

LAB University of Applied Sciences  
Faculty of Business Administration, Lappeenranta  
Degree Program in International Business

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**The transformation from 3PLs to 4PLs**  
**Case company: InterLog**

Thesis 2020

## **Abstract**

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The transformation from 3PLs into 4PLs, case company: InterLog, 59 Pages

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The research aims to figure out viable approaches which may facilitate the transformation process of the case company from a 3PLs provider into a 4PLs organization in Vietnam. Moreover, the research also discusses and clarifies elaborately ranging from benefits for the transition, risks arising during the transformation process, and challenges restraining the organization, to suggesting the most feasible and suitable strategies for the case company. The research was permitted by InterLOG company and embraced as one of the main tasks of the researcher during his summer internship at the company.

The data was collected from secondary and primary data. The former was gathered from the literature, the academic research, and the online newspapers. Concerning the primary data, the researcher undertakes the in-depth interviews with four InterLOG's staffs.

The outcome of the research indicates necessary steps and preparation for the case company in order to minimize the potential risks as well as maximize available resources for the strategic transformation into a leading 4PLs provider in Vietnam. Further research is highly recommended to figure out prevailing advantages and disadvantages of the case company at a specific period.

Keywords: 3PLs, 4PLs, risks, challenges, and strategies.

## Contents

1.	Introduction.....	5
1.1	Background.....	5
1.2	Objectives.....	6
1.3	Research question.....	6
1.4	Research approach.....	7
1.5	Research design.....	8
1.6	Research methods.....	9
1.7	Data Collection.....	10
1.8	Interview design.....	10
1.9	Delimitations.....	12
1.10	Structure of the thesis.....	12
2.	Literature review.....	13
2.1	Logistics definition.....	13
2.2	Logistics services models.....	14
2.3	Types of 3PLs providers.....	17
2.4	The difference between 4PLs and 3PLs.....	18
2.5	Key characteristics of 4PLS.....	20
2.6	Strategy.....	22
2.6.1	Definition of strategy.....	22
2.6.2	Strategy levels.....	23
2.6.3	Strategy process.....	24
2.7	Risk.....	25
2.7.1	Risk definition.....	25
2.7.2	Types of risks.....	26
2.7.3	Risk management.....	27
3.	Practical case company.....	28
3.1	Company profile.....	29
3.2	Functionality.....	29
3.3	Organization structure.....	30
3.4	Labor.....	31
3.5	Facilities.....	33
3.6	Financial performance.....	34
3.7	SWOT analysis.....	38
3.7.1	Strength.....	38
3.7.2	Weakness.....	39
3.7.3	Opportunities.....	40
3.7.4	Threat.....	41
4.	Analysis and findings.....	41
4.1	challenges could restrain interLOG from being a 4PL provider.....	41
4.2	Risks relevant to InterLOG's transformation from 3PL into 4PL.....	45
4.3	Benefits of becoming a 4PL.....	47
4.4	Strategies for the 4PL integration of InterLog.....	49
5.	Recommendation and conclusion.....	51
5.1	Recommendation.....	51
5.2	Conclusion.....	54
6.	Reference.....	56

## List of Figures

Figure 1 Logistics integration Service pyramid .....	16
Figure 2 The difference between 3PLs and 4PLs .....	20
Figure 3 InterLOG's organizational structure .....	31
Figure 4 Structure of employee numbers .....	33
Figure 5 InterLOG's facilities .....	34
Figure 6 Comparison between total revenue and total cost in the period from 2014 to 2017 .....	35
Figure 7 Structure of service levels in total revenue from 2014 to 2017 .....	37

# 1. Introduction

This chapter aims to introduce the thesis's background and objectives, along with interpreting which types of research approach, method, design, and data collection will be used in the research.

## 1.1 Background

Logistics is a crucial part of the global economy including both developed and emerging countries, and Vietnam is not an exception. In the Vietnam economy, the concept of supply chain management has been gradually concerned by numerous enterprises because nobody could deny the indispensable roles of supply chain management in general and logistics in particular to thrive business as well as penetrate potential foreign markets.

Nowadays, Vietnam has witnessed an increasing number of companies or start-ups emerging and registering in the Logistics field. However, according to Vietnam' Financial magazines, if analyzing deeply and thoroughly logistical operation, a mass majority of logistics companies are operating with a small scale and moderate capital, for instance, 75% of 2PL companies have been possessing roughly 2 to 5 registered own trucks. In addition, with several logistical companies specializing in storage activities, they just perhaps play a role as a landlord without value-added-services accompany. (Financial magazine 2020)

In 2019, Vietnam has officially around 800 companies involved in the logistics field ranging from transportation, warehousing to customs brokerage and forwarding. Generally, although the number of companies operating in logistics is largely tremendous in comparison to the scale of the whole Vietnam economy in total GPD with 245 billion USD in 2018, most of those companies are small and medium in size and scale. Besides, due to grappling with raising working capital and approaching governmental subsidies, a majority of logistics companies have a simple structure, are not really specialized in their own core activities, and are not financially capable of launching representative branches abroad. Consequently, they are restrained from external information, customers, and obviously must rely on a partnership with foreign logistics companies, which

defer them proliferating and evolving into more modern generation of a logistics companies such as a 4PL or 5PL companies in line with globalization. (Just in time 2020)

With regard to the fourth-party-logistics concept, there are just a modest handful of corporations being capable of handling and offering a thorough service obviously consisting of multifunction of 4PL such as consultation and management based on highly advanced technology along with typical services of 3PL like forwarding, transportation, brokerage, etc. Therefore, inclining towards the transformation from a 3PL entity into a 4PL could be a trendy step in the Vietnam economy in the next 5-year. Thus, the current challenge which numerous companies suffering in Vietnam motivates me to opt for the thesis title “What InterLOG should do to transform itself from a third-party-logistics into fourth-party-logistics in Vietnam market”.

## **1.2 Objectives**

The aim of this research is to grasp the current circumstance of logistical operation in Vietnam through analyzing InterLog corporation which is a third-party-logistics entity based in Ho Chi Minh city. After that, tackling forefront challenges restraining the company from proliferation as well as offering feasible solutions to transform the company itself into a fourth-party-logistics entity.

## **1.3 Research question**

The aim of this thesis is to make a comprehensive analysis of the present circumstances of the case company operating in Vietnam and then propose strategies and approaches to integrate the case company from a 3PL entity into the next generation of logistics layer called by the 4PLs company.

Specially, the main research question is **What should InterLOG corporation do to integrate itself from a 3PL into 4PL company?**

To support the main research question, the author will suggest additionally four sub-questions with the aim of specifying and collect more empirical data to facilitate the main question, including

- What are the benefits for the case company when integrating into 4PL
- What are challenges restraining the case company from becoming a 4PL enterprise
- What are risks accompany the case company during the process of transforming into 4PL
- Which strategies the case company should implement to transform into 4PL

#### **1.4 Research approach**

Saunders, Lewis, and Thornhill (2009, p. 124) interpreted that research approach is categorized into the deductive approach and the inductive approach. To be specific, deduction refers to the process of specifying research problems, examining theory by developing a hypothesis, emphasizing on the collection of quantitative data with large size of numerical samples, interpreting clearly relationships between variables, subsequently validating the hypothesis and correcting the theory based on evidence found. On the contrary, induction is defined as a process of gathering qualitative data, developing a new theory, and neglecting demands for generalization in case researchers do not want to test hypotheses and skip previous theory. However, to apply the inductive approach into research, authors must deeply involve themselves in the research process as well as grasp the research context. (Saunders, Lewis, & Thornhill 2009, p. 127)

Regarding this research, the author supposes to combine both the deductive and inductive approaches with two main reasons. Firstly, in the first part of the study, deductive approach will be applied to obtain theoretical data especially concerning logistics services integration, strategies, and risk in logistics integration. Additionally, the author can skip the stage of building hypothesis,

modifying relevant theory, along with not really necessitating the collection of quantitative information in large size and scale. With regards to the second part of this study, the application of the inductive approach is tremendously involved in collection of qualitative data through interviews as well figuring out inherent dilemmas in the case company with the aim of proposing suitable strategies to eliminate existing issues and facilitating the logistics integration in the case company.

### **1.5 Research design**

Research design is technically categorized into the conclusive study and exploratory study. In more detail, according to its name, conclusive study is characterized by being clear and well defined about specific phenomena before embarking on collecting related data. Furthermore, the conclusive research is often conducted when data collection is typically numerical or under quantitative configuration, along with having a rigid procedure (Research Methodology 2019). In contrast, exploratory research is denoted as a process of exploring new understandings and knowledge by asking experts in the research areas or searching relevant literature. Instead of being rigid like the conclusive study, exploratory research enables researchers to be flexible and adaptable to acquire new sights or even divert researcher's attention to a new direction when new information has appeared. In addition, if research tends to incline towards analyzing data under being informal, non-quantitative structure, and having a limited number of samples, researchers should simply adhere to exploratory study (Saunders & al. 2009, p. 139).

In this study, the author decided to choose the exploratory research method because the data collection is mainly carried out through in-dept interviews with people inside the case company as well as merely approach a modest number of interviewees. Besides, as a result of data collection from interviewing with specialists, the study could be deflected from initial thoughts to find out more suitable strategies and approaches for the company in accordance with its inherent conditions at the end of this research.



## 1.6 Research methods

It is presented that research methods consist of the quantitative research method and qualitative research method. The former method is acquired in the study in case researchers desire to collect data in a raw form such as numbers, statistics, prices, or test scores. Before being analyzing and processing, these numerical and standardized data is not able to illustrate or depict meanings and values to readers. To convey values from numerical data, researchers constantly arrange and quantify numerical data under the illustration of graphs or charts with the aim of exploring, describing, and examining trends and relationships inherent in data. Quantitative research is specifically suitable and efficiently applicable if authors want to gather samples in a large scale as well as generalize the outcomes achieved (Saunders & al. 2009, p.414). In contrast, the latter research method refers to the collection process of non-numerical and unstructured data. To be specific, non-numerical data could be understood as word expression collected from in-depth interviews or a list of texts from open-ended questions obtained in the online questionnaire. The main difference between quantitative and qualitative research is that numbers must be analyzed to convey its inherent meanings or literally relies on meaning while readers could easily grasp the core meaning of word expression from non-numerical data prior to being conceptualized and classified into categories (Saunders & al. 2009, p.480).

In this study, researchers prefer to apply the qualitative research method due to some of its advantages. Firstly, the author intends to undertake interviews with the case company's personnel or experts. Obviously, the data collected during the interviews would be noted as texts or short sentences which will be subsequently classified into categories for the aim of the research. Secondly, the qualitative research method does not require to collect unstructured data from a large number of samples, instead, the author plans to merely contact face-to-face with several interviewees. Furthermore, the results collected from interviews will be analyzed with the aim of coming up with innovative strategies for only the case company itself. Thus, the intention for generalization could be viewed as dispensable and perhaps inappropriate if being applicable to various companies.

## **1.7 Data Collection**

In this research, the author determined to utilize both secondary data and primary data. It is denoted that the former data refers to raw information collected and previously published summaries generated by different researchers in a similar topic. For instance, secondary data could range from payroll details, financial bookkeeping to academic books or research articles. From the perspective of researchers, secondary data is apparently useful because of less time consuming and money-saving. Furthermore, the reliability of secondary data is more consolidated and trust worthier because it perhaps already went through publish scrutiny or even open criticism (Saunders & al. 2009, p.268-270). To exploit the advantages of secondary data, this thesis will use data collected from academic articles and books specialized in logistics integrations, supply chain management, logistics service model, the case company annual report, the government's official reports in Vietnam.

With respect to the latter, it is denoted by Saunders, Lewis, and Thornhill (2009, p.261) that primary data refers to all information, statistics, or resources gathered by a specific researcher in his or her own study. Furthermore, it is highly recommended that primary data is definitely suitable for exploratory research as well as valuable for researchers if secondary data is perhaps unavailable in the research context or not really transparent in reliability and honesty (Saunders & al. 2009, p.323). Apparently, it is true in this study, because researchers must conduct data collection himself through in-depth interviews with experts and staff within the case company due to unpublished internal information and competitively confidential elements in the open market.

## **1.8 Interview design**

In this thesis, the researcher opted for in-dept interviews due to several prominent advantages. Firstly, the interviewer will conduct face-to-face appointments with four interviewees on a one-to-one basis, just between the researcher and the particular interviewee. In addition, all primary data collected during the interview

will be captured in words by noting. Secondly, because the interview will be carried out with the case company's experts and managers who are more knowledgeable and experienced than the researcher in the logistics field, it is obvious that there could be much new knowledge that emerged in the interview. Therefore, it is wise and reasonable to use in-dept interviews to explore new insight beyond the author's understandings. Lastly, In-depth interview is seen as less formal and contextually compatible with the face-to-face conversations between colleagues in the company because the author supposes to spend ten weeks of professional placement in the case company. (Saunders & al. 2009, p.321)

With regards to interviewees, the author approached four subjects encompassing

- Interviewee A is a manager who is currently working in the sales department as well as has accompanied InterLOG since the beginning period.
- Interviewee B is a staff in charge of customer relations and has worked in the company for three years.
- Interviewee C is a technician working in the warehouse as well as has been worked in the company for two years
- Interviewee D is a staff who is working in the human resource department and primarily in charge of training new staff.

To be more specific, the researcher technically conducts four interview questions, including:

- What are the reasons for InterLOG corporation to become a 4PL company?
- What are the challenges surrounding a 4PL company in the Vietnam market?
- What are risks that InterLOG corporation could deal with when the integration into 4PL take place?
- What are strategies for InterLOG to transform itself from a 3PL into a 4PL?

## **1.9 Delimitations**

This research is delimited by primary data which is acquired by in-depth interviews with InterLOG's staff and managers. Thus, the primary information is obtained heavily influenced on the personal perspective of interviewees who have worked for the company for a long time as well as had deep insights into both the corporate situation in particular and the Vietnam market in general. In addition, the thesis merely focuses on the operational range of the company within a period of three years from 2017 to 2019 in order to figure out both the nearest internal and external trends and information relevant to the company itself and its surrounding entities.

Besides, the author also intends to engage in the company's summer internship which will last for roughly 12 weeks. Thus, the internship duration will be perhaps slightly sufficient for the author to immerse himself into the company to refine useful information and necessary statistics, along with validating and correcting primary data with the aim of rolling out final strategies fit with the company.

## **1.10 Structure of the thesis**

This thesis is divided into 5 chapters, consisting of:

- Chapter 1- Introduction: presents primarily why the thesis topic is opted and which research methods are applied in this study.
- Chapter 2-Literature review: is built to guide readers towards fundamental concepts and theories which are used as a background with the aim of progressing strategies in the final chapter along with analyzing primary data in the third chapter.
- Chapter 3- Practical case company: aims to introduce in general why the case company is chosen as well as the core operation of the company

- Chapter 4- Analysis and findings: aims to illustrate a whole picture about what the company should confront and implement when decides to integrate into a 4PL.
- Chapter 5- Recommendation and Conclusion: at the end of the thesis, elaborate strategies are formulated on perspectives of the researcher with the aim of assisting the company to decide whether to transform into a 4PL or which directions the company should incline towards.

## **2. Literature review**

This chapter aims to discuss theories which were built previously and relevant to this research's empirical findings. Specifically, the literature will focus on basic definition of logistics, 3PLs, 4PLs, difference between 3PLs and 4PLs, strategies, and risks.

### **2.1 Logistics definition**

In the academic perspectives, logistics is understood theoretically in various ways by many distinct researchers. To elaborate on the definition of logistics, Waters (2010, p.3) denoted that logistics is radically an operative process with the aim of smoothening efficiently and effectively the flows of the commodity from providers to clients. Furthermore, requirements and demands from customers obviously guide manufacturing and commodity requirements via the planning process.

Otherwise, Logistics is explained as a management process with the aim of procuring, moving, and storing materials or inventory within the company and its surrounding marketing channels. the ultimate target of the process is to generate maximum profits for the organizations itself. (Christopher, M. 2011, p.2)

According to Farahani, Rezapours and Kardar (2011, p.3), Logistics management aims to plan, execute, and control efficiently and effectively flows of commodity, materials, services, and relevant data existing between original point and consumable point in order to fulfill the expectation of end-users.

To come up with a brief concept, logistics concerns all activities ranging from transportation, inventory packaging, goods storage to data and monetary exchange with the common goal of placing resources at the right time, in the correct place, at the sensible cost, at the best quality and correct quantity, and finally hand over to the right customers. (Mangan & Lalwani 2016, p.9)

## **2.2 Logistics services models**

Literally, Logistics service models is theoretically configured into 5 categories encompassing first-party logistics (1PLs), second-party logistics (2PLs), third-party logistics (3PLs), fourth-party logistics (4PLs), fifth-party logistics (5PLs). Firstly, 1PLs refers to organizations that undertake in-house transportation, warehousing, or various logistics activities by themselves instead of outsourcing or hiring external parties to handle (Logistics Glossary 2020). It is undeniable that 1PLs companies obviously involve themselves heavily in possessing tangible assets or initial investment such as vehicle fleets or warehousing infrastructures. In addition, a reason is likely explained that most majority of 1PLs corporations incline towards using of their own assets to carry out logistics functions because the consumption point locates geographically at the same place with their own factory or headquarters (Vasiliauskas & Jakubauskas 2007, p.68).

Secondly, 2PLs are technically transporters or warehouse owners who are outsourced or subcontracted by producers. The outsource aims to undertake logistical functions which manufacturers are incapable of carrying out in-house themselves. Besides, the service provision from 2PLs often adheres to short-term or even cost-driven alignment, for instance, carriers are paid after completing transportation of goods from factories to supermarkets without mutual commitment for future outsourcing (Logistics Glossary 2020). Thus, manufacturers do not necessitate to commit themselves in heavy investment ranging from purchasing trucks to leasing storage space, alongside paying total attention to core activities such as marketing or production (Hanus 2013, p.6).

Thirdly, 3PLs can be defined narrowly that 3PLs companies are service providers who are capable of offering a broad range of logistics functions for customers ranging from transportation, warehousing, labeling, cross-docking, forwarding to advanced activities that 2PL are not competent to provide such inventory management, logistics information system, or reverse logistics. Technically, 3PLs are an innovation of 2PLs and could capably provide value-added services accompanied the radical logistics functions such as labeling and re-packaging (Christopher 2011, p.223). Besides, the legitimate contract to hire a 3PLs company at least prolongs for one year. To be specific, manufacturers and 3PLs providers have cooperated in a long-term duration as well as incline towards mutual sharing in line with benefits and risks (Farahani, Rezapours & Kardar 2011, p.73).

Fourthly, regarding 4PL, it is denoted that the consulting corporation Accenture was the origin in the emergence of 4PLs. In more details, the modern supply chain management is gradually more globalized and complicated than the previous century, thus, manageable competence and efficiency for the whole supply chain does not obviously revolve around the sphere of only one enterprise, but also requires the involvement of surrounding entities. In such circumstances, it is strategically urgent for a company which likely plays a role as a focal entity being highly capable of applying know-how and specialty of its own supply chain or gathering different 3PLs organizations together with the aim of controlling and integrating the entire end-to-end supply chain (Christopher 2011, p.223). In another aspect, 4PLs is defined as an integrator who likely strategically combine resources, abilities, technological expertise of both its own enterprise and various companies in order to come up with a comprehensive service package for clients. Technically, 4PLs who merely possesses information system or advanced technologies utilizing various 3PLs providers to offer services as a part of even entirety of client's supply chain, however, 3PLs' services provided for customers is literally opted by consultation and instruction of a 4PLs organization in line with particular capabilities of individual 3PLs provider (Farahani & al. 2009, p.79). Besides, Branch (2009, p.38) also interpreted that 4PLs's domain of action is enormously extensive because it replaces customers' role in order to reconfigure

and redesign effectively and efficiently management of the entire supply chain and logistics on behalf.

Finally, it is denoted that 5PLs refers to the management and control of the comprehensive supply chain in an immense correlation with e-business. Specifically, a logistics provider is viewed as 5PLs when it must possess notably advanced technology or intellectual expertise in logistics such as artificial intelligence, blockchain, machine learning, or robot automation. Unlike 4PLs which proposes its own core technological competences and optimization, 5PLs utilizes and optimizes currently available IT system or technological facilities of its customers by turning into a virtual entity. (Farahani & al. 2011, p.81)



*Figure 1 Logistics integration Service pyramid (Farahani & al. 2011, p.72)*



### **2.3 Types of 3PLs providers**

This section will discuss in detail about basic types of 3PLs providers with the aim of grasping further the core functionality and fundamental operation of the case company which is eager to transition itself from a 3PLs into a 4PLs provider.

Theoretically, there are many types of 3PLs organizations, however, the study merely concentrates 3PLs providers classification of Coyle, Bardi and Langley (2003, p.401). To be specific, 3PLs providers are categorized into five models based on its core structure and initial business, encompassing:

The first model is the transportation-based 3PLs providers being originated from pure transporters relied heavily on owning a massive number of vehicle fleets operating primarily on roads, railways, sea, and air. For instance, FedEx and DHL are typical 3PLs organizations.

The second model is the warehousing-based 3PLs providers referring to the logistics organization explicitly involved in warehousing activities, ranging from long-term leasing warehousing infrastructures, distribution center to value-added services such as labeling and repackaging.

The third model is the forwarder-based 3PLs that encompasses companies initially specialized in services offers such as customs clearance, import-export brokerage and documents. This type of 3PLs provider usually does not intensively commit itself in vigorous investment in the tangible assets. Instead, they play a role as a broker or middleman relied on a wide network amongst manufacturers, government officials, customers, and even peers such as transportation-based 3PLs providers. The aim is to smoothen and facilitate procedures or document arrangement process relevant to import and export.

The fourth model is the financial-based 3PLs providers consisting of corporations whose expertise and know-how could endorse functionally customer companies about commodity payment, loan, bidding, auditing, and accounting.

The final model is the information-based 3PLs that is organizations emphasized offering logistics software or advanced technologies such as ERP, blockchain, or cloud base. Normally, the organizations develop and device technologically intangible assets in-house prior to leasing or selling final products to manufacturers or carriers based on patent fees.

#### **2.4 The difference between 4PLs and 3PLs**

According to Farahani, Rezapour, and Kardar (2011, p.79), 4PLs distinguishes itself from 3PLs service provider due to two main principles. Firstly, 4PLs is practically capable of proposing end-to-end supply chain solutions concentrating on all dimensions of supply chain management with the aim of reacting rapidly and efficiently to massively complicated demands of modern business. Besides, the instant response principle, the second one hints strategically tremendous influence of 4PLs on the whole supply chain of its customers. Indeed, the value of 4PLs generating for clients is possibly attributed to growing turnover, decreasing operational cost, mitigating working, and fixed capital.

Additionally, it is presented that the correlation between 4PL and customers are normally under the configuration of mutually devoted and coordinated contract. In contrast, the legitimate contract between 3PL and customer is usually rolled out under negotiable and changeable versions. Besides, the interaction between 4PL and customers tends to be shared transparently and openly with the aim of facilitating swiftly the flow of data in the whole supply chain ranging from financial data to tracking and tracing time. For instance, 4PLs usually applies blockchain or cloud base in the supply chain because the shared information is systematically decentralized and spreading automatically to various participants involved in the supply chain. Unlikely the information interaction system of 4PL, 3PLs practically inclines towards restrictive sharing and centralized system to guarantee confidentiality and internality. (Vivaldini, Pires & Souza 2008, p.21)

On the other hand, the main difference between 4PLs and 3PLs is stated that 4PLs not only simply manages its customers' the entire supply chain but also deeply immerses into customer's strategic activities such as contributing solutions to innovate and enhance customer's supply chain, which is substantially

beyond 3PLs's capabilities. To be specific, 4PLs is initially eager to be an inherent part of clients by its breakthroughs in its technological advancement and IT competency while 3PLs is simply concentrating on carrying out its jobs based on tactical domain. Furthermore, it is denoted that 4PLs differentiates because it replaces customers to monitor service provision of many 3PLs providers in relation to available know-how and technological optimization. Ultimately, the most explicit element to realize which one is structurally 4PLs perhaps is the presence of tangible assets. indeed, 4PLs is physically non-asset based, instead, it heavily relies on leveraging of intellectual expertise and technological advantage in comparison with 3PLs owning large vehicle fleets or storage infrastructure. (Hickson, Wirth & Morales 2018, p.11)

To summarize the main distinctions between 3PLs and 4PLs, Hickson, Wirth, and Morales (2018, p.13) came up with a brief table in relation to five aspects ranging from kind of services, fundamental idea, corporate inherent resources to feasible benefits and possible drawbacks.

<b>Intermediaries</b>	<b>3PL</b>	<b>4PL</b>
<b>Kind of services</b>	Tactical solutions	Strategic solutions
<b>Fundamental idea</b>	Solely undertake many logistics functions based on agreed remuneration and customer requirements	Not only traditionally carry out logistics activities but also regard manageable and innovative contribution to customer's supply chain

<b>Corporate inherent resources</b>	Intensively relied on tangible assets such as vehicle fleets, warehousing centers, and docking centers.	Limited tangible assets, instead, leveraging service offering through intense know-how and technology.
<b>Feasible benefits</b>	Support customers who are in trouble with deficient logistics resources.	Support customers whose supply chain is economically and structurally sophisticated.
<b>Potential drawbacks</b>	Neglect effective and efficient management in the supply chain of clients and pay much attention to the movement of the commodity.	Not able to keep in touch with partners or the control is compromised in the supply chain.

Figure 2 The difference between 3PLs and 4PLs (Hickson, Wirth & Morales 2018, p.11-13)

## 2.5 Key characteristics of 4PLS

Theoretically, to define precisely fundamental characteristics of a 4PL, Farahani, Rezapour, and Kardar (2011, p.80) stated that there are literally four main features including:

- 4PL basically resembles a long-lasting contract drafted or joint venture launched between various small logistics providers and the main customer.
- 4PL plays a role as a middleman or a focal point in a circle with various players encompassing numerous logistics providers and customers. The aim is to pull players together in the circle.

- Literally, 4PL is legally liable and strategically accountable for a customer's entire supply chain management in line with a devoted and coordinated contract.
- 4PL is viably established by a 3PL company as well as exists simultaneously within the parent company's structure.

In addition, 4PLs are categorized structurally into three operating models including the partnership between a 4PL and many 3PLs, solution integrators, and industry innovators. Regarding the first model, the partnership between a 4PL and 3PLs refers to a circumstance when all parties work together to generate end-to-end logistics solutions meeting available resources of engaging parties. The second one is a model when a particular customer delegate officially to a 4PL organization which is responsible for monitoring and running the entire supply chain on the customer's behalf. In this context, the 4PL company is able to utilize its own available resources as well as is authorized to select other different logistics providers in order to complement the deficient inherent function of the 4PL company. The aim is to roll out a comprehensive service package for the customer. The final model is industry innovator when a 4PL solely emphasizes to synchronize and systemize an intense logistics solution compatible with a large number of participants in a specific industry. (Farahani & al. 2011, p.80)

On another perspective, regardless of which operating model a 4PL organization is running or which main characteristics a 4PL is adhering to, a typical or leading 4PL must possess simultaneously four main components consisting of integration, control room, infomediary, and finally notable asset-based logistics suppliers. With regards to Integration, a 4PL must be capable of integrating and assembling multiple various elements ranging from innovative ability, information system, project manageability to capably visualizing and reconfiguring the whole supply chain from its widely available customer network. Secondly, control room refers to the intellectual competence of a 4PL through its logistics specialists, neutral status in the supply chain, manageability of numerous 3PLs providers, and technological optimization. Thirdly, Infomediary is understood as an information interface which enables all parties involved in the supply chain could

access easily and rapidly to concerning data through on-time technical underpinning, IT facility supply, real-time traceability, ERP, or blockchain. Last but not least, assembly of various asset-based logistics providers is undeniably the ultimate component of a typical 4PL. Apparently, the main characteristics of a 4PLs adhere to non-asset based element, thus, it is a must for a 4PL to widen and deepen its attachment to asset-based suppliers such as transporters or warehouse owners. (Christopher 2011, p.225)

## **2.6 Strategy**

To sustain and develop in the enormously competitive market, every company must have well-organized strategies based on its own current resources as well as external impacts. Thus, to grasp how to define and formulate proper strategies for the logistics integration process is significantly necessary for various logistics providers in general and the case company in particular.

### **2.6.1 Definition of strategy**

Theoretically, the strategy is the most essential part to thrive and orchestrate an organization especially in the globalized economy and fierce market nowadays. An organization which does not outline or even draft its core strategy is seen as a cruise ship without a captain and could head to iceberg. Mangan and Lalwani (2016, p.58) stated that strategy is likely interpreted as an organizational long-lasting plan or direction for its future prosperity in line with the consistent expectation from various stakeholders. Moreover, Strategy is also denoted as long-term planning of numerous activities based on the organizational scale and scope with the aim of allocating efficiently and effectively available resources and capability in order to meet stakeholders requirements as well as to adapt to the externally changing environment (Johnson, Scholes & Whittington 2008, p.2).

In addition, Strategies are also defined briefly and straightforwardly as an organizationally sustainable and speculated approach which is determined and undertaken by human involvement tremendously relied on partial data and initial

assumption relevant to external factors alongside internally adherent availability. Literally, the strategy must encompass the core content and distinct process to deal with external impacts and incline towards corporate prosperity and success. (Farahani & al. 2011, p.43)

Yet, Leonard (1996) stated that strategy is literally seen as a long-term intention of a specific enterprise and the realistic plans that are determined deliberately to apply the long-term intention to corporate daily activities. Additionally, Leonard (1996) denoted that a feasible strategy must be formed based on four radically indispensable factors including plan, pattern, position, and perspective. To be specifically, the plan means a particular direction and guidance to drive action towards the common goals while the pattern implies how to undertake the action consistently during a long time. Regarding the perspective factor, it concerns how a company handle and carry out business activities inclining towards the ultimate goals. Finally, a well-organized strategy must position explicitly an company's appearance and prominence in comparison with other peers and competitors in the specific industries by focusing on specific services or products in specific markets. (Leonard 1996)

### **2.6.2 Strategy levels**

Technically, the strategy is categorized into three levels from the top-down structure consisting of corporate strategy, business strategy, and operational strategy respectively.

Firstly, corporate strategy solely concentrates on the creation of the organizational structure and targets in accordance with the common corporate desires and interests (Farahani & al. 2011, p.43). Practically, the corporate strategy illustrates paths and guides the organizational efforts towards reaching the common goals defined (Waters 2003, p.60).

Secondly, business strategy is structurally underneath of corporate strategy. Hence, it refers to planning and configuration concentrating on particular products or niche markets which the organization has been eager. Based on the business strategy, every single department will precisely realize what to carry out to

successfully achieve common targets in the corporate strategy. (Farahani & al. 2011, p.43)

Thirdly, operational strategy (functional strategy) emphasizes to roll out plans and guidance for particular implementation in the sphere of a specific business department ranging from human resource, marketing to sales departments. The plans in the operational strategy normally depict how to smartly allocate and optimize current infrastructure or ready resources within the organization. (Mangan & Lalwani 2016, p.58)

### **2.6.3 Strategy process**

Strategy process is the indispensable part to turn the corporate vision and goals from ideas into realistic achievement by deliberate evaluation or step-by-step specific actions. To be specific, Mintzberg, Lampel, Quinn & Ghoshal (2003, p.73-74) defined clearly that formulating initial objectives and implementing them into business activities are the two most crucial elements which could decide the future success or collapse of the strategy. Because the aim of this research is to recommend possible strategies for the case company in line with its logistics transitioning process, the implementation of strategy will not be mentioned. Instead, the research importantly concentrates on the formulation part of the strategy. According to Our Lady of the Lake University, strategy formulation implies how to gather both surrounding external and internal information to indicate measurable targets relevant to what a company should prioritize to reach its ultimate strategy.

In more detail, Mintzberg & al (2003) denoted that the strategy formulation should clearly encompass four main steps including guideline following, analyzing external factors, contemplating internal resources, and the vitality of ethics. The first step refers to the precedent or existing guideline of a specific enterprise and the strategy formulation must obviously stick to the corporate guidelines. Moving to the second and third steps, to formulate elaborately a feasible strategy, both internal and external factors surrounding the organizational existence must be seriously concerned and carefully identified. In this research, SWOT analysis will be utilized to analyze the organizational internality through the corporate



strengths and weakness, alongside specifying the external impacts including imminent opportunities and possible threats. Finally, the importance of ethics ranging from social responsibility to legal compliance must be mentioned the formulation of the strategy because it would create a good awareness in public without costly marketing, as well as keep the company develop sustainably. (Mintzberg & al 2003)

## **2.7 Risk**

In the logistics transitioning process, risks are definitely inevitable. However, if the company grasp the root of risk as well as prepare sensible solutions or contingency plan before the risks abruptly arise, risks could be probably mitigated to the lowest level or even literally transformed into bloomed opportunities the facilitate the integration process.

### **2.7.1 Risk definition**

In the fierce and globalized economy, the risk is something inevitable and possible occurring in every single business regardless of whatever to be prepared or implemented prior to the risk actually happens. Theoretically, the risk is explained as the tentativeness or unanticipated elements confronted by economic figures, hence, it detrimentally influences both directly and indirectly surrounding activities and is obviously difficult to precisely analyze how damaged it causes (Benoit, Michel & Suzanne 1998). Alternatively, Mangan and Lalwani (2016, p.256) also denoted that risk means unexpected repercussions or severe loss which could potentially lead to tremendous casualties or financial bankruptcy in the future. Risk is usually originated from decisions or configurations that are undertaken rationally. In addition, James (2017, p.4) denoted that risks refer to variable factors which possibly lead to the deflection from intended results as well as enormously impact on how a corporation achieve its business goals and performs core functions, however, the corporation could not reach the innovation or improvement without confronting and tackling risks arising from both internality and externality. It signifies that if handling and controlling risks probably and

appropriately, risks could be apparently converted into opportunities and advantages for business activities. In contrast to the risk definition of James (2017, p.4), Thomas (2017, p.1) insisted that risk is commonly defined as unexpected damage or the possible loss of owning asset, consequently, the future returns or even trade-offs could not sufficiently and worthily compensate for the loss or damage being caused by risks in the past. Thomas (2017, p.1) particularly distinguished between risk and possible opportunities from risks.

Yet, the risk is commonly categorized into objective risk and perceived risk. The former one is defined as a possibility which a specifically detrimental event could happen in a certain duration frame or consequence from a specific challenge (Mangan & Lalwani 2016, p.264). Regarding the latter one, perceived risk is literally stated as a level of doubt or uncertainty with respect to the results of a buying decision that strives to minimize their personal anxious feelings or doubts through consultation or assembling data from various surrounding savvy people (Business dictionary 2020). Furthermore, perceived risk is also defined radically as inaccurate or untrusted consciousness of ordinary humans (Mangan & Lalwani 2016, p.264).

### **2.7.2 Types of risks**

Besides the radical definition of risk, understanding in detail the types of risk in business is also a pivotal part in order to alleviate unexpected loss as well as draw suitable strategies for the company. In this thesis, the types of risks are adapted from Thomas (2017). To be specific, on the organizational level, Thomas (2017, p.6) separated risk into two different categories in line with their own inherent characteristics, including the financial risk and the performance-relevant risk.

Regarding the financial risk, it simply refers to uncertainty or future damage impacting on the corporate finance and is basically categorized into cash flow risks and financial value risks. The former could highly happen due to the instability and turbulence of the imminent cash flows, for instance, the sudden drop of monthly sales or the surging in the loan interest rate could result in the tumble of cash flow and exacerbate the cash flow risks within an enterprise. In

contrast, the latter could occur and weight on the financial perspectives of a company when its financial securities such as stocks or bonds suffers from the negative fluctuation in value. (Thomas 2017, p.115)

Concerning the performance risk, it implies detrimental consequences arising from the business activities of generating products or services, along with selling them in the markets. Similarly, the performance risk is also apparently separated into two categories consisting of the operational risks and sales/procurement risks. In this research, the sales or procurement research will not be clarified because the case company is purely a logistics provider and emphasize on the logistics level upgradation. Moving back to the first category of the performance risk, Thomas (2017, p.249-250) stated that organization risks could be caused by the internal failures that are relevant to unqualified workforce, obsolete working process, or inefficient system within a corporation, as well as impacted by the external factors ranging from the change in legitimate enforcement, natural catastrophe to social turbulence. (Thomas 2017, p.249-250)

### **2.7.3 Risk management**

In a turbulent globalized economy, the most successful enterprises have realized that launching the end-to-end risk management at cross-functional levels is an urgent and indispensable part in order to facilitate the continuous innovation as well as remain competitive in comparison with rivals. In more detail, James (2017, p.11) interpreted that risk management is a continuous and comprehensive process that aims to manage and control organizational risks related to strategic planning, financial perspectives, operation, or legitimate conformity. The ultimate goal is to significantly mitigate unwanted damage alongside maximizing valuable trade-offs stemming from risks that the company could incur in the future. Yet, a well-organized risk management could be enormously supportive of making precise decision or implementing suitable strategies at the top administration level, ranging from human resource and investment strategies to operational planning. (James 2017, p.11)

Apparently, the efficient and successful risk management is not probably undertaken in isolation or within a specifically separate function. It requires the

cooperative and constructive efforts at the cross-functional levels regardless of lower or top management. Nowadays, a tremendous number of organizations have adhered the risk management to the corporate culture and structure, along with embarking on changing their perception about risks management, viewing risk as unavoidable cost to run a business. (Karen 2015, 36)

Besides, Thomas (2017, p.1-4) denoted that risk management basically encompass the specific measurement and monitoring of every single business risk across the organizational sphere. Furthermore, the risk management is also viewed as a systematic process consisting of three main steps ranging from risk identification, analyzing and measuring risks, and controlling risks. The first step is to identify possible risks based on the core characteristics of risks such as financial risks or performance risks. After the step of risk identification, risk measurement and analysis would be carried out to decide accurately whether the qualitative or quantitative measurement would be chosen to handle the risks, obviously based on the types and characteristics of risks. Then, the risk analysis is instantly implemented in following with risk measurement. The risk analysis aims to categories specifically the serious level of risk encompassing the critical level that could result in the severe threat to the organizational existence, the crucial level that could considerably damage the short-term planning of a company without alarmingly threatening the business running, and insignificant level which has a modest adversity on the corporate operation. Finally, based on fundamentals from the risk analysis, feasible strategies and appropriate instruments must be generated to control and minimize the adverse influence of the risks. (Thomas 2017, p.1-4)

### **3. Practical case company**

This chapter aims to introduce readers about the case company that is opted for discussing and analyzing in order to transform the case company from a 3PLs to a 4PLs organization. In this chapter, the case company's vision, characteristics, functionalities, administrative structure, available resources, and financial

performance will be clarified to be able to evaluate the company's advantages and disadvantages in the logistics transformation process.

### **3.1 Company profile**

In the increasingly globalized and continuously progressive economy, a large amount of needs for business activities relevant to export and import has been substantially ramped up in Vietnam. To keep pace with the generally developing potential in Vietnam's economy, InterLOG was initially established as a branch of Interlink Group prior to separate itself as an official independent enterprise in 2005. InterLOG was founded based on the contribution from 100% domestic capital, alongside being able to legitimately organize business, financial, and human resource activities. Since 2015, Logistics has gradually become a vigorous and prestigious brand in the recognition of both foreign and domestic clients. (Annual report 2017)

Specifically, to guide the company towards long-running sustainability and prosperity, the board of executives came up with its own corporate vision and mission.

**Vision:** to be recognized as a leading and standardized logistics organization which absolutely specializes in integrated service provision and supply chain building in Vietnam. (Annual report 2017)

**Mission:** InterLOG desires to generate an efficient and effective supply chain which sustainably benefits customers, society, and the organization itself. (Annual report 2017)

### **3.2 Functionality**

The company currently concentrates on offering services being perceived as its inherent core competency and advantages such as:

- Freight transportation through multimodal transport means such as air, road, and sea.

- Management of commodity consolidation inventory.
- Distribution center and warehousing services
- Value-added services such as packing, re-packaging, re-labeling, bundling, and unbundling.
- Customs clearance services for import and export commodity
- Freight forwarding
- Consultation service for comprehensive supply chain

### **3.3 Organization structure**

InterLOG has an organizational structure in accordance with line authority which top executives seizing power and control would delegate orders and tasks to subordinates ranging from directors to lower personnel. The main principle of the company has fundamentally relied on human resource management, specialized labor workforce, and encouragement of professional working style in service provision. Besides, the administrative method always adheres to the professional working environment, hence, the company has the management structure based on the innovative principle that could result in organizationally internal motivation and competitive status in comparison with rivals. InterLOG's organizational structure is depicted in the following graph. (Annual report 2017)

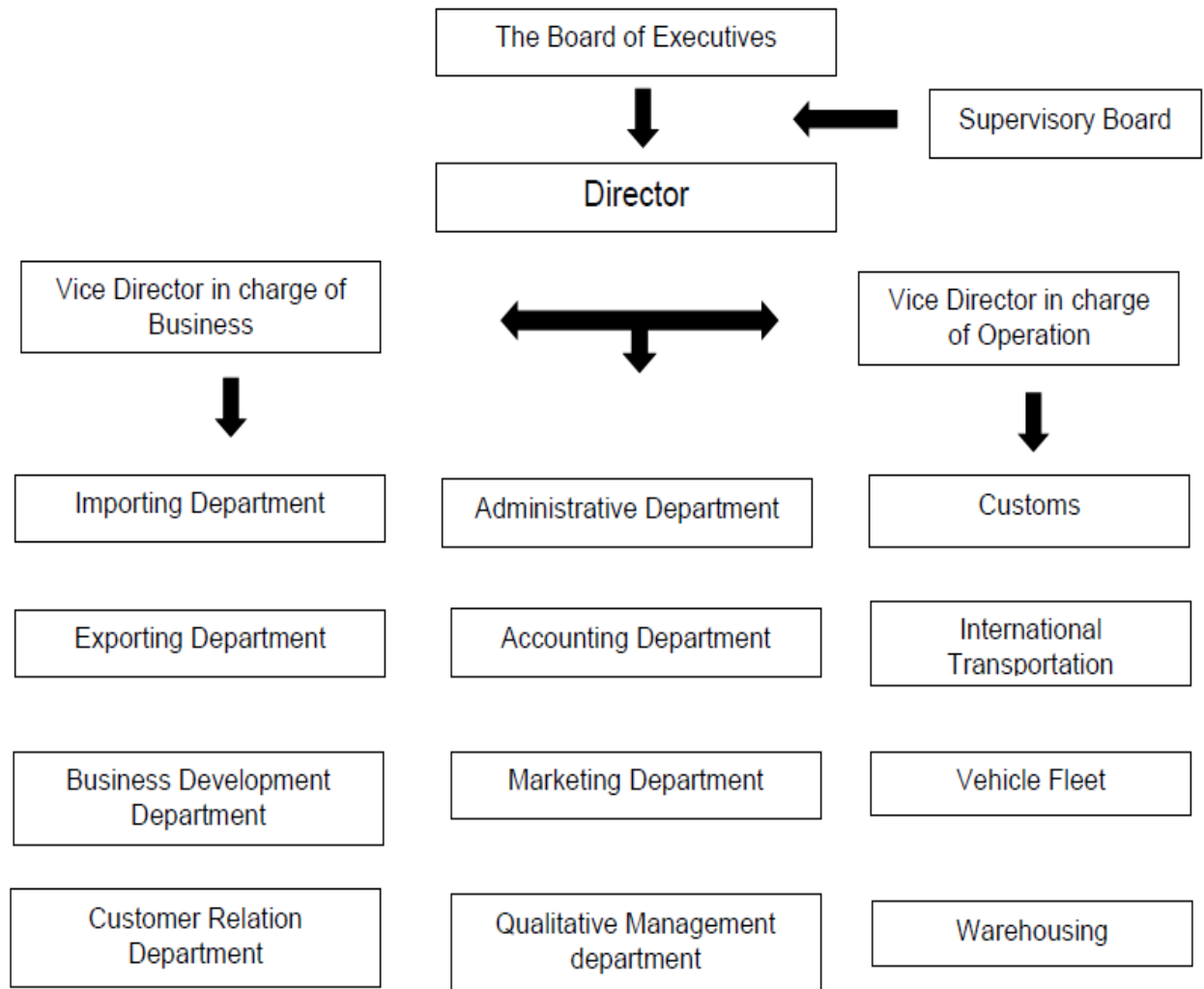


Figure 3 InterLOG's organizational structure (Quan Doan 2020)

### 3.4 Labor

InterLog has been perceived that the human resource factor is the most essential and indispensable asset attributed to long-term development and sustainability since the organization was founded in 2005. Thus, all employees of the company are always incentivized to coordinate and assist each other at the workplace. Furthermore, personnel is aware of the vitality of the organizational common

benefits, prestige, and brand which should be prioritized firstly and placed beyond personal eagerness. Currently, there are totally 130 people working in the organization, including the board of executives and staff. InterLOG's labor workforce has been highly appreciated with respect to being energetic, deeply knowledgeable, and practically adaptable to all tasks assigned as well as rigorous requirements of clients. Last but not least, to achieve the current success today, the corporate working culture was constructed from the beginning period based on core elements such as creativity, enthusiasm, and cooperative manner in working. (annual report 2017)

	Department	Number of employees
1	Exporting	10
2	Importing	10
3	Customs	15
4	International transportation	10
5	Accounting	10
6	Administration	7
7	Marketing	5
8	Agency	6
9	Customer Relation	6



10	Business development	7
11	Warehouse and distribution center	16
12	Vehicle fleet driver	11
13	Quality management	2
14	The board of directors	4

Figure 4 Structure of employee numbers (Quan Doan 2020)

Regarding the qualification and background of total employees, the number of personnel who academically graduated bachelor's degrees or master's degrees accounted for roughly seventy percent of the total staff. Besides, there are 10 people has been working in the company since the foundation in 2005. Moreover, the company also recruited laborers who merely graduated from vocational or high schools, however, these laborers who made up thirty percent in total have been subsequently trained and knowledgeably improved in the corporate training programs revolved around logistics know-how and problem-solving skill.

### 3.5 Facilities

The aim is to meet the increasingly strict demands of customers as well as remain competitive from both domestic and foreign rivals. Additionally, the organization is also eager to bring the highest quality and values to customers through its logistics services offer. Therefore, the focus on developing and investing in operational infrastructure plays a crucial role as well as is seen as the main priority within the company in recent years. To be specific, because the background of InterLOG is freight forwarder based, the organizational infrastructure is currently evaluated at a moderate level, encompassing.

Infrastructure	Number
Forklift	5
Pick-up truck	15
Tractor	26
Semi-trailer	100
Passenger car	5
Warehouse	4000 m <sup>2</sup>

*Figure 5 InterLOG's facilities (Quan Doan 2020)*

### **3.6 Financial performance**

To evaluate organizational health and efficiency of InterLOG, financial outcome is seen as a precise measure that should be taken into consideration. Thus, the financial statistics which the enterprise achieved will be analyzed elaborately.

In the period from 2014 to 2017, Interlog experienced stable growth in total turnover. To be specific, the company's revenue reached approximately 5.6 million EUR in 2014 and continued to increase slightly to more than 6 million EUR and around 6.8 million EUR in 2015 and 2016, respectively. However, the total turnover tended to soar dramatically to roughly 8.5 million EUR in 2017. To make a sensible explanation for the substantial growth in 2017, the organization perhaps changed its target customers which were previously local manufacturers and exporters, instead, it has inclined towards FDI customers who are at the beginning period to penetrate into Vietnam's market. In parallel with turnover, the increase of operating cost seemed inevitable in the period. Apparently, the

operating cost swelled moderately in the period of 3 years from 2014 to 2016, with 5.24, 5.68, and 6.28 respectively. Unsurprisingly, the total cost jumped by substantially more than 1.5 million EUR in 2017 because of the change of target customers leading to higher demands as well as larger profitability. (Annual report 2014, Annual report 2015, Annual report 2016 & Annual report 2017)

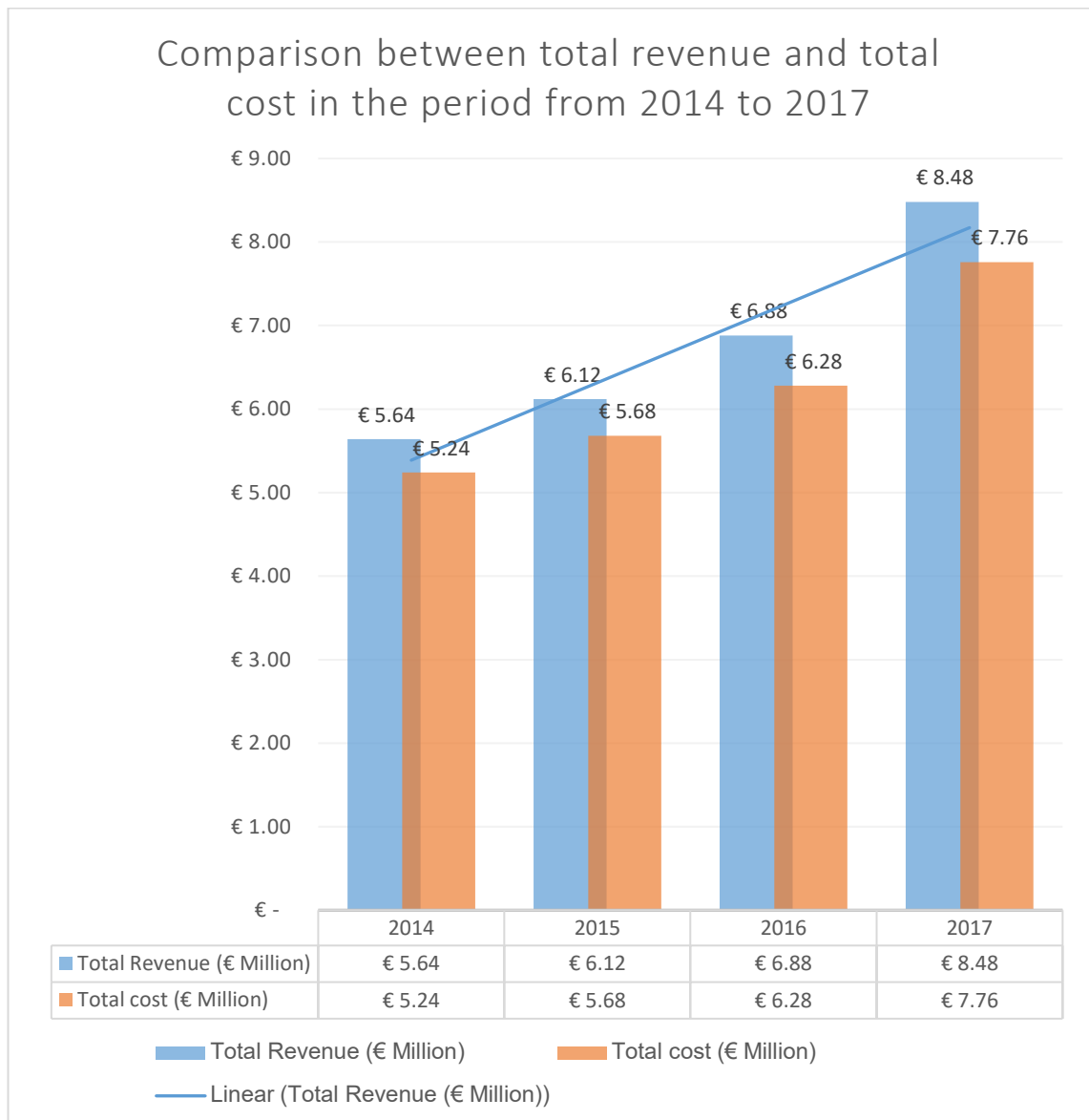


Figure 6 Comparison between total revenue and total cost in the period from 2014 to 2017 (Quan Doan 2020)

Moving to the structure of service level in total revenue from 2014 to 2017, there was a significant change in turnover of each single service type encompassing warehousing, freight consolidation, transportation, customs clearance services which are seen as core strengths of the company. Specifically, the contribution of warehousing service in total turnover tended to be dwindled gradually from 2014 to 2017, being decreased slightly by around 4% in the proportion. Similarly, the contribution of transportation and customs clearance services seemed to be plummeted drastically after 4 years, with a serious decline of nearly 10% in transportation service and precisely 6% in import-export documentation service. In contrast to the other three types of main services, freight consolidation service witnessed a dramatic upsurge in the total revenue proportion. To be specific, the consolidation service just accounted for roughly 46% in 2014, however, its contribution to the company's total turnover surged to 64.5% equivalent to approximately two-third in the structure of total revenue, which allows the organization to realize which niche markets should be prioritized and which ones should be slightly restricted in available resources allocation. (Annual report 2014, Annual report 2015, Annual report 2016 & Annual report 2017)

## Structure of service levels in total revenue from 2014 to 2017

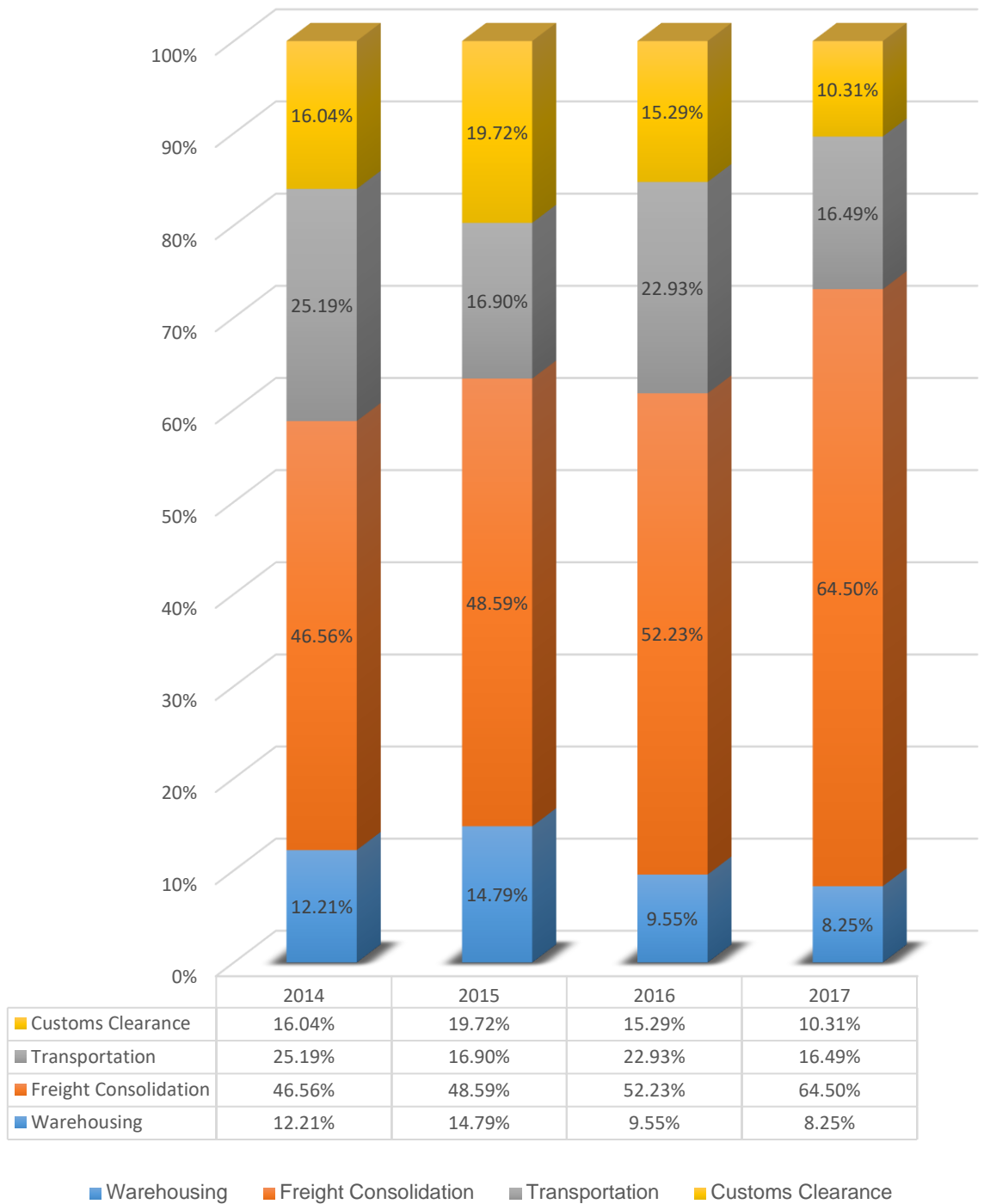


Figure 7 Structure of service levels in total revenue from 2014 to 2017 (Quan Doan 2020)

### **3.7 SWOT analysis**

This section aims to clarify both internal and external factors that could influence both positively and negatively on the logistics transitioning process of the case company through specifying strengths and weakness within the case company, alongside identifying external opportunities and threats. The final aim of SWOT analysis is to help the author generate the most appropriate strategies at the final chapter of this thesis, based on the case company's current availability as well as exploiting external favors.

#### **3.7.1 Strength**

InterLOG has built human resource quality based on both depth and width, which is capable of catching up with international integration and development in the logistics industry. With the professional working style and dedicated behavior in approaching and serving customers, every single employee has been seen as a positive factor contributed to the prevailing progression of the company. Besides, the personnel training program has been emphasized standardization and inheritance through generation by generation. Indeed, new candidates or unexperienced employees who are in probation or internship period are normally guided by experienced staff or experts in the company, which has been brought competitive differences to InterLOG.

InterLOG embarks on emphasize offers about comprehensive logistics solutions for customers. In addition, its logistics services have been synchronized and systemized in accordance with international criteria in order to fulfill strict demands of target customers who primarily correlate to FDI capitals, especially in terms of being from Japan and South Korea.

With respect to financial stability, InterLOG has been vigorously promoted by the sustainable contribution of wealthy shareholders as well as the growing business profitability every year. Thus, this factor advocates the company to make a crucial decision relevant to infrastructure investment.

Lastly, the organizational headquarters and warehouse are located in district 4 which place is seen as strategically logistics center of Vietnam's southern region. The location enables the company to swiftly approach huge ports and Tan Son Nhat airport.

### **3.7.2 Weakness**

Although being founded 15 years ago, there has been still certain limitations adherent to the organizational operation and structure, which the enterprise should contemplate to remain competitive in the market as well as prepare for the transformation into a 4PL. In more detail, the marketing department is viewed as the weakest point in the firm. Indeed, there are only totally five employees in charge of marketing activities ranging from running both physical and digital advertisements to designing and organizing crucial marketing campaigns. Yet, all staff in the marketing department are perceived internally that they are lacking the necessary experience and expertise in logistics marketing especially in terms of amplifying InterLOG's branding and influence on the whole market or at least specific industries. Consequently, the inefficient and ineffective marketing dwindled considerably the capability and status of the sales department when approaching and negotiating with new customers who have not yet been recognized or impressed by the company's branding.

With regards to market research, the company seems not to fully pay considerable attention to seriously execute or develop market research. Evidently, the corporation currently has not had its own research department, hence, the lack of market research activities could result in circumstances which unlikely to speculate on customer's future tendency as well as difficultly come up with reasonable development plans.

Currently, InterLOG has heavily relied on technology outsourcing from software companies. Specifically, the corporation has not yet applied and synchronized an IT platform to manage customers and suppliers in alignment with decentralization. In addition, the IT system is still substantially far away from full automation ranging from billing, tracking, and tracing to document processing. As a result, human involvement has been still quantitatively considerable, which

could lead to fabrication and dishonesty in data, along with slowly reacting to real-time information exchange with customers.

### **3.7.3 Opportunities**

Vietnam is currently an official member of WTO along with officially signing free trade agreements consisting of Vietnam-Korean Free Trade Agreement (VKFTA), ASEAN Economic Community (AEC), Europe-Vietnam Free Trade Agreement (EVFTA), Trans-Pacific Partnership (TPP), Japan-Vietnam Economic Partnership Agreement (VJEPA), ASEAN-India (AIFTA), ASEAN-China (ACFTA), US-Vietnam Bilateral Trade Agreement (BTA), and ASEAN-Australia-New Zealand (AANZFTA). The open policy of Vietnam's government has accelerated the development of relationships in trading with various bigger economies, which potentially lures the market penetration of transnational conglomerates which probably necessitates local logistics service providers who are capable of facilitating import-export customs documents or freight transportation. (Vietnam Briefing 2019)

Additionally, in the period from 2021 to 2025, Vietnam's government is planning to invest substantially in renovating and constructing a large number of logistics infrastructures. For instance, the construction of a new airport is nearly finalizing in Long Thanh Province where are 30 Kilometers far away from Ho Chi Minh City. The new airport which is three times bigger than Tan Son Nhat international airport will possibly dwindle traffic pressure being imposed on Tan Son Nhat international airport as well as accelerate logistics movement in and out of Vietnam's territory. (vnexpress 2019)

Yet, Vietnam macro-economy that has been speculated could reach the general growth of 4% in parallel with the particular increasing rate of roughly 20% to 25% in the logistics industry in 2020. Besides, FDI investment in public infrastructures is also anticipated to soar, which could spur the common progression of the logistics industry. (VnEconomy 2019)



### **3.7.4 Threat**

Although the public infrastructure investment has been tremendously promoted both in quantity and quality in recent years, it could neglect the fact that Vietnam's logistics infrastructure has been in miserable conditions ranging from road, sea, railway to air. Besides, the inconsistent regulation and obsolete procedures in the export-import range could cause severe complications, time-consuming processes, and legitimate barriers for logistics parties, since leading to exacerbate bottlenecks in freight movement. (Financial magazines 2019)

Lastly, the pressure from competition deems fierce and tough in the current economy when the logistics industry has been fragmented by a tremendous number of local small logistics providers who merely focus on offering partial logistics solutions, alongside the market engagement of transnational conglomerates such as FedEx, DHL, or DB Schenker. (Laborers 2018)

## **4. Analysis and findings**

This chapter will discuss and analyze information collected from in-depth interviews with four personnel working at InterLOG corporation. Besides, the information obtained in the interviews will be also justified and examined in comparison with secondary data.

### **4.1 challenges could restrain interLOG from being a 4PL provider**

In the interview conduction with four members of InterLOG corporation, the author has discovered several potential factors which possibly hinder the evolution of the company into a 4PL. Firstly, the largest concern could be attributed to human capability within the company. To be specific, during the interview with expert D who is currently accountable for recruiting and training new candidates, he has perhaps doubted that the quality of the present personnel generation that is incapable of tackling all dilemmas arisen in the functional sphere of a 4PL provider. For instance, he insisted that a majority of new candidates who have applied for job vacancies in the company are practically inexperienced and perhaps not proficient in advanced technology utilization. Indeed, inexperienced

forefront staffs are able to suffer when they approach and negotiate with corporate customers who are necessitating consultation services. These staffs could experience ambiguous circumstances prior to suggesting end-to-end logistics solutions or service packages that could be compatible with customers' needs, which could consequently lead to loss of trust and contract with customers, even in case they likely reach the final agreement, the high possibility that the quality and functional fit of service proposal could be dragged down detrimentally in line with the adverse impact on corporate image and prestige.

To affirm the information of expert D, the author uses the secondary data collected from the survey carried out by Vietnam National Economics University in 2019. According to the survey result, 53.5% of logistics companies are in shortage of qualified and knowledgeable personnel, 30% of enterprises must accountably reeducate and retrain their staffs, and only 6.7% of logistics providers seem content with the ability of their staffs. Yet, other statistics from the survey are also realistically supportive of the expert D's opinion. The statistics of the survey result indicated that 80.26% of workers and officers who are in the logistics companies engaging in the survey must enhance logistics capability via daily working tasks, while 23.6% of staffs must compulsorily take part in external training courses and 6.9% of employees are retrained by foreign logistics specialists. (Customs News 2019)

Furthermore, InterLOG corporation deems not appealing enough in the perspective of qualified and talented candidates especially in terms of employee remuneration and promotion opportunities. The interviewed D denoted that InterLOG's monthly salary level for new employees or even current staffs is currently equivalent to the regulated basic level of the whole logistics industry, merely at around 300\$ to 400\$, which seems difficult to compete directly with various rivals in the same industry or even from different sectors in order to attract the devotion of experienced specialists or students who have graduated abroad. That could be the reason for the change in approaching human resource of the company, that inclined towards the recruitment of people who have already graduated from local universities and willingly dedicate themselves to the company under the radical payment policy. To confirm the information from

interview D, according to the salary report of JobStreet (2016) that is currently a prestigious employment agency in Vietnam, the average salary for a logistic officer in Vietnam fluctuates between 400\$ and 600\$, which compares to the remuneration policy of InterLOG is apparently higher. Additionally, according to salary guide of First Alliances (2019, p.52) that is one of leading human resource specialist company in Vietnam, the minimum monthly salary for a logistics officers is around 700\$ and the maximum salary is approximately 1500\$ in 2019. The difference in salary level reported between JobStreet (2016) and First Alliances (2019, p.52) signifies that the average salary level of the whole logistics industry has been gradually increased but InterLOG's salary policy still remain low and lag behind. Hence, InterLog seems to grapple with recruiting talented candidates or even difficultly retain current individuals in the organization because of its limited salary policy.

Regarding the interviewee C who is supervising and controlling all activities in the warehouse, he stated that the IT platform which plays a pivotal role in the transformation into a 4PL is currently unavailable in the company. As mentioned in the previous chapter, InterLOG is originally forwarder-based logistics provider, hence, building in-house an IT platform in alignment with centralized software which possibly enables to supply control and visualization beyond related activities such as freight exchange, inventory management, transaction execution, real-time data sharing seems realistically impossible for InterLOG. Indeed, lacking a single interface amongst the company itself, clients, and various logistics providers adversely undermines and functionally deter communication, confidentiality sharing, and interaction of all parties in the sophisticated supply chain (Schramm, H., Czaja, C., Dittrich, M. & Mentschel, M. 2019). Besides the challenges of in-house technology development, the interviewee C also regards cost for outsourcing the cutting-edge software which deems probably expensive, could exceed the corporate budget and make the corporation reluctant for the integration process. To expand the information of the expert C, the cost for a perpetual license of cloud-based warehousing management system is averagely estimated from around 20 000\$ to 200 000\$, excluding various monthly fees such as installation or maintenance (ExploreWMS 2016). In addition, he also insisted

that there is a small number of domestic tech companies being capable of licensing or selling cutting-edge software such as cloud base or IoT on customer's requirements, thus, approaching international tech firms from Singapore or China has been seen as the most feasible decision of InterLOG. However, the total cost adherent to outsourcing foreign tech companies is very expensive for the company currently. Indeed, the information of the expert C is also corrected in comparison with the secondary data. According to People (2019) that is one of the most popular newspaper in Vietnam, a Freight Management System (FMS) software costs roughly 100 000 \$ if a Vietnamese company buy it from an international technology organization while the similar software that is developed by Vietnamese tech start-ups merely sold with a significantly lower price of 1000\$, however, a majority of logistics companies usually neglect the domestic software because of tremendous concern about the technical guarantee.

Yet, both interviewees A and B who have been working in the sales department and customer relations similarly expressed worry about gaining trust and transparency from customers. To be specific, the specialist A denoted explicitly that the core mission of a 4PL is to design and carry out a comprehensive logistics solution in alignment with a strategic partnership, hence, regardless of whether the service offering is sufficiently qualitative and applicably feasible in the customer company, the level of coordination, information sharing, and mutual immersion between 4PL provider and a particular customer play a decisive role in the success of outsourcing a 4PL firm. The interviewee B also demonstrated several reasons resulting in suspects or rejection from sharing trusts, visibility and transparency of corporate customers. Firstly, Vietnam's economy is enormously fragmented not only in the logistics industry in particular but also spreading to the entire macro-economy in general, obviously, the competitive advantages as intellectual property, specialized production chain, or financial data are supposed to be concealed carefully and secretly by manufacturing organizations with the aim of surviving and thriving in a fierce and fragmented market with a huge number of rivals. The information of the interviewee B is confirm in accordance with Vietnamnet (2019), the statistics indicated that there are around 30 000 enterprise working both directly and indirectly in the logistics

industry, with 89% of those companies being local players, 10% of them being joint-ventures while merely around 1% equivalent to the number of 300 logistics players being entirely foreign owned organizations. Thus, the current competition in the logistics industry is vigorously fierce as well as require logistics players to sustain their own competitive advantages beyond direct rivals. Secondly, the manufacturing organizations state concerns about loss of operational control, heavy reliance and dependency on 4PLs providers when they hand over end-to-end supply chain management to logistics providers. Furthermore, in case if there would be a collaborative conflict or the rejection of contract extension from logistics providers, the more possibility that the whole supply chain of producers would be broken down into pieces as well as confidential data could be leaked outside. To expand the information of the expert B, Martin, Adam, David & Charles (2011, p.323) denoted that transparency and trust are the immense concerns that could make customers reluctant to the strategic cooperation with 4PLs providers mainly because clients seem seriously afraid and worried that the know-how and information sharing could be exploited for unfair or unethical market manipulation, alongside adversely influencing the dynamic correlation between suppliers and clients. Besides, in accordance with Trading Economics (2019), Vietnam's transparency level still remains significantly low and deems a huge obstacle to logistics cooperative development in particular and foreign investment enticement. Evidently, with 100 points being the maximum score in the corruption index, Vietnam merely achieved 33 points in 2018 and slightly increased to 37 points in 2019, being considerably low in comparison with other neighbor countries such as China, Indonesia, and Malaysia reported in 2019, with the scores of 41, 40, and 53, respectively (Trading Economics 2019). As a result, the task of gaining trust from customers could be the most difficult barrier of becoming a 4PL, which is the notable distinction between a 4PL and a normal logistics provider who tends to count on a tactical contract with clients.

#### **4.2 Risks relevant to InterLOG's transformation from 3PL into 4PL.**

Regarding potential risks that could arise during the process of integration into a 4PL, all interviewees A, C, and D came up with a unanimous consent about potential risks and impacts of global incidents on the corporate transformation,

especially in terms of the nearest example being Coronavirus pandemic 2019. Indeed, the interviewee A insisted that Logistics and supply chain industry is one of the most vulnerable and adversely impacted sectors if such pandemic could occur and Covid 19 is an apparent proof. Indeed, to endorse the detrimental effects of Covid 19 on business activities of InterLOG, she indicated that the corporate revenue in April was crashed by 60%, mostly declined substantially in core logistics services of the company such as customs clearance and transportation. The reason for the dramatic slump could be attributed to the closure of Vietnam's international border, hence, commodity export and import activities have been stagnated and procrastinated leading to the bottleneck in the supply chain (Vietnamnet 2020). Besides, the interviewee D also expressed concern about the loss of customers, employment lay-off, and shrinking of the corporate scale and scope which likely occur in the logistics integration of the organization due to such pandemic. In more details, he is afraid that the pandemic not only has caused a short-term economic crisis but also results in a global recession possibly lasting for a long time. Apparently, his concern is absolutely reasonable and confirmed precisely, according to Financial Magazine (2020), Vietnam's total export turnover was plummeted by 18.4% in only April, compared to the previous month. Similarly, Vietnam's total import turnover in April was also sunk considerably by roughly 8%, only reached approximately 20 billion USD. Furthermore, Statista (2020) estimated that the global economy will witness a financial loss of 3.5 trillion USD, being equivalent to the tumble from 3% to 2.4% in the global GDP.

Besides external risks, the interviewee B also stated that the integration process of the organization could require a huge amount of working capital, hence, the risk of deficiency in capital possibly puts the company in danger of financial insolvency. For instance, the vision towards becoming a 4PL obligatorily dictates the enterprise itself to circulate its cash flow and working capitals for strategic activities ranging from recruiting, training, and retaining qualified talents through costly training programs or generous remuneration policies, to investing in updating and upgrading technological know-how or infrastructure through outsourcing external tech firms or even developing in-house current software.

Yet, to spread the corporate branding and influence in some particular industries, the organization must organize a large number of lavish marketing campaigns which may swiftly accelerate InterLOG's branding and name towards clients' awareness. Based on the current crisis of the company itself in particular and its stakeholders in general from the pandemic, the interviewee B is afraid that the firm would experience the shortage of cash flow due to stagnation in trading, along with reluctance or neglect of shareholders or investors in raising capitals or pouring additional investment in the company because of the gloomy outlook for the whole economy. From his own perspectives, he highly concerned about how the organization economically survives and financially floats in the current situation much rather than contemplating accompanying risk in the transformation process in a 4PL enterprise.

### **4.3 Benefits of becoming a 4PL**

Moving to benefits of the logistics integration on the corporate aspects, the interviewee A assumed that although the number of customers would be narrowed and shrunk due to a change of target customers, the profits margin and total revenue would have possibly risen in contrast. To explain this assumption, she stated that a 4PL provider should incline towards approaching clients in a particular industry. Instead of supplying logistics services under small and partial packages mainly focusing on the corporate core competencies as previously, a typical 4PL company should concentrate on fewer specific customers with specific core activities in alignment with providing an end-to-end logistics solution covering comprehensively in the customer's supply chain, hence, the financial returns and profitability would probably higher than partial logistics services. She explicitly mentioned the 80/20 principle which the company should count on crucial customers who are just accounted for a small number in total but being able to generate an overwhelmed proportion of profitability and earnings for the organization. Indeed, the ideal of the interviewee A is supported and validated by a previous research of Laurence (2013, p.114), insisting that 4PLs strategically place themselves in the center of target customers' logistics operation as well as be accountable for managing end-to-end particular activities, thus, the emphasis enables 4PLs providers to gain a greater profit margin and turnover in comparison

with spreading logistics resources to numerous non-core activities and various customer bases.

Besides the profitability, the interviewee B and D expressed clearly benefit relevant to the trustworthiness obtained from both clients and different logistics providers. Indeed, to become a 4PL entity, the company must demonstrate the highest level of transparency and visibility in every business aspect ranging from legitimate compliance to data protection related to competitive confidentiality in order to gain trust. Evidently, after the corporation obtains trusts and authorization from clients and logistics providers through long-time contract or official permission, leveraging the trustworthiness would be the ultimate step to promote and facilitate business activities of both InterLOG itself and its partners by utilizing, sharing, exploiting, and exchanging available data and infrastructures. Besides, the corporate prestige and branding would be also accelerated in parallel with trust gained from surrounding partners. Therefore, the belief is seen as a pivotal element to determine whether a firm should make the transformation into a higher integration. Similarly, the perspectives of the interview B and D about the corporate prestige was also expanded in the previous research. Specifically, Laurence (2013, p.114) clearly indicated that the main benefit of being a 4PLs provider is to be recognized widely about reputation and professionalism in the logistics industry based on three elements including the independence of a 4PLs, the provision of end-to-end logistics solutions, and the solidity in human resource due to the assemble of various types of 3PLs providers.

With respect to the interviewee C, he believed that 4PL integration could potentially an essential step to leverage and expand the company into the global sphere. Recently, Vietnam is an official member of many free trade agreements and pacts such as APEC or WTO, thus, enormous foreign organizations have been enticed to arrange business in Vietnam and obviously figured out local logistic providers who are competent and prestigious enough to offer comprehensive services. As a result, international relationships and collaborative experience would be globally stretched out and gradually accumulated while working together. To expand the information of the expert C, the researcher uses the secondary data collected from Vietnam's Ministry of Planning and Investment



(2020) in order to indicate the surge of foreign investment in Vietnam. Specifically, in the first four months of 2020, the manufacturing industry is the most prominent sector with being invested in roughly 6 billion USD by foreign organizations, equivalent to 48.4% of all foreign direct investment. In addition, a majority of foreign investors are from Singapore, Thailand, and Japan, with the investment of roughly 5 billion USD, 3,9 billion USD, and 1,1 billion USD, respectively. As being mentioned the practical case chapter, the main customer targets of InterLOG corporation are manufacturers being originated from neighbor countries such as Thailand, Singapore, Malaysia or Japan, alongside desire to set up branches or factories in Vietnam. Therefore, transitioning into a 4PLs could assist InterLOG company to approach easily and coordinate with those foreign players based on solid foundation related to logistics know-how, experience, and comprehensive service packages.

#### **4.4 Strategies for the 4PL integration of InterLog.**

In this section, all interviewees were asked to personally propose their own strategies mostly suit the organizational capacity and capability in association with future trends and predictions. To be specific, the interviewee A and B working and specializing in customer relations suggested that the corporation initially should establish a partnership between the company itself and its customers. they insisted that the partnership formed must be leaned on the strategic fundamentals in the transition from operational coordination as well as subsequently make the correlation between both parties gradually closer based on a win-win partnership, transparency, visibility, and flexibility. The interviewee A highly supported the approach mentioned by referring that the key role of a 4PL company not only emphasizes the provision and fulfillment of qualitative and integrated logistics service but also indispensably engage in managing efficiently and effectively the relationship with key clients in order to ensure that the trusting element is still prevailing and long-lasting. Yet, the interviewee B proposed that the organization should merely focus on a particular niche market with several prominent manufacturers. The aim is to design and formulate standardized logistic solutions for players in specific industries.

Moving to the interviewee C who has deep knowledge in technological issues, he hinted that digitalization and technological innovation is not evidently the core competency of the organization along with being deficient and obsolete in IT resources, hence, it is wiser and more sensible for InterLOG to cooperate or further form a joint venture with notable technology providers being capable of developing and supplying cloud-based IT interface, automation, big data analytics, and artificial learning, instead of building in-house software and paying for technology royalty fees that could definitely involve heavy investment or costly expenditure. He denoted that the most necessary technology application for the organization to facilitate the integration into a 4PL could be currently listed as warehouse management system (WMS), inventory management system (IMS), electronic data interchange (EDI), and cloud-based platform for analytics and data sharing. With respect to the interconnection with various logistics providers, he also highlighted the establishment of a logistics group that is seen as a joint venture and being legitimately independent. The group must be formed by different logistics providers with distinct core capabilities to supplement each other ranging from rich knowledge in warehousing, transportation, and customs execution to proficiency in analytics, consultation, and cutting-edge technology.

Finally, with regards to the interviewee D who is in charge of human resource management, he seriously raised concerns about qualification and ability of available human resource that is able to handle and fulfill surging rigorous requirements during the logistic integration process. He has been fearing that the level of current personnel in analytical, consultative, and technological utilization skills could not keep pace with the client's demands as well as be lagged behind by dominant competitors. Therefore, he enthusiastically proposed that the organization should set up a new remuneration policy which would swell the basic salary and reward generously employees in association with performance and productivity. Yet, the corporation must lure experienced experts or dedicated freelancers by offering higher bonus payment and prospective career opportunities in comparison with rivals. Besides, the long-term cooperation with universities would be a crucial forward step in organizing the training programs

for its own employees as well as approaching and recruiting new talented postgraduates.

## **5. Recommendation and conclusion**

In the final chapter, the researcher will roll out feasible strategies based the current circumstances of the case company in the recommendation section, alongside summarizing main points in the conclusion section

### **5.1 Recommendation**

In this section, the author sums up attained proposals from in-dept interviews with four personnel in the organization as well as combines with secondary data collected from the literature review chapter in order to come up with the most comprehensive and compatible strategies with the aim of updating the organization into a 4PL entity. Specifically, the strategies recommended to the case company is strategically and functionally categorized into customer target, logistics provider interconnection, human resource, technological application, and financial planning.

- **customer target**

Regardless of which layer of logistics service integration or which industry sector a company belongs to, customers always play the most strategically essential role to direct every single aspect and function of the enterprise towards generating earnings and optimizing operation, obviously, a 4PL company is not an exception of this tendency. However, the customer target and market approach of 4PLs seem completely different and unique in comparison with lower logistics levels such as 1PLs, 2PLs, and 3PLs. Elaborately, 4PLs aim to create customized and integrated logistics solutions that would be used to simplify the complexity level and run smoothly the entire supply chain of a specific customer. Therefore, the inclination towards a modest number of players whose supply chain is significantly complicated alongside the concentration on a particular industry to optimize the customization and synchronization would be a smart forward step in order to remain competitive and position as a leading logistics

provider in a fierce and fragmented market. In the case of InterLOG, the company has gradually targeted potential foreign customers who have originated or somehow correlated to FDI funding and specialization in the technology manufacturing industry. The customer approach of the company should be continuously sustained and absolutely compatible with the upgradation process into a new logistics layer.

- **Logistics provider interconnection**

To competently offer a comprehensive logistics package covering all components in the sophisticated supply chain, InterLOG corporation should indispensably coordinate with many different logistics providers whose expertise and experience could functionally supplement and assist the corporation's weakness and disadvantages especially concerning technological know-how and tangible assets such as large vehicle fleets, cross-docking centers, or abroad branches. From a long-term perspective, a legitimately independent joint venture between InLOG and other logistics providers should be taken into serious consideration because of the strategically mutual attachment and supportive context instead of tactical relationships and vigorous rivalry with each other. Besides, M&A strategy was initially also contemplated to foster the corporate expansion as well as logistics integration, nevertheless, the strategy deems unsuitable for and contradicted to the aspect of financial stability which currently could not enable the company to acquire its logistics peers with a massive amount of spending.

- **Human resource**

Being a 4PL highly necessitates a number of the experienced and qualified workforce who is capable of undertaking efficiently and effectively not only familiar tasks such as freight forwarding, customs clearance, transportation management, and warehousing management but also carrying out new and demanded missions particularly related to the inherent competencies of a 4PL such as analytics and consultation for clients. Therefore, to upgrade and enhance the qualification level of the available workforce, the organization should not neglect to accelerate the coordination with universities and supply chain forums

in order to design and roll out supplementary training programs for employees in line with present patterns and tendencies in the logistics industry. Alternatively, the corporation could enforce a new salary policy which is sufficiently lucrative and generous to acquire experienced experts, along with spurring employment welfare and rewarding based on the level of dedication and performance.

- **Technological application**

Besides the human capability, technology plays a pivotal role in the success of the logistics transformation process. Because of the soaring complexity in real-time communication and interaction in both information and statistics amongst the organization itself, other logistics providers, and manufacturers, the utilization of a cloud-based IT platform should be executed and applied immediately with the aim of optimizing the centralized control and monitoring in all activities in alignment with comprehensive automation and restriction of human involvement in order to avoid frauds and surge transparency. Additionally, in the long-term development, analytical tools based on artificial intelligence (AI) should be taken into contemplation to compensate efficiently for the restraint of human analytics as well as rapidly aggregate available data.

- **Financial planning**

As explained in the empirical finding chapter, financial stability is one of the biggest concerns that could decide whether the logistics service integration is feasible and successful or not. Therefore, a priority for a detailed and solid source of funding must be embedded into the strategy formulation. To be elaborate, the direction for logistics service upgradation must be firstly gained consensus from all shareholders based on being supported financially and ideally. Indeed, the uncertainty or even deficiency in cashflow source and available working capital may be inevitable especially in case of the present economic crisis due to the pandemic. Hence, the wholehearted agreement and advocate from wealthy shareholders potentially fasten the integration process as well as minimize arising costs such as interest rates. Alternatively, approaching financial subsidies from governments or even issuing a moderate bundle of corporate stocks would not

be the strategically terrible steps to mobilize sufficiently capitals for the transformation process, however, obstacles for reaching the state bailouts or high interest rates for corporate stocks seem presently unsolvable trouble for the organization. Therefore, financial support from wealthy shareholders has been possibly the most viable option for the organization.

## **5.2 Conclusion**

Nowadays, Vietnam's macro-economy has been swiftly shifting towards globalized tendency alongside being an official member of a numerous bundle of both bilateral and multilateral free trade agreements (FTA) such as Trans-Pacific Partnership (TPP), Japan-Vietnam economic partnership agreement (JVEPA), Korea-Vietnam FTA, ASEAN FTA, Vietnam- European Union FTA, or ASEAN-China comprehensive economic cooperation agreement. As a result, tremendous opportunities in cooperation with transnational organizations not only have been opened to large domestic conglomerates but also small and medium local companies. However, in parallel with chances, Vietnamese enterprises must confront many challenges especially in terms of direct competition with international organizations which seems capably overwhelmed in technological application, international experience, and such wealthy capital source. Evidently, the individual and separate competition would not be wise and sustainable for small and medium-sized enterprises (SMEs) particularly in the logistics industry which has been stuck in a fragmented situation with numerous local SMEs and requires massive cash injection at the beginning. Therefore, the strategy for integrating logistics services may be a next-step model for local firms and InterLOG corporation is not an exception from this tendency.

The aim of this study is to formulate indispensable preparation and direction for the corporation in order to transform into a 4PL company. To simulate the correct and appropriate approach for the firm, the author design in-depth interviews with four employees in the company based on four questions revolving around challenges, risks, benefits, and feasible strategies for the logistics integration process.

In the first question, human resource capability, technology, customer approach, and coordination with various logistics providers are identified as dominant challenges on the path of becoming a 4PL provider. Moving to the second question, all four personnel pointed to potential risks related to running out of the corporate available budget and economic devastation from global incidents such as Coronavirus pandemic at the present time. On the contradiction to negative concerns in the transformation process, all interviewees expressed bloomed optimism and prospects with regards to benefits when becoming a 4PL organization. To be specific, potential benefits leading the company to the integration process may be listed as global expansion, surging profitability, and trustworthiness gained from customers. Finally, interviewees personally illustrated potential approaches and strategies for the integration process ranging from developing the human resource and technological know-how, building the interconnection with other logistics providers, and changing customer markets to the financial preparation.

Although the study is practically carried out based on mostly internal factors of the case company, the results obtained could be generalized and applicable to other firms in the logistics industry, however, the adjustment is completely necessary and elaborately evaluated based on the current circumstance of every single organization.

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