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Mapping Dagab´s End-to-End Forecasting Process

Cross-Functional Misalignments in End-to-End Forecasting and Procurement

Master's thesis in Supply Chain Management

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Abstract

This master thesis is examines Dagab´s current end-to-end forecast process, from how the customers demand signals becomes purchasing decisions. The study focuses on how the information for customer demand is gathered, interpreted, and handovers between different function, but also how the bottlenecks and inefficiencies in the coordination is affecting the process efficiency and trustworthiness. The study is a qualitative case study of Dagab External Affairs, with empirical data from interviews, observations and internal documents.

The results shows that the process can be described as a sequential chain where customer input is transformed into forecast, system registrations and in the end, procurement decisions, and in the practice, it is in practice less linear, relying heavily on manual adjustments, individual experience and informal communication. The foremost challenges are about the unclear ownership in the process, lacking information quality, semantic differences in the functions, and goals differences. This type of problem is creating bottlenecks, reactive work, increased risk for delays or shortages, especially for new articles, campaigns, and menu related launches.

The study shows that recurrent operative disturbances can affect the customers trust for Dagab, foremost when there occurs a distinction between customers' expectations and the actual delivery capability. The conclusion for the study is that the improvements should be focusing on clearer end-to-end ownership, common definitions, better handovers, defined control checkpoints and more structured follow-ups. Thus, should the forecasting be understood as a question of cross-functional process design rather than just the forecasting precision.

Keywords: End-to-End forecasting, Demand planning, Customer trust, Procurement, Cross-functional coordination, Information flow, Process integration

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List of Acronyms

Below is the list of acronyms that have been used throughout this thesis listed in alphabetical order:

CSR	Corporate Social Responsibility
DEX	Dagab External Affairs
ERP	Enterprise Resource Planning
GDPR	General Data Protection Regulation
S&OP	Sales and Operations Planning

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1

Introduction

This chapter introduces the background and context of the study. It outlines the relevance of coordination in end-to-end forecasting processes and presents Dagab External Affairs as the case setting. The chapter also describes the problem addressed in the thesis, namely indications of bottlenecks, inefficiencies, and cross-functional misalignments in the current process. Finally, it presents the purpose, research questions, and delimitations that define the scope of the study.

1.1 Background

As organisations grow in size and complexity, it becomes increasingly important for different functions to become more coordinated, as this affects overall organisational performance. This is particularly relevant for end-to-end processes, where information, decisions, and responsibilities are transferred across different parts of the organisation rather than remaining within a single department. When such processes involve multiple handovers, different IT systems, and non-standardised ways of working, it becomes even more difficult to maintain control and ensure an efficient flow across the organisation.

This is especially relevant to forecasting processes, as forecasting is not only about predicting future customer demand, but also about anticipating customer needs, business information, planning requirements, and purchasing decisions. If this coordination is lacking, there is a risk of forecasting errors, additional work, unclear responsibilities, and a more reactive rather than proactive way of working. These risks become even more evident in relation to new product launches and campaign-related demand adjustments, where uncertainty is high and the need for coordination between functions and customers increases. Against this background, there is a need to examine how such forecasting processes are structured and managed in practice within a specific organisational context.

This study was carried out in collaboration with Dagab External Affairs (DEX), the part of Dagab that works with external customers. Dagab is a central actor for the purchasing flow and supply chain, which therefore makes it a relevant position to examine how forecasting processes are managed and structured in practice. In this context, Dagab represents a relevant setting for examining how forecasting processes are structured and managed in practice.

More specifically, the study examines the forecasting process from customer demand signals to purchasing decisions. The focus is therefore on how demand-related information is gathered, processed, and transformed into forecasts, and how these forecasts are subsequently translated into purchasing decisions.

Particular attention is given to the interface between customer-facing functions, demand planning, and purchasing, as well as to the role of system support, planning tools, and manual routines in this process. The study is connected to the menu

matrix which are a structured planning tool used by Dagab to coordinate and classify the product assortments across different customer offerings, where multiple articles comes together to form one complete customer order and considers both newly launched products and older products that are part of campaign-related activities within the categories beverages and snacks.

By studying Dagab's current way of working, it becomes possible to analyse how the forecasting process is structured, how responsibilities and information flow across different functions, and how well the process supports an integrated end-to-end flow from customer demand to purchasing decisions.

1.2 Problem Statement

Initial indications suggest that Dagab's current forecasting process includes multiple cross-functional handovers, varying degrees of formalisation between functions, and a combination of system support and manual workarounds. Information, responsibilities, and decisions are distributed across different stages of the process, which creates a risk of fragmentation and limited coordination between functions.

This way of structuring the process may lead to bottlenecks, duplicated work, unclear ownership, and inefficient information flows. It may also affect forecast quality, purchasing accuracy, and the balance between inventory availability and customer demand. When the different parts of the process are not clearly connected, the risk increases that problems are handled reactively rather than through proactive planning.

From Dagab's perspective, such shortcomings may also affect the company's ability to build trust and maintain reliable relationships with external customers. This creates a need to map the current state and analyse the process in a structured way in order to identify inefficiencies, bottlenecks, misalignments, and opportunities for improvement.

1.3 Purpose

The purpose of this master's thesis is to examine and analyse Dagab's current end-to-end forecasting process, from the capture of customer demand signals through to procurement decisions. The study seeks to identify bottlenecks, inefficiencies, and cross-functional misalignments within the process, and to develop practical recommendations to improve process integration, information flows, and decision-making. In doing so, the thesis aims to produce an evidence-based description of the existing as-is process, together with a prioritised set of improvement initiatives intended to enhance forecast accuracy, purchasing effectiveness, and inventory performance.

1.4 Research questions

To address the purpose of this thesis, the study is guided by four overarching research questions. Together, these questions aim to provide a comprehensive understanding of Dagab's current forecasting process, the challenges and inefficiencies it faces, and possible avenues for improvement. Each question focuses on a different perspective: the structure and flow of the process, the identification of bottlenecks and root causes, and the design of practical recommendations to enhance process integration and performance.

RQ1: How is Dagab's current end-to-end forecasting process structured?

RQ2: What are the main bottlenecks, inefficiencies, and misalignments in the current process?

RQ3: To what extent do the current issues and misalignments affect customer trust in Dagab, from Dagab's perspective?

RQ4: How can the forecasting and procurement process be improved to enhance integration, efficiency, and decision-making?

1.5 Delimitations

This study is delimited to Dagab's interactions with external customers and therefore excludes internal projects that are not directly related to the forecasting flow from customer demand to procurement. In mapping the forecasting process for Dagab External Affairs (DEX), the scope is limited to the two largest product categories, beverages and snacks. The study is also linked to the menu matrix, with a specific focus on both newly launched products and older products that are included in campaign-related activities. As a result, the analysis captures forecasting situations associated with both product launches and campaign-driven demand changes for existing products.

The analysis focuses on process design, roles, handovers, and information flows rather than on the underlying forecasting algorithms or statistical models. Empirically, the study primarily relies on Dagab's internal data and sources, supplemented, where feasible, by insights from external customer representatives.

Furthermore, the analysis of customer trust is limited to Dagab's perspective. This means that the study does not aim to measure customer trust directly through a broader customer-side investigation, but rather to examine how identified process-related issues and misalignments may affect Dagab's ability to create reliability and trust in its relationships with external customers.

2

Theoretical Background

The theory chapter presents the different theoretical perspectives that form the foundation of this study. It describes forecasting as a coherent and cross-functional process in which data collection, information management, and decision-making are central elements. In addition, the study includes theory on inefficiencies, misalignments, and how uncertainty can affect the forecasting process, as well as how this may lead to negative consequences for customer trust, purchasing decisions, and the relationship between the parties. The chapter establishes the theoretical basis for analysing the fragmented processes, handover issues and lack of standardised routines identified, and provides the concepts needed to link operational inefficiencies to their effects on customer trust and interorganisational relationships.

2.1 Forecasting and cross functional coordination in purchasing process

Building on the foundational role of forecasting in purchasing, this section explores the key organisational and technological enablers that determine whether forecasting efforts translate into tangible operational success. While accurate forecasts are essential, their effectiveness is contingent upon the structures and systems that support them. The following section will explore three critical areas, First, the necessity of internal integration and cross-functional coordination to ensure that forecast information is collaboratively interpreted and acted upon, second, the role on information sharing in providing the high-quality data essential for planning, and finally, how digitalisation serves as a platform for connecting these elements to support strategic, data-driven decision making.

2.1.1 The Role of Forecasting in Purchasing

Forecasting plays a central role in purchasing processes, since most, if not all, purchasing decisions are based on assumptions about future demand. In a supply chain, forecasts are not only used to estimate volumes, but also to support decision-making. Sifuentes-Domínguez et al. (2026) state that a lack of forecasting precision can contribute to operational inefficiencies such as backorders, overstocking, and a general lack of coordination between production and demand. Zietsman and van Vuuren (2023) further argue that purchasing planning becomes more effective when forecasting is integrated into a broader decision-making framework. Their study illustrates how demand, product information, and supplier parameters can be combined to provide a joint framework that supports stronger and more substantiated decision-making.

From a process perspective, forecasts should be understood as a mechanism for reducing uncertainty in purchasing operations. They make it possible to plan ahead and create better coherence between supply and demand. Failure to do so results in purchasing decisions becoming more short-sighted, while firefighting becomes more

common. This is supported by Flynn et al. (2010), who show a correlation between the internal integration of forecasting and operational performance. This means that forecast information has to be shared and used across business functions in order to have an effect.

2.1.2 Internal integration and Cross Functional Coordination

Internal integration concerns to what extent different business functions within the company coordinates its activities. Decisions made in one function will oftentimes have direct consequences in another function. This means that lacking coordination can easily lead to inefficiencies, conflicts and suboptimisation. Flynn et al. (2010) shows that internal integration makes up a crucial link between the separate business functions and the companies overarching supply chain performance.

The application of this is that internal integration doesn't emerge by itself automatically by the business functions being close, but rather has to be built through processes, routines and collaborative planning mechanisms. Therefore improvements in forecasting and purchasing requires forums where the different functions can interpret information collaboratively, discuss consequences of uncertainty and create a collaborative view of the goals and priorities. The literature thus suggests that cross-functional coordination shouldn't be seen as complement to forecasting and purchasing but target a core requirement for processes to work effectively (Flynn et al, 2010).

2.1.3 Information Sharing in Supply Planning

Information sharing is a central part for effective supply planning, since the quality of planning has a strong correlation with the access to relevant, accurate and up-to-date information. Such information may include demand, inventory balance, order status and supplier lead times. When such information is not shared or is available the risk of incorrect decisions being made, unnecessary safety stocks and a weak coordination between functions and actors.

Kelle and Akbulut (2005) shows that ERP-systems play a crucial role in enabling information sharing between actors along the supply chain. By making delivery plans, production schedules and key performance metrics available such systems can contribute to better coordination and lower costs. The most relevant finding from their study is that they show that effective information sharing not only concerns the transfer of data, but to create better conditions for collaboration, transparency and collaborative decision making.

In contrast Baihaqi and Sohal (2013) shows that information sharing in and of itself does not lead to better performance. Their study shows that integrated information technologies and good information quality will have a positive effect on the degree of information sharing, but that the effect on performance will show first when the

information is turned into action. This means that a company cannot expect performance gains only from investing in an information sharing system. The information also has to be easy to understand, reliable and usable in an actual planning context.

2.1.4 Digitalisation and Support for Decisions

Digitalisation has been gaining a more central role in the context of forecasting and purchasing, since a digital tool has the ability to process large quantities of data, automate routine activities and support decision making. In the supply chain context this means that digitalisation not only concerns modernising technologies, but also to create connections between data, analysis, and operative decisions. More specifically in the purchasing context digitalisation has shown effects like increased transparency, coordination, and responsiveness.

Alabdali and Salam (2022) shows that digital transformation has a positive effect on procurement since procurement in this context can act as a mediator between the digitalisation and competitive advantage. Their study says that procurement should be positioned as a strategic function in the digitalisation work, rather than just administrative support. The authors also argue that it is advantageous that the work with digitalisation should start at the procurement function, since this function handles large quantities of information and handles many different contract surfaces towards both internal and external actors.

As a complement to this study Zietsman and van Vuuren (2023) showed that digital support for decision making can be used as a way to integrate forecasting and purchasing planning in a collaborative framework. Their study shows that multiple different types of data can be combined.

2.2 The forecasting process as an End-To-End coordinating structure

Effective forecasting extends far beyond the initial calculation of numbers, it is a dynamic process that integrates data, cross-functional collaboration, and strategic coordination to drive decision-making. This part of the study will examine this by first establishing forecasting as a continuous process that links information gathering to planning. It then explores how sales and operations planning (S&OP) serves as the key structure for coordinating this process across an organisation. It further addresses and discusses the challenges of cross-functional coordination and the critical role that information management and system support plays in creating a cohesive and responsive forecasting framework.

2.2.1 Forecasting as a Continuous Process

Forecasting can be understood as a continuous process rather than merely an activity connected to calculations. This view implies that forecasting should not be seen as an end result, but rather as an ongoing process that leads to a planning flow in which information is gathered from industries, customer needs, and demand. The collected data is then processed and analysed in order to support decision-making. Bonde and Hvolby (2005) discuss demand planning from a process perspective and argue that it goes beyond traditional forecasting, since quantitative forecasting is combined with judgement-based input from pricing and sales.

Thomé et al. (2012) describe Sales and Operations Planning (S&OP) as a business process with clearly defined goals, structures, activities, and outcomes, where the aim is to achieve cross-functional integration of plans. Pereira et al. (2020) further elaborate on Thomé et al.'s (2012) explanation by defining tactical S&OP as a medium-term planning activity that links decisions regarding distribution, sales, and production into one integrated plan. This means that an end-to-end forecasting process should theoretically be viewed as a chain of interconnected activities that influence one another, where demand is transformed into decisions about how different resources should be used. Jonsson and Mattsson (2009) reinforce this view by describing manufacturing planning and control as the management of both material flows and production processes, where decisions in a company are made at different levels of detail and across different time horizons.

2.2.2 S&OP as the Coordinating Structure in the Forecasting Process

When forecasting is viewed as an end-to-end process, questions emerge regarding what kind of organisational structure a company needs in order to connect and manage this process. Tuomikangas and Kaipia (2014) describe S&OP as a critical function for matching capacity with customer demand. Their perspective shows that S&OP does not only function as a planning routine, but also as a structure that helps coordinate strategy with operational planning by connecting important internal functions as well as external actors. Thomé et al. (2012) further argue that S&OP should be understood as a business process where the goal is not only to improve forecasting, but also to integrate different plans while taking multiple functional constraints into account. This means that different types of data, such as market data, capacity constraints, and demand information, must be considered together in the planning process.

Pereira et al. (2020) explain from another perspective that tactical S&OP involves decisions across multiple parts of the company at the same time. This means that the structure of forecasting processes cannot be narrowed down to information flows alone. Instead, it should also take into account formal decision-making, planning meetings, and coordination routines where different views and perspectives are gathered from multiple actors. This is supported by Oliva and Watson (2011), whose study shows that the planning process can function as a link between different func-

tions that have different priorities, goals, and targets.

2.2.3 Coordination across Organisational Functions

Another central aspect of end-to-end forecasting concerns the roles, responsibilities, and cross-functional boundaries involved in the process. This is because the forecasting process is often connected to the organisation's different functions, where responsibilities are divided, data is collected, and results are handed over in a structured way. Oliva and Watson (2011) explain that supply chain planning is, in most organisations, a cross-functional activity in which different functions focus on different parts of the planning, such as operations and sales. This may create risks further along in the process, as it can lead to conflicts regarding expectations, assumptions, and decisions related to the collected information. These issues are often reflected in the quality of the information and other important process attributes, which indicates that the structure also depends on how coordination between different levels and functions of the organisation is managed (Oliva and Watson, 2011).

Tuomikangas and Kaipia (2014) elaborate further by identifying several central coordination mechanisms in S&OP, such as processes, tools, data, and leadership. This shows that the structure is not only technical, but also social and strategic. Goh and Eldridge (2019) provide empirical support for this by showing that strategic alignment and the gathering of information are among the key ways to improve S&OP outcomes.

2.2.4 Information Management

In an end-to-end logic, the forecasting process is often shaped by information flows, data sharing, and different forms of system support. This means that it is not enough to understand only the different functions involved, it is also important to understand what needs to be analysed when information is collected, how it is processed, in which systems it is registered, and how it is used across different parts of the planning process. Tuomikangas and Kaipia (2014) identify tools and data as the most central coordination mechanisms in S&OP, which helps explain both what may affect the process and how data is structured and used. Data collection and data processing are therefore highly important when seeking to improve S&OP outcomes, and their effectiveness depends on how information is managed and distributed among the actors involved (Goh and Eldridge, 2019).

Jonsson and Mattsson (2009) explain that companies using systems for managing information and resource flows are often better able to initiate and control material flows across the supply chain. They also show that material planning, execution and control, and procurement should be seen as different parts of an interconnected planning structure. This suggests that information flows and system support are not only helpful tools, but also form an integrated part of how the forecasting process should be structured based on the information that has been collected.

2.3 Sources of Inefficiency and Misalignment in the Forecasting Process

While a forecasting process provides a structured framework for integrating data and cross-functional collaboration, its effectiveness is often undermined by operational deficiencies and organizational friction. This section examines the key sources of such dysfunction by first applying a lean perspective to identify specific inefficiencies such as waste, mimicked behaviours and process bottlenecks. It then addresses the key role the need for coherence across functions play in ensuring strategic alignment. Furthermore, it explores and discusses the inherent challenges of forecast uncertainty and how its mismanagement can reduce forecasting to mere guesswork. Finally, the section analyses misalignments across data, process, and strategy, revealing how incompatibilities between organisational needs, system capabilities, and human behaviour can cascade into systematic failures that compromise the entire forecasting effort.

2.3.1 Identifying Inefficiencies

In a study by Blijleven et al. (2017), using a lean perspective to identify inefficiencies in information systems usage, the authors examined a list of eight types of waste, of which five can be applied to this study, which are transportation, waiting, overprocessing, defects, and skills and talents. The study not only identified manifestations of waste, but also found differences in the frequency of each waste type, that certain types of waste had a cascading effect, and that waste could proliferate through mimicked and routinised behaviour. Transportation waste describes unnecessary movement of information. Such information is non-value-adding and often leads to waiting times further downstream in the process. In the study, the most prominent manifestation of transportation waste was employees having to re-enter data into multiple incompatible systems. Waiting manifests as doing nothing or working slowly while waiting for a previous step in the process to be completed. Overprocessing waste refers to adding more value than the customer or process requires, for instance through entering redundant data or enforcing unnecessary checks that take time from the process (Blijleven et al., 2017).

Defects can range from an employee entering incorrect data to system malfunctions. In most cases, this requires rework to correct the errors, but in some cases the errors are not caught in time and therefore create further problems downstream in the process. Skills and talents refer to not utilising employees' capabilities to their full extent, but may also involve insufficient or improper training, which can lead to employees not following established routines or lacking the knowledge required to do so. Mimicked behaviour was also identified in the study and refers to employees copying the behaviour of colleagues, for example during training or onboarding. This may lead employees to stray from established process routines and instead adopt the behaviours of others. Routinised behaviour refers to an employee following a routine, whether formally established for the process or self-developed, without reflecting on why it is performed in that way, even when the routine is inefficient (Blijleven et

al., 2017).

2.3.2 The Need for Coherence

Gianesi (1998) explained in a paper looking at a number of Brazilian manufacturing companies that there is a need for a formal mechanism aiming to integrate operational decisions both horizontally between a company's business functions, and vertically, within the manufacturing or operational functions. They further explain that achieving this coherence is by no means an easy task within a company. They list several reasons for this, functional strategy formulation processes which aim to achieve high horizontal coherence requires very diligent management. Turbulent environments which require frequent re-planning and changes in direction within a shorter time-frame. Managers in charge of the different business functions have their own objectives and will pursue their own agendas which can interfere with the larger strategy. What can be taken into consideration from Gianesi's (1998) paper is that introducing a mechanism with the aim to boost coherence between the operational decisions made across the different business functions within the company is necessary for a successful strategy implementation. This will also facilitate a stronger vertical coherence.

2.3.3 Forecast Uncertainty

Currently one condition can be assumed to be true regarding forecasts, the fact that they are not exact and inherently contain errors, states Petropoulos & Makridakis (2020) that unless this uncertainty is expressed without ambiguity, forecasting is not far from future-telling. According to (Petropoulos & Makridakis, 2020) the most common way to express this uncertainty is to estimate the forecast distribution. This means that forecasting should not only provide an accurate forecast, to also specify the forecast distribution. What is also concluded by (Petropoulos & Makridakis., 2020) is that even though some companies do provide measures for forecast uncertainty the interval for this uncertainty is often too narrow meaning that it misrepresents the data.

2.3.4 Misalignements

Wei et al. (2005), drawing on Soh et al. (2000), describe misalignments as inconsistencies between organisational requirements and ERP software in terms of data, process, and output. One part of these incompatibilities are data misalignments, which consider if the data inputs in the process are available, accurate and are provided in the right format. Another aspect of process misalignments, which considers if the actual workflow of creating, approving and distributing forecasts match how people want or need to work. Yet another aspect is output misalignments which considers if the final forecast provides the right information in the right format for the people that will have to act upon them. (Wei et al., 2005). Wei et al. (2005) also identifies in their paper that these misalignments lead to cascading effects. Some examples of this in the context of forecasting would be if the sales data is not integrated with the forecasting tools used, causing manual data entry. This manual

process then creates an output misalignment like forecast being late due to slow manual entry. To deal with this the employees might have to take shortcuts to make up for this delay by guessing the missing numbers leading to data accuracy misalignments.

In a paper by Baker & Singh (2019) identifying the roots of misalignments in an organisation, they identified a number of root causes for strategy misalignments. One of them being how the intentions of a top down process break down. For instance if the intended strategy is unclear the application of a forecast will be unclear, and thus create misalignments and bottlenecks in the execution caused by people not knowing what they are trying to achieve. Another cause of misalignments is ineffective communication. How is the forecasting methodology, its assumptions, and its importance communicated from leadership, the sales, marketing, and operations teams who use the forecasts? Poor communication here is a major inefficiency. It leads to confusion, lack of trust, and the forecast not being used as intended.

Baker & Singh (2019) also identifies a number of bottom up causes for these misalignments. For instance how employees will find and create workarounds when the official routines are not working as intended or meets the employee's needs. An example of this manifesting is if the official routine for forecasting is either clunky, slow, inaccurate or all three employees will create their own workarounds. A salesperson might keep their own spreadsheet, a plant manager might adjust the official numbers based on local knowledge without documenting this action. This creates a misalignment between the official process and routines and what is actually happening.

2.4 Customer Trust and Relationship Stability

While operational inefficiencies and strategic misalignments undermine the forecasting process, the largest impact of these failures often affect the customer, where they manifest as eroded confidence and fractured relationships. This section examines the external consequences of forecasting breakdowns by first establishing the foundational concept of customer trust, exploring its psychological dimensions and the distinction between trust in an organisation versus its individual representatives. It then investigates how trust serves as the bedrock of customer loyalty and long-term relationships, serving as a stabilising force that mitigates uncertainty.

2.4.1 Customer Trust

Customer trust is often viewed from a psychological perspective, where one actor accepts vulnerability based on positive expectations of another actor's behaviour and intentions. Rousseau et al. (1998) argue that trust involves both the potential for cooperative behaviour and the presence of risk, since trust becomes particularly relevant when one party is dependent on the other. One example is when a customer trusts a company to act responsibly and predictably, even when the customer has no

control over the outcome of the relationship. This is why trust is especially important in relationships where the customer must rely on the company's processes and its ability to deliver on time.

Schoorman et al. (1995) further elaborate that trust can be understood through three dimensions, ability, benevolence, and integrity. These dimensions can be linked to the customer's perception that the company is capable of delivering what was promised on time. At the same time, the company should take the customer's interests into consideration and act fairly and honestly in its behaviour towards the customer. Together, these dimensions capture both the relational and performance-based aspects of how customers evaluate a company.

Some studies also show that customer trust in an organisation can be divided into different levels. Doney and Cannon (1997) explain that, in buyer–seller relationships, customers develop trust both in the company they buy from and in its representatives. This distinction is important, as it shapes different forms of trust that can influence future purchase intentions. Ashnai et al. (2016) present similar findings by highlighting the difference between interorganisational and interpersonal trust in business relationships. Their study shows that these two forms of trust are related, but not identical. Customer trust can therefore mean different things depending on the context, but it is generally formed through both direct interactions with individuals and through the company's routines, systems, and long-term behaviour. Customer trust should therefore be understood as multidimensional, shaped by experience, perceptions, and assessments of the company's trustworthiness and competence.

2.4.2 Customer Relationship and Loyalty

Trust has long been a central element in maintaining long-term customer relationships, since a strong foundation of trust can reduce the likelihood that customers switch to a competing company when uncertainties arise. Morgan and Hunt (1994) explain that such relationships are built on two vital components, trust and commitment. When these two components are managed effectively, they strengthen the relationship between the parties and reduce the likelihood of customers seeking short-term alternatives. Trust therefore functions as a stabilising force, as it minimises the need for control and facilitates future cooperation.

Chaudhuri and Holbrook (2001) provide an example through the concept of brand trust, showing that it affects both behavioural and purchase loyalty in relation to brands and business relationships. Behavioural loyalty refers more to the emotional connection and the customer's evaluation of the brand, while purchase loyalty concerns the customer's actual willingness to continue buying from the same brand. The study by Chaudhuri and Holbrook (2001) can therefore be understood as showing that trust affects not only how customers think about and value a company, but also how they behave over time when difficulties occur. This suggests that trust can

influence both the choice of supplier and future purchasing plans, and can therefore be seen as an important link between past experience and future business behaviour.

Both interpersonal and interorganisational trust also strengthen information sharing and commitment, while interorganisational trust influences how willing investors are to invest money and resources in the relationship (Ashnai et al., 2016). This highlights another perspective on trust, it is not only a positive factor influencing behaviour, but also a driving force in making relationships long-term and interdependent. Taken together, these studies show that trust is a decisive factor for loyalty, recurring purchases, and stability. Even when uncertainties arise, if customers perceive a company as reliable and trustworthy, they are less likely to choose an alternative.

2.4.3 Managing the Gap Between Expectation and Reality

Oliver (1980) explains that expectancy-disconfirmation theory suggests that customer satisfaction is created through a comparison between a company's actual performance and the customer's expectations. If the performance does not meet those expectations, negative disconfirmation occurs, which may lead customers to choose another company as they become disappointed and begin to re-evaluate the company's position. This is important from a trustworthiness perspective, as recurring deviations over time affect both the direct customer experience and the customer's view of the company's reliability and ability to perform.

One factor that can improve customer satisfaction is service recovery. This means that the negative effects of a service failure can be reduced if the company manages to resolve the problem effectively, leading customers to feel better after the issue has been addressed and making them less likely to switch to a competitor (Maxham, 2001). De Matos et al. (2007) further explain in their analysis that the effects of service recovery are most visible in customer satisfaction, while the impact on repurchase behaviour may vary and the effect on company image is more limited. This suggests that operational disruptions can be managed, but they often still create uncertainty in the future relationship between the two parties.

Customer reactions can also be influenced by how a situation is perceived, which Khan and DePaoli (2024) demonstrate in relation to shelf shortages. Their study shows that when an unexpected shelf shortage occurs, customers are more likely to choose an alternative product from the same brand, as this helps reduce negative feelings in the purchasing situation. However, their results also show that recurring or expected shelf shortages over time increase the likelihood that customers switch brands or even move to another company altogether. This means that such problems do not only represent a logistical issue, but also signal to the market how reliable the company is perceived to be. Zocco and Pedeliento (2026) further elaborate on a similar point by showing that quality and warranties can help customers feel more assured, whereas insecurity or perceptions of high risk weaken trust and reduce intentions to continue buying from the same company.

Operational disruptions, shelf shortages, and poor service therefore do not only create immediate and future dissatisfaction, but also increase the risk that customers switch to another company that they perceive as more reliable. If such problems continue over a longer period, they make it increasingly difficult to maintain trust over time.

2.4.4 Eroding Trust Through Inconsistency

Wagner et al. (2009) explain that misalignments become particularly harmful when customers experience a gap between what a company actually does and how it communicates its actions, which they describe as corporate hypocrisy. As an example the authors show that inconsistency between a company's stated CSR commitments and its observed behaviour can create a stronger perception of hypocrisy and lead to a more negative attitude towards the company. This is further developed by Delmas and Burbano (2011) in their research on greenwashing, where excessive and misleading environmental claims are shown to affect both trust and legitimacy. When such misalignments and signs of hypocrisy become too extensive, customer confidence is damaged by the gap between the company's words and actions.

Coombs (2007) adds another perspective through situational crisis communication theory, arguing that the degree of perceived responsibility is crucial for how a company's reliability and image are judged during a crisis. For example, if customers believe that a problem should have been controllable and could have been prevented, this can damage the company's image and reduce customer trust. Coombs (2007) theory is relevant to Wagner et al. (2009) discussion of misalignments, since customers often perceive inconsistencies, unclear communication, and a lack of transparency as failures that the company should have managed better. When a company is seen as inconsistent or as acting in its own interest, this can affect the relationship on several levels at the same time, leading customers to question the foundation of the collaboration (Ashnai et al., 2016).

3

Methods

This section outlines the methodology applied in this master thesis, which clarifies the qualitative research design that was chosen, the approach for the case study, and the different methods used for managing, collecting and analysing the empirical data from Dagab. The methodology section also includes the discussion for trustworthiness, limitations for our methodology, and ethical considerations that were taken into consideration. This helped us to provide transparency of how our study was managed and how we found our findings. This helped us to understand Dagab's end-to-end forecasting process and show the link to the different research questions.

3.1 Research design

Because the purpose of this master's thesis is to examine and analyse Dagab's current end-to-end forecasting process, from the capture of customer demand signals through to procurement decisions, the approach is qualitative. Rather than being purely inductive, the study can be described as abductive, as it moves iteratively between empirical observations and existing literature in order to build understanding of the studied process (Clark et al., 2021). This helps to improve the depth and adjusting if necessary for the interviews with the key participants with their different views. This study is designed as a qualitative single-case study focusing on Dagab's end-to-end forecasting process, primarily within DEX. The study follows a cross-sectional and observational design, meaning that it examines how the process operates during the studied period without intervening in it (Yin, 2018). This thesis will follow a coordinated set of stages, beginning with formulating relevant research questions, selecting interviewees, and subsequent steps. The different steps used are shown in Figure 3.1.

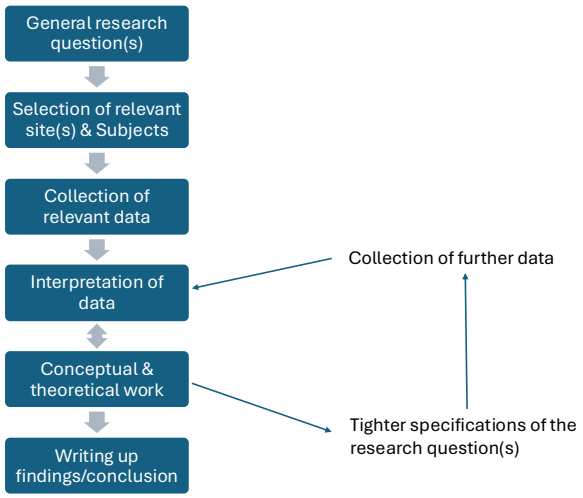

Figure 3.1: The iterative process of qualitative research design (Bryman et al.,2021)

3.2 Litterateur review

In order to build a theoretical background for our study and answer our research questions, an initial literature search was conducted during the early stage of the study. This early search mainly focused on methodological literature, peer-reviewed articles, and relevant sources related to forecasting, process integration, bottlenecks, inefficiencies, trust, and other topics that helped us address the different research questions. The relevant literature was primarily identified through the Chalmers Library and its connected databases and was further complemented by searches in databases such as Scopus.

3.3 Data collection

3.3.1 Sampling strategy and participant selection

The data collection followed a qualitative case study approach, where multiple data sources were combined to enhance trustworthiness and enable triangulation between what is done, said, and documented during the studied process (Yin, 2018; Voss et al., 2002). The choice of data was based on criterion-based purposive sampling, aiming to include interviewees who could provide valuable information and transparency across different steps in the process (Palinkas et al., 2015). So the choice of participants was formed with this purpose since our study are focusing on understanding their complex, cross-functional process rather than only measuring the separate problem on their own. It was therefore important to choose participants that could answer and present different parts of the process, since they had hands on insights for how the forecasting process, information handling and decision making is actually working in reality. This helped to both understand how the process was designed and how it works on daily basis.

Recruitment and access were managed through the organisation's contact routes and planned with guidelines to identify suitable participants while addressing the ethical considerations and confidentiality. In total, this study had in total 10 interviews with participants from different departments, since it helped to validate the information we got, but also give different perspectives for the different steps in the end-to-end forecasting process which the study is about, all from demand signals to the actual purchasing. The participants for our study was divided into three functional groups. The first one (P02-P05) was the customer near operational roles, which had responsibility for validating the forecast and handling the launches. The second group (P06-P08) was customer interface and coordination roles, and they were the ones that had responsibility for handling customer dialogues and handovers. The final group (P01, and P09-P11), had roles connecting to downstream process and systems, and their responsibility was mainly for system coordination. These groups was selected due to that they span the entire end-to-end process. Through including different departments, it helped to form better conditions to identify different bottlenecks, inefficiencies, and potentials for improvements across the departments which were included in this study.

Figure 3.2 provides an overview of the process mapping and analysis, which combines primary data (interviews and observations) with secondary data (documents/archival material and system/transactional data). One of the departments was especially interesting for this study since they make up for the majority of the participants and are a central part. It is an important aspect since they are having direct contact with their individual customer, where they discuss for example the forecasting, and the customers expectations could therefore be comprehend as a link for clear communication, availability, and delivery precision, which helps to understand the reliability in the current process.

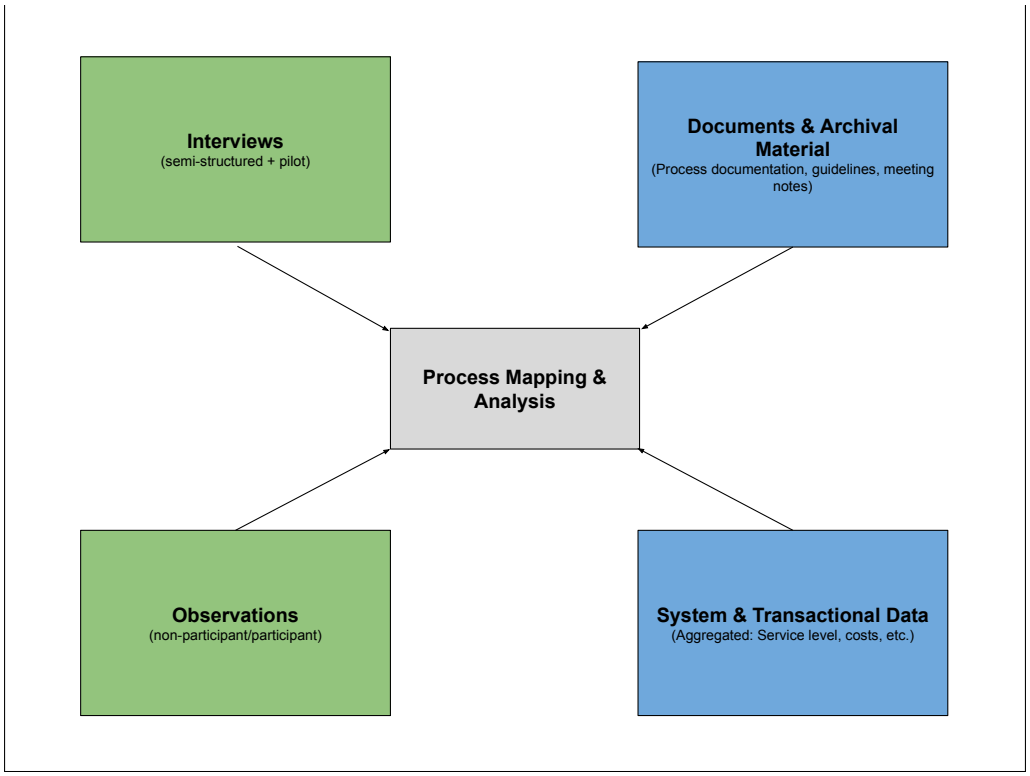

Figure 3.2: Overview of data sources and triangulation translating into process mapping and analysis

3.3.2 Interviews and observations

In the early stages of the study, observations were conducted, which meant that we followed the department into their meetings primarily to listen and ask follow-up questions, but we also had unstructured pilot interviews as an exploratory step for this study, in order to identify central actors in the company before completing the interview guide (Van Teijlingen & Hundley, 2001). The Observations was used primarily in the early stages in order to get a better understatement for how the process actually works in practice, but also to understand how the communication flows, working moments, and handovers between the different functions. The difference between participating and non-participated observation was important since non-participated observations helped to give a more natural view of the execution of the process, meanwhile participating observations helped us clarify confusions that

we had, but also to deepen our understatement of certain moments. The participating observations had risks, because it could affect the meeting and information for the process, and therefore was taken into account in the analysis. In this study, non-participant observation referred to observing meetings and process moments without active participation, whereas participant observation involved interaction that may have influenced the meeting or process.

The majority of the empirical data were gathered afterwards through semistructured interviews, which helps to compare the answers with the different actors but also keeps flexibility if necessary to ask follow up questions (Bryman et al., 2022). A thematic guide was used,which was developed from the theory, and the interview is seen in Table 3.1, which was carried out on-site or via Teams, and with consent, the interviews were audio-recorded and later transcribed and pseudonymised (Brinkmann & Kvale, 2015). The collection of data is an ongoing process until we feel that it has covered the different areas to answer the different research questions.

Interviewee	**Date**	**Length**
P01	23/3	53 min
P02	18/3	50 min
P03	25/3	45 min
P04	17/3	59 min
P05	18/3	60 min
P06	24/3	45 min
P07	23/3	52 min
P08	2/4	54 min
P09	20/3	60 min
P10	25/3	67 min
P11	23/3	42 min

Table 3.1: Overview of the interviews

As mentioned before, observations were made and can be seen in Table 3.2 in order to complement the interviews to get more understanding of the different processes, and the observations were mostly of relevant meetings with the different teams, but also with customers, and with their approval, we documented the observations. After the documentation, it was necessary to do an analysis of it, in order to find guidelines and process descriptions, which later increases traceability but it requires criticism of the source and specific selection criteria in order to get good documentation (Bowen, 2009).

Short observation comments	Date	Length
Conducting a non-participant observation during which the participants discussed the forecasting process for certain categories and any problems that might arise	10/2	60 min
Conducting a participant observation, through which we gained more information about the central problem that we are going to focus on. We also asked short questions in order to gain a better understanding of the different participants' perspectives.	4/4	50 min
Conducting a participant observation where we received updates on how the current end-to-end forecasting process was progressing, while also allowing the participants to ask us questions at the end in order to assess our understanding of the different functions within the process.	26/4	60 min

Table 3.2: Overview of conducted observations

3.3.3 Document and system data

After each documentation was done from the data collected from Dagab, it was important to analyse it, since it helped us identify the process and understand the guidelines. The purpose of the document and system data was to create a better understanding of how the process was formally structured, but also how it functioned in practice. This material helped identify indicators such as lead times, waiting levels, and handovers, which made bottlenecks, inefficiencies, and information gaps in the actual process more visible. This helped to enhance the traceability, but it requires source criticism and specific selection criteria in order to provide good documentation (Bowen, 2009). This will be further discussed in the data analysis procedure.

It was necessary to gather data from Dagab which included waiting levels, lead times, etc., as a secondary source to get an understanding and start analysing the actual organisational activity. Where system or transactional data were used, the extraction logic and key variables were documented to ensure transparency in the link between data source, analysis, and results (Yin, 2018). When the data collection activity was done, a short collection log was created which included Date, Type of data, role of interviewee/participant and short summary of findings. This according to Saunders et al. (2019) is done since it helps to get a clear audit trail between the data and analysis.

3.3.4 System description

The study adopts a systems perspective in which Dagab's end-to-end forecasting process is viewed as a link between customer demand, forecasting, and purchasing decisions. The system is therefore understood as a continuous process that includes different activities, actors, information flows, and decision-making, where shortages or unexpected adjustments may affect one or several functions within the process.

The focus is on the functions and departments that are influenced by how demand signals are handled, interpreted, and processed before being translated into forecasting and purchasing decisions. The system boundaries therefore primarily include these parts, as well as the relationships and information handovers between them, since these are most relevant to the purpose of the study. At the same time, functions outside the scope of the study, even if they may have a direct impact on the process, are not included.

The purpose of the system description is therefore not to capture the entire organisation, but rather to clarify the logic of the forecasting process and its information flows. Figure 3.3 presents an example of how the forecasting process and information move through the different functions.

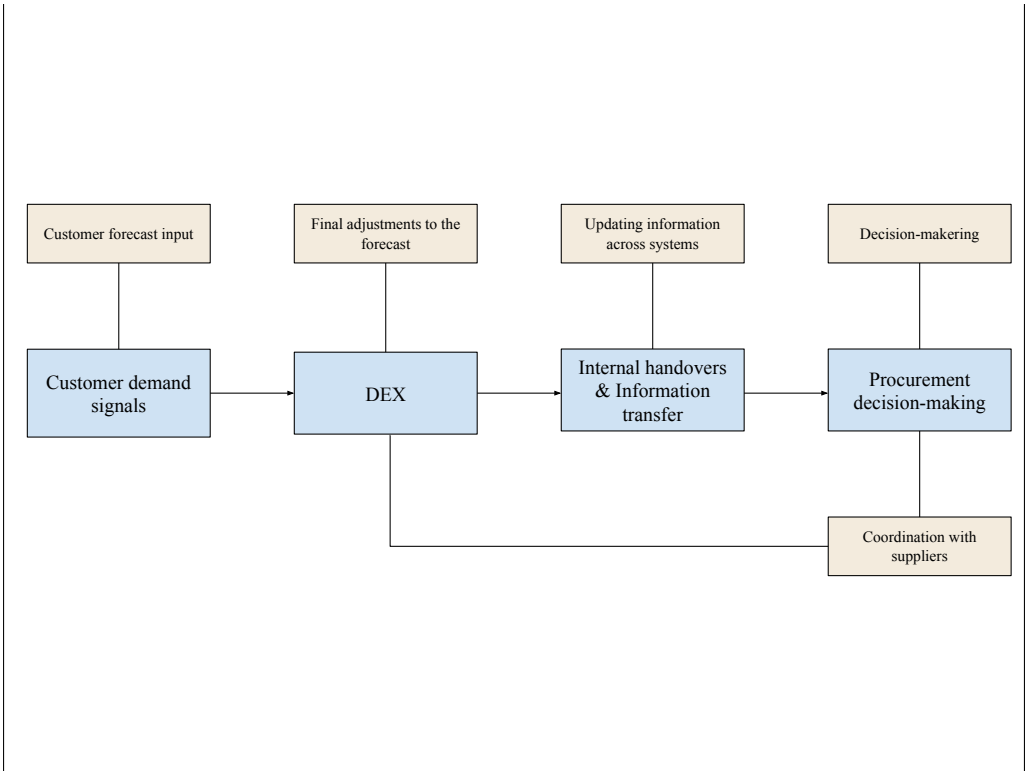

Figure 3.3: Example of a conceptual system mapping of the studied forecasting and procurement process

3.4 Data management

This segment explains how the study data were handled throughout collection, storage, processing, analysis, and (where applicable) sharing. This is important because it strengthens quality, responsibility, and traceability in data handling (Michener, 2015; SND, 2025a). The study mainly generated qualitative empirical material from interviews, observations, and internal documents to support process mapping and answering the research questions (SND, 2025a). Depending on what type of data that was collected from Dagab, it was divided into different folders in order to increase traceability throughout the study and the data collection was limited to what was necessary for the study purpose in line with data minimisation principles.

All the different files such as audio files, transcripts, documents, and observation notes were stored in a secure storage environment, with access restricted to the authors to ensure access control and confidentiality (SND, 2025b; IMY, 2025). Interview and observation materials were pseudonymised using participant codes, for example P00 - Pn, and if a code key was used, it was stored separately with additional access restrictions (IMY, 2025). This helped us to separate information that was identified directly from the analytical material and for that reason helped us during the process. Data retention and deletion followed the university's routines and applicable decisions, meaning that collected material is deleted only when and if permitted according to institutional requirements (SND, 2025b).

3.5 Data analysis procedure

3.5.1 Data preparation

Interviews were transcribed and pseudonymised, and all material (interviews, documents, and system extracts) was organised and documented continuously in an analysis log. The analysis was conducted stepwise using a systematic coding and thematisation approach aligned with thematic analysis, moving from familiarisation to codes and themes (Braun & Clarke, 2006).

3.5.2 Coding and thematisation

First, the material was read repeatedly to build an overall understanding of the process and the recurring issues. Second, meaning units were coded and grouped into themes capturing bottlenecks, information gaps, and misalignments. Third, themes were reviewed and refined, and key analytic decisions were documented to maintain traceability between raw material, coding, and findings, which can be seen in Figure 3.4 (Braun & Clarke, 2006).

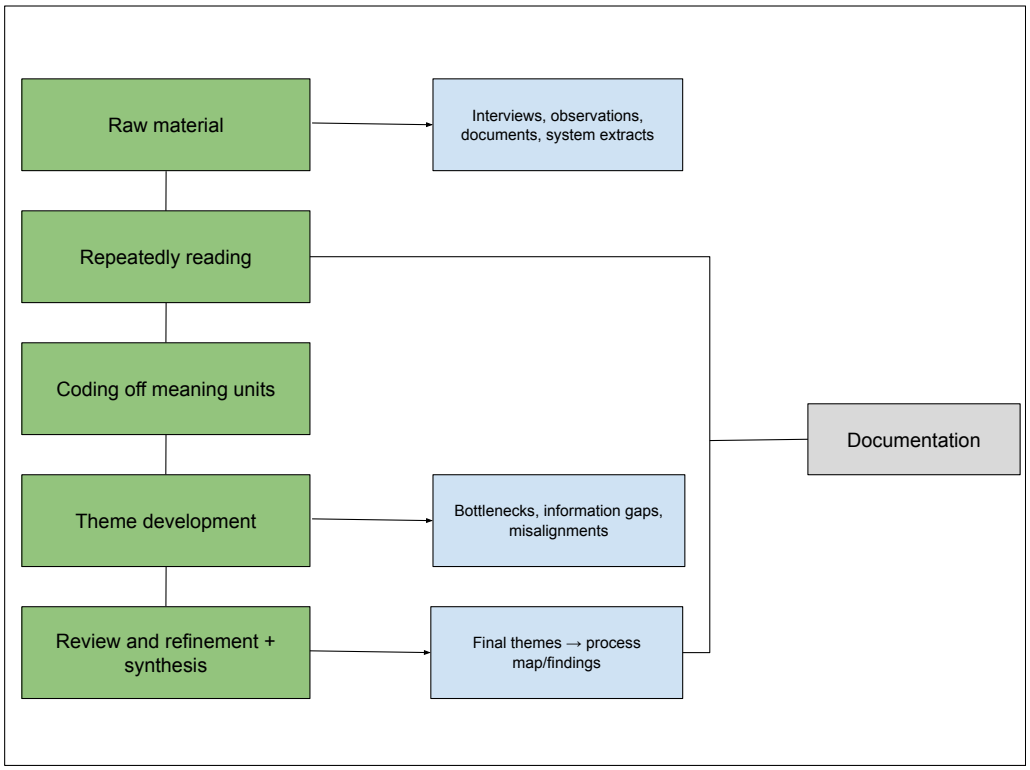

Figure 3.4: An overview of the qualitative data analysis procedure and documentation

3.5.3 Linking findings to the research questions

To ensure a clear link between findings and the research questions, themes were structured according to the research questions, which supported decisions and interpretation of both primary and secondary sources. This is illustrated in Figure 3.4, which shows how codes derived from the empirical material were grouped into themes and subsequently linked to the research questions. Figure 3.5 provides a clearer overview of how the analysis moved from empirical data to broader themes and, ultimately, to the research questions. The themes which described the processes different steps, information flows and the allocation of responsibilities was uppermost connected to RQ1, since it would help us get a clearer picture of how Dagab's end-to-end forecasting process is built. For RQ2, it was themes connecting to bottlenecks, inefficiencies, information gaps and misalignments in the current process between the different steps/functions. Themes that was related to RQ3, was built around how consequences can affect the trust from the customer, for example, late deliveries or uncertainties in the planning. And later when we had collected the results, it was the main factor for the last theme for RQ4. Finally, findings were synthesised into an end-to-end process map and triangulated across data sources before being reported by research question (Yin, 2018).

By following these steps, the gathered material was structured into themes and further processed and analysed into findings. In this way, it helped us to understand the connection from raw data that was gathered, into codes and themes, to the separate research questions, which helped to see the differences from how it was before when analysing the current situation, the different problems in the process, but also the possibilities for improvements and finally provide suggestions for improvement to Dagab. In this way, when mapping the process, it would show more than only a visual representation of the workflow, but also act as a tool to identify some of Dagab's bottlenecks, issues and misalignments between the different functions.

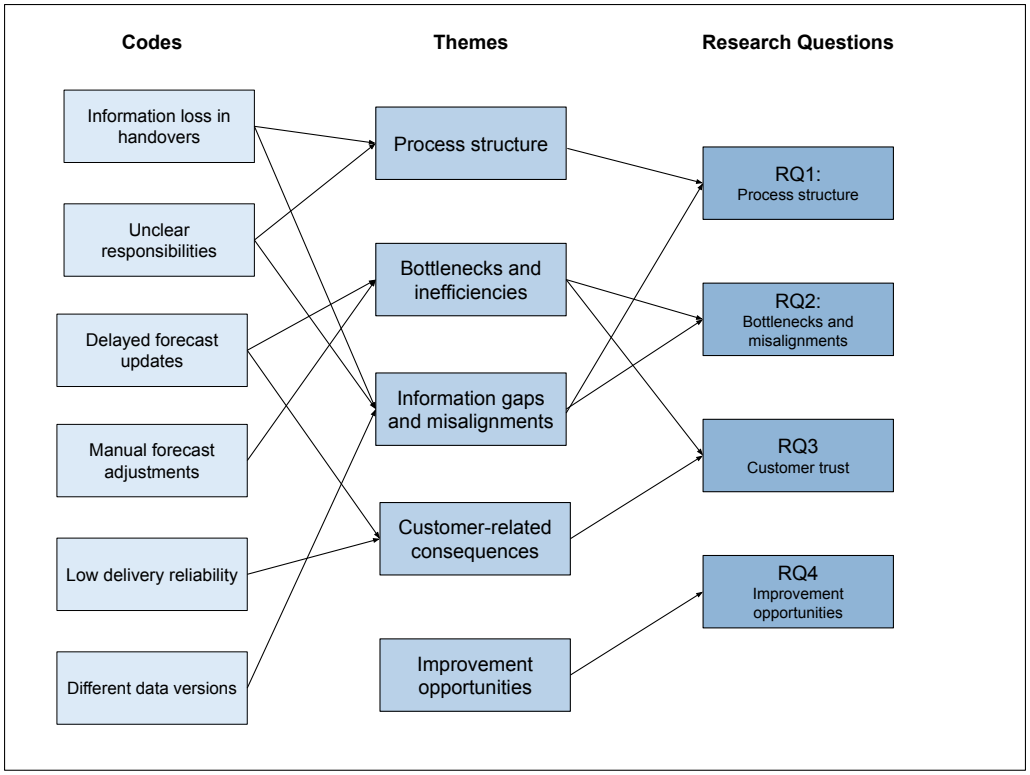

Figure 3.5: Analytical process of linking empirical codes, themes, and our research questions

3.6 Quality and limitations

3.6.1 Trustworthiness

Lincoln and Guba (1985) explained that the qualitative studies are often evaluated through trustworthiness rather than only assessed through validity and reliability, and the trustworthiness is linked around these four criterias. Such as dependability, confirmability, credibility, and transferability.

Dependability is strengthened when the research process is described in a traceable and transparent way, including the methodological choices and the analytical steps used (Shenton, 2004). Yin (2018) instead refers to analytical generalisation

in case studies, meaning that findings are generalised to theory rather than tested statistically across situations. For this study, dependability was enhanced by maintaining a continuous analysis through our data collection process and following the stepwise coding procedure which is described in section 3.5. Confirmability relates to conclusions having a clear link to the data and being supported by transparent documentation throughout the study (Lincoln & Guba, 1985). The confirmability was managed by making certain that our analytical conclusions were traceable to specific empirical codes and themes. Credibility is strengthened when findings can be linked to empirical material and supported by multiple sources, for this study, triangulation between interviews, observations, documents, and system data (Figure 3.2) helps reduce the risk that results reflect only a single source (Shenton, 2004; Voss et al., 2002). Transferability concerns enabling readers to judge relevance in other contexts through clear contextual description rather than numerical generalisation (Lincoln & Guba, 1985). In order to allow transferability, our study provides a detailed contextual descriptions of Dagab´s organisational setting, the process for menu matrix, which helps the reader to evaluate and understand the relevance of the findings in other organisations when it comes to cross-functional forecasting contexts.

3.6.2 Methodological limitations

As this study focuses on a single organisation, the findings could not be directly transferable to other organisations contexts, which is a limitation to our study (Vetenskapsrådet, 2024). In order to address this limitation, the study was designed to include different functions and data sources within the process, which created better conditions for capturing different perspectives even though the study was limited to a single case. The selection of interviewees may also be influenced by the "gatekeepers", which can lead to some perspectives not being included (Shenton, 2004). This risk was addressed by selecting participants with different roles and varying levels of influence on different parts of the forecasting process, so that the study was not based on a single perspective or one specific function.

The Observations can likely create an "observer effect", meaning that their behaviour could be influenced by the awareness of being observed, and interviews can be influenced by impressing appeals or other situational factors. These types of characteristics were considered in the explanation of the empirical material. For the document analysis, it may reflect on the formal intentions rather than actual practice, making source criticism and clear selection criteria important (Bowen, 2009). To address this, the data was managed, processed, and interpreted in relation to other data sources rather than being treated as an isolated part of the process.

3.7 Ethical considerations

Ethical considerations are a vital part of this study, and the participant's rights were respected throughout the research process (Vetenskapsrådet, 2024). Participation was voluntary and the interviewee could choose to withdraw from the study either during the interview or afterwards. Therefore, before starting any recording, it was necessary to obtain informed consent and ensure that participants knew they could ask to stop the recording at any time and withdraw their participation if they felt uncomfortable. When documenting the recordings, we aimed to minimise the collection of personal data, and the reporting was written in a way that reduces the possibility of identifying the interviewee, therefore, pseudonymisation and confidentiality were necessary (Wiles et al., 2008; IMY, 2025).

Also, the personal data was handled in accordance with the GDPR principles, for example with data minimisation, purpose limitation, and appropriate security measures, meaning that only data necessary for the research purpose was collected and processed (European Union, 2016). To reduce participant risk, reporting avoided contextual details that could enable indirect identification to the interviewees, such as their specific roles, moments, etc, and quotations were selected and slightly modified where necessary to protect the interviewees at Dagab's confidentiality (Wiles et al., 2008).

4

Empirical Data

This chapter presents the material collected from the interviews, focusing on how the forecasting and purchasing process are connected to the menu matrix and new product launches. The empirical material is structured around the five themes used in the coding, shown in Figure 3.5: process structure, bottlenecks and inefficiencies, information gaps and misalignments, customer-related consequences, and improvement opportunities, which are linked to the study's different research questions. Each respondents is further divided into three respondent groups P02-P05, P06-P08, P01 & P09-P11, based on their roles and organisational affiliations. Table 4.1 shows the respondents division based on their roles and organisational affiliation, to understand the different perspectives on the forecasting and purchasing flow. P02-P05 explains more from an operative forecasting perspective, P06-P08 tells from a customer close collaboration and strategic perspective, and the last group P01 and P09-P11 describes from a process and systematic perspective. This division helps to compare the different groups on what is a repetitive problem, such as handovers, gaps in the information, and late actions.

Groups	**Functional position in the process**	**Main perspectives in the process**
P02–P05	Customer near operational roles	Launch handling, manual adjustments & forecast validation
P06–P08	Customer interface & coordination roles	Strategic coordination, early dialogue & handovers
P01 & P09–P11	Downstream process & system roles	System dependencies, handovers & process management

Table 4.1: Grouping of interview participants and their roles in the process

In order to complement Table 4.1, Figure 4.1 visualises the respondent groups in relation to forecasting and purchasing process, and the purpose of the figure is to show not only their organisational affiliation but also which position they are in for the end-to-end flow. P06-P08 are placed early on due to that they have early contact and coordination with customer, P02-P05 shows a more operative working method, and P01 together with P09-P11 shows a more downstream process and system perspective connected to the handovers and purchasing related decisions.

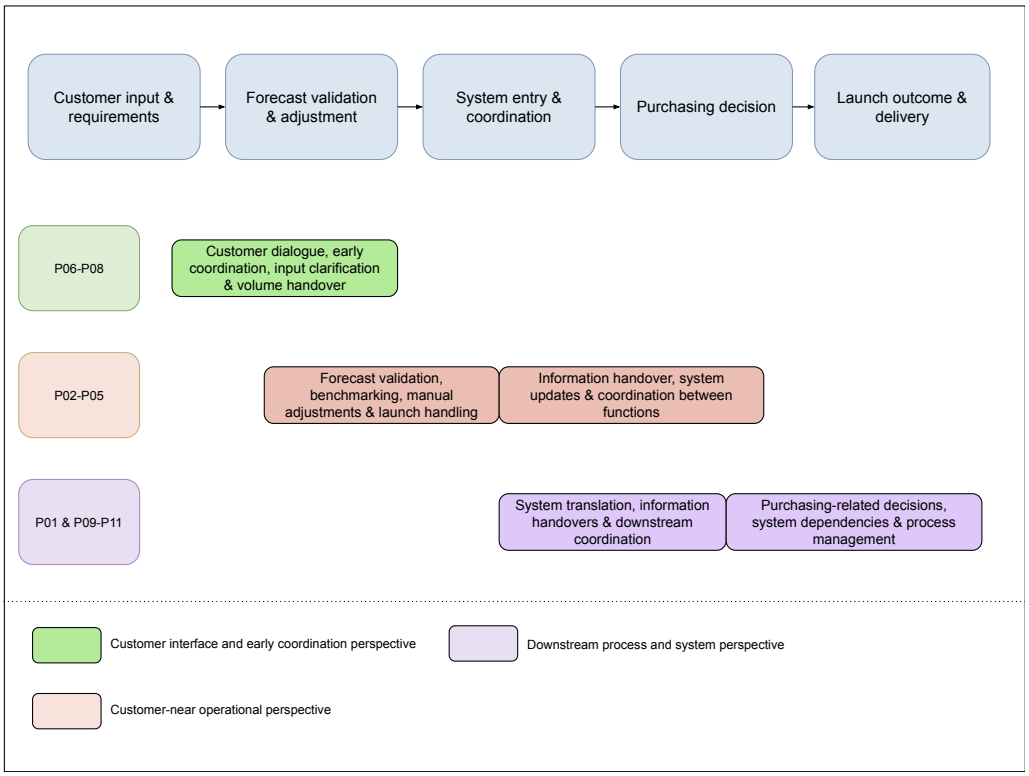

Figure 4.1: As-is representation of the forecasting and purchasing process across functional interfaces

4.1 Process structure

This theme concerns how responsibilities and information are transferred between functions during the forecasting and purchasing process. Across the interviews, respondents describe a broad sequence in which customer input is translated into internal forecasts, entered into systems and planning tools, and then used as a basis for purchasing decisions. However, the interviews also show that the process does not function as a simple step-by-step flow in practice. Instead, it involves several actors, repeated coordination, and informal follow-ups across functions. This becomes particularly visible in menu matrix-related cases, where several interdependent articles must be available at the same time for the customer offer to function as intended.

Respondents P02-P05 describe the process from a day-to-day operational perspective, especially in relation to new product launches, campaigns, and adjustments to forecasted volumes or article plans. According to these respondents, the process most often begins when Dagab receives customer demand signals linked to a new product, a campaign, or a planned change in the menu matrix. However, these signals are often incomplete. P03 explains that forecasting is sometimes based on customer input and sometimes carried out independently, stating that it is "sometimes based on the input from the customer, and sometimes entirely on my own". P05 describes a similar pattern and notes that customer input often has to be validated before it can be used, explaining that "we often get input from a customer

on the most important articles, but we need to validate it".

The interviews show that this validation is an important part of the work rather than a minor control step. Several respondents describe situations in which customers provide volume estimates that appear unrealistic in relation to the season or product category. In other cases, no volume estimates are provided at all, which means that Dagab must determine the forecast basis internally. P04 explains that this responsibility often falls on the person coordinating the forecast work, who then needs to adjust the forecast and benchmark it against similar products. This is described as time-consuming and highly manual. As P04 states, "The process for forecasting implies to retrieve data manually, which lies in an excel file, where you do your own calculations or just copy from files from before, but this is manual work throughout" (P04). Manual forecast adjustments therefore appear as a recurring feature of the process rather than an occasional deviation.

A recurring pattern in the accounts of P02-P05 is that menu matrix-related cases are more vulnerable than ordinary campaigns or standard product launches. Respondents describe this as a consequence of several articles together forming one complete customer offer, which means that a shortage in one component may disrupt the entire launch. This creates a greater need for monitoring and follow-up throughout the process. The interviews also indicate that responsibility for providing input, validating volumes, updating forecasts, and placing orders is formally distributed across different functions, but that the practical responsibility for driving an issue forward often shifts to the person who first identifies a risk and acts to prevent problems from escalating.

Respondents P06-P08 describe the process less from a daily operational forecasting perspective and more as a coordination flow between customers, suppliers, and internal functions. Their accounts mainly concern the early part of the process, meaning the stage from initial customer input and launch planning to the transfer of forecast information to later internal actors. P07 and P08 describe the overall flow as one in which a file is received from the customer, volumes are handled internally, the system is updated, and the information is then passed on to the purchasing team. As they explain, "We receive a system submission file... the coordinators get benchmark articles and volumes... they enter it into the system... and then it goes on to the purchasing person who carries out the purchase" (P07 & P08). From this perspective, the early dialogue with the customer is important because the later process becomes more reliable when the input is complete and clear from the beginning. The respondents explain that forecast volumes alone are rarely sufficient. They also need information about store location, customer-specific adjustments, end dates, and whether the customer accepts some degree of residual stock at the end of the campaign.

For P06-P08, the process appears structured on paper, but in practice its functioning depends heavily on individual experience, judgement, and direct communication. P07 and P08 explain that handovers are not always handled in the same way. In-

stead, the quality of the handover often depends on whether the individuals involved judge an article to be particularly important. As they note, “For a major hero article, the coordinators typically communicate directly with the purchasing person and explain the importance. Otherwise, there is no communication at all, it simply goes into the system and that is that” (P07 & P08). This suggests that some handovers rely mainly on system entry, while others are reinforced through direct person-to-person communication.

For group P01 and P09-P11, the process is described more as a chain of handovers between functions, with emphasis on how menu matrix-related information moves from the customer through several functions, systems, and decision points before reaching the purchasing side. P09 describes the process as one in which the customer communicates what is needed, when it is needed, and in what quantity. This is then discussed internally for validation before the input is passed on to later planning stages and ultimately to purchasers.

P11 explains that the process is standardised in the sense that it uses a shared Excel template and established communication channels, but also describes it as simple and highly manual in structure. As P11 states, “It is really very analouge... it relies on always forwarding the right information and the recipient also being aware, because it is an entirely manual flow” (P11). P10 adds a system-related perspective and explains that the process cannot be understood separately from the underlying forecasting and purchasing systems. The forecast must not only be entered into the system, but also work correctly across several connected systems. According to P10, this becomes particularly difficult for new articles with limited historical data.

4.2 Bottlenecks and inefficiencies

This theme concerns delayed forecast updates and manual forecast adjustments. Across the interviews, bottlenecks are rarely described as isolated problems located at one single point in the process. Instead, respondents describe how difficulties early in the flow create additional manual work, delayed actions, and coordination problems later in the process.

Respondents P02-P05 describe the bottlenecks as occurring mainly at the beginning and at the end of the process. In their accounts, the beginning refers to the stage where customer demand signals are received and translated into a forecast basis, while the end refers to the stage where purchasing decisions are made and orders are placed. The early part of the process is described as particularly vulnerable when customer input is incomplete. Respondents repeatedly point to difficulties in obtaining sufficiently detailed information about campaigns, marketing efforts, lead times, and supplier capacity. When such information is missing or arrives late, the forecast must be based more on internal judgement and comparisons with similar products than on complete customer data. This increases the need for manual adjustments and often leads to delayed forecast updates when later sales patterns indicate that the original forecast basis was weak.

P04 describes this pattern as a cascade effect, stating that “It starts with us not getting all the information... which means we end up in a kind of appeal situation. We get a snowball effect, and once that starts it only grows” (P04). P02 further explains that another bottleneck occurs in the purchasing stage, where the order is to be placed. As P02 states, “The most common point where things go wrong is in the final stages, when the purchasing person is supposed to order the goods” (P02). In menu matrix-related launches, this becomes especially critical because one missing component may interrupt the launch of the entire customer offer.

Respondents P06-P08 describe two recurring bottleneck patterns. The first concerns late or incomplete customer input. P06 explains that “If I am honest, the delays most often come from the customer side. And even when the material arrives on time, it is not always quality assured” (P06). The second pattern concerns the later internal handover to purchasing, where delays in purchasing decisions may affect the launch because products need to reach the customer on time. P07 and P08 identify the transfer of information from the coordinating functions to the purchasing team as the most common failure point. They describe the consequences of this as follows: “If something is not purchased, particularly the most critical articles, that is when I end up in crisis meetings... i cannot count how many crisis meetings i have sat in over three years” (P07 & P08). The same respondents also describe a structural imbalance between functions. Customer-facing roles prioritise service levels and sales, while purchasing roles are assessed in relation to both service level and waste reduction. This creates conditions in which priorities may conflict when high volumes are considered necessary to secure a new launch, a campaign, or a menu matrix-related delivery.

For P01 and P09-P11, bottlenecks and inefficiencies are described primarily in relation to process dependencies, system coordination, and knowledge gaps between functions. P09 explains that bottlenecks appear at both ends of the process. Weak customer input affects the starting point, while the later stage depends on several actors acting quickly and correctly for the launch to be secured. As P09 states, “I would say at the beginning and the end... someone may be absent, someone has missed the message, and then it just falls away” (P09). P01 further explains that some inefficiencies stem from knowledge gaps, especially when purchasers do not receive sufficient onboarding to understand the importance of menu matrix-related flows or the consequences that may arise if one component is missing. P11 highlights delays linked to article data, listing conditions, and other prerequisites that need to be in place early in the process. P10 adds a system perspective and explains that the main challenge is not simply entering forecast data into the system, but ensuring that it works correctly across the interconnected forecasting and purchasing systems. According to P10, this is especially difficult for articles where launch setup, hierarchy mapping, and assortment registration must all be aligned before automated forecasting can be generated.

4.3 Information gaps and misalignments

This theme concerns how information is lost, reinterpreted, or handled differently as it moves between functions in the forecasting and purchasing process. Across the interviews, respondents describe these problems not primarily as failures by individual employees, but as situations in which information is understood differently across organisational boundaries. In this sense, misalignments arise when functions work with different interpretations of the same input, data, or timing.

Interviewees P02-P05 describe information gaps as arising mainly after the forecast has already been established internally. Several respondents explain that the forecast they initially create is not always the version that later guides action in the process. According to these respondents, this happens when information does not reach the relevant recipients, is interpreted differently by later actors, or loses part of its operational significance during handovers. One example raised in these interviews is that a product may appear to represent only a small volume in the overall forecast, while in practice it is critical because it forms part of a complete menu offer. If later functions do not recognise that operational importance, the article may be treated as less urgent than it actually is.

Interviewees P06-P08 describe misalignments as depending heavily on how individuals choose to communicate and escalate information in practice. P08 explains that some critical products are communicated directly to relevant people in purchasing, while other products are only entered into the system without further direct contact from DEX. In this way, the handling of important information is not always standardised, but varies depending on how the situation is judged and by whom.

P07 further describes these misalignments as both external and internal. Externally, they arise when customer input is late, unclear, or based on assumptions that differ from Dagab's internal planning assumptions. Internally, they arise when different functions prioritise different operational goals. P07 points out that DEX places strong emphasis on service level and sales, while purchasing is evaluated on both service level and waste reduction. This does not necessarily mean that the functions work against each other intentionally, but it does create a situation in which the same case may be assessed differently depending on functional priorities. In that sense, differing performance logics can contribute to misalignment between functions.

Interviewees P01 and P09-P11 describe information gaps mainly in relation to how data is used and interpreted across systems and functions. P10 explains that different functions access and use system data in different ways, which means that they do not always attach the same meaning to the same information. According to this account, the consequence is often additional communication aimed at clarifying what a figure, field, or system signal actually means before action can be taken. P10 describes this as the functions effectively speaking different languages because they interact with the systems in different ways.

P10 also describes a more technical type of information gap. If a new article lacks an assortment listing, or if a valid new-item forecast cannot be generated in the system, there is no system-generated forecast that can be overridden with figures from the menu matrix. In such cases, purchasing must instead order manually on the basis of underlying documentation. This increases both manual workload and process vulnerability. Furthermore, P11 highlights a recurring conceptual gap related to dates. A date field interpreted by one function as the first delivery day to the store may be interpreted by another as the date by which goods must already be in stock. As a result, actors may believe they are aligned while in practice working towards different operational deadlines.

4.4 Customer-related consequences

This theme concerns how internal process problems become visible to customers and affect delivery performance, coordination, and the customer relationship. Across the interviews, respondents describe these consequences as particularly serious in menu matrix-related launches, where one delayed or missing product may affect the launch of the entire customer offer rather than a single article only.

P02-P05 describe the customer-related consequences mainly in operational terms. According to these respondents, process problems become visible through shortages close to launch, urgent customer questions, and unstable store ordering patterns when the planned flow does not work as intended. A recurring point in these accounts is that customer-facing flows are time-sensitive, which means that even a short disruption may create noticeable downstream effects. Stores may place extra orders, demand patterns may shift, and the internal process becomes more reactive and difficult to manage. In this way, the consequences are described not only in terms of reduced delivery reliability, but also as increased coordination work and a greater need for short-term problem-solving.

P06-P08 describe the customer-related consequences both in-store and at the relationship level. P08 explains that customers react strongly to changes in service level, fill rate, delivery timing, and perceived stability, and notes that they "scream" when service levels become too low. In this account, the consequence is not only the operational problem itself, but also how the problem affects the customer's confidence in Dagab's ability to manage the situation. P08 therefore emphasises the importance of being transparent and taking responsibility when errors occur, stating, "... I am always very honest... 'we have made a mistake'... and apologize..." (P08). This suggests that trust is shaped not only by whether a disruption occurs, but also by how Dagab communicates and responds when it does.

P07 describes a similar pattern and explains that customers may accept occasional deviations, but that repeated problems or unclear explanations create broader frustration. In such cases, the consequence extends beyond a single missing or delayed product and instead affects the overall perception of the collaboration. The problem then shifts from being a concrete delivery issue to becoming a more general

uncertainty regarding reliability and cooperation.

P01 and P09-P11 describe customer-related consequences mainly as a mismatch between what customers expect from the flow and the complexity of the internal process required to deliver that outcome. P09 explains, for example, that customers often assume that products will simply be available when needed, while the internal flow is dependent on inventory levels, lead times, supplier capacity, and several handovers between functions. P10 adds that some problems are also difficult to interpret in the data, because demand in these flows may reflect delivered volume rather than actual end-consumer demand. This makes it more difficult to determine the appropriate response once service levels have already been negatively affected.

4.5 Improvement opportunities

This theme brings together the respondent's suggestions for how the forecasting and purchasing process could be improved. As illustrated in Figure 3.5, these suggestions relate to all six underlying codes, namely information loss in handovers, unclear responsibilities, delayed forecast updates, manual forecast adjustments, low delivery reliability, and different data versions. Across the interviews, the proposed improvements mainly concern reducing manual forecast work, clarifying responsibilities, improving handovers, and creating a more shared understanding of how information and data should be interpreted and acted upon.

Respondents P02-P05 describe improvement opportunities mainly in terms of better traceability, clearer decision checkpoints, and greater transparency after handovers. More specifically, they ask for clearer ways of seeing whether information has been received, understood, and acted upon after being passed to another function. They also describe a need for better customer input at the start of the process. P04 explains that customer demand information is often requested, but cannot always be provided at the level of detail needed for reliable forecasting. This increases the need for manual data entry and forecast-related guesswork.

Respondents P06-P08 mainly emphasise closer collaboration and greater mutual understanding between functions. P08 advocates more direct collaboration through workshops and closer day-to-day interaction, with the aim of increasing understanding of the practical conditions faced by other parts of the process. The underlying idea is that better cross-functional understanding would improve coordination and decision-making. P07 also highlights the need to learn more systematically from previous outcomes so that forecast quality can improve over time rather than the same problems being repeated.

Interviewees P01 and P09-P11 mainly suggest improvements of a more structural and organisational kind. P09 points to the need for clearer ownership of the process from the point where customer input is received until purchasing decisions are made and the product ultimately reaches the warehouse. P10 focuses more on technical and system-related improvements, such as better handling of pent-up demand and

stronger technical support for generating more accurate and reliable forecasts for new products. P10 also points to a more communication-related improvement need, namely reducing the amount of clarifying communication required when different functions interpret the same data in different ways.

P11 suggests improvements that are presented as more realistic in the short term, such as shared workspaces, clearer timelines, stronger onboarding for employees involved in the process, and more direct communication in time-critical situations. From this type of perspective, the problem is not primarily that the major process elements are missing, but instead that the existing process needs to be coordinated more clearly and made easier for people to act on in practice, and together, the improvement suggestions point in a similar direction. The respondents describe a need for earlier and more complete customer input, clearer and more traceable handovers, stronger cross-functional understanding of data and priorities, and process checkpoints that reduce the need for reactive firefighting later in the flow.

5

Analysis and Discussion

The purpose for this chapter is to analyse the empirical findings from chapter 4 in relation to the theoretical aspects from chapter 2, the analysis and discussion chapter is structured based on the four research questions and aims to give a descriptive presentation of the results through analysing the underlying causes consequences and improvement opportunities for the forecasting and procurement process. This is especially focusing on how information, responsibility, accountability and decisionmaking moves across different functional boundaries, and how its weaknesses in these interfaces affect the process reliability, customer relationship and organisational coordination. The analysis shows that the challenges identified in the empirical data should not primarily be seen as an isolated operational problem, but rather as an indicator for something wider problematic connected to the end-to-end integration. The discussion focuses therefore on the relation between process structure, cross-functional handovers, customer trust, system dependencies, and semantic gaps.

5.1 How is Dagab's current end-to-end forecasting process structured?

The empirical results point to a recurring fundamental logic in the current process, meaning that customer related demand information is progressively translated into forecasts, system registrations and lastly purchasing decisions. Customer demand signals come in the form of volume indications, campaign information, new items that have limited historical data, or menu-related changes. These signals are then validated and supplemented by the customer-facing function. Forecasts are adjusted manually, often by benchmarking against similar items, after which the information is recorded in planning tools and systems and then handed over to purchasing. Purchasing is then expected to translate this information into ordering decisions. At the same time, the empirical material clearly shows that this sequence is in practice considerably less linear than the formal description suggests. In particular, menu-related cases and launch situations generate informal feedback loops, manual checks, and person-dependent escalations.

To illustrate the overall structure and key interfaces of the process, Figure 5.1 is presented. The Figure provides a generic overview of the menu launch process from customer input to launch and follow-up, focusing on main activities, milestones, and critical risk points. The purpose is not to reproduce every operational detail, but to give an analytical overview of how the process is structured and where its most sensitive transitions are found.

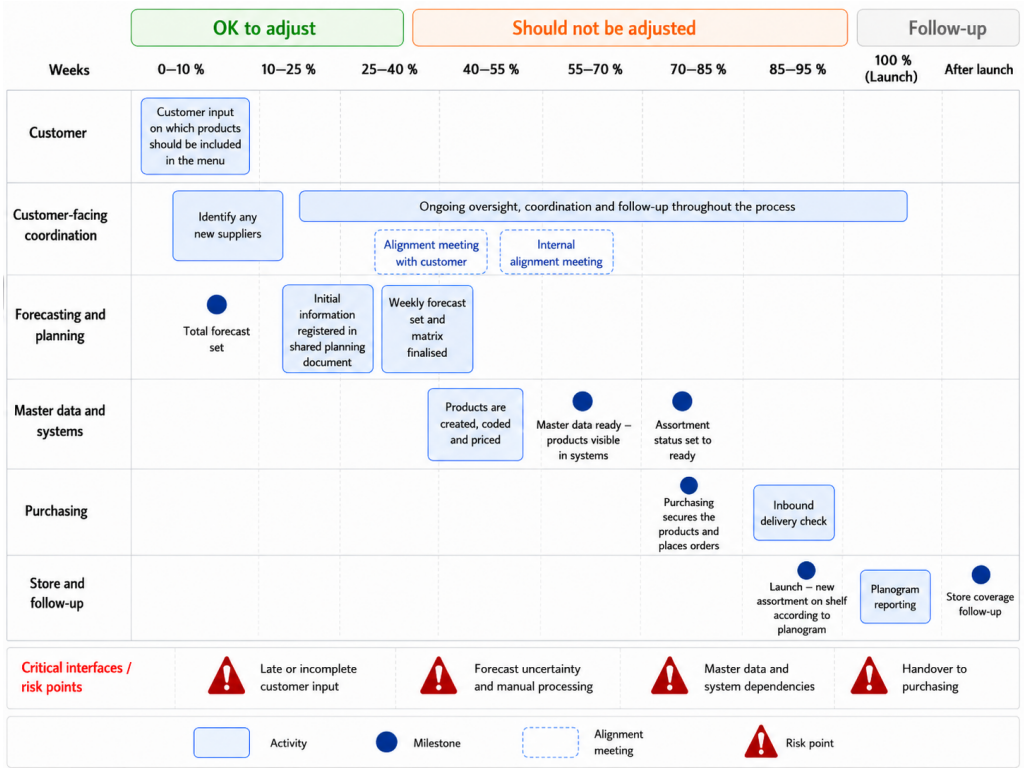

Figure 5.1: Overview of the menu matrix process with its milestones and risk points

As Figure 5.1 shows, the process consists of several interconnected process steps and functional areas that progressively move from customer input and early coordination to forecasting, system readiness, purchasing, launch, and follow-up. However, it should be noted that Figure 5.1 is a simplified conceptual overview of the actual process, therefore, the exact positions of risks cannot be shown directly in the figure. The Figure thus illustrates that while the process may appear sequential at an overall level, it also contains several critical interfaces.

Two features of the process are particularly important. First, the process is heavily dependent on manual validation and interpretation already at an early stage. The forecasting work therefore involves not merely translating demand into numbers, but also filling the information gaps that have been captured neither in the customer dialogue nor in the systems. Second, the process is asymmetrically vulnerable. In more routine flows, informal solutions can work relatively well. In tightly coupled menu cases, however, a missed item or a misinterpreted deadline can become system-critical and disrupt the entire offering. The process is therefore not only complex, but also strongly interconnected across its various components. This would imply that minimal variations in one part of the process can have major consequences later in the process, specifically when the affected item is critical for a new menu launch.

This interpretation aligns with the literature that treats forecasting and S&OP as a coordinating business process rather than as a delimited calculation activity (Thomé et al., 2012). Forecasting is expected to link supply and demand while integrating strategic and operational planning across functional boundaries. This coordinating role presupposes both horizontal and vertical integration, as well as mechanisms that tie together functions, data, and decision logic (Tuomikangas and Kaipia, 2014). Correspondingly, the literature on cross-functional planning shows that a functioning process is not built on information flows alone. It also requires information quality, process quality, and alignment in both interpretation and execution (Baihaqi and Sohal, 2013). When different functions operate based on different goals, time logics, and assumptions, the process risks producing parallel interpretations, weak execution, and low overall reliability (Oliva and Watson, 2011).

The most reasonable interpretation, therefore, is that the current process is not weak because it lacks activities, but because it lacks a stable coordinating centre, which means that a shared structure that steadily describes who owns each critical change, what type of information must be confirmed, but also how risks should be handled before they advance more downstream. It contains steps, templates, and system points, but these do not yet constitute a robust process architecture, which could be seen in the empirical material, where the process was explained as structured on paper, meanwhile, handovers were still dependent on manual checks and direct communication. In practice, the process resembles a coordination network in which critical parts of the flow are secured through experience, extra explanations, and informal follow-up. This means that the actual load-bearing structure of the process lies less in the formal system and more in people's local ability to detect and compensate for weaknesses.

This leads to an important analytical conclusion. At present, the formal process logic is weaker than the person-bound process logic, implying that the process often depends more on individuals noticing, analysing, and escalating the risks rather than on formalised control points which ensure that this happens systematically. This could be viewed in the empirical material through the need for informal feedback loops, manual checking, and an escalation in menu matrix and launch related cases.. This is particularly interesting in relation to previous research, since it shows that formal process presence does not automatically entail actual process integration. The result thus nuances the literature's assumption that shared processes and system support in themselves create coordination, by demonstrating that coordination in practice can still be heavily person-dependent. As long as this persists, every increase in complexity, such as new items, campaign combinations, uncertain customer input, or menu dependencies, will affect the process's reliability disproportionately. The problem is therefore not merely a lack of standardization. Rather, standardization currently exists at the wrong level. There are templates and system inputs, but there are not yet sufficiently strong rules for meaning, responsibility, and confirmation in the transitions between functions. This would mean that the process is formally structured, but yet not sufficient managed at the points where coordination is most critical.

The direct implication is that the first improvement should not be to calculate better, but to structure and govern better. Clear process ownership should encompass the entire flow from customer signal to purchasing decision, rather than only the substeps of each respective function. And based on the identified weaknesses in the interfaces between functions, every critical handover should have a defined purpose, a specified information content, an expected recipient, and a mandatory confirmation, which shows that responsibility for interpretation and also follow-up is built into the process rather than left to the individual initiative. For menu-related and launch-related cases, the process should also include an explicit criticality marking for items where a single error can jeopardize the entire offering.

A reasonable governance principle would therefore be to formalize the critical interfaces without over-bureaucratizing the entire process. The literature on coordination mechanisms suggests that strategic alignment and information processing are more important than simply adding more procedures. In this context, that means the focus should be on clear decision points, unambiguous date definitions, and a shared understanding of critical items, rather than on introducing more general meetings or more generic documents.

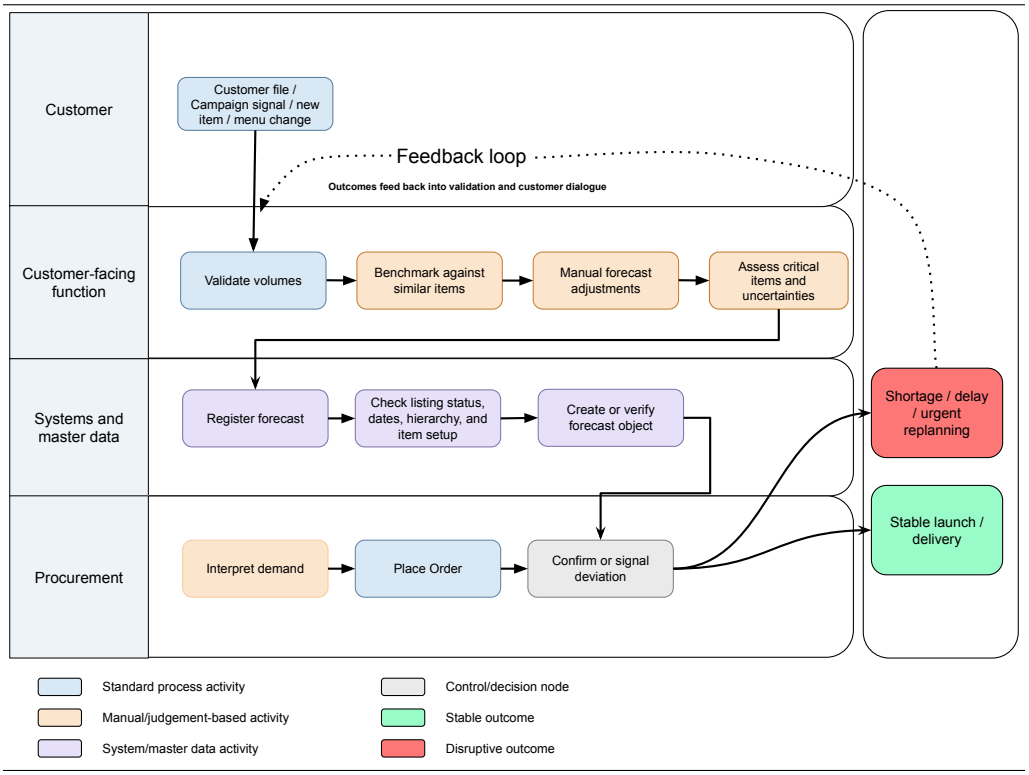

Figure 5.2: As-is representation of the forecasting and purchasing process across functional interfaces

To visualize the current process structure in a more analytical way, Figure 5.2 presents an as-is representation of the forecasting and purchasing flow across the main functional interfaces. The Figure illustrates how customer signals move from the customer-facing function through validation, manual adjustment, system registration, and purchasing, before resulting in either stable delivery or operational disruption. In addition to the formal sequence of activities, the most critical risk points identified in the empirical data, namely incomplete customer input, manual forecast adjustment, system and master data dependencies for new items, and the handover to purchasing. The semantic gaps is visible in the Figure 5.2 through the repeated interpretation of the same customer signal across the different functions and activities, for example when a customer file, menu change, or new item is first validated as a volume, adjusted as a forecast, and then registered and checked against listing status, hierarchy, item setup, dates, and finally checked by the procurement team as demand to be ordered. At each of the interpretation points, the meaning of the information can be changed if item status, dates, or criticality are viewed differently. The purpose of the Figure is therefore not merely to visualize the workflow, but also to show where semantic gaps, coordination failures, and process-related vulnerability tend to arise.

As Figure 5.2 shows, the process is formally sequential but contains an operational feedback loop, as shown in the Figure by the dotted line where outcomes feedback into validation and customer dialogue. This is particularly important for the DEX team, since outcomes from launches, shortages, or urgent replanning could require renewed communication with the customer and further validation, however the Figure could be understood as a simplified visualisation for DEX. For discussion purposes, this means that the process mapping not only visualizes the workflow, but also reveals why certain types of complexity become particularly difficult to manage in practice. The mapped process flow thus supports the argument that the central weakness of the process lies in the interfaces between functions rather than in the absence of individual activities. Its apparent linearity conceals a significant dependence on informal clarifications, person-bound judgments, and repeated validation across functional boundaries. This becomes visible in the Figure through the shift between colour coded activities, where the standard process activities are tracked by manual adjustments, system and master data activities, and decision or control nodes before the process achieves a stable or disruptive outcome. The Figure therefore supports the argument that the process is not weak because it lacks activities, but because the transitions between activities are still insufficiently standardised in terms of meaning, ownership, and confirmation. In other words, critical issues is seen as how information changes meaning that when it moves from customer facing function with validation to manual forecast adjustment, master data checks, procurement interpretation and system registration, and if these transitions is not obviously confirmed and owned, the process itself may continue formally while there is still uncertainty transferred forward in the process. This explains why the red disruptive outcome can trigger a feedback loop back to earlier stages where there is validation and customer dialogue.

5.2 What are the main bottlenecks, inefficiencies, and misalignments in the current process?

The empirical material clearly shows across several respondent groups that the most serious problems are not only connected to individual activities, but rather to the handovers between them. At the beginning of the process, customer input is often late, incomplete, or unclear. This is something that Oliva and Watson (2011) talks about when coordination problems often come from when information travels across different functional boundaries and must be interpreted by multiple actors with different priorities and responsibilities. At the end of the process, new problems often arise when information that has been handed over across multiple departments is translated into purchasing decisions. This can be particularly critical when it concerns key articles that must be actively monitored in order not to disappear in the wider flow. Between these two points, there are multiple semantic and system-related gaps, such as different versions of data, different interpretations, and system dependencies linked to new articles that have not yet been fully established across all systems. This can be seen as a form of process, data, but also output misalignment, where the problem is not concerning that information is missing, but rather that it changes when moving across the systems and functions.

The empirical material also suggests that these problems reinforce one another, which could be seen in the theme Bottlenecks and inefficiencies, since the respondents describe how the difficulties early in the flow can create additional manual work, delays, but also coordination problems the further it moves in the process. For example, weak customer input creates uncertain forecasts, which in turn lead to a greater need for manual intervention. These interventions increase the need for explanations during handovers because they make the process less clear, which can delay purchasing decisions or even cause critical articles to be overlooked. When these kinds of problems occur, they often result in crisis meetings, firefighting, and additional manual work. The process therefore creates not only bottlenecks, but also a need for reactive ways of working, due to that the employees need to spend their time to correct, clarify, and possibly escalating problems after they already has moved between functions, which could been prevented earlier on through clearer input, ownership and routines for handovers.

This pattern could be linked to fragile customer input that creates additional manual work, delayed actions, and crisis meetings later on in the process, is in line with the theoretical framework on internal integration, which shows that cross-functional coordination acts as a core link between planning information and operational performance (Flynn et al., 2010). When this link is weakened, inefficiencies arise, as different functions attempt to optimise their own goals at the expense of the overall system. The theoretical framework also shows that information sharing alone is not sufficient. It must also be combined with high information quality and actual cooperation in order to improve overall performance (Baihaqi and Sohal, 2013).

A lean perspective can help explain the empirical material, as it highlights a mismatch between system logic and actual work, which can create waiting times, extra work, and waste, and such inefficiencies may arise through imitative or routine-based behaviours. This is particularly relevant in cases where manual solutions, workarounds, and personal routines gradually become normalised over time. The theoretical framework on misalignment also shows that information systems often suffer from misalignment between data, process, and output, which can create cascading effects far removed from the original source of error. More broadly, formal routines and priorities may also move in different directions, as shown in this study where customer-facing functions prioritise service levels, while purchasing functions must consider both service levels and wastage. This explains that the same demand signal can be viewed differently depending on which function is handling it, for the customer-facing side, they may prioritise to secure availability and ensure their promise to the customers. Meanwhile, purchasing must evaluate constraints to the order, stock risk, and potential wastage that may come, and as a result, decisions that seem logical for one function may create misalignments when seen from the other perspective of the total process.

An important analytical distinction therefore needs to be made between triggering problems and underlying problems, since the empirical material showed that the same disturbance that was visible, for example delayed articles or unclear customer input, often emerged from earlier weaknesses. In relation to prior research, this is an important point, since it shows that a visible operational disturbance does not necessarily correspond to the process's deepest weakness (Wei et al., 2005; Blijleven et al., 2017). The results instead support a more systemic perspective, explaining that inefficiencies and bottlenecks that could be identified should be analysed based on their impact for other functions, handovers and decisions downstream, where bottlenecks and inefficiencies should be understood as consequences of how uncertainty travels across the organisation's different functions. Late or incomplete customer input is clearly a problem, but not necessarily the deepest underlying one, since a resilient process should be able to absorb a certain degree of uncertainty without causing major delays, one example could be though fewer requirements for information, clearer ownership, confirmation points, and system checks to so that the process is going in the right direction when handing over further downstream. When uncertainty instead leads to cascades of manual work and delayed purchasing decisions, this indicates that the process already has low structural capacity. For that reason, the main problems should not only be ranked according to how often they are mentioned, but also according to how broad and harmful their consequences are across the entire flow.

The most important underlying problem is fragmented process ownership, where responsibility often shifts to the individual who discovers a risk rather than being guided by a stable control logic, as shown in Table 5.1 and Table 5.2 through the high dependence on informal direct contact to secure the critical items. A second problem is the presence of semantic and system-related gaps, where multiple versions of data, unclear date definitions, and different system interpretations create

misunderstandings and extra work. This contributes to a third problem concerning goal conflicts between different functions, especially between customer-facing roles, which primarily focus on service levels, and purchasing roles, which must balance service and wastage. The problems also concern input quality and insufficient preparedness, especially for articles that require new listings in the system. In the end, reactive extra work and recurring problem-solving should be seen as signs of a broader structural problem rather than as isolated inefficiencies. This prioritation is connected to the empirical data that was gathered, where the respondents described the recurring problems for handovers, escalations and different assumptions for the same type of information, system dependencies for new articles and crisis meetings when critical articles are not secured in the warehouses.

The relative priority in Table 5.1 and Table 5.2 is based on the analytical evaluation rather than a quantitative measure, and the priority takes four aspects into consideration. Firstly, how wide is the problem affecting the whole process, secondly, if it is creating cascading effects over multiple functions. Thirdly, how close is the problem to the customer related consequences such as delays and shortages, and lastly if the problem is intensifying the reactive manual work, firefighting, or informal communication. This together is reflecting towards the relative priority ranking, rather than just ranking it from how many times it has been mentioned in the interviews.

Table 5.1 and Table 5.2 summarises the main bottlenecks, inefficiencies, and misalignments identified in the analysis. The problems are not ranked only according to how often they are mentioned, but rather according to their analytical importance, meaning how broadly they affect the total process and how strongly they contribute to cascading effects across multiple functions.

Problem area	**Empirical expression**	**Analytical interpretation**
Fragmented process ownership	Responsibility is often shifted to the person who discovers a risk and critical items require informal direct contact	Weak end-to-end alignment and unclear accountability
Semantic and system-related gaps	Multiple data versions, unclear date definitions, manual purchasing for new items	Data and process misalignment creating downstream effects
Goal conflicts between functions	Service vs waste trade-offs between customer-facing roles and purchasing	Cross-functional misalignment in priorities
Low input quality and weak launch readiness	Late/incomplete input and missing item setup dependencies	Insufficient readiness logic before execution
Reactive overwork and firefighting	Crisis meetings and repeated manual adjustments	Operational waste and reactive behaviour

Table 5.1: Problem areas and analytical interpretation

Problem area	Priority	Recommended action
Fragmented process ownership	Very high	Appoint end-to-end process owner and define clear accountability and decision points
Semantic and system-related gaps	Very high	Establish shared data source, data dictionary and standardised master data setup
Goal conflicts between functions	High	Introduce shared KPIs for launches and deviation management
Low input quality and weak launch readiness	High	Introduce launch readiness gate with minimum requirements before forecast lock
Reactive overwork and firefighting	Medium (cost-driving)	Measure deviations and reduce unnecessary communication through standardised handovers

Table 5.2: Priorities and recommended actions

Table 5.1 and Table 5.2 supports the argument that the most important problem is structural rather than isolated. This means that the results should not be interpreted as something limited only to the specific process studied at Dagab, but rather understood on a more general level, showing how weak semantic stability, unclear responsibilities, and conflicting goals together can transform manageable uncertainty into organisational instability. In this regard, the study confirms earlier research on integration and misalignment, but in a concrete context where several critical dependencies come together. For this reason, fragmented ownership and semantic instability should be considered more fundamental problems than weak customer input, even though customer input often acts as the initial trigger.

The overall conclusion from the ranking in Table 5.1 and Table 5.2 is therefore clear. The main problem is not forecast uncertainty itself, but rather that uncertainty is transferred through the process without being sufficiently clarified or resolved before it moves to the next function. This would indicate that there exists a lack of structural support for the process in the form of defined responsibilities, confirmations and clearly defined checkpoints that can absorb uncertainty before it creates more problems downstream. As a consequence, manageable uncertainty becomes destructive, and one indication of this is that critical articles require more informal communication in order to avoid shortages and late arrivals. When process reliability depends on who carries out extra work to solve the problems, this is no longer simply a mechanism for handling exceptions. Instead, it indicates that the core process itself is weak.

The improvement logic for this research question should therefore focus on strengthening the process's ability to absorb uncertainty at an early stage, due to the analysis that shows uncertainty which becomes most harmful when unclear customer input, item status or responsibilities are allowed to travel downstream without being resolved first. There are two particularly important checkpoints in this regard. The first should be placed before the system registration of articles, in order to ensure

that volume, date, urgency, listing status, and responsibility are clearly defined in advance. The second should be placed between the system handover and the purchasing decision, where confirmation should be required for the most critical articles in order to ensure that they are on the right track, meaning that they are orderable and not blocked in the system.

In addition, manual forecast adjustments should not be viewed as the problem in themselves, since assessment-based intervention is both expected and necessary in uncertain product and launch environments. These types of interventions can improve decision quality or compensate for weak upstream information. For that reason, the organisation would benefit from a structured follow-up of manual forecast adjustments in relation to actual outcomes. This would make it possible to distinguish between informed judgement and organisational waste.

In conclusion, the purchasing side needs more onboarding and a better understanding of critical articles, which means that articles could appear small in volume but still have high impact on for example the menu offering if they are delayed or incorrectly handled. If purchasing does not understand that a low-volume article may still be system-critical because it is part of a menu matrix or a launch, then priorities may be directed towards the wrong issues. This is not only a matter of education, but more fundamentally a translation issue between functions, due to that the customer-facing and forecasting roles may understand criticality in relation to the total customer offering, meanwhile the purchasing team could primarily interpret demand through availability, volume, or lead time. For that reason, there is a need for more shared concepts, clearer risk assessments, and a common understanding of what constitutes a critical deviation, meaning that criticality follows the information through the process instead of relying on information explanation between the functions.

5.3 To what extent do the current issues and misalignments affect customer trust in Dagab, from Dagab's perspective?

The empirical findings indicate that the consequences for customers first surface operationally: shortages, unstable order patterns, a rise in customer inquiries and declining delivery reliability directly undermine the ability dimension of trust (Schoorman et al., 2007) and, as Khan and DePaoli (2024) show, recurring stockouts markedly increase the likelihood that customers will switch to alternative suppliers. Interviews further reveal that the effects are not confined to the operational level. When the same type of deviation appears repeatedly, it is no longer interpreted as an isolated production failure; instead, it generates broader uncertainty about process stability and gradually erodes trust. This pattern reflects Oliver's (1980) expectancy-disconfirmation model, where sustained negative disconfirmation drives customers to re-evaluate a firm's reliability, and resonates with Wagner et al.'s (2009) finding that perceived inconsistency between promises and actions damages

confidence. Nevertheless, the literature demonstrates that openness, acceptance of responsibility and clear explanations can mitigate at least some of the harm caused by such faults. Effective service recovery can rebuild satisfaction (Maxham, 2001), while transparent communication that acknowledges responsibility reduces reputational damage when customers see that problems are being handled proactively (Coombs, 2007).

A crucial distinction is that the consequences felt by the customer are often triggered not by the disruption itself, but by the gap between what the customer expects and the internal reality of the company's processes. A customer may assume that product availability is a straightforward matter, while in practice it depends on a chain of interconnected factors: stock levels, lead times, supplier capacity, and multiple internal handovers. When this internal complexity is not translated into consistent and realistic external promises, the risk of damaging trust becomes even greater than the impact of the original disruption. The customer does not simply experience a late delivery; they experience a promise that was not kept.

This interpretation is strongly supported by the trust literature. Trust is frequently defined as the willingness to be vulnerable based on the expectation that another party will act in a dependable and appropriate manner (Rousseau et al., 1998). In an organisational setting, three dimensions are central to trustworthiness: ability (the competence to deliver), benevolence (acting in the customer's interest), and integrity (adhering to sound principles and keeping promises) (Schoorman et al., 2007). In this context, delivery reliability primarily damages the customer's perception of the company's ability. Taking responsibility and recovering effectively from failures, in turn, influences perceived benevolence, as it signals genuine concern for the customer (Maxham, 2001). Most critically, the gap between the external promise and the actual performance undermines integrity, because it creates exactly the kind of inconsistency that customers interpret as corporate hypocrisy (Wagner et al., 2009). Thus, the alignment between internal complexity and external communication is not merely a logistical concern, but a foundational matter of preserving trust along all three dimensions.

Literature regarding business relations makes a distinction between inter-personnel and inter-organisational trust. This is particularly relevant seeing as the empirical material of this study suggests that roles close to the customer often act as a relational shock absorber when the underlying processes fail. This type of personnel-reliant methods can mitigate the immediate damage, but in the long term it can not compensate for recurring organisational inconsistency. Furthermore, literature regarding expectancy disconfirmation and service recovery support the same point. When performance turned out lower than promised it created dissatisfaction and even if recovery efforts can improve the initiated reactions it does not remove or suppress the underlying uncertainty.

Based on this, customer trust in the case at hand should be interpreted as meaningfully affected, but not yet necessarily systematically eroded, which means that the current challenges create frustration, concern, and an increased need for explanation, while the empirical material does not show that customer trust has been permanently damaged or that customers have already reassessed the collaboration with Dagab. This is an important point for discussion, since it shows that relational consequences should not be understood as an automatic result of every operational deviation. Rather, the results suggest that it is the pattern of recurring inconsistency, rather than the individual incident, that gradually risks changing the customer's perception of the supplier's reliability. The main reason is that the empirical material describes both disruptions and active attempts to repair the relationship through explanation and taking responsibility. These repair efforts suggest that relational damage is not automatic. At the same time, recurring crisis situations, high vulnerability in menu cases, and repeated needs for explanation show that operational variation risks being translated into organisational unreliability if it continues over time.

It is particularly useful to distinguish between three levels of trust effect. The first is immediate irritation or dissatisfaction linked to a specific deviation. The second is relational uncertainty, where the customer begins to question whether such deviations can in fact be predicted and prevented. The third is strategic reassessment, where the supplier is no longer perceived as the most secure partner for critical deliveries. The current empirical material is not sufficient to show that the third level has already been reached. It is, however, sufficient to show that the current process creates recurring mechanisms that may drive the relationship in that direction.

Given the study's limitations, the most appropriate way to follow up on trust-related issues is to use trust proxies rather than direct trust measures. Useful examples include the proportion of critical deviations that are communicated proactively, the number of recurring explanation cases per customer flow, the proportion of launches requiring urgent escalation, and the proportion of customer promises that later have to be reinterpreted due to unclear dates or system statuses. These indicators do not measure trust directly, but they capture process behaviours that are likely to affect trust over time. This logic aligns with the trustworthiness dimensions described by Schoorman et al. (1995): proactive communication of deviations reflects benevolence and integrity, while promises that must be revisited due to unclear system information directly mirror the kind of promised performance gap that Wagner et al. (2009) identify as corporate hypocrisy, and repeated escalations signal a lack of ability that steadily erodes confidence (Khan & DePaoli, 2024).

From a broader discussion perspective, this means that trust in this type of study should not be treated solely as a soft relational variable, but as closely linked to the practical reliability of the process. The literature supports this view: Baihaqi and Sohal (2013) demonstrate that information and system capabilities yield performance gains only when they are turned into reliable action, implying that the operational process is the tangible foundation on which trustworthiness is either

built or undermined. The results thus indicate that customer trust and process design should not be analysed as separate areas, but as mutually dependent on a conclusion reinforced by S&OP research showing that coordination mechanisms, shared data, and integrated planning structures simultaneously shape both operational outcomes and the relational stability of customer commitments (Flynn et al., 2010; Tuomikangas & Kaipia, 2014).

5.4 How can the forecasting and procurement process be improved to enhance integration, efficiency, and decision-making?

The empirical data reveals a striking consensus on where improvements are needed. Interviewees call for better-defined traceability after handovers, earlier and higher-quality customer input, closer cross-functional collaboration, clearer process ownership, stronger technical system support for new products, a more robust onboarding process, collaborative workspaces, and more systematic learning from past outcomes. The notable finding is that these requests do not pull in separate directions; rather, they converge on a single underlying need: critical interfaces must become clearer, more visible, and more collaboratively understood across the organisation.

The theoretical literature strongly supports this logic. Research on Sales and Operations Planning (S&OP) identifies coordination mechanisms, such as formalised processes, shared tools, integrated data, and active leadership as central enablers of performance (Tuomikangas & Kaipia, 2014). At the same time, it warns that over-formalisation without genuine cross-functional engagement can be counterproductive, because internal integration must be built deliberately through collaborative planning routines, not merely imposed (Flynn et al., 2010). Similarly, digitalisation can deliver substantial value, but only when it is treated as a strategic function and when the technology is directed towards decision-making rather than being deployed as an isolated technical layer (Alabdali & Salam, 2022; Zietsman & van Vuuren, 2023).

The broader forecasting literature reinforces that manual corrections and unplanned inputs should not be passively accepted as routine; instead, they should be investigated, as they often signal underlying inefficiencies such as mimicked behaviour, defects, or routinised waste that can cascade through the process (Blijleven et al., 2017). However, a purely behavioural or collaborative perspective risks underestimating the hard constraints imposed by article setup, master data quality, and system dependencies. These represent the kind of data and process misalignments that can render even the most well-intentioned coordination efforts ineffective (Wei et al., 2005). A resilient path forward, therefore, is to start with a shared control logic and a common understanding of data across functions, and from that foundation build a systematic feedback loop. Once this is in place, stronger system integration becomes possible, where the redesigned process makes transparent exactly what needs to be standardised, turning information sharing into actionable,

performance-enhancing planning (Baihaqi & Sohal, 2013).

The core idea is therefore that any improvement project must be both organisational and technical, but not necessarily in that order. According to research this is an important discussion topic, since it shows that digitalisation shouldn't be understood as a standalone solution to a coordination problem. Rather technical solutions have the most meaningful effect first when ownership responsibilities and decision making logic has already been established. Focusing only on digitalisation risks digitalising the already existing unclear processes.

This all leads to a more precise conclusion, The core question is not if the process needs to be more standardized or flexible. The question is where the respective types should be applied. Critical interfaces require more standardisation while forecasting decisions and uncertain product launches require more flexibility. That is not to say that this flexibility should be informal or invisible, but rather well documented, considered and a subject of learning.

Based on this analysis the most appropriate way forward is sequential rather than simultaneous. Table 5.3 and Table 5.4 therefore presents a stage-based roadmap where basic control and process clarity is considered before wider system integration. This mirrors the analytical conclusion that the process should first be considered a coordination issue and thereafter as an information issue and thirdly as a technical system issue.

Time horizon	**Recommended actions**
Short term	End-to-end process owner with clear accountability, defined key dates, and mandatory handover confirmation. Introduce launch readiness gate for new items.
Medium term	Establish cross-functional exception forum. Introduce structured follow-up of manual forecast adjustments. Strengthen onboarding and shared workspaces.
Long term	Consolidate data flows, improve system integration, and automate readiness checks where possible.

Table 5.3: Recommended actions across time horizons

Time horizon	Why prioritised	Expected effect
Short term	Current process lacks stable ownership and shared understanding across functions	Fewer missed handovers, clearer accountability, reduced dependence on individuals
Short term	Item setup and master data must be completed before procurement can function reliably	Fewer manual purchases and more stable launches
Medium term	Shared interpretation is more valuable than adding procedures	Faster decision-making and reduced firefighting
Medium term	Manual adjustments are frequent but not systematically evaluated	Improved learning and fewer unnecessary rework cycles
Medium term	Different interpretations of data and process create misunderstandings	Better cross-functional alignment
Long term	Digitalisation creates value when process logic is stable beforehand	Reduced manual workload and higher traceability

Table 5.4: Rationale and expected effects of improvement actions

Table 5.3 and Table 5.4 illustrates that the proposed improvement logic is cumulative. This supports the main argument of the discussion, that improvements in this context should be considered a question of process maturity rather than multiple smaller improvements. The result thus suggests that an organisation that tries to start out with advanced system integrations before they have established collaborative definitions and areas of responsibility, risks making the processes more unclear. Early actions should create the organisational conditions required in order to later introduce system integrations that create actual value. Without clear areas of responsibilities collaborative definitions and stronger hand-over discipline risks an increase in technical solutions reproducing the same unclarity but in a more sophisticated form rather than solving them.

The managerial implication of this analysis is that the improvement work should be governed as a process design project rather than merely as a forecasting improvement initiative. If management defines the problem too narrowly as a forecasting problem, there is a significant risk that the response will consist of more calculations, more checks, or more advanced systems without addressing the underlying coordination problem. If, however, the problem is defined as a weakness in end-to-end coordination, it becomes considerably more logical to start with ownership, semantics, and handover discipline.

A second managerial implication concerns performance measurement. As long as customer-facing functions and purchasing continue to operate under partially different goal structures, the same information will continue to be interpreted differently. For critical launch- and menu-related flows, more integrated metrics should there-

fore be introduced, such as launch without urgent escalation, critical item secured before lock date, and the proportion of deviations communicated proactively. This would reduce the risk that one function views service as the only relevant goal while another must simultaneously balance service and waste in the same situation.

6

Conclusion

The analysis of the study shows that the process examined can methodologically be described as a chain that moves from customer demand signals through internal validation, manual forecast adjustments, system registrations, and handovers to procurement. In practice, however, it does not operate as an integrated end-to-end flow, but rather as a set of formal sub-processes connected through individual knowledge, informal communication, and manual compensation. This means that, on a formal level, the process appears standardised, while in reality it is highly dependent on who identifies a risk, who interprets the information, and who acts in time.

The most central problem is therefore not that forecasts are sometimes inaccurate. The deeper problem is that the process lacks a commonly owned, semantically stable, and cross-functionally coordinated structure. Late or incomplete customer input, local Excel-based solutions, and system-related gaps are important factors, but they become even more problematic because the organisation lacks robust interfaces, common decision rules, and clear feedback points. What appears in the empirical findings as multiple separate problems can therefore be interpreted as different expressions of a common underlying problem, namely fragmented coordination.

From a customer perspective, this means that operational disturbances can quickly develop into relational disturbances. Single deviations do not necessarily damage trust, especially if they are handled quickly and openly. However, recurring inconsistencies between actual outcomes, promised availability, and internal explanations risk weakening the perceived ability, integrity, and willingness to continue the cooperation. At the same time, this conclusion needs to be expressed with caution. The empirical data captures customer trust from Dagab's perspective rather than through direct measurements from the customer side, and the argument is therefore based on well-founded inference rather than direct measurement of trust.

The most reasonable improvement logic is sequential. First, the process needs clearer ownership, common data definitions, and critical checkpoints. After that, the organisation would benefit from structured learning loops that make it possible to distinguish between manual interventions that improve forecasting quality and activities that only add more work and noise to the process. Once these steps are in place, broader system integration would likely have a greater impact. Since the empirical data did not specify exact lead times, service levels, forecast errors, or economic consequences, this chapter focuses instead on recurring patterns, cascading effects, and proximity to customer impact rather than quantified effect sizes.

This means that the results of the study should be understood not only as a description of a local operational problem. From a broader discussion perspective, the findings point to forecasting work in this type of context as being more a question of organisational coordination than of forecasting precision alone. In this way, the study helps shift the view of forecasting from being a calculation-based activity to a

broader understanding of forecasting as a matter of cross-functional process design.

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