



Vaasan yliopisto
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Integrating Development Proposals into Organizational Workflow

Identifying Challenges, Barriers, and Opportunities in the Service
Operations

School of Technology and Innovations
Master's thesis in Industrial Management
Master of Science in Economics and Business Administration

Vaasa 2025

UNIVERSITY OF VAASA**School of Technology and Innovations**

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Title of the thesis:	Integrating Development Proposals into Organizational Workflow: Identifying Challenges, Barriers, and Opportunities in the Service Operations		
Degree:	Master of Science in Economics and Business Administration		
Discipline:	Master's Programme in Industrial Management		
Supervisor:	Jouni Juntunen		
Year:	2025	Pages:	71

ABSTRACT:

The aim of the study is to deepen the understanding of process innovation in low-hierarchy organizations, where ideas for improvement are generated through problems and suggestions for improvement identified in practice. The study will examine what innovation management practices can be applied to process development in such environments.

The study is a case study of a team in an internationally operating technology industry organization, where working at the client interface provides a valuable insight into practical work and thus gives many ideas for improvement for the organization. A mixed-methods methodology was selected to gain an in-depth perception of the topic. Data were collected over a total period of four months. Qualitative data was collected through interviews and participant observations, while quantitative data was collected through a survey. The data obtained were combined and compared with each other to identify the challenges, barriers, and opportunities of the organizational development proposal process.

The findings show that an open organizational culture and participative management contribute to the creation and progress of development proposals. Also, unclear structures and a lack of internal communication were found to be key barriers to progress on development proposals. The study showed that Lean thinking and continuous improvement principles can foster the systematic management of innovations arising from operational work. In particular, the results point to the importance of participative management and effective communication for the successful implementation of process innovations. Theoretically, this study adds to the literature on process innovation management, especially from the perspective of practice-based innovation in low hierarchical organizations. On a practical level, it provides applicable recommendations for organizations seeking to develop structures and models for the consistent use of innovation initiatives.

The study is limited to the activities of the Finnish unit of Case Company, which leads to a strong contextualization of the results. As such, the results of the study cannot be generalized broadly to different organizations or sectors. A further study is recommended to investigate the impact of horizontal and vertical orientations on the innovation performance of companies. Additional case studies are also needed to contrast the specificities of process innovation in different industries.

KEYWORDS: Process innovation, innovation management, development suggestion, organizational culture, case study

VAASAN YLIOPISTO**Tekniikan ja innovaatiojohtamisen akateeminen yksikkö**

Tekijä:	Heidi Pöysä		
Tutkielman nimi:	Integrating Development Proposals into Organizational Workflow: Identifying Challenges, Barriers, and Opportunities in the Service Operations		
Tutkinto:	Kauppätieteiden maisteri		
Oppiaine:	Tuotantotalous		
Ohjaaja:	Jouni Juntunen		
Vuosi:	2025	Sivumäärä:	71

TIIVISTELMÄ:

Tutkimuksen tavoite on syventää ymmärrystä prosessi-innovaatioista matalan hierarkian organisaatioissa, joissa kehitysideoita syntyy käytännön työssä havaittujen ongelmien ja parannusehdotusten kautta. Tutkimuksessa tarkastellaan, millaisia innovaatiojohtamisen käytäntöjä voidaan soveltaa prosessien kehittämiseen tällaisissa toimintaympäristöissä.

Tutkimus on tapaustutkimus, joka on tehty kansainvälisesti toimivalle teknologiateollisuuden organisaation tiimille, jonka asiakasrajapinnassa tapahtuva työ tarjoaa runsaasti tietoa käytännön työstä ja sitä kautta paljon kehitysideoita niin tiimin kuin myös organisaation toiminnan kehittämiseksi. Tutkimukseen valittiin sekamenetelmällinen lähestymistapa, jotta ilmiöstä pystyttiin saamaan syvälinen ymmärrys. Dataa kerättiin yhteensä neljän kuukauden ajalta. Kvalitatiivinen aineisto kerättiin haastattelujen ja osallistuvan havainnoinnin avulla, kun taas kvantitatiivinen aineisto saatiin toteutetun kyselytutkimuksen kautta. Saadut aineistot yhdistettiin ja niitä vertailtiin keskenään ja analysoitiin organisaation kehitysehdotusprosessin haasteita, esteitä ja mahdollisuuksia.

Tutkimustulokset osoittavat, että kehitysehdotusten syntyä ja etenemistä edistävät avoin organisaatiokulttuuri ja osallistava johtaminen. Sen lisäksi huomattiin, että epäselvät rakenteet sekä puutteellinen sisäinen viestintä muodostavat keskeisiä esteitä kehitysehdotusten etenemiselle. Tutkimuksesta huomattiin, että Lean-ajattelun ja jatkuvan parantamisen periaatteet voivat tukea operatiivisesta työstä nousevien innovaatioiden systemaattista hallintaa. Erityisesti tulokset korostavat osallistavan johtamisen ja toimivan viestinnän rooleja prosessi-innovaatioiden onnistuneessa toteutuksessa. Teoreettisesti tämä tutkimus täydentää prosessi-innovaatioiden johtamisen kirjallisuutta erityisesti käytännönlähtöisten innovaatioiden näkökulmasta matalan hierarkian organisaatioissa. Käytännön tasolle se tarjoaa sovellettavia suosituksia organisaatioille, jotka pyrkivät kehittämään rakenteita ja toimintamalleja kehitysehdotusten johdonmukaiselle hyödyntämiselle.

Tutkimus on rajattu Case Yrityksen Suomen yksikön toimintaan, joka johtaa tutkimuksen tulosten vahvaan kontekstisidonnaisuuteen. Siten tutkimuksen tuloksia ei voida yleistää laajasti eri organisaatioihin tai toimialoihin. Jatkotutkimuskohteeksi esitetään organisaatioiden innovaatio-osaamisen tarkastelua horisontaalisten ja vertikaalisten orientaatioiden vaikutusta yritysten innovaatiokyvykkyyteen. Lisäksi tarvitaan lisää tapaustutkimuksia, joiden avulla voidaan vertailla eri toimialojen prosessi-innovaatioiden erityispiirteitä.

KEYWORDS: Process innovation, innovation management, development suggestion, organizational culture, case study

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Acknowledgement:

I acknowledge the use of artificial intelligence tools for helping to shape the text and grammar of the study as well as structuring parts of this thesis.

1 Introduction

This section introduces the reader to the main features of the study. First, the purpose of the study and the core challenge the study will examine. The first chapter will also discuss the structure of this study. It then focuses on a gap identified in the literature and explains how this study seeks to fill this gap.

1.1 Purpose and structure of the thesis

Innovation management is increasingly important in today's business environment and can provide a competitive advantage, especially in the services sector. Innovation management helps companies to stand out in the market, create value for customers and improve business performance (Huikkola et al., 2021). The current literature has focused on process innovation, particularly in the context of manufacturing (Piening & Salge, 2015; Vanwersch et al., 2016), but has neglected the practice-oriented innovation processes that occur in low-hierarchical service organizations (Goni & Van Looy, 2022; Schiefer et al., 2024). In these organizations, innovation activities are often based on horizontal communication rather than formal structures, which constitutes a clear gap in existing theory.

This study examines the progression from idea to practice of the development proposals of the Marine Propulsion Service (MPS) team at ABB Oy Marine & Ports. The aim of this study is to understand the innovation process in low-hierarchy organization, identify the challenges in the current process the Case Company has that may hinder the effective implementation of development proposals, and to assess which innovation management practices and models Case Company could use to integrate development proposals into their work routines. The study also identifies barriers to implementation, opportunities that the current process has, and makes recommendations for improving organizational performance and processes.

The study is being carried out because Case Company has identified a significant challenge in the ineffective reporting and handling of development proposals. The situation is particularly critical from the point of view of the MPS team: the personnel working on site provide valuable information on the day-to-day problems and areas for improvement, but this information is not systematically exploited. The work of the MPS team is time-critical and prone to micro-delays, which can result in significant costs for both the client and the Case Company. At the same time, clients expect a smooth, high-quality service. Although the organisation has identified challenges in the development process, no effective solutions have been found.

The study is limited to ABB Marine & Ports Finland's activities and operations, in particular site work, and the resulting development proposals focusing on the source of innovation. The role of the MPS team is to organize customer-specific maintenance dry-docking activities, where the team is in constant contact with the site and can identify potential gaps in processes or identify areas for improvement. At present, however, suggestions for improvements are not processed systematically, are often overshadowed by other work, and are not taken forward, even though they could be useful.

This study is structured as follows. Section two introduces the Case Company for which the research is being carried out and the industry in which it operates. Section three goes into more detail on the literature relevant to the topic and the research. Section four presents the research methods used in the study, justifying their selection and building on the validity and reliability of the study. Section five covers the empirical part of the study, reviewing what has been learned from the research and presenting the material that emerged from the interviews and data collection. Section six presents and discusses the results of the study, supported by the literature presented in section two, as well as the limitations of the study and future research avenues. The final section includes a conclusion of the study.

1.2 Research questions and objectives

The theoretical basis of process innovation is still partly unclear, as shown by the study by Gustafsson et al. (2020). The recent literature has also found that process innovation has been supported by limited empirical research, with current studies mainly focusing on individual aspects as part of a broader framework (Schiefer et al., 2024). Furthermore, a study by De Jong and Vermeulen (2003) highlighted that one of the key research topics for the future will be to investigate the impact of organizational characteristics on process improvement. Increased international competition has also created specific challenges for the service sector, which it is crucial to understand (Lins et al., 2021). The Case Company in this study operates internationally, but its team has not yet explored in depth its own organisational characteristics and their impact on service innovation processes.

Previous research has extensively examined the role of process innovation in strengthening organisational competitiveness (Goni & Van Looy, 2022; Piening & Salge, 2015), and the benefits of Lean thinking and continuous improvement in the service environment (Lins et al., 2021; Tayade et al., 2023). The literature has also highlighted the key role of employee involvement and hands-on development activities in the success of innovation processes (Santos-Vijande et al., 2016). However, the link between the above themes and the specificities of service organisations remains insufficiently explored.

It is therefore evident that the theoretical basis for industrial service and maintenance innovation is still underdeveloped, and empirical research has not been sufficiently implemented at the practical level. This identified gap in the literature creates an important relevance for the study. This study is situated at theoretical-practical interface, it examines what innovation management practices and key elements of process innovation can be applied in an organisation where development proposals arise from practical work and where the formal structures to support development are still partly undeveloped.

The aim of this study is to answer the following research questions in the industrial service and maintenance context:

1. What innovation management practices and models can be used to effectively integrate development proposals into workflow?
2. How case organization's process can be developed in such a way that it can overcome challenges and barriers, and the process can support development proposals from idea stage to implementation?

These questions will be addressed by exploring perspectives on process innovation offered by current literature, by identifying challenges, barriers, and opportunities in the process of the case organisation, and by collecting empirical data through interviews, observations, and a survey. The resulting data will be analysed and presented to the Case Company, after which a new strategy and model will be proposed to drive the development of the proposed improvements in the organisation's process.

2 Service industry and Case Company introduction

This section presents the background to the thesis and the research context, covering both the service sector and the organisation within which the research is conducted. First, the general characteristics of the services sector and its importance in the economy are examined. This is followed by a closer look at the research company, ABB Oy, particularly its Marine & Ports unit, its role in the Marine industry, and lastly ABB's Marine Propulsion Service team and their role.

2.1 Service industry

The services sector covers wide range of industries that provide services to both consumers and businesses. Its importance in global economies has grown significantly over the last two decades and today it constitutes a central part of the economic activities in Western countries (De Jong & Vermeulen, 2003). In the service sector of maritime and port operations in particular, the use of digitalisation and technological innovation has enabled more efficient and environmentally friendly solutions.

Traditionally, maritime and port activities have focused on physical infrastructure and equipment, but the growing importance of services has changed the focus of the sector. The development of the services business has provided companies with the opportunity to differentiate themselves from their competitors and achieve sustainable competitive advantages. In particular, technology-driven innovations such as intelligent decision-making systems and electric propulsion solutions have strengthened the role of services in maritime, adding value to customers by optimising vessel operations (Schiefer et al., 2024).

As the economic importance of services sector grows, companies are constantly striving to develop and offer innovative service solutions to differentiate themselves from their competitors. Sustainability is a key part of the services business, and in the maritime

sector, improving energy efficiency and reducing emissions are crucial. For example, ABB's electric propulsion systems and predictive maintenance services contribute to both economic and environmental sustainability, supporting the industry's long-term evolution toward greener solutions.

2.2 Case company introduction

This thesis focuses on the Marine & Ports unit of ABB Oy, which is part of ABB's global organisation. ABB is an internationally renowned specialist in electrification and automation, offering a wide range of products and services for various industries, including electrification, motion, process automation and robotics (*About ABB, 2025*). ABB's business is focused on promoting sustainable development by exploiting advanced technologies in electrification and automation (*About ABB, 2025*). ABB's vision is to enable a more resource-efficient and environmentally friendly future that supports the achievement of the global sustainable development goals.

2.2.1 Marine & Ports

Marine & Ports is an ABB business unit focused on making shipping and port operations more sustainable. The unit offers a wide range of digital solutions and products that help ships and ports operate more efficiently and reduce their environmental impact. The Marine & Ports business unit offers solutions such as electric propulsion systems and intelligent decision tools that enable zero-emission shipping and improve the efficiency and reliability of ships (*Marine Digitalization, 2025*).

Azipod propulsion systems have been a key part of ABB's marine services. Azipod is an innovative electric propulsion system that improves the fuel efficiency of ships and significantly reduces emissions compared to conventional systems (*Azipod® Electric*

Propulsion, 2025). Azipod is an example of ABB's commitment to developing technology to reduce the environmental impact of shipping.



Picture 1 Azipod® propulsion portfolio (ABB website, 2025)

2.2.2 Marine Propulsion Service (MPS)

Marine Propulsion Service (MPS) is part of ABB's Marine & Ports unit and is responsible for providing maintenance services to ABB's customer vessels using Azipod propulsion systems. The MPS team is responsible for the annual maintenance of Azipod systems during dry docking operations, as well as carrying out maintenance visits in the event of failure conditions or other anomalies on board that require immediate action. The team's work is mainly project-based, with dry docking maintenance being carried out as large projects with well-defined schedules and objectives. By contrast, individual service visits do not fall into this project category.

The MPS team works directly on the Azipod propulsion system, giving them a comprehensive view of the condition of the equipment, the maintenance operations, and the methods and tools used. As much of the work is carried out directly on-board ships and, in the shipyards, MPS team and subcontractors used by MPS play a key role in the continuous improvement of operations, as they can help to improve the efficiency of both the MPS team's own operations and the work processes of subcontractors.

The MPS team reflects the typical characteristics of a low hierarchical organization. The team has an open and inclusive organizational culture where communication is informal

and interactive. Employee autonomy is supported, and decision-making is decentralized as individuals and teams are actively involved in development and operational choices. The role of middle management is not seen as a traditional hierarchical authority, but more as a facilitator of day-to-day work to enable, support, and coordinate development. Furthermore, the internal cooperation is primarily built on horizontal interaction rather than top-down decision-making, reinforcing the low hierarchy operating logic.

2.2.3 MPS Dry Docking projects

Dry docking is a key part of vessel maintenance and is typically carried out every five years or so to ensure the operational safety, security, and efficiency of the vessel. During dry docking, the vessel is lifted out of the water, allowing for in-depth inspections and maintenance that cannot be carried out while the vessel is in service.

The Marine Propulsion Service (MPS) team of ABB's Marine & Ports division is responsible for maintenance and upgrades of Azipod propulsion equipment during dry docking. Maintenance activities often include a comprehensive inspection of the equipment, replacement of consumable parts, technical upgrades and, when necessary, more extensive repairs. The primary objective of maintenance is to ensure optimum system performance and prolong the life of the system, thereby reducing the risk of unexpected failures and improving the operational efficiency of the vessel.

Dry docking projects require close cooperation with subcontractors and customers, which underlines the importance of careful coordination and effective project management. From client's perspective, the smooth execution of maintenance activities is particularly important, as minimising vessel downtime is critical to avoid operational disruptions. Proactive maintenance and modernization measures also support the objectives of sustainable maritime by reducing energy losses, emissions and unnecessary repair costs. In addition, upgrading Azipod propulsion systems to the latest technology can improve the fuel efficiency of vessels and reduce their environmental impact.

3 Literature review

Although process innovation and continuous improvement practices have been extensively studied, especially in the context of manufacturing (Lins et al., 2021; Vanwersch et al., 2016), the research literature on internal improvement processes in service organisations where development ideas are primarily generated from observations of practical work and where informal communication plays a key role, the application of systematic development models remain a poorly understood phenomenon (Goni & Van Looy, 2022).

Previous research has shown the importance of an open organisational culture, participative leadership, internal employee motivation, and Lean thinking as prerequisites for the success of innovation processes (Goni & Van Looy, 2022; Hogan & Coote, 2014; Reynnders et al., 2022). The empirical evidence on the practical application of these principles in everyday development work however is still scarce. This is noticed especially in situations where development proposals do not proceed through formal systems but remain at the level of informal interactions.

This section reviews recent peer-reviewed studies and theories relevant to the research questions. First, the role of process innovation and process development in service organizations is discussed, as well as the key challenges, barriers, and best practices in process innovation identified in the literature. This is followed by an examination of the management of continuous improvement in the context of service production, an analysis of the role of Lean principles in innovation management and service process development and the importance of organisational culture in the context of continuous improvement and innovation management.

3.1 Process innovation and its importance in the service industry

Process innovations are key factors in the development of organisational competitiveness and sustainable business (Goni & Van Looy, 2022). In today's business environment,

companies need to continuously improve their services and internal processes in order to meet changing needs and improve efficiency (Reynders et al., 2022). The value perceived by the customer and the ability of the firm to be relevant in a changing business landscape reinforces its position in the market. This is because process improvement allows, among other things, to increase the value experienced by customers, improve resource efficiency and reduce costs (Piening & Salge, 2015).

Service innovation refers to new or significantly improved ways of delivering and providing services, which may be related to digital solutions, customer-centric approaches or the development of new service concepts (Pascual-Fernández et al., 2023). Process innovation, on the other hand, focuses on internal organisational policies and methods to deliver services more efficiently and with higher quality (Goni & Van Looy, 2022). Successful implementation of these innovations requires systematic innovation management and the ability of the organization to adopt new ways of working.

Especially in Knowledge-Intensive Business Services (KIBS), service and process innovations rely heavily on employee expertise and knowledge sharing (Santos-Vijande et al., 2016). The role of frontline workers in the innovation process is critical, as they have the first-hand knowledge of the practical challenges and development opportunities in service provision. Organisations should identify and exploit this knowledge to turn development ideas into practically viable innovations.

Ponsignon et al. (2014) argued in their study that the key to process improvement is to base changes on two factors: the elimination of non-value adding tasks and the re-sequencing of tasks. In addition, their study identified four archetypes that should be used to approach process improvement. Organisations should identify their own archetype and plan process improvement according to their own organisational characteristics.

The importance of eliminating non-value adding tasks has also been recognised by Al Owad et al. (2018), who focused their study on improving patient flow in a hospital

setting. The findings of Posignon et al. (2014) and Al Owad et al. (2018) can be considered in conjunction with the framework developed by Vanwersch et al. in 2016, which provides a systematic approach to process improvement.

The framework presented by Vanwersch et al. (2016) consists of six components: aim, actors, tool, inputs, techniques, and outputs. Each of these areas describes the factors that need to be considered to implement effective process development. Aim refers to performance indicators and the scope of development, actors refers to the role of those involved in the process and those who control it, inputs define the initial data and weaknesses of the development process, outputs describe the results and objectives of the development work, technique defines the methods to be used, and tool defines the tools to be used to implement the reform. This framework provides a solid foundation for process improvement.

The success factors for process innovation have also been examined in the wider literature. Suwignjo et al. (2022) studied Indonesian state-owned enterprises and attempted to identify the key success factors for process innovation. They divided these factors into six categories: inputs, push factors, pull factors, processes, outputs and outcomes, and diffusion. These factors have in common an emphasis on employee involvement, the importance of leadership and support, the strengthening of competitive advantage and continuous improvement.

Successful process reform requires the presence of many different factors. In their study, Syed Ibrahim et al. (2019) identified five key elements: vision, skills, incentives, resources, and an action plan. They found that the simultaneous implementation of these elements enables successful change, but the absence of any element can compromise the outcome. For example, a lack of resources in an organization can lead to a failure to implement process improvements, which can lead to frustration among employees.

The importance of process development in maintaining business competitiveness has been widely recognised in the literature. Researchers have developed a number of models for process improvement and identified key success factors associated with the development process. However, there is no one-size-fits-all solution to process improvement, and organizations should adapt their development strategies to their own structural and operational characteristics.

The key to process improvement is the involvement of employees at the various stakeholder groups, systematic and supportive management and an open attitude of the organisation towards development proposals. Taking these factors into account will contribute to the success of the development processes and ensure that the reforms serve the strategic objectives of the organisation.

3.1.1 Multilevel innovation dynamics in low hierarchy organizations

Innovation processes in organizations are rarely structured as single level phenomena (Almeida et al., 2019). Instead, innovation takes place simultaneously at several hierarchical and functional levels. The innovation capacity of an organization can be understood as a multi-level entity in which individual initiatives, team level learning, and organizational decision-making form a complementary and interactive dynamic (Crossan & Apaydin, 2010). From process innovation perspective, this means that the generation, evaluation, and implementation of development ideas require structural coordination and information flow between different levels, especially when development activities are employee driven and arise from practical work observations.

In low hierarchical organizations, where decision-making is decentralized and formal structures are light, innovation dynamics rely on horizontal relationships and informal communication (Goni & Van Looy, 2022). In such contexts, development proposals often emerge informally, for example through everyday conversations or observations. This informality can undermine their progress if the organization does not have a clear

structure for processing and disseminating ideas (Naughton et al., 2024). In this case development activities can easily be left to the activity of individual employees or to the prioritisation decisions of managers, making the process haphazard and prone to inequalities.

The role of middle management is particularly important in such environment. Previous research has shown that middle management can act as either a bridge or a bottleneck between strategic management and operational work (Floyd & Wooldridge, 1997; Reynnders et al., 2022). If middle management does not have a clearly defined role in supporting innovation activities or assigning responsibilities, ideas will not be supported, evaluated, or further developed. This is a significant barrier in organizations where innovation is driven by employee initiative but does not proceed without formal processes and feedback mechanisms.

In organizations where communication is informal and decentralized there is a need for clearly defined procedures that allow for a coherent flow of ideas (Goni & Van Looy, 2022). In service organizations, development is often based on tacit knowledge and therefore its exploitation requires clarity and systematisation of processes. Without structural support, development ideas can easily go undocumented and without impact, which in turn prevents them from being scaled up from individual findings to organizational-level reforms (Lameijer et al., 2021).

Lean thinking offers one theoretically sound approach to combining these levels. Lean methodologies such as Gemba walks or visualisation, and continuous improvement models (PDCA, Kaizen) support systematic information flow and feedback at different levels at the organisation (Lins et al., 2021; Reynnders et al., 2022). This makes it possible to concretise employee involvement as part of a structured innovation process and to act as a link between cultural and organizational development, especially when development work is based on operational expertise (Garcia-Sabater et al., 2012).

Successful process innovation therefore requires an organizational capacity to disseminate new practices and learning, not just individual piloting. The continuity and impact of innovation in low hierarchical organizations is based on the ability of ideas to be generated, transferred, and embedded at different levels of the organization. Although the literature has addressed innovation capability at the individual and organizational level, it has so far neglected empirical examination of how horizontal innovation culture and informal communication at the team level support or hinder the vertical transfer of ideas to the decision-making level, nor does the literature provide clear process models for how informally generated ideas can be systematised into wider organisational learning and structural change.

3.1.2 Common challenges and barriers in process innovation in the service industry

Process innovation faces many challenges and barriers that can slow down or prevent the process of development ideas in an organisation. Challenges can be organisational, financial or cultural, while barriers refer to specific structural or process problems that prevent the successful implementation of innovations (Reynders et al., 2022).

One important challenge is the organisational readiness for change. If the culture of the firm does not support continuous improvement and innovation, the introduction of new processes and services may face resistance (Hanafizadeh et al., 2009). This may manifest itself, for example, in employees' distrust of new methods or in management's reluctance to invest in development ideas.

Lack of finance and resources is another key barrier to process innovation, especially in capital-intensive sectors such as the maritime industry (Schiefer et al., 2024). The development and deployment of innovations can require significant investment, and if organisation cannot demonstrate clear business benefits from development proposals, they may not be implemented.

The timing of innovation can also be a challenge, especially in dynamic and regulated industries. If a process innovation is implemented too early without sufficient testing or too late in a changing markets, its impact may be limited (Schiefer et al., 2024). From the process development perspective, aligning innovation efforts with both internal operational readiness and external market demands is crucial to ensure successful implementation and long-term effectiveness.

In addition, unclear processes can hinder the progress of innovation in an organisation. If there is no systematic process for processing development ideas and making decisions, innovative proposals may be ignored or drowned in bureaucracy (Terziovski, 2002). This is a particular challenge in organisation where decision-making processes are decentralised or complex (Goni & Van Looy, 2022).

Organisational structures can significantly slow down process development, especially when they are rigid and bureaucratic. A bureaucratic management model can increase the slowness and complexity of decision-making, making it difficult for development projects to move forward (Terziovski, 2002). In such an environment, process changes often require approval from several hierarchical levels, which can slow down decision-making and lead to delays in change.

Another key challenge that organisations face in the success of development projects is organisational culture and resistance to change (Tayade et al., 2023). If the organisational culture is not supportive of change, employees may experience uncertainty and resist new approaches. Especially in organisations that have been operating in the same way for a long time, change can create fear and mistrust, which can lead to a slowdown or even failure of development projects. It is therefore important that development activities are communicated clearly and consistently at all levels of the organisation (Al Owad et al., 2018).

On the other hand, organisations with an open and development-friendly culture have much better conditions for successful process development (Lameijer et al., 2021). When employees feel that their input is valued and that changes are being made to make their jobs easier, development projects are more likely to gain wider support and progress more smoothly.

Successful process improvement requires both flexibility in organisational structures and a stronger organisational culture that supports change. Management should identify potential structural and cultural barriers and actively seek to remove them so that development projects can move forward effectively and deliver long-term results. It is essential that potential structural and cultural barriers are continuously considered, and that systematic and sustained efforts are made to remove them.

3.1.3 Best practices in managing development suggestions

There are several best practices for managing development proposals and promoting innovation. These practices help organisations to systematise their innovation process and ensure that valuable development ideas are not missed. By implementing structured evaluation criteria and fostering a culture of continuous improvement, organisations can effectively identify, prioritise, and execute the most impactful development suggestions.

Standardisation plays a key role in managing development proposals by providing the structures and clarity to implement innovative ideas. At their best, innovation and standardisation can complement each other and contribute to the effective uptake of development proposals (Wright et al., 2012). One of the best-known standardised approaches is Lean, which focuses on improving the efficiency and performance of organisational processes. In particular, the Lean Startup model, a derivative of standardised Lean, enables agile and rapid experimentation of new ideas, which promotes iterative testing and reduces the need for large initial investments (Foggetti et al., 2025).

Lean Startup approach is particularly useful in the service sector, where feedback can be continuously integrated into the different stages of the development process, thus improving the quality and customer orientation of services (Foggetti et al., 2025). Although the Lean Startup model is often associated with startups, its principles and methods can also be valuable for larger organisations, where they support agility, continuous improvement, and efficiency of innovation processes.

The Stage-Gate process is a widely used method whereby development ideas are evaluated and tested in stages before final implementation. This process can help service companies manage projects more effectively, reduce risk, and improve decision-making by providing a clear and systematic way forward (Soenksen & Yazdi, 2017). The Stage-Gate model creates a standardised evaluation framework that supports decision-making and helps reduce uncertainty at different stages of the development process. While the methodology can improve project management and resource allocation, its implementation can be time-consuming and require significant investment, and it does not eliminate the risks associated with development projects.

Organisations can also make use of digital innovation platforms to facilitate the collection, evaluation, and monitoring of development proposals (Piening & Salge, 2015). These platforms can improve the flow of information within the organisation and ensure that innovation proposals are not only shared among individual employees or teams but are systematically addressed (Hogan & Coote, 2014). This way development proposals would not be overshadowed by other work.

Management support is crucial for the successful implementation of innovations (Terziovski, 2002). When top management of organisation is committed to promoting and resourcing development ideas, employees are more motivated to participate in the innovation process (De Jong & Vermeulen, 2003). In addition, organisations should establish clear processes and incentive systems that support innovative thinking and encourage employees to bring forward ideas for improvement.

3.2 Managing continuous innovation in service delivery

Continuous Improvement (CI) is a systematic process that aims to improve an organisation's policies and practices to improve quality, increase flexibility, reduce waste and increase efficiency (Garcia-Sabater et al., 2012). Its key principle is gradual and continuous improvement, which allows for significant improvements without major investments (Schiefer et al., 2024). This distinguishes continuous improvement from, for example, business process re-engineering, which seeks radical and one-off changes and makes it an important approach in the context of managing continuous innovation within a company.

Continuous innovation is closely linked to Lean thinking, as both emphasize process improvement and the elimination of waste. Both aim at efficient use of resources, quality improvement, and cost control (Tayade et al., 2023). Lean and continuous improvement principles were originally developed for the manufacturing industry, but their application has become widespread in the service sector, where they can improve both efficiency and customer experience (Lameijer et al., 2021).

Several models have been developed to manage continuous innovation, such as the PDCA cycle (Naughton et al., 2024), Kaizen (Terziovski, 2002), and Service-Dominant Logic (SDL) (Lins et al., 2021), with the common goal of delivering customer value from different perspectives. The PDCA cycle and Kaizen focus on process improvement through iterative improvements, while SDL emphasizes the central role of services in value creation. According to SDL, all business is essentially a service business, even if it is based on the sale of physical products, as products are seen only as tool to deliver services and create customer value (Lusch et al., 2007).

Successful implementation of continuous innovation in service organizations requires a systematic approach and clear business models. Naughton et al. (2024) investigated the

implementation and maintenance of continuous improvement methods in line with Lean thinking using the PDCA model. Their study showed that a systematic approach can deliver significant financial benefits, such as 10% increase in productivity and 7% improvement in efficiency. It was also found that a clear model improved the monitoring, measurement, and prioritisation of development projects, contributing to overall process improvement. Wright et al. (2012) have similarly found that the right tools and a structured approach can strengthen an organisation's culture of innovation and development.

Continuous innovation offers significant opportunities for organisations, but it is not without its challenges. In the services sector, continuous innovation is particularly important because services are based on customer focus, efficiency, and process flexibility (Tayade et al., 2023). However, in many organisations, progress on development proposals is slow or unclear. This may be due to bureaucratic processes or lack of resources, for example, which means that development proposals are overshadowed by other tasks (Wright et al., 2012). In addition, organisational culture can become a barrier if employees feel that their ideas are not valued or acted upon (Lameijer et al., 2021).

On the other hand, continuous innovation can create a long-term competitive advantage for organisations if it is managed in a planned way (Suwignjo et al., 2022). Research shows that Lean and agile methods, employee involvement, the use of customer feedback, and innovation-friendly culture generate significant long-term benefits (Garcia-Sabater et al., 2012). When an organisation is able to identify the challenges and seize the opportunities of continuous innovation, it can become a central part of day-to-day operations, enabling a faster response to market changes (Reynders et al., 2022).

To ensure that continuous innovation does not remain an isolated development activity, it needs to have a clear governance model and structure, with clear lines of responsibility and roles, so that development proposals do not get buried in bureaucracy and employees do not experience frustration in dealing with development proposals (Naughton et al., 2024). Without clear processes and management models, innovations can

easily remain just ideas and do not progress to practical implementation, where the PDCA cycle and Lean methods can support rapid development and continuous improvement. Systematic models help to manage both small-scale and large-scale innovations. When continuous innovation is organised, measurable, and supported by management, it becomes a part of the culture of the organisation and not just an individual development project (Terziovski, 2002).

Garcia-Sabater et al. (2012) present a model in which the successful adoption of continuous improvement proceeds in three stages. In the first stage, the organisation defines its strategy, trains its personnel, and clarifies hierarchy and metrics. The second phase focuses on employee involvement and change management, which reduces resistance to change. In the third phase, continuous improvement is deepened and integrated at different levels of the organization, becoming part of day-to-day operations.

The study showed that a structured and well-organised model can achieve significant and measurable benefits. Successful management of continuous innovation also requires systematic measurement and monitoring, without which it is difficult to assess the impact of innovation. Successful continuous innovation requires systematic measurement and monitoring. Key indicators are process performance, impact, and innovation culture. They assess, among other things, the number and lead time of ideas, the impact of innovations on customer satisfaction and costs, and employee engagement (Almeida et al., 2019; Burnett, 2011; Medne & Lapina, 2019). Effective monitoring supports the development of an innovative culture and strategic decision-making processes.

3.2.1 Impact of organisational culture in continuous improvement and innovation management

Organisational culture is one of the key factors in the success of continuous improvement and innovation management (Hogan & Coote, 2014). Organisations where innovation and continuous improvement are part of everyday activities achieve significant

benefits in process optimization and adoption of new ways of working (Piening & Salge, 2015). This ability to adapt and innovate is a key feature of successful firms, helping them to remain competitive in rapidly changing markets (Garcia-Sabater et al., 2012).

An innovative organisational culture supports experimentation, knowledge sharing, and open communication, which are prerequisites for continuous improvement and innovation (Hogan & Coote, 2014). If an organisation does not actively encourage employees to improve processes, or if failures are punished, the quantity and quality of ideas for improvement can suffer significantly (Reynders et al., 2022). Optimally performing innovative organisational cultures are open and supportive, which is reflected for example in high-quality service delivery as well as clear and efficient processes.

Terziovski (2002) showed that the attitude of management and front-line employees towards continuous improvement has a significant impact on the development culture of an organisation. When management supports and resources development projects, employees are more motivated to participate in innovation processes. Those responsible of the CI process should ensure the organisation's motivation for improvement (Lameijer et al., 2021) and psychological safety so that employees have the courage to bring forward suggestions for improvement and question existing practices without fear of sanctions (Hogan & Coote, 2014).

To ensure that development proposals move effectively from idea stage to the practice stage, organisations need to ensure that innovation processes are clear and well organized. If employees do not know how to submit development proposals or to whom they should be submitted, valuable ideas may not be exploited (Pascual-Fernández et al., 2023). This can also lead to fragmentation within the organisation, with separate teams or departments developing their own isolated approaches. In turn, siloing can prevent effective communication and collaboration between different units, slowing down development processes and reducing organisational agility (Reynders et al., 2022).

A lack of communication can also create resistance to change within an organisation. For this reason, open and clear communication at all levels of the organisation is crucial in continuous improvement processes (Tayade et al., 2023). If innovation processes are inconsistent and poorly organised, they can exacerbate silos, further complicating communication and increasing resistance to change. When employees do not understand the reasons behind change and perceive current practices as working, they might not feel the need to change their own practices. Therefore, when implementing change proposals, it is important to communicate the changes clearly and justifiably so that employees understand why the changes are being made, why they are important, and how they will affect the organisation (Lameijer et al., 2021).

The values of an organisation create the basis for an innovative culture, and the norms based on those values guide expected behaviours. Innovative thinking can be supported, for example, by rewarding development ideas, celebrating innovative achievements, using language that supports innovation, and recognizing and valuing the development efforts of employees. In addition, encouraging risk-taking reinforces the innovative nature of an organization (Hogan & Coote, 2014). Developing an organisational culture that supports continuous improvement also requires systematic training, participative leadership, and structured that support innovation (Reynders et al., 2022). Those companies that manage to combine these elements will be able to develop their service processes more efficiently, maintain high customer satisfaction, and gain a competitive advantage in the market.

3.2.2 Lean principles and their role in innovation management

Lean thinking provides a systematic and practical framework for managing development proposals and continuous process improvement (Abuhejleh et al., 2016; Reynders et al., 2022; Tayade et al., 2023). It is not only a method for improving efficiency, but it also emphasizes the active involvement of employees, clear lines of responsibility, and development based on observation of practical work (Lameijer et al., 2021; Lins et al., 2021;

Reynders et al., 2022). This is why Lean thinking can be very valuable in managing innovation in an organization where employees come up with ideas for improvement through operational work.

Lean thinking has expanded from traditional manufacturing to the service sector, where its principles are used to streamline processes and maximise customer value (Lins et al., 2021). At the heart of lean is the elimination of waste and the optimisation of service processes without unnecessary costs or waste of resources (Reynders et al., 2022). This makes Lean a particularly attractive approach for customer-centric service organisations, where efficiency and customer satisfaction go hand in hand.

Service organisations apply Lean strategies to improve service quality and efficiency. Lins et al. (2021) showed that the combination of Lean principles and innovation management is key to business success. Key methods of Lean thinking, such as Gemba walks and systematic elimination of waste, provides concrete tools to streamline processes. Thus it enables organisations to be more resource efficient and increase customer value, which in the long run can lead to competitive advantage, cost savings, and a stronger market position (Shamsuzzaman et al., 2018).

Applying Lean principles to the service sector brings challenges, as service processes involve invisible activities and there is less control over human behaviour compared to manufacturing environments (Shamsuzzaman et al., 2018). In addition, service organisations often have less accurate data available to measure and analyse processes. Therefore, the implementation of Lean methods need to be carefully planned and structured to understand the flow of processes, identify bottlenecks, and reduce waste effectively (Lins et al., 2021). Successful implementation of streamlined and clear processes and innovations contribute to the long-term success of an organisation (Abuhejleh et al., 2016).

One of the key benefits of Lean thinking is rapid experimentation and iterative development (Al Owad et al., 2018). For example, the PDCA (Plan-Do-Check-Act) cycle supports rapid testing of development ideas in practice. This helps organisations avoid heavy and lengthy design processes and find the most effective solutions faster (Naughton et al., 2024). In field work development proposals can be tested on a small scale before wider deployment, providing valuable information on whether the proposal is usable as is or whether it requires modification.

Lean principles also support the progress of development ideas, as eliminating waste reduces the slowdown of the innovation process and unnecessary bureaucracy (Tayade et al., 2023). By minimising approval processes and internal organisational barriers, such as unnecessary and duplicated steps, unclear responsibilities, complex approval processes, the implementation of development ideas is accelerated. In addition, clear policies and documentation can ensure the uptake of innovations, allowing best practices to be standardized and extended across the organisation.

Successfully embedding lean and continuous improvement in an organisation requires strong management commitment. Reynders et al. (2022) found that the active involvement of Lean principles, in particular, increases the likelihood of successful innovation and process improvement. Middle management plays a key role in this, linking strategic objectives and operational practices, and their support in the adoption of new practices is crucial (Lameijer et al., 2021).

It is also the role of middle management to monitor the performance of employees in practice, to identify processes that work and need to be improved, and to ensure that Lean methods are applied effectively (Reynders et al., 2022). In addition, the involvement of frontline employees is crucial for the success of Lean principles and innovation management (Santos-Vijande et al., 2016). As they have valuable knowledge of which processes are working and which need improvement, organisations should actively use

this knowledge to ensure that optimisation measures are based on real operational experience (Abuhejleh et al., 2016).

Lean thinking can therefore contribute significantly to the generation of development proposals and their effective implementation when an organisation encourages employees to actively share their findings and ideas. Lean methods help to reinforce roles of responsibility, increase transparency in the process, and ensure that employees' ideas are not left to informal discussion, but move towards systematic consideration and implementation.

When the experience and operational knowledge of employees is systematically used to inform decision making, continuous improvement becomes part of the organisation's everyday life. This requires a culture of open communication and structures that allow suggestions for improvement to be discussed and implemented quickly. When changes are based on practical experience and real needs, the organisation can continuously improve its processes and strengthen its competitiveness in the market.

4 Methodology

This section presents the methodology of the study, including the research strategy chosen, the process of data collection and the analysis techniques. It explains why the case study approach has been adopted and explains the research methods used, the data collection techniques and the analysis steps. It also describes the main features of the research process.

4.1 Case study research

Case study research is a form of research that examines a phenomenon in its natural setting (Schell, 1992). It seeks to understand a phenomenon in its real-life context, especially when the boundaries between phenomenon and context are not clearly distinguishable. This is often the case when the phenomenon is strongly linked to cultural, organisational or other local factors, and understanding it requires attention to the context. Another feature is that the context under study may be in a state of constant change, so that the boundaries of the phenomenon may be blurred and depend on changing circumstances (Schell, 1992).

In this study, the boundaries between the phenomenon and its context are blurred, as the phenomenon under study is closely linked to its environment, which is constantly changing. For this reason, the research has been conducted in a case study format. There is no ready-made model or solution in the literature for the Case Company's challenge under study, and since the challenge can't be solved unequivocally, but requires clarification of the current situation and a proposal for a new way of working, the case study provides a reliable and valid approach to conducting the research.

4.2 Mixed method

In this study, a mixed method approach has been chosen due to the nature of the phenomenon under study. The mixed method combines qualitative and quantitative research methods, aiming to provide a deeper and richer understanding of the phenomenon under study (Matović & Ovesni, 2023). This approach allows for the use of both qualitative and quantitative data, with both data collection methods supporting each other in answering the research questions. As Molina-Azorin & Feters (2020) point out, the mixed method has created more holistic perspectives for understanding the phenomena studied in the service sector, clarifying the participants' views and experiences and providing a better understanding of the phenomenon as a whole.

Qualitative research focuses on gaining an in-depth understanding of a phenomenon and its true nature (Golafshani, 2015). A qualitative approach is particularly appropriate in this study when the research questions relate to the actual nature of the processes in the case study company and how they are implemented in practice. Quantitative research, on the other hand, collects numerical data, analysed using statistical methods, and answers questions such as "how many" or "how often" (Golafshani, 2015). Quantitative data provides a broader understanding of the prevalence and extent of a phenomenon.

In this study, a mixed method approach supports the combination of both research methods, allowing a better understanding of the true nature of the Case Company's development proposal processes and how they work in practice. The data collection methods used are interviews and questionnaires, which are divided into two main parts: primary interviews to identify the current state and secondary interviews to assess the applicability of the proposed model to practical processes.

4.3 Research process

The empirical data for this study were collected through semi-structured interviews and a survey. The data collection process began with two semi-structured interviews, which aimed to provide a preliminary understanding of the development proposal process and to identify potential problem areas. Following these initial interviews, the study progressed to workplace observation within the research context and transitioned to collecting quantitative data through a structured questionnaire. The survey enabled a more in-depth examination of the challenges, barriers, and opportunities associated with the process. After the quantitative data had been collected and analyzed, additional four follow-up interviews were conducted. These supplementary interviews served to refine and clarify the understanding formed through the earlier qualitative and quantitative findings.

The qualitative data for the study was collected through interviews with employees in different functions and internal stakeholders working on the promotion of development proposals as well as participant observation. The qualitative data was collected using three methods: semi-structured interviews, participant observations, and informal discussions. The data was collected during fieldwork, in the context of a dry-docking project and in an office environment. Employees from different organisational levels and operational units participated in the study, including front line employees (FLEs), project managers, site managers, MPS team leader, Continuous Improvement manager, and staff involved in the warranty process. In this way, the data covered the broad life cycle of the service, from installation to the warranty phase.

The interviews were mainly unstructured, allowing the interviewees to express their experiences in a free-form way. In addition, the study used participant observation in the dry-docking project for five days and in the office environment and work community for four months. The purpose of the observation was to understand the context of the generation, processing, and progression of development proposals in the everyday working environment and to identify challenges and opportunities in the process. The employee

break room in the dry-docking project served as a central place for informal interaction, where proposals were presented and discussed informally with the site manager and other project personnel.

Quantitative data will be collected through questionnaires from people working in the dry-docking site. The survey was carried out during the dry-docking project by Case Company, with a total of 19 respondents. The questionnaire consisted of 34 questions, some of which were closed multiple choice questions and some of which were open questions. The questionnaire was written in both Finnish and English and was divided into six sections, which explored the respondents' experiences and attitudes towards different aspects of the process of reporting development proposals.

58% (n = 11) of the respondents were Case Company's own employees and 42% (n = 8) were subcontractors. The target group of the survey included in particular so-called front-line employees, but also included office workers whose tasks include reporting or processing development proposals in some way.

Educational backgrounds ranged from vocational education to higher university degrees: 37% had a vocational degree, 5% secondary school degree, 26% a bachelor's degree, 21% master's degree, and 11% some other degree. The distribution of job titles was varied, with the majority working in project management, specialist or various installation jobs. The average work experience in dry-docking projects ranged from less than 2 years of experience to more than 10 years of experience, with 26% of respondents having more than 10 years of experience. There was also variation among respondents in the number of dry-docking projects worked on ranged from less than five to more than twenty, with 42% of respondents having worked on more than twenty dry-docking projects.

The combination of these two data collection methods provides a rich and comprehensive understanding of how employees perceive the process of submitting and progressing development proposals, as well as an understanding of how the people responsible

for promoting them perceive the process. The qualitative and quantitative data support each other, providing the study with a strong and comprehensive basis for analysis.

The data collected was analysed by identifying and categorising themes that emerge from the data. This process aims to produce coherent and comprehensive conclusions based on the research questions. Before the questionnaires are distributed to the study participants, their validity is ensured. The questionnaires are checked to ensure that they meet several validity criteria, such as face validity, content validity, criterion validity and construct validity. The questions will be formulated in a clear and objective manner to ensure the objectivity and accuracy of the responses.

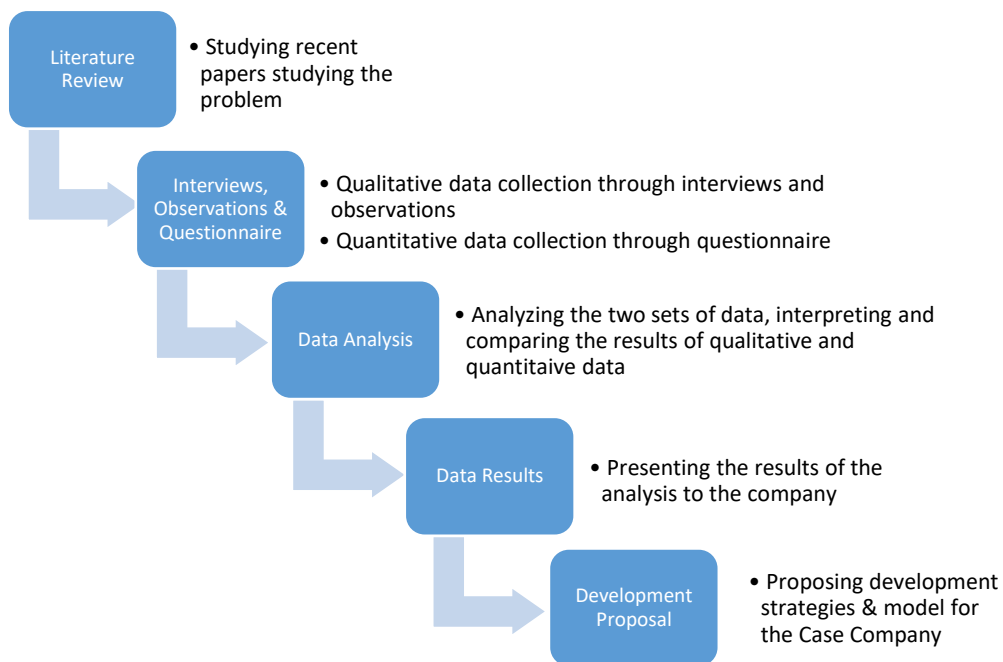


Figure 1 Research process

5 Empirical research

This chapter examines the empirical findings collected in the study. The analysis is based on both qualitative and quantitative data, which are compared and contrasted in the light of the research context. The chapter starts with a description of the current state and development process of the Case Company, followed by a detailed analysis of the challenges, barriers, and opportunities identified from the data.

5.1 Current state analysis

The main objective of the study is to examine what kind of innovation management models and methods Case Company could use to improve its internal development proposal process. As a part of this objective, the study aims to identify the key challenges, barriers, and opportunities of the current process, and to build a framework for a new process model that takes advantage of the findings from the empirical data.

An analysis of the current status is a key part of this study. Data collection was carried out using a mix method approach, including questionnaires, semi-structured and unstructured interviews, participant observation and informal discussions. The aim of these methods was to develop a comprehensive understanding of how the development proposal process works in practice at different levels of the organisation, and to identify areas for improvement.

Through interviews and observations, the aim was to understand how the current process of development proposals is perceived, and what challenges and opportunities it faces. The questionnaire survey, in turn, deepened the understanding of employees' attitudes, motivation, and experiences in relation to development proposals, and their handling.

Based on the research material, the main problem identified in the organisation was the low throughput of development proposals and the lack of structural support in the processes for the systematic progression of these proposals. Based on the interviews and observation data, a cause-and-effect diagram was developed to illustrate the key factors explaining the difficulties in progressing development proposals.

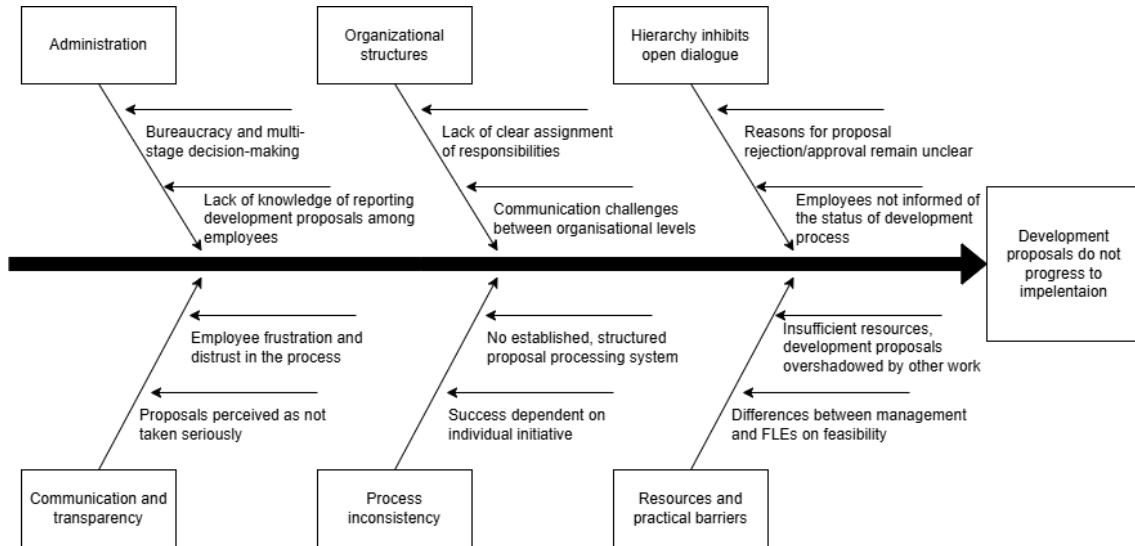


Figure 2 Cause-and-effect diagram

The qualitative and quantitative data collected in parallel were used to model the current development proposal process of the Case Company. This process diagram illustrates, step by step, how the development proposal in the organization proceeds, or fails to proceed, in its current state. What is noteworthy is that it starts directly from the idea and does not cover, for example, the MPS team and how the idea progresses there.

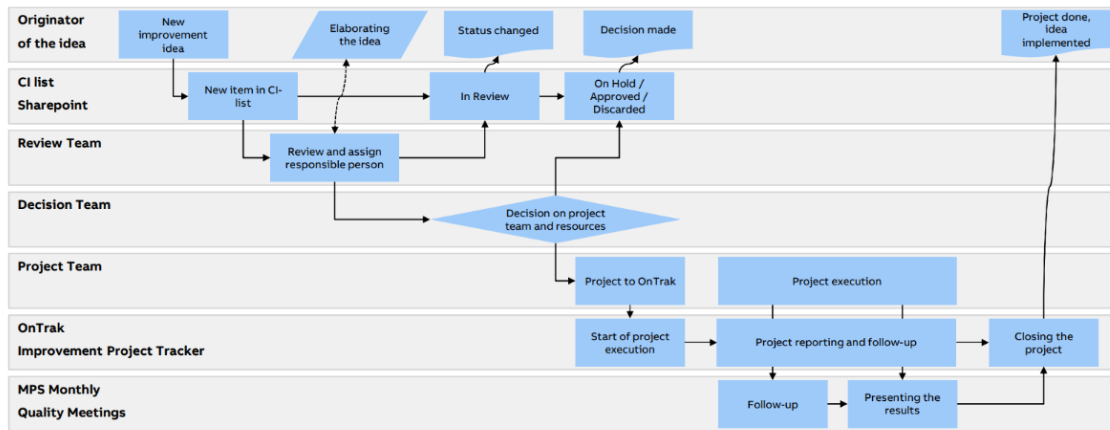


Figure 3 Process map

The next subsections will discuss in more detail the key findings emerged from each form of data to understand the current status. Before moving on to examine these three areas in more detail, it is important to define what is meant by challenges, barriers, and opportunities in this study. Challenges refer to a situation or task that requires an individual to use skills, knowledge, and resources to overcome it. A barrier refers to a factor that prevents or slows down the progress of a situation or task and makes progress difficult or impossible. An opportunity, on the other hand, refers to a situation in which circumstances allow a desired action or development to take place.

Based on these definitions, the following sections examine the identified challenges, barriers, and opportunities in more detail, paying attention to how they manifest themselves in practice and their implications for organisational development.

5.2 Findings on the current state by themes

This section presents a thematic analysis of the empirical data collected for the study, integrating both qualitative and quantitative findings. The analysis identified three recurring and central themes: (1) strong intrinsic motivation for development among

personnel, (2) ambiguities and structural barriers within the development process, and (3) insufficient cooperation and information flow across organisational levels.

The qualitative data revealed employees' frustration and distrust towards the development process, largely due to its perceived lack of clarity and coherence. Despite these systemic shortcomings, a notable willingness to contribute to improvement efforts persisted across the personnel. These sentiments were articulated through open-ended responses and interviews, where the desire to influence one's work and enhance organisational practices frequently emerged.

The quantitative data provided more specific insights into the structural challenges and barriers within the process. It also offered a broader perspective on employee attitudes towards the development proposal process and illuminated cultural characteristics unique to the organisation. Furthermore, the quantitative analysis allowed for the examination of potential correlations between variables such as length of service or job title and employee perceptions or experiences related to the development process. In this way, the quantitative findings served to both refine and deepen the understanding of the process and the challenges it entails.

Further qualitative analysis exposed underlying structural and cultural tensions embedded in the development process. Although employees consistently expressed a willingness to improve operational practices and working methods, this intent was frequently obstructed by institutional barriers. One key issue was the absence of clearly assigned ownership or responsibility for development proposals within the MPS team. The lack of a systematic mechanism to manage and follow up on proposals resulted in confusion, frustration, and a perception among employees that their contributions were not taken seriously at higher organizational levels.

5.2.1 Challenges

An integrated analysis of qualitative and quantitative data identified four interrelated challenges impeding the effectiveness of the development proposal process: (1) lack of process clarity, (2) difficulties in implementation, (3) a disconnection between strategic and operational levels, and (4) inconsistencies in perceived transparency. These challenges are further nuanced by sector- and context-specific dynamics.

One of the most prominent issues emerging from both data sources is the lack of clarity surrounding the development proposal process. For employees to contribute meaningfully, they must understand the operational steps and expectations of the system. Qualitative findings indicate that employees perceive the process as inconsistent, opaque, and difficult to navigate. This perception is substantiated by quantitative evidence: 52% of survey respondents indicated that they lacked a good understanding of the process. These findings complement each other, highlighting a widespread and significant organizational ambiguity that hinders participation.

Furthermore, responses to the questionnaire revealed disparities in employees' understanding of how to submit suggestions. While some employees, particularly those working in white-collar jobs, reported awareness of the mechanisms for making proposals, others expressed minimal or no understanding of the process. Notably, there was no significant correlation between years of work experience and familiarity with the improvement submission process, suggesting that the knowledge gap is systematic rather than linked to tenure.

A second critical challenge concerns the practical implementation of proposed changes. The data suggests that new practices are not systematically communicated at the operational level. Consequently, employees often bear individual responsibility for interpreting and applying revised guidelines. Interviews revealed that in dry-docking projects, outdated instructions continued to govern day-to-day work even when newer guidelines

had been introduced. This lag in adoption was attributed to insufficient communication and, in some cases, employee resistance to change.

Quantitative findings reinforce this interpretation. 79% of respondents reported not being informed about how development proposals were implemented in practice. Both data sources therefore indicate that the difficulty lies not merely in initiating change, but in ensuring its translation into daily operations through coherent communication and support. The qualitative data also highlighted that successful implementation was typically driven by proactive individuals or teams, rather than supported by systematic organizational procedures. This suggests a lack of institutionalized mechanisms enabling front-line employees to advance development proposals beyond the ideation phase.

A third challenge identified in the data relates to the disconnect between strategic planning and operational execution. Qualitative data illustrated that front-line employees, especially those stationed on-site, frequently felt excluded from higher-level decision-making processes. This sense of exclusion led to skepticisms about whether development proposals would translate into tangible change.

This perception is validated by quantitative results. Several respondents commented on the limited impact of their suggestions and expressed doubt about whether their proposals reached decision-makers. One commonly cited example was the request to increase the number of tool containers for dry-docking projects. While front-line personnel regarded this as a critical improvement, management cited resource constraints as a limiting factor. The differing assessments of feasibility underscore the gap between strategic resource allocation and operational priorities.

Survey data further revealed specific areas of friction in dry-docking operations. 32% of respondents reported consistent tool-related challenges across all projects, and 21% identified recurring issues with work instructions. In contrast, respondents generally reported fewer problems with working methods or on-site project management. These

findings suggest that while operational teams maintain relative control over daily practices, their confidence in higher-level management is more fragile. Open-ended responses emphasized that site-level management was generally trusted, whereas confidence diminished when referring to centralized organizational leadership.

The fourth and final challenge related to disparities in how transparency is perceived across different organizational roles. Qualitative findings revealed a clear distinction: white-collar employees tended to view the process as relatively transparent, whereas blue-collar employees frequently described information flows as inadequate and the process as lacking openness. Quantitative data, however, did not reflect this division as clearly. Responses on transparency remained fragmented across groups, suggesting that while the statistical trends are less conclusive, qualitative insights capture deeper experiential nuances.

Overall, qualitative data strongly suggests that the development proposal process is experienced as neither clear nor transparent. This lack of clarity undermines employees' willingness to engage and weakens confidence in the organization's capacity to convert ideas into actionable change. This observation directly informs the first research question: *"What innovation management practices and models can be used to effectively integrate development proposals into workflow?"*. The current system does not adequately support the progression of ideas from initiation to implementation, instead relying heavily on individual initiative and persistence.

Transparency, in particular, emerged as a complex and sometimes contradictory phenomenon. While certain employees perceive the process as sufficiently open, others described substantial ambiguity regarding both the rationale for decisions and the operationalization of agreed measures. A recurrent issue was that implemented changes often failed to manifest in everyday work practices, largely due to insufficient communication and guidance. This disconnect illustrates the broader gap between strategic decisions and operational realities.

It is important to note that these challenges do not constitute insurmountable barriers to development activity. Rather, they introduce additional burdens on employees, requiring extra time, resources, and interpersonal competencies to navigate the process effectively. If left unaddressed, these structural limitations risk eroding long-term motivation. In sum, while the quantitative data delineate the scope of the challenges, qualitative data provide insight into their underlying mechanisms and role-specific variations.

Table 1 Summary of identified challenges and data comparison

Factor	Summary of data	Consistency of data sets
1. Unclear process	The handling of development proposals is perceived as unclear, especially on the site	Well aligned between different data sets
2. Translating changes into practice	Changes are not effectively translated into practice - old ways of working remain	Well aligned between different data sets
3. The gap between strategic and operational levels	FLEs feel distanced from management decision-making	Well aligned between different data sets
4. The experience of transparency is divided	A role-specific difference is observed	Partly contradictory: quantitative data does not distinguish between groups, but qualitative data reveals a clear division.

5.2.2 Barriers

The analysis identified four key barriers that slow down or obstruct the progress of development proposals: (1) lack of ownership and responsibility, (2) insufficient communication and feedback, (3) employees' perception that their proposals are not taken seriously, and (4) the predominance of verbal communication in handling proposals. Additionally, the bureaucratic nature of the process and a lack of technical understanding when dealing with proposals were noted as supplementary challenges. Together, these issues represent systemic barriers that significantly hinder or, in some cases, entirely block the development process.

The lack of ownership and responsibility emerged as a major barrier in both qualitative and quantitative data. Without a clearly designated process owner, proposals often remain unaddressed or stagnate. In the worst-case scenario, this results in the complete halt of the development process. Interview data repeatedly highlighted uncertainty regarding who is responsible for handling or forwarding proposals. Correspondingly, 47% of survey respondents reported that the fact that there is no clear owner for development proposals is one of key barriers that hinder the progress of development proposals. This congruence between data sources suggests that the issue is both widespread and deeply rooted.

Qualitative findings emphasize that the absence of ownership and accountability prevents systematic engagement with development ideas. Addressing this gap requires the establishment of a clearly documented process model with defined roles and responsibilities. Process improvement could be supported through the application of Lean management or continuous improvement frameworks, which integrate employee-driven initiatives into the organization's formal operating structure. Currently, the MPS team lacks a designated coordinator responsible for overseeing the implementation and follow-up of development proposals, a shortcoming perceived as significantly undermining the continuity and effectiveness of development efforts.

Insufficient communication and feedback were identified as a second widespread barrier. Ambiguous or incomplete communication impedes employees' ability to understand the process and their role within it. Consequently, valuable improvement ideas may be overlooked, forgotten, or remain disconnected from further development. Interviews revealed that employees are often not informed about the status or outcome of their suggestions. Survey data reinforces this finding: 72% of respondents reported receiving little or no feedback on the proposals they submitted. The consistency across both data sets indicates that poor communication and lack of feedback are systemic challenges impeding process efficiency.

The survey also explored the practical conditions for implementing development proposals. Lack of time and resources emerged as significant obstacles to experimenting with new ideas. Many respondents (42%) expressed a need for additional training or support to realize their proposals, pointing to a structural deficiency in organizational support. Furthermore, perceptions of unevenly distributed power and influence negatively impacted motivation. While 37% of respondents felt they had little or no influence, 42% believed they had some degree of influence, and 53% felt their views were valued. These figures suggest a complex picture of perceived empowerment and recognition.

Qualitative findings similarly highlight communication and information sharing as key areas for improvement. Employees reported inadequate information about the process, decision-making criteria, and overall transparency, contributing to uncertainty and discouraging participation. Clarifying internal communication and procedural guidelines thus emerges as essential for enabling effective development work. Notably, most interviewees, particularly front-line employees and members of the MPS team, demonstrated strong motivation to improve and a shared understanding of the principles of continuous improvement. This indicates that the barriers are not due to a lack of willingness but rather stem from organizational structures and inefficiencies in existing processes.

The informal and predominantly verbal nature of proposal submission constituted a third central barrier. Only 10% of respondents reported using electronic systems to submit development proposals, even though 74% considered the current communication channels adequate. However, interviews revealed that most suggestions are presented verbally during team discussions or to immediate supervisors without formal documentation. As a result, proposals are often not recorded, which hinders their processing and follow-up. The consistency between qualitative and quantitative data suggests that verbal submission is an entrenched practice that undermines the overall effectiveness of the development process.

Employees' perception that their improvement suggestions are not taken seriously emerged as the fourth key barrier. This perception can be demotivating and may lead to disengagement from development activities. Several interviewees described instances in which their suggestions were ignored or downplayed. Quantitative data corroborates this: more than half of respondents questioned whether their proposals were genuinely considered, particularly after the completion of dry-dock projects. These findings highlight a trust deficit in the process, which impedes sustained development efforts.

Survey responses reflected frustration regarding the inadequate processing of development proposals. Respondents attributed this to indifference or to the perceived distance of decision-makers from operational realities. The proposal process was viewed as disorganized and poorly communicated, which particularly affected the motivation of front-line employees to contribute ideas.

Two additional, though smaller, barriers were also identified. First, the bureaucratic nature of the process was perceived as a slowing or discouraging factor. Excessive administrative requirements made it difficult to advance proposals. Second, a lack of technical clarity in some proposals was cited, particularly in cases where suggestions were dismissed as unfeasible. Without sufficient technical knowledge or contextual understanding, proposals may be prematurely rejected despite their potential value.

In summary, the barriers identified reflect the current state of the Case Company's development process, where the primary bottlenecks are structural and systemic rather than individual. These obstacles hinder or halt the progress of development proposals and typically lie beyond the control of individual employees. The majority of barriers relate to organizational accountability, communication, and process structures, and thus require active, strategic intervention by management. Quantitative data highlights the prevalence of these barriers from the personnel's perspective, while qualitative data sheds light on their root causes and lived experiences. The integration of both data sets

offers a comprehensive and nuanced understanding of how these barriers impact the overall performance of the development process.

Table 2 Summary of identified barriers and data comparison

Factor	Summary of data	Consistency of data sets
1. Lack of ownership and responsibility	No clear responsibility for the follow-up of proposals	Well aligned between different data sets
2. Lack of feedback and communication	No feedback on the impact of proposals - created passivity	Well aligned between different data sets
3. Development proposals are not taken seriously	Perception among employees that proposals are not taken seriously	Qualitative emphasis, quantitative data does not show this but does not deny it either
4. Verbal communication	Development proposals mainly presented verbally without formal recording	Well aligned between different data sets

5.2.3 Opportunities

The analysis of the data identified four primary opportunities for improving the development proposal process: (1) a strong desire among personnel to contribute to improvement, (2) a supportive and encouraging work community, (3) development paths emerging from recognized challenges and barriers, and (4) strengthened collaboration between internal stakeholders. These themes form a coherent foundation for the systematic development and implementation of the process, particularly at the MPS team level.

A pronounced desire for development and improvement emerged as one of the most salient themes across the data. The qualitative findings revealed a strong motivation among employees to influence their work environment and to enhance organizational practices. Interviewees consistently expressed a genuine interest in contributing to the organization's improvement. This finding is corroborated by quantitative data, as 100% of survey respondents considered the opportunity to submit development suggestions an important part of enhancing both their work and the broader working environment.

Despite challenges with the clarity of the process, employees demonstrated a notable willingness to participate actively in development initiatives. The alignment between qualitative and quantitative evidence suggests that a high level of intrinsic motivation exists within the organization, which is an asset that could be more effectively leveraged with improved process structures.

A significant majority of respondents also indicated a strong understanding of continuous improvement principles: 53% reported understanding them "very well", 42% "well", and only 5% "fairly". These results reflect a solid foundation for engaging employees in development efforts, particularly in the context of dry-docking projects.

The qualitative data also underscored the importance of a supportive and positive workplace atmosphere in enabling development activities. Several interviewees described their immediate work environment as open and encouraging towards ideation. This perception was echoed in the survey data, where more than 56% of respondents characterized their work community as positive toward development initiatives. Such a culture may serve as a compensatory factor in cases where the formal development processes are lacking. In this light, the social capital embedded in work communities can be considered a critical enabler of development, sustaining momentum even when organizational structures fall short.

Respondents broadly perceived the workplace culture as open and psychologically safe. Working conditions and general atmosphere were seen as conducive to making suggestions for improvement. Employees felt confident in proposing ideas, although some perceived indifference at higher organizational levels or questioned the depth of managerial understanding of dry-docking conditions. Instances of failed proposals were often attributed to bureaucratic hurdles and lack of visibility, further underscoring the gap between initiative and implementation.

A third area of opportunity relates to increased collaboration across teams and organizational levels. The data revealed that transparency, particularly regarding the criteria used at senior levels to evaluate development proposals, was lacking. This lack of visibility has contributed to diminished trust in the process. Strengthening inter-team and vertical collaboration could enhance mutual understanding, improve information flow, and clarify how proposals are assessed and prioritized. Such dialogue would not only lend greater legitimacy to the process but would also support the feasibility and quality of proposals by providing employees with relevant strategic and operational context.

The study also highlighted those recognized challenges and barriers themselves present opportunities for growth. Both qualitative and quantitative findings pointed to clear areas in need of development. This transparency enables the organization to direct its efforts precisely where they are most needed. The visibility of barriers allows for structural reassessment and process refinement. In this sense, the identification of problems is not solely a negative outcome, but rather a constructive first step toward continuous improvement. Notably, the data demonstrates employees' willingness to offer thoughtful and actionable feedback, which can serve as a critical resource in the organization's reform efforts.

The final section of the survey invited open-ended suggestions for improving the development proposal process. Responses included calls for more timely and transparent feedback, clearer roles and responsibilities, contact points for subcontractors, support networks, and improved documentation of the process. Employees at dry-docking sites in particular felt that management lacked genuine interest in development work, which diminished their motivation to engage. Many also reported uncertainties regarding the status of proposals after submission. This lack of transparency raises the threshold for participation and accentuates the divide between operational realities and strategic decision-making.

Survey results confirmed that employees view the development proposal process as a valuable means of improving working conditions, enhancing operational efficiency, and reducing errors in dry-docking projects. However, analysis of the full data set reveals persistent challenges related to communication, insufficient organizational support, and procedural ambiguity. Employees' experience of empowerment appeared inconsistent and often limited, especially from the perspective of subcontractors and front-line personnel. Strengthening development work within Case Company will require investment in employee training, increased transparency, clear lines of responsibility, and robust feedback mechanisms that reinforce inclusion and foster a sense of genuine empowerment.

In conclusion, the development proposal process holds considerable potential, grounded in the strong internal motivation of employees, a supportive organizational culture, and the developmental opportunities revealed by existing challenges. These elements constitute a promising foundation for building a more effective process. However, realizing this potential requires the active dismantling of barriers and resolution of structural issues. Without tangible action, motivation and a positive work atmosphere may erode over time. The data presents a coherent and compelling picture: Case Company possesses a committed, capable, and development-oriented workforce. This resource should be fully harnessed by aligning process structures with employee capacity and initiative.

Table 3 Summary of identified opportunities and data comparison

Factor	Summary of data	Consistency of data sets
1. Willingness to develop and take initiative	There is a strong desire to contribute and improve work on the site	Well aligned between different data sets
2. Positive attitude	The support and atmosphere of the work community is perceived as supportive	Well aligned between different data sets
3. Structurality	Process weaknesses are identified - opportunity to clarify	Well aligned between different data sets

4. Willingness to cooperate	Employees show willingness to participate when processes and feedback work	Qualitative emphasis, not directly measured in quantitative
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5.3 Summary and interpretation of results

This chapter synthesizes the empirical findings concerning the challenges, barriers, and opportunities related to the organizational development proposal process. The objective is to integrate the qualitative and quantitative data, compare their insights, and interpret them within the context of the research. The analytical approach is built on an ongoing dialogue between the two data types, with the aim of constructing a comprehensive understanding of the current state of the process and its potential for further development.

The findings from both qualitative and quantitative sources reinforce one another across several critical themes, particularly concerning structural barriers and latent opportunities. Both datasets underscore systemic weaknesses, including breakdowns in communication and ambiguous responsibility structures. Simultaneously, they reveal a consistently strong motivation among personnel to enhance their own work practices and contribute to the improvement of organizational operations.

However, the data types also offer distinct and complementary insights. The qualitative data adds contextual depth, revealing how individual roles, team dynamics, and organizational culture shape the experience of development work. These aspects are less discernible in the quantitative findings, which instead provide an overview of the scale and prevalence of certain problems. This complementary nature of the data enables a more nuanced and layered interpretation than either source could offer independently.

When viewed together, the data delineate both the key weaknesses of the current process and areas where the greatest potential for development lies. The results suggest a fundamental misalignment between the organization's structural design and the

capabilities and motivation of its workforce. Without addressing these structural issues and providing adequate support to overcome practical and cultural challenges, the organization risks failing to capitalize on its existing human potential.

Ultimately, the findings coalesce around a consistent theme: the absence of effective communication and feedback mechanisms significantly impedes employees' sense of empowerment. This deficiency reinforces the need for both cultural and structural transformation within the organization. While a general process description does exist, it is neither adapted to the specific operational environment of the MPS team nor communicated in a way that fosters ownership or engagement. Developing a more tailored model, one that is accessible, clearly defined, and consistently applied, would likely reduce current uncertainties and enhance employees' trust in the system.

To improve the conditions for submitting and implementing development proposals, Case Company should prioritize improving the clarity of internal communication, explicitly defining roles and responsibilities, and offering consistent guidance throughout the proposal process. Although the current structure is not entirely ineffective, it lacks the systematic and coherent implementation necessary for long-term success within the MPS team. While continuous improvement remains a stated principle of the organization, this ethos is not yet sufficiently embedded in the daily practices of the team. It is therefore essential that development activities be integrated seamlessly into existing workflows. Only through such integration can development proposals compete for attention alongside other operational demands, rather than being marginalized by them.

6 Discussion

Process innovation is a key factor in the sustainable competitiveness of businesses, helping organizations to remain relevant and strong in the market. Especially in today's service economy, where competition is mainly based on solutions, strategies, and service offerings. Therefore, a culture of innovation is a crucial prerequisite that can sustain organisations and foster their renewal. The study looked at the internal development process of the characteristics of a Case Company. The empirical results of the study showed the stratification of the organizational culture, the unsystematic and ambiguous nature of the current process, and the strong desire of the personnel to develop their work.

This chapter focuses on the empirical results of the study in relation to the previous literature and the research questions. It aims to analyse how the findings from the data relate to the theoretical framework and what new insights they bring to the development of organisational practices. The chapter is structured in two sections. The first section deals with both the theoretical and practical implications of the research, while the second section discusses the limitations of the research and the direction of future research.

6.1 Implications

The results of this study provide new insights into the functioning of internal organisational development processes and employee participation. The empirical findings highlight both structural and cultural factors that influence the progress of development proposals. The findings have implications both for the development of existing theoretical discourse and for guiding practice, particularly in organisations where continuous improvement is part of the strategic direction.

In the following subsections, both theoretical and practical implications are explored in more detail in relation to the previous literature. Subsection 6.1.1 discusses the

theoretical implications and answers to research question one, before moving to subsection 6.1.2, which looks at practical implications generally and from the perspective of Case Company, and answers research question two.

6.1.1 Theoretical implications

The theoretical framework of the study was based on the key stages of process innovation identified in the literature: analysis of the current state, identification of critical success factors, and the principles of continuous improvement (Lins et al., 2021; Tayade et al., 2023). In addition, special attention was paid to the role of organisational culture, leadership, and participatory innovation in development activities. The literature shows that a successful innovation process requires a systematic, phased, and transparent approach to identifying, prioritising, and piloting development ideas (Foggetti et al., 2025; Lameijer et al., 2021; Vanwersch et al., 2016).

This study adds to the theoretical understanding of process innovation, especially from the perspective of the layering of organisational culture. Empirical findings show that while the literature emphasizes the importance of an open culture and inclusive leadership as enablers of development, cultural openness alone is not sufficient to strengthen the follow-through of development proposals. The data revealed a clear contradiction between the horizontally expressed pro-development and the vertically expressed passivity. This suggests that cultural openness does not necessarily extend throughout the hierarchy of the organisation, but that the structures and processes that support development play a key role in enabling an effective innovation culture (Goni & Van Looy, 2022).

The cultural dichotomy identified in the study: a pro-development atmosphere at the workplace level on the one hand, and passivity at the higher organisational levels on the other, reveals a significant cultural tension. This finding was outside the original framework but proved to be theoretically significant. It shows that innovation culture is not

unambiguously “open” or “closed” but can be formed by conflicting practices influenced by organisational power structures and communication patterns.

The results also confirm previous literature that unclear processes, inadequate feedback, and inconsistent lines of responsibility slow down the processing and implementation of development proposals (Naughton et al., 2024). In the Case Organisation, development work was disconnected from day-to-day operational activities, leading to a decline in participation. The processing of proposals still relies on the initiative of individual employees rather than a systematic process, which increases the randomness and inequality in development work.

Although the culture of the organisation was generally seen as development-friendly, the lack of structures and processes prevented the integration of development proposals into daily work. This challenges the theoretical assumption that an open culture and motivated employees are sufficient to trigger innovation processes. Without clear policies, leadership support, and systematic practices, development potential will not be realised (Lameijer et al., 2021; Shamsuzzaman et al., 2018).

The research also highlights how horizontal and vertical cultures can create a cognitively conflicting experience for personnel. Such inconsistencies between organisational rhetoric and practices may in the long run undermine motivation and trust in development, especially when opportunities for participation do not match the values communicated by management. This finding suggests the need to view organisational culture as a multidimensional phenomenon in which structural and cultural factors overlap (Goni & Van Looy, 2022).

The findings of the study support the theories of Lean thinking, continuous improvement (e.g. PDCA, Kaizen), and participatory innovation. They show that without clear processes, accountability roles, and development based on observation of daily work (e.g. Gemba walks), cultural openness does not translate into action (Reynders et al., 2022).

In this respect, the study concretizes the ideals presented in the literature and highlights practical barriers that have not been systematically modelled before.

At a theoretical level, the study points out the need to develop a framework that considers the layering of organisational culture and its impact on innovation processes. Although models have been developed for process innovation, they have so far failed to recognise the complexity of the culture within an organisation. In this context, the study proposes the concept of a “layered innovation culture”, which refers to a situation where horizontal and vertical openness may be in conflict. Furthermore, the study highlights the need for a visual, role-based, and pragmatic innovation process, especially in low-hierarchical organisations where informal communication and pragmatism are emphasised.

6.1.2 Practical implications

The empirical findings of the study show that Case Company’s personnel have a strong desire to improve their own work and a positive attitude towards continuous improvement. However, this development potential remains largely untapped because of structural weaknesses and ambiguities in the development process. The process of making and dealing with suggestions for improvement is fragmented: employees are not familiar with the process and do not know to whom ideas should be addressed or how their progress can be monitored. In addition, the flow of information between different levels of the organisation is fragmented and the role of management in supporting development is perceived as passive.

The study provides concrete recommendations to systematise development activities and strengthen transparency. First, the organization should establish a clear, visually and written process for handling development proposals. This process should be easily accessible and understandable to employees, with clear roles, responsibilities, and a designated contact person. For the MPS team, this means introducing a new process

description that clearly the steps and responsibilities involved. The following process map is proposed:

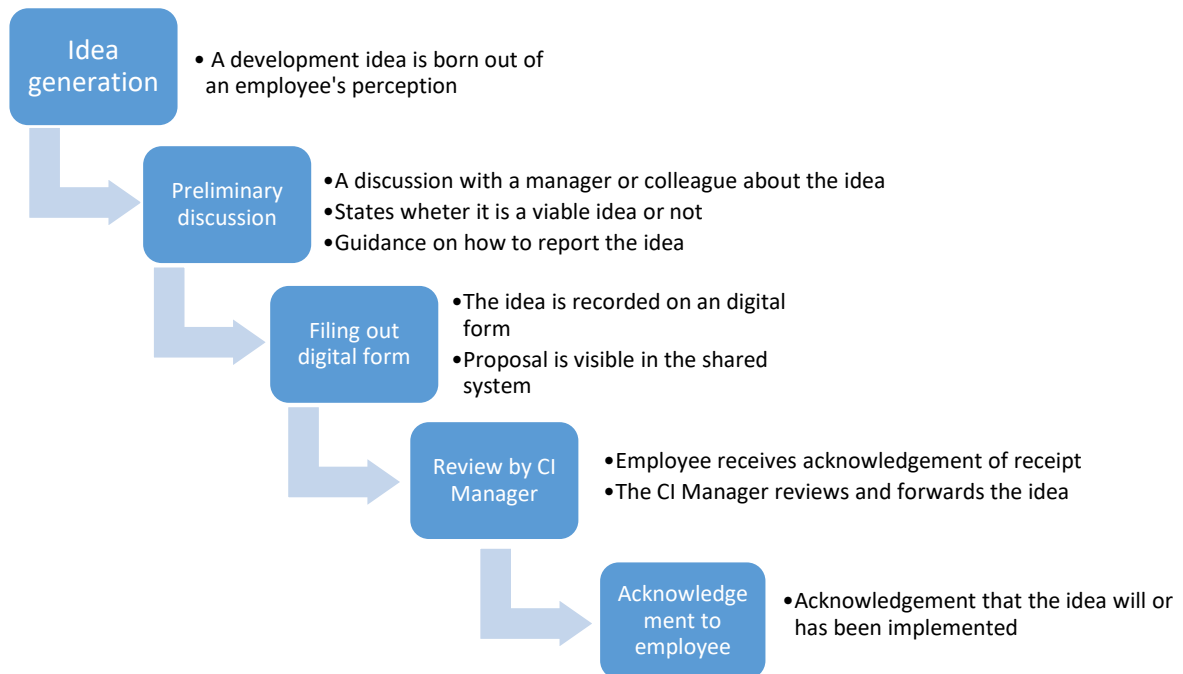


Figure 4 Proposed process

Secondly, the organisation would be well advised to systematically introduce an existing digital form for reporting development proposals and ensure that it is embedded in the work of middle managers and in daily development routines, including on-site level. The role of middle managers should be strengthened as active supporters of development activities. Middle management are expected to guide personnel in making suggestions, remind them to use digital tools and provide the necessary support and guidance. At the same time, it is important to develop feedback and increase communication on the progress of proposals.

Third, transparent communication on the progress of development proposals is critical for trust and commitment. Employees should have access to a common platform where they can monitor the status of their own and others' proposals in real time. Such visibility

reinforces the perception of fairness in the process and helps motivate employees to continue to participate in the development process in the future.

The new process description developed in the study addresses the challenges identified in the current approach: unclear process, difficulty in implementing change, gap between strategic and operational levels, and lack of transparency. The new process builds on good practices identified in the literature, such as participative management, continuous feedback, and observation of day-to-day work as a basis for development. It is also recommended that the MPS team appoint a responsible person to act as a link between employees and management and to support the discussion and communication of suggestions for improvement.

Suggestions for improvement should be dealt with in a structured and documented way, not just verbally or informally. The new proposed process and the proposed approaches are expected to narrow the gap between the strategic and operational levels by making the process more transparent and strengthening the flow of internal information within the organisation. This will allow for follow-up, systematic use of suggestions and organisational learning. The effectiveness of the development process should be regularly evaluated, especially for those groups of employees who previously found the process unclear. Based on these evaluations, the process can be further developed to ensure that it works in practice.

In a broader context, the results of the study will also provide useful information for other organisations, particularly those where operational work is central and where suggestions for improvement are generated through practical work. The results show that a clearly defined development process, visual and participatory models, and the active involvement of management are key factors in strengthening innovation capacity. Thus, the study provides both theoretically grounded and practically applicable models for revising development processes in support of an organisation's strategic objectives.

6.2 Limitations and directions for future research

The principal limitations of this study relate both to its methodological approach and to the specific research context. The study was conducted as a mixed method case study focusing on a single organization and its internal development processes. This approach enables a deep, context-specific understanding of organizational dynamics, yet simultaneously constrains the generalizability of the findings. While the observations made may offer valuable insights for organizations with similar characteristics, they cannot be directly extrapolated to broader organizational or industry-wide contexts.

A second significant limitation concerns the availability of relevant literature. The Case Company operates as a service provider within the maritime industry which is a sector for which scholarly research on process innovation and internal development practices remains limited. Consequently, the theoretical framework had to draw, in part, from literature pertaining to other service and industrial sectors. Although this broadened the analytical perspective, it may have reduced the contextual specificity of the theoretical foundations.

A third limitation involves the time frame allocated for the study. It was not possible to evaluate the effects of the redesigned development process through a longitudinal approach. As such, the study does not account for the post-implementation impacts of the proposed process model, including staff experiences or the evolution of practices over time. To gain a more comprehensive understanding of the model's effectiveness, a follow-up study would be necessary after its practical application.

To ensure the reliability and credibility of the results, data were collected at different organizational levels and roles. Participants who responded to the questionnaire and interviews were encouraged to express their views in an open and reflective manner. In addition, the four-month data collection phase contributed to the study being able to achieve a more comprehensive view of the current state of the development proposal

process. Nevertheless, the findings remain context-bound and do not support wide-ranging generalization.

Future research could be based in part on this research. Firstly, from the perspective of Case Company, it would be important to study the proposed process model and its long-term performance. This would allow an assessment of how effectively the revised model supports the submission of development proposals, transparency, and implementation. Other potential research avenues are, for example, to investigate the innovation capacity of an organization through the influence of horizontal and vertical cultural orientation on the development motivation of employees. Also, this research identifies the need for more contextual case studies to compare how different sectors implement and benefit from process innovation.

7 Conclusion

The study examined the challenges, barriers, and opportunities associated with the development proposal process of the MPS team at ABB OY Marine & Ports. The aim of the study was to identify the innovation management practices and models that could be used to manage development proposals and to provide the Case Company with practical recommendations on how to modify current operating models to integrate development proposals into the everyday life of the MPS team.

The literature review identified key factors for the success of the development proposal process, such as an open organisational culture, a structured discussion process, and participative leadership. Particular attention was paid to the impact of organisational culture on fostering innovation. The links between Lean thinking and innovation management, particularly in terms of process systematisation and continuous improvement, were also highlighted. The study responded to a need identified in the literature to examine how a horizontal culture of participation meets the barriers of a vertical organizational structure in practical development activities.

The empirical findings support the need to develop theoretical models that consider both the contextual specificities of low hierarchical organizations and the structural unsupportiveness of innovation processes. The empirical evidence highlighted three key themes that describe the Case Company's current process: strong motivation for development among employees, process ambiguities and structural barriers, and weak collaboration and information flow between different levels of the organisation. Some findings were predictable, such as employee frustration with current practices, while others, such as perceived conflict between horizontal and vertical openness, were surprising. The results show that internal motivation and horizontal trust within the organisation support the progress of development proposals, but the lack of vertical transparency and support is a significant barrier. This finding supports previous research on the benefits of participatory development but also highlights the role of horizontal and vertical structures, which has not been sufficiently addressed in previous literature.

Future research could focus on further exploring the innovative capacity of low hierarchical organization by looking at how horizontal and vertical cultural orientations affect employee motivation. As far as the Case Company is concerned, it should pay attention to both clarifying structural processes and developing the organisational culture so that the experience of openness is not only horizontal among employees but also extends vertically to the management level. The process developed in the study is specifically targeted at the needs of the MPS team and, alongside it, it is recommended that a responsible person be appointed to support the discussion of development proposals. In addition, the organisation should invest in personnel support and actively use the encouraging the use of digital systems for reporting development suggestions. This will help to build the conditions for inclusive, transparent, and effective development activities.

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Appendices

Appendix 1. Questionnaire

1. Do you work for ABB or are you a subcontractor?
2. Education?
3. My role in ABB's dry-docking projects
4. Work experience in ABB dry-docking projects as years
5. How many ABB dry-docking projects you have worked on during your career?
6. I understand how continuous improvement can affect the smooth running of dry-docking projects
7. Do you know how to report development proposals?
8. Have you ever reported a development proposal?
9. If you have reported a development proposal, did you receive information on its progress?
10. If you were informed about the progress of the development proposal you reported, how useful was the feedback you received?
11. If you did not receive feedback on the progress of your development proposal, would you have liked to be informed?
12. If you have reported a development proposal, was it implemented?
13. Has raising suggestions for improvement made your work smoother or easier (e.g. better working environment, fewer mistakes, faster work)?
14. I perceive the process of development proposals to be transparent (e.g. I know where the proposals are going and how they are going)
15. I find the process for development proposals clear (e.g. The process is clear and easy to understand)
16. How often do you encounter problems or challenges during a dry-docking project in the following categories: tools, work instructions, working methods, management

17. I know what to do if I see suggestions for improvement in the following categories: tools, work instructions, working methods, management
18. Have you received feedback, recognition or rewards for making suggestions for improvement (e.g. Praise, financial reward, visibility in the working place)?
19. What kind of rewards or recognition would you consider as motivating when making suggestions for improvements?
20. Have you been told how the development proposals will be put into practice?
21. How do you feel about the following statements: Lack of time slows down or prevents me from making development proposals, I don't know how to report development proposals, I don't report development proposals because I don't trust the process, I don't report development proposals because there are no incentives to do so, I feel that my ideas are not important, which is why I do not report my development proposals, I don't want to share my proposals with others, I have never come up with development proposals, I don't see why it is important to report on development proposals
22. Do you consider reporting suggestions for improvement as an important part of developing your work and improving your workplace?
23. Do you feel that ABB is interested in your development ideas?
24. How are you currently taking forward the suggestions for improvement and the problems you have identified?
25. Do you feel that current channels or raising suggestions for improvement are sufficient?
26. If you do not feel that the current channels are sufficient, how would you like to propose improvements?
27. Do you feel that there is something in the process that is currently slowing down the progress of your ideas?

<p>28. If yes, which three factors do you consider to be the most important slowing down the process?</p>
<p>29. How do you feel about the following statements: ABB has an open culture where employee suggestions and concerns are listened to, I feel that development proposals are ignored, working conditions (e.g. Workload, possibility of recovery, team spirit, support of colleagues) support the raising of suggestions for improvement, the working atmosphere encourages me to raise suggestions for improvement</p>
<p>30. If you feel that development proposals are being ignored, why do you think this is happening?</p>
<p>31. How do you feel about the following statements: I feel that the working methods of docking projects have evolved through suggestions for improvement, I think there is enough time and resources to test new ideas and developments in practice, I feel that I need more training or guidance on how to put the development proposals into practice, I feel that I have sufficient power and influence to take forward development proposals, I feel that my views are valued</p>
<p>32. Could you give an example of a successful development proposal and how it has progressed? What made the proposal and its progression successful in your opinion?</p>
<p>33. Could you give an example of a unsuccessful development proposal and how it has progressed? What made the proposal and its progression unsuccessful in your opinion? What could have been done differently?</p>
<p>34. How do you think the process for dealing with development proposals could be improved to make it clearer and more efficient? What changes or improvements would you like to see in the organization's process to better support the progress of your idea (e.g. more resources, better communication, better support network, support for employees)?</p>