

Analyzing the potentials of outsourced manufacturing and  
selecting an efficient outsourced manufacturing model  
The case of May Dai Phuc Ltd.

Trang Nguyen Thi Thuy

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## ABSTRACT

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| <p>This research aims to analyze the potentials of outsourcing strategy and select an efficient outsourcing model in the context of a manufacturing process within a single company. The first objective of this research is to find out the company's possibility and flexibility in outsourcing its manufacturing. The second objective is to discuss how outsourced manufacturing will influence the case company's current operational and financial performance. The third objective is to study the three most common outsourced manufacturing models currently used by national garment manufacturers and find out the most efficient one for the case company.</p> <p>The background of this thesis is firstly formed from the current situation of the case company and its demands for outsourcing manufacturing. In addition, relevant research and literature on the outsourcing phenomenon and the outsourcing process were studied to identify appropriate approaches for different issues within outsourcing context and to establish a logical framework for this research.</p> <p>This qualitative research was conducted as a single case study for the case May Dai Phuc Ltd. Data used in this research were collected from different kind of sources including previous research and literature; company internal documents; and an interview and several discussions with the managing director of the case company via telephone and email.</p> <p>The results of this research highlight the considerable potentials and benefits of outsourced manufacturing in the case May Dai Phuc Ltd. On the basis of the research findings, it is indicated that outsourced manufacturing can enhance the current financial and operational performance of the case company through reducing cost, converting fixed cost to variable cost, and reducing performance cycle time and offering flexibility. In addition, a set of recommendations were provided to assist the company in making its outsourcing decision.</p> |  |
| <p>Keywords: Outsourcing, Outsourced Manufacturing, Process of Outsourcing, Outsourcing Decision</p>  |  |

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## 1 INTRODUCTION

This chapter presents the topic and the field of study, and the factors motivate the researcher here to conduct this research. Additionally, this chapter discusses specific objectives of the research work and presents the research questions. The structure of the thesis work is also explained in this chapter.

### 1.1 Background and motivation

The general research area of this research is outsourcing, which is described as a part of production and operation management particularly in this research. There are several arguments for and against whether outsourcing belongs to strategic management, operation management or business process management. In this research, the researcher approaches outsourcing under the production and operation management's disciplines instead of strategic management or business process management. Different disciplines have different essentials; specifically within production and operation management, issues that critically influence productions and operational performance of one company are the main objects of discussion.

Waters (2009, 5) defines operations as all activities that create an organization's products and, therefore, it is the heart of any organization. Operation management became a well-known concept during the 1950s and 1960s and was rapidly introduced as an academic discipline later on (Stevenson 2011, 4). Stevenson (2011, 4) describes operation management as the primary functions of any organization which is responsible for processes of transforming inputs into finished goods/services. As business expands internationally, operation management involves additional responsibilities. The emerging of outsourcing has contributed to the growth of business by reducing pressures of production on operation management. Even though outsourcing is considered as a minor adjustment in

operation management, its effects on organizational performance are considerable. (Click & Duening 2005, 47.) There is ample research discussing the important role of outsourcing. However, outsourcing processes, functions and models are different from organization to organization. Therefore, this research work aims to provide insight into this particular phenomenon at both theoretical and practical level. To be specific, this research focuses on analyzing the potential of outsourcing and selecting an outsourcing model in the context of a manufacturing process within a single company.

My personal interest in carrying out this thesis work derives from my family's career background. The topic of this thesis and the case company are a very close sample of my family business. The fact that the case company is a medium-size garment manufacturer who is struggling to find solutions to typical manufacturing problems, e.g. timely deliveries, products' qualification, inspires me to proceed with this empirical research. As my parents have been working in the garment industry for over 18 years starting from a small manufacturing firm, I have seen their business going up and down and facing similar problems. During the time I lived with my parents, I also gained rich experiences in the garment manufacturing field. Hence, I am keen to enrich my knowledge and understanding of the context and characteristics of this field which I believe would support my future career. On the other hand, considering the high applicability and validity of outsourcing, this topic was selected in the expectation of gaining comprehensive understanding of this phenomenon both at the theoretical level as well as at the practical level.

The issue of outsourcing has been extensively studied by over the past decades by several researchers. Recently, outsourcing has become a reality for global manufacturing organization operating in almost every industrial segment (Venkatesha & Mohanty 2014, 1). As the demand for outsourcing has been growing constantly and is becoming one of the dominant business trends, it has recently been referred to as "strategic outsourcing" by most of businesspeople. The reason for such a concept is because of its highly important role in operational systems. Basically, outsourcing helps organizations reduce operation costs, increase market flexibility, enhance their ability to deal with demand and price pressures, and reduce cycle time by concentrating on their core competences and outsourcing

peripheral activities to specialists (Waters 2009, 52; Click & Duening 2005, 35; Venkatesha & Mohanty 2014, 4). Among a variety of outsourcing practices, outsourced manufacturing rapidly emerges as a practice adopted by most industries (Venkatesha & Mohanty 2014, 15). According to Bento (2010, cited by Yahya 2012), manufacturing is the most common activity outsourced, occupying nearly 30% out of outsourced activities.

Regarding the concept of outsourcing, there is a belief that it is “a luxury enjoyed by large multinational enterprises” (Hätönen 2008, 25). Small and medium enterprises (hereinafter SMEs) frequently do not consider outsourcing as a priority strategy for their business because they find it more risky rather than beneficial. The main problem is that, in most of the cases, SMEs are unable to access their potential of outsourcing. (Longbottom 2011.) However, more recent research with a focus on the effects of outsourcing has indicated that practically SMEs can benefit by adapting outsourcing regardless the size of the companies (Engardio & Arndt & Foust 2006). Therefore, this research aims to study in depth the potential of outsourcing in a medium-size company in order to change SMEs’ perspective toward this phenomenon. Consequently, this research aims to increase the attention paid to SMEs in the view of this phenomenon.

This thesis researches outsourcing in the context of a manufacturing process within a single company name May Dai Phuc Ltd. This research is done for the case company because of its specific needs and the main benefactor for the outcomes of this research is the case company. As the case company is a medium-size garment manufacturing firm, it has to deal with a high pressure of delivering qualified products in time. Timely deliveries have been a big problem when the high season comes; manufacturing within the company’s own operation infrastructure cannot respond to the inquiries from the buyers. While the managers of the company were seeking for solutions to those problems, they found outsourced manufacturing as the most efficient application. Deriving from their experiences and references from other cases, outsourcing partly the case company’s manufacturing would help in reducing production time, cost and increasing productivity. Meanwhile, adapting the outsourced manufacturing structure possibly changes the current operating system as well as requires plenty of time, effort and money. The decision to



outsource any manufacturing process of the company involves consequences and risks. Therefore, it is necessary to analyze in depth the possibilities, risks and benefits of an outsourced manufacturing process before the company considers applying it. With the help of theoretical discussions, this research highlights the motivations and possible effects of outsourcing manufacturing of the case company. On the basis of the thesis research findings, the case company will be able to answer important questions concerning its outsourcing decision, such as “what and why the company outsources its manufacturing”. The discussion and analysis involve triangulation through utilizing my own knowledge and experiences, through an interview and several discussions with the managing director of the company, and through studying literature and various written materials.

## 1.2 Research objectives and questions

With the background and motivations briefly discussed in the previous sub-chapter, this sub-chapter continues to provide the details of the research objectives and questions. Firstly, the research objectives are presented with the discussion and explanation of theories used in order to formulate the overall plan of what this research tries to achieve and how to achieve it. In the discussions to follow, research questions are defined for this thesis work on the basis of research objectives.

### 1.2.1 Research objectives

This empirical research includes three objectives following the stages of a business process outsourcing suggested by Click and Duening (2005), and a framework for outsourcing manufacturing by Momme (2002). Their theories provide guidelines in decision making and implementing the processes of outsourcing which commonly include four main steps as follows: assessment; vendor selection; transition; and management. With the help of their theories, and through three research objectives, this research ultimately aims to generate a reliable source to help the case company in making its outsourcing decisions.

The first objective of this thesis work is to find out the case company's possibility and flexibility in outsourcing their manufacturing. Momme (2002, 59) and Click and Duening (2005, 46) emphasize that assessing the capability for outsourcing is the first important stage in the outsourcing process. This stage enables companies to define the activities that could potentially be outsourced and the driving forces motivating outsourcing (Quélin & Duhamel 2003, 649). Hence, it is primarily important for the case company to be aware of their possibility and flexibility before they consider outsourcing any of their business process. To achieve this objective, it is necessary to analyze the target function of outsourcing, which is the manufacturing process in this case. At the same time, internal and external resources, which are considered as two criteria motivating any outsourcing process (Momme 2002, 62), will be analyzed to synthesize the motivations to outsource manufacturing of the company.

The second objective of this research is to discuss how outsourced manufacturing will influence the case company's current operational and financial performance. The first objective helps find out the outsourcing motives of the case company. The following phase is to study the impacts of outsourcing on the functions of identified motives (Click & Duening 2005), specifically in this case are the operational and financial segments. With the help of theoretical discussions from previous research and literature, this research firstly displays the possible benefits and risks involved when proceeding outsourced manufacturing in general. Secondly, relevant documents and information provided by the case company are analyzed. With the most attention paid to analyzing the impacts of outsourced manufacturing on the company's performance, this research critically analyzes aspects of operations and finances that outsourced manufacturing will have effects on and how they are influenced.

The third objective of this research is to find out the most efficient outsourced manufacturing model for the case company on the basis of analyzing the three most common models currently used by national garment/textile manufacturers. Firstly, for this objective, relevant literature on the Vietnamese garment industry are reviewed to understand the outsourcing situation in Vietnam. Consequently, this research explains why

certain outsourcing models are preferred by national garment/textile firms. Following, upon the findings of relevant research, this thesis selects an efficient outsourced manufacturing model for the case company.

### 1.2.2 Research questions

Three research questions are addressed in this research to achieve the objectives described in previous section. This sub-chapter presents the research questions and reflects on the necessary steps to achieve them.

1. What are the company's advantages and disadvantages in the context of outsourced manufacturing?

The first stage of researching outsourcing is the assessment stage. This stage is to identify the motivations for outsourcing by assessing the company's internal and external resources. (Momme 2002; Click & Duening 2005.) Depending on the nature of research, this stage maybe referred to as "identifying core/non-core competences" or "internal assessment"; however they all are directed to find out the motivations for outsourcing (Click and Duening 2005, 8). Simultaneously, the current manufacturing performance of the company is analyzed. Thus, the results of this research question help the case company find out their possibility and flexibility in outsourcing their manufacturing and to identify motivations for outsourcing manufacturing. Previous research and literature are used as theoretical background to interpret the research findings and to reflect on them for finding the answers to this research question. In addition, documents and information received from the company are the main sources used to find answers to this question.

2. How will outsourced manufacturing impact on the company's operational and financial performance?

This research question aims to study the possible effects of outsourced manufacturing in terms of operational and financial performance. As explained in previous sub-chapter, this research focuses only on operational and financial segments as they are roots of outsourcing motives of the company. Discussions about the impacts of outsourcing are often overlapped because of the different perspectives and objectives. However, most research argue that outsourcing has positive impacts on companies' performance by reducing costs, cycle time and increasing quality, productivity of companies (Earl 1996; Click & Duening 2005, 35; Venkatesha & Mohanty 2014, 5). This research question provides an insider understanding of the impacts of outsourced manufacturing on the company's operational and financial performance deriving from previous research and relevant documents received from the company.

3. How will the FOBI outsourcing model meet the company's requirements in term of long-term development?

FOB means that suppliers receive payment for full price of garment returned. The term is commonly used in the Vietnamese garment industry for a type production modality which is explained further in chapter 4; however FOB is not an abbreviation of any word or phrase. On the basis of Goto's research (2007) on the garment industry in Vietnam, this research question focuses on analyzing the three most common outsourcing models used by garment manufacturers in Vietnam. In Goto's (2007, 9) research, it is pointed out that there are three emerging outsourcing models that have been applied in almost every organization. They are FOBI, FOBII and FOBII. Each type of FOB has their corresponding functional responsibilities and the associated risk characteristics. (Goto 2007.) Deriving from Goto's research work and the company's requirements, this research recommends that FOBI is the most efficient outsourcing model and gives explanation for such conclusion.

### 1.3 Structure of the thesis work

The work is divided into five chapters. The second chapter proposes the research method, data collection, analyzing process as well as some limitations of this research. Chapter 3 is devoted to the theories base of this research through the discussions about outsourcing in the context of production and operation management, definitions and main concepts of outsourcing, and outsourcing motives. Simultaneously, benefits and risks of outsourcing, and the process of outsourcing are briefly discussed. Chapter 4 deals with the assessments for outsourced manufacturing in May Dai Phuc Ltd, which includes the overview of the case company, the manufacturing situation analysis, the internal and external resources analysis, and the impacts of outsourced manufacturing on the financial and operation performance. Chapter 5 presents the discussions and conclusions for the outcomes of this thesis work, and the suggestions for further research.

## 2 METHODOLOGY

This chapter focuses on explaining the research methodology to help in understanding the logic of research design. Firstly, this chapter covers the research methods and techniques applied for this thesis work. In addition, the selection of the methods and techniques is justified and their choice is motivated. Secondly, this chapter includes a description of the data collection and analyzing process. Finally, this chapter reveals limitations regarding this research work.

### 2.1 Research methods

This research applies the qualitative research method. This qualitative study is conducted as an explanatory case study. Data are collected by reviewing relevant literature on outsourcing phenomenon, and conducting one in-depth interview and several discussions with the managing director of the case company. Various information sources include literature, previous research and company documentation, which are employed in order to allow triangulation of source materials.

Explanatory research approach is selected for this qualitative research in accordance with the research objectives, for example, to explain the choice of the outsourcing type and model. Vaus (2001, 2) indicates that explanatory research focuses on developing casual explanations, which are closely linked to the research questions of this research. The explanatory research approach is relevant for this thesis work because primarily the research requires explanations of what, why and how questions regarding the case company's plan of outsourcing its manufacturing process. In addition, explanatory research approach provides an insight into the current performance of the case company supporting the analysis to find answers to research questions 1 and 2.

Case study is a commonly used research strategy in social sciences. Yin (2003, 13) defines case study as “an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident”. He also points out that case study is a comprehensive research strategy comprising an all-encompassing method because it relies on multiple sources of evidence and benefits from the prior development of theoretical propositions (Yin 2003, 14). As was discussed above, triangulation is used in this research regarding the collection of source materials. Furthermore, there are five applications of case study research method that have been summed by Yin (2003, 15), in which the most important one is to explain the presumed casual links in real-life interventions that are too complex for survey or experimental strategies.

The case study method is the most suitable research method for this thesis work, in accordance with what has been discussed so far concerning the distinctive characteristics of the case study research method. Firstly, the case study research method allows the researcher here to examine the potentials of outsourced manufacturing within a single company. Secondly, the use of case study research helps in explaining the research findings by enabling the researcher here to use a wide range of sources, here triangulation. Furthermore, the researcher can determine what evidences to gather and what analysis techniques to use to find answers to the research questions.

## 2.2 Data collection

Yin (2003, 14) argues that “case study relies on multiple sources of evidence, with data needing to converge in a triangulating fashion, and as another result”. For that reason, data collection sources of this research involve different sets of sources which are divided into documentation and interviews. In addition, personal experiences and knowledge concerning the field are also utilized to provide useful information for conducting this research; for example, formulating interview questions and evaluating the objectivity of the information acquired.

According to Yin (2003, 87), the most important use of documents is “to corroborate and augment evidence from other sources”. Therefore, documents have an essential role in data collection in doing case studies (Yin 2003, 87). The analysis of this empirical research is firstly drawn from formal scientific and academic documents, which include previous research and literature. Distinctively, theoretical framework applied in this research is drawn from the theories of business process outsourcing (Click & Duening 2005), framework for outsourcing manufacturing (Momme 2002), and managing the process of outsourcing (Hätönen 2007). In addition, administrative documents, specifically are company internal documents were collected, i.e. a financial report 2013 and a production reports 103758C. All necessary documents listed above are critically reviewed to select relevant information for the analysis to achieve the research objectives.

As has been pointed out previously, this research also relies heavily on data collected from an interview. Yin (2003, 89) argues that interview is one of the most important sources of case study evidence. Henceforth, an in-depth interview in the form of semi-structured interview with the managing director of the case company was conducted to gather information. According to Blaikie (2010, 207), in-depth interviews are best used when the researchers want to get close to the meanings and interpretations of the research. Meanwhile, the semi-structured interview method allows researchers to be prepared and appear competent during the interview (Cohen & Crabtree 2006). The interviewee in this research is the managing director and the owner of the company who has the most knowledge about the company, since she also leads and controls most of the company’s activities. Thus, she certainly can provide adequate and accurate information needed for this research. The interview consists of questions about the company’s situation, perspectives towards outsourcing and long-terms manufacturing plans. The questions were sent in advance for the interview conducted subsequently. The interview was recorded using a tape-recorder and the interview was transcribed from these tapes for analysis. In addition to the interview, during the research process, the researcher retrieved information through several discussions with the managing director of the company using telephone and e-mail.



### 2.3 Analyzing process

The analysis process of the data for this research follows the deductive research approach. According to Burney (2008, 4), deductive research approach is a method of reasoning in which conclusions follows logically from premises. In other words, the analysis under a deductive research significantly starts from theory to confirmation. Therefore, the analysis process of this research thoroughly derives from the theoretical framework.

Firstly, relevant literature and previous research were studied to gain comprehensive knowledge of this topic. Deriving from this study, the critical selection of the necessary information relating to this research was carried out. The collected data were analyzed using theory triangulation. According to Yin (2003, 97), triangulation can be used to establish and maintain the validity and reliability of the research work. Therefore, this research places considerable weight on theory in analyzing the potentials of outsourced manufacturing of May Dai Phuc Ltd. Besides, information from the interview was synthesized to confirm theoretical knowledge from relevant literature concerning the topic. Secondly, qualitative data analysis is used to compare the findings to the explanations and interpretations. To sum up, data gathered from related research, literature and an interview were integrated to assist in analyses in this research. In addition, collected data were used to interpret the empirical findings regarding the potential of outsourced manufacturing of the case company.

### 2.4 Limitations

Despite the choice and relevance of the case study method which are justified previously, the case study method also entails several weaknesses. By discussing the nature of the method and its downsides, the researcher put effort to avoid potential criticism of the

method. However, there are some limitations of the research that need to be taken into account.

Objectivity is one of the problems of this research, especially in that outsourcing is considered a very extensive topic. The analyses and syntheses of the data in this research are partly drawn from the interviewee's understanding, experiences and knowledge of the subjects. For that reason, objectivity issues need to be considered during the whole research process. Particularly, some of the arguments provided in this research are drawn from the interviewee's perspective and viewpoints instead of universal understanding. For instance, cost reduction, which is one of the main concepts in this research, therefore is narrowed down to discuss this issue according to her point of view.

Validity and applicability of the results are further concerns of this research. As the research is conducted to an extent based on the company's data sources, the outcomes of this research can be applied for the case company only.

The third issue of case studies is that they take a long time to be carried out and they may result in challenging situations from the point of view of acquiring appropriate documentation (Yin 2003, 11). This is true for this research work as well. During the process of the thesis, the researcher faced different challenges regarding data collection.

Additionally, data collected from the case company are confidential data which are inaccessible. Therefore, these data cannot be shared or published. This is another limitation of this research.

### 3 THEORIES BASE AND CONCEPTUALIZATION OF OUTSOURCING

In this chapter, an extensive review of literature is utilized. Historical theories of outsourcing reveal a fact that outsourcing phenomenon has been constantly reformed to catch business's revolution. Therefore, even though there has been a number of research on this phenomenon, many of them from the past are considered inappropriate for current practical implementation. For that reason, this research attempts to use research work on outsourcing conducted during 2000 - 2014.

Outsourcing is a wide concept and outsourcing in practice is even more complicated than the definition of the concept itself. Finding appropriate approaches for different issues within outsourcing context is significant in this research because appropriate approaches establish relevant and concrete premises guiding the analyses of the whole research work, e.g. approach to outsourcing classification, to outsourcing motives, and to outsourcing frameworks. Therefore, the use of literature contributes greatly to achieving the research objectives and to find answers to the research questions.

This chapter aims to conceptualize outsourcing in the context of production and operation management, outsourcing benefits and risks, and the process of outsourcing. The discussion of this chapter demonstrates the major contribution of previous research and gaps in literature base.

#### 3.1 Outsourcing in the context of production and operation management

In this sub-chapter, the discussion involves definitions and principal concepts of outsourcing and outsourcing motives in the context of production and operation management. As indicated at the beginning of this thesis, outsourcing in this thesis work is researched within the production and operation management disciplines. Regarding this point, because some of prior research have argued for the main fundamentals and essentials of outsourcing are in the field of strategic management. For example, the research on

business process outsourcing-the competitive advantage by Click and Duening (2005), and the evaluation, analysis, and management of the business outsourcing process by Handley (2008). On the other hand, numerous research on outsourcing have considered outsourcing as a part of business process management or production and operation management. For example, the research on outsourcing the program by Murphy (2004), and business process management systems by Chang (2006). In regard to the classification of outsourcing, Mahmoodzadeh, Jalalinia and Yazdi (2009, 845-846) divide outsourcing into tactical outsourcing and strategic outsourcing. The basic differences between tactical outsourcing and strategic outsourcing are illustrated in figure 3 below (Mahmoodzadeh et al. 2009).

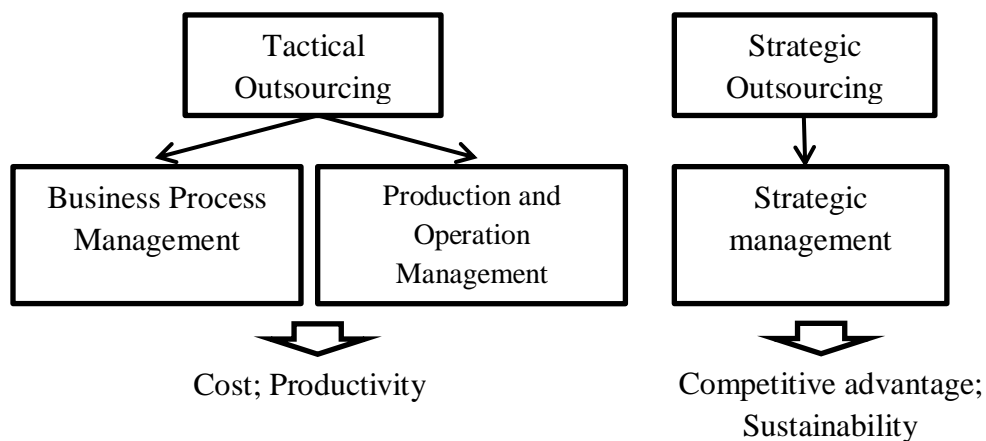


Figure 1. The differences between tactical outsourcing and strategic outsourcing (Mahmoodzadeh et al. 2009)

Mahmoodzadeh, Jalalinia and Yazdi (2009, 845-846) explain that outsourcing under strategic management looks for overall business improvement and competitive advantages, while outsourcing under business process management or production and operation managements simply looks for cutting costs and reducing cycle time. In fact, even though all kind of outsourcing has a similar function in common that it aims to attain businesses' goals by concentrating on companies' central activities, it is differentiated depending on those business's goals. Thus, outsourcing is divided into tactical or strategic outsourcing based on the businesses' goals. More specific, strategic outsourcing has long-term focus on

optimizing competitive advantage and sustainability and tactical outsourcing has a short-term focus on minimizing operational costs and maximizing daily operations productivity. (Mahmoodzadeh et al. 2009, 845-846.)

The issues of the business goals have been raised during several discussions and the interview with the managing director of the case company. Accordingly, it is synthesized that the case company is looking for three criteria associating with its manufacturing as follows: quality consciousness; cost saving; and time of delivery. Therefore, deriving from what has been discussed, outsourcing is researched in this thesis work within the production and operation management disciplines and on the premise of tactical outsourcing. The purpose of describing outsourcing in the context of production and operation management is to define outsourcing as it is used in this research and to establish an appropriate theoretical background on which the case company can be described. As a result, the discussion helps in understanding to what extent this research covers concerning outsourcing phenomenon.

### 3.1.1 Definition and main concepts

So far, outsourcing has been defined by different researchers from different business disciplines. From an overall perspective, outsourcing can be defined as having peripheral activities done by third parties (Waters 2009, 53; Bowersox & Closs & Bixby Cooper & Bowersox 2013, 83-84). This definition is relevant for this research as it provides an overview of the phenomenon and explains outsourcing in general. However, the definitions of outsourcing provided by Click and Duening (2005, 4), and Handley (2008, 4) are closer to the nature of this research work. They define outsourcing as the complete transfer of a business process that has been traditionally operated and managed internally to an independently owned external provider (Click & Duening 2005, 4; Handley 2008, 4). According to this definition, outsourcing prefers to the uses of external provider(s) to complete companies' requirements. Under this scenario, companies have to relinquish control to the supplier(s) and depend on the supplier(s)'s ability to provide the necessary

quality and delivery performance to meet its requirements. As a consequence, companies potentially have to face two critical issues related to loss of control and supply risks. In other words, companies may lose their internal capability to effectively perform and manage the business process or manufacturing activity. Another aspect of outsourcing definition is the re-shaping of existing firm boundaries. This aspect is important to point out because it distinguishes outsourcing from alternative procurement strategies such as the relocation of facilities or the user buy strategy. (Handley 2008, 4-6.)

As justified in previous section, outsourcing is studied from production and operation management perspectives in this research. Within the identified classification of outsourcing, there are three main concepts used to interpret this case study research as follows: quality consciousness; cost reduction; and time of delivery. These concepts are also the main subjects of discussion during the interview with the managing director of the case company. The managing director of the company emphasizes that an overriding concern of the company is the manufacturing development which is associated with quality, cost and time (Vo 2014b). In agree with her indication, Momme (2002, 64) indicates that quality consciousness, cost potential and reliability of delivery are key criteria for measuring an outsourced manufacturing system.

According Grimwood (1997, 1), the issue of quality consciousness is fundamental to effective customer relationship maintenance which aims to improve the quality competitiveness. Quality consciousness looks after solely one object, i.e. serving customers Grimwood (1997, 2-5). In relation to outsourced manufacturing, Momme (2002, 64) concerns that at every stage of an outsourcing process, quality consciousness is one of basic criteria used to establish and manage the whole process. Particularly to the case company, quality consciousness can be reflected through being able to meet all buyers' expectation and requirements. Of specific concern in the company's operation and structure according the managing director of the company, customer's inquiries are all matter for this type of business. Therefore, it can be concluded that quality consciousness has strong impacts on every departmental performance, especially production department.

In most of the cases, no matter what disciplines outsourcing comes from, at least to a certain level, it aims to achieve cost reduction (Hätönen 2008, 144). Depending on the characteristic of the company and the outsourcing framework it applies, the approach to cost reduction is different. Cost reduction concept can be interpreted in this particular case as reducing operational cost. The managing director of the company stresses that currently the company is wasting its labor force and internal resources on peripheral manufacturing activities. For example, ironing, corking and doubling, which are considered minor processes, are carrying out by highly skilled employees. Consequently, the company perceives cost reduction through outsourcing in the sense that it will be achieved by saving resources and labor forces for the most efficient uses. (Vo 2014b.) This point is rather clarified by Hätönen (2008, 158) as follows: “Outsourcing focuses on the need to concentrate on core competences: to gain flexibility through internal reorganization, to accelerate projects, gain access to a flexible workforce, and to sharpen the business focus”.

Time of delivery is derived from the concept of speed of performance. Time of delivery is the elapsed time from when customer place orders until the products is delivered. (Bowesox et al. 2013, 62.) Likewise, the justification for this concept is perceived significantly by the case company. According to the managing director of the company, early or late deliveries are unacceptable in garment industry because of two main reasons, i.e. cost of storage space and seasonal characteristics of fashion items. Customers usually react extremely negative to not-in-time delivery and this possibly leads to a cancellation of entire contract. Delivery time relies heavily on production planning and production control departments of the company. Even though they manage to have haft to a year before hand orders, when the high season comes, the case company frequently faces high risk of late deliveries. In relation to outsourcing regarding time of delivery concept, the company sees outsourcing as a tool to reduce the risks of late deliveries by having suppliers manufacturing minor processes of its production. (Vo 2014a.) This point is supported by Quélin and Duhamel (2003, 649-650) as they argue that outsourcing in manufacturing companies essentially relates to production improvement including gaining flexibility through internal reorganization and reducing the time to market.

The interpretation of the main concepts behind outsourcing phenomenon in the context of operation and production management is drawn from the company's perspectives and related theories for further analyses of this research. To summarize, under this research, outsourcing is conceptualized as a tool to meet customer's requirements, cut operation cost and solve timely delivery problems. In addition, on the basis of the discussion above, these three conditions are interlinked and can be achieved through outsourcing partly the case company manufacturing.

### 3.1.2 Outsourcing motives

Based upon the previous discussion, it can be summarized that the case company is looking for three specific benefits from outsourced manufacturing, i.e. customer's satisfaction, cost saving, and time of deliveries. They are the outsourcing objectives which have motivated the company to consider outsourcing and will influence the outsourcing decision. However, to avoid misunderstanding, it is worth stressing that outsourcing motives are different from what companies expect to gain when applying outsourcing. Outsourcing motives cover much wider scope of discussion, including companies' expectation for outsourcing. Hätönen (2008, 66-67) indicates that outsourcing motives are factors that make outsourcing really occur. In other words, "companies do not outsource because they can, they outsource because they see it as profitable in some way". Hence, outsourcing motives are determined by various principals from internal to external of companies. (Hätönen 2008, 68-69.)

Basically, outsourcing motives are the answers to the question why company outsources. Besides, outsourcing motives affect the decision of outsourcing's objects and location in the outsourcing process. (Hätönen 2008, 69.) Depending on industrial sector, company's characteristics and many other dominant factors, outsourcing motives can be macro to micro. Moreover, due to the spread of factors involved, outsourcing motives are often different from company to company. However, within literature, there have been several widely used categories for outsourcing motives. For example, Quélin and Duhamel (2003, 661) indicate main outsourcing motives are lowering operational cost, focusing on core



competences and gaining flexibility. On the other hand, from a broader perspective, Lacity (2012) categorizes outsourcing motives based on a broader level as follows: economical motives, technical motives and political motives.

Literature reveals that categorization of outsourcing motives are drawn from sources of profits and benefits associated with outsourcing. Major research have been applied this approach to identify outsourcing motives, e.g. Quélin and Duhamel (2003), Hietalahti and Kuoppala (2009), and Hätönen (2008). To provide insights into this issue, table 1 below which is recent studies on outsourcing motives summarized by Hätönen (2008, 66) is presented.

Table 1. Recent studies on outsourcing motives (Hätönen 2008, 66)

| References                                | Area   | Focus Industry   | N   | Main Outsourcing Motives   |
|---|--|--|-----|--|
| Kakabadse & Kakabadse 2002                | US and Europe                                  | N/A  | 747 | 1) Cost discipline/control<br>2) Aim to achieve best practice<br>3) Improve service quality<br>4) Focus on core competences  |
| Landis, Mishra & Porrello 2005            | US   | Large companies in manufacturing, transportation, consumer business, energy, financial services, technology/media/telecommunication, health care and the public sector | 25  | 1) Cost savings<br>2) Acquiring best practices/quality/innovation<br>3) Flexibility<br>4) Focus on core capabilities<br>5) Access to high-caliber labor<br>6) Transfer risk to vendor<br>7) Lack of expertise in-house             |
| Quélin & Duhamel 2003                     | Europe   | Europe large manufacturing companies   | 180 | 1) Lower operational costs<br>2) Focus on core activities<br>3) Gain flexibility   |
| Trestle Group Research Report 2004 Global | Global (16 countries from which 70% in Europe) | Financial services, telecommunications and manufacturing sectors   | N/A | 1) Reduce costs<br>2) Gain access to resources unavailable internally<br>3) Access to a flexible workforce<br>4) Internal reorganization<br>5) Improve business focus<br>6) Reduce time to market<br>7) Free up internal resources |

Furthermore, Lacity's research on outsourcing (2012) is an example to explain for this point. Deriving from Lacity's research (2012), outsourcing outcomes are analyzed and compared to initial outsourcing motives to draw the actual benefits and profits of the outsourcing. Consequently, she indicates that outsourcing motives are inferred from the successful areas where outsourcing has impacts on (Lacity 2012).

On the basis of discussion above, it can be concluded that no matter what categories outsourcing motives fall into, they are necessarily derived from sources of profits and benefits associated with outsourcing activities. For example, if a company acquires better

customer services by practicing outsourcing but the improvement is not beneficial, it is therefore not considered as an outsourcing motive. Following this logic, outsourcing motives of the case company are identified and categorized into financial motives and operational motives. Table 2 below presents the identified outsourcing motives of the company and their specific dominants.

Table 2. Outsourcing motives and their dominants

|                   |                                    |
|-------------------|------------------------------------|
| Financial Motives | - Reduce cost                      |
|                   | - Convert fixed cost to variable   |
| Operation Motives | - Increase performance cycle speed |
|                   | - Improve flexibility              |

It is important to identify accurately outsourcing motives because accurate identification will direct to accurate analyses of related segments. According to the managing director of the company, the company sees outsourcing as a tool to achieve better mass productive efficiency, and division of work and labor. She explains that these two aspects are critical to the company as they are engaged in every decision making process. Regarding the mass productive efficiency aspect, the company set its strategy as producing maximum outputs at a minimum cost. Subsequently, the mass efficiency productive of the company is associated with and can be measured by the unit cost, which is an aspect of the financial performance. Regarding the division of labor and work, she explains that due to the complexity of the company's productions, the arrangement for appropriate uses of the workers and equipment is significant to meet the company's manufacturing requirements concerning quantity and quality of the outputs. (Vo 2014.) According to what has been discussed, it can be concluded that the outsourcing motives of the company are derived from the operational and financial benefits. Further analyses regarding the financial and operational impacts will be presented in chapter 4 to find the answers to the research question 1 and 2.

## 3.2 Outsourcing benefits and risks

### 3.2.1 Outsourcing benefits

Understanding potential benefits of outsourcing would help entrepreneurs notice the importance of it in companies. Regardless specific profits and benefits one company could get from outsourcing such as concentrating on core competences and reducing cost, the actual role and functions of outsourcing need to be justified.

According to Leavy (2004, 20), the nature and fundamentals of outsourcing make it beyond a business solution but instead a business strategy. Leavy (2004, 21) argues for the main benefit of outsourcing is that it reshapes company's boundaries, hence it allows company to grow without expanding its size. In other words, when a company decides to outsource certain business process, there is high possibility that the business will be scaled up without extra investments. Secondly, outsourcing supports other business functions by two ways. The first way suggests company to outsource entire function(s) that supplier can performance better, e.g. logistic, manufacturing or information technology. The second way suggests that company insource specialized business processes and outsource minor business components to suppliers, e.g. occasional sourcing and knowledge sourcing. Either the way releases pressures of managing operations and potentially improves overall business performance. Thus, based on the justification of outsourcing benefits above, outsourcing has great deal of potentials, especially when companies are looking for a long-term business development. (Leavy 2004, 20-21.)

### 3.2.2 Outsourcing risks

While numerous outsourcing benefits have been proven, it is important to notice the risks of outsourcing as well. Mahmoodzadeh, Jalalinia, and Yazdi (2009, 845) emphasize that the

decision to outsource any business process of one company has far-reaching consequences and risks. Noticing the risks and pitfalls of outsourcing would help companies to avoid falling to common mistakes to achieve better outsourcing performance.

Risks of outsourcing are perceived differently from researcher to researcher, from company to company. Due to the fact that outsourcing risks may result from suppliers, from internal and external environment, or from company's capability, risks of outsourcing are formed and determined by a vast of factors. Within literature, the most noticeable outsourcing risks are as follows: dependency on the suppliers; ignore hidden costs; losing touch with new technological opportunities for product and process innovations; privacy risks; unqualified supplier; communication and coordination problems; and cognitive distance between suppliers and firm therefore makes it more difficult to align decisions and exchange knowledge (Gilley & Rasheed 2000; Quélin & Duhamel 2003; Leavy 2006).

In conclusion, this research considers the nature of outsourcing benefits and risks which have been discussed above to identify the advantages and disadvantages of the case company toward outsourcing, which will be proposed in Chapter 4. At the same time, outsourcing potential risks and benefits are taken into account to give the case company recommendations concerning the outsourcing decision.

### 3.3 The process of outsourcing

Outsourcing is a process consists of numerous activities and sub-activities. Majority of researchers when describing outsourcing process entail it with the decision-making process, e.g. Hätönen (2008), and Handley (2008). When the outsourcing process is entailed with the decision-making process, it is argued that the process of outsourcing necessarily starts from initial evaluation to final evaluation of outcomes (Lacity 2012). However, due to the nature of this research, outsourcing process is described at a narrower level which involves activities concerning actual outsourcing.

Basically, a standard outsourcing process is divided into four seminal phases as follows: assessment phase, vendor selection phase, transition phase, and management phase (Hätönen 2008, 54-55). Even though these phases are identified as genetic, they encompass various distinct tasks. For example, Click and Duening (2005) describe an outsourcing process comprises of five stages, starting from analyzing outsourcing opportunities to developing and presenting the outsourcing process. In addition, Momme (2002) proposes a framework for outsourcing manufacturing which consists five different stages. Figure 4 below illustrates the outsourcing process framework by Click and Duening (2005), and Momme (2002).

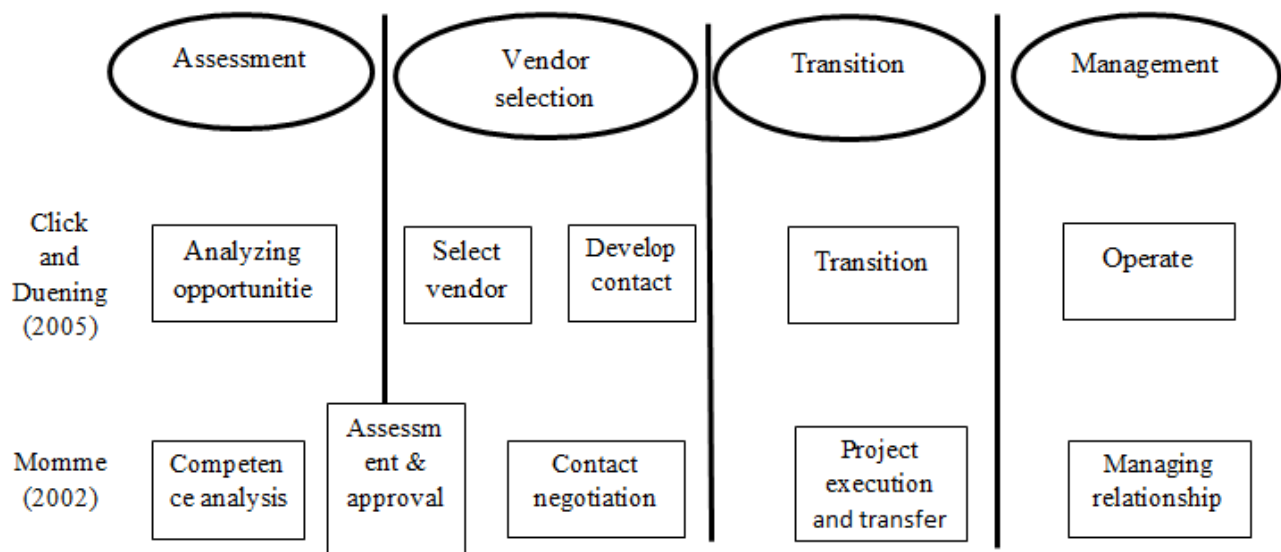


Figure 2. The outsourcing process (Click & Dunening 2005, and Momme 2002)

Regarding Click and Duening's outsourcing process framework (2005), they place considerable weight on vendor(s) selection stage. Click and Duening (2005, 43) state that "much of risk from outsourcing can be removed if vendor is qualified". However, the outsourcing process suggested by Click and Duening (2005) seems to underestimate the assessment stage. As seen in figure 4, assessment stage happens initially with the main purposes are to evaluate the outsourcing possibilities. Assessment stage may include, for example, competence analysis, analysis of outsourcing options or screening outsourcing

target. Leavy (2004, 23) indicates that giving insufficient attention to the assessment stage can result in inappropriate evaluation of outsourcing possibilities and unsuitable outsourcing objects decisions. In fact, it is reported that most of outsourcing failures are because of over-estimating of companies' competences and wrong selection of outsourcing objects (Lacity 2012). Therefore, it is significant to focus on analyzing the assessment stage and its related tasks. Click and Duening's outsourcing process framework (2005) and others' framework were further complimented by Momme (2002). In building from accepted outsourcing process framework, Momme (2002) attempted to develop an outsourcing process framework in which assessment stage is highly emphasized, as seen in figure 4.

As this research focuses on analyzing the potentials of outsourced manufacturing in the context of May Dai Phuc Ltd., one of the main objectives of this research is to analyze the possibility and flexibility of the case company in outsourcing its manufacturing. Therefore, according to the discussion above, this objective can be achieved through the assessment stage in the outsourcing process. Furthermore, even though this research does not aim to cover the whole process of outsourcing, this research draws from Click and Duening (2005), and Momme (2002) outsourcing process frameworks to define the key activities entailed with the relevant stage. Accordingly, in this research, the assessment stage in the outsourcing process is the main focus of analyzing and it is entailed with two distinct tasks, i.e. manufacturing situation analysis and internal and external resources analysis. Further discussions regarding this issue are presented in the next chapter.

To sum the discussion of this chapter, figure 3 is created to illustrate the main focuses of this research in terms of answering to the research questions. Besides, figure 3 explains for the roots of the analyses of this research which are derived from different approaches under the outsourcing topic.

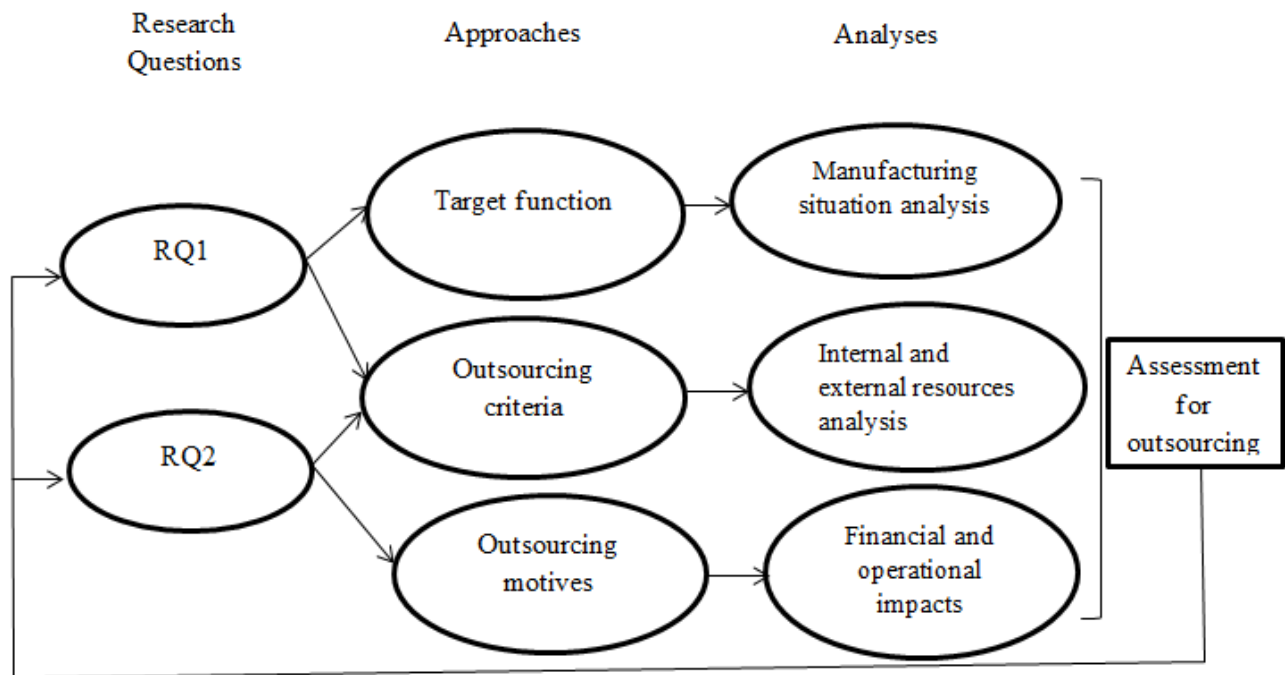


Figure 3. The research's main focuses in terms of answering the research questions

Figure 3 above sums up the fundamentals of this research which was proposed thoroughly in this chapter. The analyses of this research are formulated on the basis of studying relevant outsourcing theories in the context of production and operation management and the empirical data. The regarded analyses are proposed in Chapter 4 coming to find out answers to the research question 1 and 2.



#### 4 ASSESSMENTS FOR OUTSOURCING IN MAY DAI PHUC LTD.

In the previous chapter, the classification, definitions and main concepts of outsourcing were provided as their most relevance in this research. Simultaneously, reviewing the literature helps to identify the boundaries of this research work and the issues to which the research is focused concerning the outsourcing topic. Moreover, theoretical discussions in relation to the empirical findings concerning the outsourcing motives and the outsourcing process were conducted. These analyses propose to initiate further discussions concerning the outsourced manufacturing of the company. Accordingly, the assessment stage in the outsourcing process is identified as the main area of analysis, in which it is entailed with two specific tasks, i.e. manufacturing situation analysis, and internal and external analysis. Therefore, in this chapter, the detailed analyses of the manufacturing situation, and the internal and external resources of the company are given. In addition, the previous chapter justified the outsourcing motives of the company and pointed out that the company considers outsourcing because of financial reasons and operational reasons. Therefore, this chapter conducts several analyses to indicate possible impacts of outsourced manufacturing on the financial and operation performance of the company.

##### 4.1 The case May Dai Phuc Ltd.

The case company in this research is May Dai Phuc Ltd. It is a medium-size garment manufacturer specializing in manufacturing high quality garment products for exporting. The company has been operating for 7 years in Ho Chi Minh city, Vietnam. At the moment, the case company has 152 employees. Since the company was established, it has received credits from the buyers by keep delivering qualified products. The company takes pride in its skilled team and modern facilities enabling it to produce products which require complex operations. (May Dai Phuc Ltd. 2014a.)

In relation to the topic of this thesis work, it is necessary to provide general information about the company's characteristics concerning its operations and structure. According to

Lacity (2012), company's characteristics are one of important elements influencing the outsourcing decision and outsourcing outcomes, as is depicted in figure 4.

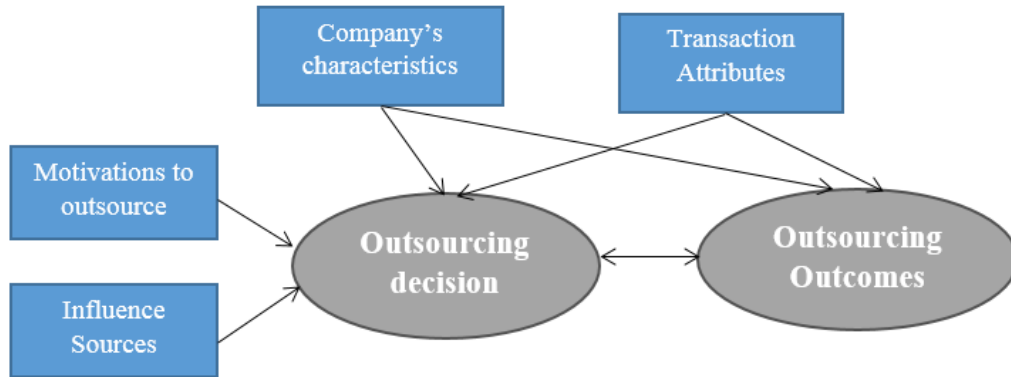


Figure 4. Determinants of outsourcing (Lacity 2012)

Regarding the characteristics of the company, the company applies mass production with high volume of products for every order. The products are usually high quality and requires numerous details. Due to the complexity of garment outputs, the manufacturing process of the company is rather complex. For example, manufacturing process for a finished winter jacket are divided into 63 stations in which every station includes different tasks (May Dai Phuc Ltd. production report 103758C). To have a better illustration of how complex the manufacturing process is, figure 5 is a sample of the details needed to produce a finished jacket from an order of the company. In addition, as a general rule of every manufacturing company, the company places considerable weight on daily manufacturing productivity. The company considers the manufacturing effectivity and efficiency as a strategy in order to meet the requirements concerning quantity and quality of the outputs. (Vo 2014b.)

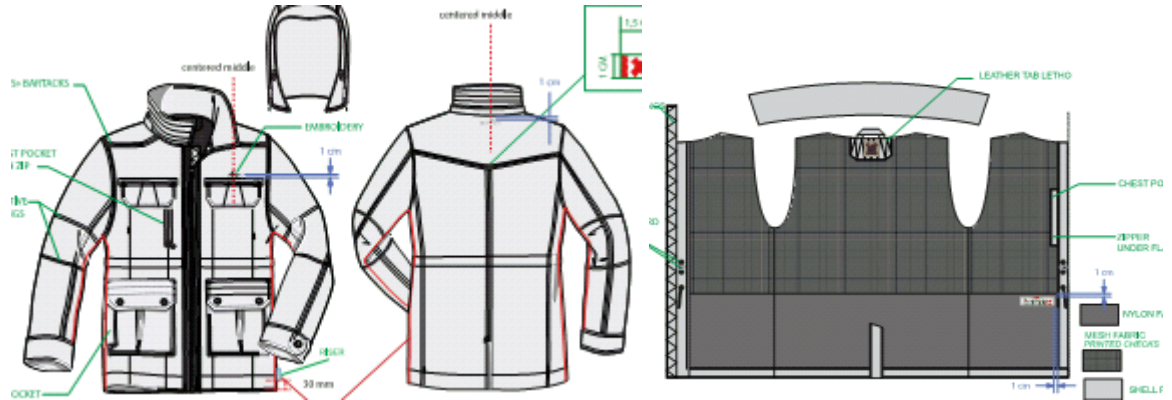


Figure 5. Details of completed jacket (May Dai Phuc Ltd. 2014b)

Regarding to the structure of the case company, as being a pure manufacturing company, its structure is typically simple, including the following departments: product development; productions; and marketing and sales. Each department is responsible for different functions associated with different activities. (May Dai Phuc Ltd. 2014b.) The flow chart of departmental responsibilities by Ryan (2014) can closely describe the structure of the company as is illustrated in figure 6.

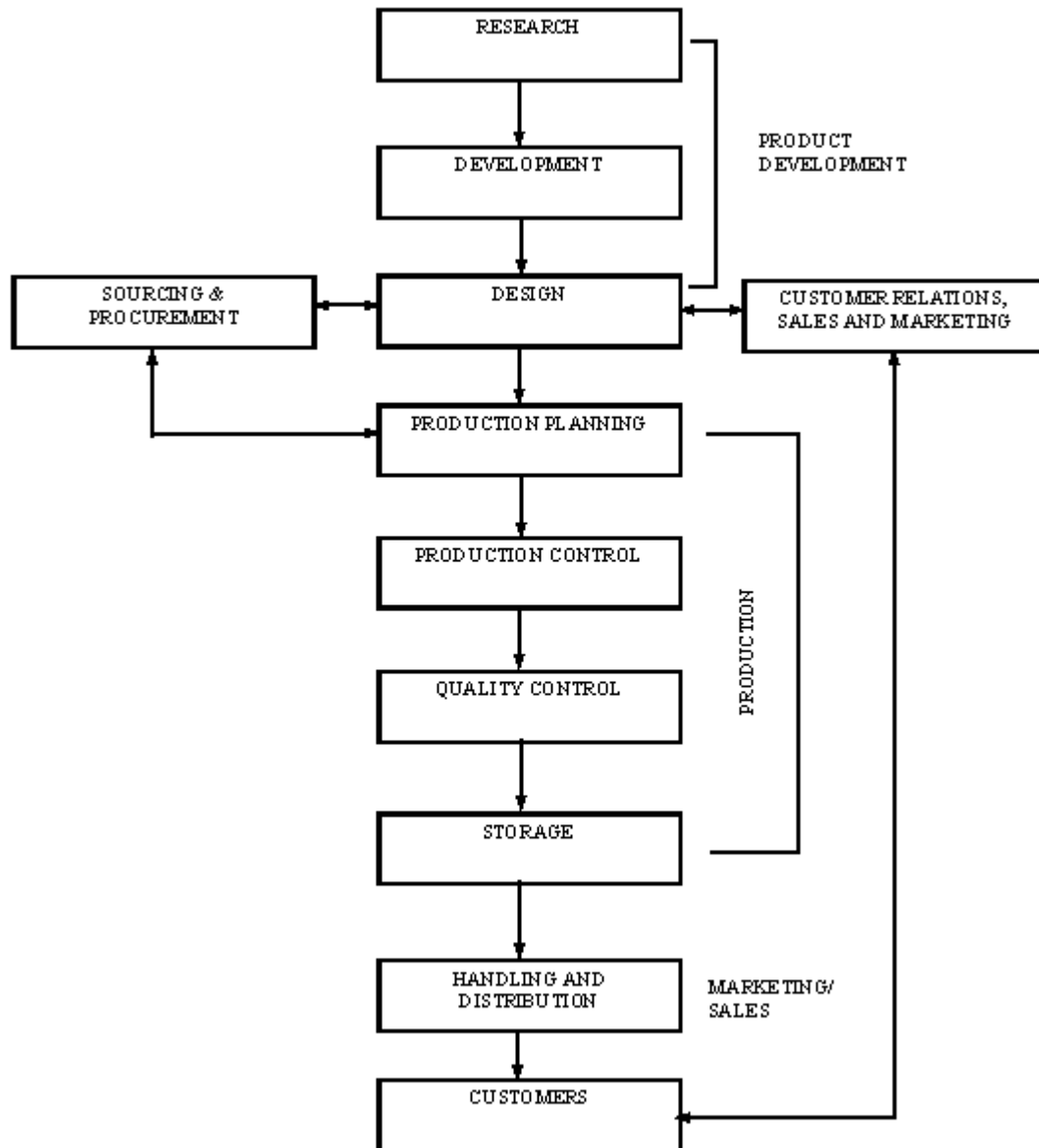


Figure 6. Flow chart of company structure (Ryan 2014)

The procedures firstly involve the processes of researching, developing and designing products to generate garment samples. These samples include finished garments and details of materials, patterns or sketches used to send to potential customers. The procedures continue with marketing and sales department through several processes with the final purpose of making binding inquiries from buyers. Continuously, production department is

responsible for the processes of making finished products based on the inquiries from the buyers. The procedures end when all finished products are delivered to buyers and meet all the requirements. According to the managing director of the case company, the characteristics of this type of business structure provide the company various advantages such as allowing it to take full control of materials, stocks and production processes. However, there are disadvantages concerning the risks and uncertainties of quantity required from the buyers. Therefore, while it is easier to achieve the quality objective, it is challenging in meeting the quantity objective in a suitable timeframe. (Vo 2014b.)

#### 4.2 Manufacturing situation analysis

In order to identify the potentials of outsourced manufacturing of the case company, it is necessary to have a comprehensive evaluation of current manufacturing situation. The objective is to gain insights into the manufacturing process, problems and performance to identify actual advantages and disadvantages of the company for outsourcing its manufacturing. Furthermore, on the basis of the information collected from the interview and the production report received from the company, this sub-chapter focuses on analyzing and justifying factors of manufacturing influencing the outsourcing decision.

According to the managing director of the company, the current manufacturing performance level is up to the mark. Manufacturing of the company has advantages of modern equipment and skilled-workforce, which allow the company to have a productive and effective manufacturing performance. However, she also emphasizes that the current manufacturing performance has not yet reached its full capacity since majority of workforce and time are spent on minor manufacturing tasks. (Vo 2014b.) With my knowledge and experiences in the garment field, this issue is a burden of almost every garment manufacturing firm because in a typical manufacturing garment outputs process, there are always tasks that unnecessarily are carried out carried by skilled employees, e.g. thread breakage and braiding. Moreover, not all the details of a garment output require highly skilled workers and specialized machines. On the basis of information from the

production report received from the company, in 63 stations of the manufacturing process, there are entire stations or tasks that belong to those stations that are possible to outsource. As discussed previously, outsourcing those tasks can free up considerable amount of time and workload for the company. The point is that which specific tasks should be selected to outsource and based on which standards.

Lead time is another important factor in the manufacturing function of the company. Lead time is “the elapsed time between release of a work order to the shop floor and the completion of all work necessary to achieve ready-to-ship product status” (Bowersox et al. 2013, 103). On the basis of customers’ requirements, a detailed manufacturing schedule is created. According to the managing director of the company, due to the seasonal fluctuations characteristic of garment products, accurate timeframe is the most important manufacturing requirement. For example, an order inquiries 30 000 winter jackets and to be delivered within 90 days, excluding distribution time and packing time, the time for manufacturing is 82 days, which means that the daily productivity must ensure producing 360 units. However, the managing director of the company indicates that every manufacturing process involves risks of overlapping manufacturing lead time. Furthermore, manufacturing is a continuous process, when a station delays, it may result in manufacturing failure to meet planned outputs because every station is connected to each other. Therefore, manufacturing lead time performance is critical to achieve in-time deliveries. In fact, timely deliveries are a big problem in the current manufacturing system of the company, especially when the high season comes and the demand for outputs increases. (Vo 2014a.) Regarding this issue, the outsourced manufacturing potentially reduces considerably the manufacturing lead time of the company; simultaneously however, it also involves risks of delays and interruption if the supplier fails to return the needed items. However, the possible benefits the company can get from solving the manufacturing lead time problems is more critical in comparison to with the risks mentioned above.

Deriving from the data received from the company, the company manufacturing’s competence is heavily based on volume perspectives. Specifically, the increase in volume

of any order leads to the decrease in the average cost of producing a product. To have better understanding to this issue, table 3 is derived from the financial report of the company to explain for the relationship of cost per unit to volume of outputs.

Table 3. The relationship of cost per unit to volume of output (May Dai Phuc 2013)

|                     | Order 1        | Order 2         |
|---------------------|----------------|-----------------|
| Quantity (units)    | 100.000        | 400.000         |
| Cost per unit (VND) | 5.050          | 3.100           |
| Total cost (VND)    | 5.050.000. 000 | 12.400.000. 000 |
| Net profit (VND)    | 315.000.000    | 5.100.000.000   |

Table 3 shows that the cost per unit of the order with larger quantity is 38,6% lower than the smaller order for the similar product. Under this scenario, outsourced manufacturing can help the company achieve larger volume by empowering manufacturing capacity. As a consequence, cost per unit will be reduced proportional to the volume increases. Therefore, the volume sensitiveness feature of the manufacturing of the company is particularly an advantage for outsourcing.

In addition, the managing director of the case company indicates that the manufacturing of the company usually has long production runs with a very standardized and inflexible manufacturing process (Vo 2014b). This is considered a disadvantage to the outsourced manufacturing because it will be restricted in the process of finding qualified supplier(s). On the other hand, outsourced manufacturing can take advantages of the division of labor and work to help the company overcome this negative aspect. For example, the company can re-arrange the uses of workers and equipment internally; simultaneously, establish a strict contractual arrangement with the supplier.

According to the discussion above, the current manufacturing of the company has distinct characteristics which are both advantages and disadvantages for outsourced manufacturing.

The main issues in the current manufacturing system which will possibly be influenced by outsourcing manufacturing are as follows: the complexity of manufacturing process; the manufacturing lead time; the volume sensitiveness; and the standardized and inflexible manufacturing process. On the basis of the analysis of above, it can be concluded that outsourced manufacturing can potentially improve the overall manufacturing of the company by increasing volume and reducing the manufacturing lead time, the complexity of manufacturing process and the workload.

#### 4.3 Internal and external resources analysis

As a fundamental of outsourcing, outsourcing not only has to meet the outsourcing motives but also has to accommodate the possibilities of the company in term of internal and external resources. (Click & Duening 2005, 134). Therefore, this sub-chapter analyzes the relevant internal and external resources are analyzed to evaluate the resources possibility and flexibility in the context of outsourced manufacturing of the case company.

Decision to outsource any business process has its cost and trade-off. Companies should clearly appraise of their available resources to prepare for the outsourcing process. In outsourcing practice, resources are typically redirected to where they have the most impacts. Due to the nature of outsourcing, resources that critically influence outsourcing performance are suggested as follows: assets; human resources; and transportation. (Kremic et al. 2006, 472-473.)

Assets are the resources owned by a company which are convertible to cash such as building, vehicles or receivables (Waters 2009, 25). Assets play a major role in outsourcing decision of one company as they reflect its financial capacity for outsourcing, for example, cost for outsourcing. Due to the lack of data, the analysis of the company' assets is limited within its inventory. However, as the managing director of the case company indicates that the company has sufficient financial capacity for outsourcing, this research considers her



indication as an evidence to draw the conclusion concerning outsourcing possibility of the company.

The inventory of the company is responsible for holding raw materials for productions and finished or semi-finished products producing during the productions period until they meet the sufficient quantity for distribution. The managing director of the company evaluates the current inventory has narrow assortment which causes challenges in inventory management. Even though the company has extensive control of stock, it has demand for extra space to be able to hold a larger quantity of raw materials. (Vo 2014b.) Figure 7 below depict the function of current inventory of the company.

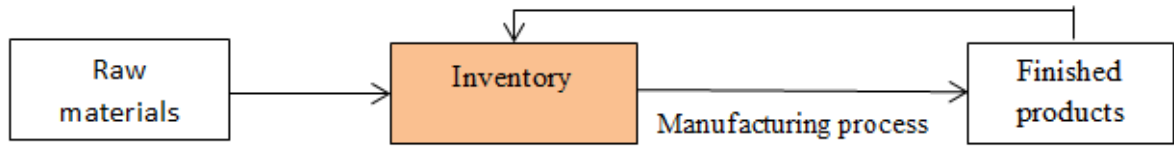


Figure 7. Function of current inventory of the case company

If the company decides to outsource some of its manufacturing tasks, it means partial raw materials will be transferred straightly to supplier without passing the company's inventory. Consequently, supplier carrying out those manufacturing tasks to produce the required details, e.g. pockets, sleeves and elbows, will be sent back to the company to continue manufacturing. To have better illustration to this issue, figures 8 describes the function of the inventory if the company applies outsourcing.

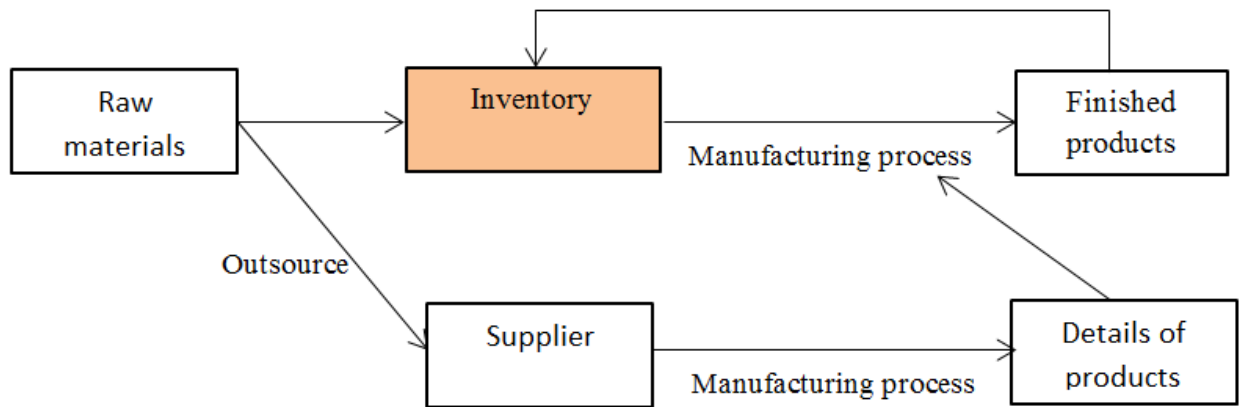


Figure 8. Inventory functionality if the case company outsourcing its manufacturing

Under this scenario, outsourcing potentially helps reduce considerable space for holding raw materials and finished products. In addition, outsourced manufacturing committed to improve level of safety stock of the company.

Internal and external human resources is the another factor influenced outsourcing decision. Majority of companies outsource because of demands for extra employees. When companies decide to outsource, it means that the work forces is re-located. Re-locating workforce decision in the context of outsourcing needs to consider acquiring needed skills from outside resources. (Kremic et al. 2006, 471.) At the moment, the case company has 152 employees, in which 141 employees are factory workers. According to the managing director of the company, due to the complexity of productions, most of the workers are required average to high skilled (Vo 2014b). This issue is a disadvantage to outsourced manufacturing of the company since it will restrict supplier selection. Accessing to people with specialized skill and knowledge is challenging, especially when the required skills are high. Simultaneously however, as mentioned previously, the manufacturing includes from simple tasks, e.g. thread breakage, fastening and harness, to extreme complex technical tasks, e.g. stay-stitching and weft threads. Hence, depending on the manufacturing tasks that are outsourced, the possibility to access to appropriate human resources is determined. As indicated in the previous sub-chapter, the company has strong demand for workers to perform simple manufacturing tasks. Outsourced manufacturing may be an ideal implement

to employ external workers to solve the demand for workers of the company. Regarding the external human resources, it is reported that the Vietnamese garment industry is one of the most competitive suppliers in the world due to inexpensive and diverse labor force (Goto 2007, 4). This is an evidence for a high opportunity to access to external human resources serving outsourced manufacturing objectives of the company. As a matter of the study's scope, this research excludes examining in detailed the external human recourse, regardless the pointed fact above.

Transportation is a very significant part of outsourcing. Transportation is responsible for shifting products between companies and supplier(s). In most of the cases, the main value of transportation is associated with inventory improvement as it moves materials out and frees up inventory. (Kremic et al. 2006, 469.) As depicted in figure 8, shifting raw materials from the company's inventory to supplier needs transportation. At the moment, the transportation of the company relies on third-parties both to move raw materials to the inventory or to delivery outputs to customers (Vo 2014b). Hence, independent transportation is a downside of the company in terms of outsourcing its manufacturing. Deriving from my experiences, due to the nature of the national economics, most of garment manufacturers do not establish their own transportation but employ external provider(s). In fact, the transport sector has influences in every industrial sector across the nation. Due to the rapid development and major contribution of the transport sector, it has been an economic trend to have a third-party transport provider(s) within the country. (The World Bank Group 2007.) Therefore, without owning transportation, the company would still have great potential to use external transportation to support outsourcing activities.

To sum up, every type of resource above can either be positive or negative influences on outsourced manufacturing of the company. Having appropriate policies to efficiently manage these resources is a key to a successful outsourced manufacturing of the company. On the basis of the analysis above, it can be concluded that the current resource capacity is sufficient to support outsourced manufacturing. In addition, outsourced manufacturing can help improve the inventory performance and meet the demands for employees of the company.

#### 4.4 Impacts on operational and financial performance

In the previous chapter, outsourcing motives were identified and the root of outsourcing motives was argued. Accordingly, outsourcing motives are categorized into two segments, i.e. financial segment and operational segment (table 2). Therefore, this sub-chapter focuses on analyzing these segments to find out possible impacts of outsourced manufacturing on them.

##### 4.4.1 Impacts on financial performance

Outsourced manufacturing can have positive impact on the financial performance of the company through cost reduction. The concept of cost reduction and the approach to cost reduction was drawn from the company's perspective in 3.1.2 section. Following, the discussions about the areas of cost reduction are presented in detailed.

Outsourcing for cost reduction objective has proved to be one of the first priorities regarding financial motives (Quélin & Duhamel 2013, 642). Previous research on outsourcing practice has identified plenty of influenced sectors where cost reduction occurs such as lowering location cost, facilities or technologies cost. For the company, key areas of cost reduction include saving labor cost and lowering unit cost by having suppliers manufacturing minor tasks at lower cost. As discussed previously, the case company tries to achieve lower unit cost by specialization of works, labor and equipment. At this point, again it places a premium on lowering cost per unit to achieve better financial performance. Outsourced manufacturing can help reduce unit cost and subsequently profit will be improved. For example, as justified previously, machinery manufacturing components are frequently kept in house while components which require low-skilled labor, are outsourced to less expensive supplier(s). However, this approach to cost reduction requires companies to accurately determine in-house cost to compare with cost from supplier(s). In fact, cost reduction can be achieved only if the sum of supplier's costs including overhead,

transaction costs and delivery costs is lower than the costs of in-house production. (Kremic & Tukul & Rom 2006, 472.)

The second impact of outsourced manufacturing on the company's financial performance is converting fixed cost to variable cost. Hietalahti and Kuoppala (2009, 12) indicates that companies have high capital investment on equipment, outsourcing can be a tool to convert fixed cost to variable cost. More specific, by outsourcing manufacturing, investments in machines and equipment can be reduced. As a result, converting fixed cost to variable cost would have impacts on the return on assets and improve the net profit. (Hietalahti & Kuoppala 2009, 12.) As the case company has invested a large amount of capital in different kind of equipment from basic sewing machines to specialized equipment, fixed cost and changeover cost are a major part of the financial performance. The managing director of the company states that the manufacturing is running over 20 different kind of equipment, which total quantity is 63 machines (Vo 2014b). Therefore, outsourcing manufacturing activities which require machinery can potentially help the company reduce the cost of extra investment on equipment.

#### 4.4.2 Impacts on operational performance

Effective outsourcing practice can have huge positive impacts on company's operational performance. That is the reason why a number of business enterprises set operational motives as the core functions for outsourcing. It has been argued that because financial motives are more likely short-term oriented, while operational motives can benefit companies in the long run (Kremic et al. 2006, 465). Regarding the case company, the first operational impacts from outsourced manufacturing can be described as increasing performance cycle speed. According to Click and Duening (2005, 39), outsourcing guarantees business productivity through increasing its focus on core activities, which finally lead to the improvement of performance cycle speed. In addition, Click and Duening (2005, 41) indicate that outsourcing is an effective tool to improve operational time control as it lessens operations' complexity by transferring partial business activities to a third

party. Similarly, outsourced manufacturing can enhance the overall operational performance of the company in terms of time control.

The second operational importance of outsourced manufacturing of the company is improving flexibility. Gilley and Rasheed (2000, 765) argue that in many ways the essence of outsourcing rests in the ability to be flexible. Flexible operations refer to a company's ability to respond to special situation such as unusual events or unexpected customer requests (Bowersox et al. 2013, 62). According to Gilley and Rasheed (2000, 765), outsourcing enables companies to access to a wide range of external resources, e.g. facilities, labor force, and technology, which ultimately helps companies increase their flexibility. Under this scenario, outsourced manufacturing can potentially increase level of production flexibility of the company, especially when the company is in need of resources. In addition, flexibility interlinks with other outsourcing motives. For example, increasing performance cycle speed or reducing cost can create flexibility (Gilley & Rasheed 2000, 765).

#### 4.5 FOBI model

This sub-chapter analyzes the FOBI model deriving from the research on the industrial upgrading of the Vietnamese garment industry by Goto (2007). The purpose is to explain for the efficiency of the FOBI model under the outsourced manufacturing context in terms of long-term development of the company.

As justified in Chapter 1, the FOB term used in this research is not an abbreviation of any word or phrase. To avoid confusion with the FOB term from the incoterm<sup>6</sup> which means "free on board", an important note for the use of the FOB term here is presented. Accordingly, the FOB here refers to a term commonly used in the Vietnamese garment industry for a type of production modality which means suppliers receive payment for full price of garment returned. (Goto 2007, 8.)

Goto (2007, 8) indicates that a majority of Vietnamese garment firms is applying FOBs because they offer larger amount per unit output than the tradition CMT (hereinafter cutting, making, trimming). On the basis of results from analyzing FOBs practices, FOBs is classified into three different types, i.e. FOBI, FOBII, and FOBIII. Each type of FOB is differed from its functional responsibilities and the associated risk characteristics. (Goto 2007, 8.) To have better illustration, figure 9 below summarizes the basic differences of the three types of FOBs by Goto (2007, 8).

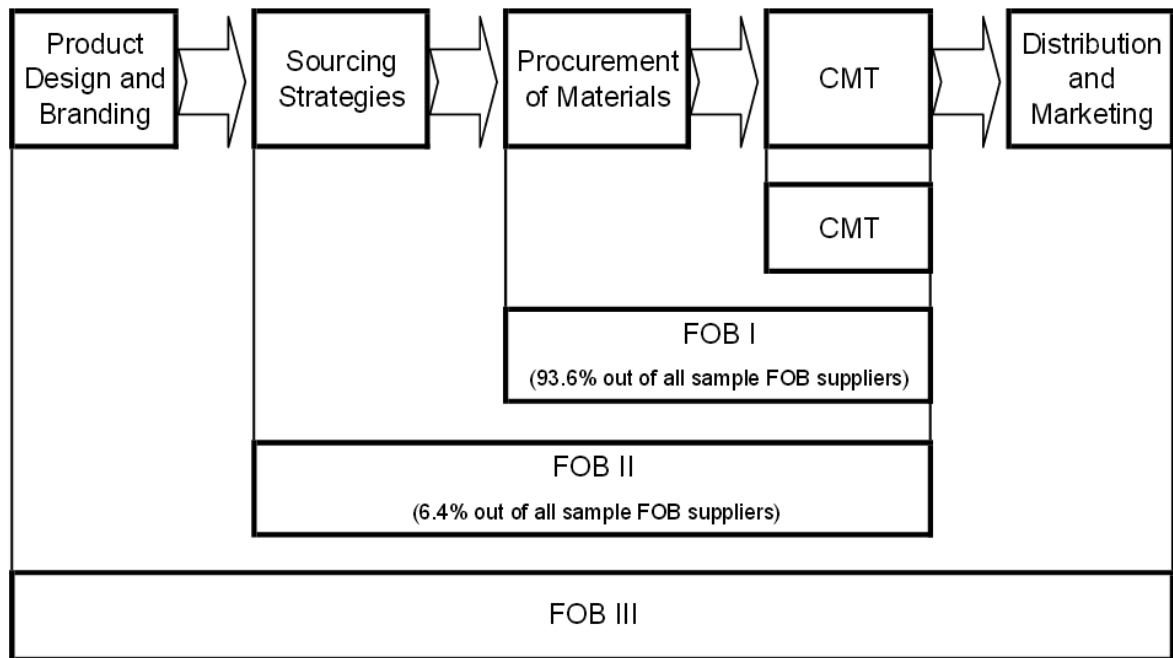


Figure 9. The differences of the three types of FOBs (Goto 2007, 9)

Deriving from the figure, while the FOBII and the FOBIII provide suppliers with extensive control of manufacturing process, the FOBI has the most narrowed procedure. Under the FOBI, issues associated with production including volume outputs, manufacturing time, process, are determined by the buyers. (Goto 2007, 10.) Applying to the particular case of this research, if the company conducts outsourced manufacturing based on the FOBI, it will be able to take up to 93.6% control of the production transferred to the supplier(s). For example, if the company outsources 10 000 pockets to a supplier based on the FOBI, the

company will provide the supplier a pocket sample, sufficient raw materials, detailed manufacturing process requirements and exact time of delivery.

According to the managing director of the company, the company defines long-term developments is associated with quality-consciousness. As was discussed previously in section 3.1.1, quality-consciousness has always been an important issue in the company business strategy. So far, the company has achieved credit from the customers through maintaining its high quality standards. Applying the outsourced manufacturing to achieve a better manufacturing capacity would make no sense if the quality standard is reduced. Therefore, the FOBI model with its distinctive functions would help acquire the quality-consciousness to meet the company's long-term development plan. Firstly, it can reduce the risks in outsourcing concerning production and distribution from suppliers to the lowest. Moreover, the FOBI can ensure the accurate time, and the quality and quantity of products returning from the suppliers.



## 5 DISCUSSION AND CONCLUSION

This final chapter synthesizes the whole research work under the theme of analyzing the potentials of outsourced manufacturing and selecting an outsourcing model for May Dai Phuc Ltd. This chapter discusses the most important points of this research work. Moreover, this chapter concludes this research work by drawing from the research findings presented in Chapter 4. In addition, this chapter provides answers to the research questions, the recommendations concerning outsourced manufacturing decision and the suggestion for further research.

### 5.1 Discussion

Outsourced manufacturing has proved to be the most common outsourcing practice in the recent business trend. Besides notable benefits that outsourced manufacturing offers companies, the decision to outsource any manufacturing process simultaneously involves consequences and risks. This research was initially conducted on the basis of the case company's need for practicing outsourcing. The outcomes of this thesis work are, therefore, valuable for the case company and the findings of this research are supposed to assist the company in making its outsourcing decision.

During the research process, the company's manufacturing situation, and the internal and external resources were analyzed based upon both theoretical discussions and the empirical findings. The purpose was to interpret the company's possibility and flexibility to outsource its manufacturing. The results indicate that the distinct characteristics of the current manufacturing system concerning lead time, volume outputs, and division of labor and

work create good conditions and environment for outsourced manufacturing. Moreover, the research indicates that the company has sufficient resources to support outsourced manufacturing. Additionally, outsourced manufacturing was proved to free up the influenced resources, e.g. inventory, workers and equipment, to enhance the company's resource capacity. All in all, outsourced manufacturing seems to be an appropriate decision for the company in the current circumstance.

Another focus of this research was analyzing the possible impacts of outsourced manufacturing on the financial and operational performance of the company. Drawing from the theoretical discussions and the empirical findings, these analyses provided a comprehensive understanding of the specific areas of impacts, the approaches to the identified areas in the context of financial and operational aspects. As a result, outsourced manufacturing was proved to have positive impacts on the company financial and operational performance.

Through the findings presented in Chapter 4, this research provides the company with a set of recommendations as follows.

- Outsourcing minor manufacturing tasks which do not required specialized equipment or labor to avoid the risk of dependency on supplier.
- Having an appropriate re-arrangement of the uses of workers and equipment to reach full potential of outsourcing.
- Building new inventory policies to increase the level of safety stocks for outsourcing activities.
- Developing distribution function to support outsourcing transportation between the company and supplier(s).
- Developing a detailed outsourced manufacturing model on the basis of FOBI model.

This research is a first attempt to analyze the actual outsourced manufacturing potentials of the company. The practical implication of this research is important for the company to

make its outsourcing decision. However, outsourcing practice is influenced by a variety of other factors which are excluded from this research, for example, competitiveness of environment, political and sociological factors. Therefore, in order to have the most appropriate outsourcing decision, it is necessary to conduct further relevant research on the regarded factors.

## 5.2 Conclusion

Throughout the research process, relevant literature was used to establish the theoretical background for this research. At the same time, data and information of the company were collected from the interview and several internal documents of the company for the purposes of analyzing to achieve the research objectives. The outcomes of this thesis work indicate the high benefit and profitability of outsourced manufacturing to the company.

Three research questions were addressed in this research to achieve the objectives. Below, the answers to those research questions are presented.

1. What are the company's advantages and disadvantages in the context of outsourced manufacturing?

To be able to answer this question, the current manufacturing situation and, the internal and external resources of the case company were analyzed on the basis of data and information received from the case company. These analyses were reflected on relevant literature to draw the advantages and disadvantages of the case company towards outsourced manufacturing. The table 4 below summarizes the answers to the first question of this research.

Table 4. The company's advantages and disadvantages toward outsourced manufacturing

|                                 |                 | Advantages   | Disadvantages  |
|---------------------------------|-----------------|--|--|
| Manufacturing situation         |                 | <ul style="list-style-type: none"> <li>- High volume productions</li> <li>- Extensive division of labor and work</li> <li>- Complex manufacturing process</li> </ul>           | <ul style="list-style-type: none"> <li>- Standardized manufacturing process</li> <li>- Uncertain manufacturing lead time</li> <li>- Long production run</li> </ul> |
| Internal and external resources | Assets          | <ul style="list-style-type: none"> <li>-Sufficient capital and means</li> <li>-Tight inventory</li> </ul>  | <ul style="list-style-type: none"> <li>- Expensive and specialized equipment</li> </ul>  |
|                                 | Human resources | <ul style="list-style-type: none"> <li>-Demands for employees to perform simple tasks</li> <li>-Wide access to external workers</li> <li>-Decrease current workload</li> </ul> | <ul style="list-style-type: none"> <li>- Re-organization of internal work force</li> </ul>   |
|                                 | Transportation  | <ul style="list-style-type: none"> <li>-Developed transport sector</li> <li>-Shifting materials through a third-party</li> </ul>   | <ul style="list-style-type: none"> <li>- Independent transportation</li> </ul>   |

Table 4 describes briefly the main pros and cons of outsourced manufacturing in the context of analyzing the manufacturing situation, and the internal and external resources of the case company. Different dimensions of the current manufacturing and the current resources which have impacts on the outsourced manufacturing of the company were also the theme of this research.

2. How will outsourced manufacturing impact on the company's operational and financial performance?

The discussions in Chapter 4 of this research indicated that outsourced manufacturing would have positive impacts on the current financial and operational performance of the company. Firstly, outsourced manufacturing can guarantee cost reduction by saving labor cost and lowering unit cost by having suppliers manufacturing minor tasks at a lowered cost. Furthermore, because the investment for machines and equipment of the company is large, there is a high risk that the income cannot cover fixed cost to recoup the capital investment. Outsourced manufacturing will probably convert fixed cost to variable cost to lessen this kind of risk. Regarding the impact on operational performance, outsourced manufacturing can enhance the ability to deal with timely deliveries' pressure by lessening the complexity of the manufacturing process and the amount of current workload. In addition, outsourced manufacturing can enable companies to access to needed external resources to increase the flexibility.

3. How will the FOBI outsourcing model meet the company's requirements in term of long-term development?

On the basis of Goto (2007) research on the industrial upgrading of the Vietnamese garment industry, it is reported that there are currently three outsourcing models practicing by almost all of national garment companies, i.e. FOBI, FOBII, FOBIII. Under the FOBI model, risks in production and distribution are reduced to the lowest as it regulate a very strict outsourcing contractual agreement with the supplier(s). Through the interview with the managing director of the case company, this research understands that the company perceives that long term development is associated with the quality consciousness issue. Thus, the FOBI model can support the company to meet its long-term development plan by guaranteeing the accurate time, and the quality and quantity of products returning from the supplier(s). All in all, this model was recommended to the case company as the most efficient outsourcing model to meet its long-term development.

### 5.3 Suggestions for further research

During the research process, there were several critical issues concerning the outsourced manufacturing decision of the company which this research was not able to cover. In order to ensure an effective outsourcing practice in the future, this research suggests the case company to conduct further research.

Firstly, this research suggests the company to research the internal environment from a comprehensive viewpoint regarding their specialized field. The purpose is to establish an outsourced manufacturing model which standardizes for the company's outsourced manufacturing strategy. For example, the model could include the assets specificity, management strategy and pricing policies.

Secondly, it would be important for the company to carry out research on supplier(s) selection in the context of outsourced manufacturing. As the case company currently has a good reputation for manufacturing high quality products, in order to maintain the high quality level of products when they apply outsourced manufacturing, it is significant to acquire qualified supplier(s). Therefore, further research concerning the process of finding, recruiting and retaining supplier(s) is suggested.

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## APPENDIX 1

Appendix 1

1(2)

INTERVIEW WITH MINH NGUYET VO, THE MANAGING DIRECTOR OF MAY DAI PHUC LTD., CONDUCTED ON 20 NOVEMBER, 2014.

1. What type of garment products does the company usually manufacture? What is/are core product(s)?
2. Can you please describe briefly the manufacturing process of the company?
3. Which aspects of manufacturing are critical to meet the production plan?
4. Can you please describe the uses of equipment and machines in the manufacturing process? Is the manufacturing of the company equipped sufficiently?
5. Are all equipment and machines working in full capacity?
6. How about the workers? How do you evaluate the current work-force of the company?
7. Is there any limitation in the current manufacturing? If yes, which aspects should be improved and how in your viewpoint?
8. How do you evaluate the importance of elements of the manufacturing of the company in terms of meeting customers' requirements and maximizing profit?

|                                 | High important | Important | Average |
|---------------------------------|----------------|-----------|---------|
| Sales forecasting               |                |           |         |
| Facilities                      |                |           |         |
| Raw Materials                   |                |           |         |
| Manufacturing schedule          |                |           |         |
| Manufacturing lead time         |                |           |         |
| Division of labor               |                |           |         |
| Division of work                |                |           |         |
| Equipment                       |                |           |         |
| Workers                         |                |           |         |
| Level of inventory              |                |           |         |
| Managerial staff                |                |           |         |
| Distribution,<br>transportation |                |           |         |

9. Why does the company want to apply outsourced manufacturing?
10. What are the expectations of the company for outsourced manufacturing?
11. What are the criteria for outsourcing the company manufacturing in your point of view?
12. How do you evaluate the level of current resources in terms of influencing outsourced manufacturing?
13. Outsourced manufacturing practice will involve current functional operations, which functions would support outsourcing activities the least and the most in your opinion?
14. Is outsourced manufacturing considered short-term oriented or long-term oriented? Why?