS4]
People	-

STS Analysis

As in the literature study, Leavitt's Diamond has some components. The author mapped points taken from the interview processes to STS components in each implementation phase.

By mapping all the interviewees' answers, we know that all components are related. By implementing project management integrated with ITIL service management, the new tool (technology component) is needed to expand, so as to create a new process (task component). Processes must be aligned with the tool, understood by the new role (structure component), and mastered by people via training (people component). While the training for both role training—job desc—and tool training—toolset [22]. The company prepares all the aspects of STS, as they know that any change in one particular process may impact others. Overall, the company is already doing an excellent job as our informants can see the benefits of this project management integrated with ITIL. Each implementation phase results in different STS components—even on the post-implementation process, nothing comes from technology and people components. However, as a whole implementation project, the company has completed all the necessary components. Mapping from each activity can be depicted using code, as shown in Figure 5, adapted from the study by Blumberg et al. (2019). In Figure 5, the STS diamond, project, and activity relationship between each component can be clearly seen. The implementation phase represents as color of each component. Green and red color blocks in technology and people mean both components are part of the pre-and implementation phase only, while green, red, and blue on task and structure show that they are part of the pre-, post-, and implementation phases.

The writer found some recommendations for the company during this research. Release management practice has been partially implemented, but the role has not yet been appointed. The change manager still handles some of the release management practices regarding the transition process. As some processes are integrated with release management—including change management [36]—it will be best to split the role. Therefore, there will be documentation handed over between RM and CM, also consider taking someone good on technical with at least 2 RM, one expert for ERP, another expert for non-ERP. When the role is ready, tools also need to be configured.

As we split the roles of release manager and change manager, the change manager may have more time to take deeper control of the hypercare period. So, the issue like hypercare is not a real condition as on a daily basis, or other inappropriate hypercare might not be reoccurred. The control and wise decision on all transition processes also should come from the project manager in charge. All things should be delivered and transitioned properly and transparently. Good quality of project delivered will increase customer satisfaction and minimize defects/impacts to business performance. A well-transferred project to the operations team (service team) makes the solution from this project more reliable, and then continuous improvement of the organization can also be activated.

This arrangement may create a more solid IT service system. All people in charge take responsibility with new processes, master all the tasks, get used to new tools, and all business processes properly build. Thus, will increase the successful rate of this project management integrated with ITIL implementation.

Secondly, in the post-implementation phase, there are no actions on the people component, and no respondent talks about communication. Promoting effective communication is needed for continuous improvement and assessment after the system implementation [37]. Through effective communication in post-implementation process, organization can complete orientation processes, gain feedback, and create organization willingness to accept the new process [38]. Therefore, the authors recommend that the company continue effective communication after implementation.

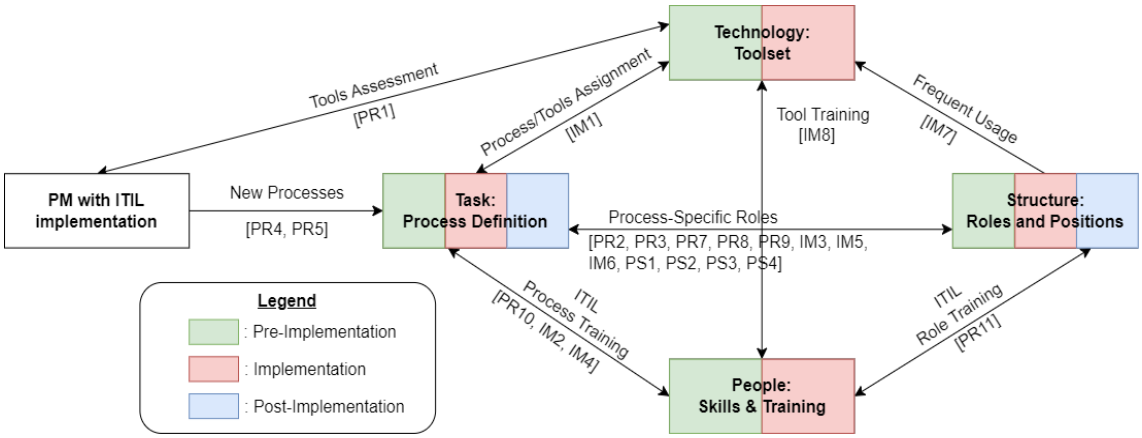

Figure 5. STS Analysis Result Mapping

E. Conclusion

This study succeeded in gathering information from company respondents. Interviewees from different functions may give a different perspective to one another, not to mention that sometimes they oppose each other. The company has done some activities from each implementation phase that align with socio-technical aspects. In the pre-implementation phase, the first thing to do is to review existing technology and the organization's condition. Then, the company defines scope, timeline, ITIL practices to tailor prioritization, also stakeholders and each responsibility. The structure is renewed by appointing a new role and team to handle the new process of implementation project management with ITIL.

In the implementation phase, a new tool has been introduced and integrated with the existing tools. Then, the company started to socialize and communicate new processes to audiences. Project management runs with a tailored process of ITIL. However, the company believes that learning by doing is effective and can speed up the learning process.

Lastly, from the post-implementation phase, the service management team reviews the effectiveness of ITIL process implementation, how the absorption from users, benefits, and if there is any improvement needed. From project management side, PMO team reviews the new processes and the alignment of process with business needed. The implementation team also establishes escalation processes. Thus, all stakeholders can raise any issues at any time.

The authors conclude that the company has successfully implemented project management integrated with ITIL. The change management and change enablement practice collaboration brings a more steady process to IT projects. The project team can focus on the project and bring more fresh ideas, while business as usual remains stable with support team maintenance. The transition process from project management to support team runs more smoothly and is structured with the integration of the PMBOK management project and ITIL service management. Although up until now, it is not perfect yet. Some rooms for improvement are still being reviewed.

The practices related to the transition process are change enablement and release management. Change enablement has been completely implemented, but release management has not. The company knows that every new process leads to tool, people, and organization structure adjustment—as in Leavitt's Diamond. Thus, the organization will patiently wait to fully implement release management when it is time. Yet, this can also be addressed as a recommendation for the company to split the role. Therefore, both change management and release management can give maximum results to the organization. Secondly, it would be better if the company promoted effective communication to complete the orientation of the new process.

Project management integrated with ITIL service management brings so many benefits for both users and internal IT stakeholders. This integrated framework makes the process more structured, gives clear job descriptions, and pushes the project team to deliver a better solution. The effective strategy for the implementation process we can learn from this study case is that technology, task, people, and structure are the requirement components for PM with ITIL implementation. Each phase has its own actions and steps to be taken. Overall, the company fulfills socio-technical systems by balancing all the components of Leavitt's Diamond. Even though not all components are represented in each implementation phase.

F. Limitations

The findings of this study should be interpreted considering its limitations. This research is conducted on a multinational FMCG company located in Indonesia. Different organizations, under some circumstances, may result differently. Second, limited interviewees also can give a biased answer; participants may not want to give the impression that the implementation is unsuccessful.

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