jamk.fi

Forwarding Process Comparison

Case: Valmet Technologies Inc. & Valmet AB

Minna Moilanen

Bachelor's thesis
May 2015

Degree Programme in Logistics Engineering
Technology, communication and transport

JYVÄSKYLÄN AMMATTIKORKEAKOULU
JAMK UNIVERSITY OF APPLIED SCIENCES

JYVÄSKYLÄN AMMATTIKORKEAKOULU
JAMK UNIVERSITY OF APPLIED SCIENCES

Description

Author(s)	Type of publication	Date
Moilanen, Minna	Bachelor's thesis	05.05.2015
		Language of publication: English
	Number of pages: 63	Permission for web publication:

Title of publication

Forwarding Process Comparison

Case: Valmet Technologies Inc. & Valmet AB

Degree programme

Logistics Engineering

Tutor(s)

Pakarinen, Risto

Lähdevaara, Hannu

Assigned by

Valmet Technologies, Inc. & Valmet AB

Abstract

The aim of this thesis was to analyze the existing spare part export forwarding processes in two units, Valmet Technologies Inc.'s unit in Jyväskylä and Valmet AB's in Sundsvall. To understand the phenomenon and analyzing of results, theoretical framework of the thesis includes introduction to international business, forwarding and benchmarking. The information sources used for theory background were mainly books and electronic sources.

The primary approach of the study was qualitative case study. The aim was to benchmark two units and find best practices used in them in order to find harmonized way to operate for both units. The method used for data gathering were theme interviews, written documents and author's own observation. In theme interviews forwarding employees and managers were interviewed and the material was analyzed thematically. Written documents were process charts and process instructions.

The outcome of the thesis was that the two processes are quite similar already. Both processes have the same tools in use. Challenges for the processes were problems in the flow of information. Success factors for the processes were the knowledge and motivation of the personnel and efficient systems. Improvement possibilities in the processes were targeting the flow of information to the ERP system, start using of electronic signature and archiving all shipping documents electronically.

Keywords/tags (subjects)

International business, forwarding, benchmarking, process development

Miscellaneous

JYVÄSKYLÄN AMMATTIKORKEAKOULU
JAMK UNIVERSITY OF APPLIED SCIENCES

Kuvailulehti

Tekijä(t)	Julkaisun laji	Päivämäärä
Moilanen, Minna	Opinnäytetyö	05.05.2015
	Sivumäärä 63	Julkaisun kieli Englanti
		Verkkojulkaisulupa myönnetty:

Työn nimi
Huolinta prosessien vertailu
Case: Valmet Technologies Inc. & Valmet AB

Koulutusohjelma
Logistics Engineering

Työn ohjaaja(t)
Pakarinen, Risto
Lähdevaara, Hannu

Toimeksiantaja(t)
Valmet Technologies, Inc. & Valmet AB

Tiivistelmä

Opinnäytetyön tavoitteena oli analysoida varaosien vientihuolinnan prosesseja kahdessa yksikössä, Valmet Technologies Oy:n Jyväskylän ja Valmet AB:n Sundsvallin yksikössä. Jotta tutkittavaa ilmiötä voisi ymmärtää ja analysoida tuloksia, työn teoreettinen katsaus sisälsi johdatuksen kansainväliseen kauppaan, huolintaan ja benchmarkkaukseen. Teorian taustalla olevina tietolähteinä käytettiin lähinnä kirjoja ja elektronisia lähteitä.

Tutkimuksen ensisijainen lähestymistapa oli laadullinen tapaustutkimus. Tavoitteena oli vertailla kahta yksikköä ja löytää niistä parhaat menettelytavat, joita voitaisiin käyttää pohjana yhteisille tavoille toimia. Tietojen keruumenetelminä käytettiin teemahaastatteluita, kirjallisia dokumentteja sekä tekijän omia havainnointeja. Huolinnan työntekijöitä ja esimiehiä haastateltiin teemahaastatteluilla ja kerätty aineisto analysoitiin teemoittain. Kirjalliset dokumentit olivat prosessikaavio ja prosessiohjeet.

Opinnäytetyön tuloksena oli, että tarkastelun kohteena olevat prosessit ovat jo samankaltaisia. Molemmissa prosesseissa käytetään samoja työkaluja. Prosessien haasteina olivat ongelmat informaation kulussa. Prosessien menestystekijöitä olivat henkilökunnan tietotaito ja motivaatio sekä tehokkaat järjestelmät. Prosessien parannusmahdollisuuksia olivat tiedonkulun kohdentaminen ERP järjestelmään, sähköisen allekirjoituksen käyttöönotto ja kaikkien vientidokumenttien sähköinen arkistointi.

Avainsanat (asiasanat)
Kansainvälinen kauppa, huolinta, benchmarking –tutkimusprosessi, prosessien kehitys

Muut tiedot

Contents

Figures

Tables

1 Introduction

Challenging economic times and increased competition are leading companies to search for ways to make their business processes more efficient. The spirit of the business world is to seek for continuous improvement and learning, which able companies to stay competitive or even market leaders.

1.1 Background

Topic of the thesis was export forwarding process analysis with benchmarking approach in two departments of the commissioning company, Valmet Technologies Inc. and Valmet AB. The initiative for the research came from the Sundsvall unit in Sweden, were improved process description was discovered to be needed. Also the possibilities towards one forwarding team were on the interest. With united team there could be possibility to back up one another. The studied processes were involved in paper machine spare parts export forwarding.

Theoretical background of the thesis is divided into three topics. First topic is international business which will introduce the reader to the world of trade from exporting point of view. Second topic is forwarding which concentrates on giving the reader idea what forwarding is about. Third topic covers the basics of benchmarking method and it works as a bridge between the theoretical basis of the thesis and empirical part. In the early stages of the thesis work, change management was considered to be one topic of the theoretical frame work. However, later it was considered to be topic that mostly concerns the phase after thesis work. Also there could be a possibility for another thesis work about implementing the findings and results from this work. It was also important to limit the framework in order to have cohesion between the theoretical and empirical part.

1.2 Objectives of the Thesis

The aim of the research was to find out best practices by benchmarking processes in both units. Processes in both units were studied by analyzing data and interviewing personnel involved in the process. After the data was gathered, it was analyzed, reported and conclusions were drawn. The end result of the thesis was suggestion for harmonized guidelines for both units. This study was conducted as a case study and the results received are valid for only this case. However, the work reported may help other organization or thesis worker to study processes and look for improvement in them.

1.3 Research problem

The target of this research was to study the forwarding practices used in two units of the commissioning company. The research problem was to find out if there was a way to harmonize forwarding processes in Valmet's Jyväskylä and Sundsvall units. The used research method for this study was qualitative and case study strategy was used as an approach. Benchmarking method was used for analyzing and comparing the current processes and data gathering methods were interviews, written documents and author's own observations.

1.4 Company information, Valmet Technologies Inc.

Valmet Technologies Inc. offers services and technologies for the pulp, paper and energy industries globally. Valmet has about 10,500 professionals working close to customers in 30 countries. Net sales in 2014 were approximately EUR 2.5 billion. Valmet's operations were organized around three business lines and five geographical areas (see figure 1). Services business line accounted for 40 % of the net sales in year 2014. Pulp and Energy business line's percentage was almost equal with 39 % and Paper business line's net sales was 21 % of the total. The geographic areas were Valmet is present are North America, South America, EMEA (Europe, Middle-East and Africa), Asia Pacific and China. These areas are in charge for sales, providing services that

meet customers' needs and support of project deliveries in their respective regions. (Our businesses 2015.) Fourth business line was acquired in spring 2015, Automation.

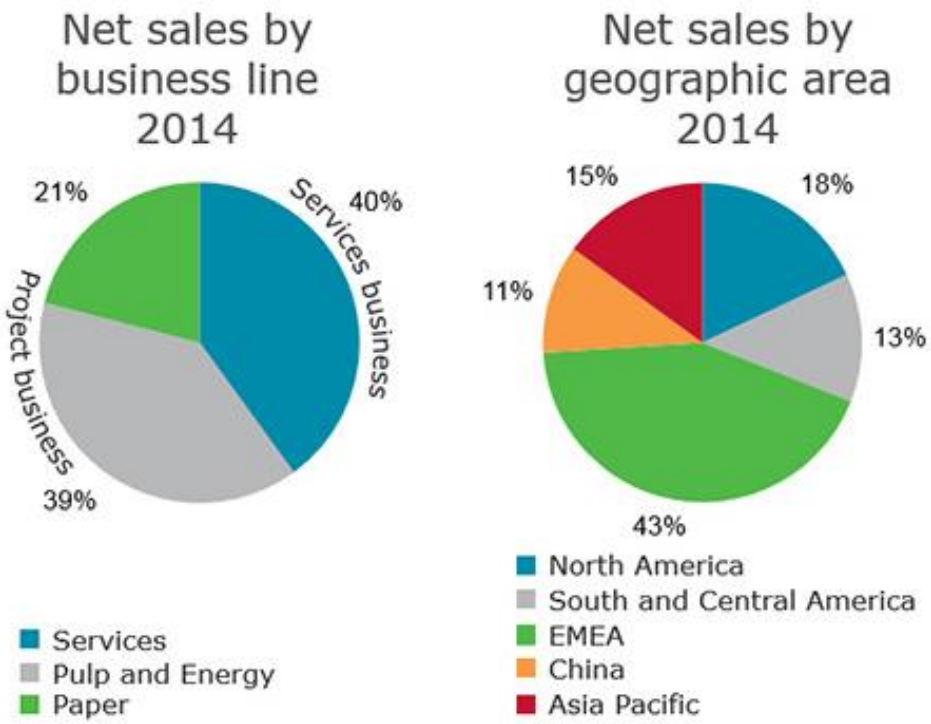


Figure 1. Net sales by business line and geographic area 2014 (Key figures 2015)

Services business line

Valmet offers services globally through 70 service units where about 5,000 service professionals are working. Annually over a half of the 3,800 pulp and paper mills around the world are purchasing services from Valmet. The customer's for the Services business line are mainly in the pulp, paper and energy industries. EMEA and North America are considered as the most important geographic markets. Valmet has increased its focus on the service business over the past two decades. In recent years, companies have become increasingly focused on their core businesses and have outsourced service and maintenance related activities. (Services business line 2015.)

There is growing demand for services in the industries served by Valmet in North America and Europe. Increasing markets with more demand are in South America, China and Asia Pacific. The Services business line offers services and solutions mainly to the pulp, paper and energy industries. The services and solutions provided include parts and equipment for spare, wear and replacements, paper machine roll services, filter fabrics, paper machine clothing, plant improvements, upgrades and technical modifications and expert services to improve plant productivity and operational efficiency, as well as plant maintenance outsourcing. (Services business line 2015.)

Pulp and Energy business line

Business line provides technologies and solutions for pulp and energy production as well as for biomass conversion. The pulp projects vary from process equipment deliveries to complete pulp mills. Valmet's energy solutions include e.g. biomass based energy boilers and their rebuilds. In addition, Valmet continuously develops new biomass conversion technologies. (Our businesses 2015)

Paper business line

Business line is focused on delivering complete board, tissue and paper production lines and machine rebuilds. The outcome of these lines are used in a number of end products such as packaging, toilet paper, hand towels and handkerchiefs as well as printing and writing papers. (ibid 2015)

Figure 2. Valmet's values (2015)

Valmet was demerged from Metso Group in December 2013. With the new founded company and image, Valmet is driven to go forward and promote its vision and strategy through values which can be seen from figure 2, Customers, Renewal, Excellence and People. These values can also be seen in this thesis which aims to develop the process of forwarding. In the end it could be seen as more value for the end customer's as more efficient lead time, more understandable work process for the Valmet employees, support from teams in different units and improved efficiency.

2 International Business

Term international business can be used from trade where goods or services are crossing borders of countries. Term global trade is referred to companies who has trade activities in all central markets. Trade and international business has grown and developed during the last century and it is going through changes all the time. Due to development of information technology and improved transportation and logistics, border crossing trade has become easier. (Pasanen 2005, 15.)

There are several factors that a tradesman should consider when doing international business. While there are risks in all business transactions, international trade involves additional ones. Greater distances and the events of cargo being handled through several hands and in some cases prolonged storage increases the risk of damage, loss or theft. In other words transport risks. It can be difficult to check the creditworthiness of foreign buyers which leads to a risk of non –payment, late payment or outright fraud. Risk concerning importers is that the quality of goods may differ from what have been expected. Exchange rate fluctuations may cause losses to other party while benefiting the opposite if a price has been set in a particular currency. (Jimenez 2012, 13 – 14.)

In case of disputes and legal actions, traders should be cautious with contracts they are signing. If the contract is made to subject to the jurisdiction of foreign courts, it can get impossible or rather expensive to settle issues. Unforeseen events, such as a strike, natural disaster or war can make delivery impossible or make the cost of transport more or less higher. Export business may also suffer from unstable conditions of target country in terms of loss of investments. (ibid, 14 – 15.)

The playground of international business is guided by number of globally recognized procedures, documents and standard rules. The players in the field include exporters, importers, bankers, transporters and insurers. (ibid, 13.)

2.1 Export

The export process is twofold involving the delivery of physical goods and the corresponding documentary exchanges. (Jimenez 2012, 15.) Foreign trade can be categorized in internal and external trade. Internal trade is trade between countries which have made trade agreements or are in economic union, such as the European Union. External trade is trade between an EU country and a country outside of EU. The goods have to be declared at the borders both in exports and imports. (Pasanen 2005, 498.)

In general, goods are being exported permanently, which means that they are not intended to bring back to the European Union. Export can also be temporary, for example if the items are being transported to a trade fair or demonstration. Temporarily exported goods are intended to be returned back to the EU in the same conditions they were released from origin country. All goods that are being exported outside the EU have to be placed under Customs procedures by issuing an export declaration. The exporter has the responsibility to obtain the export declaration. The exporter has to be located in the trade community and the exporter can authorize an agent to issue the export declaration on behalf of the exporter. Normally the authorized representative is a forwarding agent. (Mitä on vienti? 2015.)

2.2 Customs role in the export

Customs definition

Customs is an authority which tasks include monitoring the movement of goods in border crossing trade, inspecting legality of the traded goods and gathering data from imports and exports. The Customs promotes the smooth operation of international trade of goods. The Customs task is to make sure rules are being followed and that customs duties, taxes and charges related to foreign trade and manufacture of the goods are being carried out. The Customs combats crime against health and security as well as prevents threats and customs crime directed to financial interests' of Finland and the EU. (Suomen tulli on palvelu- ja lainvalvontaorganisaatio 2015.)

Customs duties is to protect the environment and the consumers by controlling and inspecting the groceries and consumer goods which are entering the markets through Customs borders. The Customs monitors that import and exports restrictions are being followed. Customs operates together with other authorities such as the Police and The Border Guard to enhance the security inside the borders of Finland. (Suomen tulli on palvelu- ja lainvalvontaorganisaatio 2015.)

Customs process

Methods that can speed up the customs processes are AEO and C-TPAT. A company who has been granted title Authorized Economic Operator (AEO) can be recognized as a safe trader and who will benefit faster customs processes for their products. The faster customs processes are a benefit for a company since the goods can be moved faster from one country to another and this also helps to lower transport costs. The process is also a benefit to the EU customs as resources can be directed to checking risky and suspicious transactions. (European Commission – Press release.)

Member States can grant the AEO status to any economic operator who meet the common criteria set for granting. Economic operator who can prove to have clean records with appropriate recordkeeping, customs compliance, financial solvency and, where relevant, proper security and safety standards can be a candidate for the AEO status. Economic operators can apply for an AEO status either to be in a more favorable position to comply with the new security requirements or to have access to simplified customs procedures. (Authorised Economic Operator (AEO) 2015.)

C-TPAT (Customs-Trade Partnership Against Terrorism) is a security certification used in the United States and it is granted by U.S. Customs and Border Protection authorities. It is similar to AEO status, but the program is mainly focused on the imports to the United States. The C-TPAT status entitles its holder to less physical checks of cargo and faster inspection of cargo. (Hörkkö et al. 2010,463 - 464.)

Intrastat

Custom collects information from internal trade between member countries of EU for statistical purposes. The collected information includes for example dispatch and destination country, commodity code, the nature of transaction, mode of transport, the net weight and the invoice value. The customs compiles internal trade statistics from the received notifications which can be used for example in statistical surveys and studies. The Intrastat form is filled by the importer or exporter whose imports or exports exceeds the yearly statistical threshold limit. In Finland the threshold limit for providing information is 500 000 € both for arrivals and dispatches in 2015. (INTRASTAT in Finland 2015.)

2.3 Terms of delivery and payment terms

Incoterms 2010 are trade terms used in international trade. They are meant to protect both the seller and the buyer. Trade terms define who is responsible for charges and risks, and at which point of they are handed from the seller to the buyer. Incoterms 2010 rules are mainly used in international trade by exporters and importers. However also banks, insurance and transport companies use and know them. When a sales contract (or purchase contract) is made between the seller and the buyer, the Incoterm is negotiated between these parties and the chosen Incoterm is then marked to the sales contract. Delivery point defines when the risks of damage and responsibilities are transferred from the seller to the buyer. Meaning when the seller has “delivered” the goods for assigned port, terminal or destination. From this point onwards the buyer is responsible bearing the risks. (Alpha International Trade)

Incoterms are classified under rules where any mode of transport is accepted and rules where only sea and inland waterway transport is allowed (Jimenez 2012, 60).

Any mode of Transport

EXW – EX Works

FCA – Free Carrier

CPT – Carriage Paid To

CIP – Carriage and Insurance Paid To

DAT – Delivered at Terminal

DAP – Delivered at Place

DDP – Delivered Duty Paid

Sea and Inland Waterway Transport

FAS – Free Alongside Ship

FOB – Free On Board

CFR – Cost and Freight

CIF – Cost Insurance and Freight

Payment terms

Terms of payment can be divided roughly into two categories, clean payments and documentary payments. Type of clean payments are payment order and cheque. Type of documentary payments are Collection and Documentary Credit or Letter of Credit. Clean payments require less time in terms of preparation and processing, but they are more risky in terms of not receiving the payment. Documentary payments offer greater protection for the seller as the process of payment is being monitored by banks. (Melin 2011, 121.)

When choosing a term of payment, it is advisable to consider currency, payment time, method of payment, place of payment, discounts, banking charges, delivery term and consequence for default. (Melin 2011, 119 – 121.)

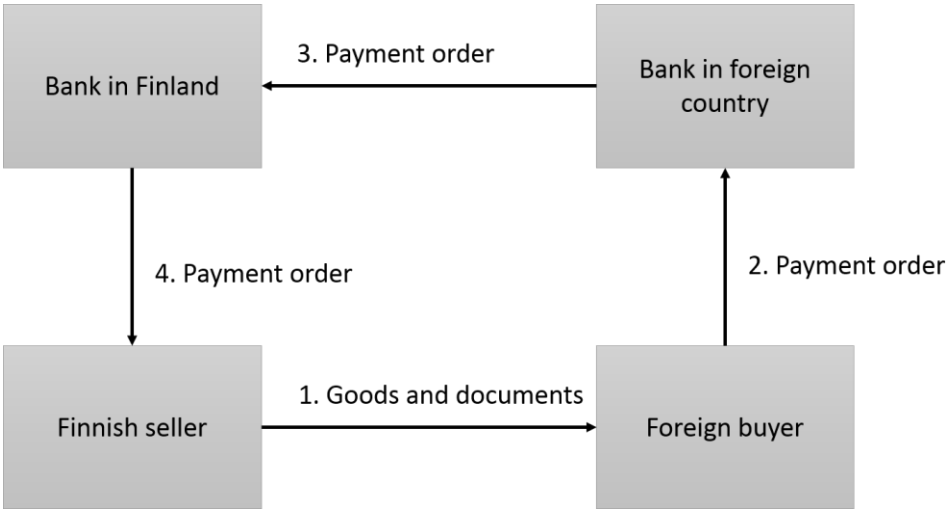


Figure 3. Flow of international money order (Melin 2011, 124)

Payment order is the most common used method of payment in international trade. This type of payment method is used in transactions where the trade parties trust that the buyer will pay the contract price. Seller releases the goods and the buyer will inform their bank to transfer the invoice amount to the seller's bank (see figure 3). (Pasanen 2005, 202.) The outgoing payment is based on the written instructions provided by buyer to their bank to credit the beneficiary's account unconditionally, irrevocably and without limitation. The payment order could be compared to domestic bank transfer. The bank is only working as a conciliator of the payment and do not assist with transferring documents related to the shipping of the goods. (Melin 2011, 123 – 124.)

Cash Against Documents (CAD) or Documentary Collection is a payment term where the seller can control the ownership of the goods until the buyer has paid the traded goods. When the goods have been released from the seller's premises (see figure 4), the seller hands over the shipping documents to their bank and gives instructions for collection. The seller's bank hands over the documents to the buyer's bank who releases the documents to the buyer after the payment is completed. With this payment term, the seller must bear in mind that the delivery terms are negotiated accordingly since the goods should not be released to the buyer before the payment have been completed. When the payment has been completed, the buyer has access to the goods by showing the correct shipping documents. (Melin 2011, 125 – 126.)

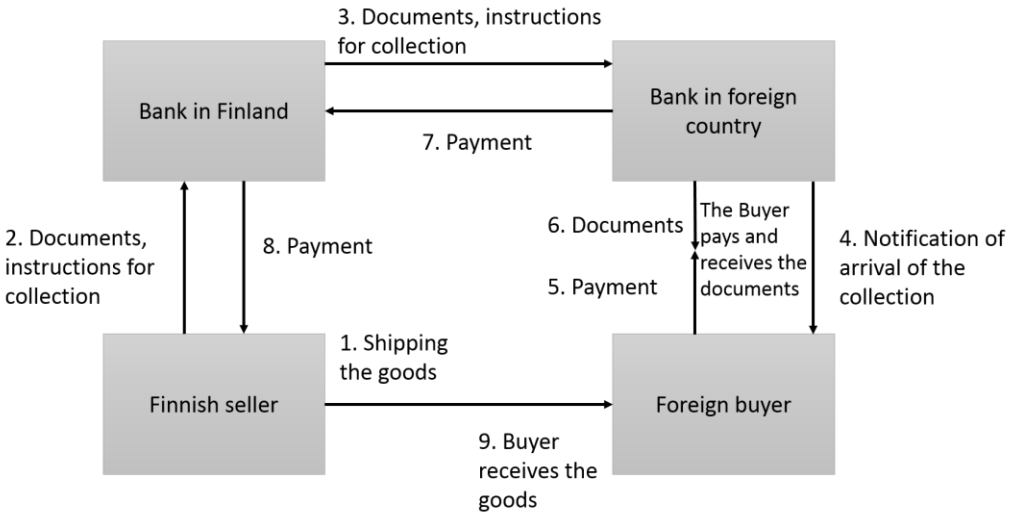


Figure 4. Stages of Documentary Collection (Melin 2011, 124)

Letter of Credit (L/C) or Documentary Credit (D/C) is a payment term and payment method where the money and documents transfer is done through the issuing and advising bank. L/C is a commitment from the issuing bank that it will transfer the L/C amount to the seller according to the instructions they have received after the seller has presented the necessary documents stated in conditions of the L/C (see figure 5). There are several types of Documentary Credits which can be divided into credits payable at sight and usance credits. (Melin 2011, 130 – 131.)

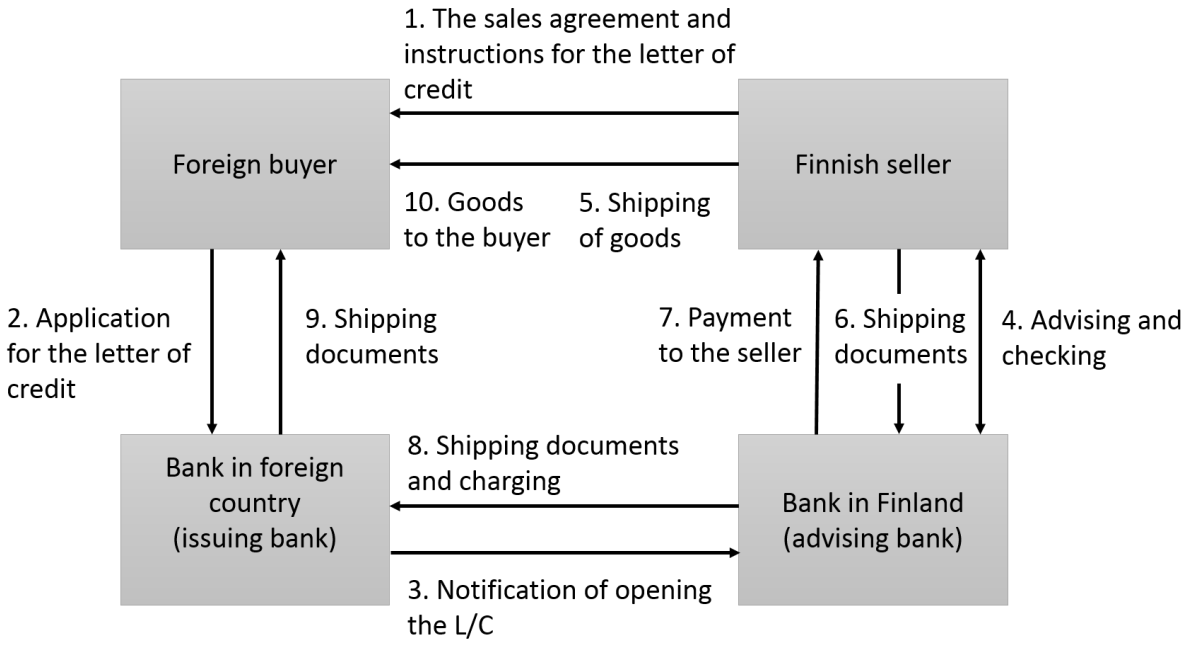


Figure 5. Process of the Letter of Credit (Melin 2011, 133)

Documentary Credit is used as a payment term usually for the reasons that currency regulations of the buyer's country do not accept advance payment or the currency regulations of the seller's country do not accept exports without advance payment or notification of opening of a Documentary Credit. Documentary Credit may be also used if the value of the sold goods is very high or the traders are located far away from each other geographically. It is also advisable to consider using of Documentary Credit if the seller and the buyer are not known for each other or if the political situation is unstable in one of the trader's home country. (ibid 136.)

3 Forwarding business

Forwarding services are maybe the least known part of supply chain in the flow of goods in international trade (von Bell 2011, 121). Jimenes describes the freight forwarder as an indispensable member of the international trade community. Freight forwarder is the party of supply chain which carry out the international shipment of goods. Forwarders are like travel agents, they offer the best “package deal” to the shipper. (2012,191.)

The history of forwarders can be traced back to times when the merchant travelled from country to another along their merchandise, thus it could be said that the merchant was the first forwarder. When the foreign trade developed and expanded, the merchant was forced to rely on country local representative who ensured that the goods were delivered to destination. Thus the professional freight forwarder was born already in the late Middle Ages. (Hörkkö et al. 2010, 26.)

The concept of the freight forwarder and the freight forwarder's business is legally defined only in a few countries. In Finland, the freight forwarding industry rules are defined by the General Conditions of the Nordic Association of Freight Forwarders. These conditions define the rights and obligations of forwarders and contractors. (NSAB 2000.) As an integral part of these conditions are freight forwarder’s tasks and their execution, regulations of forwarder’s and principal’s liability, settlement of disputes and reimbursing cots (Hörkkö et al. 2010, 26).

A person working in forwarding field can have titles such as forwarder, freight forwarder, dispatcher, shipping coordinator and shipping or forwarding agent. Forwarder can work in a forwarding company or in a commissioning company. If person is working for the commissioning company, their responsibility is to carry out commissions with forwarding company and provide necessary documents for shipping of cargo.

Field of forwarding is versatile and forwarding company can be specialized either in a few aspects of logistics or can offer variety of forwarding services.

Different kind of forwarding services are for example arranging the pickup, booking shipment space, customs procedures, delivery, invoicing, compiling statistics and warehousing (see figure 6). (Hörkkö et al. 2010, 26 – 27.)

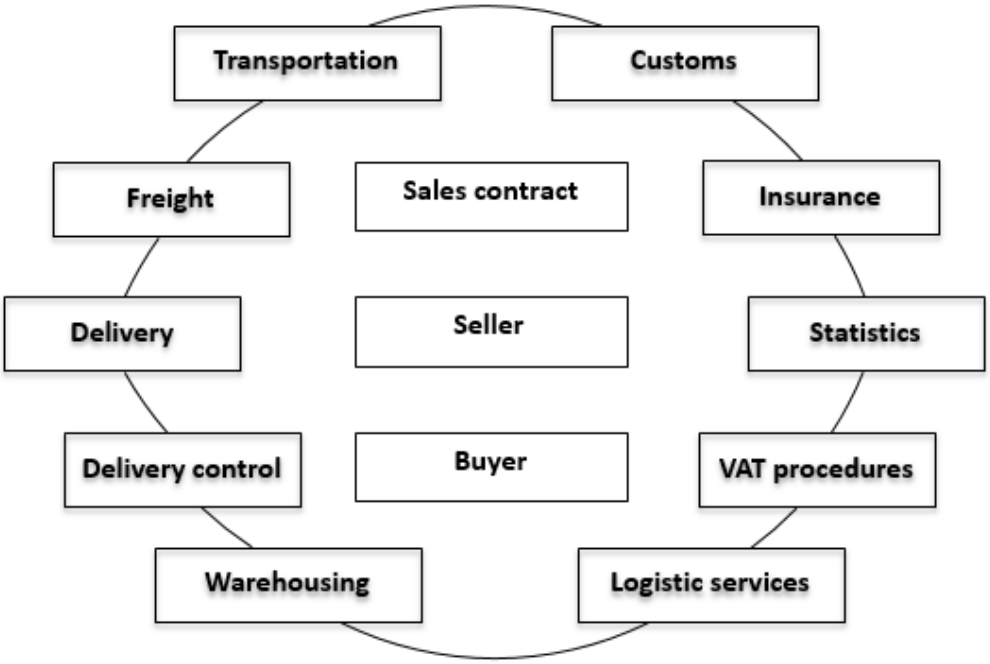


Figure 6. Basic elements of forwarding (Hörkkö et al. 2010, 27)

3.1 Forwarder's duties and responsibilities

When forwarder and customer have agreed on cooperation and the forwarder have received an order, the **obligation to act** starts. It is forwarder's duty to act as agreed and ensure that customer's interests are fulfilled. **The obligation to check** refers to forwarder's duties to check the transported goods and condition of packaging, quantity, marks and numbers, documents, when it is possible with normal procedures. Forwarder is **obliged to inform** the customer if any anomalies or unexpected circumstances occur. (Hörkkö et al. 2010, 26-27.)

3.2 Choosing of transportation mode

Transportations has remarkable role in companies' material economy since they have influence on the company's level of customer service and cost structure. The costs of incoming and outgoing shipments can be even 10 – 20 % of the price of the products. (Melin 2011, 194.)

The key factors affecting to the choice of transportation mode are the following according to Melin (2011, 194):

1. Transportation costs
2. The quantity and dimensions of the transported goods
3. Destination country
4. The value of goods in relation to the transportation costs
5. Nature of the goods. Do they broke easily
6. Delivery time
7. Level of customer service.

When several shipments are being made through a year, most common way is to have a yearly agreement with a transportation company. In the agreement, forwarding and transportation prices and quantities and amount of shipments are negotiated. With the agreement, a customer commits to use the transportation company for agreed time period. The yearly contract can be done also with country specifications. With this kind of agreements the customer can use the transport companies which have best solutions and are specified in those countries. (Hörkkö et al. 2010, 30.)

3.3 Cooperation

Forwarder is a middleman who ensures the process of delivering goods from the shipper to the customer. In this process, the forwarder is in contact with many parties and ensures that the correct information is reaching necessary partners.

Melin states that handling exporting processes is not only a question of procedures and managing challenges in them. It requires a lot of cooperation with joint contractors, different authorities and other parties involved in procedures. For these reasons it is important that the personnel involved in these procedures are capable of cooperation and working in multicultural environment. (2011, 286.)

3.4 Documents needed in exporting goods

The importance of the documents in exports is essential. They must be carefully drafted, as incomplete or unclear information may cause delays at customs, damages to the goods, refunds and disappearances, as well as additional costs. Shippers and forwarders are handling different type of documents in their daily work. In the following paragraphs some of the most important documents are described.

Commercial Invoice

Commercial invoice (see sample in appendix 1) is one of the important documents involved in trade. This document shows the seller's demand for payment. The buyer can pay the purchase according to the invoice. (Melin 2011, 89.) Data included on a commercial invoice shows different type of information for different parties involved in the delivery of goods. Information has to be precise since information given on the invoice will be a base for other export documents. In international trade a buyer should inform a seller about the requirements for commercial invoice on their respective country. (Hörkkö et al. 2010, 208.)

Commercial invoice for export is prepared on the seller company's form and on the language of the receiving country or one of the legally accepted languages on trade in that receiving country. Some countries has specific requirements for information to be seen on the invoice, such as declaration from authorized exporter for the origin of the goods, values and the correctness of information on the commercial invoice. (Melin 2011, 90.) Shipping handbook

(Laivauskäsikirja), published by Finpro is a tool for exporters and forwarders. It includes requirements by countries for example for commercial invoices.

Proforma Invoice

If the seller is not able to provide a commercial invoice, for example if the delivery is done in partial shipments and the whole value will be invoiced in one commercial invoice, the seller can make a proforma invoice. Proforma invoice (see appendix 2) does not bind the buyer for payment, but it is rather for customs purposes to show the value of the goods to be exported. Proforma invoice can be issued for delivering samples and exhibition material, for the need of buyer to open a letter of credit or if the buyer needs to obtain an import license before the delivery of goods. Usually proforma invoice includes statement “Value for Customs only…” (Melin 2011, 92).

Packing List

Packing list (see appendix 3) indicates important information for the handlers, dispatchers and receivers of the package. For example, the type of shipping package, such as carton, crate, box or drum is indicated on the packing list together with the information which item(s) are included in each individual package (Jimenez 2012, 27).

Certificate of Origin

Some countries require a certificate of origin (see appendix 4), which will be a base for Customs discounts. It is a signed statement as to the origin of the export item. Certificate of origin has to be validated by local Chamber of Commerce. (Hörkkö et al. 2010, 210.)

ATA-carnet

The ATA Carnet (Admission Temporaire, Temporary Admission, see appendix 5) is a customs document that permits temporary export and import of goods to countries that have signed the Ata Carnet agreement. It allows the temporary export of commercial samples, goods to be presented at trade fairs, professional equipment, promotional materials and scientific equipment. Ata Carnet replaces the export documents in origin country and customs documents

in destination country. However it does not replace documents such as import license. (Melin 2011, 101.)

Ata Carnet can be obtained from local Chamber of Commerce. Articles that have been imported to a country with Ata Carnet, have to be exported latest one year from entry and have to be returned to country of original departure. Condition to permit temporary import is that the articles are identifiable when they are returned. With one Ata Carnet, the articles can travel in several countries if applied in the application process. Applicant pays a deposit to Chamber of Commerce, which will be refunded when the Ata Carnet is returned. (Melin 2011, 101.)

Waybills

Every transporting mode have their typical document of transport which indicates the contract between the shipper and the carrier. CMR (Convention on the Contract for the International Carriage of Goods by Road) is used for international road transport, AWB (Air Waybill) for air transport, Rail Waybill (CIM), waybill for courier shipments and B/L (Bill of Lading) in sea shipments. (Hörkkö et al. 2010, 228 – 234.)

Shipping Instructions

Ordering party may hand their shipping instructions in a written form. It can be a free-format instructions or a form prepared by the forwarder which is then filled by the ordering party. Shipping instructions can include specific instructions how the shipment should be handled and which delivery mode is to be used. The importance of well given forwarding instructions increases when other customs procedures are used than normal sale or purchase. (Hörkkö et al. 2010, 245.)

3.5 Changing regulations

The exporter and the forwarder needs to be aware of the changes to regulations in countries they are exporting goods. For example, in the beginning of year 2015, 1st of January, a new regulation in Hungary took effect. A new road

transportation control system, EKAER (Electronic Trade and Transport Control System) was introduced to minimize the possibility of VAT fraud in Hungarian public road transit shipments. (EKAER 2015.)

With this new regulation, Hungarian exporters and importers are required to register in the electronic EKAER system. The system is developed to monitor import and export road shipments in trade between Hungary and other EU Member State. The EKAER number is needed for shipments entering and leaving Hungary by road, when the tariff number, value and weight of the shipment is exceeding limits. The number is valid 15 days from its establishment. Prior shipment, Hungarian company is liable for obtaining the number and distributing it to the carrier or agent organizing the transport. At first the regulation was on a test phase and starting from 1st of March 2015, penalties were effect if failing to show EKAER number. (EN – information.)

4 Benchmarking

"Benchmarking is the search for the best industry practices which will lead to exceptional performance through the implementation of these best practices" (Camp, 1989)

History of benchmarking can be traced back to Japan where it was developed as a quality improvement tool. In 1976 Rank Xerox was the pioneer in Western countries when it started their first benchmarking studies. Benchmarking can be defined as a continuous and systematic process to identify, understand and implement the best methods and practices, with the aim of developing the organization's performance. (Tuominen 1993, 15 – 16.) The operational definition by Camp (1994, 304) is finding and implementing best practices.

Benchmarking can be divided into four different categories; internal, competitive, functional and generic process (Camp 1995, 16.) Benchmarking can be targeted to product, strategy or process. Comparison can be done both for performance and qualities of the target. (Laamanen 2005, 218.)

By internal benchmarking an organization compares their functions between different units and departments. In this case the best practices and knowhow can be transferred to another units. Advantages of this kind of comparison is the reachability of the relevant data and information, matter of confidentiality are less of concern, measurements are usually similar and assure a high degree of comparability. Disadvantages of internal benchmarking is the fact, that internal practices may not be the industry best. Also other unit may be reluctant to share they knowledge if they are feeling they have competitive advantage compared to other internal units. (Camp 1995, 80 - 81.) Internal benchmarking may also validate the old methods and thus give a competitor a head start if the used methods are not industry best (Tuominen 1993, 23).

Competitive benchmarking is done by comparing the work process with the best competitor. Functional benchmarking is done by comparing the work process with a work process of functional leader. In most cases the functional leader is not working in the same industry and are considered the best at what

they do. Generic process benchmarking is involved with benchmarking the generic processes every organization have. Such as take an order, fill it, create an invoice and collect the payment. If the basic processes are identified, the benchmarking can be done to whichever company is the best, regardless of industry or other restrictions. (Camp 1994, 305 – 306.)

Benchmarking study can be carried out by comparing results and performance. Another way is to compare ways to operate by analyzing processes and work steps. (Lecklin 2006, 161.)

Other methods which can be used in business process development are EVA, TQM (Total Quality Management), Balanced Score Card, BRP, Six Sigma, BPM (Business Process Management).

4.1 Process of benchmarking

A process is a series of interdependent tasks with a goal to process a product or information by using certain methods and implementing operation modes (Tuominen 1993, 90). Processes consists of inputs, work steps, outputs, feedback and results as can be seen in figure 7. When companies are seeking benchmarking subjects in their processes, this type of process model can be useful to determine what to benchmark. (Camp 1995, 25.)

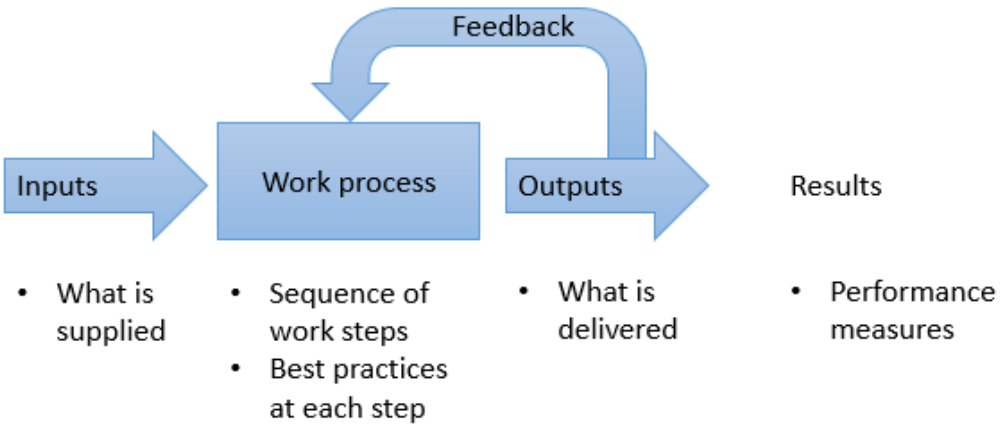


Figure 7. Process model (Camp 1995, 25)

The process of benchmarking can be described in 6 to 10 steps. The formal 10-step benchmarking process is a structured way to plan, analyze, integrate and take the findings in action (see figure 8). Benchmarking process starts with the identification of the benchmark subject. When the subject is identified, the next step is to identify the benchmark partner. Data collection methods and collecting data are part of the planning process. (Camp 1995, 19 - 20.)

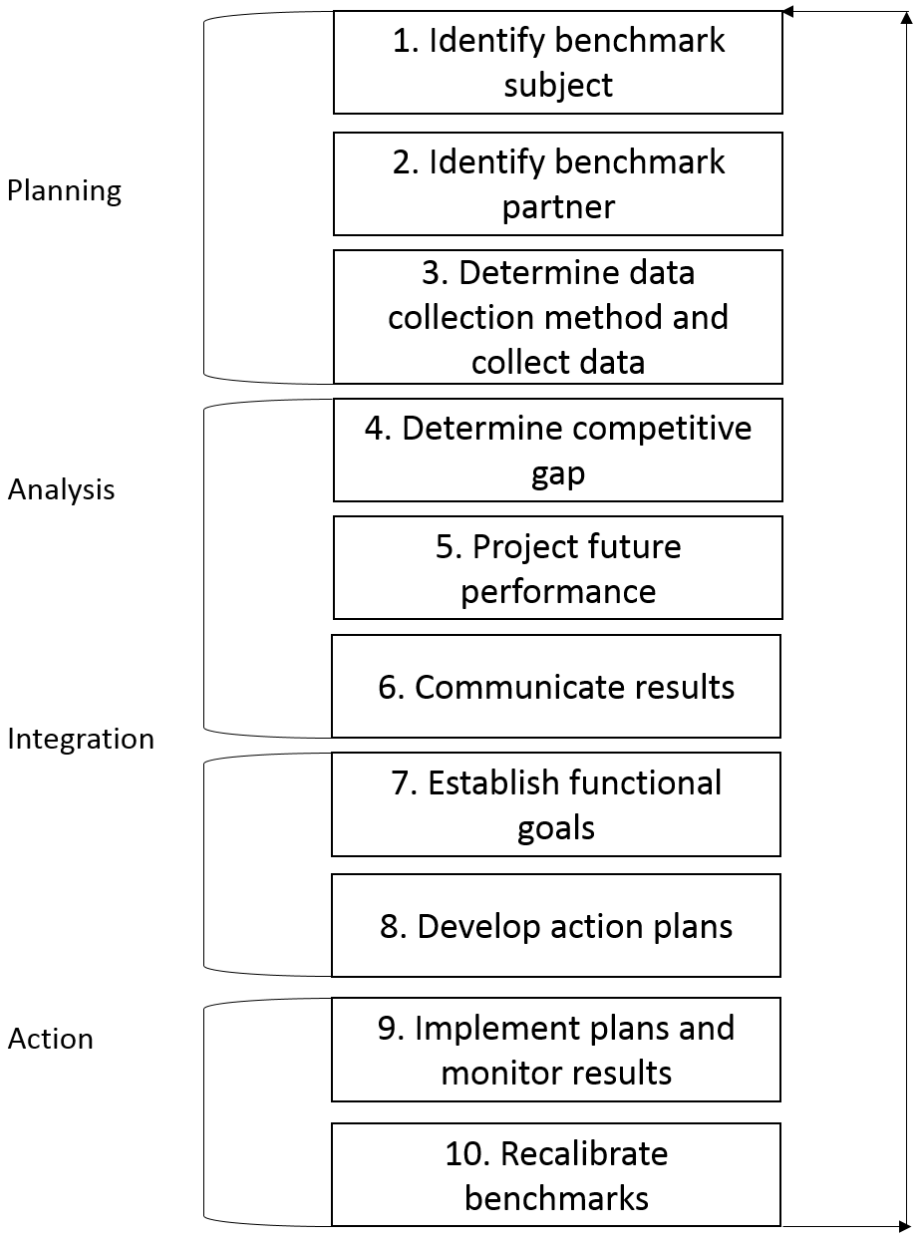


Figure 8. The 10-step benchmarking process (Camp 1995, 20)

Laamanen describes the benchmarking process in six different steps. First define the area to be developed and choose a partner. Secondly study your own

process. Thirdly study your partner's process. Fourth step is to recognize the improvement possibilities. Fifth step is to implement the ideas to own practice and make the changes happen. Last step is to evaluate the results and learning outcomes. (2005, 220.)

4.2 Documentation

To conduct an effective benchmarking, prerequisite is to focus on the work process. It is important to document the work process as it will be a baseline for any other comparisons. (Camp 1995, 80)

Minimum requirements for documenting the benchmarking process is to have a picture of the process and a narrative description of the process. Another requirements are description of the process step and description of the practice at the process step. The goal of the benchmarking process is to benchmark and improve the process, this is why it has to be presented visually and be documented. (ibid 51 – 52.) Normally the information from company's own process is easily accessible and should be found in written form. Data gathering methods from benchmark partner could be mail questionnaire, phone inquiry and interviews (Lecklin 2006, 169).

5 Research process

The aim of this research was to study existing forwarding processes in two units of the commissioning company. The project was started in autumn 2014 but the main study was conducted during spring 2015. The information for theoretical part of the thesis was collected from books, articles and internet sources.

The research approach for this thesis was qualitative and research strategy was comparative case study. According to Hirsjärvi, Remes & Sajavaara (2009) a typical case study includes an in-depth examination of a single event, situation or group of events. The case is studied from the focus point of an individual, group or community in its natural environment. Data collection methods can be several, for example observations, interviews and documentary analysis. (135.)

5.1 Research questions

The main research problem in this thesis was to find out if the forwarding processes in Valmet's Jyväskylä and Sundsvall units could be harmonized. Main research question was: How to harmonize the forwarding processes in two units?

In order to answer that research problem, the following questions were formed:

- What are the Forwarding practices in Valmet Services in Jyväskylä?
- What are the Forwarding practices in Valmet Services in Sundsvall?
- How do these two differ in practice?
- How to build up common forwarding practices?

5.2 Research methods

The applied method for analyzing business processes was benchmarking. Appropriate data collecting methods for benchmarking, as described earlier in theory part, were interviews, written data and author's own observation. In order to analyze two departments, a parameter had to be used. For this study the parameters were existing supply chain and forwarding process charts from two units, which were available in written form.

The basic data was gathered by interviewing people working in the forwarding units. The interview questions were send by email to 5 operating people and 3 persons answered. Two persons were invited to face-to-face interview, 1 management level person from Finland with history of over 15 years of experience in the company and 1 management level person from Sweden with nearly 40 years of work history in the company. All in all two professionals from the Service Forwarding unit in Jyväskylä and three professionals from the Sundsvall unit were interviewed. The one on one -interviews were recorded and the recorded material was transcribed to literal form. The aim of the study was to analyze the current state of the two processes. By interviews problems and bottlenecks were studied as well as success factors of the processes. The used technologies and methods were also studied.

The results of the research provide information what are the bottlenecks of the processes and what are the success factors of the processes. Based on the answers, efficient work methods can be recognized and improvement suggestions can be drawn. Based on the interviews and observations, suggestion for forwarding process harmonization was made.

6 Case Valmet Technologies Inc and Valmet AB

People in the forwarding department are working on delivering the packed orders from a warehouse or a supplier's premises to a final customers. Their responsibilities are booking the shipments and issuing the correct transport documentation. Forwarding coordinator's tasks include for example, booking shipments leaving from different warehouses or from supplier's premises. Execution of shipping documents (refer to Chapter 3.4) such as invoices, waybills, packing lists, Certificates of Origin, Ata Carnet and other certificates and paper work regarding shipments. Decisions making regarding the way of delivery such as courier, air freight, sea freight or road freight. Reporting, archiving shipping documents and mailing invoices to the customers. Invoicing goods that are transported and handling the freight bills that are received from transportation companies. Consultation to other units and departments, estimations of freight costs, way of deliveries, time of deliveries, tracking shipments, delivery and payment terms.

Background information

Personnel Forwarding Jyväskylä
1 Manager
4 Full-time
2 part-time

Personnel Forwarding Sundsvall
1 Manager
2 Full-time
1 Subcontracted

The forwarding services in Sundsvall unit were outsourced until 2 years ago. The shipping team and procedures are thus younger in experience compared to Jyväskylä unit. Jyväskylä unit handles shipments from the main warehouse in Vantaa and other locations around Finland. Sundsvall unit handles shipments from the warehouse in Sundsvall. Warehouse in Vantaa helps Jyväskylä unit by handling courier size shipments to EU.

7 Results and analyzing

The interviews provided information for the analysis of the current situation of the forwarding processes in two units. Also the author of the thesis has been working as Supply Chain Trainee in the Jyväskylä's Service Forwarding Department for two summers and also during the time of the thesis writing. The author has thus on hand experience from the studied phenomena and author's own observation could also be used as secondary research method.

The interview questions were formed according to the benchmarking process instructions. Questions were arranged in themes and the purpose was to get answers concerning the definition of the process, measuring the process, methods and tools used in the process, problems and bottlenecks in the process, improvements and success factors of the process.

7.1 Current situation in Finland and Sweden

Supply Chain Process

A simplified delivery process is described in figure 9. The delivery process starts when a customer and sales department agree on a purchase order and an order acknowledgement. The sales department's duties is to keep the customer informed, and having contact with them about the delivery and other issues concerning the purchase they have made from Valmet.

Valmet's purchasing department purchases needed quantity informed by the sales department and is in contact with the suppliers. The logistics department monitors the arrival of the goods to the warehouse and keeps contact with the personnel at the warehouse. When orders are packed, the warehouse allows forwarding department know that the shipment is ready to be forwarded by inserting packing details to the Enterprise resource planning (ERP) system and the ongoing package will appear on the forwarder's queue.

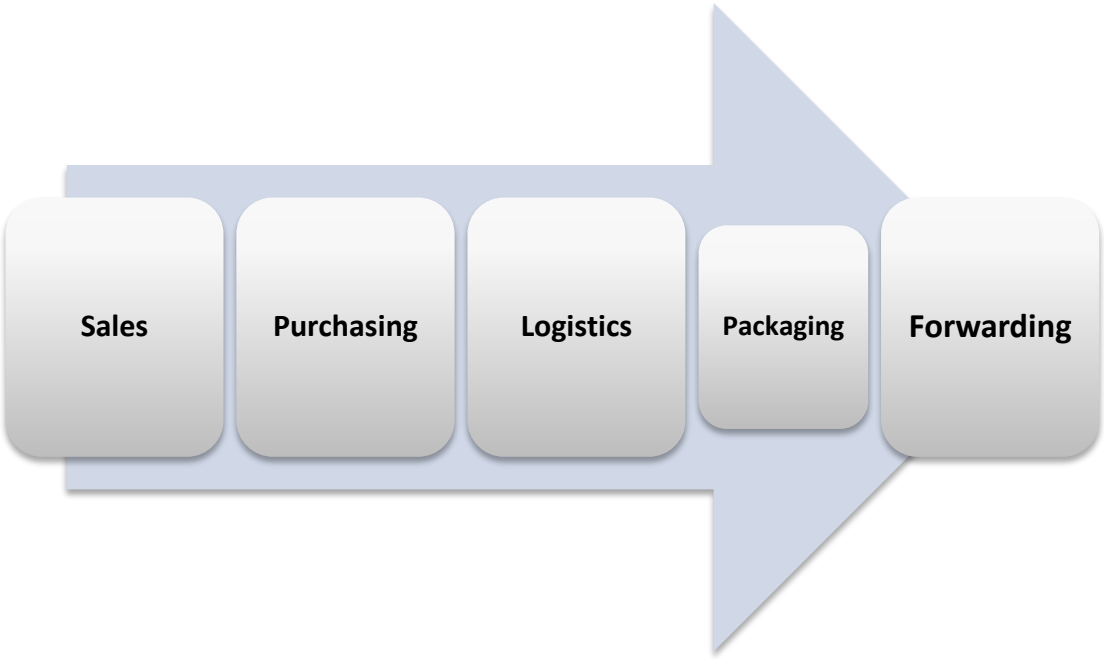


Figure 9. Delivery process

Forwarding: Jyväskylä

When the goods are packed and ready to be shipped, it is the forwarding department which continues the delivery process (for the process chart, see appendix 8). The forwarding department follows the delivery terms and decides which type of delivery mode and a transport company will be used according to company policy. The selection is based on the size of the package (weight and length), line nominations and the delivery time promised to the customer. If the delivery term indicates that Valmet is not payer for the freight, shipping instructions are asked from the customer or Valmet's unit in the receiving country. The coordinator books the transportation either in the Baan ERP system via Valmet Transport Gateway (VTG, see Chapter 7.2.1) system or manually by sending email to the transport company. The coordinator invoices the order in Baan. The transport company arranges the pick-up and delivery of the shipment.

Forwarding department prepares export documents in accordance with the requirements of the customer and the Customs in receiving country. The documents are being handed over to the transport company and to the final customer or their representative. If the shipment will be delivered outside the EU, the transport company will make an export customs clearance according to

the export documents. If the shipment will be delivered to another EU country, information for an Intrastat declaration will be handed over to the Customs.

The shipments are being invoiced by the time of shipping if not otherwise agreed. In some countries, like Brazil, the invoice has to be checked and approved before the goods can be released. In export outside the EU, usually the coordinator gives a shipping advice to the receiving party by sending the invoice and the waybill (B/L, Air waybill, CMR or courier waybill). These documents are also archived according to Customs regulations. The export documents shall be archived either in electronic or paper form and shall be stored for 6 + 1 year (Hörkkö et al. 2010, 191).

Deliveries which are intended as temporary export, such as tools shipments for a machine maintenance and service projects, have different procedure. If the country where the shipment will be exported temporarily, has signed the Ata Carnet agreement, an Ata Carnet document is applied from the Chamber of Commerce with an online application. For applying the Ata Carnet, the forwarding coordinator needs a list of the items which are shipped. Usually a member of the maintenance project sends an excel file list with details of the tools, such as name, value and weight of the items. The Chamber of Commerce processes the Ata Carnet application normally in 2 - 3 days and informs when the Ata Carnet can be picked up. The Chamber of Commerce requires a deposit, which will be returned when the Ata Carnet is send back to the Chamber of Commerce after the temporary export has ended and the shipment is returned back to Finland.

When the Ata Carnet is ready, and the exported shipment also, the Ata Carnet is forwarded to a transport company with an authorization letter to use the Ata Carnet. If the tools will travel together with a project member, the Ata Carnet is handed to that person.

Documents and details of temporary exports are filed to a Lotus Notes database, where the Import department finds the information, when the shipment will be returned back to Finland.

Certificates of origin are needed by some countries or customers. For example, shipments to Saudi Arabia or Russia. The certificate can be applied online from a web tool of the Chamber of Commerce. The certificate can be printed out, when the Chamber of Commerce have electronically approved the certificate. The certificate can also be applied manually by sending printed document to the Chamber of Commerce for stamping and signing. However the online application is normally faster.

Forwarding: Sundsvall

The delivery process (see appendix 9) in forwarding starts when a packing plan is issued by the warehouse employees. The packing plan is normally created automatically when the order lines on the order are reported as picked in Baan. If order lines are missing the Packing plan is manually created in Baan by Sales or Project Manager. (Process Instruction Sundsvall)

When the goods are packed, net- and gross weight and dimensions are inserted in Baan. Then a shipping request is created in the Forwarder's queue. The seller is responsible for the proper delivery term indicated in the order and that it follows the company policy. If other conditions are applied, it should be approved by the local Head of Supply Chain. Depending on the preset values the order show up in a shipping coordinator’s queue with status "Packed". The request can be delegated to other shipping coordinator if needed.

The shipping coordinator handles the request and can give it different statuses in the shipping queue:

- **Packed**, when the goods are packed and ready for booking
- **Waiting**, when there is need for shipping instructions or info for special shipments
- **In Progress**, when working on the booking, until confirmation is received
- **Shipped**, once received the booking confirmation, case closed

The booking and invoicing process is initiated by selecting "Maintain Invoice" for a request in the queue. All transport bookings should, whenever possible, be booked via the VTG system, which is made in Baan. The delivery must be invoiced before the status is changed to “Shipped”. For urgent deliveries, the

request can also be sent to other transport companies than the nominated, but all freight quotes should be archived.

When the invoice is created, a shipping label is printed with shipping address and marks according to the order, which is put on the box. A manifest is printed that will be checked and signed by dispatcher and the driver. The manifest is archived by date order at least for one month. The shipping documents are archived in Shipping Sweden email and/or VTG for 10 years.

The Sundsvall unit had not handled any temporary tool shipments by the time of writing this thesis. In the future when there will be temporary tools shipments, the Ata Carnet is applied from the local Chamber of Commerce in Sweden. The Ata Carnet has to be returned back to the Chamber of Commerce when the tools are returned back to Sweden.

The shipping team in Sundsvall uses Certificate of origin mainly in shipments to Russia or when customer requires it. The unit has created own Valmet AB certificate of origin, which is used if the customer accepts it. The certificate saves time and money, when it does not have to be applied from the local Chamber of Commerce.

7.2 Observation and analysis

7.2.1 Tools and methods

Jyväskylä

Baan is the main tool used in the forwarding process. VTG is the main tool used for booking transportation and email is used to book transportation where VTG is not possible to use. Information is shared through email and telephone. Lotus Notes is used as a database for information and instructions. For example the country specific instructions can be found from Notes database. There has been efforts to direct information to the ERP system so that

the information is available for the right person at the right time. There has been improvement but it is still work in process.

The way to operate varies according to the receiving country and where the shipment is leaving. There are established practices for shipments which leave from own warehouse or from subcontractor's warehouse. Sometimes there are exceptional direct deliveries from subcontractor with whom standard practices are not established and the way to operate has to be adjusted accordingly.

The most important part of the process is what actually happens before the process. For forwarding process, it is crucial that the information which is in the system is correct. The selection of transport mode is dependent for example from the size of the shipment, but also from the date it is planned to be received. Also there are so called pipeline codes in use, which indicate if the shipment is in a hurry and has to be shipped without concerning the costs of it. If the data is incorrect in the system, this might cause extra costs, for example if a shipment is expedited with extra costs when actually it was not in a hurry or vice versa. Also incorrect information causes extra work when something has to be checked.

Sundsvall

The tools used in daily work are the same as in Jyväskylä. The used ERP system is Baan, VTG is used to book transport, email, internet, telephone and personal contact are tools for information sharing and retrieving.

Each forwarding coordinator has a list of countries to work with. The forwarder is responsible to work on the issues related to that country, for example: bookings, freight quotations and updating information to the client.

Common tools

Baan is an enterprise resource planning (ERP) system which is used at Valmet to coordinate for example item data, sales and purchase orders, order delivery and invoicing processes. All order shipping related information should

be found from Baan. Baan has gone through development processes and it is being fine-tuned to adapt changes needed.

A shipping queue (see figure 10) is a tool for shipping coordinators where orders appear when they are packed and the information is inserted in to the system. From the shipping queue the coordinator can see the size of the package, the warehouse or pick-up place it is located, the destination country and the receiving customer. Also the possible pipeline code for the order can be seen in the queue. This allows the forwarder to prioritize the processing of the urgent deliveries.

Figure 10. View of the shipping queue

Valmet has a transport booking system called Valmet Transportation Gateway (VTG), which is Valmet's own system and it is integrated together with Baan ERP system. The VTG system is also integrated with the biggest contract carrier's ERP systems which allows transport bookings to be made directly from Valmet's system to the service provider's system. Shipments can be also tracked through VTG system. The current state of VTG allows mainly bookings to courier or road transportation with selected partners, and recently one air transportation company was added to the selection. Nevertheless there is development process going on that other air and ocean transportations could be booked also through VTG.

VTG allows bookings to be made through "one Click" and the transport documents are stored in the system and can be retrieved later if necessary. With

VTG there is no need to send separate emails to the transportation company, since the booking goes via the system.

Email is also important tool for the forwarding process. It is used as a tool for information searching and sharing, booking shipments which cannot be booked via VTG, asking shipping instructions and advising receivers for arriving shipments.

Most important tool for coordinator is the ERP system and it has been tried to emphasize that all necessary information related to shipping orders should be in Baan, so that whoever is doing the booking, has the information available. There is a tool called “Forwarding Text”, where information concerning shipping can be inserted in Baan for Sales Order. However, there is still a lot of information which is shared through emails.

7.2.2 Measuring process

Jyväskylä

According to interviewed manager, there is no established measure for forwarding. The on time delivery is being measured but it is not a measure for forwarding only. The amount of shipments and their destination countries are being followed. Earlier there have been a practice to mark the date when shipping instructions have been received into Baan. However, this procedure only concerns shipments which are needing shipping instructions. With this procedure, it can be followed how long packages are waiting in the warehouse before they can be shipped.

Sundsvall

The process itself is not being measured in Sundsvall either. In Sundsvall the days sales outstanding (DSO) is being measured. This means how many days it takes between when the good is packed until it is invoiced. According to interviewed manager the DSO is quite short, 1-2 days. The shipments are being invoiced when they are packed.

7.2.3 Problems and bottlenecks

Jyväskylä

One bottleneck for the process is the use of delivery terms and the fact they are not used correctly. For example, Valmet is bearing the costs and decides the way of delivery, but still the receiver decides when the items are being shipped. Shipments were the buyer is responsible for deciding the used transportation are sometimes waiting for long time before the receiver decides the used delivery mode and the transportation company. This means that the package will stay on the forwarder's queue unprocessed and also takes space in the warehouse. Also if the receiver decides to use a less known transportation company and does not share the contact details, the finding of correct contact from the transportation company can take time.

Flow of information or lack of it can be a problem for the process. If something is promised, the information should be shared to all people related. There are people with different level of skills related to usage of the ERP system. Sometimes it causes delays or unclear situations if the user is not able to insert correct information or retrieve it.

Internal customers are in some cases more demanding than external customers. The Customs in some countries are challenging and demand specific documentation. The origin declaration process does not always work and the order will be stuck in the forwarding department since the forwarding department is in charge of obtaining the supplier's long term declaration of origin of the item.

If there are deliveries, which does not go according to procedures, the process is compromised. For example if there is a rush order, other work has to be put aside and the forces have to be focused on one delivery only. Also if the order is leaving from a supplier, with whom there are no established procedures, it requires efforts from different parties to cooperate together.

According to interviewed operating person the workload is high and the personnel has to work with strain and pressure almost all the time. The resources

are not correct for the amount of work. There is no time to find out about unclear issues, develop some existing challenges or familiarize oneself with new issues. When there are things to develop, it is hard to find time to actually think about the issue and find solutions for it. According to interviewed manager the feeling of rush, pressure and uncontrollability are disturbing the performance of the personnel and the amount of resources is not ideal.

Unnecessary emails where information could be retrieved from Baan. For example sales people inform contact in another unit that an item has been packed. Also the forwarders are receiving emails which refer to orders which are not packed yet. Since the forwarding department is mainly responsible to booking the transportation, the questions when the item is ready should not be targeted to forwarding but rather to logistics or purchasing unit who have the information when the goods are being received in the warehouse.

If the ERP system is having a failure, the process stops. If VTG is having a technical issue, it only affects to those deliveries which are booked through Baan and VTG. The system tools are important part of the process and if there exist problems, they affect immediately. Technical problems are hard to predict and if they do exist, the only solution is to wait that the IT department can solve the issues.

The main warehouse was recently being transferred to a new location with new service provider. Establishing common practices have taken time. The mistakes done in the warehouse are causing extra work to forwarding department. For example packages have been cross labelled and they have been sent to wrong destinations because of that.

Sundsvall

According to interviewed manager, a factor that disturbs the process is that there is no united Sweden shipping team. In Sweden, in different locations there are shipping coordinators working from Sundsvall, Hagfors, Karlstad, and Gothenburg. All of the locations have their own procedures and ways to work.

One of the bottlenecks for Sweden are the delivery modes which are not integrated in VTG. The booking of transportation has to be done manually, usually by sending email or phoning to service provider. If the booking is done manually, the transportation documents cannot be found from the systems but they have to be printed out and archived into folders.

All of the interviewed agreed that the amount of work and resources are not in balance and it is problem for the process. According to interviewed manager increasing orders put strain on people. Interviewed operating personnel felt that there is no time to take a pause and learn new things properly.

Lack of information, such as lack of incoterm, lack of delivery date in case of urgent shipment, lack of forwarder and customer's account number in case of courier shipment with freight paid by the customer. These are causing delays since the information has to be retrieved from the sales representative or from other source. Also receiving questions which are not related to forwarding, but rather sales or purchasing, are causing extra work for forwarding people. On the other hand forwarding have to consult sales.

Table 1. Problems and bottlenecks

Jyväskylä	**Sundsvall**
Use of delivery and payment terms (Sales)	Delivery modes which are not integrated in VTG
No time to find about unclear issues or familiarize oneself with new issues	No time to take a pause and learn new things properly
Unnecessary emails	Lack of information causes delays
Work load	Resource challenges
Rush and non-procedure deliveries	Receiving questions not related to forwarding causes extra work
Mistakes done in the warehouse	

Summary of problems and bottlenecks in Jyväskylä and Sundsvall unit can be seen in table 1.

7.2.4 Process improvements

Jyväskylä

There has been lately process improvements made for a certain area or country by going through the process with the person in charge of the country and the unit in the receiving country. For example some countries are separated from the forwarder's original shipping queue and they are having own shipping queue. Also certain dates are established when deliveries are being processed. By doing consignment shipments it makes the process clearer as by certain dates, all of the ready packages to a certain destination will be shipped together.

Also the practice of having team meetings has been returned to agenda. The team of forwarding and logistics is meeting regularly, usually once a month, and information is being shared among the teams. There has been initiatives to improve the flow of information and for example there was a meeting held with the Finnish sales team. The purpose was to share information in order to improve the overall process.

The systems are being constantly updated, for example new releases to Baan and VTG. There is an ongoing development on the process to have an electronic signatures on the invoices automatically printed from Baan. This new feature would diminish time used for signing and stamping original invoices required by certain countries. After the new feature is completed, the original invoices can be send via email to the transport company and the receiving unit. The amount of printed paper invoices will decrease as well as the need of mailing paper versions to different parties.

Sundsvall

According to interviewed manager the biggest improved in the forwarding process is the availability of VTG which can be used in domestic transport, road Europe and courier shipments. Also the establishment of the forwarding

queue has been successful improvement. Electronic signature has been taken into use. There is still work to do with the design and it is still work in progress. The signature comes from Baan, but it has to be enlarged manually in PDF. Valmet AB has been granted the title of known dispatcher, this means that the goods do not have to be scanned at the airport.

There has been improvements with the flow of information. The amount of emails from the sales department has been decreased and nowadays it mainly concerns freight quotations. Also the sales department has been requested to follow the procedures and reminders are being send. The superiors are involved also to follow that procedures are being followed. The other departments are being taught how they should commit to the procedure and how they should also understand their impact on forwarding work.

Summary of improvements done in the processes of Jyväskylä and Sundsvall unit can be seen in the table 2.

Table 2. Latest improvements in the process

Jyväskylä	**Sundsvall**
Dispatch dates and collect shipments	Establishment of the forwarding queue
Team meetings - forwarding and logistics is meeting regularly, usually once a month	The amount of emails from the sales department has been decreased - mainly concerns freight quotations
New releases to Baan and VTG	New releases to Baan and VTG
Electronic signature (not yet available)	Electronic signature
Process development with own units	The sales department has been requested to follow the procedures
	The availability of VTG

7.2.5 Success factors

Jyväskylä

The process has been developed over the years and according to the interviewed manager, it is close to being as fast and efficient as it can be what comes to systems used. The factors that enables the process being efficient are the knowledge that personnel have and the efficient systems, Baan and VTG.

The process is efficient when the right information is available to the right person in the process. There should be initiatives to question the process and think of ways to improve if necessary. Unfortunately there is not always time to do it. Everybody should have an attitude to direct the information to the right place even though the matter does not concern the person who have received it. Success factors of the process are the changes made and informing the people involved with it. The flow of information between different parties and correct people enables the efficiency of the process. When unnecessary information is being minimized, for example minimizing the amount of emails and instead of inserting the information to Baan, the process can be improved.

At the moment there is differences how people do different steps of the process. If the steps would be harmonized between team members, it would make the process clearer.

Sundsvall

Highly motivated staff was seen one of the success factors in Sundsvall's process according to interviewed manager. VTG and Baan were seen as efficient tools which makes the work simpler and faster. Good communication and sharing the right information with right people were seen as success factors for efficient process.

Summary of the success factors in the processes can be seen in the table 3.

Table 3. Success factors

Jyväskylä	**Sundsvall**
Knowledge that personnel have	Highly motivated staff
The efficient systems - Baan and VTG	The efficient systems - VTG and Baan
Flow of information between different parties and correct people	Good communication and sharing the right information with right people

7.3 Conclusions

Similarities:
Both forwarding processes are in their main parts similar. Both are using VTG for bookings where applicable. Both units have divided countries among shipping coordinators and each country have their specific instructions filed in database for user access.

Both units have problems with the flow of information and there is hopes that the information would be shared through the ERP system rather than email. Also it has been suggested that the procedures are being followed which would help the overall process of the delivery chain. The lack of information is causing delays and is an obstacle for the process to operate smoothly.

Both units are facing challenges in resources and workload which cause stress and strain to the personnel. The lack of resources also cause limitations to the personnel not having time to learn new things.

Differences:
In Sundsvall orders are being invoiced by the time they appear in packed status in shipping queue. In Jyväskylä the orders are being invoiced by the time they are shipped or depending on the receiving country and their Customs procedures the order is being invoiced by the time shipping instructions are

being asked. The process is not being measured in Jyväskylä unit. In Sundsvall the time between the orders is packed until it is invoiced is being measured.

Table 4. Summary of similarities and differences

Similarities	**Jyväskylä**	**Sundsvall**
Tools	Baan, VTG, email, databases,	Baan, VTG, email
VTG usage	When possible	When possible
Shipping queue	- For daily spares - Mill, roll and spare part package shipments have different procedure	All shipping needs are directed to the shipping queue
Country instructions	Updated by country representative	Updated by country representative
Differences	**Jyväskylä**	**Sundsvall**
Invoicing	Orders invoiced when they are shipped	Invoiced when they appear on forwarder's queue
Measuring	No measurement for forwarding	The days sales outstanding
Certificate of origin	Validated by the Chamber of Commerce	Valmet AB's certificate
Archiving documents	Baan/VTG or physical archives. Saved for 6 + 1 years	Shipping Sweden email and/or VTG. Saved for 10 years

Sundsvall unit uses Certificate of origin mainly in shipments to Russia or if it is required by the customer. If the customer accepts, an origin certificate developed by Valmet AB is used as a Certificate of origin. Jyväskylä unit uses Certificates of Origin which are validated by the Chamber of Commerce.

Jyväskylä unit uses physical archives for shipping documents which cannot be found from Baan or VTG. Such as waybills for manually booked shipments. The documents are archived for 6 + 1 years. Sundsvall unit does not have physical archive for export shipping documents. The documents are archived either in Shipping Sweden email or VTG. Sundsvall unit saves the documents for 10 years.

7.4 Improvement possibilities

Areas where improvements can be made are the problems and bottlenecks which are reasons why the process does not work as efficiently as it could. One of the main bottlenecks for the process seems to be the fact that established procedures are not being followed in the processes before forwarding. The lack of information on the correct place is also an obstacle.

Both units are facing challenges in amount of work resources. This also reflects to the improvement of the total performance. If the personnel does not have time to consider the bottlenecks and weak points of the process, development cannot be made to adjust the shortfalls of the process.

In Sundsvall unit the orders are being invoiced by the time they appear on the shipping queue and the time between an order is packed until it is invoiced is being measured. This could be something that Jyväskylä unit could consider. However, it should be taken into consideration, does this procedure help the process or not. For Jyväskylä unit, the deliveries which are waiting shipping instructions, are causing backlog of undelivered orders. Also these orders are not being invoiced. In Sundsvall unit the undelivered orders are being invoiced nevertheless they have received shipping instructions or not. This issue is something that further research could be done. The questions are whether the shipping instructions are being received faster and other question is, if the procedure is causing more work to invoicing department when invoiced orders are not being paid but rather are overdue.

Other areas were are improvement possibilities can be realized are establishing dispatch dates and collecting shipments. In Jyväskylä unit there are already dates when shipments to certain countries and customers are being collected and shipped together. However there could be more possibilities to have a look on. Process development have been made with own units and this type of development should be continued further. Team meetings have been useful for updating information between different departments. It could be also worth to consider whether team meetings between forwarding and sales department should be arranged. Electronic signature had been taken into use in Sundsvall unit. However it was still work in progress as the design had to be adjusted manually even though it is printed automatically from Baan. When the development process is completed and the signature can be taken into use in Jyväskylä as well, it will shorten the time of processing invoices to certain countries.

In Sundsvall unit, the amount of received emails from sales have been decreased and the sales department have been requested to follow the procedures. Also in Jyväskylä unit there has been some improvement, but from time to time, the issue has to be reminded to the sales department.

8 Forwarding process improvement suggestion

The main research question of the thesis was “How to harmonize the forwarding processes in two units?” To answer that question the following questions were formed:

- What are the Forwarding practices in Valmet Services in Jyväskylä?
- What are the Forwarding practices in Valmet Services in Sundsvall?
- How do these two differ in practice?
- How to build up common forwarding practices?

The purpose of the research was to analyze the forwarding processes in Jyväskylä and Sundsvall units. The research revealed that the forwarding procedures are quite similar in both processes in terms of tools and methods. However in practice at the moment there is differences how people do different steps of the process. If these steps would be harmonized between team members, it would make the process clearer.

The theory part of this thesis was including definitions from International Business, Forwarding and Benchmarking. The areas was selected to support and understand the findings of the research. Export forwarding process is highly connected to international business and the personnel working in exports have to know the different documents used in exporting goods (Chapter 3.4). As it was studied in the research, the forwarding processes include issuing an invoice and booking the transportation according to packing plan. Selection of the transportation mode is depending on the size of the package and destination country, and also the promised delivery time.

The used method for analyzing the two processes was benchmarking. The questions asked in interviews were formed in order to find the process definition, problems and bottlenecks, success factors and improvement possibilities. The purpose of benchmarking is to identify, understand and implement the best methods and practices. The aim of benchmarking is to develop the or-

ganization's performance. In this research it was discovered that the forwarding process has been developed over the years and it is close to be as efficient as it can be. However there remains work to do with the flow of information and training people to use the ERP system as efficiently as possible.

Improvement

The topic of information flow is something to consider. There is a valid reason why the information have to be found from the ERP system rather than emails. And the reason is the availability of the information to everybody in process to be used. If the information is stored in emails, there is a risk that the information will not reach the correct person or something is done wrong if the information is in the wrong place. There can be situations when a person is away for unexpected reasons or on a holiday. If the information is only in the person's email, a substitute cannot access the information.

Common WTO (way to operate)

The processes seems to be quite similar already. This is a good ground for possible future common way to operate. However, this research did not reveal the differences deep enough how things are done in practice.

As a recommendation, there should be common database where information is shared. Both units are familiar with country specific instructions which are one of the main information sources how to handle shipments to different countries. If the two units will cooperate in the future, these instructions should be available in English and include at least the following information:

- Both companies' account numbers for transport companies
- Contact details to parties (customer or internal unit) handling arriving orders in the destination country
- Country nominated carriers and recommendations of transport mode by weight of the shipment

Since Jyväskylä unit is handling shipments from different locations, the details of warehouses and supplier's warehouses need to be available also to Sundsvall unit. Such as the pick-up times, code needed when generating the invoice in Baan, printer options for printing the waybill from Baan to the warehouse, contact details for personnel in the warehouse or supplier. Jyväskylä unit need also the same information for the warehouse in Sundsvall.

Jyväskylä unit is using physical archive for archiving shipping documents which cannot be found from Baan. Suggestion for this could be that the shipping documents are archived in group email where everybody can access without restriction where the person is located. Other option is M-files, which is a data storing system.

Documents, such as Certificate of Origin. If customer agrees and accepts, Jyväskylä unit could start using the Origin certificate developed by Sundsvall unit. In case customer does not agree, the Certificate of Origin is then applied through Chamber of Commerce. It should be figured out, whether the team in Sundsvall is able to apply Certificate from Finnish Chamber of Commerce or Ata Carnet which is applied from a webpage of the Chamber of Commerce.

If the two teams are united and start cooperation, it is recommended that the teams have regular Lync meetings to share information and develop the processes.

Recommended practices for both units could be similar to the following:

- Share of information, when a process improvement is discovered, it is communicated between team members
- Process development with own units, if some procedure is taking lot of resources, the process should be re-evaluated and adjusted
- Communication, if information does not belong to the person who receives it, direct the information to correct place
- Following procedures and agreed nominations

9 Conclusions

The research revealed that the studied processes are using the same systems, Baan, shipping queue and VTG. The tools used in the process were considered a factor that make the process efficient. Improvement possibilities in the process were targeting the information to the ERP system where it is available to the user.

The defect of this research was that the planned visit to Sundsvall unit was not realized in practice. The ways to operate would have been better evaluated if the Sundsvall process could have been studied in its own environment. The research was done in short time period. The answers from Sundsvall unit operating personnel were received later than hoped and the time to evaluate the answers was shorter than expected. The answer rate for operating personnel was 1/3 for Jyväskylä unit. The possible reason why answers were not received could be the given answer time.

Things to consider

Sweden and Finland have different time zone. This should be remembered when bookings are done. All the information should be in English but it should be considered whether all the people in the process are capable of working in English, for example the warehouse employees. Country instructions are updated by the person in charge of the country, still it might be a questionable if the instructions are up to date all the time.

Further research

Further research could be done on development of cooperation and information sharing with sales department. Also there was raised a question whether the forwarding process should be measured or not. And if it should be measured, what the way of measuring would be.

10 Discussion

The process of writing a thesis is a long journey where student is getting familiar to the selected phenomena in theory and also in practice. The author of this thesis has been in lucky position to work closely in practice to the topics covered in theory. However it has been challenging to combine full-time working and thesis writing process. Keeping the schedule was not easy, the work load and hustle witch is typical in the field brought their own challenges to the process.

The author considered the reference material and tried to use as trustworthy sources as possible. The personnel interviewed in this thesis were professionals in their own field. It can be stated that the interview results were reliable. This study was a case study and it was done in its own nature and environment. If the study was done again in the same environment, probably the results would be similar.

Forwarding department is the last link of the delivery chain before orders are released to the customer. Forwarding is also a critical part of the supply chain and sometimes it is the bottleneck of the total supply chain. If the information inserted to the system is correct from the beginning of the supply chain, the process is smooth and efficient. If vital information is missing, the process stops latest in the forwarding department and it is delayed.

References

Alpha International Trade. Incoterms 2010. Page on Alpha Bank's website. Accessed on 18 January 2015. Retrieved from http://www.alphainternational-trade.com/en/methods/incoterms-2010

Authorised Economic Operator (AEO). 2015. Page on European Commission's website. Accessed on 12 April 2015. Retrieved from http://ec.europa.eu/taxation_customs/customs/policy_issues/customs_security/aeo/index_en.htm

von Bell, A., Inkiläinen, A., Ritvanen, V. & Santala, J. 2011. Logistiikan ja toimitusketjun hallinnan perusteet. Saarijärvi: Saarijärven Offset Oy

Camp, R.C. 1995. Business Process Benchmarking – Finding and Implementing Best Practises. United States of America: ASQC Quality Press

Camp, R.C. *Benchmarking – The Search for Industry Best Practices That Lead to Superior Performance.* In Robeson, J.F. and Copacino W.C. (Eds). 1994. The logistics handbook. United States of America: The Free Press. Accessed on 15 March 2015. Retrieved from https://books.google.fi/books?id=TPJrAp1fejMC&printsec=frontcover&hl=fi&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

EKAER (EN) Electronic Trade and Transport Control System (Hungary). 2015. Page on EKAER.hu's website. Accessed on 16 March 2015. Retrieved from http://ekaer.hu/en/

EN – Information. Page on National Tax and Customs Administration's website. Accessed on 16 March 2015. Retrieved from https://ekaer.nav.gov.hu/articles/view/information

European Commission – Press release. 2012. Customs: EU and USA agree to recognise each other's "trusted traders". Accessed on 12 April 2015. Retrieved from http://www.tulli.fi/fi/yrityksille/asiakkaana_tullissa/AEO/IP-12-449_EN_EU_USA_04052012.pdf

Hirsjärvi, S., Remes, P. and Sajavaara, P. 2010. Tutki ja kirjoita. Helsinki: Tammi

Hörkkö, H., Koskinen, H., Laitinen, P., Mattsson, M., Ollikainen, J., Reinikainen, A. & Werdermann, R. 2010. Huolinta-alan käsikirja. Suomen Huolintaliikkeiden Liitto Ry. Rev.ed. Vantaa: Hansaprint Oy

INTRASTAT in Finland 2015. Compilation of statistics on trade between EU countries. 2015. Finnish Customs. Accessed on 13 March 2015. Retrieved from http://www.tulli.fi/en/finnish_customs/statistics/intrastat/liitteet15/01_EN2015.pdf

Jimenez, G.2012. ICC Guide to Export/Import. Global Standards for International Trade. 4th Ed. Paris: ICC Services

Kananen, J. 2009. Vientikaupan maksuliikenne ja rahoitus. Tampere: Tampereen Yliopistopaino Oy – Juvenes Print

Key figures. 2015. Page on Valmet Corporation's website. Accessed on 23 February 2015. Retrieved from http://www.valmet.com/en/about_us.nsf/WebWID/WTB-131121-2257B-420E5?OpenDocument&mid=0335AFE1027474CDC2257C2E004B05B2

Laamanen, K. 2005. Johda liiketoimintaa prosessien verkkona – ideasta käytäntöön. 6th ed. Keuruu: Otavan Kirjapaino Oy

Lecklin, O. 2006. Laatu yrityksen menestystekijänä. 5th ed. Hämeenlinna: Karisto Oy

Melin, K. 2011. Ulkomaankaupan menettelyt – Vienti ja tuonti. Tammertekniikka / AMK-Kustannus OY

Mitä on Vienti? 2015. Page on Finnish Customs' website. Accessed on 12 April 2015. Retrieved from http://www.tulli.fi/fi/yrityksille/vienti/index.jsp

NSAB 2000. Page on Finnish Freight Forwarders' Association. Accessed on 22 March 2015. Retrieved from http://www.huolintaliitto.fi/huolintaliikkeidenliitto/en/general_conditions/index.php

Pasanen, A. 2005. Kansainvälisen kaupan käsikirja. Helsinki: Multikustannus Oy

Services business line. 2015. Page on Valmet Corporation's website. Accessed on 23 February 2015. Retrieved from http://www.valmet.com/en/about_us.nsf/WebWID/WTB-131121-2257B-66887?OpenDocument&mid=5771880C944D3E8EC2257C2E004B0B6D

Suomen tulli on palvelu- ja lainvalvontaorganisaatio. 2015. Page on Finnish Customs' website. Accessed on 12 April 2015. Retrieved from http://www.tulli.fi/fi/suomen_tulli/tulli_tutuksi/tehtavat/index.jsp

Tuominen, K. 1993. Benchmarking, Prosessiopas – Opi ja kehitä kilpailijoita nopeammin. Tampere: Tammer-Paino Oy

Our Businesses. 2015. Page on Valmet Corporation's website. Accessed on 23 February 2015. Retrieved from http://www.valmet.com/en/about_us.nsf/WebWID/WTB-131118-2257B-F5F98?OpenDocument&mid=9C05FBD6DEF1FE18C2257C2E004AFE78

Values. 2015. Page on Valmet Corporation's website. Accessed on 23 February 2015. Retrieved from http://www.valmet.com/en/about_us.nsf/WebWID/WTB-140828-2257B-591AB?OpenDocument&mid=C76C8A7967A13913C2257C2E004A0A4F

Appendices

Appendix 1. Commercial invoice (Sample)

INVOICE No 123456789 Page 1 / 1

April x, 2015

Export Invoice Ver 1.281

Contact person	Our reference	Customer number
SALESPERSON	12345	123

Invoice Address	VAT	Customer	VAT
Customer x Address 1 CITY COUNTRY	12.345.220-4	Customer x Address 1 CITY COUNTRY	12.345.220-4

Delivery address	VAT
Customer x Address 1 CITY COUNTRY	

Forwarder
UPS-SCS
Way of delivery
By air freight
Terms of delivery
DAP
Incoterms 2010

Your reference
ABC

Other terms
Orgalime S 2012

Terms of payment
Net 45 days from invoice date

Dispatch Country
Finland

Destination Country
XX

Due Date
May 31, 2015

Overdue interest %
8.50

Shipping Date
April 16, 2015

Package Type/Marks and Numbers/Note	Dimensions(cm)	Gross Weight(kg)	Net Weight(kg)	Volume(m3)
Pallet, wooden / ABC UPS-SCS Air Freight Number of Packages: 1	360x50x35	122	90	0.630

Position and item		Quantity and unit		Currency	Unit price	Line total
1	ITEM O-RING Commodity code: 84399900 Country of origin:	1	PCE	EUR	1,00	1,00
	Net			EUR		1,00
	VAT		0.00 %	EUR		1,00
	Total			EUR		1,00

Please state with your payment: 123456789

Export

The exporter of the products covered by this document
(Customs authorization No. FI/XXX/XXX)
declares that, except where otherwise clearly indicated,
these products are of EU preferential origin.

xx.xx.2015, JYVÄSKYLÄ
Company, Inc., Services

VAT ID FI1

COMPANY, Inc.
Services
PO Box
Address
40101 JYVÄSKYLÄ
FINLAND

Phone +358 (0)1000 20000
Telefax +358 1234 56789
sales@company.com

Bank: Bank Finland Plc
Account No: 12345-6789
SWIFT/BIC: FIHH
IBAN: FI123456789

Business ID FI12345

Appendix 2. Proforma invoice (Sample)

PROFORMA INVOICE No 123 Page 1 / 1
April x, 2015

Export Invoice Ver. 1.281

Contact person	Our reference	Customer number
SALESPERSON	12345	123

Invoice Address	VAT	12.345.220-4	Customer	VAT	12.345.220-4
Customer x Address 1 CITY COUNTRY			Customer x Address 1 CITY COUNTRY		

Delivery address	VAT	Forwarder / Way of delivery / Terms of delivery
Customer x Address 1 CITY COUNTRY		UPS-SCS By air freight DAP Incoterms 2010
Your reference ABC		**Other terms** Orgalime S 2012
Terms of payment		**Dispatch Country**: Finland; **Destination Country**: XX
Due Date	**Overdue interest %**	**Shipping Date** April 16, 2015

Package Type/Marks and Numbers/Note	Dimensions(cm)	Gross Weight(kg)	Net Weight(kg)	Volume(m3)
Pallet, wooden / ABC	360x50x35	122	90	0.630
UPS-SCS Air Freight Number of Packages: 1				

Position and item	Quantity and unit	Currency	Unit price	Line total
1 ITEM O-RING Commodity code: 84399900 Country of origin:	1 PCE	EUR	1,00	1,00
Total Value		EUR		1,00
Value for Customs Purposes Only		EUR		1,00

VAT 0% supply outside EU

The exporter of the products covered by this document
(Customs authorization No. FI/XXX/XXX)
declares that, except where otherwise clearly indicated,
these products are of EU preferential origin.

xx.xx.2015, JYVÄSKYLÄ
Company, Inc., Services

VAT ID FI1

COMPANY, Inc.
Services
PO Box
Address
40101 JYVÄSKYLÄ
FINLAND

Phone +358 (0)1000 20000
Telefax +358 1234 56789
sales@company.com

Bank: Bank Finland Plc
Account No: 12345-6789
SWIFT/BIC: FIHH
IBAN: FI123456789

Business ID FI12345

Appendix 3. Packing list (Sample)

PACKING LIST **Page:** 1 / 1

Packing Plan: 123456 **Package Number:** 1	**LBU Project:**	**Packer:** Packer 1 **Packing Date:** Apr x, 2015 **Company:** 636
Dimensions (cm): 360 x 50 x 35 **Volume (m3):** 0,630 **Container:**	**Net Weight (kg):** 90 **Gross Weight (kg):** 122 **Type of Package:** Pallet, wooden **Storage Type:** IU: Inside unheated	**Sales Order No:** 123456 **Customer PO No:** ABC **Shipping Area:** Warehouse
CUSTOMER/delivery address: Customer x Address 1 CITY COUNTRY	**Marks and Numbers:** 998 ABC	
Name of the Package: **Notes:** UPS-SCS Air Freight		
Terms of Delivery: DAP Incoterms 2010		

Parent Item		Parent Item Description		Parent Drawing		
Item	**/ Pos**	**Item Description**	**Drawing**	**Quantity**	**Unit**	**PCS-Projec**
ITEM	/ 1	O-RING		1	PCE	

Consignor: COMPANY, Inc. Services PO Box Address 40101 JYVÄSKYLÄ FINLAND	Phone	+358 (0)1000 20000	Business ID	FI12345
	Telefax	+358 1234 56789	VAT number	VAT ID FI

Appendix 4. Certificate of Origin (Sample)

CERTIFICATE OF ORIGIN

(2) SHIPPER/EXPORTER (COMPLETE NAME AND ADDRESS)	(5) BOOKING NO.	(5A) BILL OF LADING NO.
	(6) EXPORT REFERENCES	
(3) CONSIGNEE (COMPLETE NAME AND ADDRESS)	(7) FORWARDING AGENT/ FMC NO.	
	(8) POINT AND COUNTRY OF ORIGIN	
(4) NOTIFY PARTY (COMPLETE NAME AND ADDRESS)	(9) ALSO NOTIFY - ROUTING INSTRUCTIONS	
(12) INITIAL CARRIAGE BY (MODE)* / (13) PLACE OF INITIAL RECEIPT	(9A) FINAL DESTINATION (OF THE GOODS NOT THE SHIP)	
(14) VESSEL VOY FLAG / (15) PORT OF LOADING	(10) LOADING TERMINAL	(10A) ORIGINAL(S) TO BE RELEASED AT
(16) PORT OF DISCHARGE / (17) PLACE OF DELIVERY BY ON-CARRIER	(11) TYPE OF MOVE (IF MIXED, USE BLOCK 20 AS APPROPRIATE)	

MKS. & NOS./CONT. NOS. (18)	NO. OF PKGS. (19)	DESCRIPTION OF PACKAGES AND GOODS in Schedule B detail (20)	GROSS WEIGHT (21)	MEASUREMENT (22)

SAMPLE

The undersigned (Owner or Agent), does hereby declare for the above named shipper, the goods as described above were shipped on the above date and consigned as indicated and are products of the United States of America Dated at on the day of 20 00

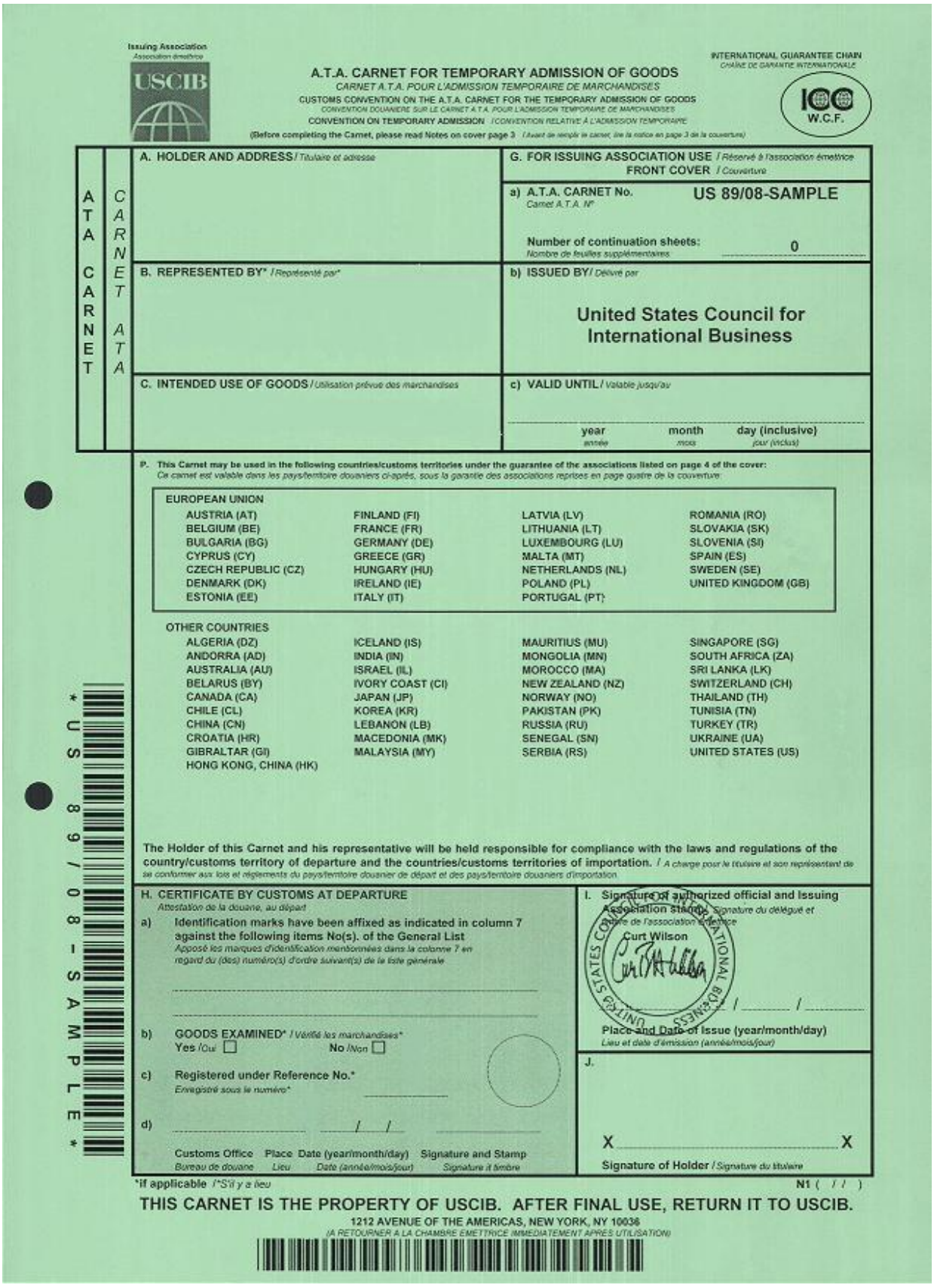
Sworn to before me this day of 20 00

SIGNATURE OF OWNER OR AGENT

The Chamber of Commerce: , a recognized Chamber of Commerce under the laws of the state of , has examined the manufacturer's invoice or shipper's affidavit concerning the origin of the merchandise, and, according to the best of its knowledge and belief, finds that the products named originated in the United States of America.

Secretary .....

Appendix 5. ATA Carnet (Sample)



Issuing Association / Association émettrice
USCIB

A.T.A. CARNET FOR TEMPORARY ADMISSION OF GOODS
CARNET A.T.A. POUR L'ADMISSION TEMPORAIRE DE MARCHANDISES
CUSTOMS CONVENTION ON THE A.T.A. CARNET FOR THE TEMPORARY ADMISSION OF GOODS
CONVENTION DOUANIÈRE SUR LE CARNET A.T.A. POUR L'ADMISSION TEMPORAIRE DE MARCHANDISES
CONVENTION ON TEMPORARY ADMISSION / CONVENTION RELATIVE À L'ADMISSION TEMPORAIRE
(Before completing the Carnet, please read Notes on cover page 3 / Avant de remplir le carnet, lire la notice en page 3 de la couverture)

INTERNATIONAL GUARANTEE CHAIN / CHAÎNE DE GARANTIE INTERNATIONALE
W.C.F.

ATA CARNET / CARNET ATA

A. HOLDER AND ADDRESS / Titulaire et adresse

G. FOR ISSUING ASSOCIATION USE / Réservé à l'association émettrice
FRONT COVER / Couverture

a) A.T.A. CARNET No. / Carnet A.T.A. N° US 89/08-SAMPLE

Number of continuation sheets: / Nombre de feuilles supplémentaires 0

B. REPRESENTED BY* / Représenté par*

b) ISSUED BY / Délivré par
United States Council for International Business

C. INTENDED USE OF GOODS / Utilisation prévue des marchandises

c) VALID UNTIL / Valable jusqu'au
year / année — month / mois — day (inclusive) / jour (inclus)

P. This Carnet may be used in the following countries/customs territories under the guarantee of the associations listed on page 4 of the cover:
Ce carnet est valable dans les pays/territoire douaniers ci-après, sous la garantie des associations reprises en page quatre de la couverture

EUROPEAN UNION

AUSTRIA (AT)	FINLAND (FI)	LATVIA (LV)	ROMANIA (RO)
BELGIUM (BE)	FRANCE (FR)	LITHUANIA (LT)	SLOVAKIA (SK)
BULGARIA (BG)	GERMANY (DE)	LUXEMBOURG (LU)	SLOVENIA (SI)
CYPRUS (CY)	GREECE (GR)	MALTA (MT)	SPAIN (ES)
CZECH REPUBLIC (CZ)	HUNGARY (HU)	NETHERLANDS (NL)	SWEDEN (SE)
DENMARK (DK)	IRELAND (IE)	POLAND (PL)	UNITED KINGDOM (GB)
ESTONIA (EE)	ITALY (IT)	PORTUGAL (PT)	

OTHER COUNTRIES

ALGERIA (DZ)	ICELAND (IS)	MAURITIUS (MU)	SINGAPORE (SG)
ANDORRA (AD)	INDIA (IN)	MONGOLIA (MN)	SOUTH AFRICA (ZA)
AUSTRALIA (AU)	ISRAEL (IL)	MOROCCO (MA)	SRI LANKA (LK)
BELARUS (BY)	IVORY COAST (CI)	NEW ZEALAND (NZ)	SWITZERLAND (CH)
CANADA (CA)	JAPAN (JP)	NORWAY (NO)	THAILAND (TH)
CHILE (CL)	KOREA (KR)	PAKISTAN (PK)	TUNISIA (TN)
CHINA (CN)	LEBANON (LB)	RUSSIA (RU)	TURKEY (TR)
CROATIA (HR)	MACEDONIA (MK)	SENEGAL (SN)	UKRAINE (UA)
GIBRALTAR (GI)	MALAYSIA (MY)	SERBIA (RS)	UNITED STATES (US)
HONG KONG, CHINA (HK)			

The Holder of this Carnet and his representative will be held responsible for compliance with the laws and regulations of the country/customs territory of departure and the countries/customs territories of importation. / A charge pour le titulaire et son représentant de se conformer aux lois et règlements du pays/territoire douanier de départ et des pays/territoire douaniers d'importation

H. CERTIFICATE BY CUSTOMS AT DEPARTURE
Attestation de la douane, au départ

a) Identification marks have been affixed as indicated in column 7 against the following items No(s). of the General List
Apposé les marques d'identification mentionnées dans la colonne 7 en regard du (des) numéro(s) d'ordre suivant(s) de la liste générale

b) GOODS EXAMINED* / Vérifié les marchandises*
Yes / Oui ☐ No / Non ☐

c) Registered under Reference No.* / Enregistré sous le numéro*

d) Customs Office / Bureau de douane — Place / Lieu — Date (year/month/day) / Date (année/mois/jour) — Signature and Stamp / Signature et timbre

I. Signature of authorized official and Issuing Association stamp / Signature du délégué et timbre de l'association émettrice
Curt Wilson
UNITED STATES COUNCIL FOR INTERNATIONAL BUSINESS
Place and Date of Issue (year/month/day) / Lieu et date d'émission (année/mois/jour)

J.
X ____ X
Signature of Holder / Signature du titulaire

*if applicable / *S'il y a lieu

N1 (/ /)

THIS CARNET IS THE PROPERTY OF USCIB. AFTER FINAL USE, RETURN IT TO USCIB.
1212 AVENUE OF THE AMERICAS, NEW YORK, NY 10036
(A RETOURNER A LA CHAMBRE EMETTRICE IMMEDIATEMENT APRES UTILISATION)

US 89/08-SAWDLE

Appendix 6. Interview questions, process in Jyväskylä and Sundsvall

Background:

What is your title in the company?

Years of experience in the company?

How many people work in your team?

1. **Defining process:**

How does the forwarding process go?

What are the tasks in process steps?

What kind of technology and methods are used?

2. **Measuring process:**

Do you measure the process?

How do you measure it? How often? By whom?

What is the performance level of the process? (If measured)

3. **Problems in the process:**

What are the factors that disturb the process?

What are the problems and bottlenecks of the process?

4. **Process improvements:**

Has there been actions to improve the process lately?

How much and what kind of trainings are being given in different steps of the process?

5. **Success factors of the process:**

Which factors improve the process performance?

What makes this process efficient?

Which would be the best practices and ways to operate?

Appendix 7. Questions for operational employees: Sundsvall and Jyväskylä

What is your title in the company?
Years of experience in the company?
How many people work in your team?

Defining process:

1. How does the forwarding process go?
2. How are tasks divided among team members?

Methods:

3. How is the forwarding process according to your daily work?
4. Which tools and methods you use in your work?
5. Which tools and methods are most efficient?
6. What makes your forwarding process efficient?

Problems:

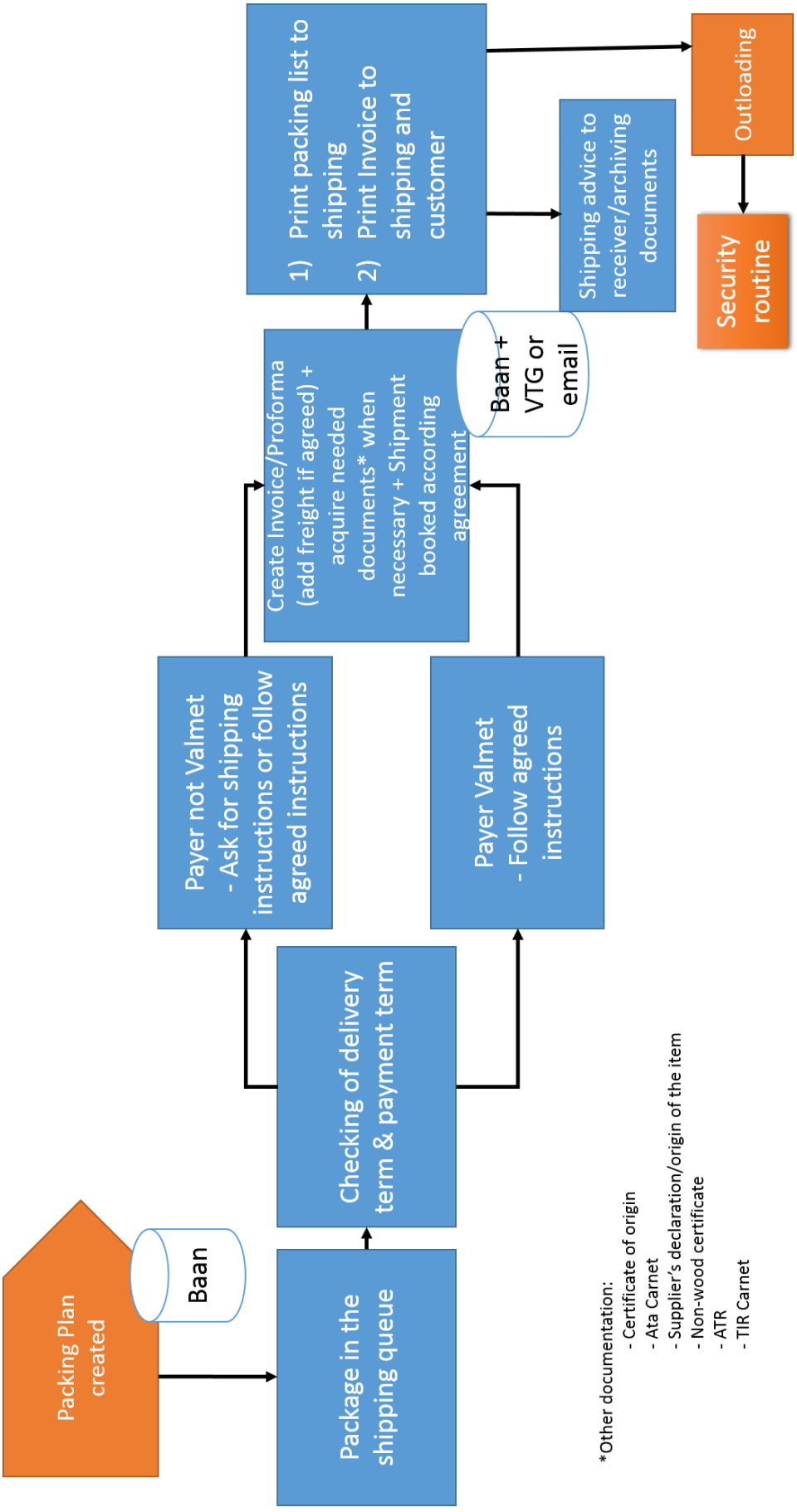
7. What are the problems and bottlenecks of your work? How about the process?
8. Which processes/tasks are taking most time?

Improvements:

9. Has there been actions to improve the process lately?
10. How much and what kind of trainings are being given in different steps of the process?
11. Do you think the work instructions should be developed? How?
12. How would you develop the process?

Any other comments?

Appendix 8. Delivery process in Jyväskylä



Appendix 9. Delivery process in Sundsvall