Mohamed Dagher

Improving Functional Performance of The Operation Division in The Case Company.

Helsinki Metropolia University of Applied Sciences
Master of Business Administration
Business Informatics
Master's Thesis
23 October 2018

Helsinki
Metropolia
University of Applied Sciences

Author(s) Title Number of Pages Date	Mohamed Dagher Improving Functional Performance of the Operation Division in the Case Company 58 pages + 4 appendices 23 October 2018
Degree	Master of Business Administration
Degree Programme	Business Informatics
Instructor(s)	James Collins, Senior Lecturer

The objective of this study is to improve the internal process of the operation division in the target company. The company is a freight forwarder in Egypt with main markets in the Far East, China and Europe, and South America.

Due to the increasing growth on the business activities of the company, the workflow shows that the operation department is experiencing a lack of standard-operating procedures which are supposed to be capable of complying with the business size and increasing volumes. Furthermore, the department does not have standard policies, which has led to grey areas in processes with unclear responsibilities, ultimately resulting in huge penalties on the organization and more problems with key account customers.

The thesis has applied the case study model for the research. Both quantitative and qualitative methods were used in the study. At the current state analysis phase, the data was acquired over different techniques using interviews with employees, questionnaires to customers and case examples suggested by the management. The researcher started with process mapping, after which the observation results were divided into four main categories to draw a more defined structure. As a result, the findings of the current state analysis revealed some flaws on the process design, but other issues, however, appeared as execution errors.

By reviewing the suitable literature and exploring the best practices of two leading companies on the market, the researcher was able to provide the organization with an improved design of the internal process and standard guidelines for the operation department, the new / modified process addresses three points on the pricing stage to guarantee the smooth flow of the tasks, save time and define responsibility areas, while the suggested guidelines would maintain the integrity of the overall performance.

Keywords	Developing internal process, operation, Small and medium-sized enterprises, shipping, forwarding

Contents

List of figures

Acronyms

FIATA	International Federation of Freight Forwarders Associations
FCL	Full Container Load
LCL	Less than Container load
RFQ	Request for Quotation
HB/L	House Bill of Lading
MB/L	Master Bill of Lading
CC	Freight Collect
PP	Freight Prepaid
CIF	Cost, Insurance and Freight
Incoterms	International Commercial Terms
ICC	International Chamber of Commerce
BPM	Business process management
SME's	Small and medium-sized enterprises
MSDS	Material Safety Data Sheet
NVOCC	Non-Vessel Operating Common Carrier

1 Introduction

1.1 Background Information

Shipping is one of the world's biggest global industries. There are more than 50 000 merchant ships registered in more than 150 countries, having over one million employees practically from all nationalities. The shipping industry carries every kind of cargo from raw materials to finished goods via a complex network of trade routes. Shipping industry is the lifeblood of the global economy and supporting the world trade. Without shipping, the import and export of goods on the scale necessary for the modern world would not be possible.

Maritime transport defined by World Shipping Council (2018) as "liner shipping which is the service of transporting goods by means of high-capacity, ocean-going ships that transit regular routes on fixed schedules. There are approximately 400 liner services, most sailing weekly, in operation today. Liner vessels, primarily in the form of containerships and roll-on/roll-off ships, carry about 60 percent of the goods by value moved internationally by sea each year".

Additionally, International Air Freight is also vital to the global economy, according to the Economist (2017) "Only 1% of exports by volume go in aircraft but because they tend to be the most expensive goods, they account for 35% of global trade by value. Nearly everyone has used products delivered by aircraft".

Freight transport represents a huge part from the whole cycle of shipping, Freight transport is the physical process of transporting commodities and merchandise goods and cargo using various modes of transportation (air, inland water, ocean, rail, and road).

1.1.1 Case Company

Company A which will be the case company of this study is an International Freight Forwarding Agency located at Egypt. The company has been established four years ago during an extremely difficult economic situation of the country, as the company just entered the market recently their priority was to gain more business, for that they had started the operations without a comprehensive management system.

The Company does not move the goods through its own equipment but acts as an expert in the logistics network, and use a variety of shipping modes, including ships, aircrafts, trucks, and railroads, and often use multiple modes for a single shipment.

As mentioned on the FIATA Model Rules (2004), definition of Freight Forwarding is "services of any kind relating to the carriage, consolidation, storage, handling, packing or distribution of the goods as well as ancillary and advisory services in connection therewith, including but not limited to customs and fiscal matters, declaring the goods for official purposes, procuring insurance of the goods and collecting or procuring payment or documents relating to the goods".

Forwarding is classified as a traditional industry but in fact it has been subject to a lot of development influenced by the IT evolution and its impact on most industries. While, the nature of the sector has set some rules that has not been changed yet, which is that freight forwarder is dealing at each shipment with multiple parties and managing a variety of activities that mostly encounter unexpected problems during the process.

Employees should have the capability to handle such problems right away and the system is supposed to manifest rules and exact procedures for every department in order to maintain a smooth process.

The following diagram explains the parties involved in trade and forwarding activities and their contractual relations.

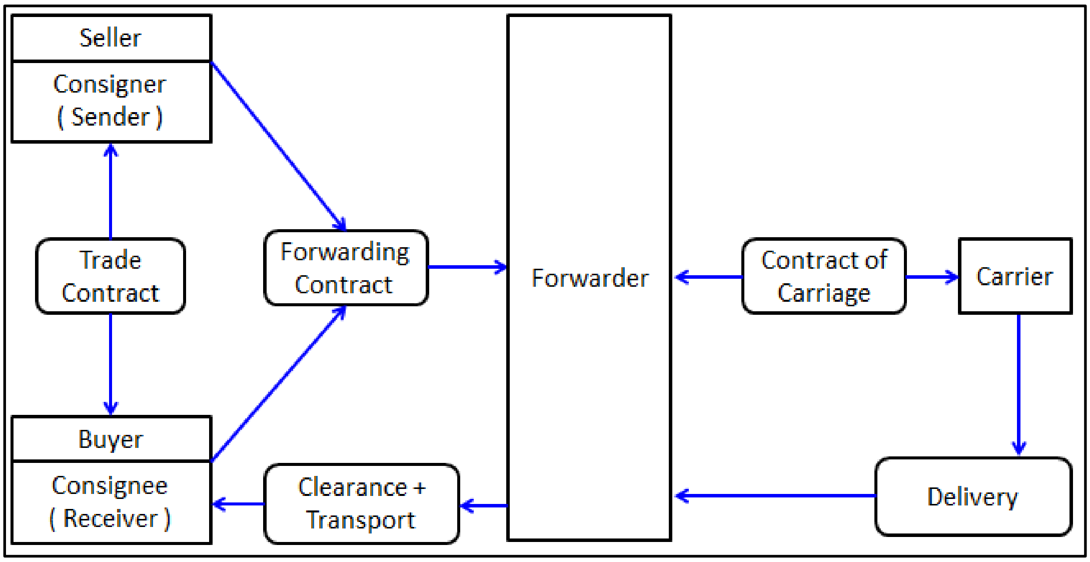

Figure 1: parties involved in trade and forwarding contracts

Company A is classified under SME’s (small and medium-sized enterprises) that most freight forwarders companies sorted according to the same category. The company structure is shown as below, mostly like as a typical company structure.

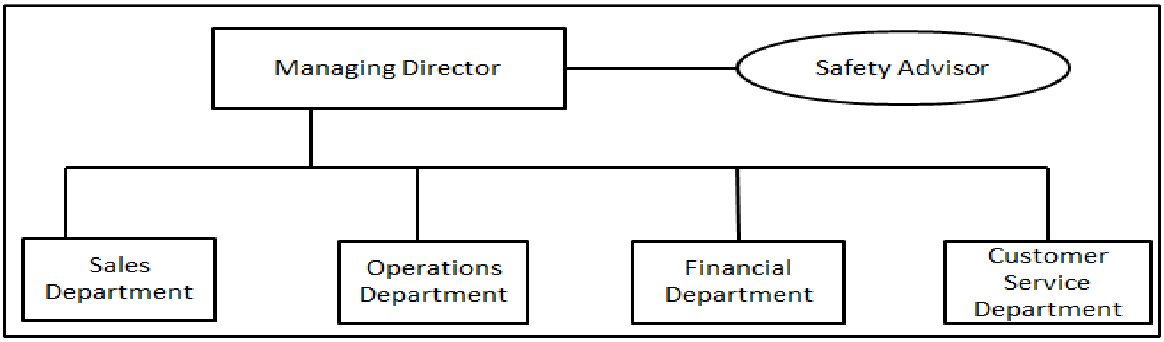

Figure 2: Company structure

1.2 Business Problem

As a startup business, the company strategy was built on expanding the customer base and set the priority to gain new business and this approach was acceptable at that time, but later it appears that the management had to give more attention to the operational aspect of the current orders as transactions has expanded and more staff would join the company.

The workflow shows that the company is experiencing lack of strong internal administrative and operational system which is supposed to be capable of complying with the business size and increasing volumes. Also, it has been evident that departments don’t have clear policies and standard procedures which led to grey areas in processes with unclear responsibilities, ultimately resulting in huge penalties on the organization and more problems with our key account customers.

While, Freight Forwarding is all about the smooth flow of all processes as the freight forwarder is the party who “ensures that internationally traded goods move from point of origin to point of destination and arrive at the right place, at the right time, in good order and condition, at the most economic cost” (CIFFA, 2015).

To accomplish this, we are required to investigate different areas at the organization and figure out the best solutions. The organization set a development project which aiming to develop the internal process of all divisions (Sales, Operation, Finance and customer service).

As the desired project would need extremely long time and huge amount of data to be included on the thesis, the management has decided to select most vital department to be connected to the thesis. Based on the feedback from each department head and according to management discussions. Operation division which considered the most important department of the company have been selected to conduct the study.

1.3 Objective & Intended Outcome

The objective of the study is to develop the internal process of the operation department and make the internal activities of the division more reliable and to increase productivity of employees performing their day to day tasks. While every department consists of small group and working as a team on all required functions, still the process doesn't flow smoothly all the time and may be subject to some problems.

The output of the study is to provide an improved design of the internal process and standard guidelines for operation department. The management has detected that more clear process and rules must be created to overcome several gaps and unclear responsibilities and develop the internal processes.

1.4 Thesis outline

The thesis consists of additional six chapters after the introduction, starting with the research methodology at the next chapter which will include the research approach and the research design that will set the sequence of the research plan defining the steps of how this study will flow, also it will contain the data collection techniques. After which the current state analysis would emerge to gain information about the status que of the operation department by mapping the internal process and performing interviews with employees to investigate the details of their daily work and make use of case examples that has been suggested by the management, then conduct the analysis to state the key issues on the internal process of the department.

Thereafter, the researcher would pursue exploring literature at the existing knowledge chapter related to the research problem starting with process management general concept and with more depth into the process redesign and the implementation of process management at SME’s, also it will include reviewing the best practices of other companies on the field, The final stage will investigate the change management approach and how the planned change could be delivered to the internal system and facilities the successful adaptation of new behaviors within the organization.

Combining the results of both (CSA and reviewing literature) at a conceptual framework that will lead up to the next chapter of building the initial proposal, the outcome of this chapter would be a draft proposal to the management that addresses the issues appeared on the CSA with an improved design of the internal process and guidelines for the operation department. After discussing the proposal with the management, the researcher will take into consideration any comments suggested to create the final proposal.

The last chapter will include a conclusion of the study and an evaluation about the objective of the study compared to the outcome, also it will include the reflections of the researcher about the thesis.

2 Method and Material

The purpose of this chapter is to set a level field of all readers, by briefly describing the various methods used in research. It will explain the research strategy from collecting data through the analysis and how to organize the results.

The data was primarily collected through interviews with employees and questioners to customers with different volume categories to discover their feedback and comments on the areas related to the operation department. Additional sources were case examples suggested by the company management.

2.1 Research Approach

Selecting the suitable research methodology start with the end result that research tend to achieve as the first consideration. By comparing the basic research concept with Applied Research, the basic research aimed to develop scientific theories and improved understanding of a topic or certain natural phenomenon, it has a theoretical focus and mostly oriented to generalize the results and testing theories, basic research helps in adding new knowledge to the already existing knowledge and presents new theory.

While Applied Research can be defined as research that encompasses real life surroundings. It is directed towards providing a solution to the precise practical problems and develop innovative concepts. In finer terms, it is the research that can be applied to real-life situations. It studies a particular set of circumstances, in an attempt to relate the results to its corresponding circumstances. Applied research embraces research that focuses on certain conclusions experiencing a business problem.

This study is carried out to solve practical problems, seek solutions to everyday situations, full gaps and develop innovative ideas. The research approach would be using applied research methods which is the most suitable approach to identify business problems.

There is two types of data (quantitative and qualitative) that could be source of information on the study, The current project require that more than one method might be engaged on the research, referred to this approach by the term “mixed methods” which an methodology of research that configure the quantitative and qualitative data within a single investigation to collecting and analyzing both quantitative (closed-ended) and qualitative (open-ended) data.

One of the many advantages of using mixed methods is improved accuracy as the researcher get findings through different methods while investigating the same subject.
For example, the research can compare the date collected from certain type such as questionnaire with data resulted by observation for the same situation to have the confidence that both methods have similar output.

Also, the use of more than one method can enhance the findings in a way that provide complete picture of the research topic and cover different aspects that cannot be produced by using of a mono method.

Data needed to conduct the research would determine which research method is suitable to choose for collecting such data. Differences between qualitative and quantitative methods as below.

Qualitative research in where there is no exact answer of (yes or no), the researcher will gather information in a way to understand the environment by analyzing this information.

> “Qualitative research is primarily exploratory research. It is used to gain an understanding of underlying reasons, opinions, and motivations. It provides insights into the problem or helps to develop ideas or hypotheses for potential quantitative research. Qualitative Research is also used to uncover trends in thought and opinions, and dive deeper into the problem. Qualitative data collection methods vary using unstructured or semi-structured techniques. Some common methods include focus groups (group discussions), individual interviews, and participation/observations. The sample size is typically small, and respondents are selected to fulfil a given quota”. (DeFranzo, 2011)

Quantitative research usually used to acquire measuring data. research methods, controlled and easy to be classified and get the direct results of it.

> “Quantitative research on the other hand is used to quantify the problem by way of generating numerical data or data that can be transformed into usable statistics. It is used to quantify attitudes, opinions, behaviors, and other defined variables – and generalize results from a larger sample population. Quantitative Research uses measurable data to formulate facts and uncover patterns in research. Quantitative data collection methods are much more structured than Qualitative data collection methods. Quantitative data collection methods include various forms of surveys – online surveys, paper surveys, mobile surveys and kiosk surveys, longitudinal studies, website interceptors, online polls, and systematic observations”. (DeFranzo, 2011)

While using mixed methods in conducting the research, most of the information and details will be extracted from the qualitative research methods, as the project main area to understand the process in details and to investigate the roots behind each action. Certainly, quantitative methods also will contribute with important details.

According to Denscombe (2014), “A shrewd combination of methods allows the researcher to exploit the strengths of a particular method without leaving himself/herself vulnerable to criticism in connection with that method’s weakness. To illustrate the point, a researcher who chooses to use semi-structured interviews as the main data collection method might also choose to supplement this method with the use of a closed-answer questionnaire”. The choice of semi-structured interviews could reflect the researcher’s need to gain an in-depth understanding of the motivations of a particular group of people, while the closed-answer questionnaire is designed to obtain information from a broader number of participants.

The choice of semi-structured interviews might seem appropriate because this method is particularly good at allowing the researcher to explore in depth the thoughts, feelings and reasoning of the employees. But because interviews generally take time to organize, conduct and analyze, the numbers involved are generally quite small – which makes the researcher vulnerable to the criticism that the data are not representative. To compensate for this weakness, a mixed methods strategy can be adopted that involves a questionnaire survey of other involved group, possibly including customers of the company. The questionnaire designed to measure points related directly to operation department internal business process.

2.2 Research Design

The research plan containing the steps of how this study will flow and describes the procedures and data materials and the intended outcome.

It is consisting of five main phases starting the first stage with stating the objective of the study and followed by the current state analysis which meant to explore the status que of the department and create an understanding of the internal process and define the flaws and gaps and the roots behind them.

Afterwards there is the phase of exploring the literature and best practices of the topic under research and according to the findings of the current state analysis, thereafter the researcher will start building the initial proposal, and then the final stage is about receiving the feedback and creating the final proposal.

Research design indicating the five stages are shown in figure 3.

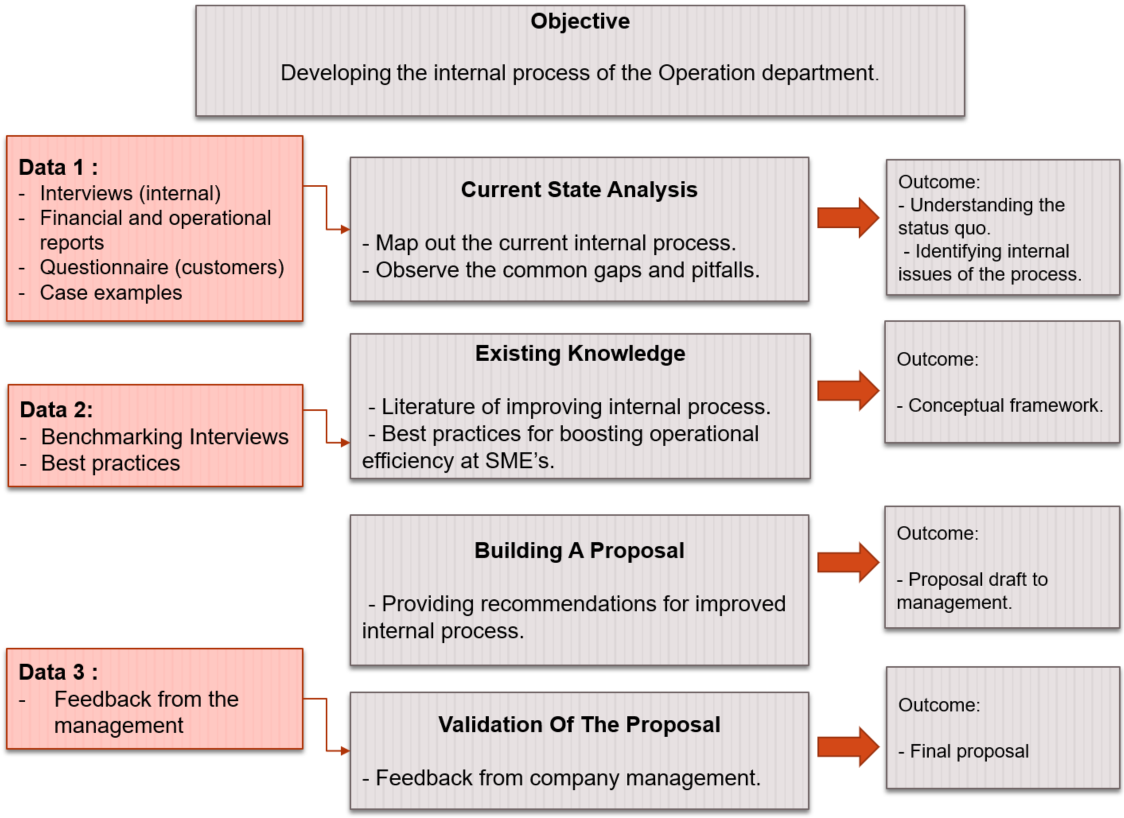

Figure 3: Research design

The study started with defining the business problem based on the cooperation with the organization management, the researcher has had several discussions with the management to identifying the role of the study in connection with the planned development project as the crucial point is to settle the thesis scope and what exactly the study will concentrate on and as mentioned previously, it has been decided that the focus of the study would be the operation department internal process.

Next stage is the current state analysis which aims to gathering information from business stakeholders, understanding the operation process management system and mapping out the internal processes of the operation department to recognize the cycle of the work in detail.

Also, it was about collecting data depending on various techniques to acquire the complete picture of the current situation and to have an overview of each part on the process. The analysis process comes after completing all the required data to observe any gaps or issues and investigate the roots of them which will form the input for the next phase.

Reviewing literature and best practices stage, the researcher will concentrate to review related suitable materials that could be helpful in the study scope, there are a huge amount of publications about improving the internal process and increasing the operational efficiency of internal process, the main purpose is to combine theory with practical case studies around the topic under investigation to create knowledge for building the proposal that will support of developing the internal process of the operation department in the case company.

The fourth stage is about building the initial proposal based on the previous two phases of understanding the status que of the department and reviewing the literature and best practices to form the initial proposal.

The final stage is about collecting feedback on the initial proposal from management and involved stakeholder and based on suggestions and comments, a modifications plan would be started to check the initial proposal and create the final proposal.

2.3 Data Collection and Analysis

Data collection is the process of “gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes. The data collection component of research is common to all fields of study including physical and social sciences, humanities, business, etc. While methods vary by discipline, the emphasis on ensuring accurate and honest collection remains the same”.(Reviews, 2016)

Several methods applied to gather data in the research, in the phase of current state analysis there was face to face and telephone interviews, web-based questionnaire and selected case studies, also we tend to use financial and operational reports when-ever it was available and have sufficient information that would help with the research data. At the stage of reviewing the existing knowledge the source of data was from literature, another part was best practices interviews with operation department managers at two of the market leading companies to have an idea about the best practices.

The final round of data collection was for validating the proposal, a feedback data was received from the company management reflecting how the study output was.

Details of data collection are represented in Table 1 below:

Data Round	Data Type	Data Source	Date & Approach	Purpose
Data 1 Current State Analysis	Interview	Operation Department Staff Employee 1 Employee 2 Employee 3	Aug. 2017 Face-to-Face	Investigate the internal process in detail
	Interview	Finance and Sales Departments Staff Employee 1 Employee 2 Employee 3 Employee 4	Aug. 2017 Face-to-Face	Examine other divisions relation with the internal process of operation department
	Case Examples	Suggested by the management	Aug. 2017	Check the related issues with the operation dept.
	Group Discussion	Operation department Manager Sales Manager Business Development Manager	April 2018 Face-to-Face	Discuss interview output to explore different dimensions
	Questionnaire	Customers	April 2018 Web-Based	Discover customer feedback on certain points
	Internal Documents	Financial reports Operational reports	April 2018	Check the turnover, penalties and errors resulted from internal process

Data 2 Best practices	Interview	Operation Manager Business Development Manager Of two companies	July 2018 Phone calls	Discuss companies' internal regulations and process of the operation department
Data 3 Validation	Meeting	Top management	Sep 2018 Conference call	Proposal validation feedback

Table 1: Data Collection

While observation is part of our normal life activities for making knowledge and based on that knowledge we decide how to act, our interaction with other people around us is mainly based on ideas, thoughts of how particular group of people are likely to behave. These theories are built up and continually refined, by observation.

As mentioned above in Table 1, several techniques and tools of quantitative and qualitative methods has been used to effectively gather this data. (Questionnaire/ Interview/ discussion group). According to Denscombe (2014) "both the quantitative and the qualitative methods are valuable and can make a worthwhile contribution to what is known on the matter. Combining the methods, however, allows the researcher to produce a fuller account of the situation that covers not only the scale of the issue (e.g. numbers involved, age, sex, ethnic group) but also gives some insight into the motivational factors that give rise to the behavior (e.g. self-image, stress, peer groups)".

2.3.1 Current State Analysis Data

In this section, the researcher will demonstrate the type and methods applied on the CSA phase to collect data which are (interviews, questionnaire, case examples and focus group).

- Interviews.

The semi-structured interview will be the method for gaining in-depth knowledge for the internal process details, the semi-structured interview is a qualitative data collection strategy in which the researcher asks informants a series of predetermined but open-ended questions. The researcher has more control over the topics of the interview than in unstructured interviews, but in contrast to a structured interview which has a rigorous set of questions that does not allow one to divert.

Interviews most often will take place face to face, but in some cases, it might take place over the telephone, or online using computer-mediated technologies. Most interviews are conducted between two people (the researcher and the interviewee or the participant). Interviews as mentioned previously were semi-structured interviews; the researcher might not use all questions on every interview and may use other questions brought up during the interview because of what the interviewee says.

According to Eriksson & Kovalainen (2016), “qualitative interviews, as used in scholarly research, are research vehicles, the purpose of which is to produce empirical materials for the study in question. In contrast to how you conduct everyday conversations with fellow students, teachers or business managers, a good qualitative interviewer most often prepares some of their questions in advance, and later analyses and reports results in a specific way. The interviewer also focuses the interview on particular issues that are related to the topic and research questions of their study”.

The interviews questions can be found in Appendix 1, 2, mostly focus on daily process of the operation department, group one interview questions were designed to operation department team and it will investigate all aspects of the operation department and the intern process, one of the most remarkable notes that age all employees of the operation department were between 25 and 30 years old and years of experience from 3 to 5 years.

Group two of interview questions was targeted to employees of other departments (finance, customer service and sales) to check their cooperation in daily work with operation department and how the process is running, the questions were designed to reflect mostly on the internal process of the operation department.

- Questionnaire.

While regularly questionnaire to customers concentrate on service quality assessment to examine customers who experience poor quality as service quality contributes to substantial damages to a business when compared to other business factors such as product cost. Questions usually included in a standard service quality evaluation is about addressing customer problems and perception about service quality where the organization can make enhancements.

But questions for the customers on this study designed based on a different concept, the researcher tend to ask the type of question which has reflection on the operation department part of the shipment cycle, so questions will not be similar to the regular and stranded service quality surveys that mostly build to measure the general aspects for the service quality.

Most of the question mentioned on this questionnaire (Appendix 3) were designed and directed to specific areas such as speed and accuracy of information, which considered main elements of the internal process of the operation department, the researcher needs to get a broader view of the operation processes from an outsider and the customers is one of the best information sources who owns different overview as they based their judgment on practical issues and direct benefits, it was essential to get the information from a different angle.

- Case examples.

According to Denscombe (2014), “Case studies need to be chosen on the basis of their relevance to the practical problems or theoretical issues being researched” (Denscombe, 2014). The cases examined in this study were suggested by the organization management because these cases have made a huge impact of the company and caused massive problems and the operation department was part of these cases, the purpose was to inspect the cases to check if the problems were caused by an error of the internal process of the operation department and if so, it has to be included to the data of the study.

- Focus Group.

Focus group is basically an interview method but done in group discussion, the selected persons were the department managers, a group discussion with involving stakeholders could be used to provide qualitative data that would help to explain why certain problems happens and what is the roots behind that.

The main reason of the group discussion was to derive comments and thoughts that might help to draw up different perspective of certain points of the results of interviews and questionnaire based on the opinion of the managers.

2.3.2 Best Practices Data

For this section, searching for best practices will be applied to compare the performance of the internal process of the operation department to other companies so we could know our weaknesses points in relation to them. Arranging best practices interviews was necessary because the studies available of field of freight forwarding is limited and the techniques of work inside the companies of freight forwarding if different than other businesses, Accordingly, the researcher have been in contact with some of the leading freight forwarding companies to get their approval on participating on the study, already two companies approved to join the study.

The researcher had a phone call with the Operation Manager of the first company and
A meeting with the Business Development Manager of the second company, the discussion was about the internal process of the operation department of both companies.

Questions were asked about specific procedures followed in certain cases based on the current state analysis findings and how the cycle of work running on the operation department at the two companies. The target was to obtain an awareness of the highest performance levels currently being achieved.

A copy of the best practices interview questions can be found in Appendix 4.

2.3.3 Feedback on Proposal

The proposed recommendations initially presented to the management and to the operation department staff via email to be conducted and included in the internal processes, the management had a discussion with the employees of the operation department to check the results of the recommendations on the internal process. Later, a meeting was held using a conference call to obtain their comments, this feedback will be utilized to form the final proposal.

2.4 Validity and Reliability

According to Sagor (2000), “validity refers to the essential truthfulness of a piece of data. By asserting validity, the researcher is asserting that the data actually measure or reflect the specific phenomenon claimed. While reliability relates to researchers' claims regarding the accuracy of their data”.

One of many ways to check the validity of attained data is to measure the outcome of the data with what was already planned, the data must lead to information about the research problem. Using multiple resources for acquiring the data will assist of the validity.

“While validity is concerned with ensuring you are measuring the right measures, reliability is concerned with whether the responses are consistent. The most basic test of reliability is repeatability. This is the ability to obtain the same data from several measurements of the same group collected in the same way. An example of repeatability is to administer the questionnaire to the same individual repeatedly over a period of time. If the individual responds the same way to the questions every time, there is minimum error, meaning there is high reliability. If, however, the individual has different responses, there would be high error, meaning low reliability”.(Elkeles, Phillips and Phillips, 2014).

3 Current State Analysis

The current state analysis (CSA) section is mainly for generating information about the operation division current situation and how their internal processes work. The target is to gather real quantifiable objectives and potential functional gaps. Another question arises, do the internal tools supports the process of the division.

3.1 Current State Analysis approach

CSA was accomplished over systematized steps to focus on some specific areas inside the operation department.

Business processes: The focus of the researcher is to gain insights about the activities accomplished inside the department and to investigate the current process to detect their context and sequence. In studying the existing process, the researcher needs to separate between the necessary and unnecessary actions and approvals. Also, to recognize the interrelation between processes.

Business rules: the analysis would concentrate to define the current rules under which the department operates, searching for missing rules or the out of date regulations that might need an update, so all the stakeholders have the same rules.

User tools: to complete full understanding for the current state, user tools must be investigated so the researcher could figure out in which level the user tools support the current process and if any additional requirements should be included.

Problems: the current state analysis would assist to define the problems and examine the roots behind them, it is essential to understand the problems to avoid misjudging or suggesting solution that do not address the origins of the problem. The researcher must be extremely precise on his way to discover the problems and set aside any preconceptions that might misdirected him to the wrong output at the end.

3.2 Operations Process Management

We had to dig deep into the operations process management to figure out the details behind every move and understand the regular cycle on the day-to-day work. Operations management is "concerned with those activities that enable an organization to transform a range of basic inputs (materials, energy, customers' requirements, information, skills, finance, etc.) into outputs for the end customer".(Brown, 2005)

Operation simple definition and interrelation between processes is "about tasks consisting of one or more elements or subtasks, performed typically in one location. Usually operations transform resource or data inputs into desired goods, services, or results, and create and deliver value to the customers. Two or more connected operations constitute a process. The starting point of successful operation is the output, and no amount of efficiency in the transformation process will make up for an inappropriate design of product or service".(Galloway, 1996)

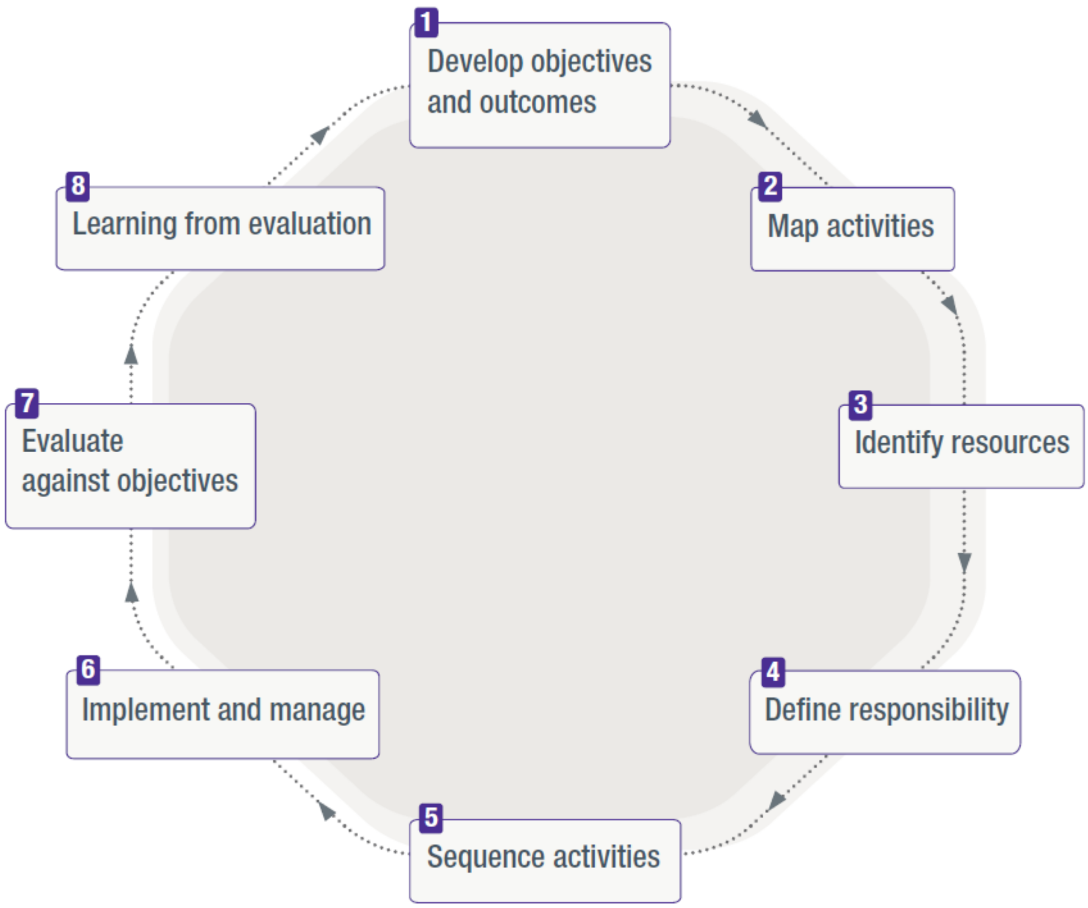

Figure 4: The eight stages to managing operations - Cass Business School

For that reason, understanding past mistakes allows the researcher to offer workable solutions, instead of making blind recommendations, which hardly scratch the surface of the problem. Access to stakeholders inside the department who perform and understand the business process is a key element on the research, at least the researcher needs to have one stakeholder to represent each role on the process to draw the operation cycle.

3.2.1 Process Mapping

Mapping the process is an essential element, the project will need to gather everyone involved in the process even from other departments, deciding how the process happened: inputs, outputs, steps and processing time. There are many benefits of process mapping, first of all when all participants involved in this activity, it would have a positive affect about the whole improvement project because they feel as it is their own project, their own ideas would make them very positive about assisting and suggesting innovative thoughts that definitely will contribute to other stages on the project and certainly to the overall progress. One of the other benefits of the mapping activity is exposure of vague problems, it is not always very easy to discover what is the exact reason that makes the cost high or why there is a delay happened or time gab between some actions, who gives the decisions and whom is the responsible about it.

Another point of view regard to the benefits of the process mapping is about getting the full and complete picture of the activities, it is better when you see everything visually, other stakeholder realizes how it might be complicated to their colleagues for certain points in the process. Furthermore, the process mapping allows the chance to redesign the whole process again and one of the main points before the redesign is to allocate any unnecessary steps or procedures which may be the reason for long process, also it might appear that some activities with no added value to the process itself and could be removed or replaced with other actions to generate benefits on the whole cycle.

Also there is several employees who has long experience time in the company follow sort of a tradition to practice the process according to their experience and situations they had faced during their work in the organization, so there is a variation in the practice on the process depending on each individual, for that process mapping help to detect all of these variations allowing the researcher of removing the inefficient activities and promote the most effective.

3.2.2 Process Mapping analysis

Reviewing the process map, the researcher is looking for processes that may cause delay or does not have added value or the process that continually pass back and forth between certain people, deciding what opportunity of fixing it could become. Analysis made to draw attention to four key elements.

Bottlenecks: When the process slowed during a certain step on the cycle or where we have a huge waiting time, it should be analyzed and search for the reason why the flow has slowed and find a solution for it.

Points of contact with the customer: though the operation department is not considered a direct point of contact with the customer, but some processes inside the department have a direct impact on the customer even if other departments intervene in the middle but still the output from the operation department is the main influential factor. It is extremely important to revise these activities to become the most satisfying for the customer.

Determine the value-adding activities: reviewing the process in detail will assist to reveal if the scope of the process has some activities that could be considered low value activities, those should be improved in a way to create more value or to be removed to facilitate the process cycle and eliminate the effects of this activities on cost or time.

The interaction between systems: the information flow, work flow of business activities inside the organization, specifically between the operation department and other divisions internally, this connection and information passes from one department to another should be observed so that the workflow became smoothly transferable and the transmission of orders and running shipments could be reliable.

Because the processes were huge and has a lot of involved parties, the researcher choose to separate the process into stages or phases so it would be easier to follow the interaction between all participants. Here the researcher will present the stage of pricing, in this stage mapping the process had started even out the range of the operations department as the process starts there and the researcher had to check if the underlaying causes might be reside outside the internal process on the department.

Pricing stage which starts at sales department with receiving the RFQ (request for quotation) from the customer and then send it to the operations department as shown on Figure 5.

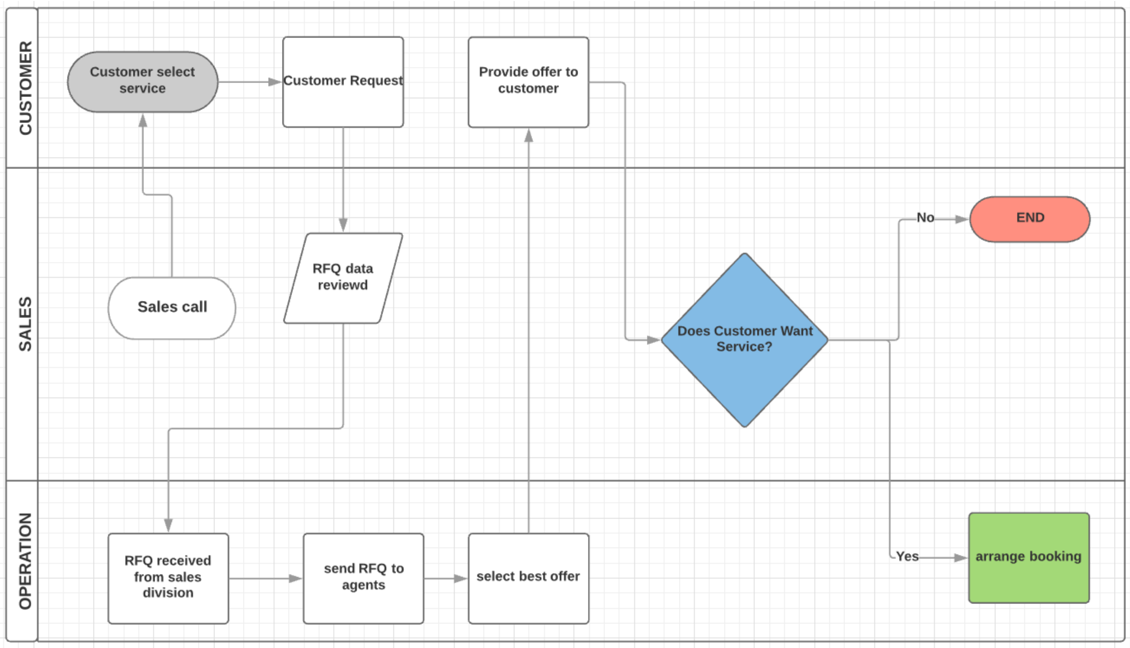

Figure 5: Pricing Stage

According to this stage the researcher will give an example of how the process map is analyzed and depending on this structure the following stages of the process and further processes will be examined and mention all the results at the next point of this chapter (observation results).

Starting with the RFQ received from the customer, RFQ it is not definitively containing all the required details that must be available to operation department in order to start immediately working on acquiring the price, even there is a stage when the sales person review the RFQ data before forwarding it to the operation department.

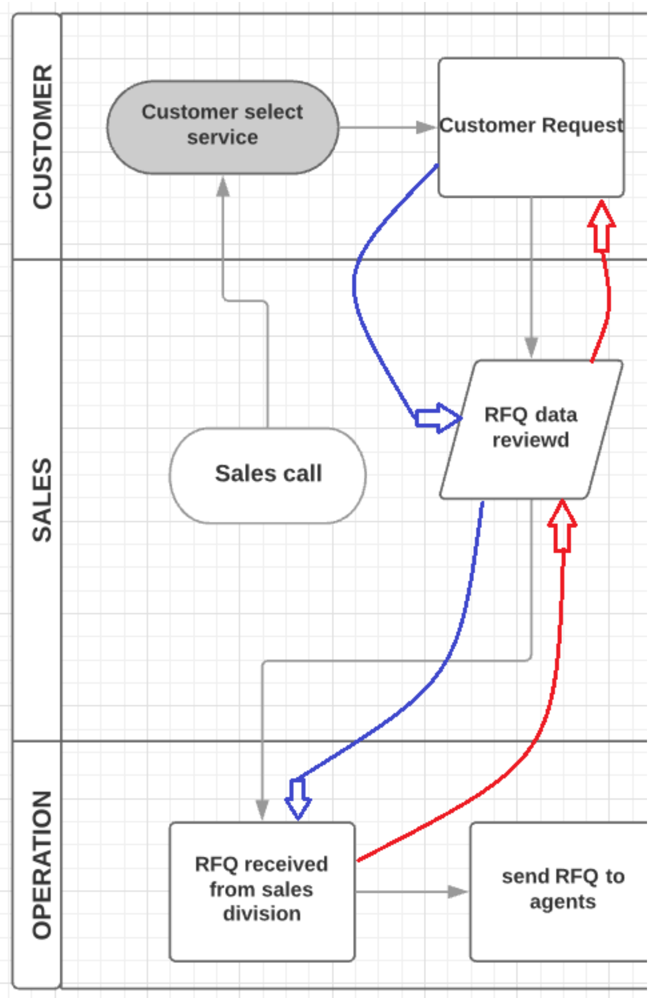

Figure 6: Repeatable Process

This causing a repeated process as shown in Figure 6, operation department staff had to ask for the missing information from the sales division and for that, usually they return the RFQ stating the required data from the customer, and according to that also, the sales team return again to customer to obtain subject information and after that send the inquiry to the operation department.

The defect shown in this process has several consequences occur as a result of repeating this process, one of the most important consequences is because the customer is part of the process, it is very sensitive area when the customer is part of the process.

First of all, it affects the reputation of the company and its sales team when the sales employee return to demand additional information that must be available to obtain the price, it gives impression for the customer that sales person is not familiar with some technical details of the business. Furthermore, it increases the effort required by the customer to ask for the price and waste more time for him. Beside all of that, it has major impact on the average working hours per each shipment as it increases the working time approximately by twenty percent at least.

The middle part of the process is about getting the price from international agents or local shipping lines and select the best rate to make an offer to the customer. As shown at Figure 7, the process moved directly from the operation department to the customer.

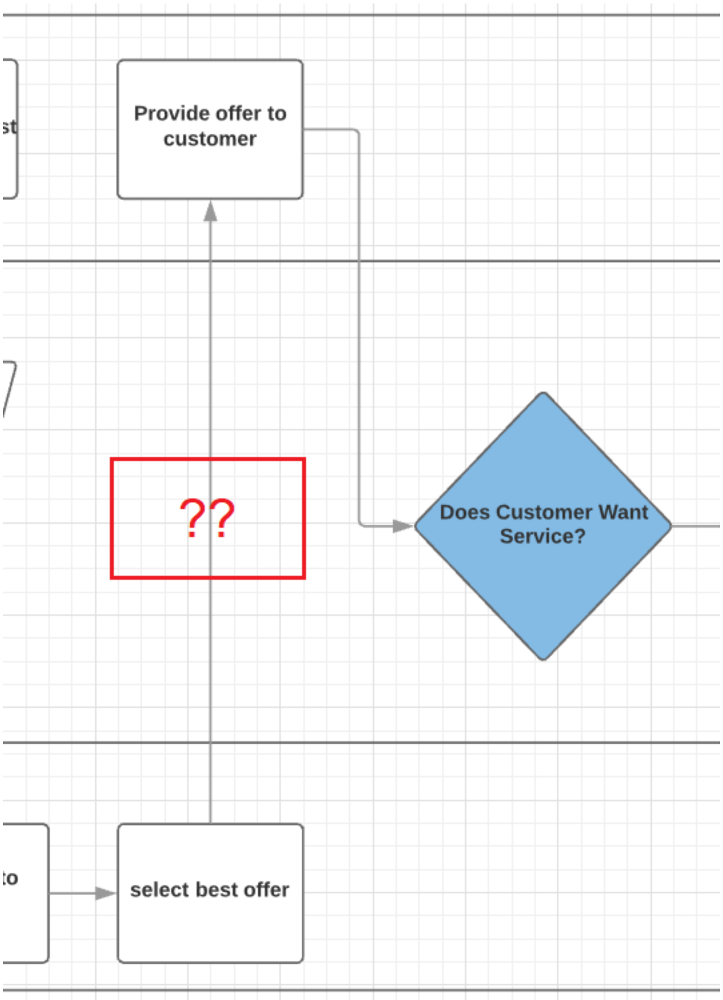

Figure 7: Missing Step

Although that the selling rate is determined by the sales person responsible about the customer account, it is obvious that the offer should be presented by the sales division to the customer. Here there is a conflict part of the process because interviews reveal that in other cases sales employee receive the price from the operation department and send the offer to the customer directly. It is a gray area where the decision's responsibility is ambiguous, which division is responsible and who can bear the liability of results.

3.3 Observation findings

On this section, the analysis of process mapping and data acquired from interviews, questionnaire and case studies will be combined together to form the final results.

After mapping out the process in detail and investigate certain cases (pervious shipments) suggested by the company management to check the problems happened at these files and identify weak points and their relationship with the operation department. Also, as the interviews disclosed many information and details, it was necessary to divide the observation results into four main categories which will assist to draw the status que on more defined structure and would helping to indicate gaps and pitfalls to be avoided.

Will investigate with more depth into these four categories (Communications, Documentation, Finance and Delegation of authority) to discover how these tools affects the daily work inside the operation department, some of these categories are mode or a manner of procedures inside the department and some about other departments and how the cooperation between these divisions affect the tasks and functions required from the operation department.

3.3.1 Communications

Based on the internal work cycle for the operation department, the internal communications which is the relation between the division itself and other departments inside the company will be examined to check how it affect the internal process and output of the operation department.

- Gap in cooperation between sales and operation.

Interviews showed up huge gap in cooperation between sales and operation departments, one of the employees of the operation department says:

> “we are feeling that we are in a competition with the sales department not as supposed to have cooperation, we tend to fight at every shipment for some details” (Interviews, 2017).

This has a direct impact on the files under processing, the results differ between delays on the booking, conflict about cost of the shipment (net cost) and way of handling the consignment.

The reason for that poor communication is that both divisions hold different point of view on the work process and different priorities. Operation employees is very practical, time is extremely important and very limited for them, and also, they do not have the sense of customer service.
The sales on the other side, is working based on a different scale, different model, one of the main priorities for them is to gain the business in a very competitive environment, maintain the customer satisfaction even under difficult circumstances that may happen during the processing of the shipment.

- Share of information.

Flow of information inside the department and between other divisions is not organized in way that would let every employee knows some basic information required to maintain his role in a good manner, meaning that some information might be shared and others not, without structure or a declared statement specify how the information could be shared and in which way.

For instance, in case there is no agreement with certain shipping line, not all departments have the same information, and this might lead to huge problems. One of them appeared on the questionnaire done with customers, one of the customers stated that:

> “the company does not always use the same shipping line that has been agreed before with the sales department” (questionnaire, 2018).

The customer may prefer using exact shipping line or air carrier for their consignment, the reason of that choice might depend on that shipping line or airline provide easier procedures for releasing the cargo or another reason that it owns a warehouse near to the customer premises, there are many other reasons for the customer to prefer using such exact carrier.

In such cases the sales personal agrees with the customer to use the mentioned shipping line and include that in the contract, but in fact the sales do not have information that there is no agreement with this carrier and the company will use another carrier.

3.3.2 Documentation

- ❖ Releasing MB/L without collecting HB/L.

Let us define the meaning and function of both Master Bill of Lading (MBL) and House Bill of Landing (HBL).
MBL: A bill of lading issued by the shipping line to the shipper to serve as a contract of carriage and a receipt for goods, mostly master bill of lading is issued by the carrier (the shipping line) to the freight forwarder as the party who is representing the exporter located at the port of departure to be sent as original document to the destination port agent as an evidence to receive the shipment after arrival.

On the other hand, HBL is issued by the freight forwarder once after receiving cargo from shipper after necessary customs formalities, the freight forwarder releases house bill of lading HBL to the shipper. The shipper at the HBL is the exporter or the party who delivers goods to freight forwarder and the importer or the consignee is the party to whom the cargo has to be delivered by the said freight forwarder.

Documentation cycle for HBL and MBL has many details and the essential point on the cycle is that the Original MBL should not be surrendered to the customer unless the overseas counterpart (the freight forwarder at destination port) collects the original HBL from the customer. As it has legal liability on the issuing party which is the freight forwarder at origin.

At the subject case, the operation department released the original MBL without collecting the HBL from the customer which reflecting a missing rule for the department internal regulations. The consequences of this incident were very awkward, and it caused a huge problem between the organization and its international agent.

- Showing wrong/different details on the bill of lading.

The customs clearance formalities at Egypt requires that the goods information on the bill of lading must be the same on the commercial invoice of the shipment. The customs clearance procedure starts with reviewing the shipment documents and confirm that all the details are matching on all documents.

The cycle of the documentation for the shipment is based on the cooperation between the shipper or the exporter of the shipment and the freight forwarder, the shipper responsible at his own to issue the commercial invoice, packing list and the certificate of origin. While cooperating with the freight forwarder of issuing the bill of lading (house and master).

At the subject case both house bill of lading and master bill of lading were issued showing different details of the shipment for which are mentioned on the commercial invoice and other documents (packing list, certificate of origin). When the customer (the importer) starts the customs clearance formalities at destination port it was revealed about these differences, the customs authority had to hold the shipment and asked for an amendment of the documents to have the same and right details of the goods.

Since the correct information was mentioned of the commercial invoice then the H/MBL had to be amended to show the same description, this require much time to be implemented and definitely a correction fees for the shipping line. And therefore, the customer complains about the additional cost of delaying and fees to the organization.

Usually the operation department proceed on the shipment after receiving a confirmation on H/MBL drafts from the shipper of the consignment by the overseas counterpart, but according to this case this procedure was not enough to maintain the integrity of the drafts.

3.3.3 Finance

The finance department manages wide activities on the organization, the business functions of the department typically include bookkeeping, planning and on certain cases present information to assist the management on strategic decisions.

After mapping the whole parts of the operation department process and analyze the parts where there is an interaction between the operation and finance departments, one important point came to discussion which is credit control.

The operation department usually receive an RFQ for a new customer from the sales as stated in the pricing stage and on certain cases after the operation department working for a few days to secure the best rate available on the market, the shipment will be canceled as the customer need credit facility for long period which cannot be accepted by the finance department, and this makes the efforts done by the operation department useless.

Usually, when a new customer asks for a credit facility the regular approval comes from the management but as mentioned above finance department might refuse the request after offering the rate to the customer because of the long period or the huge amount in other situations. Credit control approval currently affected by finance and top management decisions which might be different than each other and as evident it is not the ideal situation.

3.3.4 Delegation of authority

Authority structure in the organization is traditional and power or authority in many situations comes from top down, based on the freight forwarder small size companies, the top management might consider current aspect more efficient to control the authority in such structure. While the concept of delegation of authority is about the process which the manager divides power among subordinates, and move part of the responsibilities to them in order to accomplish certain tasks, along with that perspective, the management could guarantee achieving effective results.

And by returning to the operation department and their daily work activities, the process mapping shows that the operation employee face different circumstances during each shipment and he has to deal with it immediately with a prompt decision. According the current way, most of these cases the operation department staff has to return to their direct manager or even more to the top management to explain the case and the choices available and get an idea of what should be done and in which way.

The feedback from management in many cases is on time and does not affect the processing of the current file but there are certain situations the operation department staff reported that the responsible official is not available and they might need to act immediately.

3.4 Key Findings Current State Analysis

The current state analysis purpose is to derive much information as possible out from the internal process on the operation department to reveal gaps and pitfalls and get a list of the pain points and allow the chance of asking questions to find the root causes for any issues appeared. “The researcher should follow an approach focused on identifying and understanding the underlying causes of an event as well as potential events that were intercepted” (Hughes, 2008).

The operation department staff were very enthusiastic about participating in the interviews and providing the researcher with any information needed and by this assistance and spirit there was many topics has been observed during the CSA.

The issues derived from interviews, discussions, case studies and questionnaires are listed as below:

CSA Key Findings	Missing information at the RFQ resulting on repeated process.
	Conflict area between sales and operation for sending offer to customer.
	Releasing MB/L without collecting HB/L.
	Showing wrong/different details on the bill of lading.
	Gap in cooperation between sales and operation departments.
	Absence of sharing information policy between divisions.
	Different credit control decision between top management and finance.
	Authority structure and implications based on top down decision technique.

Table 2: Key Findings from CSA

After the CSA, it has been clear now what exactly is required and the researcher discuss above mentioned points with the management, it has been decided that all issues will be included in the research. Management will also benefit from the findings on this stage as it will be transferred to the development project.

4 Existing Knowledge

This section is about exploring existing knowledge concern the research problem, reviewing the best practices from literature and reveal the theoretical/practical thoughts that would assist the researcher to learn more about the suitable solution for the research problem. Topics and subjects of the existing knowledge has been selected based on the results of the current state analysis and designed on a steps knowledge sequence to obtain the general basics and the structure of the business process management and techniques of increasing operational efficiency at SME's. On the second stage, the researcher will review the best practices on the market by interviews with two local companies in addition to the studies published of the international organizations on the field of freight forwarding. The final stage will investigate the change management approach and how the planned change could be delivered to the internal system and involved stakeholders with a professional technique that could guarantee the continuation of the project.

4.1 Process Management Framework

The section will discuss the general aspects of process management which is an extremely wide subject so the researcher would concentrate more on the process management basic knowledge and then focus on the importance of the process redesign, and the next point would concern the merging of the process and practice, and the last point will discuss optimizing systems and using the process management at SME's.

According to Brown (2005) operations managers find that handling the internal process of the organization is a major concern, even with different organization process result as it may offers products or services. A full understanding of the nature, requirements and distribution channels of the product or service must be presented at the mind of the operations manager. Another risk that most SME's consider when trying to have compliance with business process management that "Over-design can cause major problems of organizations intending to innovate new products and services, and will take up unnecessary time and capacity".(Brown, 2005)

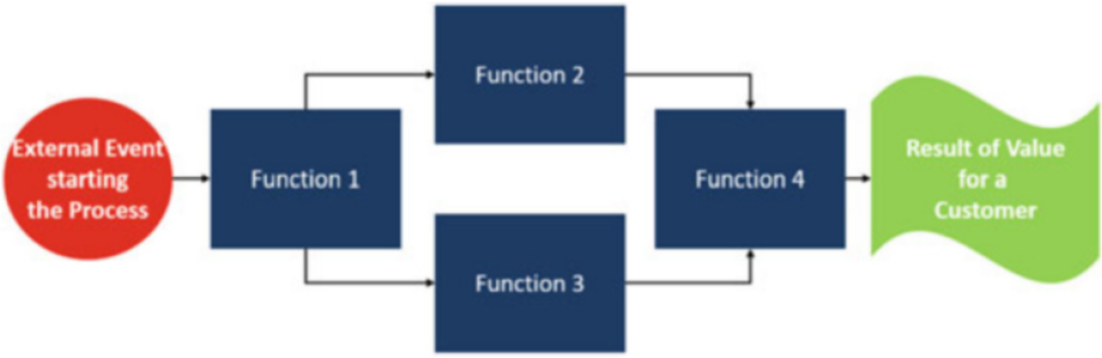

Figure 8: Definition of the term "business process" - (Kirchmer, 2017)

Smith & Fingar (2003) define Business Process Management (BPM) as "a structured method of understanding, documenting, modelling, analyzing, simulating, executing and continuously changing end-to-end business processes and all relevant resources in relation to an organization's ability to add value to the business. It is the current term utilized to encapsulate a process-driven approach to attain enterprise operational efficiency".

Operations management is about managing people and resources of the organization to produce services or products, the efficient process of an organizations is guaranteed by compliance with standardized procedures, in order to enhance the final output and ensure lower errors, the process has to be monitored and evaluated regularly to improve the procedures that have heavy impact of the product.

According to Brocke & Rosemann (2014) "If performance does not meet targets, the reason for this shortcoming must be determined. Broadly speaking, processes fail to meet performance requirements either because of faulty design or faulty execution". The performance measurement of the process should be conducted the minute the process starts, it has to be compared to the applied matrices based on customer needs and company requirements. "Such targets can be based on customer expectations, competitor benchmarks, enterprise needs, and other sources".(Brocke and Rosemann, 2014)

Figure 9 represents the essential process management cycle.

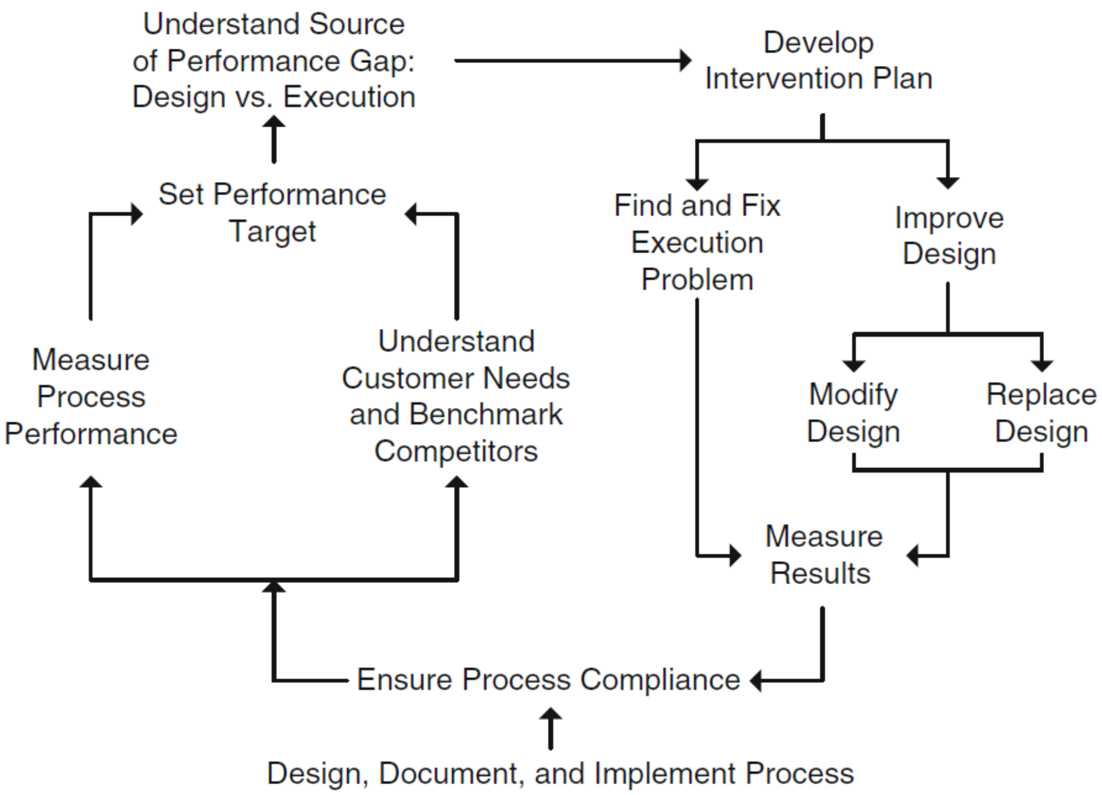

Figure 9: The essential process management cycle - adapted from (Brocke, Rosemann, 2014)

In case the organization willing to apply business process management then standardizing process is a pre-requisite for that initiative, it means that procedures across internal system of the business unit must be integrated and unified. High performance could be insured through a well design of the process combined with carefully managed execution. To figure out the roots of the gaps on the process, the organization should follow the pattern of the process, a widespread, repeated defects means there are a design flaw, in contrast the execution issues on the process happen occasionally.

4.1.1 Process Redesign

Business process is a planned response to an operational business event. Harmon (2014) suggests that an internal management process could be made up of serveral subprocesses, in the following figure 10, the author is emphasizing the importance of redesign the process and how it could reflect on the day-to-day business activities.

When the organization start to redesign a certain process, it must include every element of the process in the design to ensure that the cycle of the process in closed and there is no way that an event could be lost during the ongoing process, a professional process design would guarantee full compliance from the business unit and the employees.

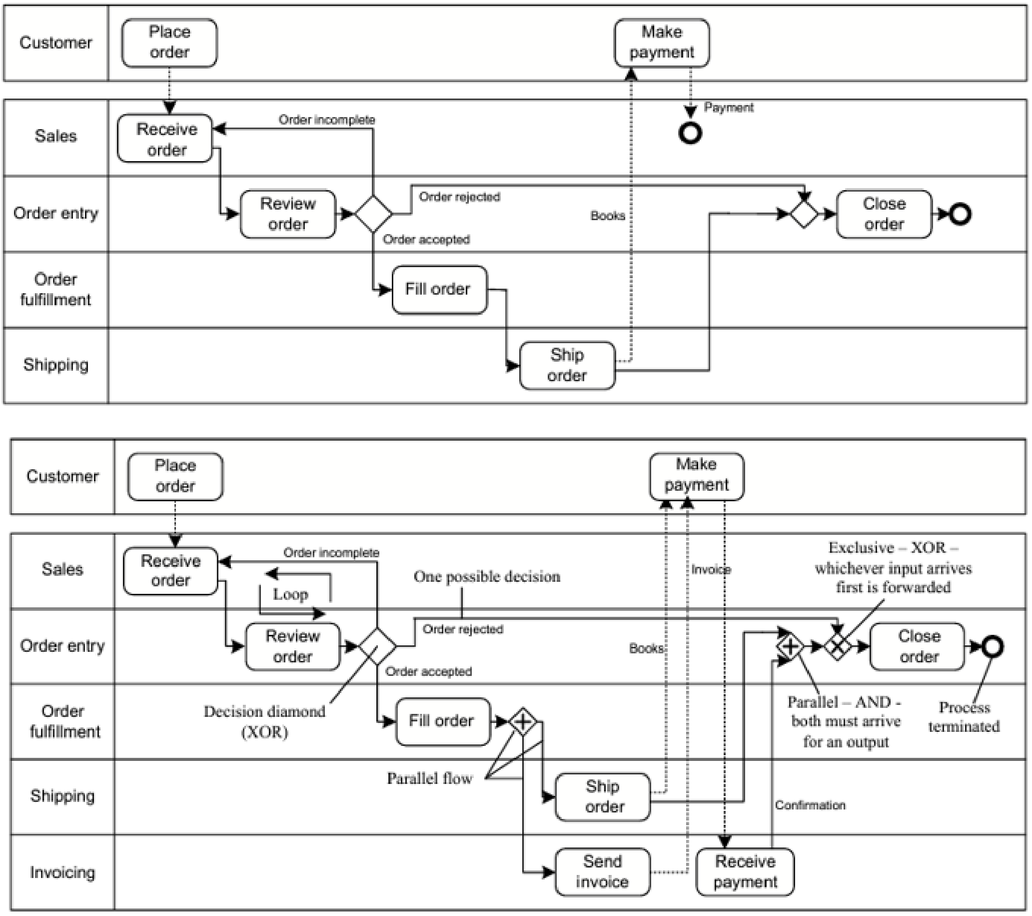

Figure 10: Process redesign (Harmon, 2014)

Business process redesign in meant for achieving the best performance available using the current resources of the organization, the success of a process improvement is very depending on process-related initiative and the discipline of the measurement. It should firstly identify organization resources from physical objects, systems and people, the process design reproduces a new or modified process pattern with its value proposition, pricing, and target customers. “The approach of a “process factory” is used to develop the process design as efficiently and effectively as possible. Such a process factory is necessary to ensure a quick move from strategy to the implementation and execution phase while still having sufficient time to focus on process innovations and important strategic improvements of high-impact processes”.(Kirchmer, 2017)

4.1.2 Process and Practice Orientation

Freight forwarding industry is one the fields that require high knowledge about practice of the process, the experience in the field of freight forwarding have a huge impact on the performance of the organization and consequently affect the final results. The people on the organization should always raise their practical knowledge about the filed to ensure achieving the best performance. “Every effort to change how work is done needs a dose of both process – the design for how work is to be done – and practice, an understanding of how individual workers respond to the real world of work and accomplish their assigned tasks”.(Brocke and Rosemann, 2014)

Definitely, analysts can design and implement an efficient process regardless of their experience level or understanding of every detail on the sector, but for other fields particularly those which require high knowledge and practice on a specified area is difficult for outsiders to understand and design.

Here it is apparent that the design should combine process details and practice knowledge and the best way to achieve the best design would be through an experienced personal who owns knowledge about the field and realize how the practical environment works to ensure the new or modified process will be more effective and efficient.

4.1.3 Process Management for SME’s

Expansion is a challenge for a small and medium size enterprises, currently SME’s acquire a considerable percent of the global economy, at the case organization, with more employees joining the company things tend to get more complicated, but process management can assist SME's to attain more growth in a sustainable way.

According to Fortune magazine, only one out of ten start-ups succeeded (Griffin, 2014), many of these elements that lead to failure could be handled through the implementation of process management, most SME's have some common features that makes the execution of the process management aspect difficult such as cost, time and human resources, but in the same time they own additional characteristics that would assist of employing a business process discipline as fast decision making, integration of activities.

Usually small business companies are looking for applying new process or at least adjust the current process in the time of developing their business performance, but while large organization are benefited from applying the business process model because they have more complex structures and large numbers of employees which the process management make them focused on specific tasks. SME's would not have these huge benefits but also can take advantage from applying the business model for their day to day process to achieve quality, efficiency and compliance.

Employees on small organizations tend to have different perspective for their work and the outputs of it, the business environment makes them adapted to identifying and solving upcoming issues by themselves "They do not have many guidelines, policies, and standard operating procedures on which to rely" (Kirchmer, 2017). Individuals usually take actions in a limited time; the process forces them to find the best possible solutions.

For that reason, mid-size companies have to consider the risk of losing their competitive advantage while applying the business process management, which Kirchmer (2017) represent the important elements of it as "SMEs have to be faster, more agile, and more innovative than large organizations. Since they do not have any significant economy of scale, attributes like speed, agility, and innovation are preconditions to survive".

In case of applying the process management in a very busy environment of the company, organization employees would have a great pressure and on the same time the management does not have the ability to recruit more employees. According to

Kirchmer (2017) “people on this situation must focus on vital, day-to-day operations which makes them normally available on a part-time basis. When even a small change in the business process can have an impact on the overall performance”, the business process approaches need to blend into that environment and implemented in a manner that is well integrated with the other multiple tasks of SME employees. It must be clear that additional effort in one area truly leads to less work in others or that the resulting benefits is improved. Also, the author points out that a successful project of applying process management in mid company is the project which consider “the right balance between standardization and agility”.(Kirchmer, 2017)

4.2 Best Practices in Improving Internal Processes

The data on subject section mostly are the output of the interviews with two managers of operations department at local companies, also, information from some studies made about international companies of freight forwarding sector has been included. The content of the interviews was about exploring the environment of the operation department and to acquire more information about their internal process specially concerned with the points appeared on the current state analysis.

Both managers have more than ten years of experience in the field of freight forwarding, the results show that both companies have a unified ERP system connecting all divisions in a way that makes the information transferred smoothly between the involved stakeholders and RFQ process managed inside the same system. The accessibility of data inside the system is determined based on the requirement of each department. Concern the credit control matter, both advised that it is working also on the same system when the sales person creates new account for the customer and fill on all the information including the credit facility if it was one of the requirements of the customer and based on that, the finance department give a positive or negative decision according to the required amount and time.

The discussion about the cooperation between sales and operation departments was in the core information, apparently, they have the same issue between the two divisions, but their solution was to arrange sort of workshop every quarter to discuss any related issues between the sales and operation.

Interviews also shows that the average years of experience for employees of the operation department in both companies are remarkably higher than their counterpart in the organization under the study and based on that they obtain more space to have decision in certain situations, so the degree of authority is a bit more available to employees.

Regarding the documentation cycle, the managers advised that each department has its own rules on the documentation cycle, so the department employees knows exactly how to maintain their part during the consignment.

Reviewing the international perspective about the main factors of a successful freight forwarding organizations. It has been represented in a study include top freight forwarding companies in the world such as Kuehne & Nagel, Expeditors International, DSV, Panalpina and UTi. Burnson (2016) state that “They all have the same common denominators in place: experience and stable, productive business systems”.

Based on the results of the study, the author explains that the most important factor of the success of the companies is about building a business system which clearly defined organizational structures, processes, another important feature of the organizations is about how the companies manage their internal system, “Neither Kuehne & Nagel nor Expeditors have a superior IT system. Both use an older in-house solution” (Burnson, 2016),

But the author emphasize that “what really matters instead is how well companies use their systems, which includes constant updates and ongoing training” (Burnson, 2016). According to this perspective, the structure and management of the internal system is more important than how advanced the system is used.

4.3 Change Management Approach

The current stage of the existing knowledge would explore the basic principles of the change management which is a broad subject, the researcher need to obtain the required knowledge that would facilities the successful adaptation of new behaviors within the organization. As Goncalves & Campos (2018) advise that “change management can be applied to all different types of organizational change. While the most mutual change drivers could include: technological evolution, process reviews, crisis, and consumer habit changes; pressure from new business entrants, acquisitions, mergers, and organizational restructuring. They all have one feature in common, they affect people and their paradigms. They change the status quo (the way things are done) and take people out of their comfort zone”. Also, the authors adapt Lewin’s freeze model that suggests the change involves a move from one static state via a state of activity to another static status and all this via a three-stage process of managing change: un-freezing, changing and re-freezing.

A simple change meaning is illustrated at figure 11 as below.

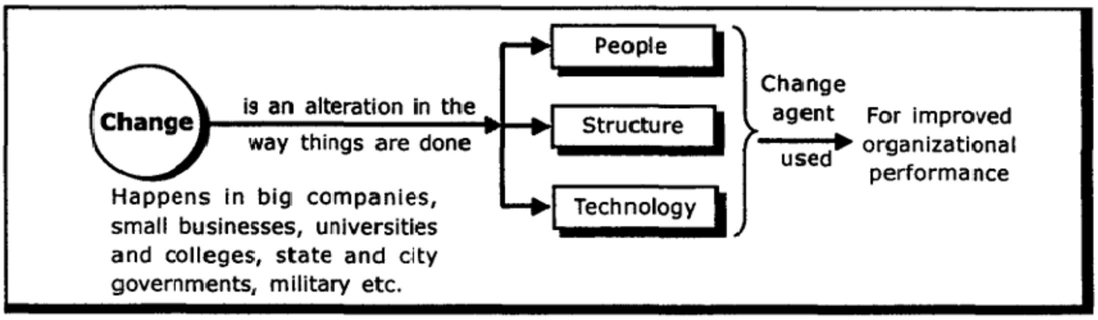

Figure 11: Meaning of Change - adapted from (Murthy, 2007)

There are many reasons for an organization to create the need of the change, these factors differ from internal and external, in the case company the forces of change are internal, the internal process of the operation department require that such approach to be applied as it will be suitable, so the employees could adapt the required changes.

The process of change management is the order of phases or actions that a change management scheme follows to apply change management plan to an organization, to drive individual transitions and certify the plan meets its projected results. The below steps mentioned at figure 12 have been recognized as main factors of a successful change management process.

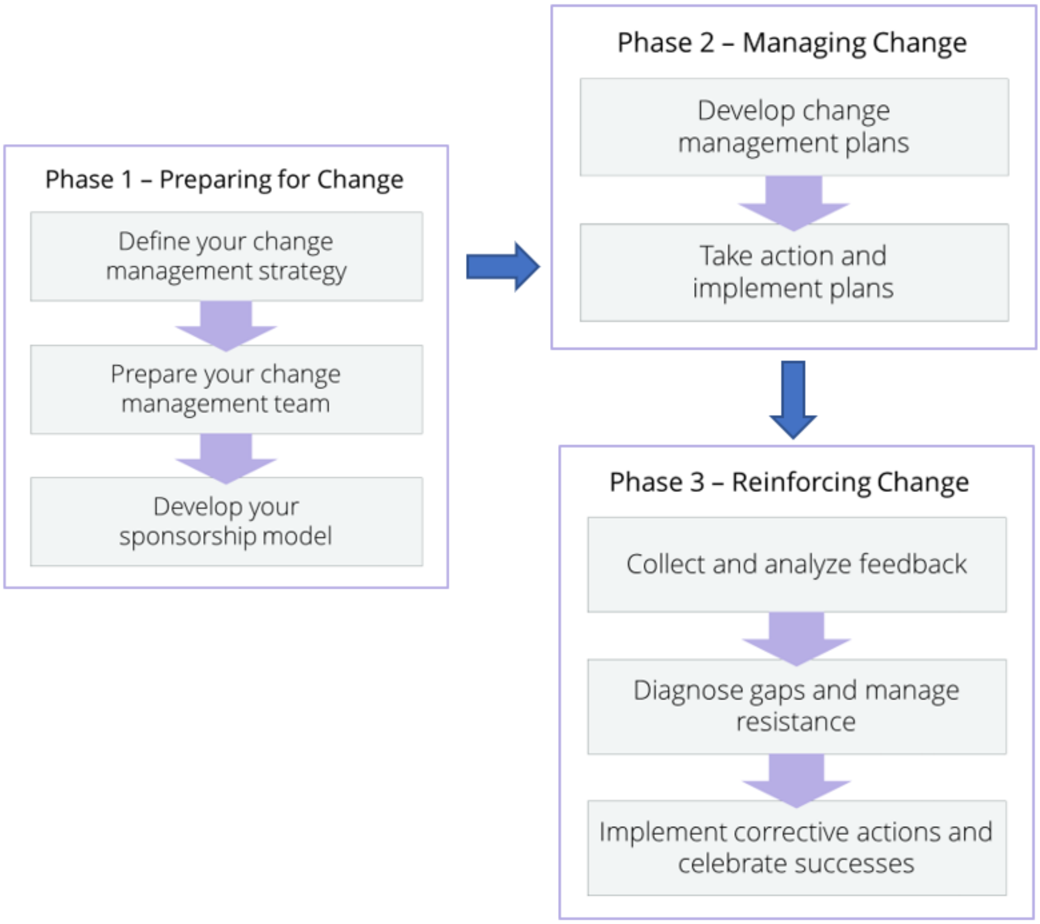

Figure 12: Change Management Process – adapted from Prosci's 3-Phase Process

- Preparing for Change.

The stage will be about facilitating the introduction of the change project to involved stakeholders, the employees should feel they are part of the project so it could build an awareness of the importance of the change, in addition, this stage will include an analysis of the environment to achieve an overall understanding of current situation, also, it will assist on realizing the surroundings that might affect the project positively or negatively.

The change objective should be evident at the preparation phase as it will improve the ability of effective communication through the project, the resources of the project must be reviewed and the sponsorship model to be identified.

- Implementing Change.

The second stage is about creating the plans that will be incorporated into the project, the strategy should explain the steps in which it will support the participants on the change project, Kirchmer (2017) suggests that training is needed to ensure that employees can do their jobs as required by the altered or newly established business process. Also, the author emphasize that training activities should be organized with a business process-oriented approach and address the relevant changes of the existing as-is processes or the integration of a new process into the overall process landscape.
In addition to that, the current stage also involves the execution of processes and activities to actualize change. “The ADKAR model has five elements that define the basic building blocks of a successful change: Awareness, Desire, Knowledge, Ability and Reinforcement”.(Hiatt, 2006)

- Sustaining Change.

The third phase helps to create specific action plans for ensuring that the change is sustained. The sustainability of change is in the endurance of new methods and performance levels in the organizational setting. It is not only the process that should change but also the behavior to create a new culture, the action plans should be altered based on the attitude of employees to fill gaps for a full adaptation. The organization need to maintain the change by having a measure of compliance.

The bottom line, to deliver a change successfully to an organization, certain elements must be followed to insure the project will positively affect the people. “The change management processes need to be managed to minimize the period during which the change has a negative performance impact, and it must minimize this effect, as well as related risk”(Kirchmer, 2017). “The first level of organizational performance measurement emerging from the analysis focuses on overall results and outcomes of the change, project, or initiative. This dimension asks whether the effort has delivered the expected benefits and improvement in performance”. (Rothwell, Stavros and Sullivan, 2015) and ask questions about these results, has the performance improved as expected and has the benefits of the project realized.

4.4 Conceptual Framework

At the existing knowledge section, the researcher has reviewed the basics and general characteristics of the process management framework, with more focus on process design specifically to gain in depth knowledge about the core process sequence also, the researcher reviews BPM role in small and medium sized enterprises to check how to implement process management strategy at very different environment of SME's, what is the challenges that could face the implementation and suggested plans that could be tailored to utilize the process management benefits with the advantages of being agile as a small company. The second stage was the best practices interviews to explore how other organizations manage their process in the same field, as it was very essential to obtain a practical information about how other organizations resolve similar issues on their day-to-day work environment. Then the final phase was about the implementation of the change for the organization and how it could be prepared, planned and managed through the whole cycle.

Earlier at the stage of current state analysis, the researcher could state challenges face the internal process of the operation department, followed by the existing knowledge to review literature and best practices to derive information that would assist the researcher finding out the suitable solution for the research problem, sequence of both parts, CSA and literature shown on figure 13.

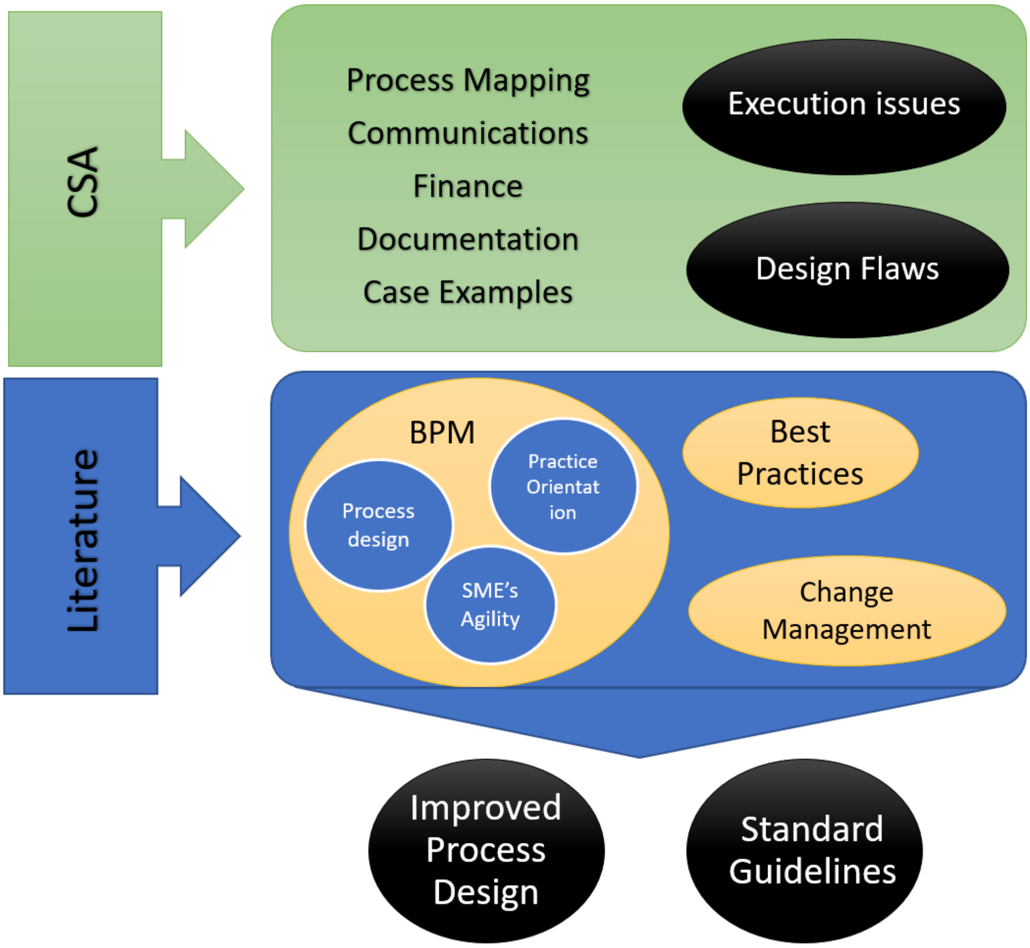

Figure 13: Thesis conceptual framework

As appeared after literature review, some of those problems was a result of lack of a comprehensive design of the business process inside the division which lead to increasing process time, delays of several actions and unsatisfying feedback from customers, while others problems were an execution issues resulted from the lack of standard procedures where the employees could not find a guide to follow in certain situations and also it has an effect on the financial part of the company causing penalties on the organization.

Based on the results of the existing knowledge section, it has been clear for the researcher how to tackle the problems and issues of the internal process of the operation department. On this respect, the correlation between the results of the CSA and findings of reviewing literature part will empower the researcher to create the suitable solution for the case organization that will be the performed in the next chapter.

5 Building a Proposal

One major concern for the researcher while building the proposal is to avoid over-engineering, the distance between top management and operations team in the company is not that huge as corporate organizations. Also, the researcher has to consider that the company does not have a complete ERP system that connects all the departments together, so the proposal should adapt that no advanced software available at the time of implementing the development project.

5.1 Initial Proposal

Based on the findings of pervious two chapters, the researcher has developed a structure of which will differentiate the key findings of current state analysis into three main categories, the building of the proposal will be based on these categories, Process design gaps and Execution errors as shown in table 3.

While there are some problems that could be classified as managerial issues and after the discussion with the management, it was required to include a recommendation for these issues at the final proposal stage.

Process design gaps	Missing information at the RFQ resulting on repeated process.
	Conflict area between sales and operation for sending offer to customer.
	Showing wrong/different details on the bill of lading.
Execution errors	Releasing MB/L without collecting HB/L.
	Different credit control decision between top management and finance.
	Absence of sharing information policy between divisions.
Managerial issues	Gap in cooperation between sales and operation departments.
	Authority structure and implications based on top down decision technique.

Table 3: Concerns observed from CSA

The Initial proposal would depend on two pillars, the researcher will provide the company with redesign of the internal process of the operation department which will address several issues on the structure of the process, secondly a set of guidelines and rules to prevent recurrence of employees' execution flaws.

5.1.1 Design the process

As shown at table 3, there was three points that has been classified as design gaps, the proposal will suggest adding or adjusting certain steps on the internal process to overcome the defects of the process.

Starting with the first point of the missing information at the RFQ that lead to a repeated process, the researcher has developed an RFQ form that sales team now must complete, the RFQ form will be sent to operations department, RFQ form now would have full information and details that required by the operations department in order to enable them from acquiring the proper offer from the agents or the shipping lines and based on that they would be able to give the right quotation from the first time avoiding double work and eliminate any chance for wrong or missing information or even ask for additional details. Sales team employees will ask for any missing information from the customer when receiving the shipment details because they must fill up the form with all the required details for the specific commodity of the shipment.

The second point was about the conflict area between sales and operation for sending offer to customer. At the new process, the offer must be sent from the sales team side to the customer directly, so the operation department will not send any offers to customers, they will send the net rate -the price without adding profit- to the sales team and sales will add the profit share and contact the customer.

At the following figure 14, the inclusion of the RFQ form and price offer is done on the price stage process map, the new/adjusted process is shown in yellow.

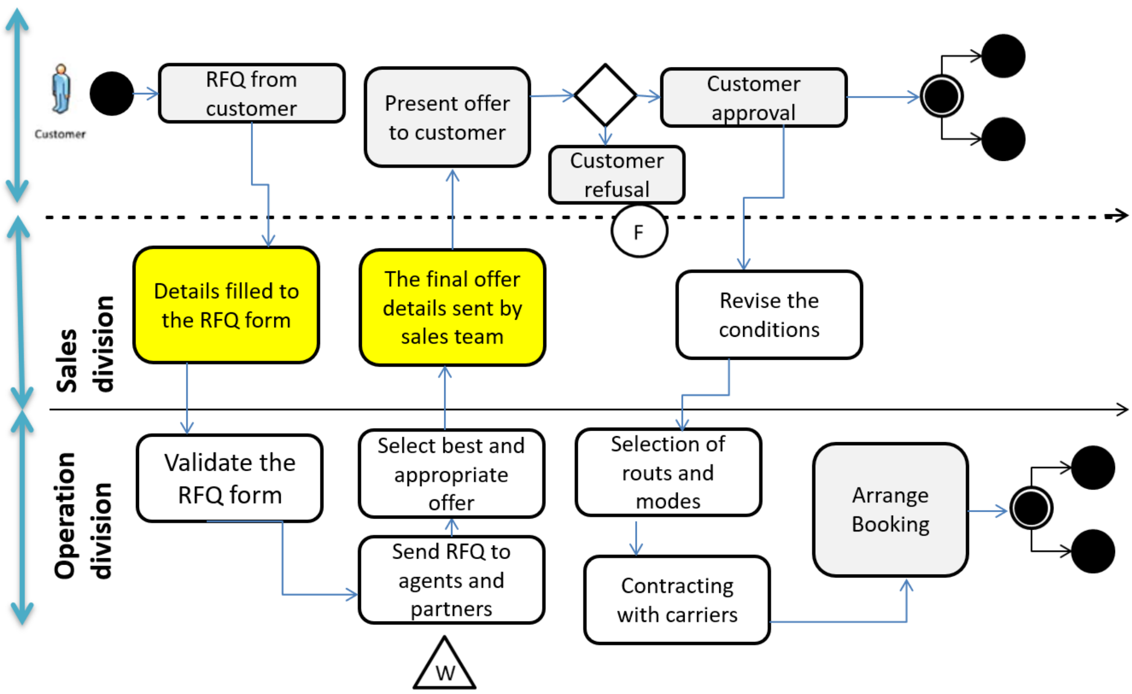

Figure 14: Pricing Stage redesign

The third point was appeared in a case example, wrong/different details has been stated on the bill of lading of the shipment, as mentioned of the case observation, operation department usually get a confirmation from shipper by our international agent but it was not enough to ensure the details are correct, so there is a new process to be included in which operation department staff has to double check on the shipment drafts by the customer even after getting shipper's approval, this third point of confirming the bill drafts from the customer will not be added to the shown model of pricing stage and it will be included at another stage of the operation process.

5.1.2 Standard guidelines

The second part of the proposal was about setting certain rules to avoid the execution problems and prevent any area of unclear responsibilities which will maintain the process integrity. The new procedures will be added to the current guidelines and rules of the operation department, the management will communicate the importance of the new procedures to involved stakeholders.

The first issue was about releasing MB/L without collecting HB/L. according the best practices interviews, the researcher suggested the company should develop a full documentation cycle for the operation department and to include the matter of the releasing master bill of lading on this documentation cycle, this will result on a control of how to manage all documentation activities inside the department and ensure that such act will never occur again.

The second point of different credit control decision between top management and finance, the idea was to create a combination of speed, compliance and simplicity of the procedure. To save time for the process, the first step was that the top management approval will be eliminated from the cycle so now the management will not decide about the credit control anymore, the only and final decision will be stated by the finance department. The researcher had a discussion with the finance department to figure out what is the range of credit facility (defining amount and time) that could be accepted by the department by default and under the current financial situation.

And then the solution was to set a standard criteria of credit amount and allowed payment time, if these criteria applied to the new customer, then the sales team will directly send the RFQ to the operation department and proceed with the shipment. In case of the customer need credit facility that exceed the pervious declared conditions by the finance department, the sales must get a separate decision from the finance before sending the RFQ to the operation department and at that situation, the operation department will wait to receive the approval from finance before proceeding on the order.

Th third and last point was about absence of sharing information policy between divisions. The operation department is the part of the company which deals with international agents, local/international shipping lines, customs brokers and trucking companies so any information about the agreements with those parties is managed by the department. And as the operation department is the source of such information, it has been essential to resolve the matter of sharing information by establishing a rule that operation staff has to make a notification about any updated, modified or canceled agreements with agents or shipping line to other departments (finance, sales and customer service).

On this respect and according to what has been mentioned above, the suggested rules will maintain that these actions will not occur again.

6 Validation of the Proposal

This section will include the stakeholders and management feedback on the initial proposal and if any suggestions or amendments needed for the process design and the rules.

6.1 Validation Overview

The proposal for the case organization was built upon several foundations, the ultimate goal was to improve the internal process of the operation department to achieve the best performance for more optimized operations. Earlier there was the stage of current state analysis which was about reviewing the processes on detail and state the key findings which need to be addressed, followed by the existing knowledge phase to explore the literature about the specific points resulted from the CSA and review the best practices on the field so the researcher could have the ability to gain more knowledge that would allow him to create the proposal.

Later on, the built proposal was presented to the management and the operation department staff for discussion, the meeting (data 3) was the main source of the feedback on the initial proposal, the participants gave their comments about the points of the initial proposal and according to these comments some minor changes were made to the proposal.

6.2 Final Proposal

Beside the process redesign and the guidelines that has been mentioned of the initial proposal, the management asked to include recommendations for managerial issues appeared on the current state analysis on the final proposal, so below table 4 state the main elements that would form the final proposal.

Proposal Include:	
1.	Redesign of the internal process of the operation department.
2.	A set of guidelines and rules.
3.	Recommendations for managerial issues.

Table 4: Final proposal main points

Based on the participant's feedback and considering their experience about the whole proposal, there was two points that has been subject to modification. The management need to include the process of confirming bill drafts to the pricing stage and to be the final step of that stage to maintain all points of contact with the customer into one phase which is the pricing stage, next phases would be internally managed between the operation department and other divisions. So, the researcher has to amend the process design to add more steps to complete the required actions before adding the final step of confirming bill drafts from the customer.

The modified steps of the process are shown in figure 15 in green as the final design of the pricing stage.

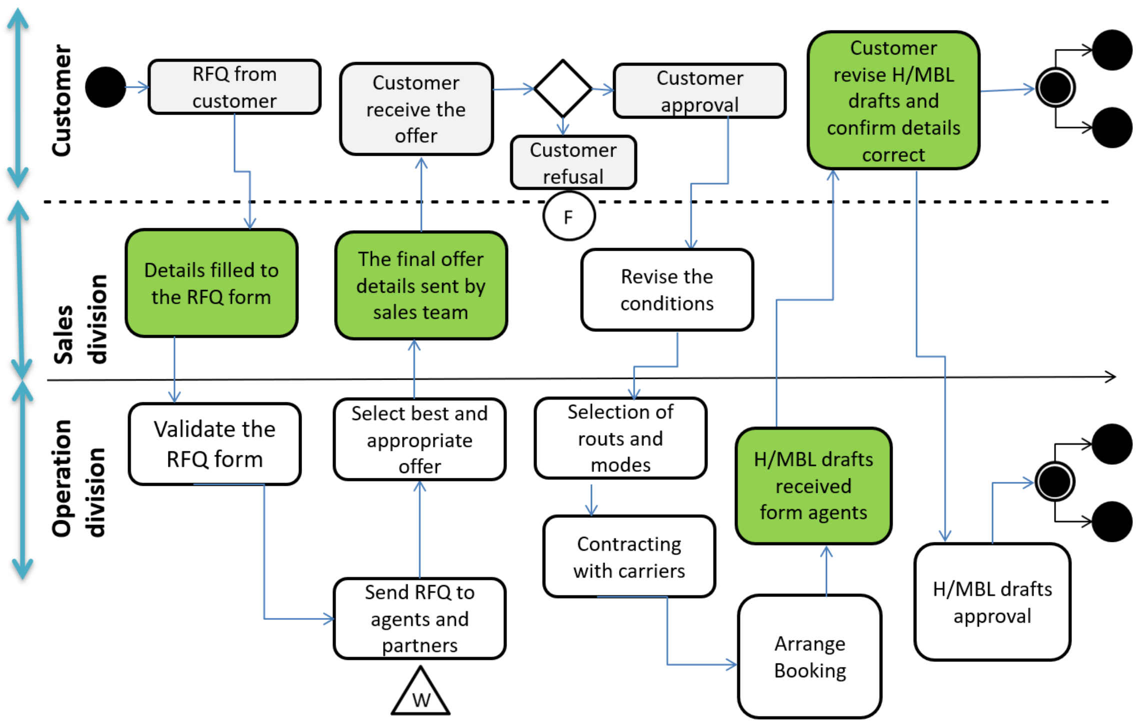

Figure 15: Pricing Stage final design

The second point that require modification was the sharing information policy, in addition to the agreements update notification, the management suggested that operation department should submit a monthly announcement about any changes at the routes, prices and ports requirements that has been reported to the department during each month to all divisions, even in case it does not affect the current business of the company. The management concept is to sustain full knowledge of any update or general changes on the market to other divisions especially sales team.

Table 5 include the final modified output of the process design and guidelines indicating the observed concerns from CSA and the proposed action of each matter.

Process Design	Missing information at the RFQ resulting on repeated process.	New RFQ form will modify the RFQ request process, sales team now must complete the form with all required details.
	Conflict area between sales and operation for sending offer to customer.	An adjusted process that will make the offer to be sent from the sales team side to the customer directly.
	Showing wrong/different details on the bill of lading.	A new process to be included in which operation department staff has to double check on the shipment drafts by the customer even after getting shipper approval, and to be the final step of the pricing stag.
Execution Guidelines	Releasing MB/L without collecting HB/L.	The company will develop a full documentation cycle for the operation department and to include the matter of the releasing master bill of lading on this documentation cycle.
	Different credit control decision between top management and finance.	A standard criteria of credit amount and allowed payment time has been applied, in case of the customer need credit facility that exceed the pervious declared conditions by the finance department, the sales must get a separate decision from the finance before sending the RFQ to the operation department.
	Absence of sharing information policy between divisions.	Operation staff has to make a notification about any updated, modified or canceled agreements with agents or shipping line to other departments (finance, sales). Also they must make monthly announcement about any changes at the routes, prices and ports requirements that has been reported to the operation department during each month.

Table 5: final modified output of the process design and guidelines

6.2.1 Recommendations for The Managerial Issues

Finally, as per the discussion with the management the final proposal will also include recommendations concern the managerial issues to assist the organization overcome those matters. The first point that has been classified under the managerial section was the gap in cooperation between sales and operation departments that has been appeared in several times during the CSA.

The cooperation between the two divisions reserving a huge part of the day-to-day work process and in order to enhance the current situation the researcher suggested that sales could have a period of a practical training within the operation department, the training would be conducted with the operation department staff directly during their usual daily activities so the sales team could know how it goes with every stage of the shipment and who are the active players on the cycle and how some decisions affect the procedures and what situations might happen during the processing of the shipment.

This would let the sales team to create an overview of the environment of the operation handing process and the difficulties that might face the operation department staff at several situations. Also, they will figure out the reasons behind the information and details which the operation department might request during the process of the shipment.

The second point was about the authority structure and some negative effects resulted based on the top down decision technique, business activities of freight forwarders tend to rely on experience, for that reason there must be more space of the middle management and even for the employees to decide about certain issues without returning to the top management.

In fact, empowering middle management with more authority will reflect of the day-to-day business activities and will contribute to the greatest advantage of the organization which is the agility, this feature that distinguish the company among the big players on the market giving it a competitive advantage. The role of middle managers has evolved to be a vital part of the organization performance success, while the top management focus on the strategy of the organization, the role of the mid-level managers is to maintain the way of how these strategies will be implemented.

6.3 Recommendation for Implementation

High percentage of change programs aim to modify parts of the internal process of any organization face several difficulties because of their lack of employee support. It is necessary for the company to have a practical approach of how to plan, implement and sustain the change and to share the whole project with the employees.

One of the most significant factors that participants must engage in a highly interactive discussion about the intended change to create positive environment and realize the benefits of the change, that would facilities the successful adaptation of new behaviors within the organization.

Organizations usually tend to focus more about thinking on the change and plan for it but do not expand a lot of energy in the adaptation phase, to deliver a change successfully to an organization, both the implementation and the adoption of the new process or system must be observed at the same time as separate and distinct sets of activities to monitor the progress of project and sustain the improved performance.

7 Discussion and Conclusions

The final chapter of the thesis discuss the research progress and gives a summery of the study, stating what was the objective and comparing it to the intended outcome and present a reflection on the study.

7.1 Summary

The study performed as part of the development project for the case company, the reason behind this development project was that the organization as a startup had focused mainly on acquiring new business, open new branches and increase the customers base to support the financial side of the business. During performing this strategy, the number of shipments had increased in an unprecedented way, in parallel with such growth, many problems started to appear at the processing of the consignments, these issues resulted in losing some of the key clients, paying huge penalties and dissatisfaction from several customers about some delays faced their shipments. The impact of these issues leads the company management to consider a development project to enhance the overall performance of the company.

The study scope was the operation department internal process, the researcher had investigated the internal process in detail to discover any gaps also examines the co-operation between the operation department and other divisions that was part of the internal process of the department, also the researcher had to check points of contact with the customer that been resulted from the internal process of the department.

All those details and information has been observed using several techniques to gain in-depth knowledge from different angles and to verify the authenticity of the acquired information. The research approach was the mixed methods research design that enable utilizing of both quantitative and qualitative research data. The next step was to analyze these data to find the roots behind the problems and to reach a complete understanding of the current state of the department.

At the existing knowledge phase, the researcher had reviewed the literature about the key findings of the current state, there was three topics selected business process management, best practices at the field and change management. The business process study area was extremely wide, so the researcher had worked on acquiring the basic principles of the BPM and then concentrate more about the process design and implementation of the process management at small and mid-size companies. The best practices had focused on the practical information at two leading companies on the market and the last point was discussing the way on which the new and improved process will be delivered to the department using the concepts of change management approach.

7.2 Evaluation of the Thesis

This section will include an evaluation about the objective of the study and the outcome, also it will contain the researcher reflection to the study.

7.2.1 Outcome vs Objective

The objective of the study was to improve the internal process of the operation department at the case company, in other words “to make the internal daily processes of the division more reliable and to increase productivity of employees performing their day to day tasks” quoted from the first chapter of the thesis. The goal was to reach a smoothly flow of the process and functions inside the department.

Comparing the outcome with the objective, I believe the study had faced the problems inside the internal process with the suitable solutions in the form of redesigning the flawed parts of the process and applying guidelines for certain points that face lack of rules or unclear responsibilities.

The proposal has been built to encounter the challenges of the internal process directly and with the simplest technique to avoid complexity that might have a negative effect of the daily work of the department and would cause delays on the work cycle.

7.2.2 Reflection & Afterword

At this final part of the thesis, I would give my reflection of the study, I have worked on the thesis for nearly one year, it was challenging to get the balance between work and studying at certain times. The scope of the thesis has been modified at the first beginning because to complete a development project for the entire organization would need an extremely long time and a massive amount of data. After this modification, it was time to concentrate on how to acquire the data correctly, using of semi-structured interview was an ideal selection to acquire the required data to create a complete understanding of the current situation. Also, the participants enthusiasm and the management full support to the study was one of the main reasons for the success of the study, and after processing the CSA data, the management has showed a great interest to check the findings of the research till this stage.

The feedback from the management showed that the proposal had a direct benefit to the company and that working on this project with the employees give a positive impact on the internal environment, employees felt they have participated on building their own working system. Personally, I am satisfied that I had the chance to contribute to the development project.

References

Becker, J. *et al.* (2012) ‘Business Process Management’, *Business & Information Systems Engineering*, 4(5), pp. 227–228. doi: 10.1007/s12599-012-0228-2.

Boon, S. and Ram, M. (1998) ‘Implementing quality in a small firm’, *Personnel Review*, 27(1), pp. 20–39. doi: 10.1108/00483489810368530.

Brocke, J. and Rosemann, M. (2014) *Handbook on Business Process Management 1: Introduction, Methods, and Information Systems*. Springer. Available at: https://doi-org.ezproxy.metropolia.fi/10.1007/978-3-642-45100-3 (Accessed: 7 February 2018).

Brown, S. (2005) *Strategic operations management, second edition*. Available at: https://apps.uqo.ca/LoginSigparb/LoginPourRessources.aspx?url=http://www.books24x7.com/marc.asp?bookid=28165 (Accessed: 28 June 2018).

Burnson, P. (2016) ‘Freight Forwarding Selection: The People Factor’, *Logistics Management (2002)*, 55(5), pp. 32–34,36–37.

Cameron, R. and Molina-Azorin, J. F. (2011) ‘The acceptance of mixed methods in business and management research’, *International Journal of Organizational Analysis*, 19(3), pp. 256–271. doi: 10.1108/19348831111149204.

Chong, S. (2014) ‘Business process management for SMEs: an exploratory study of implementation factors for the Australian wine industry’, *Journal of Information Systems and Small Business*, 1(1–2), pp. 41–58.

Chugunov, A. A., Trufanova, T. P. and Nasikivskyy, I. M. (2014) ‘Improvement of business processes of a freight-forwarding company’, *ЕКОНОМІКА: реалії часу*, (5 (15), 2014), pp. 65–69.

Cohen, L., Manion, L. and Morrison, K. (2007) *Research Methods in Education*. doi: 10.4324/9780203489352.

Cox, E. (2000) *Psychology for AS Level*. Oxford University Press. Available at: https://books.google.fi/books?id=CjUGmd4pfGwC (Accessed: 2 June 2018).

Denscombe, M. (2014) *The Good Research Guide small-scale social research projects*. Fifth edit. Maidenhead, Berkshire : McGraw-Hill Education.

DiCicco-Bloom, B. and Crabtree, B. F. (no date) ‘The qualitative research interview’, *Blackwell Publishing*, MEDICAL ED(40), pp. 314–321.

E. Martin, W. and D. Bridgmon, K. (2012) *Quantitative and statistical research methods. From hypothesis to results*.

Elkeles, T., Phillips, P. P. and Phillips, J. J. (2014) *Measuring the Success of Learning Through Technology: A Step-by-Step Guide for Measuring Impact and Calculating ROI on E-Learning, Blended Learning, and Mobile Learning*. American Society for Training & Development. Available at: https://books.google.fi/books?id=Q2fgBAAAQBAJ (Accessed: 5 March 2018).

Eriksson, P. and Kovalainen, A. (2016) *Qualitative methods in business research*.
Finch, E. (2011) *Facilities Change Management*. Hoboken: John Wiley & Sons.

Galloway, R. L. (1996) *Operations management : the basics*. London; Boston: International Thomson Business Press.

Giacosa, E., Mazzoleni, A. and Usai, A. (2018) 'Business Process Management (BPM).', *Business Process Management Journal*, 24(5), pp. 1145–1162.

Goncalves, V. and Campos, C. (2018) *The Human Change Management Body of Knowledge (HCMBOK)*. CRC Press (Best Practices and Advances in Program Management). Available at: https://books.google.fi/books?id=EM5JDwAAQBAJ (Accessed: 22 July 2018).

Hardy, K. and Runnels, A. (2014) *Enterprise Risk Management: A Guide for Government Professionals*. Wiley. Available at: https://books.google.fi/books?id=K0mbBAAAQBAJ (Accessed: 23 July 2018).

Harmon, P. (2014) *Business Process Change: A Business Process Management Guide for Managers and Process Professionals: Third Edition*.

Hiatt, J. (2006) *ADKAR: A Model for Change in Business, Government, and Our Community*. Prosci Learning Center Publications. Available at: https://books.google.fi/books?id=Te_cHbWv-ZgC (Accessed: 22 April 2018).

Hughes, R., Foundation, R. W. J. and and Quality, U. S. A. for H. R. (2008) *Patient Safety and Quality: An Evidence-based Handbook for Nurses*. Agency for Healthcare Research and Quality (AHRQ publication). Available at: https://books.google.fi/books?id=r64DvgAACAAJ (Accessed: 5 December 2018).

Hyötyläinen, T. (2014) *Steps to Improved Firm Performance with Business Process Management: Adding Business Value with Business Process Management and Its Systems*. Springer. Available at: https://doi-org.ezproxy.metropolia.fi/10.1007/978-3-658-07470-8 (Accessed: 19 June 2018).

Johnston, A. (2014) 'Rigour in research: theory in the research approach', *European Business Review*, 26(3), pp. 206–217. doi: 10.1108/EBR-09-2013-0115.

Kaplan, R. S. and Mikes, A. (2012) 'Managing Risks: a New Framework', *Harvard Busines Review*, 90(6), pp. 48–60.

Kirchmer, M. (2017) *High Performance Through Business Process Management : strategy execution in a digital world.* [S.l.]: Springer International Pu. Available at: https://doi-org.ezproxy.metropolia.fi/10.1007/978-3-319-51259-4 (Accessed: 7 May 2018).

Knight, P. T. (2001) *Small-Scale Research: Pragmatic Inquiry in Social Science and the Caring Professions*. SAGE Publications. Available at: https://books.google.be/books?id=I5O94wA0fPkC (Accessed: 13 March 2018).

Krishnaswamy, O. R. and Satyaprasad, B. G. (2010) *Business research methods*. Mumbai [India]: Himalaya Pub. House. Available at: http://public.eblib.com/choice/publicfullrecord.aspx?p=588025 (Accessed: 3 February 2018).

Lancaster, G. (2005) *Research Methods in Management: A Concise Introduction to Research in Management and Business Consultancy*. Elsevier/Butterworth Heinemann. Available at: https://books.google.be/books?id=_28H-G4psG0C (Accessed: 22 March 2018).

Murthy, C. S. V. (2007) *Change management*. Mumbai [India]: Himalaya Pub. House Pvt. Ltd. Available at: http://public.eblib.com/choice/publicfullrecord.aspx?p=588098 (Accessed: 28 July 2018).

O'Gorman, K. and MacIntosh, R. (2015) *Research Methods for Business Students: A guide to writing your dissertation*. doi: 10.13140/RG.2.1.1419.3126.

Oyegoke, A. (2011) *The constructive research approach in project management research*. (4). doi: 10.1108/17538371111164029.

Pathak, A. (2016) *Export Import Management*. Educreation Publishing. Available at: https://books.google.fi/books?id=gpNQCwAAQBAJ (Accessed: 16 April 2018).

Phillips, P. P., Phillips, J. J. and Edwards, L. A. (2012) *Measuring the Success of Coaching: A Step-By-Step Guide for Measuring Impact and Calculating ROI*. American Society for Training & Development. Available at: https://books.google.fi/books?id=Gut7m2WuHsEC (Accessed: 28 July 2018).

Ranđelović, A. S., Milojević, R. and Radosavljević, M. (2018) 'Identification and analysis of key business process management factors.', *Identifikacija i analiza ključnih faktora upravljanja poslovnim procesima.*, 56(1), pp. 57–78.

Reviews, C. T. I. (2016) *Managing Health Education and Promotion Programs , Leadership Skills for the 21st Century: Business, Management*. Cram101. Available at: https://books.google.fi/books?id=IcqzjNMHRz0C (Accessed: 22 April 2018).

Rothwell, W. J., Stavros, J. and Sullivan, R. L. (2015) *Practicing Organization Development : Leading Transformation and Change*. Hoboken, UNITED STATES: John Wiley & Sons, Incorporated. Available at: http://ebookcentral.proquest.com/lib/metropolia-ebooks/detail.action?docID=4093344 (Accessed: 28 July 2018).

Ruel, S. (2017) 'Qualitative Methods in Business Research', *Qualitative Research in Organizations and Management: An International Journal*, 12(1), pp. 87–88. doi: 10.1108/QROM-08-2016-1410.

Sagor, R. (2000) *Guiding School Improvement with Action Research*. Association for Supervision and Curriculum Development. Available at: https://books.google.fi/books?id=W5VRDwAAQBAJ (Accessed: 15 March 2018).

de Salas, K., Lewis, I. J. and Huxley, C. (2017) 'Using the critical process targeting method to improve SMEs' process understanding', *Business Process Management Journal*, 23(2), pp. 425–447. doi: 10.1108/BPMJ-06-2014-0052.

Sapsford, R. and Jupp, V. (2006) *Data Collection and Analysis*. SAGE Publications (Published in Association with). Available at: https://books.google.fi/books?id=BEDTrvUH8NcC (Accessed: 22 March 2018).

School, C. B. (2009) *Operations*. Available at: www.comfirst.org.uk/files/cass_business_school_operations.pdf (Accessed: 15 May 2108).

Simon Kendal (2015) *How to Write a Research Paper*. Ventus. Available at: http://sure.sunderland.ac.uk/8274/ (Accessed: 2 February 2018).

Stapenhurst, T. (2009) *The Benchmarking Book*. Taylor & Francis. Available at: https://books.google.fi/books?id=ncwsBgAAQBAJ (Accessed: 13 July 2018).

Sue Greener, J. M. (2013) *An introduction to Business Research Methods*. Book-boon.com. Available at: https://bookboon.com/fi/an-introduction-to-business-research-methods-ebook (Accessed: 22 March 2018).

Vom Brocke, J. and Rosemann, M. (2010) *Handbook on business process management*. Springer. Available at: https://doi-org.ezproxy.metropolia.fi/10.1007/978-3-642-45103-4 (Accessed: 7 February 2018).

Weathington, B. L., Cunningham, C. J. L. and Pittenger, D. J. (2012) *Understanding business research*. Hoboken, N.J.: John Wiley & Sons. Available at: http://public.eblib.com/choice/publicfullrecord.aspx?p=894393 (Accessed: 28 February 2018).

BAtimes for business analysts. (2012) *The Structure of Business Analysis Documents*. [Online] Available from http://www.batimes.com/articles/the-structure-of-business-analysis-documents.html. [Accessed: 30th January 2016].

FIATA (2004), Freight Forwarding and Logistics Services [Online] Available from https://fiata.com/media/publications/description-of-services.html [Accessed: 30th January 2017].

World Shipping Council (2018), *How Liner Shipping Works* [Online] Available from http://www.worldshipping.org/about-the-industry/how-liner-shipping-works [Accessed: 30th January 2017].

CIFFA (2018), Freight Forwarder's Role in Transportation [Online] Available from https://www.ciffa.com/about/freight-forwarders-role-in-transportation/ [Accessed: 30th January 2017].

QuestionPro Survey. (2018). Customer Service Quality Evaluation Survey. [Online] Available from https://www.questionpro.com/survey-templates/service-quality-evaluation/ [Accessed: 30th January 2018].

Business dictionary. (2018) Operations [Online] Available from http://www.businessdictionary.com/definition/operations.html [Accessed: 30th January 2018].

DeFranzo, S. (2011) Difference between qualitative and quantitative research. [Online] Available from: https://www.snapsurveys.com/blog/qualitative-vs-quantitative-research/ [Accessed: 30th January 2018].

Prosci. (2018) Change Management Process. [Online] Available from: https://www.prosci.com/change-management/thought-leadership-library/change-management-process / [Accessed: 24th April 2018].

Griffin, E. (2014) Why Start Ups Fail, According to Their Founders. In: Fortune Magazine, [Online] Available from: http://fortune.com/2014/09/25/why-startups-fail-according-to-their-founders/ [Accessed: 24th April 2018].

Kaplan, R. S. and Mikes, A. (2012) Managing Risks: A New Framework, Harvard Business Review, 90(6), pp. 48–60. [Online] Available at: https://hbr.org/2012/06/managing-risks-a-new-framework. [Accessed: 24th April 2018].

Becker, J., Rosemann, M., Röglinger, M. et al. Bus Inf Syst Eng (2012) 4: 227. [Online] Available at: https://doi-org.ezproxy.metropolia.fi/10.1007/s12599-012-0228-2 [Accessed: 24th April 2018].

The economist (2017). Trends in the air-freight business. [Online] Available from: https://www.economist.com/business/2017/04/14/trends-in-the-air-freight-business [Accessed: 30th January 2018].

Appendix 1: Interview questions group one

Interview questions with operation department employees.

General information

- Age group:
- 25-30 / 30-35 / 35-40 / 40-45 / 45-50 / 50-55 / 55-60
- Education
- Work experience in years
- Work experience in the target organization
- Job role
- In charge of Import or Export shipments.

Process questions:

1. Describe your role in detail?
2. What parties you are dealing with outside the division?
3. What is the most common problem happened in the range of your role?
4. In your opinion, whom is responsible about these problems (internal team members or other division)?
5. What kind of problems that internal team members is responsible for?
6. What kind of problems that other divisions are responsible for?
7. How do report these problems in case of repeated?
8. Do you receive enough information to perform your role in a good way?
9. Do you receive this information in a suitable time?
10. Which parties that commonly does not provide essential information?
11. In which way you ask for this information?
12. Have you had a training before starting the job in the company?
13. In your opinion, what is the strengths and weaknesses of the department?
14. In your opinion, is the hierarchical organization suitable for the company?
15. In case you need a decision from your manager/supervisor, how fast you get the decision?
16. In case of delay, in your opinion, how it could be solved?
17. Do you think that current service level meets the customer expectation?
18. In your opinion, how we could improve service quality provided to the customer?

Appendix 2: Interview questions group two

Interview questions with employees on other divisions.

General information

- Age group:
- 25-30 / 30-35 / 35-40 / 40-45 / 45-50 / 50-55 / 55-60
- Education
- Work experience in years
- Work experience in the target organization
- Job role

Process questions:

1. Describe your role in detail?
2. What parties you are dealing with inside the operation department?
3. What is the most common problem happened in the range of your cooperation with the operation department?
4. What are the reasons behind the issues?
5. How do report these problems in case of repeated?
6. What could be the development targets in the process to prevent these problems?
7. In your opinion, what is the strengths and weaknesses of the operation department?
8. Do you receive enough information from the operation department?
9. Do you receive this information in a suitable time?
10. In which way you ask for this missing information?
11. Have you had a training before starting the job in the company?
12. Do you think the training system is workable for operation department employees?
13. Do you think that current service level meets the customer expectation?
14. In your opinion, how we could improve service quality provided to the customer?

Appendix 3: Questionnaire

Service Quality Evaluation by customers

Questions:

1. Please rate the quality of service you received:
   Worse - Bad – Normal – Good - Excellent
   Please describe if there was any particular aspect of the service experience that was unique:
2. In case of problems, the process of getting my problem resolved was:
   Worse - Bad – Normal – Good – Excellent
3. How do your rate the service in terms of price?
   High – Normal – Competitive
4. How do your rate the service in terms of speed?
   Slow – Ordinary – Quick
5. In case of limited time, how do rate the company interaction with the situation?
   Late – Normal – Prompt
6. How do you rate the ability of our employees to understand your specific needs?
   Worse - Bad – Normal – Good - Excellent
7. Have you ever faced different outcome than the agreed on the shipping contract?
   Yes
   No
8. What differences?
9. Considering the time, effort and money you spent, how would you rate the overall value provided?
   Worse - Bad – Normal – Good – Excellent
10. Would you recommend the service of the company to other companies?
    Yes
    No
11. Why?
12. Do you have any suggestions for improving our services?

Appendix 4: best practices Interview Questions

Interview questions with operations managers on other companies.

1- Does the company have an ERP system?
2- How the RFQ process flow between sales and operation department?
3- Who is responsible about sending offer to the customer?
4- Do the company have sort of a system policy regard the profit margin of the consignment?
5- Who is responsible about releasing the shipment documents to customer and how the process being handled?
6- How the documentation cycle works in the company?
7- What determine the accessibility of data for each division?
8- In what way the cooperation between the sales and the operation department take place during an ongoing file?
9- In your opinion, what can make the cooperation between the sales and the operation much easier?
10- Who is responsible about the final credit control decision in case of huge amounts and long period?
11- In what level do you classify the authority delegation in the company?