Parichat Homchant

Strategic Supply Chain Management for Freight Forwarders

Enhancing customer experience through a digital platform

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The aim of this study is to elaborate on the latest phenomenon in the freight forwarding industry as digital freight platform in which how it can improve customer experience. The objectives of this study were to study not only the context of supply chain management in freight forwarding companies, but it also raises awareness of digitalisation concept that influences the seamless supply chain. Customers experience become the heart of all business industries, even in the era of digitalisation, where technology plays an essential role in any businesses. Customers need service process simple, faster, and with transparency, various businesses already approached customers through a digital online platform, likewise, in the freight forwarding industry. For the past few years, many world’s leading freight forwarders implement the digital platform to satisfy the customers.

The nature of this study is exploratory, to gain a profound understanding of their provision to the customer, the perception towards the platforms and the future of the industry. Thus, a qualitative approach was used. The primary data was collected through in-depth interviews with two company studies: Twill logistics Thailand and Panalpina Finland. The secondary data was collected from literature, company’s reports, websites and blogs.

The findings indicate how the digital platform benefits to customers and with its advantages to enhance customer experience in a new way. Listening to customers is the main key. Besides, the Gaps model of service quality and 3E’s framework are considered. The gaps are discrepancies between the customer’s expectation and perception of service, which need to be closed. The 3-E framework includes easy, effective and emotional. Minimising the gaps and well-managed customer satisfaction could help companies gain brand loyalty. In addition, the findings also show that challenges and limitations of the platform are the critical issues for companies to overcome and lead their competitor. Finally, one common perception for freight forwarder is the small traditional freight forwarders will be left out if they do not adapt to digital transformation.

Keywords: Digital platform, Digital Freight Forwarding, Customer Experience, Supply Chain Management, Freight Forwarders, Gaps model, 3E’s framework, Technology
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List of Abbreviations

AI: Artificial Intelligence
B2B: Business to Business
B2C: Business to Customer
CC: Customer Care
CS: Customer Service
CSCMP: Council of Supply Chain Management Professionals
DC: Dangerous Goods
EDI: Electronic Data Interchange
ETA: Estimated Time of Arrival
FIATA: International Federation of Freight Forwarders Associations
IT: Information Technology
RFID: Radio Frequency Identification
SCM: Supply Chain Management
Incoterm: International Commercial Terms
1 Introduction

In recent decades the fields of logistics and supply chain management grew both in popularity and complexity. When people think about supply chain management, theories or strategies, most of the answers will come as from the manufacturing and distribution aspects, and the apparent example case studies will typically involve large organisations that provide effective supply chain such as Toyota, Dell, Zara, Walmart. Supply chain management is broader than that. There are various types of logistics service providers. In this research, freight forwarders will be focused. Not many people know this term, what type of services provided, and how it involves in the area of businesses. In short, freight forwarders are acting as an intermediary of exporters and importers to streamline shipping operation. Murray (2018) states that freight forwarders are specialists in shipping large amounts of products to distant countries and cities and make sure customer receive their items promptly without incident. A freight forwarder can help provide services such as packaging, labelling and documentation to both exporters and importers.

It is universally accepted that customer experience is the heart of any businesses. Likewise, for freight forwarding industry, they provide service, not product. Hence the service quality is the most critical to providing effective customer experience. It is worthy to note that people remember the experience they receive. Every point of customer experience, their impression through services provided by companies influences customer’s loyalty.

Freight forwarders need to embrace the technology to meet and overcome the threats the traditional freight forwarders faced. Back to 30 years ago, they probably focused on the freight service otherwise rely on outsourcing, then 20 years later, freight forwarders added the value of their business by expanding their businesses as one-stop service by merger and acquisitions involved other companies and service providers. Consequently, physical work from 20 years ago continues to be used nowadays. Therefore, to be a modern one-stop shop, they attempt to concentrate on developing innovation and artificial intelligence (AI) to serve customers. Digital freight online has become widespread in the last few years with the purpose to reduce the pain points of both services providers and the customers. According to Vetchote (2019), the pain points include delays in quotation request, a lack of transparency on prices, paperwork, phone calls and email back and forth.
1.1 Research questions and objectives

Every company must have a business strategy to maintain a competitive position in a market; it is the same as supply chain strategy, a company needs supply chain strategy to design decisions to support their business strategy. According to Sanders, there are four building blocks of supply chain strategy: operations, sourcing, distribution and customer service strategy (2012: 6). Since this thesis only focuses on the freight forwarding industry, the supply chain strategy in a block of customer service strategy integrated with the technology implemented in freight forwarding firms will be provided.

The purpose of this thesis was to elaborate academically such a latest phenomenon in the freight forwarding industry- digital freight forwarding. In the era of business’s nature is held by technology and becoming more and more digitalising. It is important for freight forwarders to adapt themselves beyond competitors with providing a great customer experience which is the heart of business.

The research question in this study is set as: “How freight forwarders enhance their customer experience through a digital platform.”

Accordingly, the objective of this study listed below:

1. To study the context of SCM and freight forwarding industry.
2. To explore the application of digital freight in improving customer experience.
3. To evince case studies and testify theories or frameworks in practice.

Apart from the main aim of this research, some of the secondary questions such as challenges and the future outlook of freight forwarding will be addressed as well.

1.2 Thesis Structure

This thesis is divided into five main parts. Chapter 1 presents the introduction of the thesis including the research topic, its significance, research questions and objectives which help the readers get the logical idea behind it as well as determining the level of readers interest. Chapter 2 provides the literature review which is a theoretical knowledge collected from various authors through textbooks, relevant researches, and internet sources such as journals and websites. The literature review has four main relevant sections: supply chain management, freight forwarding industry, customer service in the supply chain and technology in the supply chain. Chapter 3, the research methodology presents the research approach, how the data is collected as well as considering
the ethical issue and data reliability of this study. Chapter 4, finding and discussion, in this chapter the overview of the company cases will be provided, the results of the interview are interpreted to the finding of the study, the discussion is also addressed during the analysis. This chapter illustrates the connection between theoretical knowledge and models discussed in the literature review. Furthermore, both primary and secondary questions will be answers in this chapter. Finally, chapter 5 presents the conclusion of the study. Based on the finding of the study and the limitation of the platform, the recommendation for the case companies and the suggestions of further researches on this topic will be discussed.

The structure of this thesis is organised as below:

1. INTRODUCTION
2. LITERATURE REVIEW
3. RESEARCH METHODOLOGY
4. FINDING AND DISCUSSION
5. CONCLUSION AND RECOMMENDATION

Figure 1. The vertical list illustrates the thesis structure.
2 Literature Review

In this chapter, the theoretical concepts, an overview and critique the gap of some previous researches related to this thesis will be presented. This thesis focuses on customer service and technological concepts which are also considering as one of the essential parts in the SCM (Supply Chain Management) and nowadays, these two theories are implemented in freight forwarding companies. Thus, this literature review will focus on four major topics: supply chain management, freight forwarding industry, customer service strategy and technology in the supply chain.

In order to give readers more precise understanding, it is necessary to provide them with some foundation of SCM such as its definition, concept and importance. In the second section, role and important freight forwarding the context of customer service, elements, theory and logistics customer service will be focused. Finally, this section will focus on technological perspective in the supply chain, especially implementing the launch of the latest technology tool in the freight forwarding industry-digital freight. The rise of digital freight forwarder will be the highlight of this chapter. In addition, it is imperative to understand that even though this study seems mainly based on supply chain management and logistics theories, only one branch of the subject is inefficient. The fundamental knowledge from marketing and information technology subjects somehow will also require in this chapter.

2.1 Supply Chain Management

2.1.1 The SCM definition and theoretical concept

The definition of SCM always on the first page of many logistics and SCM textbooks because it is a high priority for readers to know the foundation and understand the context in the same direction as the authors. The obvious point that is written by most authors is that there are still many people misunderstand and confuse between the concept of logistics and SCM.

To highlight the definition of SCM, Professor Christopher defined Supply Chain Management is a broader concept than logistics. He states the difference between logistics and SCM clearly as:
Logistics is essentially a planning orientation and framework that seeks to create a single plan for the flow of products and information through a business. SCM builds upon this framework and seeks to achieve linkage and co-ordination between the processes of other entities in the pipeline, i.e. suppliers and customers, and the organisation itself (Christopher 2011: 2).

In accordance with Mangan and Lalwani (2016: 11-13) argue that SCM is the design and management of all activities within a network of the supply chain in both relationships and flows of material, information and resources. In order to create value, enhance efficiency and meet customers satisfaction. They also distinguish four perspectives on logistics versus SCM which is an important feature to be noted. The four aspects as shown in Figure 2 include traditionalist, re-labelling, intersectionist and unionist view. Traditionalist regards SCM as the subset of logistics, secondly re-labelling view where logistic is seen worth noting as re-labelled by the world SCM. The intersectionist view is that some parts between logistics and SCM are overlapped, but some are separate. Finally, the unionist view; the concept that widely accepted and adopted in various textbooks, this view the logistics is seen as a part of SCM and SCM is a much broader, intercompany, boundary-spanning concept than logistics concept. Figure 1 below illustrates four different perspectives on logistics versus supply chain management.

![Figure 2. Four perspectives on logistics versus SCM (Mangan & Lalwani 2016: 13)](Image URL)
2.1.2 The rise of Supply Chain Management

The research found out that it is interesting to provide the readers with the evolution of supply chain management to give a solid grasp. According to Rodrigue (2017), the evolution of SCM can be divided into five stages: 1960s, 1980s, 1990s, 2000s and 2010s afterwards, as illustrated in Figure 1.

According to Rodrigue's explanation in his article that the rise of SCM as it has been characterised by an increasing degree of integration of separate function. In the 1960s, all the functions being reasonably independent of the other. Then during the 1970s and 1980s, in the era, the emergence of personal computers provided massively better computer access to planners. The activities are consolidated into two functions include material management and physical distribution. The subset of materials handling included demand forecasting, sourcing, requirement and production planning. The functions as in physical distribution included goods inventory, distribution planning, order processing, transportation and customer service. However, at this time, involved warehouse activities still were separate from others such as warehousing, materials handling and packaging. Move further to the 1990s, and all the functions became integrated as a single management perspective. In the 2000s, due to modern information technology, integration became better complete. SCM allows integration of management and control of information, finance, goods flow, distribution and production system. The objective is to aim at value capture and competitiveness. Stepwise, nowadays, the growth of automation has been a dominant element of SCM, especially, for physical distribution and material management. They push towards automation such as storage, material handling and packaging as well as automated delivery vehicles also implemented. (Rodrigue 2017)
Many researchers have mentioned the evolution of SCM in their textbooks and websites. The beginning of the history may not start in the same period, some may define it as earlier in the 1940s, and 1950s when logistics was seen as only how to use mechanisation (Robinson 2015). Some may only focus from in the 1990s which is the most rapid rise of logistics and SCM as a critical business concept. However, there is one consistent point that logistics and SCM became booming by the emergence of the technology revolution as well as the globalisation of manufacturing. The word and interest in logistics and supply chain was widespread recognition in the era of 1980s and 1990. Many SCM strategies and principals invented by leading-edge companies and technology is one of the most critical factors driving effective supply chain management since then.

### 2.1.3 Importance of SCM and blocks of supply chain strategy

It is well known that today SCM is a core of the success of most businesses, thanks to the evolution of its. Thus, it is essential to understand how it plays a crucial role. Recall that SCM involves the coordination and management of all activities in the supply chain. Sanders defines SCM activities into three functions include coordination, information sharing and collaboration (2012: 6). The CSCMP or Council of Supply Chain Management Professionals (2018) emphasises that implementing effective supply chain management is significant for any businesses due to three main reasons. Firstly, it
boosts customer service, as customers always expect the exact product to be delivered quickly and on time at the right location. Secondly, SCM allows a business to reduce its operating costs such as purchasing cost, production costs and total supply chain costs. Finally, SCM helps improve financial positions, for instance, increases profit leverage, reduces fixed assets and grows a cash flow. Owing to the controlling and reduction of supply chain costs can result in dramatic increases in firm profits.

2.2 Freight Forwarding Industry

It is unsurprising that today freight forwarding industry is one of the most integral elements in the supply chain and why the researcher said that. Based on the Research and market team (2018) informs that the global freight forwarding market increased by 8% in 2017, and this shows a rapid expansion and the biggest annual gain since 2010.

2.2.1 The definition and role of Freight Forwarders

There are many logistics terms that people easy to get confused. Likewise, “Freight Forwarder” is one on the list. This term is not new. However, many people do not comprehend this type of business sufficiently due to its vague definition and activities overlapping with other terms. If the readers are looking for the definition of freight forwarding, they might find out some a little wordy and complicated explanation. To illustrate the definition of it, Mangan and Lalwani explain the role of freight forwarders in their book as “high-street travel agents, but they arrange transportation, not people” (2016: 132). They further state that a significant activity involves arranging customs clearance for freight that moves internationally. Sometimes freight forwarders are called brokers or freight agents (Mangan & Lalwani 2016: 132-133).

Rau points out on his blog about the definition and role of freight forwarder as it is arranging customers importing and exporting of goods and does not move the freight itself (2014). However, the interesting point is nowadays some freight forwarders also provide transportation service by their vehicles or the freight forwarder itself outsource other transportation agencies to move customers’ freight. They act on behalf of customers to move goods from the port to their warehouse or distribution centre and vice versa. It can be argued that, in the real world business, many companies do not provide all the services as the definition or information we found from books or article, but it more depends on the different nature of each company.
Now let us look at the roles of freight forwarders who play a significant interlinking in the supply chain. The following argument is based on IRC Group (2017) as freight forwarders are considered as a hub of information which is built on a network of cross border colleagues and contract as well as knowledge of the law in various regions along with multicultural difference can help businesses take advantage at this point. Secondly, freight forwarders gather different vertical of supply chain management. Thirdly, a business can rely on freight forwarder to seek advice on complexity issue, for instance, import/export strategies, trader term or any foreign contracts. Fourthly, with an established global network, freight forwarder can provide a more economical price. Finally, all the legal documents, certifications, procedures, as well as expediting the flow of goods are handled by freight forwarder. In short, there are five important roles include global transportation network, integration of operation, consultant service, cost-effective and legal assistance.

In addition, freight forwarding industry is investing in enhancing distribution networks and facilities to serve their customer’s requirement. Juneja (n.d.) provides an interesting point that global logistic scene is possessed by ten international companies followed by smaller companies. For the last two decades, entire global trade has accommodated by major service providers such as DHL, Kuehne+Nagel, Schenker, UPS and so on. It can be argued that plenty of multinational companies have acquired and bought smaller and local freight forwarders to achieve an international position as well as expanding their global network in quick.

2.2.2 Top Global Freight Forwarders

Even though they might have similar business models, the diversity in levels of profitability between companies is remarkable. The table below presents the top 10 freight forwarding companies as compiled by the consultancy Armstrong & Associates and recorded by individual company’s gross revenue, freight volumes which in both ocean TEUs and metric air tons as well as an estimation of A&A (Armstrong & Associates 2018). According to Burson (2018), DHL Supply Chain & Global Forwarding and Kuehne + Nagel both ranked in a first place and followed by DB Schenker, another well-known German logistics service provider. Compared with the previous year, Richard Armstrong the chairman of Armstrong & Associates says: “Some had impressive revenue numbers while others captured their rankings by cargo volumes. It’s a complicated process, but it’s balanced and fair” (Armstrong cited in Burson 2018).
<table>
<thead>
<tr>
<th>Rank</th>
<th>Provider</th>
<th>Headquarters</th>
<th>Gross Revenue (US$ M)</th>
<th>Ocean TEU’s</th>
<th>Air Metric Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DHL Supply chain %</td>
<td>Germany</td>
<td>27,598</td>
<td>3,259,000</td>
<td>2,248,000</td>
</tr>
<tr>
<td></td>
<td>global forwarding</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Kuehne + Nagel</td>
<td>Switzerland</td>
<td>22,574</td>
<td>4,355,000</td>
<td>1,570,000</td>
</tr>
<tr>
<td>2</td>
<td>DB Schenker</td>
<td>Germany</td>
<td>18,560</td>
<td>2,169,000</td>
<td>1,300,000</td>
</tr>
<tr>
<td>3</td>
<td>Sinotrans</td>
<td>China</td>
<td>9,530</td>
<td>3,360,300</td>
<td>533,300</td>
</tr>
<tr>
<td>4</td>
<td>DSV</td>
<td>Denmark</td>
<td>11,374</td>
<td>1,389,611</td>
<td>635,655</td>
</tr>
<tr>
<td>5</td>
<td>Expeditors</td>
<td>United States</td>
<td>6,921</td>
<td>1,070,424</td>
<td>985,549</td>
</tr>
<tr>
<td>6</td>
<td>Panalpina</td>
<td>Switzerland</td>
<td>5,621</td>
<td>1,520,500</td>
<td>995,900</td>
</tr>
<tr>
<td>7</td>
<td>Nippon Express</td>
<td>Japan</td>
<td>16,720</td>
<td>600,000</td>
<td>835,755</td>
</tr>
<tr>
<td>8</td>
<td>UPS Supply Chain Solutions</td>
<td>United States</td>
<td>7,981</td>
<td>600,000</td>
<td>935,300</td>
</tr>
<tr>
<td>9</td>
<td>Bolloré Logistics</td>
<td>France</td>
<td>5,012</td>
<td>864,000</td>
<td>640,700</td>
</tr>
<tr>
<td>10</td>
<td>CEVA Logistics</td>
<td>The Netherlands</td>
<td>6,994</td>
<td>729,000</td>
<td>480,000</td>
</tr>
</tbody>
</table>

Table 1. Top 10 Global Freight Forwarders List (Armstrong & Associates, 2018)

Besides looking at the top 10 players in the global contract logistics market, it is also important to consider reliable, top performing freight forwarding companies located in Finland. There are various logistics service providers present the freight forwarding and supply chain management services in the country. However, it is not surprising that those world’s largest logistics brands such as DHL, DB Schenker, Kuehne + Nagel, DSV and Agility are the powerful competitors of Finnish freight forwarders. Example of well-known Finnish Freight forwarding companies such as Varova Oy, Beweship Oy and Hacklin Oy. These Finnish firms are the member of FIFFLA (Finnish Freight Forwarding and Logistics Association) and the association also represents its member in FIATA (International Federation of Freight Forwarders Associations) thus, their members are considered to be the reliable freight forwarder around the world. (see appendix 1 for the list of freight forwarders in Finland).

To sum up, as Juneja (n.d.) informs us that traditional freight forwarders deal with cargo bookings from both origin and destination services and due to the rapid change of global business practices and SCM started gaining around, these companies need adaptation to survive. Thus, they offer multiple services such as ground transportation,
warehousing, customs clearance and contract logistics with cutting edge technology to support the global operation.

2.3 Customer Service in the Supply Chain

Today’s business nature is characterised by an empowering of the customer who is the driving force of the supply chain. Focusing on customers and supply chain competitiveness has been expanded with the turn of the century. To be competitive, companies must be better than competitors at meeting customer needs. In order to understand the all function involved customer’s perspective, some foundation of marketing needs to study. Stepwise, the context of customer experience, what is customer service and how it impacts in the supply chain, then the focus on the logistics customer service and roles of it in freight forwarders will be provided.

Sanders (2012: 93) has pointed out the definition and importance of the marketing in short as it is the function responsible for identifying what customer needs, how to create value and importantly how to build strong customer relationships. In addition, it became a far more complex than it may appear due to much more than basic needs for products and services of customers. The marketing key is to understand and develop the combination of products and services that accurately meet the different expectations of customers. Figure 2 below illustrates the marketing function with is concerned to the downstream part of the supply chain.
Within the supply chain, the term of customers is a broad perspective. Most organisations in the supply chain are both suppliers and customers of other members. Thus, it is undeniable that a customer is at any delivery location, not necessarily the last location in the supply chain. Sanders (2012: 107-108) further states that customer service can affect the supply chain in four significant aspects include time, dependability, communications and convenience. Time is a duration to complete an order and deliver to the clients, called the order cycle time. For effective management, order cycles should be responsive and of short duration. Dependability is a trust, meeting promises made to customers; it may include delivery on time and level of quality. Communication is about providing actual time order status to all supply chain customers with the integration of IT such as EDI or the internet. Last but not least, convenience, companies are offering flexibility to accommodate various customers’ requirement.

2.3.1 Customer Experience

Customer experience is a buzzword in business lately, people know it matters, but they are still confused with customer service. To give a more precise understanding, Blake Morgan, a Forbes contributor defines customer experience as “how the customers feel about the company overall (both pre and post-sale) and offering with the emotional, physical, psychological connection customers have with a brand” (Morgan 2018). If a customer has a positive experience with a product or service company offering, that customer tends to become a repeat and loyal customer. On the other hand, even the company X is renowned for high-quality and robust customer experience, but the customer receives a defective product. Customer's perception toward the company X will change as a low company quality. It is noteworthy that only one negative reason can lead to an overall poor experience, and definitely, it affects the brand and company image and will become a bigger issue as a customer lose their trust. Customer perception is fragile and easy to be changed, so steadily maintaining customer experience is the top priority.

Shep Hyken, another Forbes contributor, argues in his article that “enhancing customer experience management can be the essential investment that companies can make in today’s competitive business environment” (Hyken 2018). These days, many companies use effective customer experience strategy to create an optimal customer experience at all touchpoints and to be outstanding among competitions. Customers are navigated
through multi-channels of the customer journey to avoid customer’s unsatisfaction. Multi-channels in customers journey include prints, websites, emails, word of mouth, in-person and especially social media.

Gautum (2017) defines the stages of customer experience into eight stages. The reader might have seen this type of process before because it is the same as the customer journey stage. Many researchers believe that companies should use a customer journey map to define and refine their customer experience.

A process below display a customer experience journey stages.

![Customer Experience Journey Stages](image)

Figure 5. The stages of the customer experience journey (Gautum 2017)

It is undeniable that customer service is a vital part of any firms and the entire customer experience. Customer service is the company advise their clients before, during and after purchasing or using products and services. All the problems customers facing is the duty of customer service to tackle those problems. Gautam also points out that it is customer service responsibility to increase customer satisfaction and loyalty by creating everlasting relationships with customers (2017). According to the Powton, 73% of customer leave because of dissatisfied customer service (2017). No matter how hard companies strive to increase customer experience, it is possible that the company fail to satisfy customers is some issues. Thus, customer service is always needed.

In short, to distinguish between customer experience and customer service, customers experience similar to, but different from customer service. Customer experience is the entire journey between customers’ interaction and brand with overtime, and it is proactive while customer service is only part of the overall experience and it is reactive (Ameyo n.d.). What the companies should whether the focus on customer service or customer satisfaction: the answer would be companies cannot ignore either one.
2.3.2 Logistics Customer Service

Customer service is not only a crucial factor in shaping today's marketplace but also a requirement in logistics activities. The concept of customer service of freight forwarders is more like service than goods. As freight forwarders, customer service will be the first line of contact with customers. The customers should not feel like they are trapped when contacting the companies (Globalforwarding 2013). Therefore, there should be customer services or customer cares who know the value of customers and willing to serve them professionally anytime. Grant (2012: 18) suggested that logistics customer service contains three distinct categories: pre-transaction, transaction and post-transaction. The post-transaction also includes the relationship of service and the relationship of quality. His three construct and the primary descriptors of global satisfaction is shown in Figure 5 below.

![Logistics customer service elements (Grant 2012: 18)](image)

According to Grant (2012: 18-20), pre-order or pre-transaction is an element before the actual order takes place. To always fulfil customer needs, availability of products in existing inventory, appropriate and consistent order cycle time or lead time is the essential indicators. This element is a must for all suppliers to provide to the firm. Secondly, order service and quality or transaction, this element occurs during the stage
of order fulfilment as involved transaction activities. The indicators for this element include accurate invoice and order, on-time delivery, consistent product quality, complete order and product arrive at the specification with an undamaged condition. Lastly, the post-transaction element occurs when the transaction is finished and related between suppliers and clients. The two categories include service and quality. Relationship service contains after-sales support that is provided by suppliers, actual time delivery, helpful customer service representative and customising services. Relationship quality is the relationship between the parties which exhibits as trust, commitment and integrity. These three constructs link to the outcome as global satisfaction.

The author believes that companies can apply the list of elements as a starting point to develop their customer service features and strategies. The notion of pre-transaction, transaction and post-transaction will enable companies to determine, monitor and follow up the critical events and failures (Grant 2012). At this point, the reader will see that the four dimensions of customer service impact the supply chain of Sanders is correspondent with Grant’s framework (Sanders 2012). Such time, accuracy, trust and customised service are the vital part of customer service factors since it is not only a must concerning point between customer service and clients, but these factors can affect all the supply chain. In addition, the freight forwarding company should have the manager who continuously check the performance of customer service representative to ensure that any issues are appropriately resolved.

2.3.3 Logistics Customer Service Strategy

Most of logistics textbooks and other researches frequently adopted the service quality model to investigate such evaluation service quality called “Gap” model. The Gap model developed from the service marketing discipline initiated by A. Parasuraman, Valarie Zeithaml and Leonard L. Berry in 1985. The gaps model widely accepted that it enables a firm to identify differences between customer requirements and the firm’s performance. Grant (cited in Waters & Rinsler 2014: 111) indicates in his study that customers develop their expectations based on several aspects including previous experience, word-of-mouth recommendations or advertising and by the service provider. If the customers experience their expectation, they are satisfied. On the other hand, if the perception does not meet as their expectations, then they are dissatisfied. He further empirical states: “The difference between expectation and perceptions called gap” (Grant cited in Waters
The study introduced five possible reasons or gaps why the customers are not satisfied, and firms must measure, manage, minimise or eliminate in each gap to meet customers’ expectations.

The diagram below presents the service quality, or the gap model also includes the customer’s and the firm’s positions. The diagram is adapted from Parasuraman, Zeithaml and Berry analysis (Waters & Rinsler 2014: 112).

Those five gaps include:

According to Grant (Waters & Rinsler 2014: 111), gap 1 is the discrepancy between the customer’s expectations and the firm’s perception of these expectations. Simply, this gap arises because the firm misunderstands what customer expect. The reasons could happen including, first, lack of management and customer interaction, second, lack of
effective communication in the firm. Third, insufficient market research. Lastly, failure to listen to the customer’s feedback.

Expert Program Management (2019) explains Gap 2 as it is the fault between the firm’s perception of customer expectation and the firm’s establishment of service quality specification. This gap occurs when the firm turns the customer’s expectations into tangible service specifications (Waters & Rinsler 2014: 111). The reasons include poorly define customer service standards and service level as well as failure to update service levels.

According to Expert Program Management (2019), Gap 3 is the fault between the firm’s establishment of service quality and its actual delivery of service. This gap is also known as “delivery gap” and it occurs due to the failure of supply to demand matching, lack of cohesive teamwork to deliver service or product.

Grant (Waters & Rinsler 2014: 112) further explains the fault between the company’s actual service provision and external communications to customers as Gap 4; the failure of what company promised to customers through advertising. This communication gap happens if the firm overpromising or insufficient communications between the operations and advertising team.

Finally, the most critical gap that companies attempt to close; Gap 5. This gap is also known as “customer gap” means the difference between customers’ expectation and their perceptions of the actual event and is the sum of the four gaps associated with the firm (Grant cited in Waters & Rinsler 2014: 112). Essentially, it is impossible to close this customer gap directly; the only way to close the gap is to close the other four gaps in the model (Expert Program Management 2019)

2.4 Technology in the supply chain

One of the most distinctive factors that affect the SCM is the massive change of capability and availability of information technology. Traditionally, most of the businesses the interaction has been manual, importantly rely on the team’s experiences, using hard copy hardcopy document, the phone and email, but now IT has changed the way business interaction B2B and B2C. As mentioned in the previous section, since from the 1990s; the era of computerisation and internet of things, the rapid accessibility of information for
all parties in the supply chain was changed. The economical but more efficient methods of conducting the business are the result of advanced technology. In this section, technology applications implemented in freight forwarding, as well as the context of digital freight forwarding to enhance customers experiences will be provided.

Mangan and Lalwani (2016: 208) point out two board areas of technology applications in logistics and SCM as hardware and software applications example of hardware application include the automated materials handling equipment. Software applications such as enterprise resource planning (ERP) software that allows a business to track customer and business interactions. To discuss a little more in detail, IoT (Internet of things) refers to the network of devices embedded with electronics, sensors and software to enable the connection. Automation such as material handling, security detection and drones. Data capture and transfer technologies such as EDI (electronic data interchange) and RFID (radio frequency identification). These mentioned technologies are pervasively implemented in the industry.

What is about technology in freight forwarder? - It is no doubt, that technology is indeed impacting on the freight forwarding market. There are numerous companies already implemented technologies to add their value and to good use, especially offering more straight forward, quickly and online. The author will point out the importance and benefit of the rising trend “Digital Freight Forwarding” in the next section.

2.4.1 Digital Freight Forwarding

We are in the era of getting digitalisation in any touchpoint of business; however, on a major level, freight forwarding industry still works on paper, documents and files. The forwarders have to spend an amount of time on checking document accuracy, calculate their freight charge, generate a quote and find the best rates, routes and schedule. The activities lead to making the whole process very time-consuming. These are the factors of digital freight forwarding invention. At this point, the readers might wonder the concept of digital freight forwarder. Its concept is simple as it is a new breed of a traditional freight forwarder that simplifies or optimise the freight forwarder’s procedure. With the digital platform the burdensome of the mentioned traditional operational process. Also, to respond to customer needs such an online experience and faster service. Digital freight platforms are driving the transformation; various players have entered in this race, some participated in the race early on, some came later, and others still are working on it to
enter to the race. A digital freight forwarder is designed to simplify shipping with the customer at the helm. According to Forwarder Magazine (2017), the platform offers customer one place to book, manage and monitor shipments online through clicking a button. It is easy as booking airlines or hotel. Each company might offer customers differently several services, but a distinctive feature they all have is instant quotes and online booking because that is the fundamental reason for the platform invention.

Digital freight is the newest technological tool which does not only benefit customers but also the shippers and carriers to reduce their operating costs, make the process efficient and straightforward (FreightBro, 2018). The world’s largest forwarding companies setting up their own digital freight platform such as Maersk- innovation with Twill, Agility with ShipaFreight platform, DHL with Saladoovl, DB Schenker with Drive4Schenker Simultaneously, innovative start-ups such as Zencargo, Fleet, Freightos, FreightHub and Xeneta create massive media buzz (Baron et al., 2017: 5).

To explore in greater depth, the services offering from Twill- the Maersk’s digital freight forwarder (previous was a brainchild of Damco) and Zencargo. In 2017 Twill’s provided customers with four key features including instant quotation and online booking, integrated document handling, milestone transparency, proactive exception management, (Forwarder Magazine 2017). While customers will get benefit from Zencargo in five features: get instant quotes and online booking, store and manage all the paperwork in the cloud, tracking real-time shipments, providing one central dashboard and customer support (Zencargo 2018). Based on these two digital platforms, the reader can see that the same four essential functions include an instant price quote and booking, tracking services with transparency, simplified paperwork and finally, offering proactive customer care (Damco 2018). However, since from 2018, Twill also provides dashboard functions for customer’s reporting and analytics. It can be analysed that all the five features are the standard value that any freight forwarders should be available.

To make a clearer picture of the reasons why digital freight forwarding is booming, and many people keep eyes on, one of the most impact answers is that the rules customer engagement are changing. Customers nowadays need their products or services to be quick, accurate, lower price and great customer service. The researcher has created a table 2 below based on BCG analysis shows how digitisation can significantly improve customer satisfaction and profitability.
Opportunities to improve both customer experience and operations (Riedl et al. 2018).

In conclusion, advances in information technology and IoT are the greatest factors that empower consumers demand for a wide choice of products and services. The importance of digital systems, such as online tracking, freight consolidation, and other communication tools in the freight industry is apparent as globalisation drives freight to more places in the world. Accenture indicates: “the ability to become a “one-stop-shop provider” is emerging as a way to achieve differentiation and capitalise on cross-segment opportunities” (Mai 2017). The customer no more waiting, annoying back and forth communication. Customer can access their needed information by self-service whenever and wherever they prefer. Companies need to be innovative and flexible enough in order to survive in an era where digital technologies take hold.
3 Research Methodology

This chapter of the thesis presents the explanation of the design of this study whether it is qualitative or quantitative research, data collection method, data analysis as well as the research ethics and reliability.

3.1 Research Approach

The approaches and uses of today’s research are diverse. However, broadly speaking, there are two frequently approaches to a research problem and these include Quantitative and Qualitative research. According to Adams, Khan, Raeside & White (2007: 26), quantitative research deals with data that is quantifiable. It is applied for quantitative measurement, and hence statistical analysis is used. While quantitative research deals with quantitative measurement. Qualitative research is concerned with nonmeasurable aspects of the data. It is exploratory research that aims to explore and describe experiences, opinions, the motivation of the respondents (Phelps, Fisher & Ellis 2007: 208, 217).

This study is qualitative research with a case-study design. The author chooses this approach because this method is aligned with the research questions of this study. As it has been addressed in chapter 1 that the primary question is a How to question. As the author’s opinion, exploring the explanation of in-depth analysis on the condition or state of something which needs reasoning, analysing and critical thinking is best suited for qualitative research. Sreejesh, Mohapatra & Anusree indicates that the qualitative data is nonnumerical, unlike quantitative. Quantitative research generally has a pre-designed set of responses to preparing for statistical analysis, meaning that there are limited answers which it perhaps does not represent the respondent true feelings. While observing the respondents through face-to-face interview, can probe the mind of the respondents and interpreting the information they provide (Sreejesh et al. 2014: 46-47).

The questions are set as open-ended questions where there are none yes/no answers at all. The answers of both primary and secondary questions in this study consist of asking not only the opinion but also give the interviewee to think as it the way to tackle issues as reasons and development for the future. Therefore, setting the hypothesis that seeks to confirm the phenomena, collect data, and interpret it into the number, graph or chart as the quantitative method is usually done is not suitable for this thesis.
The way of conducting and analysing the data of this thesis is different from others that have similar topics. The theses which related to customer experience/satisfaction mostly applied the quantitative method and attempted to focus on the customer’s perspective such experiences and opinion. However, the objective of this study is to study, explore insight illustrate and interpret from the perspective of companies as service providers to know how they implement, improve and solve any customer’s concerns to optimise the customer experience - not from the customer’s aspect.

A case study design

In the scope of this study, to present also how the holistic image of the theoretical framework can be implemented or how the digital platform provided by freight forwarders in accordance with any theories or models, the case study design was chosen as a type of qualitative research. According to Starman (2013: 28-43), a case study is one of the popular types of qualitative research methodology. This method can be helpful when researcher eagers to answers the questions of why (although the questions what and how are also relevant). The author indicates a case study as a ticket that allows researchers to enter the research field to discover unknown area while continually monitoring their own researcher performance such as general and existing knowledge. Saund and Lewis explain data collection techniques of a case study may be varied and include a combination of interviews, observation, documentary analysis and questionnaires. The case study can be conducted into multiple cases if the researches need to generalise or place more faith in findings (Saunders and Lewis, 2012: 118).

Even though the author pointed out the reasons for choosing a qualitative approach to outweigh the quantitative approach; there is no one right and wrong way to analyse research in general. Whether it is qualitative or quantitative, it depends on the differing objectives in each specific study. Many researchers also use a pragmatic approach to research as a mixed method. It is considered to appear best suited to the research problem, rather than having either of each alone. For example, the researcher conducts quantitative data through experiments or surveys, simultaneously with collect data of the diversity of ideas, open-ended questions through focus groups and interviews. Undeniable, in any methods have both strengths and weaknesses.
3.2 Data Collection and Analysis

Collecting data lies at the heart of the research process (Phelps, Fisher and Ellis: 2007; 179). Data collection can be divided into primary and secondary data. Primary data are data the authors collect specifically for the research by themselves, the methods include observation, experimentation, surveys, interviews, case studies and triangulation. While secondary are using data that were originally collected for some other purpose. Simply says, if the researcher needs to collect data themselves, it is primary data collection or needs to answer the research questions available elsewhere then using secondary sources (Adams et al., 2007: 108). It is important for researchers to not focus on primary data and see the potential of using secondary data because it saves time and money by access to broader data sets than the research can collect by themselves. Both advantages and disadvantaged are listed below:

Phelps et al. (2007: 18) explained the advantages of using secondary data are first, it is easier to use, for example, it represents large samples well beyond the resources of an individual researcher. Data are also often already in the public domain, and it is used to supports documentation and explanation of methodology such as the contextual background. Secondly, the researcher can concentrate on data analysis and interpretation. The disadvantages of secondary data are, first of all, the uncertainty of data compatibility and coverage. It often cannot answer the exact questions the researchers are pursuing. Secondly, there is no control over the quality of data, so the researchers have to infer the quality from other information provided. Thirdly, a gap of time and its consistency, this is essential to concern with because circumstances always change by time (Saunders and Lewis, 2012: 84). The sources provided not always in the present this regards to the scope for each study.

Tesch (as cited in Phelps et al. 2007) states an important point of data collection especially for qualitative research as:

Qualitative data analysis involves both conceptual operations and mechanical tasks. It is a dynamic, intuitive and creative conceptual process of inductive reasoning, thinking and theorising. Data do not become manageable in the analysis process because there is less to deal with; they become manageable because they are organised (Phelps, Fisher & Ellis 2007: 208).

In some cases, the lack of structural, organisational system can also lead the difficulty and information inefficiency of qualitative data analysis.
This thesis comprises both the theoretical and the empirical parts, therefore, the author decided to use both primary and secondary data collection to analyse the research question and objectives. Primary data was taken from in-depth interviews with the representative of two global freight forwarders; one is based in Bangkok, Thailand and another one is located in Vantaa, Finland. The concept of the study is also attempt readers to understand the context of supply chain management, therefore, in the part of literature review, secondary data as textbooks, reliable electronic sources like journals are collected. In addition, companies’ annual report and websites, as well as online articles on blogs and other reliable websites which provided knowledge and information relevant to the research topic are employed.

In the qualitative approach, only general is insufficient; it should be well engaged in in-depth research interviews. It takes approximately an hour and further into behind the straightforward questions. Sreejesh et al. (2014: 47) explained that a depth interview can also serve as a preliminary to more analytical questionnaire design for quantitative research in the early stage of development of the questionnaire. Three subdivision in an individual in-depth interview include:

- Non-directive or unstructured interviews
- Semi-structured interviews
- Standardised interviews

For this study, the frame of the interview was decided as a semi-structured. This type of interview is more structured than the non-directive one as well as allowing some amount of flexibility to the interview (Sreejesh et al. 2014: 48). Hence, the author does not have to adhere to the interview protocol strictly, and it provides the author to probe the interviewee for additional details such as thoughts, feelings and opinions.

The author set the criteria of primary data collection based on different geographical perspective. One is in Asia, and another one needs to locate in Finland. One selected company is Damco, located in Bangkok, Thailand. Damco is one of the leading global freight forwarders. The author had an internship opportunity to work there for a full five months. At that time, Damco launched their innovation called “Twill Logistics” it is digital freight forwarder which nowadays affiliated directly under Maersk. The author found it was fascinating, but unfortunately, the routes are not opened in that area yet. However, it later became the initial inspiration for this thesis.
According to data collection from the port of Helsinki, there is a total of 64 companies who are freight forwarders and who provide freight forwarding services in Finland. The author narrowed down the number by firstly, excluding the companies that did not provide enough information on the contact detail such as there is no website or number of the company provided. Secondly, the companies that are no longer running the business and the same company with the different department are excluded from the list and remain only one. Thirdly, the companies that the only representative as sales or agency of freight forwarders. The author believes that collecting primary data from the only agency as an intermediary will be inefficient for analysis for this topic research. Finally, the companies that their website, homepage and do not provide enough or related to the thesis topic need to be excluded. As a result, the sample was narrowed down to only 15 companies fit in the criteria.

The author approached the 16 companies (including Twill logistics Thailand) by sending an email interview invitation and requested to participate in this study. The companies are free to choose the way of interviewing their preferences, whether through face-to-face interview, skype interview, phone interview as well as time, date and place. Since it is an in-depth interview, the author asks for 40 minutes to an hour. The author set the period for three weeks (12.03.2019 - 01.04.2019) for responding to the request. The theme of the question was divided into three main categories include:

- How the company improves customer experience (in general and through the digital method)?
- What are the risks and challenges of the digital platform/methods company implemented? Moreover, the ways to tackle or manage.
- How do you see the logistics /freight forwarding industry in the outlook?

The three main questions above can be called a checklist which is set to every respondent. The questions are set in common vocabulary, have the same meaning and same questionnaires for all interviewees for better decoding and analysis (Sreejesh et al., 2014: 59). The author informed in the invitation that there will be sub-questions arise during the interview as related to each main categories. There were half of the emails replied. Three of them declined to participate because they were too busy at this time of the year. Two of companies replied as automatic message as she is on leave (for business purpose and maternity leave). Another one replied as will find and inform later if any person willing to participate; however, the author did not receive any email yet.
Moreover, two of them accepted the invitation and willing to participate in this study; both representatives agreed to have the interview in the same week. The date of the interview and the detail of the interviewees as below:


The author only provides the objective of the thesis and three main questions in the invitation in order to reduce the risk of biases and errors as the disadvantage of the interview is error and bias. Because sometimes interviewees give inaccurate answers as they think it will please the interviewer. The first interview was conducted in Thai, through video calling with an average length of an hour. Since it is a mother tongue for both of us, it brought a comfortable and ease interview vibe. The interviewee can respond the questions clearly, and courage to share more ideas and insight, as well as the interviewer, can understand more precisely because there is no worry about language such as vocabularies, slangs, idioms or terms which tend to misunderstand especially logistics terms. Both interviewer and interviewee always check the understanding of each other to ensure that we understand in the same direction.

Another interview was conducted as a face-to-face interview. Since the interviewee is a Finnish, English was used for all the time of the interview. The interviewer paraphernalia includes voice include recorder, interview guide, laptop, note pad and pen. The interview was set in the small meeting room to ensure that there is no disturbing voice occur during the interview. The author believes that it is a good and important idea to use audio recorder so the interviewer can concentrate more on the interview and observations such as body language of the interviewee rather than concerning about taking notes. During the interview, the interviewer also used a laptop to illustrate and discuss the information that interviewer has prepared. This interview also lasts around an hour.

As Adams et al. (2007: 55) suggested the set of qualitative data analysis procedure into five phases as follows:

- An exploration phase; which aims to detect patterns in the data and identify odd-ities.
• A classification phase; which aims to compare the theory and identify groups.
• A drawing conclusion phase; which aims to detect the conformance (if the scientific method is used), compare and contrast group.
• A representation phase; which aims to construct a model.
• A testing phase; which aims to validate the research.

In this thesis, the data analysis will follow the procedure suggestion as by Adams et al. Firstly, all the qualitative data collected from both interviews need to transcribe and carefully recheck to identify the pattern. Then, long answers can be summarized to its key point in order to compare and categorise the answers to the theme more accessible. At this point, the primary data needed to check with the secondary resources, for instance, companies' report, websites and the feedback received from customers. Next step is to confirm and represent the theories to reach a conclusion as well as fulfil the inductive objective of this research. Finally, the validation phase; having both primary and secondary resources helps the author to review, compare and validate the possibility and consistency more effectively. The result of the study is presented and analysed in the following chapter.

3.3 Ethical Considerations and Reliability

Ethical responsibility to do the work honestly and with integrity is the essential one. If the researchers do not ethically conduct the work, they will fail. All stage of doing any research, fraud must be avoided, fraud can appear in various forms such as intentional biasing data collection process, making up data, falsifying results and biased or inappropriate analysis (Adams et al., 2007: 35). In Bryman and Bell book (2011: 128), Diener and Crandall stage four main ethical concerns in business research as:

• Is there harm to participants?
• Is there a lack of informed consent?
• Is there an encroachment of privacy?
• Is fraud involved?

The author sent the invitation to participate in this study through email, the topic, objectives, the three themes questions and approximately time requirement are informed. The respondents were free to choose any interview approaches they preferred. At this point,
it is understandable that the respondents who are willing to take part of this thesis as voluntary since they have to sacrifice their valuable time to answer and explain in deeper detail than what general people can find content on any websites.

During the research on secondary data, there were plenty of other ideas related to the topic shared on social media as on LinkedIn. There was one author who works in one of the world’s largest logistics companies who quite often updates their article through his social. The author sent him the consent by email asking permission to use his idea as part of the thesis, also asking if he has time to provide further information as well as answer questions provided through email. Unfortunately, the author did not get any reply. The author was very aware of an ethical issue. Even though that information will be plus for the study, but most of the information is related to his workplace. Therefore, the author decided not to employ the notions related to his company into this thesis without permission but only read to increasing knowledge. In addition, the author agreed with the interviewees to adopt both primary sources and secondary source as the information from the companies’ website. As well as the information will be referenced as their personal opinion if the information is only from their opinion or understanding not as represented as the company’s view. For accuracy of data and confidential perspective, the author agreed to send the finding part to both interviewers in order to recheck if there is any information discrepancy or any points the interviewees do not agree and need to be modified before publishing.
4 Findings and Discussion

In this chapter, the findings of this thesis will be present as well as discuss them in correspondence to the logistics service quality model presented in the literature review. The chapter will start with the background of two case companies: Twill logistics and Panalpina. Then move to find the research questions of both primary and secondary questions. The major questions of the thesis include the way the company improve their customer experience through general and associated with the digital platform, the risks and challenges the company faced when they implement the digital platform in their organisations. The result of the primary questions will be presented in the relation of the logistics service quality model “Gap Model” as well as “3-E Model”. The Secondary question is how they see the outlook of the logistics and freight forwarding industry. This chapter will be concluded by discussing the limitations of this thesis.

4.1 The Case Companies

4.1.1 Twill Logistics– Maersk Innovation

Twill is a digital platform that enables customers to manage and monitor their shipment online. The initial idea behind Twill was to change the face of freight forwarding and design to make shipping simple. Started as a project and small team assembled to kick off the project in Berlin, Germany in 2016, later on, moved to The Hague, The Netherlands and grew the team which has been Twill’s headquarter since then. The first booking was in January 2017, and the platform is officially launched in April 2017 for the UK and China trade lane (Omine 2019).

According to Damco’s press releases, Twill was initially created as a Damco innovation project and operated as a partner with Damco; the freight forwarder and supply chain management company under A.P. Moller Maersk. The distinctive Maersk’s strategy is to become a global integrator of logistics providing, delivering end-to-end solutions. As a result, Twill changed its brand affiliation from Damco to Maersk during 2018 (Damco 2018). Vincent Clerc, CCO of Maersk, added: “Maersk has over a hundred year of history. Its scale will bring new opportunities to Twill and Twill bring the innovation and easement to Maersk’s customers” (Charif 2018). His explanation is in accordance with Troels CEO of Twill that the reason why Twill changes brand affiliation to Maersk because Twill attempts to reach a broader market. “Maersk is a stronger brand, highly recognised and will bring Twill to have stronger brand competitive positive in the market.”
Twill has approximately 100 to 200 employees, and it is currently active in twenty-seven countries in five continents and two more countries are coming online in 2019 (A.P. Møller - Mærsk A/S 2019).

Twill in Thailand rolled out in June, and the first CIF term rolled out in 2018, additionally, at present, the service offering has extended to include all Incoterms which regulate the deliveries of goods (Salazar 2018). Only two customer cares called “Ninja” are currently working solely for sea export shipments under Maersk Line Thailand.

4.1.2 Panalpina

Panalpina Group is one of the world’s significant supply chain service solutions providers which founded in 1935, the headquarter Panalpina group is in Basel and other eight head offices in different cities in Switzerland. The company’s key facts presents 500 branches in 70 countries; it represented in 100 countries with partner presence. More than 500 offices worldwide with a total of approximately 14,500 full-time employees. According to Hofer (2019: 1), the company’s core products include Air Freight, Ocean Freight, logistics and manufacturing and project solutions. Air and Ocean Freight forwarding are the foundations of their business to support customer’s need. These two services ranked among global top four in 2017.

As Joutsen (2019) informs that Panalpina Finland is quite small, it was founded in 1995, located in Vantaa. The main business for Finnish brunch is freight forwarding followed by international transportation and warehousing. At the moment, there are approximately 20 employees with operational ocean export for four people. The trade route of shipments from Finland to anywhere, any continents.

Regarding this case study, Panalpina has an outstanding strategy; it based on four core pillars: operational improvements, organic growth, external growth and innovation. The innovation they provide can be an important case study of this thesis. In February 2019, Panalpina launched its new customer portal. It was designed to help customer easier and faster interacts with Panalpina as well as reducing the e-mail and phone communication (Hofer 2019: 4).

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1 Incoterms is international commercial terms which clarifying the obligations of buyers and sellers to prevent confusion in international trade contracts. See https://www.investopedia.com/terms/i/incoterms.asp
4.2 Interview result

4.2.1 Improving Customer Experience

Both interviews were started with the most important question as the primary research question for this thesis. The author would like to know how the company improve its customer experience as in general and through the digital method. In this part, various sub-questions raised but still related to the topic because the author needs to ensure that the answers and information will be enough to analysis effectively also to avoid misunderstanding or data discrepancy.

In general, the customer service or customer care attempt to understand customers desire by listening to customer’s pain points because sometimes customers even do not know what their pain points are. Vetchote emphasised an essential point to improve the customer experience as:

> It does not like customers will always give us the feedback, complaint or point out exactly what they like or dislike. But it is our responsibility to listen to their experience and analyse the pain point customers are facing simultaneously because sometimes it happens that they did not see it as a problem, but we can even suggest a better solution to them. (Vetchote, 2019).

After figuring out what customer needs, they offer different solutions depending on the situation of the specific customer at that time. They can suggest the solution whether through their digital platform or forward the issue to Damco to handle it as general freight forwarding service. Even though they have the plan to roll out, Twill still cannot go live in every country such many countries in Africa continent. Twill is also unable to provide service for DC (dangerous goods) container and reefer\(^2\) container. As a result, these types of goods will be managed by Damco instead. It is an affiliation between Maersk, Damco and Twill. However, it is the customer decision to choose whether to prefer to work with a traditional or digital freight forwarder at the end.

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\(^2\) Reefer has known as a refrigerated container is a shipping container for transportation of temperature sensitive cargo. See https://www.marineinsight.com/refrigeration-air-conditioning/everything-you-ever-wanted-to-know-about-container-refrigeration-unit/
On the other hand, Joutsen (2019) the customer service of Panalpina AB Finland states that their customers are from small and large companies. Most of the large companies in Finland are from their headquarter decision, and for small companies, they choose by the reliability and the freight rate. As the Finnish branch, the respondent explained the process as the large companies will request for the quotations probably from ten biggest freight forwarders after considering the all price rate and then they choose one.

With the digital platform, both companies have their digital platform. The two platforms provide similar four major services to customers including instant quotation with transparent prices, providing easily and quickly booking, track and trace service in real time with full visibility and helping customer filter and visualise data for optimization.

For the Twill platform, “Vetchote” customer care of Twill Logistics Thailand stated that Twill platform just launched for approximately two years, started in April 2017. Hence they do not have abundant shipments yet. To improve the customer experience, they decide to first focus on their in hand-holding customers. Twill in Thailand does not have their sales department; therefore, the customers will be from first they contact Twill directly by signing up on the platform and through Damco’s sales department.

Twill can simplify customer’s shipping into five ways: easy booking and transparency on price, online customer support, track and trace, paperwork and collect and analyse data. It is interesting to note that, even Twill is now an A.P Moller- Maersk’s innovation, but the platform provides customer various options for shipping containers such as CMA CGM group, Evergreen Marine and OOCL. About the rate price, the interviewee said that mostly the prices are set as standard rate as general freight. Therefore, it is almost no difference on this issue, but it is even better from customer’s perspective since they will have a chance to see the list, comparison and are free to choose their preferred carriers and trade lanes and rate price.
To create a seamless customer experience, Panalpina recognises the essence of technology including IoT, cloud computing, predictive analytics, artificial intelligence and Uberization of logistics (Hofer and Yahil 2018). At present, they developed various tools for benefits of customers such as customer portal, Mypanalpina app, Panalpina smart view e-portal and VGM portal. Since this thesis concentrates on digitalisation and freight forwarding service, the latest Panalpina digital innovation called “Customer Portal” will be analysed.

Panalpina CEO Stefan Karlen says:

“Our new customer portal is the centrepiece of Panalpina’s technology transformation and one that will greatly impact how we, and likely others in the industry, will interact with customers in the future.” (Karlen, cited in Burns, Aircargoweek 2017)

The customer portal enables customers to manage their entire supply chain end-to-end digital environment and collaborate with all customer’s partners in one place. With this platform, customers can firstly, discover Panalpina’s network and schedule around the world and plan their next shipment by themselves. Secondly, acquire instant quotes with the transparent price and different transport modes. Thirdly, simpler and faster booking the shipment. Fourthly, track their shipments in real time and with full visibility. Finally, the porter will filter and analyse the customer’s data and create their reports to complement the user experience (my.panalpina.com, n.d.). In her article, Yahil (2019) informs us that features are added to enhance interaction not only with customers and logistics service providers but also suppliers, and enable:

- Procurement system service.
- Electronic channels that offer exchange service orders and lead to contract closure.
- Advocating shipment performance and settlement process through the application.
- Integration of visibility and reporting services.

Joutsen pointed out that customers appreciate the fastest way, for example, they need a fast quotation; these days, most of the biggest freight forwarding companies they have their websites and platforms. Customers can see their shipment details, track status of shipment and choose their quotation. She further suggested the idea to enhance the
customer experience for the future by perhaps joint freight forwarders will create a programme where customers can place their shipment details, and any freight forwarders can see it. Because nowadays if the customers do not know or hesitated to choose their freight forwarder, the customers need to go to every freight forwarding webpage as one by one to compare the price which is time-consuming and not very convenient.

According to both primary and secondary data collection, customer can experience the simple shipping platform as illustrated in the vertical box list below.

<table>
<thead>
<tr>
<th>Easy Booking and Transparency on price</th>
</tr>
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<tbody>
<tr>
<td>• Eliminate of time-consuming and long lasting phone calls. Customers are able to set their tradeline and cargo delivery. Instant shipping booking online; customer no need to wait for a quotation. Customer can choose by the provided options. At the result they can ensure that they are getting the best deal.</td>
</tr>
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<table>
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<tr>
<th>Track and Trace</th>
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<tbody>
<tr>
<td>• Customers can stay up to date on their cargo status at all times.</td>
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<table>
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<tr>
<th>Online Customer Support</th>
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</thead>
<tbody>
<tr>
<td>• Customer can contact CS/CC when any issues arise.</td>
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</table>

<table>
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<tr>
<th>Paperwork</th>
</tr>
</thead>
<tbody>
<tr>
<td>• No document need to send back and forth to supplier and freight forwarder, use a dashboard to store and share important documentation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Collect &amp; Analyse Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Customer can obviously see oversight of their important data: expenses, average transit time and on time delivery ratio.</td>
</tr>
</tbody>
</table>

Figure 9. The benefits of a digital platform that customer will experience.
(Adapted from Twill and Panalpina 2019)

It is not only benefited for customers but also as a freight forwarder, shipper and supplier also get advantages from the platform. Vetchote brought out a clear example as traditionally suppliers would like to work as soon as they arrive at the office. However, due to discrepant working hours between suppliers and freight forwarders, they cannot contact
freight forwarder such as check status of the shipment or asking any issues. These advantages make them feel not satisfied but with a digital platform; they can just open the platform, log in to track and trace the status of their goods. All paperwork centralised in only one place. The customers and suppliers can upload, revise, confirm the documents directly through the platform as well as collect and save all customer’s data. Hence, no need for calling and email forth and back which is a barrier of the process flow. When need to contact in charge personnel outside the working hour is also easy since customer care teams will always stand by for 24 hours as the rotate shift to support customers.

Comparing the differences between the traditional and digital freight forwarder, it is obvious seen by the benefits of service provision to customers, as discussed earlier. However, to demonstrate how the complexity and disorder of traditional freight process transform to the simple digital freight process is shown as Figure 10 below.

![Figure 10](image-url)  

Figure 10. The comparison between traditional and digital freight process complexity. (Retrieved from Twill 2017).
It can be seen that the freight forwarders coordinate with multiple parties, a lot of manual work and paper-based process are the reason why the procedure is complex and often time-consuming. Due to the digitalisation, the platform is created to facilitate customers, freight forwarder and carriers with transparency, productivity, simple and fast.

4.2.2 Gap Model

Structure of the Gap model, definitions in each gap has been explained previously in the literature review chapter. In this part, to cover the factors that may impact on customer experience, the strategies for closing those five gaps related to the digital platform will be identified. In this analysis, the explanation of "gap model" from Grant (2014) will be adopted, repeatedly, the five gaps include:

- Gap 1: A gap between what customer expects and the company thinks the customer expects.
- Gap 2: A gap between what companies think the customer expects and the quality standard the company establishes.
- Gap 3: A gap between the quality standard that the company establishes and the actual service provision.
- Gap 4: A gap between actual service provision and what is communicated to the customer.
- Gap 5: A gap between a customer's expectation of the service and the customer's perception of experience.

<table>
<thead>
<tr>
<th>Gaps</th>
<th>Problems</th>
<th>Strategies for closing the Gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gap 1</strong> &quot;Knowledge Gap&quot;</td>
<td>Not knowing what customer expect</td>
<td>-Listen to customers feedback in numerous ways: in the meeting, phone calls, online feedback, customer survey and exchange information between employees.</td>
</tr>
<tr>
<td><strong>Gap 2</strong> &quot;Standard Gap&quot;</td>
<td>Not picking the right standard</td>
<td>-Before setting the standard of service provision, need to accurately understand the total customer experience and design all element to meet customer expectations as well as update the policy and inform customer regularly.</td>
</tr>
</tbody>
</table>
**Gap 3**
"Delivery Gap"

<table>
<thead>
<tr>
<th>Not delivering to service standard</th>
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<tbody>
<tr>
<td>- Arrange employee training to ensure that employees are willing, and able to deliver quality services in an appropriate manner.</td>
</tr>
<tr>
<td>- Apply the right technology to assist, speed up the service performance.</td>
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</tbody>
</table>

**Gap 4**
"Communication Gap"

<table>
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<tr>
<th>Not performance as their promises or advertising</th>
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<tbody>
<tr>
<td>- Measure customer expectation in reality.</td>
</tr>
<tr>
<td>- Using reality in advertising, do not over-promise to only attracting customers.</td>
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<tr>
<td>- Ensure that horizontal communications are proper.</td>
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**Gap 5**
"Customer Gap"

<table>
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<th>The result of gaps in stage 1 to 4</th>
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<tr>
<td>- The only way to close this gap is by closing down the first four gaps.</td>
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</table>

**Table 2.** The strategies for closing/reducing the five gaps (Retrieved from Expert Program Management n.d.)

What the companies have been doing to close the “Gap 1” is quite simple. That is listening to the customer’s opinions, feedbacks through multi-channels; in-person meeting, phone calls, online feedback and sharing with the team within or/and outside a company (Vetchote 2019). Take Twill for an example; they always listen to the customer’s voice through various ways to ensure that there is no discrepancy between customer’s expectation and the company’s service provision. What customers are looking for, asking for are the same as they are serving. They acquire the customer nuanced opinions and feedbacks by direct interview, discussing within the teams; sales teams and customer care teams and testing on the platform. Also, Chariff emphasises a distinctive key feature of Twill platform is collaborating with customers. Customers are as part of their development; they co-create with Twill’s team by submitting requests for new features and platform updates (2018).

After understanding what customer’s requirement, the next step is to ensure that what they are going to provide to customers is the right one. For example, Troels Storving, CEO of Twill explained that instead of creating one function which takes six weeks to develop, they create a small, simple button and see how many people have accessed it then analyse the type of customers as a group or just particular customer (Palamarui 2018). To close the Gap 2 importantly, always make sure that the decisions are made based on what customers ask for (Grant 2014). Analysing not only who require the function but why do they need that function. In addition, if the platform is often updated, it is essential to inform customers in order to avoid the customer’s confusing while using the platform (Vetchote 2019).
According to Expert Program Management (n.d.), the Gap 3 can be reduced or eliminated by arranging team training to expand and fulfill the employee knowledge also to ensure that they will perform their performance in a proper, service-minded way and provide the service effectively. However, it can be added that instead of arranging the training, hiring the right person for the right position is better to be done since in the first place. Technology also can help to meet customer’s expectation. Vetchote states that for the platform itself, customers can choose their options of transportation by themselves with based on the rate price companies provided (2019). Hence, the customers they all know that the rate of shipment is the direct variations with the service they might receive.

Although all the three gaps mentioned above have been closed, the failure to meet customer expectation can happen too. To close the communication gap or Gap 4, internal communication between teams should be made. Accordingly, all employees understand and able to communicate to customers in the same direction whether providing information before or helping during the service delivery. Another important strategy is that they do not overpromise to customers. Exaggerated information mostly in the type of advertising or by the sales persons often leads to this gap because it exceeds the ability of the company to provide the service as their promises. (Expert Program Management, n.d.)

The different ways to cover this gap regarding the digital platform comprise of the nature of the platform, communication through online such blogs, press releases and social media. According to Twill, the platforms are made in user-friendly concept and greater various functions. The online customer support function that standby for 24/7 to assist customer anytime needs help. The communication in the way of acknowledging people about any issues related to the digital platform through blogs, news and press releases are easily find on their websites (2019).

The customer gap is the most critical and the ultimate goal in narrowing or closing this gap. Repeatedly, to close the gap 5, the only way to do is that, the company need to find the gaps between the Gap 1 to 4 and narrow or close them. There is no alternative for the company to directly close this gap (Expert Program Management, n.d.). Referring to the interview result, it can be emphasized that although the companies attempt to deliver service to meet customer requirement, the digital platform itself sometimes challenges both customer and service provider. For instance, the frequency of updating the functions
on the Twill platform causes easily confuse customers or the Panalpina’s customer portal that somehow increase the burden for the customer service since they still have to manage with the regular customers and customers who use the new portal.

It can be argued that technology impacts the way of narrowing and closing the gap, for instance, before four ways affect the customer’s expectation include word of mouth, personal needs, experience in the past and external communication from the service provider to the customer. However, these days, customers are part of the co-production such as self-service or technology-assisted service which impacts the customer’s expectation and nature of service delivery (Bitner, Zeithaml, and Gremler 2010: 204).

Besides the gaps in each stage that companies need to reduce or eliminate by using the digital platform, the simple 3-E Framework from Kate Leggatt of Forrester Research can be undertaking to improve customer experience. According to Watson’s article (2017), Leggatt states that the 3E’s include easy, effective and emotional. The first E represents to make it Easy for customers; it is well known that customers nowadays do not want to spend a lot of time or effort getting what they want. Hence, the digital platform should be decided to be simple, hassle-free and convenient. For example, once the customer sign-in, the platform offers to remember the username and password function, or it is also easy to use in mobile mode. Secondly, the performance of the platform is Effective; the customers can have the answers from their questions in a short time and accuracy; the landing page loads quickly or arranged in a clear format. The last E present as to make it Emotional; the interesting and right graphic designs, font text and colour can trigger positive emotional experience.

4.2.3 Risks and Challenges of an Implemented Digital Platform

For Twill, there are three challenges the interviewee faces nowadays: customer’s perception, competitors and limitation of the platform. The similarity to Panalpina’s view, the customer’s perception and the platform itself are the challenges. First of all, Vetchote explained the meaning of the customer’s perception in the way of changing that traditional way of thinking. The challenge is how to persuade customers to change from the traditional way and use digital freight forwarding instead. To push customers out of their comfort zone is not easy. Traditionally, CC or CS received a complaint about the difficulty to contact any customer service person, waiting a long response, so they will persuade customers to try to use Twill by explaining how it works and how it will benefit to the customer. However, not every customer will agree to change, even they complain, and
the team suggest the solution, some customers may prefer to use traditional freight service.

Joutsen described customer perception as a misunderstanding of the context, for instance, customers sometimes, they do not understand some logistical terms, and it leads to a failure of adequate communication. Perhaps because they have not worked in the industry before, she further emphasised that in Finland, everything is very structured; on time, all the companies are in the flow chain. Hence she does not receive many complaints. Take the abbreviation of ETA, for example, this once happened to her that customer did not understand the definition of ETA, which is estimated time of arrival, not the exact time, so customer went there and complain about this issue. To prevent the misunderstanding, avoiding abbreviation in any communication, using words that easy and clear for customers to prevent are her solutions. Importantly, do not assume that the readers will understand what the sender means.

Second, in this era, logistics service providers are expanding their business segment to meet all the customer’s requirement. Traditionally, customers need shipment to be delivered on time, at the right place and the right price with acceptable quality, however nowadays customer needs everything processes faster and transparency even when booking shipment. For a few years past the word “digital freight” has become a buzzword. The competition in this industry is getting intense. Global companies have been launching their specification innovation to satisfy customers. The interviewee explained that it is important to grab more market share, therefore “share of mind” and “share of heart” are the challenging of the company to achieve beyond the competitors. There must be many companies currently officially provide this type of service and will launch soon in different countries such as Agility and DB Schenker. However, Twill is now a frontrunner of digital freight forwarding in Thailand since the Thailand route rolled out before their competitors since in the mid of 2018 while no one did at that time and even now.

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3 Share of mind is the first brand people in the market think of when they need.
4 Share of the heart is customer engagement by the experience with emotion rather than ration. See https://www.energizeinc.com/store/share_mind_share_heart

Undeniable, the platform itself is challenging for both companies; how to create the platform to benefit customers most effectively and efficiently. Twill’s customer care teams in
each country always share an idea, feedback from customers and discussing the way to improve because it is possible that a function one customer gives a complaint, does not mean others will be displeased with.

Joutsen (2019) suggested that the platform should have decided to benefit the most for both parties: customer and freight forwarders. The customer portal at the moment is easier for the customers but not for a general freight forwarder in the way of extra working. Also, the trade lanes, it is another challenging to extend the service offering both the terms of freight booking and countries to roll out.

The risks can be when unpredictable conditions occur such as shipment is late, products arrive in the crush, is defrosted or missing. These are risks, and the responsibilities are, however, depending on the Incoterm issued between importer and exporter. In addition, the risk is from the platform itself; the interviewee explained that the development team are trying to update the platform based on the customer’s feedback every two weeks. As a result, the platform is currently still unstable as it is supposed to be. Customers argue that they get confused sometimes since sometimes the front page and functions are deleted, added up and changed placed.

4.2.4 Future of the Freight Forwarders

Both respondents believe that freight forwarding industry continues to be a growth industry, as long as people still see the value of import and export their goods from within and outside the country. As Joutsen stated that in general, the industry would not recede. “People still put much money on such production and manufacturing in foreign countries and the requirement of international logistics to transport cargoes and the services around the world” (2019). Vetchote pointed out in a concern of digital perspective that “It will continue to grow and will be stronger as every business can become digital, freight forwarding can do that too” (2019).

The author completed the interviews with the question “Do you see technology as opportunities or challenges?” to see their opinion towards the outlook of the industry. The answers from both interviews are in the same direction that Technology plays as both opportunity and challenging role in the logistics industry. The opportunity is seen as with the assistance of technology; freight forwarders can meet customers requirement easier, faster and more efficient. On the other hand, investment is a challenge; companies need
much money to invest and complete in development of one innovation. It is not easy for a small business to achieve there. Even though, it is evident that people and technology can work together as they are doing so today, replacing human works with the technology is still another challenge. Hence, it is better for employees to always seek more knowledge and experience or have the ability to do beyond what technology can play a role. One common sharing that was noticed in both interviews is that a concern of freight forwarders who do not adopt or develop innovation due to any reasons, they probably will fade away in the end. This statement is unsurprising, it is innovation that brings revolution; people always are interested, pursued in what makes them live comfortably.

Moreover, the digital platform as the result of digitalisation is one of their choices. Hence, people will change their behaviour of using freight forwarding service as their online shopping behaviour. This is absolutely challenging for traditional freight forwarders especially any small ones.

4.3 Limitation

The limitation of this thesis mainly from the data collection part which is well known that it is not always easy to acquire the company respond from the interview request. The author’s supervisor has assisted and suggested a way to solve the problem if the process cannot complete as the plan. In this thesis, the primary data is from the interview method as discussed in the data collection chapter. Request for an interview is not always easy; it is a process that is quite time-consuming and relies on the other decision. The data acquires from the interview can be voluminous and subjective which can make the interpretation and summary analysis difficult. Also, since it is a qualitative data, quantification and statistical analysis are limited. The interviews were conducted and transcribed one in Thai and another in English, and the finding is translated and presented in English. Although the author tried to interpret in exact meaning, there unavoidably some gaps in different language’s characteristics. For instance, terminology especially logistics terms can be used in various meaning. It can happen since that word has been used for a long time from the previous employee and train to a new one and being used as word of mouth. As a result, the author quite often tended to ask the interviewees to confirm the understanding to avoid misinterpretation further.

The secondary data is mostly based on both companies’ websites. Since Panalpina customer portal just has launched at the beginning of this year, the information quite difficult to find except the Panalpina website or press release and the industry news. As a result,
broad and deep information is not provided as it should be for instance the feedback from the customer which is important to this research. To explore in more detail, interview with the expert in the particular field is required. On the other hand, Twill started since 2017; it is easier to access information through news, other blogs and others analysis. Blogs written by the marketing team or interns from the company are beneficial which not only for their customers, but it is also another channel to communicate with ordinary people like the author.

Furthermore, it is noteworthy that limitation of the platform functions is necessary to improve such to expand the trade lanes in more countries, adding the functions that will more facilitate customers and increasing the platform’s stability and investing issue. Even though currently there are still limitations for both companies as mentioned above, the author believes that they are developing various functions and attempting to optimise the platform to provide a greater and seamless customer experience.
5 Conclusion

This thesis aimed to study the context of supply chain management strategies in the freight forwarding industry which is solely focused on the technology perspective as digital freight platform. The notion is that how the digital freight platform can improve customers experience. This thesis based on the foundation of logistics and marketing knowledge. Customer experience is the critical matter for any businesses should be striving to improve; means the company needs to understand precisely customer’s requirement and satisfy through their services. Technology is believed as a bridge between internal and external to better connectivity driving a seamless supply chain. Since the technology is advancing at a rapid rate, companies in the industry also need to be aware of its importance and create, adapt or improve their existing system in order to win in the intensely competitive market.

The primary data were obtained from interviews with two different aspects; one is digital freight forwarder “Twill” as Maersk’s innovation and another one is Panalpina; one of the world’s leading logistics service provider companies. The company provided the latest platform provided in 2019 called “Customer portal platform”. The secondary data was acquired from company websites and other publication. While answering the main research question; how to enhance customer experience through both general way and digital platform, risks or challenges, and the future of the logistics industry are also discussed.

The findings present the benefits of digital freight platform consist of five main advantages to enhance the customer experience. First, easy booking and transparent range of prices; the system automates the process and present customers a list of suitable options that can match per customer’s requirements. Second, customers can track their shipments anywhere and anytime; hence, no need to email or phone calling forth and back to customer service. Third, the customer can contact service or customer care immediately when issues are arising by using online customer support function. Fourth, reducing traditionally time-consuming paperwork. Instead of searching the needed document by scrolling through the email inbox which causes a delay in many cases, the platform provides data collection function. In a secure folder, all important documents are saved as well as it is easy to share documents such as a bill of lading, packing list or invoices with the third parties. Finally, collect and analyse data; besides the data collection, the platform also provides an analysis function to build the reports for continuous
optimisation. Significantly, comparing the traditional and digital freight forwarder, it can be seen obviously that the differences by the benefits of it as discussed. The three most significant changes in digital transformation include increasing transparency of operation, time shortening and paperwork elimination.

In addition, Gap model as a logistic service strategy initiated by Parasuraman, Zeithaml and Berry analysis in 1985 and the 3-E model from Kate Leggatt for improving customer experience are adapted to analyse the gaps, and the method of the service companies provided can be improved. The four gaps need to be close in order to close or the most critical gap "customer gap". This is not for one person or department to take responsibility, but it is a collaboration of various departments to perform their tasks and provide the maximum value to customers. To eliminate the gaps, listening to customers pain points, expectations and feedbacks by direct interview or through the sales department. Secondly, ensure that what they are planning to serve is the right one as customers' expectations. Thirdly, always examine the performance of both customer service persons and the platform to provide inappropriate manner. Fourthly, delivery the service as company promise. If there is no fault or only acceptable fault occurs, it will completely close the customer gap.

The 3 Es perform easy, effective and emotion (Watson 2017). To enhance customer experience, the simple 3 Es is importantly noted. Customers nowadays prefer products and services with easy accessibility, fast, high quality and able to catch the sentiment or passion of customers. It is worth mentioning that lack of one aspect from these three above can cause company losing customers because they mostly to remember the experience they have through the service than the price.

The challenges of two companies are quite similar; they think that the customer's perception towards the service and the platform itself are still the matter to improve. Also, the failure of communication between customers and service providers, for example, unpredictable circumstances that it is not the company’s responsibility, but the third party involves. Being the market leader to have the potential of market share is also very challenging. Another common perception is the outlook of the industry. The logistics and freight forwarding industry will continue to grow up. Technology is a crucial factor in changing the face of freight forwarders. The digital transformation of this industry may change slower when compared to other industries. Therefore, it is a critical decision for
traditional freight forwarders nowadays to embrace the technologies to survive the business. It is highly possible that for the companies that are adapting themselves through digitalisation will reap the profitable growth. Conversely, any small and traditional freight forwarders will gradually disappear likewise the reduction of travel agencies significance.

To conclude, new technologies and service innovation is one of the most crucial influences for any businesses to run their seamless supply chain. It can be focused on the different level depending on the target and core competencies of each business. For the freight forwarding industry, the newest technology booming is digital freight platform. It is another significant model that many freight forwarders and logistics service provider attempt to present to customers and in order to gain more market share. It has been growing for a few years and tends to continue to develop and expand its significance in the industry. It can be argued that at present the platforms are not entirely perfect and will never perfect for all users. Since the customers’ requirements can change by time and launching one function is not easy, and it takes time. Some companies may provide services beyond others, some may lack some points. Hence, the function that is already acceptable for one customer cannot guarantee others’ satisfaction. The author believes that there are many factors behind one innovation development. However, every company are fully attempting to create the most effective platform to meet customers’ needs and expectations.

5.1 Further research and Recommendations

Further research and recommendation are based on the limitation of this thesis and the service provision which are analysed in the previous chapter. The recommendations for further research and the case companies are identified as the following:

First of all, the recommendation for the platform could be improving its performance such stable, smooth and ensure that provided functions are diverse enough to be outstanding than competitors in the market. Nowadays, most companies impart similar main functions; however, due to individual company’s factors, lack of trade lanes, providing insufficient service functions are also the matter leads to company gaps. It is noteworthy that once customers are interested in company A’s platform, but they did not experience the service as their expectation. Customers will not wait for the company to alter or add the service, but they will change to other companies rapidly, means that company A will lose their customers to competitors.
Furthermore, this study solely analyses from the company's perspective, and the qualitative data collection method is applied. For further studies, both qualitative and quantitative should be considered to apply. Mixing both methods can provide a breadth of understanding and examine the aspects more accurately than either quantitative or qualitative approaches alone. Use the qualitative method for finding the depth of understanding, such as process, history, and strategy. Apply quantitative for presenting a diversity of opinion and idea. For example, quantify in the percentage of respondent's perception towards the digital platform and the digitalisation which classify by factors such as age, work experience and department. As a result, the study can avoid biased interpretations, and it is easier to measure to see a trend as a large group.

In addition, since customers experience through the digital platform is the main research topic, the opinion of real platform users should be asked to compare the different and conformable perspectives from both service providers and the customers. Because it is possible to have discrepant information or bias with legal requirement or company's confidential information. Finally, for all of its advantages, digital freight platform is a double-edged sword. One of its negative points is that it impacts the future of work of general employees; how employees can adapt to technological change could be interesting to address for researchers.
6 References


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Appendices

List of 15 Freight forwarding companies in Finland

<table>
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<tr>
<th>Freight forwarders in Finland</th>
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Interview Questions

The interview questions are set as semi-structure, it divides into three categories, in each main question, there will be also sub-questions arising (if the answers are possible to share).

**Question 1:** Respondent’s background and company overview.

**Question 2:** How the company improve customer experience?
Including the sub-questions as:
- The process as in general, and through technology such digital platform.
- The origin and development of the digital platform.

**Question 3:** Risk and Challenges.
Including the sub-questions as:
- What are the factors for customers to consider when choose the company?
- What are the risks and challenges of the digital platform company implemented?
- The way to tackle or manage the problems.

**Question 3:** Outlooks.
Including the sub-questions as:
- How do you see the logistics/ freight forwarding industry in the future?
- As a freight forwarder do you see technology as an opportunity or challenge?