



## **Optimizing supply chain in Ecommerce through fifth party logistics (5PL)**

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## Abstract

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<b>Report/thesis title</b> Optimizing Supply Chain in Ecommerce through Fifth Party Logistic (5PL)
<b>Number of pages and appendix pages</b> 21+2
<p>The goal of this research paper was to address the growing demand in the logistic industry and how it can be used in ecommerce for supply chain management. Although there are several types of party logistics services, this study will focus more on the most recent in the market which is the fifth party logistics (5PL).</p> <p>The theoretical framework was created to appreciate what fifth party logistics (5PL), ecommerce and supply chain management are. And after deep diving into these concepts, the author then points out how fifth party logistics be utilized in supply chain management particularly in ecommerce section. For the last part, it explains the challenges of fifth party logistics (5PL) especially with all these demands and companies' undecided to use their service.</p> <p>The study was first conducted as qualitative research. Questionnaires and request to interview were sent to various fifth party logistics companies in the country. However, none of them responded to the author's requisition. Thus, leaving the author to focus only on what was accessible and available to her through the desktop method and obtaining information relevant to the topic and supplementing answers to the questions which was not acquired using the first research method used.</p> <p>After being able to gather all the information through the desktop research, it can be presumed that fifth party logistics (5PL) is the most in-depth and is the best solution in managing the supply chain in ecommerce. Although the cost of this service can be more expensive than the others at first, by fully integrating technology in logistics, the 5PL (Fifth Party Logistics) provides comprehensive solution to businesses in managing and making their work fast and efficient and providing a real-time visibility of what is happening in the entire supply chain. Thus, reducing the cost by making zero to less errors saving more time and money for the company and at the same time boost the business through good customer satisfaction.</p> <p>With all these advancements, most businesses will surely pick logistic providers who are willing to go above and beyond to meet and exceed their needs and expectations.</p> <p>As a result, this thesis will showcase the advantages of optimizing 5PL in the supply chain management which will be beneficial to the readers and companies who are still apprehensive to make use of this kind of party logistics</p>
<b>Keywords</b> Outsourcing, Logistics, Innovation, Supply chain, consumers, Ecommerce

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# 1 Introduction

Amidst the temporary slowdown of the global economy due to the recent pandemic with COVID 19, came a surge of growth in the e-commerce sector. For the past two years and with series of lockdowns, going online seemed to be the best option, considering all the restrictions implemented, this became the new normal. Consumers relied heavily with online services for purchasing from the basic needs to their wants, forcing businesses to go digital avoiding economic downturn. With a booming e-commerce sector also came a heavy demand to the logistics and supply chain industries. The purpose of this thesis is to help readers and businesses in choosing a good party logistics for ecommerce which is essential to meet these growing demands and with this, the fifth party logistics (5PL) is the best option amongst all.

This thesis is a researched based bachelor's thesis for the Degree Programme in International Business with the specialization in Supply Chain Management from Haaga-Helia University of Applied Sciences in Helsinki, Finland. The main goal of this academic work is to do a comprehensive study, look over and interpret every gathered information, determine conclusions, and to share the results with the public.

## 1.1 Thesis objectives and publication

Modern e-commerce needs push businesses must prioritize efficient inventory management, order fulfilment, and seamless delivery operations. With the rise of pressure on e-commerce businesses, the fifth-party logistics (5PL) model has emerged as an effective solution to manage supply chain complexities. By partnering with a 5PL provider, businesses can have their logistical needs handled from start to finish. This includes identifying exact requirements, planning, executing, and managing the entire supply chain network. In the case of cross-border e-commerce, a 5PL provider can handle complexities such as customs rules and regulations, freeing up more time for businesses to focus on selling. (Softlink Global 15 March 2023)

## 1.2 Research Question

This thesis aims to develop a better understanding and to determine the effectiveness of optimizing supply chain through fifth party logistics especially in ecommerce. By the end of this study, the audience will be more familiar with fifth party logistics (5PL) and supply chain management.

The guideline for this is the research Question (RQ) as presented: **RQ. How can optimizing supply chain through utilization of fifth party logistics benefit ecommerce businesses?**

To support this thesis, the RQ is consist of 4 investigative questions (IQs).

- IQ 1. How does supply chain management operate by utilizing the fifth party logistics?
- IQ 2. How can the 5PL address the growing need of global e-commerce business to make their business efficient?
- IQ 3. What are the challenges of Fifth Party logistics (5PL) in the supply chain management?
- IQ 4. What are the advantage and disadvantages of using fifth party logistics in Ecommerce?

Table 1 below presents the IQs, theoretical frameworks components, research methods, and results in chapters for each IQ:

Table 1. Overlay Matrix

Investigative Questions	Theoretical Framework	Research Method	Result
<b>IQ 1. How does supply chain management operate by utilizing the fifth party logistics?</b>	Supply Chain management and logistics- The E-commerce businesses would hire a Fifth Party Logistics (5PL) to develop a good supply chain management solution with an IT system who will ensure a real-time view and control of the supply chain.	Qualitative and quantitative interview with 5PL companies  Quantitative analysis And interpretation of results collected.  Desktop research done utilizing academic resources available online	P 19
<b>IQ 2. How can the 5PL address the growing need of global e-commerce business to make their business efficient?</b>	5PL and E-commerce With E-commerce itself innovating technology and business, 5PL can efficiently integrate the E-commerce supply chain with its tailored-fit supply chain management solutions to organize, operate and negotiate on behalf of their clients.	Qualitative and quantitative interview with 5PL companies  Quantitative analysis And interpretation of results collected.  Desktop research done utilizing academic resources available online	P 19 & 20
<b>IQ 3. What are the challenges of Fifth Party logistics (5PL) in the supply chain management?</b>	5PL and E-commerce One major challenge to consider for an E-commerce supply chain management is Sustainability. Ensuring that all the sources whether it be by labor, or supply can meet what was ask of.	Qualitative and quantitative interview with 5PL companies  Quantitative analysis And interpretation of results collected.  Desktop research done utilizing academic resources available online	P 20

<b>IQ 4. What are the advantage and disadvantages of using fifth party logistics in Ecommerce?</b>	5PL and E-commerce	Qualitative and quantitative interview with 5PL companies  Quantitative analysis And interpretation of results collected.  Desktop research done utilizing academic resources available online	P. 20 & 21
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## 1.1 Demarcation

These days, as technology advances, the e-commerce is also thriving. Hence, this is the best time for companies to flourish and seek for more customers and more opportunities not just locally but even around the world. With this said, demands are expected and comes challenges as customers look forward to and prefers their orders to be speedy and affordable. With all these big expectations and higher demands and for these e-commerce businesses to keep up, having an effective supply chain strategy is important. This is where 5PL comes in. In recent years, as technology evolves, so does the logistics. 5PL can bring so much advantage to the supply chain management as they source and negotiates all the services that a company needs. They utilize technologies to implement an efficient and orderly management of the entire supply chain to guarantees the most accurate development in each step of the supply chain. Thus, with efficiency comes swift and reliable deliveries of goods and services.

With 5PL supply chain management would be less complex, more organized and secured. For e-commerce to ensure the proper management of their supply chain, choosing the best to collaborate with is essential. Although there are apprehensions with advantages of technology, The goal of this study is to properly address the questions about 5PL and for companies to make better decision for their respective businesses especially when it comes to e-commerce. Although, there are no guarantees that it will be a success to all.

The author of this study will also make the most out of this through understanding and gaining more knowledge about 5PL and e-commerce the author will also apply this new information as a learning to which she can also relate to the author's future career on logistics.

## 1.2 Benefits

This study does not have a commissioned company. The intention of this academic work

is to function independently and collect more data from different sources to broaden the topic. Hence, the author did not just focus on a single company as the basis of the data collected. The purpose of this work is to guide companies with growing e-commerce business and is considering utilizing 5PL in handling their complex supply chain. Thus, this project will contribute ideas and help them in deciding through weighing out the advantages and disadvantages of having 5PL in handling their supply chain network. Therefore, it is important to showcase all the data that will be collected to be of use to people interested with the topic and how it can give an impact to their business from the result of this study after its publication.

### 1.3 Risks and Risk Management

Due to limited resources available for this topic since there are still quite few numbers of 5PL operating companies around the globe, lack of resources and information can be anticipated. This can be a hindrance and can be a possible threat for this study. To manage this is to be able to identify what these operating companies are and be able to gather information from the appropriate subject. The other risk is if these companies will not respond or participate in the interview which will result to insufficient data for this study. However, the author believes that by presenting a good proposal and by emphasizing the importance and what the subject can benefit from this study, the risk will be reduced.

### 1.4 Key Concepts

The following concepts and their definitions are presented thereafter with the purpose of providing the reader a guide for better understanding of this study before, during, and after the research methods and its structure.

**Outsourcing:** Outsourcing is a strategic decision by a company to reduce costs and increase efficiency by hiring another individual or company to perform tasks, provide services, or handle operations that were previously done by employees within the company. In other words, outsourcing is the practice of getting certain job functions done outside a company. The process of outsourcing business functions is also called contracting out. (Corporate Finance Institute 2022).

**Logistics:** Logistics, or logistical planning, refers to the process that a business uses in order to coordinate its supply chain operations. It includes a wide variety of tasks and activities, such as managing how raw materials or inputs are acquired and transported to the business, how inventory and inputs are stored at the business' facilities, and how inventory is transported within the business and beyond. (CFI Team 2022)

**Innovation** – is about successfully implementing a new idea and creating value for you customers and stakeholders. Innovation starts with a new idea. It could be a plan for an improved product or services; it could be an updated method for running your operations; it could also be a new business model. (BDC 2022)

**Supply chain management** - A supply chain is an entire system of producing and delivering a product or service, from the very beginning stage of sourcing the raw materials to the final delivery of the product or service to end-users. The supply chain lays out all aspects of the production process, including the activities involved at each stage, information that is being communicated, natural resources that are transformed into useful materials, human resources, and other components that go into the finished product or service. (CFI Team 2022).

**Ecommerce**- E-commerce is the process of selling goods and services over the internet. Customers come to the website or marketplace and purchase products using electronic payments. Upon receiving the money, the merchant ships the goods or provides the service. (Fuscaldo 2022.)

## 2 Optimizing fifth party (5PL) logistics in e-commerce's supply chain

In this chapter, the author came up with a theoretical framework correlating to the RQ and the IQs formulated.

### 2.1 The evolution of fifth party (5PL) logistics

The fifth party logistics (5PL) is a new model in the logistics industry where logistic service providers are hired to develop a good supply chain management solution integrating an IT system to ensure a real-time view and control with the company allowing smooth and successful transactions in all levels of the supply chain. Its task is to organize and operate on behalf of its clients and to negotiate in terms of logistics for favorable rates fitting into company's needs in terms of supply chain management.

5PL providers manage at the strategic level by a focus on providing innovative logistics solutions throughout the entire supply chain. The key to success in these endeavors is the effective integration of IT and computer systems. Other terms used for providers who manage all parties in the supply chain in an e-business market are 'virtual LSPs or 'infomediaries'. (Garrido & Regan 2002)

Over time, logistics providers have adapted to meet the changing demands of businesses and consumers alike. As e-commerce has surged, logistics providers have continued to evolve their services, culminating in the development of the ultra-modern 5PL model.

Initially, logistics providers offered basic transportation services, moving goods from one place to another. Over time, they added warehousing services to their offerings, allowing businesses to store their inventory and manage their supply chains more efficiently. The next step was the 3PL (third-party logistics), which offered more comprehensive logistics services such as order fulfilment and distribution.

As the complexity of logistics grew, the 4PL (fourth-party logistics) emerged. 4PL providers acted as logistics consultants, managing and optimizing the entire supply chain for their clients.

The 5PL takes things even further, offering end-to-end supply chain management that includes not only logistics services but also engineering and IT services. With their advanced technology platforms and engineering expertise, 5PL providers are well-positioned to manage the complex and fast-moving world of modern e-commerce.

The emergence of 5PL logistics is due to the increasing popularity of e-commerce, and its development is strongly influenced by the advances in information technology (IT). The internet plays a crucial role in enabling this type of logistics service.

5PL logistics providers facilitate online payments, making transactions more convenient for customers, and offer a call center service for feedback and suggestions. Thus, enables customers to provide valuable input that can help improve service quality.

Overall, the concept of 5PL logistics has evolved with the times and reflects the growing need for more sophisticated supply chain operations and logistics-related implementations. As technology continues to advance, it is expected that 5PL logistics will become increasingly prevalent and offer even more benefits to businesses and consumers alike. (Softlink Global 15 March 2023)



Figure 1. 5PL — Fifth-Party Logistics (Arkindia 2019)

### 2.1.1. Other party logistics

**First Party Logistics (1PL):** The First Party Logistics (1PL) providers are responsible for only the transportation of goods. These logistics providers are considered the first level of outsourcing for a company's logistics activities. Clients typically subcontract the regular transport of their goods to a 1PL provider. These providers utilize carriers who are compensated based on volume or distance travelled, or a combination of both.

This arrangement is ideal for companies that do not prioritize transportation as their major factor in their business operations.

**Second Party Logistics (2PL):** Second Party Logistics (2PL) providers offer transport equipment, infrastructure, storage and warehousing services. This level of outsourcing involves more activities than 1PL providers. 2PL providers are essentially carriers with the capacity for storage and warehousing. The compensation for 2PL services is calculated based on the cost per pallet for transportation and storage.

**Third Party Logistics (3PL):** 3PL logistics providers are responsible for overseeing and coordinating transportation operations, along with identifying suitable partners for 2PL logistics services. 2PL logistics involves outsourcing a wider range of logistics activities than 1PL, such as storage and warehousing and requires a logistics provider with storage capabilities. Payment for 2PL services typically follows a cost-per-pallet model, including transportation and storage costs. Therefore, a logistics provider offering 2PL must be a carrier with the necessary storage capacity to meet the needs of their clients.

**Fourth Party Logistics(4PL):** A 4PL logistics provider offers a higher level of outsourcing of a company's logistics activities, going beyond the scope of 1PL, 2PL, and 3PL services. They develop and implement comprehensive solutions for the entire logistics process or specific parts. The 4PL provider organizes, manages, and continually optimizes the logistics chain to achieve maximum efficiency, not just delivery but throughout the entire process. They also remain adaptable to changing market conditions or customer requirements. This level of logistics outsourcing requires a high degree of expertise and knowledge in the logistics industry. (Softlink Global 15 March 2023)

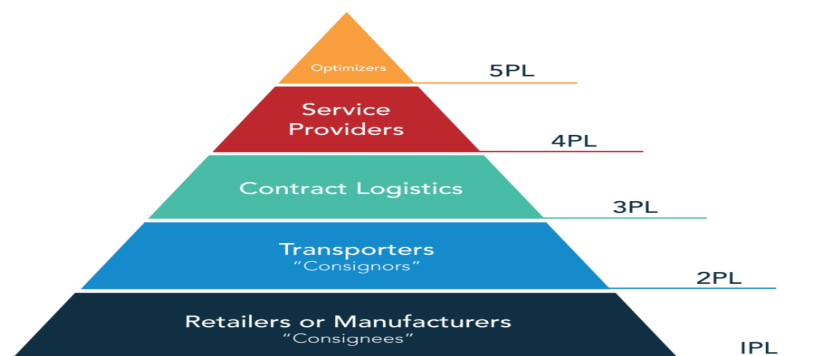


Figure 2. A Comparison Between the Players in the Logistics Network (Matthieu 2018)

## 2.2 Supply chain management and logistics

A supply chain is a network of businesses and activities that takes a product from raw material suppliers to end consumers. By definition, logistics refers to the processes of acquiring, transporting, and storing resources along the supply chain and logistics. A supply chain, which relies heavily on information technology, logistics and transportation, may involve numerous different businesses that comprise the various links along the supply chain, or a single company may oversee the majority of the supply chain and logistics for its products. (Dan 24 July 2013)

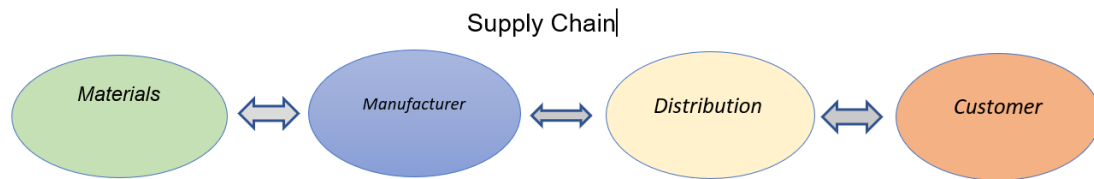


Figure 3. Supply Chain Model

Supply Chain Management, under its umbrella, covers areas such as planning, design, execution, and control of business operations. Businesses can analyze supply chain activities to create net value, sustaining a competitive advantage, leveraging global logistics, and many more. Overall, there's no reason to believe that **supply chain management** is not essential to any company or operation. (Arkindia 2019)

For instance, a supply chain for rice would start with the farmers in Southeast Asia (SEA). The product (rice) would then move along the supply chain from the farmers to the facilities such as rice mills that process. Next would be the packaging of the rice. Lastly, they would transport the goods to distributors who would then be delivered to their respective wholesalers. The wholesalers would then take the product to rice retailers or restaurants for sale, then finally out to the consumers. With this example, the supply chain and logistics would be the entire network of businesses that carry the product from its source – the rice farmers in Central America – to where the finished product is consumed by customers of rice retailers and restaurants serving rice as their staple.

Applying and developing a supply chain can without any doubt modify several striving processes in all supply chains. And by using the technology and good plan of action, it can help with the challenges the supply chain is facing and keep it competitive.

### 2.3 Supply chain and logistics activities

Supply chain and logistics activities Consider supply chain business processes vertical systems. A typical supply chain consists of manufacturers, wholesalers, distributors, and retailers. A supply chain can be seen as a system connecting the value chains of the companies within that system. Consider the activities closest to the source of raw materials **upstream activities**. Then consider the activities closest to the finished product and the end consumer **downstream activities**. A company is considered upstream or downstream in relation to other companies in the supply chain depending on its relative position in the supply chain network. (Dan 24 July 2013)

### 2.4 Supply chain management

Supply chain management refers to the process of overseeing and optimizing the overall supply chain network from raw material suppliers to finished product retailers. The goal of supply chain management is to make the supply chain process as efficient as possible by enhancing product and information flows among participating businesses.

Improving your supply chain can involve supply chain communication, or enhance the flow of information among businesses along the supply chain. Furthermore, the logistics and transportation systems will run optimally. But this only happens if all members of the chain have access to all relevant market data and operations information. All other members of the chain provide this information. (Dan 24 July 2013)

## 2.5 Importance of supply chain management

**Interconnected Supply Chain:** Our world can also be viewed as one significant example of a supply chain. Producers and consumers are consistently communicating with each other, and the product goes through various checks and hands before reaching their destination. Supply Chain Management is a valid option, which can manage substantial issues on the growth of partnerships, corporations, outsourcing, and global brand extension.

**Integrated and Collaborative Logistics:** Effective supply chain management tends to meet the demands of both consumers and producers with an integrated approach towards management — consequently, it's a necessity for the foundation of all societies.

**Better Supply Chain Includes Better Business:** For obvious reasons, an improved supply chain can grow your business. Reliable supply chain management can provide customer services with direct improvement. The right product and quantity have to be delivered on time to appease both producers and vendors. Consumers desire to know the exact location they must go to obtain the goods they require. A better supply chain will lead to better business within the company.

**Momentum:** Supply chain management streamlines everything from merchandise flow to even some unexpected disasters. Many organizations lack risk management due to not being able to take care of potential problems efficiently. With effective supply chain management, organizations can diagnose disruptions and concerns accurately. (Arkindia 2019)

## 2.6 E-commerce and logistics

Evolution in logistics Globalization processes, a dynamic development of information technology with increasing competition have caused significant changes in the activities of economic entities. One of the many important factors to achieve this goal is the swiftness of operations as well as process effectiveness and efficiency, in turn imposing cooperation coordination, which takes on the supply chain form.

E-commerce logistics varies from traditional logistics, online orders are characterized by a small number of products ordered and many packages. Errors are common in such a model, therefore, extensive automation of processes based on effective management systems of not only the warehouse and its processes, but also of the delivery of packages or potential returns is vital. When choosing a logistics solution, it is necessary to check what systems are in use. It is, therefore, essential to distinguish logistics as a category which the entrepreneur should pay special attention to, and it is also a confirmation of the huge role that logistics plays in online sales. (Zurek 2015, 129-138)

### 3 Research Methods

In this chapter the author presents the research done for this study.

In figure 4 presented below shows how the author visualized the research design for this study. This research is categorized into three phases, each phase is then divided into 3 categories. First part is all about who will be the respondents for this study. Next is the method of data collection. Lastly, the relationship of the investigative questions for this research.

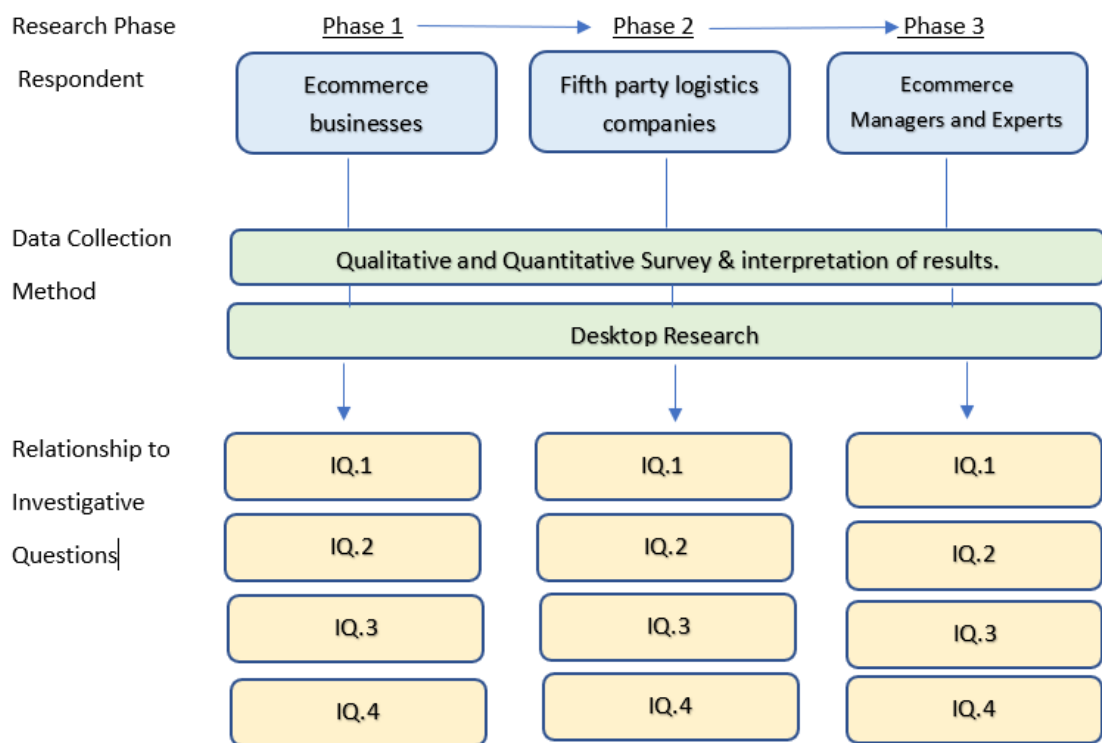


Figure 4 Research design

#### 3.1 Population and sample

The author will be conducting interviews with companies in Finland that provides 5PL services like DB Schenker. And the author will also be conducting interview with companies with Ecommerce and are utilizing 5PL service providers. The author will use the qualitative method approach since it will be conducted as interview and the quantitative method will not be effective in the data collection.

### 3.2 Data collection

The data gathered and utilized in this study is for the most part secondary data. Although the researcher does have data collected from interviews from the ecommerce and fifth party logistics companies, the writer will focus mainly on the data collected from various authors with established study about the topic since information about this topic is still limited. Secondary data can be raw or published summaries from other authors. Secondary data is chosen because it is favorable to the researcher since it is cost-efficient and is appropriate for the writer's situation since this is a broad scope and may take few years to finish due to limited resource available.

### 3.3 Survey and interview

Survey and Interview will be conducted in two parts. First, to companies that are running Fifth party logistics solutions (5PL) and to determine the challenges of running this type of logistic solution company. The other interview will be for companies who are utilizing the 5PL service to determine the outcome of their outsourcing, if it has yield positive performance to their business and to find out the challenges that they have of having 5PL provider running their supply chain sector. Regrettably, none of the respondents replied to the author's request. Hence, no data was collected.

### 3.4 Desktop Research

The author used desktop research method wherein the researcher utilized different resources found on the internet as a source material.

- Books, online articles, and magazines
- Web content and social media posts and videos.

Desktop Research will be used all throughout the study.

### 3.5 Research Process

For this study to be completed, Colin Fisher's process of doing a dissertation was used. It involves six phases:

- ✓ Phase 1: Choosing a topic.
- ✓ Phase 2: Writing a critical literature review.
- ✓ Phase 3: Developing Concept, conceptual frameworks, and theories.
- ✓ Phase 4: Collecting and analyzing research material.
- ✓ Phase 5: Interpreting the research material.
- ✓ Phase 6: Conclusion & writing the dissertation.

(Fisher 2011, 6)

## 4 Result

This chapter will talk about the questions made for this study and support it with the details obtained from the resources used. The structure of this chapter will be questions in bold, followed by a paragraph of information to support and supplement the answer.

### 4.1 Key Findings

Qualitative research was conducted in this thesis. The data collected for the research is explained in this subchapter. This method is used to understand the experiences, opinions, and beliefs of blockchain and SCM experts in their fields. None of the data collected is an objective numerical conclusion. All information collected in this research is subjective and open to interpretation by the reader.

#### **How does supply chain management operate by utilizing the fifth party logistics?**

The Fifth Party Logistics (5PL) oversees the tracking of the goods in the supply chain. From the source to the consumer, it is responsible for the forwarding and the reverse flow of goods and services.

It also presents a higher advantage in terms of technology and engagement with the client since it is involved and is in control of the planning, inventory, transportation, warehousing and even customer service. Thus, it is tailored-fit to specifically meet a company's logistics needs.

With Fifth Party Logistics (5PL), a single point of contact for supply chain operations is provided ensuring efficiency. The use of advance technology in 5PL is imperative to keep the supply chain flexible and resilient.

#### **How can the 5PL address the growing need of global e-commerce business to make their business efficient?**

Businesses are rapidly changing globally to catch up, it is essential to be able to adapt quickly as it required to be prepared for new and sudden surges in demands. In logistics, a lot of 3PL providers and now leveling up into 5PL providers to offer an extensive scope of management and function. With its advance approach, it is easily gaining attention to the business industry as it offers new strategies to improve and compete in the industry. Although at first, the Fifth Party Logistics (5PL) may seem expensive, it can benefit the company with a good return of investment eventually in longer term as it improves the efficiency and reduced cost optimizing the operations of the supply chain as

it affiliates with the shipments and does the negotiation on company's behalf for better rates with carriers. With its advance technology, the 5PL service provider offers the actual real-time view of the supply chain. Thus, allowing the businesses to track every transaction easily and recognize possible disruptions and by-pass it by taking proactive measures.

With its vast connections to different companies, 5PL providers has a better understanding of the logistics industry and may contribute important insights and guidance which can help e-commerce businesses make better outcomes and resolutions. Hence, with Fifth Party logistics' (5PL) technology, it can provide you the latest and updated forecasting by utilizing AI powered analytics and modify operations appropriately and accordingly.

### **What are the challenges of Fifth Party logistics (5PL) in the supply chain management?**

Despite the numerous benefits the Fifth Party logistics (5PL) presents for optimizing the supply chain management, few businesses are still hesitant in to accepting the Fifth party logistics process due to concerns about possible drawbacks. The most significant barrier in collaborating with Fifth party logistics is the Premium Cost which can possibly be higher than the traditional logistics solutions. The bigger the company's supply chain operation needs, its cost may also increase correspondingly. Although in the longer term, companies can benefit and could save a lot in terms of cost as 5PL optimize its operation of the supply chain.

### **What are the advantage and disadvantages of using fifth party logistics in optimizing supply chain management?**

The Fifth Party Logistics (5PL) and its technology has a vast and competitive network tailored-fit for a company's specific needs. Choosing Fifth Party Logistics (5PL) can be a good move as it provides comprehensive solution for businesses as it enhances the efficiency by utilizing its expertise in supply chain optimization. Its advance technology and integration such as the use of artificial intelligence and automated solutions increases efficiency and accuracy. Its advances technology ensures the right solutions for outdated processes. In addition, these can be useful in identifying possible fraudulent activities and problems in the supply chain.

In addition, as a business thrives and demands increases, 5PL's extensive network both in the local and international scene gives you a favorable access to new markets as it has already established connections around the world. And in times when business can be

unstable, logistic operations can be modified by the 5PL provider. Having efficient networks ensures accuracy and fast deliveries. With these, the client has more time to focus on the core of their business without worrying for the logistics and deliveries.

Aside from its added complexity into the supply chain management, there are also disadvantages that needs to be considered. Consider the great level of service the 5PL provides and since it is modified and costume-fit according to a business specific need, its cost is higher than of the other traditional logistic providers.

In addition, there is an increased level of dependency with 5PL providers. As they oversee and be in charge with the logistics and non-logistics solution, businesses may rely heavily with the 5PL providers and as a result, has a lesser control over certain functions in the supply chain management. Moreover, a strong dependency may turn into a propriety lock-in situation. As the business relies much on and has integrated into the supply chain, the harder it will be switch to a competitor which can be complicated and expensive.

## **5 Conclusions**

After in-depth study and research done into logistics and supply chain management, this thesis has come to an end.

Through the study, the author concludes that utilizing Fifth Party Logistics to optimize the supply chain management presents a lot of benefits to businesses. To business owners, collaborating with Fifth Logistic Party (5PL) providers provides comprehensive solution for the company's logistic needs.

A strategic partnership formed within a Fifth Party Logistics (5PL) provider and a company optimizes the supply chain management and provides various advantages which includes efficiency and resiliency. And despite the challenges encountered from the disadvantages of using 5PL providers in business, its advantages and benefits outweighed them all.

In this modern time, to take advantage of what Fifth Party Logistics (5PL) providers has to offer in business is the best choice as it provides end-to end supply chain solution and advance technology fit for this fast-paced and technology driven world.

### **5.1 Author's conclusion of the research**

From the very start, the author encountered a lot of challenges for this study due to limitations in resources about the topic.

This thesis is limited since it did not receive any response from its respondents. Thus, leaving the author to use only the secondary data collected to discuss the objectives of this study.

This accomplishment represents the efforts made by the author while trying to juggle her hours for her study, two jobs and being a mother to her daughter. These challenges helped her improved in a lot of aspects may it be personally, professionally and in academics.

The author managed to incorporate the knowledge she gained throughout these years of studying the program according to the Haaga Helia bachelor program.

The audience only views the point of this study through the different opinions and Logistic summaries gathered and presented. The limitation can also be considered from the author

since her understanding on 5PL and logistics is insufficient according to Haaga Helia bachelor program.

The completion of this thesis was made possible thanks to the motivation of the family and friends of the author who supported her in all aspects and were her motivators during the toughest times.

At a future date, the author aspires to investigate more about this topic. To supplement and broaden it with primary data.

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