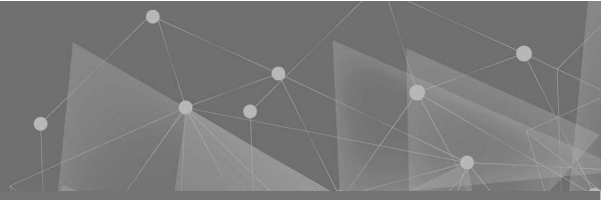




CHALMERS
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Development of Communication in Business Relationships between Inbound Logistics and Carriers

Master's thesis in Quality and Operations Management

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CHALMERS UNIVERSITY OF TECHNOLOGY
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Abstract

In today's industrial practices, enterprises operate within complex supply chains involving multiple stakeholders. Effective communication plays a foundational role and presents a significant challenge that companies must actively address to achieve favorable outcomes. Notably, the role of transportation companies has become essential in ensuring that the entire supply chain runs smoothly. Consequently, establishing efficient communication channels with carriers becomes imperative. Hence, the objective of this study is to extensively investigate the communication process between an automotive company's inbound logistics department and its carriers, both critical parts of a transport service triad, aiming to enhance comprehension of the underlying communication structure. Furthermore, the study provides recommendations for enhancing this communication process. To accomplish this objective, the research utilizes a case study approach combined with an abductive methodology. The primary data collection entails semistructured interviews, while thematic analysis is employed to analyze the gathered data. The primary findings suggest that the case company should concentrate on four key areas exhibiting potential for development: *Frequency*, *Mode*, *Direction*, and *Content*. Moreover, the study proposes focusing on eliminating internal noise, nurturing and fortifying relationships, and altering the perception of communication as a proactive strategy for anticipating future challenges, rather than solely as a reactive response to problems.

Keywords: *Business relationships, Communication development, Supply chain management, Transport, Transport logistics, Transport service triad.*

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Victoria Ahl and Sanna Kadir
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1 Introduction

In today's automotive industry, companies work within large supply chains, where there are many actors involved. This leads to the fact that it requires a lot of planning and good communication as there are several parties involved in the supply chain (I.M. Ambe & J.A. Badenhorst-Weiss, 2010). The successful operation of these complex supply chains necessitates effective communication between the various stakeholders within the automotive companies and their partner companies. In other words, the production of cars involves not only the automotive company but also substantial contributions from suppliers, subcontractors, and transportation entities in completing the final product. As there is a constant change in the market and demand changes according to customer demand, the companies involved in the supply chain need to interact in new ways and find an agile way of working to always respond to demand.

Transport services play a significant part in the supply chain, as mentioned before, there are several different actors involved in the supply chain. According to Andersson et al (2018), the supply chain process can be described as a triad between the buyer, supplier, and transport service provider, i.e the carrier, where the supplier and buyer are exchanging goods and the supplier and transport service provider are exchanging transport services. The relationships between the various actors take place at many stages of the supply chain process, which means that communication may occur informally to speed up certain processes. However, ongoing informal communication can lead to important information being lost or poorly handled. Therefore, it is essential to build a clear communication infrastructure that governs the transmission of information between all phases of the process (Xiao et al, 2022).

Large companies have a significant amount at stake, such as potential revenue losses, which makes it especially vital to ensure that there is no deviation. Further, the occurrence of gaps in the communication infrastructure or insufficient ones put in place can result in consequences for both the companies and from an environmental perspective (Supplychaindive, 2016). There may be unnecessary transport of small parts, which could have been avoided with more effective communication. Nevertheless, it is essential to consider that there exist additional factors that also contribute to the emergence of these consequences. In other words, communication is only a small contributing factor among larger factors such as strikes, lockdowns, traffic accidents, and weather conditions that have a more direct impact on the occurrence of these unnecessary transports. However, effective communication is an important tool to minimize the risk of delays and unnecessary transport.

Within the European Union (EU) there is a target to reduce carbon emissions from transport by 60% from 1990s levels by 2050 and Sweden has a target to reduce transport emissions by 70% from 2010 to 2030 (Andersson et al, 2018). Transporting critical parts once or twice may not have a big impact on the environment, but if these small transports are repeated, the environmental impact becomes more noticeable. In the present societal context, characterized by the pressing issue of climate change, there is a need to preserve the environment. To this

end, companies strive to minimize unnecessary transportation in their supply chains in order to uphold their reputation as environmentally responsible entities.

According to the International Organization of Motor Vehicle Manufacturers. (2020) within the automotive industry, it is common for vehicles to be produced on assembly lines in plants at a rate of about six and a half vehicles per minute. However, this number may vary depending on what type of production line and plant. This shows the importance of maintaining seamless production to mitigate the risk of production stagnation, causing automotive companies to lose time and revenue. In these circumstances, there is a trade-off between financial returns and environmental considerations. Generally, companies prioritize the rapid shipment of components to ensure that production does not stagnate for an extended period of time. For example, assuming that an automotive company operates three shifts, it has the capacity to produce 9,360 vehicles per day. This means that a shortage of a component for the vehicle that can be shipped by air in 24 hours will prevent the production from standing still for more than 24 hours. A stagnated production can lead to decreased revenue and dissatisfied customers who are forced to wait for their vehicles. As a result, it is not uncommon for such companies to choose the less environmentally friendly option in order to avoid production delays and an extensive backlog of vehicles. Although production stoppages are infrequent, they may be caused by external factors beyond an organization's control, including labor strikes, inclement weather, or transportation delays. However, to manage interruptions in production, companies can implement strategies such as maintaining safety stock levels and establishing effective communication structures. Consistently improving operational performance and cultivating positive relationships through clear communication channels can enhance a company's ability to maintain profitability, preserve the environment, and ensure customer satisfaction.

In the automotive supply chain, carriers play an important role. The proficiency and dependability of carriers have a substantial influence on the overall efficiency and competitiveness of the automotive supply chain. Hence, carriers are a crucial part of both the inbound transport of components as well as outbound materials. Carriers transport goods from suppliers to assembly plants where vehicles are manufactured as well as to dealerships and end customers. For large automotive companies, the relationship with their carriers is important, as the carriers deliver the company's goods with caution to maintain the quality and uphold the authenticity of the material ensuring that it arrives in time for production.

1.1 Purpose

The purpose of this study is to delve into the communication processes between the inbound logistics EMEA department (the IBL department) and the carriers that are involved in the transport service triad. The study aims to gain a deeper understanding of the communications structures by both parties, where areas of improvement will be identified. To fulfill this purpose, a thorough analysis of a case company and its carriers has been conducted,

providing valuable insights into real-world communication practices within the transport industry. By exploring the communication practices within this particular context, the aim is to contribute to the overall understanding of the factors that play a role in the success of the communication processes in a transport service triad, ultimately leading to improved collaboration and efficiency in the transportation industry.

1.2 Problem Specification from Case Company Perspective

The focus of this master's thesis will be on the IBL department of a case company, where the teams are involved in handling the inbound process of shipments via air, road, rail, and sea. For the case company, the proper functioning of each step in its supply chain is crucial. Malfunctions within the supply chain can result in significant financial losses and production delays as a direct result of non-compliance with shipment and transportation schedules. As previously mentioned, all the different steps in the supply chain are vital, yet communication between internal departments, suppliers, and carriers, which may be perceived as a minor aspect, plays a critical role in making the operations run smoothly and without any unnecessary expenses. However, various factors can result in these outcomes, including weather forecasts, traffic, supplier material shortages, strikes, and vehicle breakdowns. Urban locations of manufacturing plants mean that deliveries are frequently impacted by traffic congestion in large cities.

The risk of carriers opting for a competing company implies that there is a need to enhance the communication process among all parties involved and establish well-defined roles and responsibilities. A structured communication infrastructure that encompasses the carrier meetings must be established to gain insight into the communication procedures and relationships between the IBL department and the carriers. Furthermore, reviewing the planning and execution of these weekly meetings will ensure that all participants are adequately prepared and informed, thereby minimizing the risk of losing important information between the parties. This is crucial for both the case company and the carriers, as the former aims to maintain its position as an attractive partner and retain its current carriers.

1.3 Limitations

This study is limited in several ways, and it is important to acknowledge these limitations. Firstly, the study will only include interviews with carriers that represent 80% of all air, road, and sea transport and along with their corresponding contact person at the case company, i.e. carrier manager. This decision was made to ensure that all relevant correspondents are interviewed within the given timeframe and to be able to manage the data effectively. Additionally, the study will only focus on the dialogue between inbound and carriers, hence, communication with other actors in the supply chain will be excluded from the scope, for instance, other departments at the case company as well as the suppliers. It should be noted that certain parts of the IBL department have recently been outsourced, more specifically it is

the premium road division, which has been outsourced and will therefore be left outside the scope of the study. Additionally, the Packaging department, which is accountable for tasks such as coordinating the return of empty packaging to suppliers for reuse purposes, will also be excluded from the scope. These limitations are necessary, in part, to ensure that the study remains congruent with pertinent data regarding the issue under scrutiny, while simultaneously guaranteeing that the study is accomplished within the time frame and averts the risk of information inundation.

1.4 Research Questions

In regard to the purpose and problem specification of this master thesis the following initial research questions have been formulated. These questions aim at fulfilling the stated objectives. The first research question seeks to identify the current communication state between the IBL department and the carriers. The second and third research questions focus on defining an ideal future communication structure, evaluating the current state in relation to this ideal, and suggesting actions and improvements in order to close the gap. The research aims to provide insight into how communication between the inbound department and carriers can be improved to better support the needs of the case company. Additionally, the results of these research questions are also intended to have a broader application.

- 1. What is the current state of communication between the inbound department and the case company's carriers?*
- 2. What is the ideal future communication structure between the inbound department and the case company's carriers?*
- 3. How can proactive measures be taken to develop the communication structure between IBL and carriers, aiming for a closer alignment with the ideal state?*

1.5 Structure of the Study

Table 1 shows an overview of how the study is organized. The structure of this study begins with Chapter two dedicated to the theoretical framework. This chapter delves into the theories surrounding business relationships, transportation within the supply chain, and communication. Following this, Chapter three, provides a detailed account of the thesis's execution, explaining the chosen methodologies and their rationale. Chapter four, describes the case company and its inbound process in detail. The subsequent chapter, Chapter five, focus on presenting the result for research question one and two. The findings and subsequent discussions are then discussed in Chapter six, which aims to answer the third research

question. The report concludes with its seventh and final chapter, which consolidates the findings and identifies areas of development targeted toward the case company.

Table 1

Overview of report structure

Chapter	Chapter Content
Chapter 1	Introduction
Chapter 2	Theoretical Framework
Chapter 3	Method
Chapter 4	Description of Inbound Logistics of Case Company
Chapter 5	Empirical Findings
Chapter 6	Discussion
Chapter 7	Conclusion

2 Theoretical Framework

This chapter covers an overview of relevant theories to be able to analyze and support this study and receive more insight into the problem specification given by the case company. The chapter first introduces the concept of business relationships and supply networks. Thereafter, literature regarding transport in supply networks is covered. Followed by an introduction to communication between carriers and stakeholders in a supply chain, and lastly, a proposed analytical framework is presented based on the literature. The theoretical framework will later be used to support the data analysis and discussion.

2.1 Business Relationships and Supply Networks

Today companies face a lot of different dimensions within business due to internalization, mixed technologies, and diversity in consumer culture compared to 100 years before (Håkansson, 2006). Simultaneously, significant transformations are taking place in the way companies structure themselves internally and, perhaps even more significantly, in their interactions with their surroundings. Their surroundings are manifested in their collaboration with their suppliers, customers, and competitors. There have also been changes in the business world on how to use managerial tools. There are methods such as JIT (just in time) and TBM (time-based management), and more specific tools such as marketing, supply chain models, and customer relationship management among others.

Relationships and networks play a fundamental role in creating a framework that enhances learning, particularly in contexts that involve a counterpart or another organization (Håkansson, 2006). Different business relationships can provide new learning about different ways that will benefit companies economically. What is central in business relationships is to make use of the other's knowledge. Building this relationship with more knowledge about each other can contribute to solutions and the development of logistics, administrative or technical matters. The second aspect that is crucial in business relationships is to “create shared learning”. Shared learnings serve as a foundation for development that transcends the boundaries of individual firms, and relationships emerge as a suitable mechanism to facilitate this process. (Håkansson, 2006)

Håkansson (2006) argues that if you have cooperation over a longer period of time, the employees of the companies will build relationships and work towards developing specific solutions. At the core of these social interactions and developments is that trust between the parties plays an important role. Relationships are intricately woven into the fabric of social structures, making it challenging to establish a straightforward cause-and-effect relationship between the social exchange within a relationship and the overall structure. While trust plays a significant role, it was not identified as the primary explanatory variable. Instead, Håkansson (2006) emphasizes the existence of interdependencies. Håkansson (2006) believes that some companies enter into connected business relationships where a co-evolution occurs. What they had in common was that all were trying to develop their

products or processes given the existence of the others and their efforts. These connections are partially formed due to existing interdependencies, yet the involved companies also actively forge interdependencies. Håkansson (2006) describes two different interdependencies which according to him are the most important types. Firstly, technical interdependencies are where technical systems can create interdependencies between companies. Secondly and lastly, commercial interdependencies are created over a longer period of time, where there are small and significant adaptations, but the interdependencies can also be created through actions such as joint ventures, outsourcing, and supply chain alliances.

Thus, according to Håkansson (2006), relationships play a significant role in business, emphasizing the importance of strong relationships that involve knowledge sharing and the establishment of trust.

2.1.1 Supplier Relationships

In supply chain management (SCM), the relationships between a buyer and their suppliers are fundamental. To effectively manage these relationships, it is important to understand the specific features that characterize them (Gadde & Håkansson., 1993). Moreover, these features could be applicable to other relationships within the supply chain. Gadde & Håkansson., (1993) identify six specific features of supplier relationships: *complexity, long-term nature, adaptability, informal social processes, power and dependence, and conflict and collaboration*. Understanding and applying each of these features is important for building and maintaining successful supplier relationships. This knowledge is also crucial for developing a complete theoretical framework for managing supplier relationships.

Complexity refers to the fact that supplier relationships can be complex due to several factors, including factors like the number of suppliers involved, how much the buyer and supplier depend on each other, and the level of coordination necessary to manage the relationship (Gadde & Håkansson., 1993). There can also be other factors causing complexity such as cultural differences, language barriers, and factors that may complicate the communication between the buyer and supplier resulting in misunderstandings. An example of complexity in supplier relationships is when a large organization has several suppliers providing components which in turn are integrated into the final product. This can for instance create challenges in coordinating delivery and resolving any problems that arise. In many cases, people from various departments and on both sides of the supplier relationships must communicate extensively to discuss and solve complex problems. Although these issues may be addressed separately, they are often interconnected. Therefore, it is essential to improve communication between firms to enhance problem-solving and achieve better outcomes. To address the complexity of managing supplier relationships, a potential solution is to designate a specific individual with the responsibility of coordinating with the supplier. This approach is not commonly utilized, but it can help to ensure clear communication, establish expectations, and facilitate effective problem-solving between the buyer and supplier.

Long-term in nature means that supplier relationships typically extend over an extended period, encompassing more than just a single transaction or contract (Gadde & Håkansson., 1993). Long-term relationships are based on continuous contact and cooperation and the existence of trust between buyer and supplier. These factors are important for effective problem-solving and knowledge sharing over time to achieve continuous improvement. According to Gadde & Håkansson.,(1993), long-term relationships are desirable because the costs associated with establishing contact and exchanging information are typically high in the early stages of a relationship, but decrease as the relationship progresses. In other words, retaining and maintaining an existing relationship is more effective than acquiring new ones. Maintaining a relationship necessitates a significant emphasis on development through day-to-day activities, as several instances have demonstrated that a relationship can rapidly cease to develop if not nurtured. Conversely, if a company neglects to maintain its relationships for a period of time, its position will not be substantially impacted due to the inertia of these relationships.

Adaptability refers to the ability to adjust to changing conditions, such as shifts in market conditions, technology, or the needs and goals of the buyer or supplier (Gadde & Håkansson., 1993). This capacity to adapt is crucial to ensuring the relationship's long-term sustainability. An instance of adaptability in supplier relationships is when a supplier can rapidly pivot to produce a new product type to meet changing market demands. To achieve this, the supplier may work closely with the buyer to comprehend their needs and then modify their production processes accordingly.

Informal social processes refer to the relationships that occur informally between the buyer and supplier to gain trust and partnership with each other (Gadde & Håkansson., 1993). These kinds of processes might be complex to handle, but if handled effectively they can make supplier relationships thrive. Creating security in a relationship is not something that can be achieved in a single moment, but something that must be developed over time. That trust needs to be built through interaction processes that foster trust between the actors which will then gradually deepen. Additionally, it is also important that both actors have an understanding of each other's different operational processes, therefore the author argues that other social contexts may be needed to build a deeper understanding of each other's problems and to create a better relationship.

Power and dependence is a process that involves both the buyer and supplier working together to solve problems, share information, and achieve common objectives (Gadde & Håkansson., 1993). In order to establish a fruitful and long-lasting relationship with suppliers, collaboration is crucial. It has the potential to foster innovation, decrease expenses, and enhance the quality of products and services, resulting in an improvement in overall performance.

Conflict and collaboration refer to the understanding that in a business relationship, the parties involved may share common interests as well as conflicting ones (Gadde &

Håkansson., 1993). It is crucial to balance these interests to prevent unnecessary conflicts. According to Gadde & Håkansson., (1993), conflicts do not necessarily have to be completely eliminated, as many people might assume. In fact, a high degree of conflict combined with a high degree of cooperation often results in a well-developed and functional relationship between the supplier and the buyer. However, it is important to note that a significant amount of conflict without sufficient cooperation does not result in a positive and thriving relationship. On the other hand, good cooperation is a necessary condition for establishing a good relationship between the parties involved.

To conclude, managing relationships in SCM is vital for the success and sustainability of businesses. It is vital to understand the six specific features of supplier relationships described above, in order to retain and maintain fruitful relationships. Although supplier relationships can be complex and challenging, improving contact, adapting to changing circumstances, nurturing informal social processes, balancing conflicts and cooperation, and collaborating effectively can help foster innovation, reduce costs, improve quality, and ultimately improve the overall performance of the supply chain.

2.1.2 Business in Networks

The interdependencies described above, are according to Håkansson (2006) creating connections among single relationships that are leading to network effects. A network is perpetually in a state of imbalance, never achieving neutrality or optimal conditions. It consistently exhibits preferences toward specific interests, harboring the potential for manipulation, non-democracy, and a lack of transparency. The network seems to have a higher capacity to find solutions for development, and have a higher effectiveness than the market. In cases where interdependencies exist, coordination necessitates alternative approaches. Cooperation, through the mutual alignment of plans, serves as a viable solution for individual (dyadic) business relationships.

The network structure exhibits a unique trait known as the chain effect, which emerges from interconnections (Håkansson & Snehota., 1995). When an event or change in one business relationship impacts another, it initiates a propagation of effects throughout the network. However, the chain effect is not inherently automatic or predetermined; it requires transmission by some of the participants involved. The dynamics of a relationship between two companies are not solely determined by the actions of the two parties involved. Instead, they are influenced by the interactions occurring within numerous other relationships. The ability of a pair of actors to establish a relationship is contingent upon the wider network structure and its characteristics.

2.2 Transport in Supply Networks

This subsection explores the critical role of transportation in the exchange of goods within the buyer-supplier relationship, creating the transport service triad (TST) involving buyers,

suppliers, and carriers. Additionally, the subsection emphasizes the importance of effective collaboration and communication among all parties involved in order to develop sustainable transport solutions and enhance overall transport performance in supply chain management and networks.

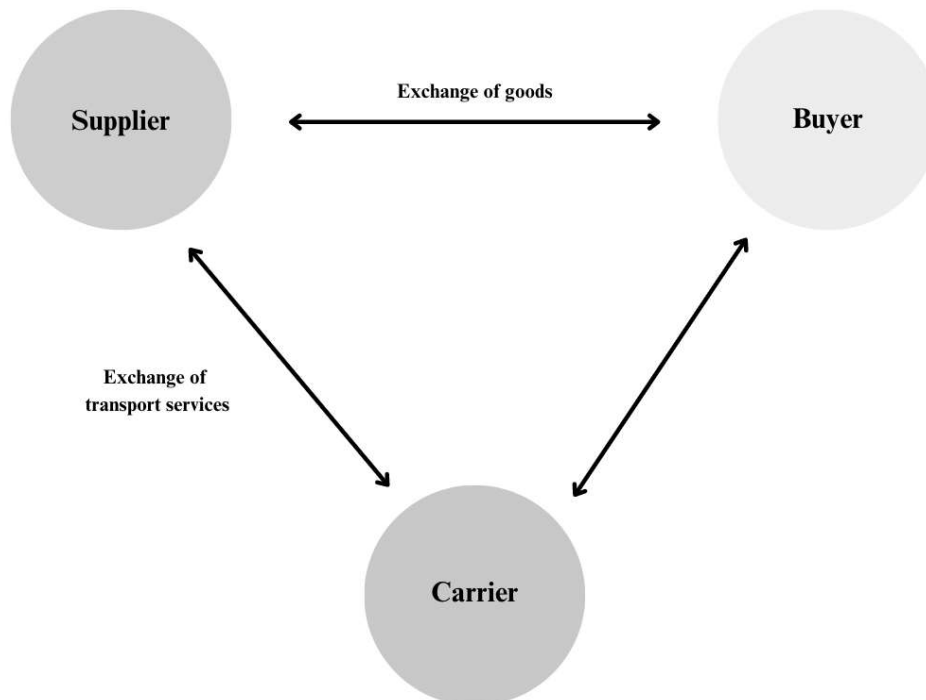
2.2.1 The Transport Service Triad

According to Andersson et al (2018) the exchange of goods between a customer and supplier requires a transport service, which entails the involvement of a carrier in the process. This creates a triad consisting of a buyer, a supplier of goods, and a transport supplier i.e. a carrier, which is called the TST (Andersson et al., 2018). According to Andersson et al (2018), carriers are taken into account in the strategic planning process with the buyer and supplier due to their role in the buyer-supplier relationship. Furthermore, the greater the involvement of carriers in the strategic planning process, the higher the chances of realizing benefits from the buyer-supplier relationship.

Figure 1, illustrates the TST when the buyer purchases services from a supplier and the supplier buys a transport service from the carrier. Additionally, the exchange of goods can occur in either direction, meaning that both the supplier and the buyer can purchase transport services from the carrier. When coordinating logistics services Andersson et al (2018) suggest that a triadic approach as described above is the most suitable.

Figure 1

Illustration of the transport service triad.



Further, there are also different roles within the triads: *brokerage*, *mediation*, and *coalition* (Andersson et al., 2018). *Brokerage* can be disguised as it creates relationships between the various actors as well as the one in the triad that disperses the information between the parties that may not otherwise have any contact in the process. The second, *mediation* describes how dyadic relationships are affected within this triad and can be affected by various mechanisms as well as how they are affected by third-party relationships. The third and last role, *coalition*, is described as the role that captures the structure as well as the transformation that occurs between the three-actors system, that is, how the three actors balance their relationships in a triad.

2.2.2 Transport Management in Supply Networks

To make transport performance better at every level, we need to know how transport activities are embedded in supply chains (Eriksson, 2021). Transport performance refers to the effectiveness and efficiency of transporting goods or people from one place to another, and can be measured in various ways, such as cost, time, safety, and environmental impact. The activities in the supply chain, contributing significantly to environmental impacts such as emissions, have increased the interest in sustainability in SCM. Notably, the EU's aim to decrease carbon emissions from the transport sector by 60% by 2050 from 1990 levels emphasizes the significance of sustainable transportation.

Despite this, Eriksson (2021) acknowledges that the literature on SCM has not given adequate attention to transport activities. Interdependencies of transport activities within supply chains are both vertical and horizontal. In the context of supply chain management, vertical interdependencies are defined as the interrelationships between activities within a supply chain, while horizontal interdependencies are the interrelationships between activities in different supply chains that arise due to shared resource utilization. An example of such resources can include transportation infrastructure like roads, rails, and ports. To effectively handle the various connected activities in supply chains. It is important to have good teamwork and communication among all involved parties. This collaboration is crucial for developing sustainable transport solutions and improving overall transport performance (Eriksson, 2021).

Moreover, effective transportation management is vital to the success of supply networks (Eriksson, 2021). Further research is necessary to understand the challenges and opportunities associated with transport in supply networks. As collaboration and resource utilization among actors in transport networks increase, transport performance may enhance, either through more efficient utilization of existing resources or by utilizing more sustainable transportation resources. Therefore, recognizing the embeddedness of transport in supply chains and transport networks is essential in improving transport performance and enhancing sustainability in supply chain management.

2.3 Communication between Stakeholders

When stakeholders are using external companies for their transport the aspect of communication becomes fairly important between the involved parties (Zasadzien, 2020). Communication is not just about sharing information; it's a complex and ever-changing process that involves different layers. It allows people to exchange meanings and thoughts, and it depends on how individuals interact with each other. So, it's not just what you say, but also how you say it that matters.

According to Zasadzien (2020), there are two basic groups of information channels: verbal and non-verbal. The basic way of relying on information verbally is spoken words, written words, and different types of illustrations. Furthermore, the non-verbal way of communication is an enhancement of the verbal and consists of facial expressions, gestures, and voice timbre.

During communication, there are several things that can cause interruptions and affect the message being sent. These interruptions are commonly known as "noise", and they can cause the communication process to deviate from what the sender had intended, leading to misunderstandings and less effective communication. Zasadzien (2020) argues that noise can be disaggregated into *internal* and *external interference*. *Internal interference* is explained to be the process of communication and is often a consequence of inadequate information, whereas the communication channel is not adapted to the recipient's level. Moreover, *external interference* refers to the distractions that come from the surroundings of the communication process, and they are not caused by the sender or receiver (Zasadzien, 2020).

According to Zasadzien (2020), the quality of communication is a complicated concept and can be described in various concepts. One of the concepts created by E. Robertson (Zasadzien, 2020, p.356) divides communication quality into four different levels, the achievement of which leads to a high level of communication. Zasadzien (2020) describes the four levels as follows;

1. *"Messages should reach the appropriate recipients in the right form and time."*
2. *"The content and form of the message should be tailored to the specific recipients."*
3. *"Convincing the addressee that the message relayed are relayed are relevant to their work."*
4. *"Communication should affect the addressee – influence their thoughts, commitment and action. "*

The assessment of communication effectiveness encompasses more than just its quality, as various factors come into play that can influence communication efficiency. The most important factor that affects the efficiency of communication includes according to Zasadzien

(2020): *personality, relationships between employees, professional experience, culture and organizational climate, and organizational structure.*

2.3.1 Communication within Transport Supply Chains

To have a sustainable supply chain, well-functioning communication is crucial according to Forslund et al (2021). Furthermore, the author stresses the importance of acknowledging communication between the different actors for a sustainable supply chain. Xiao et al (2022) argue that sharing information is vital for developing supply chain efficiency. Furthermore, communication gaps or silos create difficulties to mediate demand. This leads to insufficient cooperation between actors as well as decreased innovation, increasing the risk of unforeseen problems occurring (SupplyChainDive, 2016). Difficulty in communicating can cause problems in working together in supply chains, such as disagreements, uncertainty, and misunderstandings. But effective communication can also help resolve these issues between suppliers and buyers (Forslund et al, 2021). Forslund et al (2021) describe communication as “the glue that holds together a channel of distribution” (p.3).

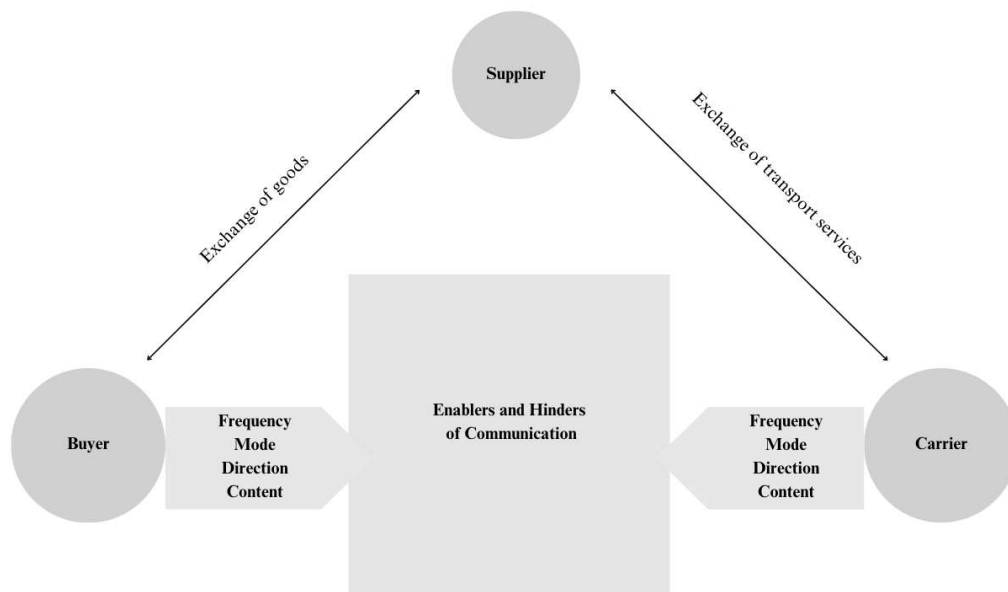
Communication and information sharing in supply chains can also be described as four levels: *frequency, direction, mode, and content* (Forslund et al., 2021). The authors argue that when these levels are put together, communication can be described as collaborative or autonomous. Autonomous communication refers to the use of formal methods that are often structured and planned to convey direct content through channels that are not frequently used and are not well-defined. Furthermore, collaborative communication is characterized by high-frequency communication, both formal and informal communication between actors. It also occurs in bidirectional flows, which means giving feedback on the information that has been shared. This is important to get an understanding between the customer and the supplier of what capabilities or expectations they have of each other (Forslund et al., 2021).

2.4 Analytical Framework

Drawing upon the Transport Service Triad concept inspired by Andersson et al. (2018), which involves a buyer, supplier, and carrier interconnected within a logistics chain and engaged in communication, an analytical framework is proposed and presented in Figure 2. This figure emphasizes the various modes of communication occurring between the buyer and carrier, as described by Forslund et al. (2021), encompassing frequency, direction, mode, and content. The figure serves as a tool for analyzing the obtained results, with a particular focus on the communication dynamics between the buyer (IBL in this case) and the carriers. Additionally, we incorporate the communication enablers discovered within the figure's central section.

Figure 2

Analytical framework for communication in the transport supply chains, with enablers and hinders of communication and four modes of communication.



3 Method

This chapter outlines the methodology employed in the study to address the research questions put forth in chapter one. It begins by presenting the research strategy and design utilized in the study. The approach adopted was a combination of qualitative research strategy and an abductive approach. Additionally, a case study was conducted with a primary focus on a single company and its carriers. The chapter further discusses the data collection and analysis, with semi-structured interviews serving as the primary data collection method. A total of 16 representatives were interviewed, and the collected data underwent thematic analysis. Lastly, the chapter examines the study's quality and addresses ethical considerations.

3.1 Research Strategy and Design

The choice to employ a qualitative research strategy for this study was based on two main reasons. Firstly, the lack of prior research in the field of the studied phenomena, how an ideal state of communication can appear between an inbound department and their carriers to achieve an efficient supply chain, makes a qualitative approach suitable to investigate and comprehend this area. In other words, the study aimed to develop theories rather than verify existing ones (Bell, Bryman & Harley, 2019). Nonetheless, established theories from related research fields were utilized as reference points. Hence was an abductive approach utilized in the study, as it involves a cyclical process between theory and data. The second reason that a qualitative study was used is that the subject studied is tied to social processes, as capabilities are tied to the ability of various stakeholders to create value from resources. Thus, was not feasible to examine capabilities without considering the subjective experiences of individuals. Hence, making a qualitative research strategy appropriate.

The research design utilized in this study is a case study approach, that focuses on a single case company as a means to gain a thorough understanding of the phenomena under investigation. The intention of the study was not only to examine the particular circumstances of the case company but also to arrive at conclusions that have broader applicability. This approach, known as an instrumental case study (Bell et al., 2019), was employed. One challenge in conducting this type of study on a single company was to maintain a balance between a deep understanding of the company and the ability to draw more general conclusions. To address this limitation, the knowledge of this challenge was kept in mind throughout the entire study.

Semi-structured interviews were chosen for this study to ensure a comprehensive exploration of the research topic. This decision was based on the versatility that Semi-structured interviews offer, as highlighted by Bell et al. (2019). The flexibility provided by this method allowed participants to have control over the discussions, while also enabling the interviewer to adapt the questions as needed. To strike a balance between flexibility and coverage of important topics, semi-structured interviews served as the primary research method. These interviews were designed to have a predefined set of questions, see Appendix 1, yet allowed for flexibility in probing and exploring participants' responses. Additionally, unstructured

interviews were conducted to complement the main research method. These unstructured interviews took the form of informal conversations and participation in weekly meetings, providing additional context and insights.

The study primarily involved engaging with relevant staff members at the case company through semi-structured and unstructured interviews. This approach allowed for purposive sampling, wherein participants were selectively chosen based on their knowledge and experience within the organization. This intentional sampling method ensured the collection of valuable data directly related to the research questions, as opposed to random sampling commonly used in quantitative interviews (Bell et al. 2019). The use of qualitative interviews not only facilitated a deep understanding of the subject matter but also provided the opportunity to gather rich and detailed insights from participants.

3.2 Data Collection

This subsection provides an in-depth description of the structure, context, and sampling approach employed during the conducted interviews, offering a comprehensive understanding of how the data was gathered and the interview process was conducted. By detailing the interview structure, including format, sampling as well as the context in which the interviews took place, this subsection ensures transparency and clarity in the research methodology.

3.2.1 Semi-structured Interviews

As mentioned earlier, the interviews conducted in this study followed a semi-structured approach, allowing interviewees to guide the discussion toward areas they considered important. However, to maintain a certain level of focus and context within the investigated area, all interviews were based on a standardized interview template, which can be found in Appendix 1. Depending on whether the interviewee represented the case company or a carrier, slight adjustments were made to the template to ensure relevance and alignment with their specific roles. The interview template served multiple purposes, including ensuring comprehensive coverage of all relevant topics to be investigated. Before initiating the actual interview, all participants were informed that all conversations would remain confidential and their responses would not be linked back to them. This approach aimed to encourage the interviewees to provide candid and truthful answers without concerns about any impact on their professional circumstances (Bell et al., 2019).

Furthermore, according to Patel and Davidson (2011), maintaining anonymity is crucial as it fosters a sense of comfort for interviewees during the interview process. This aspect was deemed significant in the context of the present study. In addition, the interviewees were asked for consent to record the interview, facilitating more precise data analysis for the interviewees' benefit. Prior to delving into the template questions, each interview commenced with a brief introduction, wherein the purpose of the research report and the main topics of discussion were explained to the interviewees. This served to provide them with a

foundational understanding of the study's objectives and rationale for their participation. By emphasizing the significance of their input in exploring the studied area, it aimed to motivate the interviewees to provide thoughtful and valuable responses.

Following the explanation of the study's purpose and the reasons for their participation, the interviewees were invited to introduce themselves, sharing details about their work roles, responsibilities, and previous experience. This step aimed to gain insights into each individual's position within their respective organization, whether as a carrier or a case company representative. Understanding the organizational context of each interviewee, facilitated the analysis of potential patterns and relationships between different roles and functions. This contextual information played a crucial role in identifying commonalities or variations in perspectives and practices, contributing to a more comprehensive interpretation of the collected data.

After introducing the study's objective and providing the interviewees with an opportunity to introduce themselves, the interview commenced with a set of questions aimed at addressing research question 1. These initial questions aimed at the interviewees' personal descriptions of the communication process and information flow between IBL and the carriers. They were intentionally open-ended to capture the interviewees' perspectives on communication dynamics (Bell et al., 2019). Subsequently, additional questions delved into their thoughts on the communication process, any aspects they felt were lacking, the frequency and content of communication between IBL and the carriers, and insights on the significance of weekly meetings, which the case company considered important to the investigation. These questions explored the structure and impact of the meetings, as well as any desired changes or improvements.

Following this, the interview template shifted focus to address research question 2. Interviewees were asked to envision an ideal communication process between IBL and the carriers, covering aspects such as frequency, information exchange, and stakeholders involved. They were also prompted to identify critical factors and clarify the benefits associated with an ideal process. Furthermore, they were asked to identify any hindrances preventing the achievement of such an ideal communication process. These questions aimed to explore the interviewees' perceptions of crucial elements for an optimal communication experience.

Moving from hypothetical scenarios, the interview template transitioned to more concrete questions, encouraging interviewees to provide specific examples of necessary improvements and measures for approaching an ideal communication process. They were also prompted to identify factors impeding effective communication between IBL and the carriers. Towards the end of the interview, interviewees were given the opportunity to raise additional topics they believed relevant to answering the study's questions, ensuring that any missed aspects were emphasized. They were also provided with the chance to clarify or add information to the discussion, allowing their messages to be effectively conveyed and ensuring their viewpoints were fully expressed (Bell et al., 2019).

3.2.2 Interview Contexts

With the exception of one interview, all interviews were conducted through the Teams platform. This choice was made for several reasons. Firstly, it facilitated finding suitable meeting times for both interviewers and interviewees. Additionally, certain participants, particularly carriers, were unable to attend interviews at the case company's office. Teams provided a convenient digital solution for conducting remote interviews and had the added benefit of an integrated transcription tool. However, the transcription tool was not flawless, requiring the interviews to be listened to and corrected manually post the interview occasion. Nevertheless, this approach saved time in the process.

Using Teams also offered the advantage of recording all interviews, allowing for the possibility of revisiting and listening to the data. This enhanced the credibility of the data collection process and ensured the accuracy of all quotations. The decision to use Teams was also influenced by a request from the case company, which already utilized this tool in its daily operations and felt comfortable with its functionality. The security aspect of Teams was a further key consideration in the decision-making process. The interviews were conducted in either English or Swedish, based on the individual preference of each interviewee. The duration of each interview was approximately one hour. Moreover, both authors of the study were present at every interview to ensure optimal interview quality.

3.2.3 Selection of Interview Representatives

Semi-structured interviews were conducted with 16 participants, consisting of eight individuals from the case company and 8 carriers. The sample size was determined based on several considerations. Firstly, Blomkvist and Hallin (2014) suggest that a sample size of approximately 10-15 interviews is suitable for a master's thesis, indicating that the sample size in this study is acceptable. Secondly, the concept of data saturation was considered to prevent redundant repetition of interviewee responses and reaching a stage where no new insights or conclusions could be drawn (Bell et al., 2019). On the other hand, it is important to note that Bell et al. (2019) also acknowledge the potentially limitless nature of insights that can be derived from collected data in qualitative research. Nevertheless, during the study, it became evident that after a certain number of interviews, recurring patterns emerged and no significant themes relevant to the study were longer identified, despite the emergence of new details. Lastly, the chosen sample size allowed for gathering a reasonable amount of data within the project's timeframe.

In addition, the total number of interview representatives was also limited to 16 due to other factors, such as individuals falling ill or facing circumstances that hindered their availability for the interviews. Despite efforts to reschedule, it was not feasible to find an alternative time that fell within the designated data collection timeframe hence the person could not participate in the study.

The selection of interviewees was based on recommendations provided by the project supervisors at the case company, focusing on individuals who were expected to provide

valuable insights in response to the interview guide. This approach reflects purposive sampling, where participants were chosen with specific research goals in mind (Bell et al., 2019). The sampling was limited to carrier managers within the IBL department, as they maintain close contact with the carriers. Additionally, the study focused solely on carriers responsible for 80% of the case company's transports, as they handle the majority of the transportation operations and, consequently, have the most communication with the IBL department of the carriers.

Table 2 shows the representations of the sample in the semi-structured interviews, providing an overview of the role and belonging of each interviewee. Please note that there are two belongings in the study: the interviewees either belong to the IBL team at the case company or are carriers themselves. Likewise, there are two types of roles represented: carrier managers and employees from the carrier department that is responsible for the contact with the case company. The sample of the study, as depicted in Table 2, consists of an equal number of individuals from the IBL department as well as the carrier group. This balanced approach was adopted to gather substantial data from both the carrier and IBL perspectives. Additionally, it is important to highlight that for each carrier interviewed, their respective responsible carrier manager was also interviewed.

Table 2*Representation of Interviewees*

Interviewee	Belonging	Role
Interviewee 1	IBL	Carrier manager
Interviewee 2	IBL	Carrier manager
Interviewee 3	IBL	Carrier manager
Interviewee 4	IBL	Carrier manager
Interviewee 5	IBL	Carrier manager
Interviewee 6	IBL	Carrier manager
Interviewee 7	IBL	Carrier manager
Interviewee 8	IBL	Carrier manager
Interviewee 9	Carrier	Employee
Interviewee 10	Carrier	Employee
Interviewee 11	Carrier	Employee
Interviewee 12	Carrier	Employee
Interviewee 13	Carrier	Employee
Interviewee 14	Carrier	Employee
Interviewee 15	Carrier	Employee
Interviewee 16	Carrier	Employee

3.3 Data Analysis

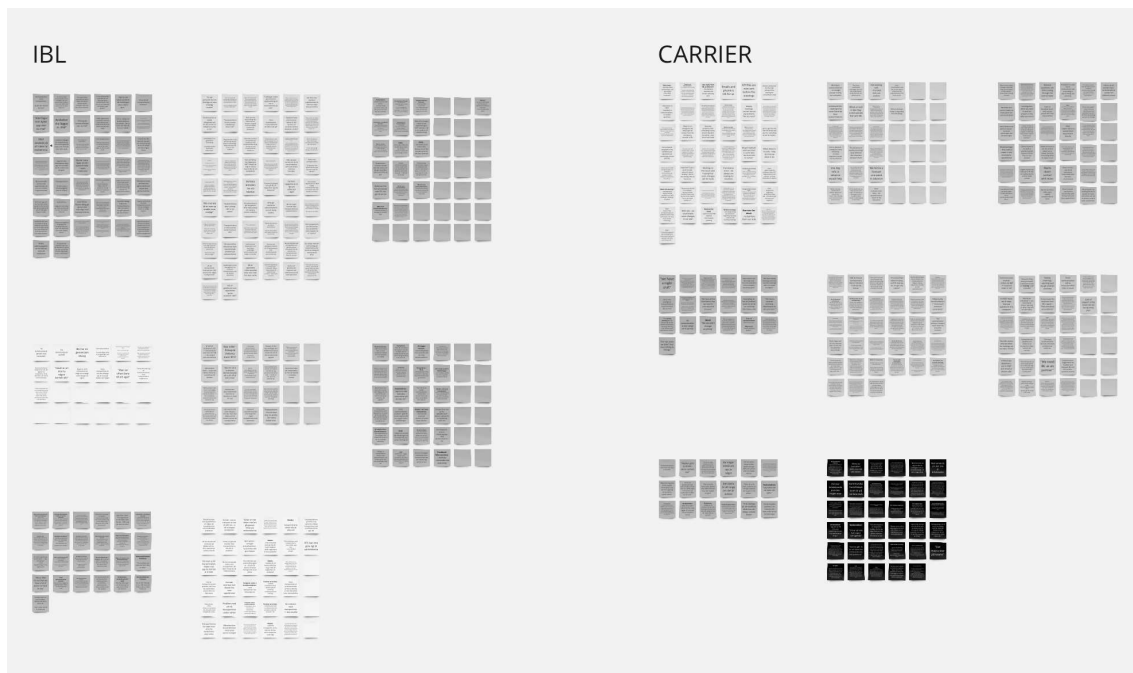
The data collected was analyzed using a method known as thematic analysis, which involves identifying patterns in qualitative data and deriving main themes from those patterns (Bell et al., 2019). Thematic analysis is a flexible approach that can be tailored to suit the requirements of a particular study. It involves gradually grouping qualitative data to form themes that represent the findings, with patterns emerging iteratively throughout the process.

In this study, the thematic analysis was conducted in the following manner. Before the analysis, all interviews conducted were transcribed and written down as text. The data analysis process began by carefully reviewing all transcripts and transferring the relevant

information onto digital post-it notes. This approach was employed within the digital platform Miro to ensure a structured overview of the data. Opting for Miro also proved to be a time-efficient decision. Moreover, each interviewee's notes were assigned a unique color to facilitate easy identification during the subsequent data analysis. Furthermore, efforts were made to maintain a consistent color scheme for notes associated with the IBL department and the carriers, enabling clear differentiation between the two interview groups. Figure 3 represents the final outcome achieved through the comprehensive review of all transcripts and the inclusion of relevant data on digital post-it notes.

Figure 3

The outcome of transferring relevant data on digital post-it notes in Miro.

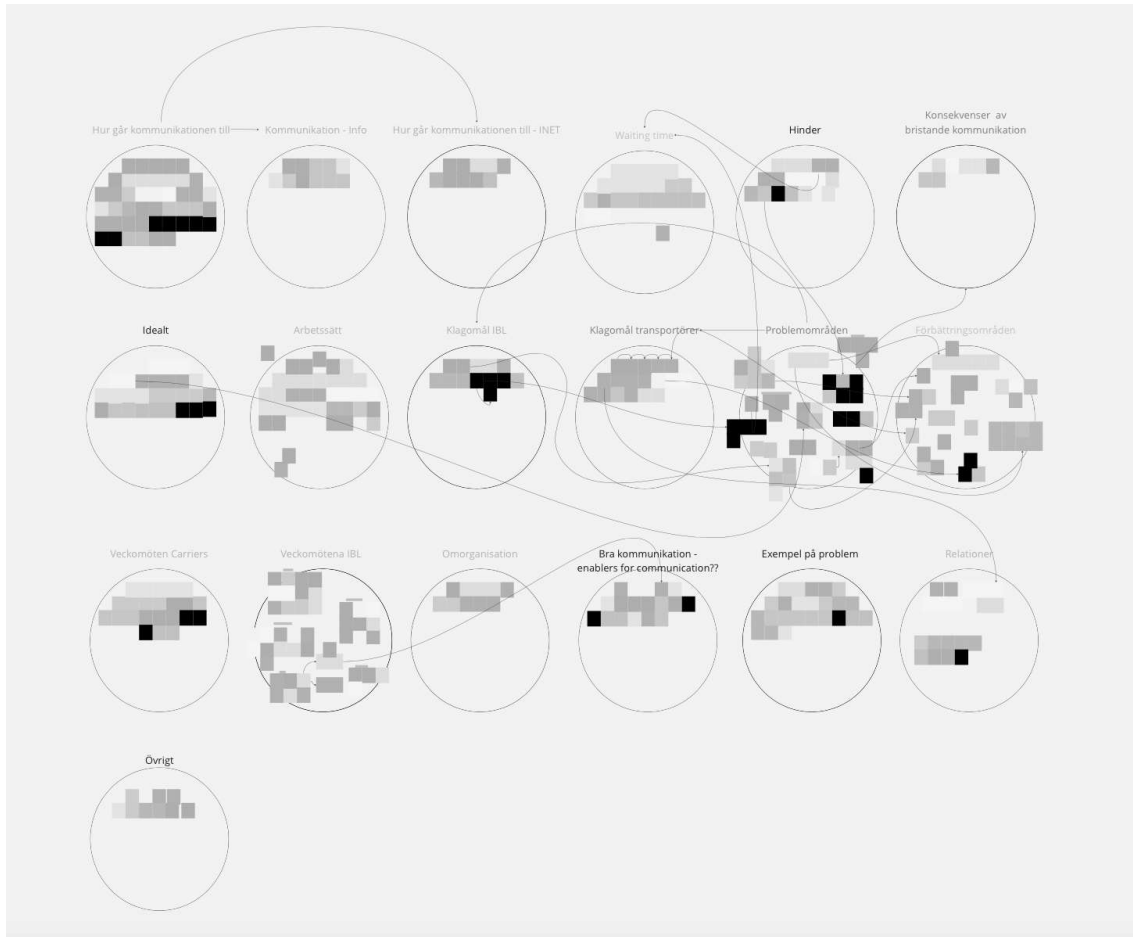


The subsequent step involved creating unnamed circles and systematically reviewing the digital post-it notes. Post-its that were considered to be interconnected or related were grouped within the same circle. It is important to note that new circles were added whenever there were no existing circles that could accommodate the relevant post-it note. Hence, there was no limit to the number of circles created, as long as each note found its appropriate place. Upon reviewing all the post-it notes and organizing them into clusters within the circles, a total of 19 circles were filled with post-it notes. Subsequently, each circle was carefully examined to assure the cohesion of the notes within and to ensure that no additional circles were required for a better fit. The circles were then assigned headings, representing the emerging themes from the qualitative data. In addition, these themes served as inspiration for the structure of Chapter four. The final step in the data analysis process involved drawing arrows between post-it notes and circles that was not considered to belong to the same theme but shared important connections, which were crucial for addressing the research questions

when presenting the empirical findings. Figure 4 illustrates the final outcome of the complete thematic analysis.

Figure 4

Illustration of the final outcome of the thematic analysis.



The selection of thematic analysis as the chosen approach was driven by two key factors. Firstly, as indicated by Bell et al. (2019), it is a widely used method for analyzing qualitative data, which made it suitable for this study. Secondly, the flexibility of a thematic analysis allowed for adaptation to align with the specific requirements of the study.

3.4 Research Quality and Ethical Reflections

This subsection will evaluate the quality of the study and examine the ethical considerations that were taken into account during the research process.

3.4.1 Assessment of Research Quality

Bell et al. (2019) present four criteria for assessing the trustworthiness of qualitative research: *Confirmability*, *Credibility*, *Dependability*, and *Transferability*.

Confirmability refers to the objectivity of the study and minimizing the researchers' own values (Bell et al., 2019). While full objectivity is challenging in qualitative research, external input from supervisors and previous research helped reduce the authors' influence on the results, enhancing confirmability.

Credibility refers to the trustworthiness of the study's findings, which was sought through rigorous research practices (Bell et al., 2019). Initially, to ensure an accurate interpretation of collected data, the authors engaged in ongoing discussions with the supervisor from the case company. Additionally, during the interviews, the authors strived to foster an open dialogue with the participants, allowing them to speak freely and elaborate on their responses. Following each interviewee's response, the authors also summarize their answers to confirm their understanding of the individual's intended meaning. These actions were undertaken to enhance the study's credibility.

Dependability relates to the extent to which the study's findings can be applicable in different settings. Incorporating relevant research within the theoretical framework, maintaining detailed documentation, and providing a comprehensive description of the methodology all contribute to strengthening dependability. Furthermore, these efforts facilitate external review and evaluation, thus further enhancing the study's dependability.

Transferability assesses the applicability of findings in contexts beyond the study (Bell et al., 2019). While the unique social setting of a case study limits transferability, the spottings related to the development of communication in a transport service triad and the challenges related to the area can be relevant to similar organizations. However, identified development areas addressed in the concluding chapter that specifically targets the case company are more context-specific. External organizations interested in these findings must consider differences in contexts.

3.4.2 Ethical Considerations

Throughout the study, it was crucial to keep ethical aspects in mind to prevent any violations. Vetenskapstådet (2002) provides four ethical principles for research: *Information*, *Confidentiality*, *Consent*, and *Utilization*. Similarly, Bell et al. (2019) identify four main areas of research ethics: *Potential harm to participants*, *Informed consent*, *Invasion of privacy*, and *Deception*. To ensure that no violations would occur this study addressed the four areas, aligning with the recommendations of both Vetenskapstådet (2002) and Bell et al. (2019).

Deception can according to Bell et al (2019), occur in research where the purpose and scope of the study are not clear to the participants. To avoid the risk of deception, all participants were thoroughly informed about the scope and purpose of this study. Furthermore, during the

study and after the interviews, all participants were encouraged to come back with questions if anything was unclear.

Lack of informed consent means according to Vetenskapstådet (2002), that participants in a study should be provided with enough information about the study to be able to make an informed decision about whether they want to participate in the study or not. In this study, several measures were taken to ensure informed consent. Firstly, in the invitation to the interviews, all participants received a short brief of the study and were further informed about what their participation would entail. Secondly, before the start of the interview and the actual recording of the interview, the participants received another more detailed introduction to the study. Lastly, all participants had the opportunity to withdraw their participation at any time during the interview or after the interview without further complications.

Harm to participants includes stress, physical harm, and harm to the interviewee's career and future employment (Bell et al, 2019). To minimize stress among the interviewees, flexibility was provided in terms of time scheduling and rebooking. Anonymity was ensured, both externally and internally i.e. both within the case company and the carrier companies and also for other stakeholders interested in the study. Before each interview, the interviewee could choose whether they wanted to be recorded or not. Moreover, the recordings were only saved locally and deleted after the study. In addition, no identifying details about the case company were disclosed to guarantee the anonymity of the case company as well.

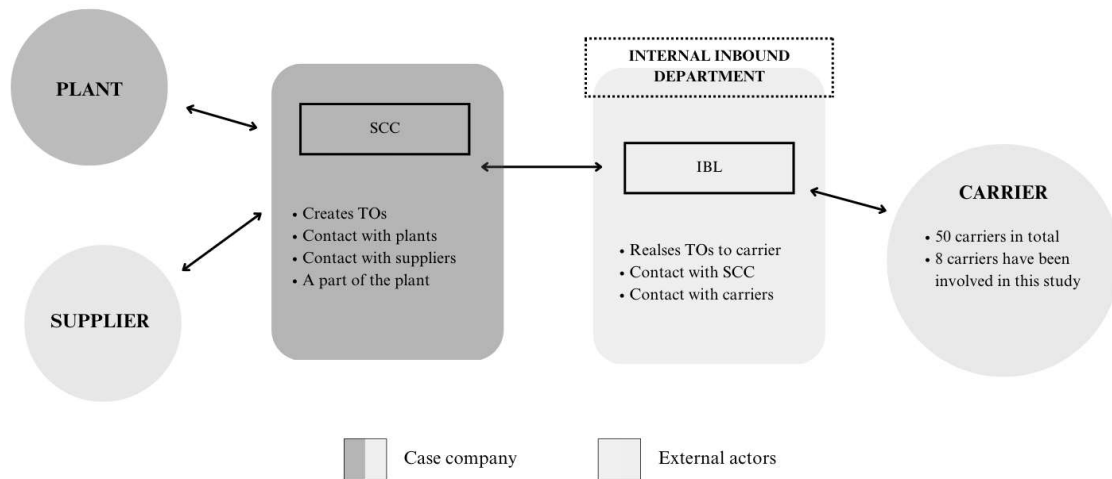
Invasion of privacy was taken into account to preserve the integrity of the participants by respecting the values and privacy of the interviewees. Several commitments were made to ensure the privacy of the participants. Firstly, no superfluous information was collected. Secondly, in the same way that lack of informed consent was guaranteed invasion of privacy was ensured by giving the participants the chance to withdraw their responses and end their participation at any time, with the aim of assuring participants' well-being and privacy. Thirdly, the authors were committed to transparency and honesty about the research purpose, ensuring it was not misrepresented (Bell et al., 2019). Lastly, participants were not obliged to answer all questions. In the event that the interviewees chose not to answer a particular question, they were given the option to express their preference, and the interview would proceed to the next question accordingly.

4 Description of Inbound Logistics of Case Company

The case company uses two internal systems that work together to create new transport orders (TO). The TOs are automatically created but if necessary, TOs can be created manually by either the suppliers or Supply Chain Coordinators (SCCs). Their internal network called the TMS system, is set up with routes for each flow i.e. the route from a supplier to one specific plant and the document Supplier Relation Sheet (SRS) containing detailed information about the transport setup, activation date, collection, and delivery address, Carrier, Supplier and receiver contacts and mode of transport. If changes or updates are needed within the routes, the case company has an *optimization team* that is responsible for that and can change lead times and tactical windows. Figure 5 depicts how the inbound departments of the case company are divided into two and with which parties they work.

Figure 5

The inbound supply chain of the case company, including the inbound departments (IBL department plus the SCC department) and their different parties.

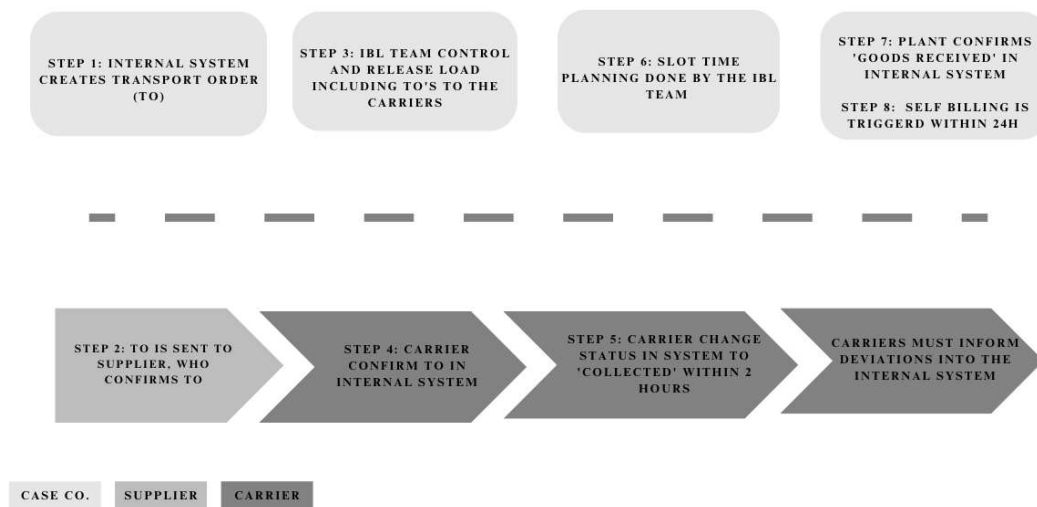


The process works as follows, a TO is created based on the call-off (specified quantity of goods to be delivered at a specified location by a specified date and time) with the parameters set in the route. The TO is created two days prior to collection and is at that point also visible to the supplier in the case company's TMS system. The supplier can then adjust the TO if there are any issues. However, if everything is correct from the supplier's side they confirm and release the TO latest 11:00 one day prior to collection. The day before the pick-up the operations planning team (a group within IBL) work begins, they make sure that everything is correct in the TOs as there may be discrepancies (such as for example lead-times and

timetable at collection and delivery address) and release to the contracted carrier, latest 14:00 one day prior to collection. The carrier has until 16:00 one day prior to collection to confirm the TO, but as the carriers are contracted most of the bookings are confirmed. Once the carrier has picked up the goods, they must enter the status "collected" in the case company's TMS system. The carrier can enter the status in the TMS system either manually or via EDI from their own TMS system. The day before delivery, slot-time planning takes place, this is done based on the prioritization of urgent parts and the tactical windows. Communication that takes place between IBL and carrier, to inform what time the transport can be unloaded at the plant. The carrier is obligated to report any deviations that may occur in the transport into the case company's TMS system. When the goods are delivered, the plant changes the status to "goods received" in the case company's TMS system, so that the carrier later can receive a payment. Figure 6 shows a simplified illustration of how the different actors in the case company's inbound process are interconnected.

Figure 6

Illustration of the Inbound Communication Process



There is not supposed to be any communication between the IBL team and supplier, and the same when it comes to the SCCs and carriers. This break in the communication chain results in that simple questions and decisions can take hours instead of minutes. As of the time of the study, the idea within the process is that there should be no contact between the IBL team and the supplier. On the other hand, SCC occasionally communicates with the IBL team to address supplier-related issues, as evidenced by the inclusion of IBL team members as a copy in email correspondence with suppliers.

The case company has established a variety of contractual agreements for transport with carriers. The standard agreements include long-term contracts lasting 2-3 years in which a single carrier assumes responsibility for a specific route as well as short-term agreements with carriers for transportation with less predictable demand. Another type of contract is the

Ad-Hoc pool, where the majority of carriers are the case company's standard carriers. The Ad-Hoc pool is an alternative tool for solving the transports if there are deviations in the normal planning. For example, it could be that there is overtime in one of the plants, and for the overtime, the plant needs to get more material from the suppliers to keep production running. Consequently, this could result in overbought capacity meaning that the nominated carrier for that specific flow does not have the possibility to confirm the transport order. Another reason why a transport order ends up in the ad-hoc pool could be that the need for material is lower than usual and if the route is bought as Full Transport Load (FTL), it would be more beneficial to transport the material as Less Transport Load (LTL). The operations planning team determines whether a shipment should proceed to the ad-hoc pool where carriers bid on the shipments. Furthermore, there are also premium agreements between carriers and case companies for transports that are more urgent and have less lead time than the standard agreements. The premium part of the case company has recently been outsourced to a third party.

The members of the IBL team are resigned to specific carriers and are supposed to have weekly check-up meetings with these, this is internally at the Inbound EMEA department called 'carrier meetings'. One of the current challenges expressed by the case company is that the IBL teams find it difficult to make time for the weekly carrier meetings with their assigned carriers due to competing priorities and workload. As a result, there are periods throughout the year when team members are unable to prioritize these meetings, leading to a gap in communication and important agendas and problems going unaddressed.

For instance, if too many meetings with carriers are missed, feedback on their transportation solutions may not be received. In the long term, if a carrier consistently keeps finding solutions and placing bids on different transports and not getting any of them, they may choose to prioritize another automotive company, potentially one of the case company's competitors. Moreover, in the case of carriers with standard contractual agreements, the failure to attend meetings can result in restricted continuous improvement in the partnership between the carriers and Inbound EMEA. Additionally, the case company has raised apprehensions about the reactive nature of the weekly meeting, which primarily focuses on resolving current problems and challenges. In other words, at present, the case company asserts that the carrier managers' weekly meetings primarily address and deliberate on existing issues rather than prioritizing preventive efforts aimed at minimizing the occurrence of problems. For structural and strategic issues that arise with carriers, the carrier management team is in charge and this is not addressed in the weekly meetings. This approach poses a potential obstacle to continuous improvement.

The case company's manufacturing plants have three shifts daily that produce one vehicle per minute. As previously mentioned, if any crucial components are missing, the whole production stagnates, and the backlog would increase. However, to reduce the risk of production stagnation or reducing downtime, it is not uncommon for rapid transports for inbound components to occur. The occurrence of these transports can be attributed to inadequate communication within the supply chain process.

5 Empirical Findings

The following chapter presents the outcome of interviews conducted with the case company and the main carriers of the company. The focus of the report is to explore two research questions. The first question aims to identify the current state of communication between the IBL department and carriers, while the second question aims to determine what an ideal communication approach between the two parties could look like.

5.1 Appearance of Current Communication between IBL and Carriers

This subsection focuses on the findings and analysis derived from qualitative interviews conducted to address research question 1. The chapter is organized into different areas, separately presenting the perspectives of carriers and the IBL department under each respective area. By examining these perspectives, a comprehensive understanding of the communication dynamics and practices between these stakeholders is achieved.

5.1.1 Modes of Communication

Case company

In light of the interviews conducted, it becomes evident that the IBL department serves as a crucial hub of communication between the case company's carriers, and the SCCs. As Interviewee 7 states, any issues or concerns that may arise are resolved by the IBL department. Furthermore, as Interviewee 4 highlights, the carriers have specific departments dedicated to the case company, resulting in frequent communication with the same individuals, hence the IBL department often knows who to contact.

The interviews with employees at the case company revealed that email is the primary mode of communication with carriers. Interviewees 1, 4, and 6 all noted that most communication with carriers is done via email, especially through the IBL's common mailbox. According to Interviewee 1, "all questions that arise are via email," while Interviewee 6 estimated that "90% of the contact with the carriers is by email." Interviewees 1 and 8 stated that email is preferred for documentation purposes suggesting that written records are important to the case company. Interviewee 8 also noted that email is used as a communication tool at IBL to ensure that everyone on the team receives the same information, and so that conversations can be referred to later. In the daily operations, Interviewee 1 means that "there is a lot of focus on operational work i.e. answering the common mailbox". Additionally, Interviewee 2 clarifies that the objective is to ensure that all emails directed to the shared mailbox receive an answer as soon as possible. However, the interviewee also notes that not all emails carry the same level of urgency. For instance, an email regarding a delivery issue that could affect the production at the case company is prioritized over others that may not be as critical. Thus,

the IBL department prioritizes emails based on their level of importance when responding to them.

While email is the preferred mode of communication, Interviewee 1 mentioned that carriers and IBL sometimes communicate via phone for a quick response. Interviewee 2 also mentioned that critical cases are handled via phone, and pointed out that IBL maintains a common answering machine to guarantee that the carriers receive a prompt response at all times, without the need to call multiple numbers, in case of more pressing situations. Interviewee 2 added that carriers are required to answer the phone at all hours and that some small carriers may have standby arrangements to cover nights and weekends. Overall, IBL seems to prioritize written communication over verbal communication as email offers the benefits of having a written record and ensuring all team members receive the same information. However, in some cases, phone communication is necessary for a quick response or handling of critical cases.

Moreover, besides email and phone, data from the interviews reveal that IBL and carriers indirectly communicate via the case company's TMS system, as indicated by Interviewee 4. Interviewee 1 describes TMS as "the actual system where the booking or order is made." Further Interviewee 1 explains that deviations are reported in the TMS system, but if one wants to know a more precise reason for the deviation, an email can be sent and asked. Interviewee 1 also means that all deviations must be registered in TMS. When a carrier reports deviations in TMS the information is automatically registered and then sent out to the SCCs, as explained by interviewee 2. Furthermore Interviewee 2 emphasizes the significance of timely updates of delivery statuses in TMS, even if carriers do not have any deviations. Failure to update the status on time may result in the system automatically flagging a deviation, even then everything is going according to schedule. That is to say, incorrect information that goods have not been picked up or delivered is disseminated.

Furthermore, Interviewee 3 stresses the importance of updating statuses in TMS in time, stating that "you don't want to stop the production so if updates in TMS come in time, it is easier to avoid stops". Additionally, Interviewee 2 points out that carriers must send an email with a significant level of anticipation and proactive planning, according to a special template, if their cars have not been loaded or if there are other reasons for deviations. However, this template is not always used as carriers tend to change it and make it their own. Interviewee 2 means that trying to try to interpret emails where the template has been customized by the carrier is not especially effective and indicates that it would be more efficient if all carriers used the predetermined template.

The frequency of communication between IBL and carriers varies depending on the carrier and the day, as described by Interviewee 3. This suggests that the communication approach may be flexible and adaptable to different needs and situations. Additionally, Interviewee 6 asserts that carrier managers are entrusted with the responsibility of communicating with their carriers when they observe any inefficiencies in the system. These issues could be about communication breakdowns or instances where the carrier has been unable to comply with agreed-upon schedules, resulting in late transports or deviations. This highlights the

importance of proactive communication in identifying and addressing potential issues before they become major problems.

In terms of IBL's contact with carriers and subcontractors, Interviewee 5 explains that while IBL has contact with SCCs and carriers, IBL does not have direct contact with the carrier's subcontractors. It is the carriers that have the responsibility over and handle all communication with their subcontractors.

Altogether, the data from the interviews suggest that IBL utilizes various communication channels and tools, including email, phone, and the TMS system, to communicate with carriers and manage transport operations effectively. However, IBL seems to prioritize written communication over verbal communication as email offers the benefits of having a written record and ensuring all team members receive the same information. However, in some cases, phone communication is necessary for receiving quick responses or handling critical cases. Lastly, the communication approach between IBL and the carriers appears to be adaptable and flexible, depending on the carrier and situation.

Carriers

When asked about the carriers' perspective on the communication between them and the case company, Interviewee 13 explained that their communication with the case company is frequent and ongoing throughout the workday, and is primarily related to operational issues. These could include requests for goods needed earlier for production, delays in delivery that are not acceptable for the production schedule and needs to be substituted with for example premium transports, or other issues such as a broken truck. "We communicate with the case company from 7 am when we start until 5 pm when we leave work," as expressed by Interviewee 13. Interviewee 15 explained that they have a separate department directed to the case company and that the communication is primarily done through email, and perceive that they receive quick responses from the case company's common email address. "If there are any discrepancies regarding the shipments, then we send an email because we want everything in writing and to know what is happening with the shipment," they said. Moreover, that email is used as the primary source of communication in non-urgent cases for documentation is confirmed by all of the interviewees from the carrier side. This is in line with the responses from the IBL interviewees and highlights the importance of written communication and the need for clear and concise information exchange.

In alignment with the response from the IBL department at the case company, the interview answers from the carriers confirmed that besides email communication between carriers and the case company, communication also takes place via phone and the TMS system. As explained by Interviewee 9, email is the preferred tool for non-urgent matters, while phone calls are used for urgent matters. Interviewees emphasized the importance to call during the evening and night for urgent matters. One of the interviewees highlights a situation where they as a carrier have been escalated due to a situation outside office hours where the IBL department could not reach them for several hours. The interviewee implies that the situation

occurred as a result of miscommunication between them and the IBL department that they have standby during non-office hours, thus IBL must call during those hours to get an answer. Instead, the IBL department tried to get in contact through email, hence did not receive an answer. Further, Interviewee 9 stated that they always receive an answer from IBL's emergency number in case of emergencies.

TMS is the primary system for order handling, and updates of shipments during transportation. According to Interviewee 14, as a carrier, they are required to update the TMS system three times throughout transport. If a status is not set in time by the carrier automated messages are sent out by the system, informing about a deviation. Interviewee 15 reported that they like the TMS system because it is simple and allows discussions to be made only through the platform if the transport runs according to plan, hence contact through email and phone can be avoided. Interviewee 14 summarized their communication with IBL, stating that orders are handled via TMS, while problems are addressed by email and phone.

Interviewee 16 mentioned that most meetings are conducted over Teams, indicating that digital tools of communication are important for the case company to maintain contact with their carriers. To clarify, the main reason for using the digital tool teams is that the majority of carriers are not located in Sweden. Interviewee 11 stated that general questions are usually directed to their control tower because the case company have requested to have only one point of contact with them. However, they noted that it takes longer for IBL to get answers to their questions if they go through the control tower, as it becomes an intermediary that has to send the case or question to the person who can answer the question or handle the case. Interviewee 11 believes that a more efficient way would be to contact the person concerned directly without going through the control tower. However, this would require the case company to have a greater insight into its carriers' operations. To rephrase it, the case company may need to build even stronger personal relationships with the staff in the carrier departments they collaborate with. This would enable a better understanding of their roles and areas of expertise, thus facilitating the identification of the right person to approach for various issues, and providing them with a broader range of options. According to Interviewee 11, the implementation of this approach with more direct contact may slow down communication initially but ultimately lead to reduced and faster communication.

Overall, it seems that communication is a vital aspect of the operations between the case company and its carriers. The use of digital tools such as email, phone, and Teams is prevalent, with email being the primary mode of communication. For at least one carrier a control tower is used for handling and distributing general questions and cases to relevant persons, but it has been raised that there are instances where it may be more efficient to contact the person concerned directly. Lastly, there is a strong emphasis from several interviewees on written communication since written communication allows communication between the IBL department and their carriers to be documented.

5.1.2 Weekly Meetings and Reorganization

This subsection focuses on the significance of the weekly meetings between the carriers and the IBL department, as they play a crucial role in their communication process. The weekly meetings serve as a dedicated platform for the carriers and the IBL department to come together, discuss relevant topics, and address any pressing issues. By examining this aspect of their communication, valuable insights are gained into the structure, purpose, and effectiveness of these meetings. The discussion will begin by presenting the IBL's perspective, followed by the carriers' viewpoint.

Case company

The main purpose of the weekly meetings, as mentioned by Interviewee 4, is to reconcile the current situation with the carriers. Discussions can encompass a wide range of topics, ranging from the arrival of a new colleague to drawing attention to upcoming production stoppages. According to Interviewee 1, the weekly meetings serve as a means to assess the carriers' performance, including tracking their delivery and collection of goods. Interview 6 adds that these meetings also involve highlighting the week's progress and addressing any issues that arose during the week. Moreover, Interviewee 2 stresses that apart from KPIs operational issues are also addressed in the meetings.

KPIs play a crucial role in the weekly meetings, as highlighted by all the interviewees since they serve as a benchmark to evaluate carriers' status reporting accuracy in TMS and overall performance in the past week. However, Interviewee 1 believes that more attention should be given to understanding the carriers' operations and current challenges rather than solely focusing on KPIs. Additionally, Interviewee 1 elaborates that currently, the meetings primarily revolve around KPIs. Consequently, this leads to repetitive meetings with less emphasis on pinpointing the root cause of poor KPIs and exploring potential solutions. In contrast, Interviewee 8 offers a different perspective, suggesting that the emphasis of the weekly meetings should remain on the KPIs as they serve as a reliable measure of a carrier's performance.

When asking about who is involved in the weekly meetings, Interviewee 3 notes that the meetings typically involve the carrier manager and representatives from the carriers. Further, several representatives from the IBL team explain that the weekly meetings offer an opportunity to establish a better understanding of the carrier, resulting in the IBL team providing better assistance. As Interviewee 2 states, "The carriers are all different and should therefore be handled differently". This suggests the significance of considering each carrier's distinct characteristics and preferences, underscoring the need of being well-acquainted with their operations. For instance, interviewees from the IBL team imply that some carriers work proactively and promptly to address the issue, while others require more support and effort to gather information.

In terms of structure and guidelines, Interviewee 7 remarks that there is no set procedure on how to conduct the weekly meetings, instead each team member conducts their meetings in their way. As stated by interviewee 1 “So far we've realized that we all work in different ways. Some do not have an agenda but let the carriers bring up what they want to talk about.” highlighting the flexible nature of the weekly meetings suggesting that the agenda is sometimes influenced by the carriers’ needs and priorities, allowing for a more personalized approach. Furthermore, Interviewee 7 turns out to have a more fixed agenda typically revolving around discussing KPIs, deviations, performance status, identifying problems or errors, and addressing complex lanes. However, Interviewee 7 further emphasizes that modifying the agenda has the potential to enhance carrier motivation. This is particularly crucial as interviewees have expressed that they occasionally experience a sense of repetitiveness in their discussions, lacking tangible long-term improvements and the motivation to instigate change. The diversity of the weekly meetings within the IBL team is also emphasized by interviewee 2, who states, “Even though we are not that many people in the team, we work in very different ways.” This implies that individual approaches and work style influence how the meetings are conducted. Although the format of the weekly meetings may vary depending on the responsible carrier manager a common aspect is the inclusion of a review of the KPIs, which is conducted by either the carrier manager or the carrier’s representatives.

Moreover, the interviewees have expressed uncertainty regarding the expectations of managers regarding the weekly meetings and the absence of guidelines specifying which KPIs should be addressed. But despite the absence of a formal manual for the weekly meetings, Interviewee 1 mentions the existence of unwritten rules that serve as a guide for the meetings. These unwritten rules likely stem from the accumulated experience and shared understanding within the team.

Notably, the interviews revealed that the interviewees within the IBL department employ different methods for their weekly meetings. Some delegate the meeting to the carriers themselves, allowing them to present their KPIs and be in charge of the meeting. Conversely, others take charge by presenting the KPIs and leading the meetings themselves. According to Interviewee 3, their approach is to allow the carriers to hold the meeting and present the KPIs, themselves. The interviewee believes this approach fosters increased engagement and participation from the carrier.

Regarding the frequency of the weekly meetings there exist varying perspectives on the optimal frequency of conducting weekly meetings. Interviewee 3 suggest that holding meetings every two weeks would be more efficient than conducting them every week. However, Interviewee 1 advocates for more frequent meetings and increased follow-up of carriers’ concerns. Interviewee 1 further articulates that currently, there is insufficient time available to adequately address carrier-related issues, hence numerous problems are recurring. One challenge highlighted by Interviewee 1 is the lack of time to prepare before the weekly meetings for example to review the KPIs in advance. Interviewee 1 means that the

time constraint may limit the depth of analysis and hinder the ability to identify underlying causes or propose effective solutions. Interviewee 1 believes that there should be more attention given to the carriers. Currently, the approach is to deal with things as they come up. For instance, during the weekly meetings, there is not much preparation done beforehand, and the problems that arise during the meeting are solved on the spot. The interviewee thinks that this is not the best approach to handling issues effectively. Interviewees 4 and 8 support the idea of extending the interval to two or three weeks for carriers without issues, and Interviewee 8 notes that carriers generally do not mind if they do not have weekly meetings every week. Instead, the carriers appreciate the idea of reducing the number of meetings and find it enjoyable.

During the interviews, it was revealed that an initiative has been implemented to enhance uniformity and standardization in carrier managers' meetings. Hence, the case company appears to prioritize standardization and consistency during their weekly meetings. This initiative involves the development of a platform that generates pre-designed PowerPoint presentations for weekly meetings, tailored to the specific carrier and week in question. Although this tool is relatively new, not all interviewees have had the opportunity to test it. Among those who have tested the platform, a positive reception was observed. However, some interviewees expressed concerns regarding the pre-generated PowerPoint presentations, noting that they heavily emphasize KPIs. As a result, substantial meeting time is dedicated to discussing KPIs, leaving limited room to address other issues and focus on potential solutions using the automatically generated slides.

The interviews also reveal that weekly meetings are occasionally deprioritized when the workload at the IBL department is high. As mentioned earlier by Interviewee 1, Interview 2 shares the belief that there is insufficient time available for weekly meetings, especially during busy periods. However, Interviewee 2 notes that there might be improvements in the future due to a recent reorganization since work tasks will disappear as a result of the outsourcing of the premium department leaving more time to preparations for the weekly meetings. Nevertheless, up to this point, the interviewee has not observed any positive changes. Interviewee 4 attributes the lack of priority to the perception that smaller carriers do not require meetings as frequently, since they handle less transport and thus often have fewer issues on average.

Regarding the recent reorganization within the IBL department, multiple interviewees have provided insights. According to them, the reorganization entails a redistribution of carrier managers, with each manager exchanging the carriers they are currently responsible for. Additionally, the team will reduce by two members. The purpose of this change is to introduce new perspectives and contribute innovative solutions. Furthermore, there will be a shift in focus from stakeholders to a greater emphasis on the team itself and its development.

Opinions among the interviewees are divided regarding the benefits of this reorganization. Interviewee 3 and 7 believes that there are both advantages and disadvantages. They emphasize the fresh perspective that comes with new eyes, enabling the discovery of new

solutions for recurring problems. They also argue that it could be beneficial for carriers not to become too comfortable with their current carrier manager, as this may foster a sense of responsibility for self-improvement.

However, Interviewees 2, 3, and 7 highlight certain risks associated with the reorganization. These risks include a lack of familiarity with the carriers themselves, their respective organizations, and the communication channels with them i.e. whom to contact if any issues. Establishing relationships and trust with the new carriers will take time, resulting in a slow start before the daily collaboration runs smoothly and the team can begin focusing on improvement work. Additionally, Interviewee 1 expresses concern that despite the reduction in team size, the tasks will remain the same and thus entail a high workload. This worry stems from the increased difficulty of managing tasks, such as preparing and conducting weekly meetings, which are already challenging to coordinate. Interviewee 2 further expresses concern about the reduced team size, stating, “We will not be able to accomplish as much; one must prioritize and be more selective.”

In summary, the interviews highlight the role of weekly meetings as a means of communication and assessment of carrier performance. Although not all carrier managers have a defined agenda for these meetings, they generally cover various topics such as KPIs, operational matters, and carrier-specific concerns. However, there is a necessity for clearer expectations, standardized processes, and enhanced follow-up procedures to effectively address the challenges faced by carriers. Furthermore, it may be essential to allocate more time and place higher priority on the weekly meetings.

Carriers

The data gathered from the interviews makes it clear that the weekly meetings play a significant role in communication and problem-solving between the carriers and the IBL department. Interviewees from the carrier side emphasized that these meetings serve as a platform to receive feedback on their performance and discuss any issues that need attention. Unlike communication, through email and phone in more critical cases, the weekly meetings provide a more direct avenue for obtaining answers and resolving current problems. Interviewee 13 specifically mentioned that these meetings are essential for discussing issues that cannot be adequately addressed via email and require more in-depth explanations.

During the weekly meetings, various topics are covered, as explained by Interviewee 9. Interviewees mentioned that discussions revolve around KPI, operational issues, actions required from the case company’s side, and the needs of the client i.e. the case company. According to Interviewee 9, there is no fixed agenda for the weekly meetings, allowing flexibility in addressing relevant topics. The emphasis at the weekly meetings on KPIs was consistent across multiple interviews, indicating the importance of KPIs for monitoring and evaluating performance. Furthermore, Interviewee 12 explains that besides the KPIs the carriers are evaluated on other aspects such as communication. The carrier manager rates their communication on a scale of 1-5, and according to Interviewee 12, they have achieved a

score of 4, which they consider to be excellent. Nevertheless, when questioned about the reason for not attaining the highest score of 5, the interviewee is uncertain about the means to achieve such a rating and expresses the view that obtaining a score of 5 appears to be nearly impossible. Based on this, it seems that the interviewees do not know what is expected of them in order to get the highest score, which may be something that the IBL department needs to be more clear about in order to see improvement in communication from their carriers.

Additionally, all interviewees have a unified picture that the primary format of the weekly meetings is through the digital platform teams. Nevertheless, Interviewee 15 expressed a desire for more in-person meetings, stating that physical gatherings foster transparency, a better understanding of one another, and hence stronger relations.

When asking about the frequency of the weekly meetings it differs for some interviewees. While meetings every week were the norm, Interviewee 10 mentions a lack of continuity of the weekly meetings due to changes in the IBL team, leading to a six-month gap in meetings. Both Interviewees 14 and 15 emphasize the importance of having meetings every week to be up to date on their performance, identify areas for improvement, and maintain strong relationships.

5.1.3 Opportunities for Enhancement and Areas of Focus

Throughout the interview process and subsequent analysis of the data, various aspects emerged, written below in italics, that highlighted both the challenging aspects and potential areas of improvement regarding the communication between the IBL department and the carriers.

Case company

Request for Better Updates: One area of improvement highlighted by Interviewee 1 is the carriers' request for better updates on organizational changes within the case company, such as production stops, to be informed well in advance. This indicates a need for proactive communication from the IBL team to keep carriers informed about any significant changes that may impact their operations. By providing carriers with timely information, the IBL team can ensure smoother coordination and minimize unnecessary communication. Further, Interviewee 5 also acknowledged the potential for improvement in communication by emphasizing the need for timely information sharing, particularly through informative email updates. This highlights the importance of effective communication channels and practices within the IBL department. By promptly sharing relevant information, such as waiting times, the IBL team can enhance transparency and enable carriers to plan their operations more efficiently.

Improvement of Response Time: One recurring theme mentioned by multiple interviewees was the slow response time from the IBL team. Interviewee 2 mentioned carriers' desire for

faster email responses, indicating that prompt communication is crucial for carriers to carry out their tasks effectively and be able to meet IBL's request to respond quickly. Moreover, Interviewee 1 pointed out that some team members prioritize their personal mailboxes over the shared IBL mailbox, potentially leading to delays in response time. This highlights an internal issue within the IBL team that needs to be addressed. By encouraging team members to prioritize and actively monitor the common mailbox, the IBL team can ensure that carrier concerns are handled promptly and efficiently. Interviewee 1 further explains that IBL's slow response time is due to the fact that managers did not have time to address all issues during the weekly meetings, leading to a large influx of emails in their private inboxes. This highlights the importance of effective communication within the internal structure of the IBL department.

Timely Updates and Information Flow: Another challenge highlighted was the lack of timely updates and information flow from the carrier's side. Interviewee 5 mentioned that carriers sometimes fail to report delays or long waiting times in time. This indicates a need for the carriers to improve their communication practices and ensure that relevant information is shared in a timely manner. Interviewee 2 mentions that the IBL team often relies on the carriers to provide timely updates on the status. However, Interviewee 1 further acknowledges that the process is not flawless from the case company either. There are times when the carriers have to remind IBL to report the status of "goods received," indicating that the carriers have delivered the goods. Although this status is the responsibility of the plant and not the IBL department, it still falls under the responsibility of the case company. Hence should not affect the carriers' operations. Moreover, Interviewee 5 explains that when the IBL department is unable to provide an answer or lacks updates on a particular issue, they occasionally choose not to respond to emails related to that topic. Interviewee 7 suggests that communication could be enhanced if IBL could furnish carriers with information earlier and be more transparent when they do not have information to share. This suggestion aligns with feedback received from the interviewee 7s' carriers.

Lack of trust: Lack of trust between the IBL department and the carriers emerged as a significant area of improvement. Despite having the TMS system in place for reporting all deviations and transport statuses, the IBL department expresses that they have doubts about the reliability of the carrier in accurately updating this information in the system. As a consequence, they tend to send emails as a double-check to ensure that carrier's transports are proceeding as planned, resulting in a high volume of emails being sent to confirm information. This excessive email correspondence consumes valuable time and hampers productivity. Interviewee 1 expresses this lack of trust, stating, "The carriers do not do their job 100% and then you lose trust in them." This is attributed to carriers occasionally failing to report deviations and update "status collected" in TMS after picking up a load, leading to doubts about the reliability of the information stored in TMS. For instance, if goods collected are not reported in TMS, it may not be that the goods were not picked up and there was a delay, but it may also be that the carrier forgot to report that they picked up the goods in the warehouse. Furthermore, Interviewee 6 also highlights the issues of carriers not promptly reporting delays and that they have long waiting times. The interviewee states that

“Unfortunately our carriers, sometimes, I would say not always and not all. But sometimes they are a little bit sloppy in putting the statuses in time.” This delay in reporting leads to a lack of accurate and timely information for the IBL team.

Furthermore, according to interviewee 7, the carrier managers bear the responsibility of motivating carriers to update the TMS system. However, Interviewee 6 highlights a lasting issue they face. When problems are raised with carriers and solutions are implemented, the improvements tend to be short-lived. After a short amount of time, the carriers revert back to their old patterns, requiring constant reminders from IBL and reopening discussions about the problem. Moreover, Interviewee 6 reveals that some carriers overlook feedback, stating, “We have carriers that I think are so big that they can almost do whatever they want without any consequences.”

Interviewee 1 points out that if no deviations are reported in TMS, the assumption should be that there are no deviations. However, due to their awareness of the carriers' inconsistent reporting, members of the IBL team feel compelled to send numerous emails to double-check. On the other hand, Interviewee 6 suggests that information in TMS should be trusted but acknowledges that information received outside TMS it is not always accurate. Interviewee 6 means that "Carriers can give some 'happy news' sometimes, maybe to protect themselves a bit." This discrepancy in information accuracy further complicates the trust dynamic between the IBL department and carriers. Additionally, Interviewee 6 highlights the challenge of obtaining the right support promptly when critical issues arise. This often leads to significant delays in obtaining accurate information, prolonging the process of coming up with a solution.

Excessive email volume: Another area of concern that leads to frustration is the overwhelming influx of emails received by the IBL department, which of some are perceived as unnecessary. The influx of emails significantly hampers their ability to focus on other important tasks, as described by several interviewees. Interviewee 7 describes the situation, stating, “The mailbox explodes from time to time.”

Interviewee 6 sheds light on one reason for the excessive email volume, attributing it to their instructions for carriers to rather provide too much information than too little. Conversely, Interviewee 2 emphasizes the importance of only contacting or emailing when absolutely necessary and not contacting by mere curiosity. Interviewee 2 highlights that one reason for the unnecessary email overload within the organization, which is the habit of people extensively including "the entire company" as copy recipients in their emails. This practice leads to the widespread distribution of emails that may not be relevant or necessary for everyone in the organization. By including “the entire company” in the email recipient list, individuals contribute to the overall email overload problem. As a result, employees end up receiving numerous emails that are not directly related to their specific roles or responsibilities. Consequently, valuable time and attention are used to sorting through and reading irrelevant emails. Interestingly, Interviewee 16, who is a carrier, shares the

perspective of Interviewee 2, stating that they only contact the IBL department when it is essential to do so.

Interviewee 5 raises concerns about the disadvantages of receiving unnecessary emails. Besides the fact that it is time-consuming sorting through and responding to these emails, the interviewee means that critical emails get buried among the unnecessary ones in the mailbox, increasing the risk of overlooking crucial information. As Interviewee 5 describes the issue, “If you have 50 emails in your inbox, how do you know which ones are critical? The same goes for the carrier, and that is why I am careful about sending too many emails.” To address this issue, Interviewee 5 proposes that more individuals directly impacted by particular problems should be involved in the weekly meetings. This way, issues can be discussed and resolved at the meetings, hence minimizing the reliance on email communication.

Lack of structure: When asked about communication and cooperation with carriers, Interviewee 1 expresses a sense of lacking structure. The interviewee explains that they take things as they come and emphasize the need for a clearer framework. Interviewee 2 acknowledges the lack of clear instructions at the IBL department, resulting in individuals working in their own ways. Furthermore, Interviewees 2 and 8 mention the existence of a shared platform within the IBL department containing carrier information, emergency contacts, and more. However, they note that the information in this shared platform is not consistently updated, highlighting an area for improvement.

Challenges beyond IBL-Carrier interaction: The responses from the interviews also underscore the need for communication improvements in areas beyond the interaction between the IBL department and carriers. Although this is outside the scope of the study, it is still important to mention as it ultimately affects the communication between IBL and the carriers. Interviewees 4 and 6 believe that there is potential for improvement in the communication between the carriers and their subcontractors. The interviewees say that sometimes it feels like problems come from the subcontractors and that in these cases it is not the communication between IBL and the carriers that does not work, but that the carriers do not get answers from their subcontractors. They believe that improving this communication is crucial for resolving the overall communication challenges. Furthermore, Interviewee 3 offers a different viewpoint, suggesting that communication breakdowns can occur because the IBL department acts as an intermediary between carriers and the plant. In such cases, delays in obtaining the accurate status arise from the plant's slow response. Interviewee 7 also acknowledges that the internal communication “does not flow that well either”. Interviewee 13 adds that more structured internal communication would enable quicker provision of information to carriers. To sum up, interview responses suggest that some communication challenges stem from factors beyond the direct contact between carriers and the IBL department.

Carriers

Furthermore, the carriers' viewpoint on the challenges and potential areas of improvement that they perceive for themselves and the IBL department is important to consider.

Improvement of Response Time: Looking at the carrier's perspective there are some communication challenges and room for improvement. One problem area similar to the one expressed by the IBL department is the slow response time from the IBL team. Interviewee 13 expresses frustration when they as a carrier do not receive timely replies, especially in escalated situations where quick actions are required. Interviewee 9 also mentions situations where they have waited 2-3 hours to receive a response, particularly during the afternoon. Faster response times are desired by carriers, as it would facilitate planning and make operations smoother.

Timely Updates and Information Flow: Timely information sharing is another area of improvement highlighted by the carriers. Interviewee 1,9, and 14 expresses the need for the IBL team to be more proactive in informing the carriers about organizational changes, for instance, production stoppages. It has emerged that carriers sometimes find out about such changes through suppliers, which is not ideal since it is the IBL department that is the carriers' main contact point within the case company. Additionally, according to Interviewee 14, there are instances where it seems as though they are at the end of the supply chain, resulting in being the last to be informed about changes. Lack of timely information provided about stoppages and disruptions in production affects carriers' ability to plan effectively and optimize their operations. Interviewee 10 expressed a desire for the IBL department to offer more precise and directed communication when it comes to matters such as providing estimated times for truck unloading. The interviewees mean that this improvement would enhance overall communication.

Enhancing Direct Communication Channels: Several carriers express a desire for increased direct contact with the IBL department. Interviewees 11 and 14 emphasize the need for more direct communication channels, such as having more frequent in-person meetings, the ability to directly call the responsible person, and knowing the right contact person for specific issues instead of relying on email correspondence through a common inbox. Carriers believe this would increase the efficiency of the communication and help the IBL team to gain better insight into their specific issues.

Lack of understanding: Interviewee 16 draws attention to an area where improvement can be made from the IBL's side. The interviewee emphasized that many things can affect transportation, such as queues and broken trucks. However, Interviewee 16 experiences that there is a lack of understanding from the IBL department, in these critical situations. When critical incidents occur, IBL expects frequent updates from the carriers. However, several interviewees feel that providing updates without new information is unnecessary. Carrier expresses frustration with IBL's pressure to provide continuous updates in stressful situations. The interviewee explains that the pressure adds to stress and sometimes the situation is beyond their control. As Interviewee 12 describes situations like this "It does not matter how much you scream if a trailer is on a boat that is not in the port". Despite conveying their

understanding of IBL's desire for updates, Interviewee 16 acknowledges that excessive communication does not lead to faster resolutions. Further, the interviewee describe a situation where they received numerous emails and calls from IBL, all focused on the same issue, despite that they had already indicated a lack of updates. As a result, Interviewee 16's coworkers felt compelled to repeat themselves and provide the same answers to IBL, taking attention away from problem-solving and other tasks.

Interviewee 16 suggests that IBL's limited understanding may stem from their unfamiliarity with the logistics chain in reality. They express that it would be beneficial if IBL had firsthand experience on the transport chain side, as it would foster greater understanding. "It is a bit of a shame that IBL lacks experience from reality.", as expressed by Interviewee 16 stating the lack of practical experience within IBL. From the carrier's perspective, Interviewee 16 assures that they can provide clear explanations about what happened during a means of transport, but that IBL has to respect that they cannot provide updates when they have no more.

When asked about areas for improvement as perceived by the carriers, Interviewee 13 mentions that the IBL department expects carriers to report to TMS accurately and on time. While acknowledging this issue, Interviewee 13 points out the challenges faced during peak hours that make timely reporting difficult. They suggest that IBL could benefit from having a better understanding and increased oversight during such demanding periods.

Challenges beyond IBL-Carrier interaction: According to the interviews conducted, it has emerged that internal communication within the case company has a negative impact on both the communication with the case company and the performance of the interviewees. This issue is highlighted by Interviewee 15, who points out that they are frequently asked to provide explanations to IBL for poor KPIs, but many of the problems they encounter they feel are caused by the case company itself, suggesting a lack of effective communication and coordination within the company. Interviewee 16 further supports this notion, stating, "Nothing ever happens with the actual problem. Maybe the IBL department works a lot on it. It is difficult for us to determine, but it never feels like you really make progress and then you have to sit and answer why KPIs are bad." This quote emphasizes the frustration felt by the interviewee, suggesting that despite efforts from the IBL department, the underlying issues within the case company persist without any tangible solutions being implemented.

Additionally, Interviewee 15 adds, "Many times we have a good dialog with IBL, but it does not happen much anymore because we never make progress there." This statement further underscores the idea that communication challenges may extend beyond just the interaction between IBL and the carriers, but are also influenced by internal communication challenges within the case company. Also, Interviewee 13 suggests that the main areas of improvement in communication lie within the case company itself. They state, "I think it is more, to be honest within the case company." This quote implies that the case company bears the responsibility for addressing and improving internal communication issues. Furthermore, Interviewee 16 expresses their dissatisfaction by stating, "It is been 15 years and the case

company still has not solved the problem." This quote highlights the longevity of the issue, indicating that the problem has persisted for a significant period without resolution. This long-standing problem further emphasizes the negative impact it has on communication and overall performance.

Waiting times: The interviews reveal a significant area of improvement concerning the case company's prolonged waiting times for unloading goods at the plants, as mentioned by the majority of the carriers interviewed. This issue is highlighted by Interviewee 13, who expresses frustration by stating, "We can not drop the trailer. We need that trailer back again for other transports". They further emphasize the lack of information received, stating, "There is a very huge lack of all the information, we do not get any information at all." The waiting times not only cause inconvenience but also hinder the carriers' ability to plan and coordinate their operations effectively.

Interviewee 13 also highlights the importance of receiving timely information, stating, "We can keep all of the parties in the supply chain calm. We can calm our drivers. Perhaps we can also do something with the driving and rest time of the drivers." This quote underscores the importance of receiving updates on how long the drivers will have to wait to be unloaded as well as the impact of waiting times on various aspects, including driver schedules, compliance with driving and rest regulations, and overall supply chain coordination. Furthermore, Interviewee 14 reveals that the long unloading times harm their KPIs even though it is not their fault that they have to wait to be unloaded, hence feel powerless to address the issue. They state, "It is a big issue that we can not tell our drivers or we can not do any planning." This quote highlights the consequences faced by carriers due to the unloading delays.

However the case company seems to be aware of this problem, Interviewee 8, representing the IBL department, acknowledges that the unloading times are suboptimal and impact carrier willingness to work with the case company. However, Interviewee 8 expresses difficulty in addressing the issue as a member of the IBL team, implying limited control or influence in resolving the problem. Interviewee 1, also from the IBL department, suggests a potential solution by stating that if carriers had access to a system to book slots themselves instead of relying solely on IBL, it could mitigate the problem. Similarly, Interviewee 9, who is a carrier, emphasizes the need for IBL to have a better understanding of how waiting times affect driver schedules and subsequently impact KPIs. They also suggest that IBL should improve communication and estimation of waiting times to assist carriers more effectively.

Interviewee 1 recognizes that IBL, as the middleman between the carrier and the plant, may not be entirely responsible for the lack of dependable information about unloading schedules. However, they stress the need for the case organization to make sure that IBL can give better and more timely responses to tackle this problem.

Satisfied Carriers - No perceived Need for Communication Enhancements: Some carriers hold a contrasting viewpoint and assert that they do not perceive any need for enhancing their

communication with the IBL department. They assert that they have not encountered any difficulties in their interactions. Interviewee 15 stands out in particular due to their optimistic perspective and difficulty in pinpointing areas for improvement. They propose that this might be attributed to the fact that the case company is their customer, and they simply adhere to the established system. Moreover, Interviewee 14 shares their personal experience by stating, "We did not have anything to change for two years." This suggests that the carrier did not identify any necessary adjustments or improvements during that prolonged period.

5.1.4 Business Relationships

While the interviews did not directly delve into this aspect, it is worth noting that both the IBL department and the carriers made several references to the nature of their relationship. Although not explicitly discussed, these references provide important contextual information that can influence the dynamics of their communication. Understanding the nature of their relationship is crucial in comprehending the underlying dynamics and potential factors that may impact their communication practices. By exploring this aspect further, we can gain a deeper understanding of how their relationship dynamics may shape their communication patterns and contribute to overall collaboration.

Case company

Regarding the perspective of the IBL department, Interviewee 6 emphasized the significance of weekly meetings as a crucial platform for fostering relationships. In addition, Interviewee 6 stressed the importance of establishing strong relationships with carriers to ensure their comfort and satisfaction with the support provided. Building a solid relationship, according to Interviewee 6, relies on transparency and open communication. Similarly, Interviewee 8 emphasized that positive relationships with carriers lead to better results. Face-to-face interactions were noted by Interviewee 8 to facilitate relationship-building more effectively compared to virtual meetings. As stated by Interviewee 8, "In-person meetings have a distinct advantage. They create a more relaxed atmosphere for conversation." Furthermore, Interviewee 8 highlighted that smaller carriers are more eager and receptive to developing deep relationships, as they rely heavily on the case company as a customer. This distinction was illustrated by Interviewee 8 through the following quote: "So relationships are very important, but you can see that the larger carriers are a little bolder. The smaller carriers are a little more humble." Interviewee 2 also acknowledged the variations in relationships with different carriers, noting that some carriers are highly independent while others rely heavily on the IBL department. Additionally, Interviewee 8 mentioned that contact with carriers typically occurs only when problems arise. Interviewee 2 further commented that the fewer carriers a carrier manager is responsible for, the fewer relationships to manage and track. Hence also increasing the quality and proximity of these relationships.

Carriers

From the carriers' perspective, Interviewee 14 expressed the sentiment that they view the IBL department as a valuable partner. This confirms that the IBL department is of importance to the carriers. Interviewees 11 and 15 emphasized the importance of direct contact and the prioritization of physical meetings for maintaining a strong relationship. Interviewee 11 stated that it is essential to establish personal connections and foster relationships with everyone involved. Interviewee 15 further explained that having direct contact and building relationships with specific individuals from the IBL department creates clear expectations and delineates responsibilities when addressing problems. In contrast, if there is no direct contact i.e. contact with one responsible individual for example the carriers' carrier manager Interviewee 11 noted that issues can easily slip through the cracks, with no one feeling accountable. Several interviewees from the carrier side pointed out that while it may be convenient for the IBL department to have a shared inbox for email responses, the lack of a designated person responsible for each message can result in delayed problem resolution, to the carriers' dissatisfaction. Interviewee 11 also highlighted a power imbalance in their relationship with the IBL department noting that since the IBL department is their customer, they feel hesitant to raise every issue or express all their desired changes. However, interviewees with representatives revealed that the IBL team has experienced challenges in getting carriers to take their feedback and make changes operational changes, especially from large carriers. More specifically, the interviewees noted that these carriers are less reliant on the case company as a customer, implying a potential power imbalance in the opposite direction.

Interviewee 16 shared their positive experience with a long-standing contact person from the IBL department, highlighting the benefits of building a relationship and working with a consistent individual over time. Conversely, Interviewee 11, who mentioned that "we have had four different carrier managers over the past three and a half years," expressed dissatisfaction with the frequent turnover of carrier managers from the IBL department, highlighting the consequential lack of stability. Interviewee 11 also noted inadequate handover between different carrier managers, resulting in the need to start over every time. Lastly, Interviewee 10 discussed the connection between the weekly meetings and building relationships, stating that when these meetings are unprioritized and even canceled, there is a noticeable negative impact on the closeness between them and IBL.

5.1.5 Enablers of Communication

This section will outline the factors that facilitate and enable communication between IBL and the carriers. Specifically, it will discuss the insights provided by the interviewees from the IBL department and the carriers regarding effective communication practices that are currently in place and contribute to successful communication

Case company

Several interviewees representing the IBL department underscored the positive aspects of communication and collaboration with the carriers. Interviewee 4 expressed overall

satisfaction with communication, stating that it generally works well. However, the interviewee emphasized that communication tends to excel when it benefits the carriers, especially with larger carriers. This suggests that when both parties recognize a mutual value, communication becomes more efficient and productive.

Moreover, Interviewee 7 highlighted the positive outcomes of direct communication. They explained that in cases where there has been more direct communication, problems were resolved more easily. The interviewee attributed this to a greater sense of personal responsibility felt by both IBL and the carriers. Thus, collaboration becomes smoother and more effective when individuals are personally invested in fixing the issue.

Another key aspect identified by interviewee 6 was the presence of a “high ceiling” in communication. This implies that both IBL and carriers have the freedom to raise various topics, whether positive or negative. By fostering an environment of open dialogue, both parties can address issues, give feedback, and together work on improving processes.

The interviewee pointed out the benefits of establishing deeper relationships with carriers. By assigning some specific carriers to each carrier manager, IBL fosters stronger relations with the carriers. These stronger relationships cultivate a feeling of mutual trust and support, enabling carriers to be more willing to assist and act in the best interest of both parties.

To conclude, communication and strong relationships with carriers play a crucial role in achieving successful logistics operations. When communication is open, and direct, and benefits both parties, it leads to efficient problem-solving and a greater sense of personal responsibility. Additionally, establishing deeper relationships with carriers fosters trust and collaboration, ensuring mutual benefits for IBL and the carriers.

Carriers

From the carriers’ perspective, it also emerged various key aspects enable good communication between the carriers and the IBL department. Firstly, Interviewee 8 expressed that while receiving slightly faster responses would be preferred, overall, communication is not a major issue. By stating that the communication currently works well. As interviewee 8 put it, “Of course, it would be good if you could sometimes get a slightly faster response, but on the whole, it is a minor problem because communication works well.”

Interviewee 16 lifted that the effectiveness of communication and cooperation varies in different periods. However, like Interviewee 8, they agreed that the overall communication and cooperation are satisfactory. In addition, Interviewee 16 acknowledged that due to the involvement of multiple parties, communication could become a bit messy at times. They shared their perspective, stating, "I think that's also pretty much in periods and ways. On the whole, I would say that communication and cooperation work well. But there are many people involved, so sometimes it can get messy."

The carriers also brought up the support they receive and the responses they receive from IBL. Interviewee 8 mentioned that they receive feedback when needed and if they require assistance they know who to contact, stating that in many situations they can turn to their carrier manager. Interviewee 12 expressed that they are satisfied with the support they receive from the IBL department, stating that every time they encounter an issue, they acquire the necessary support from the case company. Likewise, interviewee 14 felt that the IBL department cares about their problems and provides good responses when raising concerns.

Interviewee 9 highlighted the problem-oriented approach of the carriers and IBL, stating that whenever problems occur, they are always actively seeking solutions. This demonstrates the willingness between IBL and the carriers in resolving issues. Also, Interviewee 15 mentioned that the carriers are good at openly sharing both good and bad news, indicating that they communicate effectively and are transparent.

The collaboration between carriers and the IBL department was also addressed. Interviewee 14 noted that when lifting suggestions for improvements they are well-handled from the IBLs side attributing this to common interests. This statement implies that there is a collaborative mindset and a willingness to cooperate towards mutual benefits.

The presence of clear expectations and straightforward communication was brought up by carriers. Interviewee 12 expressed that the communication and collaboration with IBL work well due to the case company's simple and straightforward rules. Interviewee 16 added that the expectations placed on them by IBL are fairly clear. Furthermore, interviewee 12 emphasized this further by mentioning their attempt to replicate the communication setup they have with the case company to other customers.

Finally, Interviewee 13 noted that the current communication process is more structured today than it has been in the past due to increased automation. The interviewee views the increased automation as beneficial, stating that the more automated process has simplified communication for all parties involved.

To sum up, the carriers' perspective highlights the positive experiences they have had with communication and collaboration within the IBL. While there may be minor areas for improvement, such as faster responses, carriers appreciate the support they have received, the direct communication channels, and the commitment of the IBL department to address their concerns. Additionally, the IBL department's problem-solving approach, clear expectations, and structured communication processes contribute to a working partnership between IBL and the carriers, which ultimately improves overall logistics operations.

5.2 Exploring Ideal Communication Practices: Enablers and Hinders

This section focuses on addressing research question 2, which explores the ideal communication methods between the IBL department and the carriers. It is important to note that the findings presented here are based solely on the interview data and do not provide a

comprehensive answer to the research question. Further discussion and exploration of the research question will be presented in subsequent sections for a more comprehensive understanding. Similarly to the presentation of the empirical findings for research question 1, the perspectives of the case company and the carriers will be separately presented.

Case company

To start, understanding the ideal communication state between the IBL department and the carriers requires us to consider the viewpoint of the IBL department. By exploring how they define effective communication, we can uncover their expectations, priorities, and goals for establishing successful channels with the carriers. This examination helps us grasp their perspective on what constitutes a favorable communication dynamic, guiding us in identifying areas for improvement and developing strategies to enhance overall communication.

Interviewee 3 emphasized the importance of smooth communication, expressing that ideally the contact would be kept to a minimum while ensuring efficient operations. They state “The best thing would be if we did not have to have so much contact and everything just flowed smoothly.” Aligned with Interviewee 3's viewpoint, Interviewee 4 shares the belief that minimizing communication between the IBL department and the carriers is ideal, as their primary interaction revolves around resolving issues, stating “Ideal is not to have so much communication because then everything works as it should”. They mean that a lack of contact implies the absence of problems. However, Interviewee 4 understands that completely avoiding contact is not practical, so they propose that receiving information as early as possible would be optimal to avoid issues due to late information sharing.

Continuing their thoughts, interviewees emphasized the significance of carriers promptly reporting any deviations through TMS. They consider this expectation from the IBL department towards the carriers to be reasonable. Interviewee 7 expressed a similar viewpoint as Interviewee 4, emphasizing the importance of carriers updating their statuses in TMS in a timely manner. The interviewee expressed enthusiasm by saying, “That would be wow!”. Interviewee 7 believes that such timely updates would ensure that all stakeholders have access to the same information, promoting transparency and a streamlined communication process.

Adding to the discussion of timely updates, the interviewee highlighted the value of fast communication. They expressed a desire for carriers to provide feedback within two minutes, recognizing this as the most optimal timeframe. However, Interviewee 4 acknowledged that carriers are sometimes slow at responding, implying that real-life situations might not have always aligned with this ideal. They stated, "If we could choose, the carriers would have given feedback within 2 minutes. That would have been the most optimal, but yes, sometimes they can be a bit slow to respond."

Lastly, Interviewee 1 envisioned an ideal state of communication where carriers and the IBL department pursued common goals without conflicts of interest. They believed that achieving such alignment would have been optimal. Though the interviewee did not elaborate further, it was implied that this unity would have enhanced cooperation and fostered smooth interactions.

Moreover, the interviewees from the IBL department highlighted some hinders to achieving an ideal state of communication. Interviewee 2 pointed out that one of the hinders to ideal communication is there are so many stakeholders involved, each with their perspective on what approach is the best creating complexity in receiving an ideal state of communication. According to Interviewee 3, another hinder to ideal communication is that carriers may sometimes feel "Why should we do everything right when the case company cannot deliver from its side". This mindset leads to a vicious circle. For example, carriers might not see the point in always updating in time, if they arrive at the plant and are not unloaded and do not receive any information about when they are planned to be unloaded either. Furthermore, Interviewee 8 pointed out that another hinder concerns transparency since some carriers may be reluctant to share problems they encounter in their business. This destination for openly discussing challenges the other part is facing may restrict the flow of information and makes it difficult to get a comprehensive understanding of the situation.

Interviewee 8 raised the issue of varying work practices among carriers, which posed another hinder to ideal communication. The differences in how carriers work lead to the use of different communication methods, making it challenging to establish standardized processes and consistent exchange of information. Additionally, Interviewee 8 pointed out that the high volume of daily transport undertaken by carriers presented a challenge. With numerous transports to handle, it is challenging for carriers to keep track of and provide detailed information for each and every transport, potentially resulting in communication gaps.

Interviewee 3 further added that another hinder to achieving ideal communication lies in carriers sometimes failing to comprehend the significance of deliveries for the case company. Instead, they perceive IBL and the case company's demands as unreasonable. In such instances, carriers may respond that there is nothing they can do, and it can be a lengthy process for IBL to get the carriers to comprehend the significance of the transportation handled by the carrier to them. Moreover, highlighting a language barrier by saying "We do not speak the same language" Interviewee 3 expressed that carriers and the IBL department sometimes struggle to communicate effectively due to the use of different terms, resulting in misunderstandings.

Finally, the interviewees recognize the benefits of attaining an optimal level of communication. Interviewee 8 suggests that reaching this state would prevent production disruptions, accelerate transportation processes, eliminate the need for expensive premium transports, result in cost savings, and enable proactive decision-making and action-taking. Another benefit highlighted by Interviewee 7 is that IBL would experience a reduction in the

number of emails in their common inbox. This would result in a decreased workload, as IBL currently receives a significant amount of unnecessary emails.

Carriers

Interviewee 9 emphasized the importance of two-way communication, stating, "It would be great if the communication of problems went from both sides, not only that the carrier is informing." Likewise, the interviewee envisioned an ideal scenario where information is shared without constant reminders, stating, "it would be ideal if we could get information without asking the case company." Both these statements highlight the need for involvement and collaboration from both the carriers and the case company to achieve proactive and more efficient communication, enabling smoother operations.

Efficiency and timeliness are crucial aspects of ideal communication, according to Interviewee 9. They highlighted the need for fast communication due to the nature of their work in transportation, stating, "Since they work with transportation where everything has to be fast, it is ideal that communication is fast. Significantly faster than at present." Furthermore, for effective planning and preparation, Interviewee 14 suggests that receiving information two days in advance of the loading date would be ideal. This allows them to be proactive, ensuring the smooth execution of their transport operations. Interviewee 11 believes it would be ideal if they received information from the IBL department about the state of other actors in the supply chain so that they can know what to expect. For instance, receive information about production delays at suppliers that may affect the carrier's transports.

In alignment with some thoughts from interviewees representing the IBL department, the interviewee expressed that an ideal state of communication would be if the communication was minimized, as it would signify that everything is functioning smoothly. They mentioned, "ideal is when there is almost no communication because it means that everything is working as it should." This perspective underscores the importance of an efficient and reliable system that minimizes the need for constant communication. "The more communication we have, the more problems we see", as described by Interviewee 14 which stresses the advantages of less communication between IBL and the carriers.

Interviewee 16 brought up the significance of building relationships and trust in achieving an ideal state of communication, stating, "In order to carry out improvement work, you need to have some kind of relationship and you need to trust each other". Moreover, Interviewee 16 outlines the value of open and transparent communication, emphasizing that both carriers and the IBL department should openly discuss challenges and reasons behind issues. They state, "More open and transparent communication, that we as well as the IBL department are transparent and say when things do not work, we have to be open about why it does not work and say so, just as the case company has to do it too."

In addition, Interviewee 11 suggests that achieving ideal communication requires more personal contact and interaction, alongside digital platforms. They express that face-to-face communication plays a crucial role, stating, "All credit to digital platforms, but it does something to us humans when we sit in the same room and talk." This highlights the significance of personal connections and the potential benefits of direct, in-person communication.

Additionally, the carriers highlighted several hinders that prevent the attainment of an ideal state of communication. Interviewee 11 believes that a challenge is that they have a complex organization that the IBL department does not understand, which can impede effective communication. On the other hand, Interviewee 14 introduced a different perspective stating that certain real-life factors, such as technical problems or accidents, could serve as hinders to obtaining an ideal state.

In contrast, both Interviewees 13 and 9 attributed the case company itself as the biggest barrier to achieving ideal communication. Interviewee 13 expresses that the ball is more in the case company's court, stating, "We are a quite fast-moving company and can implement the changes necessary for achieving such a state." Similarly, Interviewee 9 states that "it seems to be the case company's internal communication" when asking about hinders to reaching an ideal state of communication. Hence, both interviewees emphasize that information flow must improve within the case organization for effective communication to be realized.

5.3 Summary of Empirical Findings

This subsection provides a summary of empirical findings described in subsections 6.1 and 6.2. It will highlight several key points regarding areas of improvement in communication between the IBL department and the carriers.

These points present a summarized list of the main improvement areas suggested by the IBL department, which emerged from the data collection, primarily through the semi-structured interviews. The list comprises 7 areas where improvements have been identified.

1. *Request for Better Updates*: IBL has picked up that their carriers need more proactive communication with the IBL department regarding organizational changes and production stops. Timely and clear information sharing is crucial to ensure carriers are well-informed and to have a chance to meet IBL's requirements.
2. *Slow Response Time*: The IBL team faces delays in responding to carriers' emails. Factors contributing to this issue include prioritizing personal mailboxes over the common IBL mailbox and the limited time available for carrier managers to address questions during weekly meetings. It is also a problem in the other direction as carriers also need to improve their response.
3. *Timely Updates and Information Flow*: Carriers sometimes fail to report delays and waiting times promptly. The IBL team relies on carriers to update statuses, but there is

room for improvement in this process. Proper communication channels and timely reporting are essential for smooth operations.

4. *Lack of Trust:* The IBL department lacks trust in carriers' ability to report deviations and update the TMS system accurately. Consequently, additional emails are sent to verify information, leading to time-consuming back-and-forth exchanges. Establishing trust and ensuring accurate reporting is crucial for effective communication.
5. *Excessive Emails:* The IBL department receives a high volume of emails, some of which are unnecessary. This overload hampers productivity and makes it difficult to identify critical messages. Streamlining communication and reducing unnecessary emails would improve efficiency.
6. *Lack of Clear Structure:* The communication and cooperation with carriers lack a clear structure. Implementing a well-defined framework for communication, utilizing shared platforms, and ensuring consistent updates are essential for streamlining processes.
7. *Internal Problems:* Internal communication within the IBL department faces challenges due to a large number of ongoing transports. Improving internal structure and communication channels would facilitate timely information sharing with carriers.

The following points provide a condensed overview of the primary areas for improvement proposed by the carriers, arising from the data collection, particularly from the semi-structured interviews. The list encompasses six areas where specific areas for improvement have been identified.

1. *Slow response time:* Carriers have expressed the need for improved response times from the IBL team to alleviate frustration among carriers.
2. *Timely information sharing:* Carriers seek more timely information from the IBL team regarding organizational changes and production disruptions to enhance carrier planning and operations.
3. *Seeking Direct Communication Channels:* Carriers desire more direct contact with the IBL department to facilitate effective communication and address specific issues promptly.
4. *Overcoming Lack of Understanding:* Challenges arise when the IBL team lacks understanding during critical situations, hindering problem-solving efforts and necessitating repetitive communication.
5. *Internal Communication Impact:* Carriers perceive that internal communication issues within the case company have a direct impact on their communication with the IBL department.
6. *Mitigating Delays in Unloading:* Lengthy waiting times for unloading goods at the plants have a detrimental effect on carrier schedules and operations, calling for improvements in this aspect.

In addition, it is worth noting that during the data collection process, it was observed that

some carriers do not perceive any changes or issues in their communication with the IBL department. While this indicates that certain carriers may have a satisfactory level of communication, it is essential to ensure a consistent and reliable communication experience for all carriers involved.

In conclusion, this chapter has provided a comprehensive overview of the empirical findings related to the communication between the IBL department and the carriers. It has highlighted several key areas for improvement that have been identified through the data collection process, particularly the semi-structured interviews. The findings suggest that there are several crucial aspects that require attention and enhancement to facilitate effective communication and collaboration. These areas include the need for better updates and timely information sharing, addressing slow response times, establishing direct communication channels, overcoming lack of understanding, improving internal communication, and mitigating delays in unloading goods. By addressing these areas, the IBL department and the carriers can work towards establishing more efficient and productive communication practices. This, in turn, will contribute to smoother operations, enhanced trust, and better overall performance within the supply chain.

6 Discussion

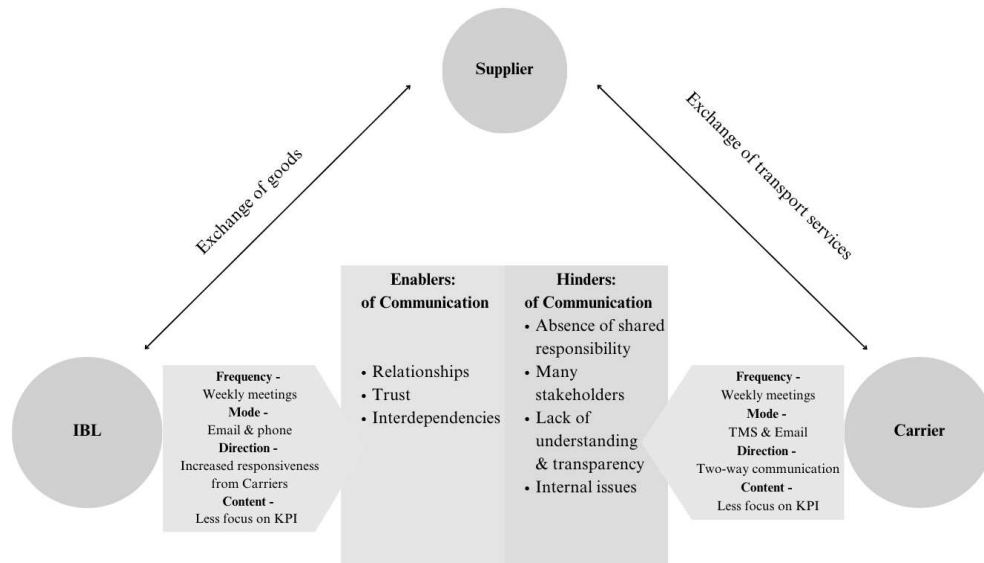
This chapter discusses the third research question of the study, regarding how the case company can enhance its communication between the IBL department and the carriers to move closer to an ideal communication process. The first subsection introduces the analytical model developed to analyze the study's findings and explores four communication categories in depth. Subsequently, the following subsection discusses areas for development. Throughout the chapter, the findings from the data collection are analyzed and compared with existing theory.

6.1 Analytical Framework and Communication Modes

Figure 7 shows the analytical framework used to analyze the results. The purpose of the figure is to analyze and discuss all the findings obtained during the study. The figure is constructed based on the TST proposed by Andersson et al (2018), which illustrates a triad consisting of a supplier, buyer, and carrier engaged in the exchange of services. At the bottom of the TST in Figure 7, two green arrows depict the four communication modes identified by Forslund et al (2018): *frequency*, *mode*, *direction*, and *content*. These communication modes influence the enabling factors of communication that have surfaced in this study. The enablers of communication that have been discovered are the relationships between the IBL department and their carriers, the trust between them, and the reduction of noise. The following section will delve into a discussion of the four communication modes and the enabling factors uncovered.

Figure 7

Analytical framework illustrating the TST, modes of communication, and enablers of communication.



6.1.1 Frequency

The frequency of communication between IBL and the carriers is clear from the results that it takes place on a daily basis via email and telephone. The results considering the weekly meetings show that there are different opinions regarding the weekly meetings, both internally at IBL and between carriers. The majority of the IBL side agreed that all carriers need to be considered differently, as they are of different sizes and need different types of support from IBL. However, some at IBL believe that if there have been no problems recently, they can skip the weekly meetings. This contradicts what Håkansson (2006) suggest in theory that to build relationships it is necessary to have continuous contact to create security between the parties. Håkansson (2006) also acknowledges that in a business relationship, it is important to take advantage of each other's knowledge to find new solutions to issues. If the weekly meetings were held every week, even though there are no acute problems, IBL and carriers could identify solutions to future obstacles by having regular meetings. To add to this, Gadde & Håkansson emphasize (1993) that in order to maintain a relationship, it must not be neglected, which can occur when there is a deficiency of daily contact. This underscores the significance of ensuring regular communication, such as weekly meetings and avoiding prolonged periods without contact. From empirical findings, carriers have also voiced their positive opinion on the weekly meetings, stating that they find them beneficial for staying updated on the happenings within the case company. This is reinforced by Gadde & Håkansson (1993) that believe that when it comes to different

departments, and in this case two different companies working with each other, close communication is needed to solve complex problems.

The ideal aspect of the weekly meetings is their adherence to the planned schedule, occurring once every week. Even if there are no specific issues requiring attention during a particular week, the purpose is to proactively address potential obstacles in the future.

6.1.2 Mode

The mode of communication as mentioned above is on a daily basis through email and telephone. The empirical findings showed that some at IBL felt that their common mailbox could sometimes be overflowing and that it was then difficult to keep track of which emails were more urgent.

The updates in the case company's internal TMS system from carriers is another mode of communication that is used, but which is not frequently used by all carriers. If the carriers had updated the TMS system as requested by IBL, many emails sent could have been avoided, as the updates on the transport are in the TMS system. This would have made it easier for the team at IBL to navigate their mailbox and see which emails are urgent, and not just updates on transport. There are also weekly meetings between IBL and their carriers, which are not held every week with all carriers. Thus, while daily contact via email and phone works well, it is important that updates in the TMS are timely from the carrier's side, so there is no need to send unnecessary emails between IBL and carriers.

However, it is also crucial to emphasize that if carriers enhance their update process in TMS, IBL must trust the accuracy of those updates and refrain from sending emails to double-check. This is because such double-checking emails consume valuable time for carriers, which could otherwise be utilized for timely updates. Additionally, the act of sending emails for double-checking purposes can have a negative effect on carriers' motivation to update the TMS, as they will anyhow receive emails that require their confirmation.

6.1.3 Direction

Based on the interviews conducted, there appears to be a noticeable gap in information sharing between carriers and the IBL department, where both parties desire the other to provide more information. In essence, carriers provide IBL with some information, but not to the extent desired by IBL. Conversely, carriers feel that IBL does not effectively keep them updated on internal matters, despite IBL's expectations from their carriers. This has fostered an attitude where each party questions why they should fulfill their obligations if the other party fails to do so.

From a theoretical standpoint, Håkansson (2006) emphasizes the importance of having comprehensive information about one another in a business relationship to effectively tackle challenges together. This underscores the significance of both parties keeping each other informed. Likewise, Gadde & Håkansson (1993) argue that sharing information is crucial for

establishing mutual understanding and nurturing long-term relationships. These theories further highlight the significance of both parties striving to enhance their information-sharing efforts.

In addition to the aforementioned points, it is essential to highlight the significance of trust when sharing information between IBL and carriers. Trust plays a crucial role in ensuring that the shared information is perceived as accurate and reliable, preventing any doubts or concerns about the information being double-checked. Consequently, it becomes vital to focus on building trust before delving into extensive information sharing. Regardless of the amount of information shared, its effectiveness is undermined if the recipient lacks trust in the shared information. Therefore, establishing a foundation of trust is a fundamental prerequisite for fostering effective information exchange and collaboration between IBL and carriers. This can be achieved through open communication, transparency, and consistently demonstrating reliability in the information shared.

In summary, the interviews highlight the existence of a communication gap, indicating the need for improved information sharing. The theories of Håkansson (2006) and Gadde & Håkansson (1993) further reinforce the importance of both parties actively working to enhance their information-sharing processes. Finally, in order to share more information, it is important that there is trust between IBL and the carriers.

6.1.4 Content

Another notable finding was the absence of a clear structure in the agenda of the weekly meetings. However, a recent development is the creation of a tool that generates a presentation, aiming to provide carrier managers with a convenient resource and establish a well-defined structure for all meetings going forward. Nonetheless, it was evident from the empirical findings that the presentation and KPI files were not shared with the carriers prior to the meeting, resulting in a significant portion of the weekly meetings being dedicated to presenting the KPI figures themselves. Instead, it is advisable to distribute the KPIs to all parties involved prior to the meeting, enabling them to review and discuss any significant KPI values and suggest potential solutions during the session. Sharing the file in advance would also provide carriers with an opportunity to highlight any points of disagreement or provide additional explanations.

This approach would free up more time during the weekly meetings to address other pertinent issues that may impact the involved parties. According to Xiao et al (2022), information sharing within a supply chain is crucial for enhancing overall efficiency. To further improve collaboration between IBL and carriers, it is vital for both parties to exchange information in a timely manner. For instance, IBL should promptly inform carriers if there are any factory disruptions that could affect transportation planning on a larger scale. Timeliness of updates is crucial, as delayed information holds little value. The results indicated that carriers often feel they receive important information last, which negatively impacts their own processes.

As stated by Håkansson (2006), aligning plans mutually leads to more effective cooperation. Hence, it is essential for both parties to share relevant information at the right time.

6.2 Enablers for Communication Development

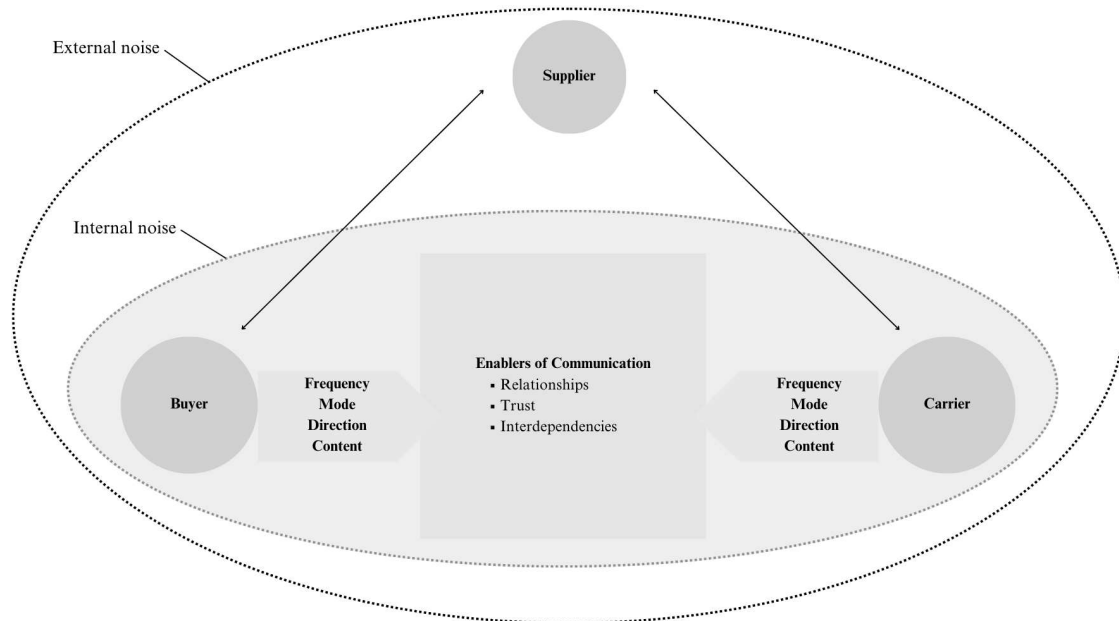
The first part of this subsection is dedicated to understanding the impact of communication and information sharing between the buyer (IBL department) and carriers within the TST. It delves into the examination of internal noise and external noise in supplier relationships within the study's context. Additionally, relationship building within the IBL-carrier dynamic is explored, emphasizing the importance of trust, transparency, and effective communication for fostering successful partnerships. Finally, the subsection challenges the notion that minimizing communication is ideal and highlights the importance of extensive, proactive communication for improved outcomes in supplier relationships and the transport service triad.

6.2.1 Managing Internal Noise and External Noise in Business Relationships

The study primarily focuses on examining the interaction between the buyer (IBL department) and carriers within the TST (Andersson et al., 2018). It specifically investigates the four dimensions of communication and information sharing - frequency, direction, mode, and content (Forslund et al., 2021) - which play a crucial role in determining the quality of communication. In Zasadzien's theory (2020) on communication between stakeholders, the author discusses the concept of "noise" - factors that can disrupt and have a negative impact on communication quality. This study suggests that noise can be considered a hinder to attaining an ideal state of communication. Consequently, the reduction or elimination of noise helps to bring one closer to this ideal stage. The theory distinguishes two types of noise: *internal* and *external*. Figure 8 proposes an extended framework that visualizes the presence of internal noise in the interaction between buyer and carrier as well as external noise that arises from other actors in the transport service triad, including SCCs and subcontractors.

Figure 8

Illustration of extended framework that shows the presence of hinders (internal and external noise) within the transport service triad studied.



Empirical findings indicate that communication between IBL (the buyer) and carriers is influenced not only by internal noise but also by external noise. Internal noise specifically refers to issues existing solely between the buyer and carrier within the transport service triad, as illustrated in Figure 8, such as perceptions of inadequate communication speed between the IBL department and carriers or lack of information sharing. The primary focus of the study lies in examining internal noise, with the objective of identifying development areas to address and eliminate it. However, it is important to acknowledge the significance of external noise as well, as it according to the result has emerged as a crucial factor contributing to interruptions and affecting the quality of communication between the IBL department and the carriers.

Building upon these findings, both IBL and the carriers have identified various examples of external noise. The IBL department highlights the lack of sufficient control carriers has over their subcontractors as a type of external noise that ultimately impact their communication. On the other hand, carriers emphasize that internal communication within the case company affects their communication with the IBL department. Therefore, while the study's primary focus is on addressing internal noise, it is important to acknowledge that external noise, despite falling outside the study's scope, remains an influential factor in the studied part of the triad. Hence, resolving internal noise alone does not guarantee ideal communication, as external noise plays a significant role in hindering the achievement of an optimal communication state.

Considering these insights, the logical next step in the research would involve a more detailed investigation of external noise to gain a comprehensive understanding of its impact on the communication between the IBL department and the carriers. However, the study's primary objective remains centered around addressing internal noise to enhance communication between the IBL department and carriers.

6.2.2 Building and Maintaining Relationships and Trust

Part of the findings show a focus on the relationships between IBL and their carriers. Many carriers believe they have a close and positive relationship with their carrier managers, and carrier managers at IBL expressed a positive rapport with their carriers, sharing a sentiment that their relationships were strong. Both parties acknowledged the weekly meetings as a valuable platform for fostering their relationship and establishing trust.

Establishing relationships with everyone can be challenging, but the better and closer the relationship, the smoother and more effective the cooperation between the parties (Håkansson & Snehota., 1995). The case company aims to be an appealing partner, and achieving this relies on cultivating close relationships. The weekly meetings, held regularly, provide an excellent platform for nurturing these relationships. However, some carriers express concerns about the shared mailbox system, as they feel they cannot rely on a single person to promptly respond to their emails and address their issues. The carriers wish for direct contact, trusting that someone is dedicatedly managing their cases.

According to Gadde & Håkansson (1993), maintaining and nurturing existing relationships is more effective than establishing new ones. To preserve a relationship, it is crucial to emphasize daily activities, which in this case include weekly meetings, emails, and telephone. To further develop the relationships between IBL and carriers, it is advisable to conduct weekly meetings consistently, going beyond reviewing KPI files, and discussing other factors that impact the processes. Whenever feasible, physical meetings should be arranged with carriers in close proximity, as there is a notable distinction between physical and online interactions. Building relationships also enhances the trust between the parties. The empirical findings reveal that at times, trust can be lacking between IBL and carriers. IBL may perceive carriers as delivering only good news and being less transparent about issues such as transport delays. On the other hand, carriers feel they do not receive sufficient or timely information from IBL. To prevent such situations and reinforce trust, transparency is crucial. As Håkansson (2006) suggests, knowledge sharing is essential for building relationships and developing effective solutions.

As an example, given the challenge of establishing relationships with numerous individuals, it becomes crucial for carrier managers to consistently meet with a designated representative from each carrier during their weekly meetings. However, following Gadde & Håkansson (1993) suggestions, it might be more effective to assign the responsibility of relationship building to a specific individual.

Thus, it is suggested to designate one person from each side to establish the weekly meetings on a weekly basis. Hence, everyone doesn't have to be involved every time just these two people are involved and can keep their teams updated.

6.2.3 Managing Interdependencies; Reevaluating Minimum Communication as Ideal Communication

Based on the results obtained, there seems to be a contrast between how theory and the interviewees regarding ideal communication practices. Interviewees from the IBL department and carriers both expressed that minimizing communication is the key to reducing problems and react an ideal communication, as they perceive communication to be primarily associated with addressing existing issues. In their opinion, less communication would imply fewer problems. In essence, their perspective suggests that reducing communication signifies that they have a decrease in problems.

However, this viewpoint contradicts established theories on supply chain management. Eriksson's (2021) theory on transport in supply networks acknowledges the crucial role of effective communication among all parties involved in managing various supply chain activities, including IBL and carriers. Additionally, Eriksson (2021) emphasizes that communication and good teamwork within the TST significantly enhance transport performance. Likewise, according to Gadde & Håkansson (1993) theory on supplier relationships, emphasizing the importance of communication is crucial for attaining improved outcomes. Gadde & Håkansson (1993) further outline six features that are important for effective relationship management, where one of which is to have extensive communication between parties in the supply chain to improve outcomes. Forslund et al. (2021) also point out the significance of communication, stating that communication difficulties can lead to problems within supply chains, while effective communication can help resolve issues between buyers and carriers.

Considering these theories, the absence of problems is not guaranteed solely by keeping communication to a minimum. Hence, ideal communication does not involve minimizing communication, as suggested by the carriers and IBL. Instead, entails having extensive communication and actively working to improve it, aiming for the most effective communication possible. As according to the theories, this approach would lead to improved transport performance. Therefore, a shift in mindset may be necessary for IBL and carriers. Instead of perceiving communication as a means to solve existing problems, they should view it as a preventive tool to minimize the occurrence of problems. Thus, rather than considering the presence of communication as a negative indicator of problems, they should recognize it as a proactive measure that can yield better outcomes in the supply chain.

Furthermore, the adoption of extensive communication also highlights the importance of fostering a culture of open dialogue and information sharing. The findings reveal that such a culture exists in certain relationships between carrier managers and their carriers, while

others lack it. One contributing factor is an imbalance of power within these relationships. In some cases, the carrier depends on IBL and may hesitate to be completely transparent, while in other cases, the carrier's size grants them more influence. However, it is worth questioning whether absolute transparency is necessary. According to the insights from the interviews, carriers may not feel comfortable being fully transparent about every issue within their company. Nonetheless, Håkansson's (2006) theory emphasizes that trust and interdependencies among supply chain parties are crucial for establishing relationships where all stakeholders feel comfortable expressing concerns, sharing relevant information, and collaborating openly. This way, IBL, and carriers can address potential challenges early on instead of letting them become major problems.

Further, by improving communication is an ongoing process that requires constant efforts, active engagement, and a willingness to adapt (Zasadzien, 2020). By continually refining communication practices, IBL and the carriers can build a beneficial relationship that boosts efficiency, satisfies customers, and ensures long-term success.

In conclusion, these theories shed light on the significance of communication in supplier relationships and the transport service triad. The understanding that minimizing communication is not the solution challenges conventional assumptions. Instead, embracing extensive and proactive communication can lead to better transportation outcomes. IBL and the carriers are encouraged to reconsider their mindset, recognizing communication as a preventive tool and adopting a culture of open dialogue. Through these transformative efforts, they can navigate the challenges of the supply chain more effectively and achieve sustainable success.

7 Conclusions and Implications

This study is centered around three research questions with the objective of examining the communication dynamics between a specific case company's inbound logistics department and their carriers, which are both involved in a transport service triad. The primary aim of the study was to identify areas within the communication process that can be enhanced. In this concluding chapter, each research question will be addressed individually, accompanied by suggestions for improvement and recommendations for future research.

RQ1 focuses on investigating the current state of communication between IBL and their carriers. The findings indicate that daily communication occurs predominantly through email and phone. The weekly meetings, scheduled regularly, may be canceled if no issues arise during that week. During these meetings, the selected KPI values are typically discussed. Individuals at IBL acknowledge that the quality of communication varies among carriers, with some being proficient in providing timely information, while others require more follow-up. Simultaneously, the carriers express satisfaction with the communication with IBL but feel that they sometimes receive important information too late. Overall, while the communication between the parties is functioning, there is room for improvement from both sides.

RQ2 seeks to explore the desired communication structure for the future, considering the existing state of communication between IBL and its carriers. The findings revealed that a significant number of individuals from both parties expressed the belief that the ideal scenario would involve no communication at all, as they perceive no communication as no problems in the transports. On the contrary, this contradiction challenges the notion that minimal communication is sufficient for ideal communication. Instead, the study suggests the necessity of extensive communication and information sharing to actively address problems and foster robust relationships. Additionally, some carriers expressed a preference for direct contact with the IBL department, rather than solely relying on email communication through a shared mailbox. They believed that establishing a direct contact would foster trust that their cases would be effectively handled by a designated person.

RQ3 aims to explore the ideal state of communication and how to attain it. To address this question, the analysis has examined a comprehensive analytical framework compiled from existing literature and suggested an extended version. This framework highlights various communication enablers, including relationships, trust, interdependencies, and the four communication modes: frequency, direction, mode, and content. The framework also highlights hinders for communication. Based on this analysis, the recommended approach for the case company is to shift their focus from solely discussing KPI files during the weekly meetings. Instead, they should create space to address other matters that can strengthen their relationships with the carriers. Furthermore, minimizing communication between IBL and the carriers is not recommended. Rather than viewing communication as an indicator of problems, a shift in mindset is necessary, recognizing it as a valuable tool for preventing issues and engage in improvement work. It is also essential to increase communication and

prioritize relationship-building in order to be proactive and find effective solutions to emerging issues.

The aforementioned recommendations encompass both the IBL department and the carriers. Nevertheless, there are three recommendations directed more specifically towards the carriers. Firstly, it is recommended for them to maintain open lines of communication with the case company in order to foster relationship building. Secondly, the carriers should discard the "we and them" mindset and instead view their relationship with the case company as a mutually cooperative endeavor. Lastly, it is advisable for the carriers to perceive the case company as a partner rather than merely a customer to please. These recommendations stem from empirical findings that revealed certain carriers encountered difficulties in identifying areas for improvement due to their perception of the case company as their client, inhibiting their willingness to offer constructive criticism. Therefore, for the partnership to flourish, it is imperative that the carriers exhibit transparency and openly share their opinions and suggestions for improvement.

For future research, it would be advantageous to further explore external noise that influences the communication between the IBL department and the carriers, as the study suggests. This would provide a more comprehensive understanding of the challenges and areas of development that both parties must consider for a closer alignment with the ideal state.

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Appendix

Appendix 1 - Interview Template

Part 1: Introduction

Vi är inne på sista terminen av vår masterutbildning i kvalitets- och verksamhetsstyrning på Chalmers och i vårt X-Jobb undersöker vi kommunikationen mellan IBL och deras transportföretag. Specifikt syftar vår studie till att identifiera möjligheter att förbättra kommunikationsprocessen genom att analysera de kommunikationsstrategier och tekniker som idag används av båda parter. Och förhoppningsvis kommer vi i vårt arbete att kunna identifiera förbättringsområden.

We are in our last semester of our master in Quality and Operations management at Chalmers and will be looking at the communication between IBL and their carriers. Specifically, our study seeks to identify opportunities for enhancing the communication process by analyzing the communication strategies and techniques utilized by both parties, with the ultimate goal of identifying areas in need of improvement.

* Be om godkännande för att få spela in, alla svar är anonyma och det är endast vi som kommer att ha tillgång till alla svar.

* Ask for permission to record, all answers are anonymous and only we will have access to all answers.

1. Kan du lite kortfattat beskriva din roll och dina huvudsakliga arbetsuppgifter?
Can you briefly describe your role and your main tasks?
2. Hur länge har du jobbat på företaget och hur länge har du haft din nuvarande roll?
How long have you been working at the company and for how long have you had your current role?

Part 2: RQ1

3. Kan du beskriva kommunikationsprocessen och informationsflödet med IBL-avdelningen/transportören idag?
Can you describe today's communication process and information flow with the IBL department/carrier?
 - a. Hur ofta kommunicerar du med IBL-avdelningen/transportörerna?
How frequently do you communicate IBL department/carriers?
 - b. Vad tycker du om den frekvensen? Är det för mycket, för lite eller bra? Hur ofta vill du ha dom?
What do you think of that frequency?
 - c. Vilka är konsekvenserna av missade möten?

What are the consequences of missed meetings?

4. CARRIER: Hur tycker du att kommunikationen och samarbetet med IBL funkar?
How do you find the communication and collaboration to be with IBL?
5. Anser du att kommunikationen och samarbetet har den struktur som du skulle vilja ha?
Om inte, vad är det du saknar?
Do you believe the communication and collaboration have the structure you would like? If not, what are you missing?
6. Hur ser agendan för ett typiskt veckomöte ut? och vilka är involverade i veckomöterna?
What does the agenda of a typical weekly meeting look like? Who are involved in the meetings?
 - a. Vad diskuterar ni?
What are you discussing at the meetings?
 - b. Vad tycker du om veckomöterna? tycker du att dom används på rätt sätt?
What do you think of the weekly meetings? Are they utilized in the right way?
 - i. Om nej, hur hade du velat att dom skulle se ut? vad tycker du ska diskuteras? Vilka KPIer osv?
If not, what would you like them to look like? what do you think should be discussed? What KPIs etc
7. Kan du peka på något som för närvarande fungerar bra i kommunikationsprocessen?
Du får gärna ge berättat med ett konkret exempel om du har något.
Could you point out something that is currently working well in the communication process? Please exemplify.
8. Kan du peka på något som för närvarande inte fungerar bra i kommunikationsprocessen? Ge exempel på detta.
Could you point out something that is currently not working well in the communication process? Please exemplify.
 - a. Har det uppstått några problem eller konsekvenser i och med detta? Tror du att det kunde ha förhindrats i förväg och hur?
Have there occurred any consequences or problems due to this? Could this have been prevented in advance?
9. IBL: Vi har förstått att ni är inne i en omorganisation. Hur skulle du säga kommunikationsprocessen har förändrat/kommer förändra processen?
From what we have understood you are undergoing a reorganization. How would you say the communication process has changed/will change the process?
 - a. Vad är det för förändringar som egentligen skett?
What are the changes that have actually taken place?

Part 3: RQ2

10. Hur skulle en ideal kommunikationsprocess med IBL avdelningen/ transportörerna se ut? (Förtydligande: hur ofta skulle den ske, vad för typ av info, vilka skulle vara involverade, vad behöver ni ha kontakt om?)

What would an ideal communication process with the IBL department/carriers looklike? (Clarification: how often would it happen, what kind of info, who would be involved, what do you need to have contact about?)

- a. Bara så vi förstår hur skiljer den sig från den nuvarande kommunikationen?
Just so we understand, how does it differ from the current communication?

12. Vilken skulle du säga är de viktigaste faktorerna i den ideala kommunikationsprocessen?

What would you say are the most important factors in the ideal communication process?

- a. Varför tror du att de är viktiga?
Why do you think they are important?

13. Vilka fördelar tror du att det skulle innebära att införa en idealisk kommunikationsstruktur med IBL-avdelningen/transportörerna?

What benefits do you think would come from implementing an ideal communication structure with the IBL department/carriers?

14. Vilka hinder ser du för att genomföra din ideala kommunikationsprocess med IBL avdelningen/transportörerna?

What barriers do you see to implementing your ideal communication process with the IBL department/carriers?

- a. Om hinder - kan du tänka dig något som skulle kunna hjälpa till att övervinna dessa?

If obstacles - can you think of anything that would help to overcome these?

Part 4: RQ3

15. Vilka specifika förbättringar anser du att man skulle kunna göra i den nuvarande kommunikationsprocessen?

What improvements could be made to the current communication process with the inbound department/ carriers?

- a. Är det någonting man kan ta sig med från hur det såg ut innan?
Is there anything you can take away from how things were before?

- b. Varför tycker du just dessa förbättringar är viktiga?

Why do you believe those are important?

16. Vilka åtgärder tror du att man måste vidta och hur skulle detta kunna implementeras för att genomföra de föreslagna förbättringarna av kommunikationsprocessen?

What actions do you think need to be taken and how could this be implemented to conduct the proposed improvements to the communication process?

- a. Vilka aktörer kommer vara involverade i att genomföra dessa åtgärder?

What other actors need to be involved to make those actions?

17. Vilka potentiella utmaningar eller hinder ser du för att genomföra de föreslagna förbättringarna av kommunikationsprocessen?

What potential challenges or barriers do you see to implementing the proposed improvements to the communication process?

a. Om ja, Hur kan man överkomma dessa?

If so, how can these be overcome?

18. Tror du att den andra parten (IBL/operatören) har samma syn på vilka förbättringar som krävs? Om inte, hur anser du att detta bör hanteras?

Do you think the other party (IBL/carrier) has the same view of what improvements are needed? If not, how do you think this should be addressed?

* Vill du lägga till eller förtydliga någonting?

** Do you have anything you would like to add or clarify?*

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