

# **Current issues and solution to improve Vietnam's rice exports to Africa**

**Focusing on Cost Leadership and Third Party Logistics  
model**

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| Abstract<br><br><p>Rice is important product in commodity category of Vietnam. Vietnam is among the top rice exporters in the globe and the country government aims to boost rice export to gain higher export revenue. There were evidences which were developed by other researchers to address the topic of about rice export activities of Vietnam. Evidences were developed with a broad range of research topics such as marketing strategies for Vietnamese rice producers. However, none of them focused on rice export to African countries. The primary objective of this dissertation is to identify current issues in Vietnam's rice export activities to Africa's countries and to propose solutions to further improve export performance. To resolve primary objective, in-depth interviews were utilized with the participation of 5 experts who are working for Vietnam Food Association (3 people) and Vietnam Logistics Associations (2 people) to join the interview sessions. . The interviews with these experts revealed 3 persistent problems and challenges. They are the choice of rice product for exporting in which African countries do prefer lower quality products with lower price, the lack of cooperation between Vietnamese governments and other governments in Africa, and fragmented African market that lead to different demand of rice import when global rice price changes. The key limitations of the competitive capabilities of Vietnam's rice manufacturers are export planning and stocking plan is underperformance compared to rice manufacturers in China or Thailand. Based on the findings, there are some recommendations are delivered to further improve rice export to African countries.</p> |  |   |
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## Contents

|          |  |           |
|----------|--|-----------|
| <b>1</b> | <b>INTRODUCTION .....</b>                                  | <b>3</b>  |
| 1.1      | Background of the study .....                              | 3         |
| 1.2      | Problem statement.....                                     | 3         |
| 1.3      | Research objectives .....                                  | 4         |
| 1.4      | Scope of the study .....                                   | 5         |
| 1.5      | Structure of the study.....                                | 5         |
| <b>2</b> | <b>RESEARCH METHODOLOGY .....</b>                          | <b>6</b>  |
| 2.1      | Research philosophy.....                                   | 6         |
| 2.2      | Research approach .....                                    | 7         |
| 2.3      | Research design.....                                       | 8         |
| 2.4      | Types of research methods .....                            | 9         |
| 2.5      | Data gathering.....  | 10        |
| 2.5.1    | Primary data gathering.....                                | 10        |
| 2.5.2    | Secondary data gathering.....                              | 10        |
| 2.6      | Interview design .....                                     | 10        |
| 2.7      | Data analysis techniques.....                              | 11        |
| <b>3</b> | <b>LITERATURE REVIEW.....</b>                              | <b>11</b> |
| 3.1      | Generic business strategy .....                            | 11        |
| 3.2      | Supply chain management (SCM) .....                        | 14        |
| 3.3      | Logistics services integration model.....                  | 15        |
| <b>4</b> | <b>DATA ANALYSIS AND RESULTS.....</b>                      | <b>17</b> |
| 4.1      | Description of the interviewees .....                      | 17        |
| 4.2      | Current situation of Vietnam's rice export to Africa ..... | 18        |
| 4.2.1    | The strengths of Vietnam's rice export.....                | 18        |

|              |   |           |
|--------------|---|-----------|
| <b>4.2.2</b> | <b>The persistent problems and challenges of Vietnam’s rice export to Africa</b>                      | <b>19</b> |
| <b>4.2.3</b> | <b>Issues related to competitive capabilities of Vietnam’s rice manufacturers</b>                     | <b>21</b> |
| <b>4.3</b>   | <b>How to improve Vietnam’s rice export to Africa through cost leadership strategy</b>                | <b>23</b> |
| <b>4.4</b>   | <b>How to improve Vietnam’s rice export to Africa through logistics services integration strategy</b> | <b>26</b> |
| <b>5</b>     | <b>CONCLUSION AND SUGGESTION</b>  | <b>30</b> |
| <b>5.1</b>   | <b>Conclusion</b>   | <b>30</b> |
| <b>5.2</b>   | <b>Suggestion</b>   | <b>31</b> |
| <b>5.3</b>   | <b>Limitations and future research</b>  | <b>32</b> |
|              | <b>References</b>   | <b>33</b> |

## Figures

|                  |  |           |
|------------------|--|-----------|
| <b>Figure 1:</b> | <b>Generic business strategies</b>   | <b>12</b> |
| <b>Figure 2:</b> | <b>Research design</b>   | <b>9</b>  |
| <b>Figure 3:</b> | <b>3PL logistics integration strategy for Vietnam’s rice manufacturers</b> | <b>27</b> |
| <b>Figure 4:</b> | <b>Current value chain process of Vietnam’s rice manufacturers</b>         | <b>28</b> |
| <b>Figure 5:</b> | <b>Proposed value chain process of Vietnam’s rice manufacturers</b>        | <b>29</b> |

## Tables

|                 |                            |           |
|-----------------|----------------------------|-----------|
| <b>Table 1:</b> | <b>Interview questions</b> | <b>10</b> |
|-----------------|----------------------------|-----------|

# **1 INTRODUCTION**

## **1.1 Background of the study**

Rice is important product in commodity category (Milovanovic & Smutka, 2017). The report from Food and Agriculture Organization of the United Nations – FAO (2018) confirmed that rice price has been increased by more than 16% between 2017 and 2017 and top rice producers are China, India, Indonesia, Bangladesh, and Vietnam. In addition, global rice market has witnessed a slight raise in total production, from 501 million tons in 2016 to 511 million tons in 2018 (FAO, 2018). In 2019, global rice production is expected unchanging due to amid climatic uncertainties that leads to lower outputs and poorer producer margins across main rice producers (FAO, 2019).

Vietnam is among the top rice exporters in the globe. The country earned total export value of US\$2.2 billion or consumed 9% of global rice export value in 2018 (Workman, 2019). India and Thailand earned higher rice export value compared to Vietnam and they were stood at US\$7.4 billion and US\$5.6 billion, respectively (Workman, 2019). According to Ministry of Industry and Trade (2019), Vietnam has been exporting rice products to more than 150 countries and rice export volume of the country was accounted for nearly 15% of global export volume. Beside of that, rice producers in Vietnam has been initially entering to Korea, Japan, Hong Kong, U.S., and E.U. throughout higher product quality such as white and fragrant rice (Vietnam Economic News, 2019). Besides, Vietnam also has the plan to export lower rice quality at cheaper prices to emerging and developing countries in Africa (Thang, 2017). In fact, it is identified that exporting rice to Africa's countries is surged since the rice export to China has been facing up with more challenges which come from strict import policies from Chinese government (Vietnam News, 2019; Nhung, 2016).

## **1.2 Problem statement**

There were evidences which were developed by other researchers to address the topic of about rice export activities of Vietnam. Evidences were developed with a broad range of research topics such as marketing strategies for Vietnamese rice producers

(Goletti et al., 2015), examination of rice policy with futuristic recommendations (Nielsen, 2007), the impact of trade agreement on Vietnam's rice export (Hoa et al., 2019), and trend in rice production and export in Vietnam (Thanh & Singh, 2006). Although rice export activities have been studied and gained attention from the researchers, it is identified that there are not so many evidences which explore the area of logistics activities and the determination of cost leadership as export strategy in rice producers. In fact, when Vietnam shifts rice export target to Africa, cost leadership become important since lower product quality with cheaper price is more appropriate with poor economic condition (Nhung, 2016). In addition, when the companies go to global business context, logistics services integration is one of condition that helps them to reduce logistics cost and therefore reducing export cost and price. It is denoted that Vietnam has high logistics cost compared to other countries like China and Thailand. Current logistics cost of Vietnam was about 20% of GDP, as reported by Ly (2014) while average global logistics cost is about 11% (Biinform, 2016). In addition, most of the companies are following asset operation or asset intensive transportation services (2PL logistics) and only few companies are able to perform contract logistics with asset intensive non-transportation services (3PL logistics) (Biinform, 2016). Moving from 2PL to 3PL logistics model is important since it helps the companies to lower logistics cost and it is one of the national target of increasing the percentage of companies to follow 3PL logistics model to 50-60% by 2025 (Ministry of Industry and Trade, 2017).

### **1.3 Research objectives**

The primary objective of this dissertation is to identify current issues in Vietnam's rice export activities to Africa's countries and to propose solutions to further improve export performance. To fulfill this research objective, there are some research questions to be proposed:

- What are the persistent problems and challenges that are restraining Vietnam's rice export activities to Africa's countries?
- What are the limitations of the competitive capabilities of Vietnam's rice manufacturers when exporting rice to Africa's countries?
- Is cost leadership strategy suitable in case of Vietnam's rice export to Africa's countries?

- Is 3PL logistics integration strategy suitable in case of Vietnam's rice export to Africa's countries?
- Any other recommendations for further improving the export performance of Vietnam's rice manufacturers to Africa?

#### **1.4 Scope of the study**

The dissertation is developed within specific scope. It is developed during June 2019 and the location of the study is in HCMC of Vietnam. The main content is about rice export activities of Vietnamese manufacturers and the export market is primarily for Africa's countries. Qualitative research method will be utilized with the primary data to be collected from interviews with the experts.

#### **1.5 Structure of the study**

The dissertation has 5 chapters.

##### Chapter 1: Introduction

The first chapter gives the background of Vietnam's rice export activities. It posits the importance of this activity to Vietnam's economic development and growth. Research problem is identified as foundation of proposing the main research objective. The research objective is fulfilled through the answers of research questions.

##### Chapter 2: Literature Review

The second chapter consolidates the understandings of generic business strategy and logistics services integration model. The researcher also explores the concept of supply chain management as well as collecting evidences related to the studied topic.

##### Chapter 3: Research Methodology

The third chapter is about research methodology. It consists of choices towards research philosophy, research approach, and research design. The researcher also provides choices of research method and how to collect the data in this chapter.

##### Chapter 4: Data Analyses and Findings

The fourth chapter presents the findings which will be extracted from in-depth interviews with the experts in Vietnam's rice export activities. This chapter is separated by several sessions in relation with the interview questions.

#### Chapter 5: Conclusions and Recommendations

The last chapter concludes all the previous results. It consists of managerial recommendations to further improve rice export performance of Vietnam to Africa's countries.

## **2 RESEARCH METHODOLOGY**

### **2.1 Research philosophy**

Research philosophy refers to the perception of a researcher towards the natures of studied topic (Bajpai, 2011). It drives the researcher's choices to subsequent parts of research methodology such as research approach, research design, research method, and data collection (Saunders et al., 2016). Common research philosophies are positivism, interpretivism, and realism. To choose the most appropriate philosophy, the researcher needs to understand their concepts.

Positivism philosophy refers to the observation and the measurement of aspects of social phenomenon in order to obtain the facts (Aliyu et al., 2015). This philosophy demands the researcher to establish factors' operationalization, to collect the data, to conduct respective analyses, and to describe the findings (Wilson, 2010).

Interpretivism philosophy is defined as the development of knowledge throughout social interaction between the researchers and relevant people (Myers, 2008). Unlike positivism, interpretivism provides objective point of view related to social phenomenon (Collins, 2010).

Realism is the description of reality throughout the researchers' observation and key findings are generated as it reflects (Haddadi et al., 2017). Realism is divided into direct realism and critical realism. Direct realism exports the findings as purest nature of the social phenomenon or findings reflect social phenomenon as it appears (Saunders et



al., 2016). Critical realism refers to the action of viewing social phenomenon in multiple times and therefore there is no single conclusion for a research topic (Novikov & Novikov, 2013).

Given to the definitions for four research philosophies, the dissertation is developed with the application of positivism philosophy. It is reasonable since this philosophy helps the researcher to develop understandings about Vietnam's rice exports to Africa throughout cost leadership and 3PL logistics model. Moreover, positivism is the best choice compared to other philosophies. Interpretivism should not be selected because of it is highly subjectivity. Realism is not relevant since the researcher does not only want to capture the fact but want to identify the underlying issues and possible solutions to boost the rice export through appropriate business strategy and logistics area.

## **2.2 Research approach**

Research approach consists of deductive reasoning and inductive reasoning (Saunders et al., 2016). Like in previous section, the choice of research approach is based on the definition of each approach. Deductive reasoning is a process in which research problems, objectives and questions are linked to existing theories or evidences provided by other researchers (Wilson, 2010). This research approach refers to the application of existing theories into a specific circumstance (Gulati, 2009). Inductive reasoning refers to a process with the highest objective of generating new theories from the observation of social phenomenon (Goddard & Melville, 2004). In other words, inductive reasoning is used to build new theory (Lodico et al., 2010).

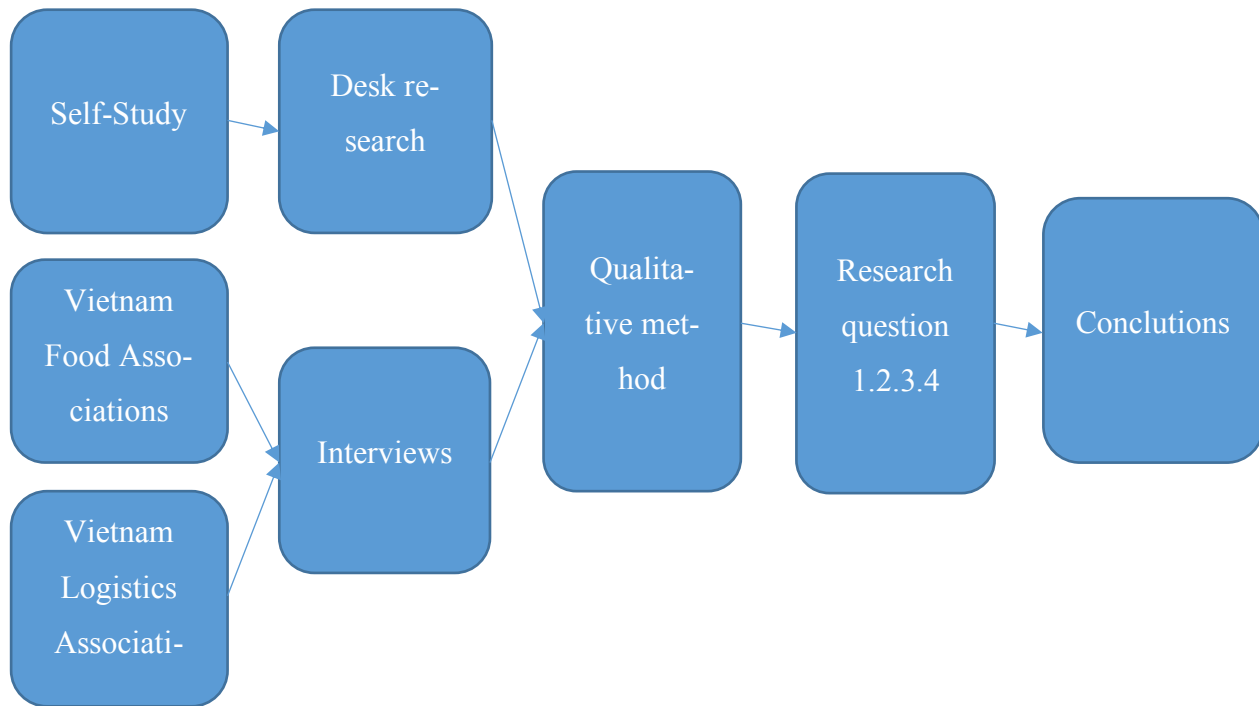
Given to the difference between these two research approaches, this dissertation's research objectives are better resolved by deductive reasoning. It is relevant since inductive reasoning focuses on the generation of new theories while deductive reasoning refers to theoretical application. In this dissertation, the researcher is in the position of applying existing theories rather than creating new ones. In more detail, the researcher will provide evidences related to the application of cost leadership strategy and 3PL logistics model into the rice export activities of Vietnamese company in the export activities to Africa's countries. Thereby, no new theories are developed and therefore inductive reasoning is not suitable.

### **2.3 Research design**

In this section, research design is put into the discussion. There are two major research designs, namely conclusive and exploratory. Conclusive research design is utilized when the researchers want to provide final conclusion for their studies and it allows the researchers to answer research objectives and research questions in straightforward way (Saunders et al., 2016). This research design is used with quantitative assessment (Nargundkar, 2008). Exploratory research design, however, is utilized when the researchers want to explore social phenomenon in multiple aspects and the objective does not cover the generation of conclusive statement (Saunders et al., 2016). This research design is associated with qualitative assessment and it is appropriate choice when there are not so many evidences related to the studied topic (Brown, 2006).

In this dissertation, exploratory research design is utilized and this choice is supported by the fact that the researcher wants to explore how the rice export activities are further improved through cost leadership strategy and the establishment of 3PL logistics model. There are not so many evidences in Vietnam to explore the use of cost leadership strategy and 3PL logistics model in rice export activities. The researcher also wants to conduct in-depth interviews with the experts in order to capture the facts.

A research design is developed and illustrated as below:



**Figure 1: Research design**

## 2.4 Types of research methods

Quantitative methods emphasize objective measurements and analysis of statistical, mathematical or numerical data collected through polls, questionnaires and surveys or by manipulating previous statistical data by computational techniques. Quantitative research focuses on collecting digital data and generalizing it across groups of people or to explain a particular phenomenon (Babbie, Earl R. *The Practice of Social Research*. 12th ed. Belmont, CA: Wadsworth Cengage, 2010). Qualitative research is a market research method that focuses on data collection through end-to-end communication and conversation.

In this research study, the researcher will use qualitative method. This choice is selected because of collected data is non-numerical format. The researcher attempts collecting data from interview with respective people who understand about the rice export activities in Vietnam. Using qualitative method has the benefit of the researcher can extract in-depth findings related to studied topic. However, this method is highly biased and it is depended on the point of view of the experts.

## 2.5 Data gathering

### 2.5.1 Primary data gathering

Primary data is information collected from the interviews with people who are the experts in Vietnam's rice export activities. The choice of interview helps the researcher to collect the current issues in Vietnam's rice export activities to Africa's countries in general. It also helps the researcher to identify the obstacle concerns in this activity and how to leverage rice export performance throughout cost leadership strategy and 3PL logistics model.

### 2.5.2 Secondary data gathering

The collection of secondary data has the benefit of reducing times and efforts to collect the data (Srivastava & Rego, 2016). The researcher collects secondary data as journals and books about cost leadership strategy and 3PLs logistics model. The researcher also collects information about rice export of Vietnam, especially the performance of rice export activities to Africa's countries.

## 2.6 Interview design

As mentioned above, interview is chosen as data collection instrument for primary data. There are 5 interview questions as below:

**Table 1: Interview questions**

| No | Interview question  |
|----|---|
| 1  | What are the persistent problems and challenges that are restraining Vietnam's rice export activities to Africa's countries?        |
| 2  | What are the limitations of the competitive capabilities of Vietnam's rice manufacturers when exporting rice to Africa's countries? |
| 3  | Is cost leadership strategy suitable in case of Vietnam's rice export to Africa's countries?  |

|   |   |
|---|---|
| 4 | Is 3PL logistics integration strategy suitable in case of Vietnam's rice export to Africa's countries?            |
| 5 | Any other recommendations for further improving the export performance of Vietnam's rice manufacturers to Africa? |

There are 5 employees who are working for Vietnam Food Association (3 people) and Vietnam Logistics Associations (2 people) to join the interview sessions. They are primarily taking the responsibilities of monitoring rice export activities of Vietnam throughout the years and the development of promotional policies to further improve rice export performance. Every interview session was lasted for about 45 minutes and the researcher asks the experts with interview questions listed in the previous section.

## **2.7 Data analysis techniques**

The main data analysis technique which is utilized in this dissertation is content analysis. It helps the researcher to extract key information from interview sessions with the experts who have rich experience and knowledge about rice export activities of Vietnam. The researcher also notes down the experts' answers and then key information is extracted accordingly. Moreover, the similarity and the differences in the experts' answers are both captured and the researcher will validate their answers with secondary data.

# **3 LITERATURE REVIEW**

## **3.1 Generic business strategy**

Strategy inside a company is defined as on-going process which is carried in order to control its operations and business activities in order to achieve common business goals (Porter, 1996). According to Johnston & Scholes (2002), company's business is divided into corporate level strategy, business level strategy, and operational strategy.

Corporate level strategy is developed to address overall purposes and scopes of the business and how to add value to stakeholders (Grunig & Kuhn, 2010). Business level strategy refers to the development of competitive advantages to help the companies to compete better with other companies in given market (Johnson & Scholes, 2002). Finally, operational strategy is considered as planned activities which are developed to address internal business and operational aspects of the companies and it is developed to support business level strategy (Grunig & Kuhn, 2010).

Porter (1980) developed a generic business strategy framework based on sources of competitive advantage and market where a company competes with other competitors. There are four generic business strategies which are conveyed from the level of market competition and competitive advantage of the companies, including cost leadership, differentiation leadership, niche leadership with cost focus and differentiation focus.

|                           |                 | Markets where business competes |                       |
|---------------------------|-----------------|---------------------------------|-----------------------|
|                           |                 | Broad                           | Narrow                |
| Source of competitive ad- | Costs           | Cost leadership                 | Cost focus            |
|                           | Differentiation | Differentiation leadership      | Differentiation focus |

**Figure 2: Generic business strategies**

Source: Porter (1980)

Cost leadership is conducted when the companies want to sell goods to target customers at lower price compared to average market price (Porter, 1980). This generic business strategy is obtained throughout the business standardization and it helps the

companies to gain lower operating cost or to gain the benefits from economy of scale. Thus, goods and services can be sold at attractive price to the customers.

Differentiation leadership refers to the business orientation of the companies in which they develop goods and services with unique functions compared to other competitors' goods and services (Porter, 1980). The objective of conducting differentiation leadership is to distinguish a company to other companies in the market (Hall, 1980).

Niche or focus strategy is the third generic strategy and it refers to the application of cost focus and differentiation focus in case of narrow market competition (Porter, 1980). Niche strategy is applicable when the companies are doing business in small market segment and they decide to focus on specific customer segment to avoid intensive competition with other players (Horsky and Nelson, 1993).

In addition to generic business strategy, the companies are able to perform other business strategies, including focus-growth strategy, market leader strategy, market challenger strategy, market follower strategy, and market nicher strategy.

According to Leminen & Westerlund (2012), focus-growth strategy is applied when the companies want to achieve higher business growth at given business scale and therefore achieving business goals in long-term. In more detail, focus-growth strategy is divided into high growth and slow growth strategy in which high growth strategy is adopted in favorable market conditions and the companies want to increase market coverage while slow growth strategy is usable in case of the companies are doing business in high competitive market and the board of management would like to achieve sustainable development (Brown et al., 2001).

Market leader strategy refers to the business strategies which are conducted by a company with following business characteristics: having highest market share, high marketing budget, high technology adoption rate, and high new product development (Butler & Collins, 1996). The companies which adopt market leader strategy would like to increase their market size by introduction new products to new customer segment, to increase their business in different geographical locations, to invest a lot into marketing programs to increase brand awareness from the customers (Kotler et al., 2010). Moreover, market leader strategy requires strong in customer relationship management from the companies (Gilligan & Wilson, 2003).

Market challenger strategy is conducted by the companies which want to take the market share through business attack to a market leader (Tse et al., 2004). One of well-known market challenger strategy is to acquire smaller companies or the companies with financial troubles in the market (Gilligan & Wilson, 2003). Other market challenger strategies are price reduction, the introduction of high innovative goods and services, better marketing programs compared to market leaders (Gilligan & Wilson, 2003). However, the companies which apply market challenger may face up with fierce competition from market leader and this competition can bring adverse impacts to business performance of market challengers (Porter, 1980).

Market follower strategy is often used in case of the companies want to keep current market share by conducting less aggressive business actions compared to market challengers and market leaders (Hooley & Greenley, 2005). This business strategy reduces the competition threat from other competitors to the companies while their market shares are still maintained (Levitt, 1996). The companies which adopt market follower strategy often share the business characteristics of small business scale, lower research and development (R&D) efforts, and the management board involves directly to daily business and operational activities (Saunders, 1987).

Market nicher strategy refers to the focus on smaller subsets of the market where there are less competition from other companies (Ho, 2014). This business strategy is suitable in case of the companies are able to perform high specialization in specific market segments such as specialization in goods and services development, unique goods and services' features, and the delivery of high service quality to retain positive customer experiences (Gilligan & Wilson, 2003).

### **3.2 Supply chain management (SCM)**

The definition of SCM was provided by the Councils of Supply Chain Management Professionals (2019) in which SCM is a business term which reflects the coordination between entities inside and outside of business flow of the companies and this term represents for the planning of the activities related to logistics, procurements, and conversation in the business. Stock & Lambert (2001) provided another definition for SCM and it refers to the connection between the companies' entities, their suppliers, their



distributors, and their customers and the primary goal of this connection is to bring values to all stakeholders. Christopher (1998) perceived SCM as the activities which are carried out in both upstream and downstream level of the businesses and its objective is to deliver values to the customers at the right cost level. Mentzer et al. (2011) viewed SCM as tactics which are conducted and managed by systematic and strategic ways to bring the sustainable development in long-term perspectives. Frankel et al. (2011) posited that SCM is a framework which is established to link different activities inside and outside of the companies together such as distribution, logistics, sourcing, and productions.

SCM and logistics are often used interchangeably although there is the difference in term of concept between two terminologies (Larson & Halldorsson, 2004). Pache & Colin (2000) asserted that logistics refer to functional aspect of activities while SCM is closed to the operational integration in order to reach long-lasting values and relationships. Croom et al. (2000), however, considered logistics is kind of activity in the companies while SCM is viewed as business framework and it is established to connect different activities, including logistics. The view of logistics is belonged to SCM is emphasized in unionist theory (Sweeney & Bahr, 2015). Another difference between logistics and SCM was highlighted by Delfmann & Albers (2000) in the context of logistics is happened between different organizations while SCM is primarily conducted inside an organization. SCM also involves more activities compared to logistics since it consists of procurement activities, sourcing activities, and distribution activities (Saunders, 1997). This argument is also affirmed by Hugos (2006) since this researcher concluded that SCM is established to manage all activities inside and outside of the companies. In addition, traditionalist theory dictated that logistics covers SCM (Larson & Halldorsson, 2010) although it is only true in the early stage of SCM development (Alves Filho et al., 2004). In fact, SCM is began with logistics activities but this terminology is expanded during the companies' development since more activities are established and integrated together (Maia & Cerra, 2009).

### **3.3 Logistics services integration model**

Logistics services integration model emphasizes the pyramid of which logistics activities of the companies is categorized into 5 levels, including first party logistics (1PL),

second party logistics (2PL), third party logistics (3PL), fourth party logistics (4PL), and fifth party logistics (5PL).

1PL logistics model refers to basic logistics activities such as haulier, warehouse, and operators and these activities are conducted by the companies' internal teams (Ozovaci, 2016). This model is suitable when the companies have small business scale and their businesses are mostly happened in the same location (Vasiliauskas & Jakubauskas, 2007). Since the business scale is small and business location is narrowed, the companies are able to deliver goods to other stakeholders by their owned resources (Erkan, 2014). Another motivation of conducting 1PL logistics model is that the companies want to avoid negative impact from market's uncertainties (Gruchmann et al., 2018).

2PL logistics model is developed when the companies expand their scope of businesses and the management decides to keep basic logistics services internally but also utilizes international forwarder services from external logistics companies (Odnokonnaya, 2017). Key motivation of using 2PL logistics model is to reduce investment cost into commodity capacity services and it does not require the investment into information technologies or system to control the stock level from 2PL logistics providers (Hanus, 2013). Generally, a non-permanent contract is signed between the companies and 2PL logistics services providers (Switala, 2016).

3PL logistics model refers to long-term and beneficial contractual relationship between purchasing companies and logistics services providers in order to deliver goods based on the requests from purchasing companies (Papadopoulou, 2001). According to Njagi (2017), 3PL logistics model is carried out by outsourcing logistics activities which were self-conducted by the companies before. 3PL logistics player is also defined as logistics companies which do not have goods' ownership but take the function of delivering, storing, and receiving goods from one place to another place (Councils of Supply Chain Management Professionals, 2019). The motivation of choosing 3PL logistics model is to reduce logistics cost and purchasing companies can obtain higher operational efficiency, higher customer satisfaction and customer loyalty (Patil & Dolas, 2015). Currently, 3PL logistics model gains much attention from business practitioners. The report from the Applied Market Research (2018) affirmed that 3PL logistics services generated more than US\$860 billion in 2017 and compound annual

growth rate is expected more than 7% during 2018-2025. Moreover, more than 50% of global 3PL logistics services revenue was generated in Asia Pacific economic region (Korn Ferry, 2019). However, the limitation of 3PL model is captured as it only focuses on freight management and information sharing between purchasing companies and its 3PL players is very limited (Cherneva & Voigt, 2015; Vivaldini et al., 2008).

Two last logistics services models are 4PL and 5PL. 4PL model refers to independent general contractor (Quora, 2019). 4PL model is developed to connect business activities in different industries in order to gain economy of scale and business scale by utilizing assets across different industries (Cherneva & Voigt, 2015). 5PL model is the result of aggregating different logistics demands for more favorable logistics services rate and lower logistics cost (Erkan, 2014). Both 4PL and 5PL model have less dependency on physical assets but these two models focus on the application of advanced information technologies in order to increase the connectivity and the optimization (Hickson et al., 2018). Although 4PL and 5PL are advance logistics models, the application of these models brings some business concerns. These models allow the companies which have complex supply chain system focus on value creation but the control of supply chain is limited (Cherneva & Voigt, 2015; Vivaldini et al., 2008).

Currently, most of logistics companies in Vietnam are operating under 2PL model and very few are able to perform 3PL model (Biinform, 2016). It is recommended that 3PL model should be explored in order to gain lower operating and logistics cost to the companies. The application of 4PL and 5PL model may not be appropriate at this time since it demands the companies to have high information technology knowledge (Hickson et al., 2018). Therefore, the researcher will explore further how 3PL model can be applied in rice exporters of Vietnam.

## **4 DATA ANALYSIS AND RESULTS**

### **4.1 Description of the interviewees**

The primary data was collected from the interviews with 5 people who came from Vietnam Food Association (3 people) and Vietnam Logistics Administration (2 people).

This results was collected from these people throughout a process of collecting their answers and opinions about 5 interviewing questions.

Regard 3 people from Vietnam Food Association, they are holding the positions related to inspection of the members' quality, export insurance fund and export operation. Other people who come from Vietnam Logistics Administration are holding the positions of evaluating overall logistics market performance and logistics technologies. All these peoples are willing to join the interviewing process. For personal reasons, the identity of the interviewee will not be disclosed. Therefore, their names will be named as interviewees 1.2.3 come from Vietnam Food Association while 4 and 5 come from Vietnam Logistics Administration.

## **4.2 Current situation of Vietnam's rice export to Africa**

### **4.2.1 The strengths of Vietnam's rice export**

Current situation of Vietnam's rice export to Africa is explored through two interviewing questions. Before highlighting the persistent problems and challenges that are restraining Vietnam's rice export activities, the researcher would like to export what the performance of rice export activities of Vietnam over the times. Interviewee 1 from Vietnam Food Association emphasized that Vietnam achieved more than 6 million tonnes and more than US\$3 billion in term of rice export in 2018. He considered that such rice export volume and value was good since it was nearly 20% higher than 2017. When asking about the main reason of such increase in rice export, interviewee 1 said that it is because of Vietnam's rice manufacturers have been trying to shift exported rice products to higher quality in order to earn more profit margin. Currently, rice manufacturers of Vietnam are delivering different types of rice products, including white rice, Jasmine and aromatic rice, glutinous rice, and Japonica rice. In which, white rice, Jasmine and aromatic rice consume highest share of rice export revenues that was about 83% in 2018. He further addressed that local rice manufacturers should continue to focus on these rice types to earn higher profit margin in following years. Similar findings were found during the interviewing sessions with Interviewee 2 and Inter-

viewee 4. It is reasonable since Interviewee 1 and 2 are working for the same organization so that their information to be delivered consistently. Interviewee 4 is working in Vietnam Logistics Administration and he further shared that he often look up statistical reports about export volume of different product types and he paid attention to rice product since it is being considered as leading exported products of Vietnam. Interviewee 5 said that rice export activities of Vietnam have been improved recently due to the shift from concentrated export contracts to trade contracts. He further argued that concentrated export contracts did not bring the optimization to logistics activities of rice manufacturers since they had to classify their rice products and chose different transportation partners to deliver the products to the buyers in different areas of the globe. Trade contracts allow rice manufacturers to deliver different types of products to global logistics companies and the products will be then distributed respectively to different buyers. Interviewee 3 also highlighted the change in local rice producers which are known as the farmers. He indicated that Vietnamese farmers have been paying more attention to more quality of rice seeds so that they can produce rice products with more quality. Moreover, Interviewee 3 emphasized about the role of Vietnamese governments to provide financial supports to local farmers to borrow money from social banks to grow rice and to invest into more quality rice seeds. In summary, the main strengths in Vietnam's rice exports refer to the export strategy to focus on different rice products, the use of more quality rice seeds of local farmers, the financial supports from the government, and the application of trade contracts rather than concentrate export contracts.

#### **4.2.2 The persistent problems and challenges of Vietnam's rice export to Africa**

The first interviewing question refers to what the persistent problems and challenges that are restraining Vietnam's rice export activities to Africa's countries are. The researcher summarizes the content which was extracted from the interview session with different persons to understand the main issues towards rice export of Vietnam in general as well as rice export to Africa in specific. It is believed that rice export in Vietnam is facing up with numerous problems and challenges to rice export of Vietnam.

The researcher will pay more attention to problems and challenges that constrain the export volumes and export revenues to African countries. Interviewee 1 said that African countries are mostly poor and therefore current strategies with high focus on more quality of products may not be suitable. He further explained that people in poor countries in Africa are not able to pay more high price for high quality products and therefore current strategy of focusing on white rice, Jasmine and aromatic rice limits the penetration of Vietnam's rice manufacturers to this market. Interviewee 2 and 5 Interviewee 3 also delivered the same answer when the researcher asked them about the main challenges to local rice manufacturers when they penetrate African market.

Interviewee 2 further added up one more challenge to rice export to African countries. In interviewee 2's point of view, Vietnamese government has not put more effort to open trade accessibility to African countries. Up to now, only an significant cooperation was signed between Vietnamese government and South African government with rice export volume to be estimates at 0.85 million tonnes. The participation of the government is important as confirmed by Interviewee 3. He emphasized that when the governments of two countries cooperate with each other, local rice manufacturers in Vietnam will earn the benefit from avoiding trade barriers such as high import taxes and the document process to deliver rice products to African countries will be faster compared to normal process. He believed that the cooperation between Vietnamese government and South African government will improve the time efficiency of delivering rice products by more than 50%. It is translated to half of time to process exporting documents in South African when Vietnamese rice manufacturers export their rice products to this country. Behind of that, Interviewee 4 and 5 who are working for Vietnam Logistics Administration said that logistics facilities in African countries are not in good conditions. African countries lack of logistics centers to help distributing rice products to different buyers in different geographical locations.

Interviewee 5 also provided another persistent problem to rice export of Vietnam to African countries. He indicated that the countries in Africa are more exposed to the price changes since this market is very fragmented, leading to the different impact of price changes. He took an example of business situation in 2018 since global rice price was surged. During this year, different countries in Africa did have different demands towards rice products. While Nigeria imported more rice from other countries, Senegal

lowered their demand of importing rice. It was because of Nigeria has competitive advantage from internal oil production and this country earned high revenue from oil production and therefore it was affordable to the surge of rice products. In the contrast, Senegal do not have competitive advantage of oil production so that higher rice price actually reduced their rice import demand.

In summary, there are some problems and challenges to Vietnam's rice manufacturers when they set to export rice products to African countries. They are the choice of rice product for exporting in which African countries do prefer lower quality products with lower price, the lack of cooperation between Vietnamese governments and other governments in Africa, and fragmented African market that lead to different demand of rice import when global rice price changes.

#### **4.2.3 Issues related to competitive capabilities of Vietnam's rice manufacturers**

Moreover, the second interviewing question is what the limitations of the competitive capabilities of Vietnam's rice manufacturers when exporting rice to Africa's countries are. Currently, African countries are importing rice products from different countries such as Vietnam, China, Myanmar, India, Indonesia, Thailand, etc. The real threat is come from China since this country has high rice stock which is equivalent to two-third of global rice stock so that it allows Chinese rice manufacturers to export rice products to African easily. In fact, Interviewee 1 and 3 provided the fact that rice manufacturers from China are able to supply rice to more than 40 countries in Africa. Therefore, the competition between Vietnamese rice manufacturers and Chinese rice manufacturers is a practical concern.

Interviewee 2 is working for Vietnam Food Association and they identified that competitive capabilities of Vietnam's rice manufacturers are not in par compared to other rice manufacturers in other countries. He had some field visit to China, Thailand and India to capture how rice manufacturers do the exporting activities to other countries. He indicated that local rice manufacturers in these foreign countries do have clear plan for exporting rice to Africa. They developed rice exporting plan in the beginning of new

year and do update the plan with price change. Moreover, big rice manufacturers in China or Thailand has established the business practice of purchasing rice and conduct stocking when rice price at lowest level. This action allows them to stabilize the price when price is surged and therefore, they can keep exporting volumes and revenues at optimal level. Interviewee 2 denoted that this business practice is not familiar with Vietnam's rice manufacturers. It is translated to the fact that Vietnam's rice manufacturers are not good at export planning and stocking plan is underperformance compared to rice manufacturers in China or Thailand.

Interviewee 2 also highlighted an weakness in competitive capabilities of Vietnam's rice manufacturers. He denoted that rice manufacturers in Vietnam are not equipped with good marketing positioning and targeting. Currently, they focus on South Africa as major export destination and they ask the government to support the export activities to this country. In fact, he saw that the best market to export rice to African countries are Benin, Nigeria, Gambia, Sudan, and Algeria. Benin has more than half of its population living in urban area and they are able to purchase rice products even at higher prices. Nigeria has a big population with 180 million people and the demand for imported rice products is reliable since local manufacturers cannot meet the consumers' demands. Interviewee 3 also visited Gambia and he saw that this country is small with 2 million people but their eating habits with high rice consumption may be considered as good business opportunity to Vietnam's rice manufacturers. Sudan and Algeria has a good market size for rice exporting with 80 million people. Both of Sudan and Algeria have high demand towards rice products. Moreover, Sudan is relying mostly on foreign investors which can help them to import rice at reasonable price as well as guiding them to grow the local rice production.

Interviewee 4 and 5 come from Vietnam Logistics Administration. They added an existing issue related to rice export of Vietnam to African countries. They emphasized that China and Thailand have made foreign investment to African countries to build up logistics centers to support the distribution of imported products to different areas of this continent. Interviewee 5 said that Vietnam is more welcome to receive foreign direct investment and only telecommunication companies like Viettel are now conducting foreign investment to other countries in ASEAN region. This situation limits the competitive capabilities of Vietnam's rice manufacturers in exporting and distributing



rice products to African countries. Interviewee 4 confirmed that when Vietnam's rice manufacturers do not have logistics center in Africa, they must rent the logistics services and logistics facilities from Chinese and Thailand's logistics companies and therefore rice price of Vietnam is always higher than rice prices of China or Thailand.

In summary, there are some limitations of Vietnam's rice manufacturers that lead to their lower competitive capabilities. Vietnam's rice manufacturers are not good at export planning and stocking plan is underperformance compared to rice manufacturers in China or Thailand. Rice manufacturers from Vietnam do not have good marketing positioning and targeting. Moreover, Vietnam's rice manufacturers do not have logistics centers which are established in Africa.

### **4.3 How to improve Vietnam's rice export to Africa through cost leadership strategy**

This section is expanded through the interviewing question of cost leadership strategy is suitable in case of Vietnam's rice export to Africa's countries. As mentioned in second chapter, cost leadership is one of generic business strategies provided by Porter (1980). This strategy is conducted when the companies want to sell goods to target customers at lower price compared to average market price. Previous section clearly highlighted that one of the main problems that restraint rice export of Vietnam's rice manufacturers to African countries is that the choice of high quality rice products may not be fit with the current demands of African countries due to they are poor countries. In addition, Vietnam's rice manufacturers have lower competitive advantage compared to other rice manufacturers from China and Thailand due to they must rent logistics facilities from other players, leading to higher rice prices. In this section, the researcher asked 5 people who were involved into the interviewing session in order to determine how to improve Vietnam's rice export to Africa with cost leadership strategy.

It is identified that different interviewers provided different solutions to assist Vietnam's rice manufacturers to boost their rice export volume and revenue to African

countries throughout cost leadership strategy. The summary of cost leadership solution which is collected from the interviewing sessions shows that rice manufacturers in Vietnam should find the way to lower their production cost in order to generate cheaper rice products (Interviewee 1, 2 and 5), Vietnam's rice manufacturers should adopt and apply new technologies to reduce the cost of production (Interviewee 2, 3, 4, 5), the establishment of logistics centers in Africa (Interviewee 5). and finning the market positioning and targeting (Interviewee 3 and 5).

Given to idea of Interviewee 1 and 5, Vietnam's rice manufacturers must find the way to lower their production cost in order to generate cheaper rice products. The lower production cost can be achieved through the investment into automation process with the application of equipment and machines. According to Interviewee 2, the technology allows Vietnam's rice manufacturers to raise the bar of economies of scales. It is translated to the fact that equipment and machines allow the rice manufacturers to produce rice at cheaper production cost and therefore, they can sell final products at cheaper prices. Interviewee 1 addressed that the investment into automation process may bring the harmfulness to local labor since the number of new labor demands will be dropped if production activities can be automated. Therefore, he strongly recommended that Vietnamese government should involve into this process in order to bring the balance in social-economic development.

Given to idea of Interviewee 3, 4, 5, Vietnam's rice manufacturers should adopt new technologies to reduce cost of production and transportation. As mentioned above, technologies must be used by Vietnam's rice manufacturers to lower final product prices when they export rice products to African countries. To do that, new technologies must be adopted and know-how must be transferred to Vietnamese farmers. For example, Interviewee 4 asserted that the farmers in China or U.S. are now using drones to control the overall performance of crop, spreading seeds, and conducting chemical sprayers. Therefore, he recommended that local rice farmers in Vietnam should use drones to lower production cost and effort in rice production.

Moreover, Interviewee 5 said that rice manufacturers in Vietnam should invest more capital to develop their logistics system to reduce the cost of transportation. As highlighted in previous section, logistics center has not been available yet and rice exporters from Vietnam must rent the logistics facilities and other logistics services such as

transportations from foreign logistics providers. This practice does not help Vietnam's rice manufacturer to lower rice prices to African countries due to high transportation cost. Therefore, Interviewee 5 recommended that Vietnam's rice manufacturers should cooperate with each other in order to build a logistics centers for Vietnamese exporters in various locations of Africa. In fact, a logistics center in Africa must be built in the way of supporting other exporters in other areas or it is not only limited within rice manufacturers. By doing that, the cost of building logistics centers in African can be shared among different manufacturers. Interviewee 5 also said that Vietnamese governments should join into this process as controlling group to ensure the fair distribution of using logistics centers services between the players.

Given to idea of Interviewee 3 and 5, Vietnam's rice manufacturers should improve their capabilities in term of marketing positioning and targeting. Interviewee 3 said that he strongly recommended Vietnam's rice manufacturers should export their rice products to Benin, Nigeria, Gambia, Sudan, and Algeria rather than only focusing on South Africa's rice market. He provided the argument when the researcher asked him the issues related to competitive capabilities of Vietnam's rice manufacturers in comparison with other rice manufacturers coming from other countries like China, Thailand, and Indonesia. Interviewee 3 recommended that Vietnam's rice manufacturers should work with various Vietnamese government agencies to establish governmental strategic cooperation between Vietnamese government and the governments of these 5 countries to avoid negative effects from trade barrier. The strategic cooperation should be in long-term perspectives and it will come up with the local partnership to help rice manufacturers in these countries to grow their rice volume. Interviewee 3 argued that local partnership believed that this action will establish long-term relationship with African countries and it will no longer harmful to exporting volume and exporting revenues of Vietnam due to local production of these countries cannot meet the rice demands from citizens. In fact, rice manufacturers can only fit to 40% of local rice demands and therefore, it is still a lot of business opportunity for rice manufacturers in Vietnam.

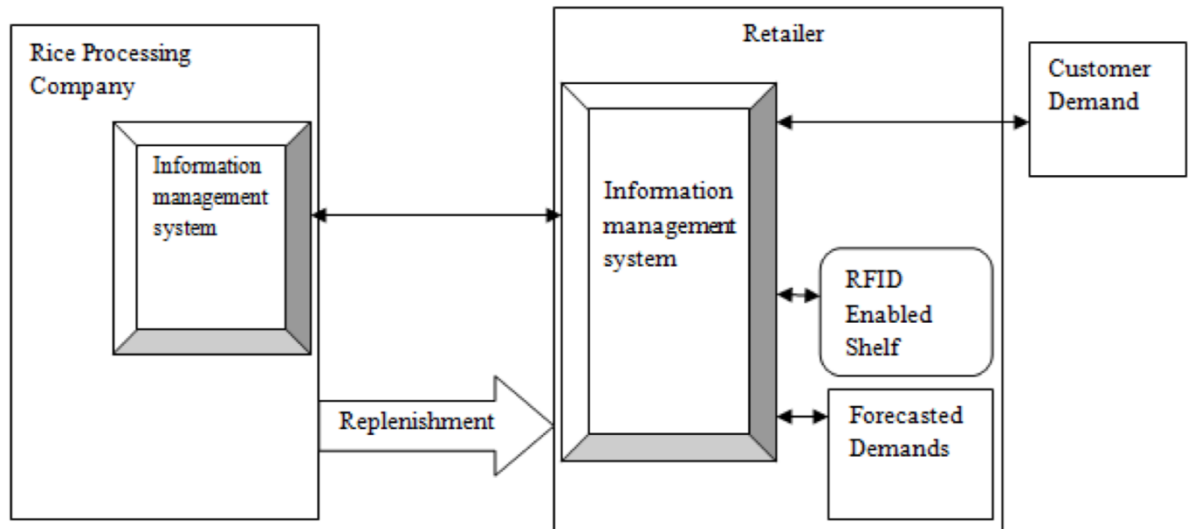
Interviewee 5 totally agreed with the idea of fining marketing positioning and targeting in Vietnam's rice manufacturers. He further explained that rice manufacturers in Vi-

Vietnam must cooperate with international organization in commodity goods and services to capture the statistical reports about rice price and rice demand of each country in Africa before choosing the best markets for penetration and exporting rice products. Interviewee 5 also recommended that Vietnam's rice manufacturers should look up the geographic location of each country, the structure of population in urban and rural area and their eating habits to finetune their choices of exported market. He believed that when Vietnam's rice manufacturers can finetune their exported market, they would earn stable rice demands from local partners as well as signing long-term contracts to reduce competitive threats from other rice manufacturers from China or Thailand.

#### **4.4 How to improve Vietnam's rice export to Africa through logistics services integration strategy**

An interviewing question of how 3PL logistics integration strategy suitable in case of Vietnam's rice export to Africa's countries is. As highlighted in the second chapter, 3PL logistics model refers to long-term and beneficial contractual relationship between purchasing companies and logistics services providers and it helps to reduce the logistics cost through transferring logistics functions to other logistics services providers. By adopting 3PL logistics integration strategy, it is expected that Vietnam's rice manufacturers will earn the benefits of higher operational efficiency and better serving the customers' demands.

To understand how the 3PL model to be implemented in Vietnam's rice manufacturers when they export rice products to African countries, the researcher discussed with 3 people coming from Vietnam Logistics Administration (4 and 5). Interviewee 4 said that 3PL logistics model requires rice manufacturers to cooperate with retailers in African countries. The system should be developed in both sides, including rice manufacturers – the exporters and the entities of importer side such as the retailers, the logistics services providers, the wholesaler, etc. The researcher summarizes the findings from interviewing sessions with Interviewee 4 and 5 and an 3PL logistics integration model is illustrated in the figure below:

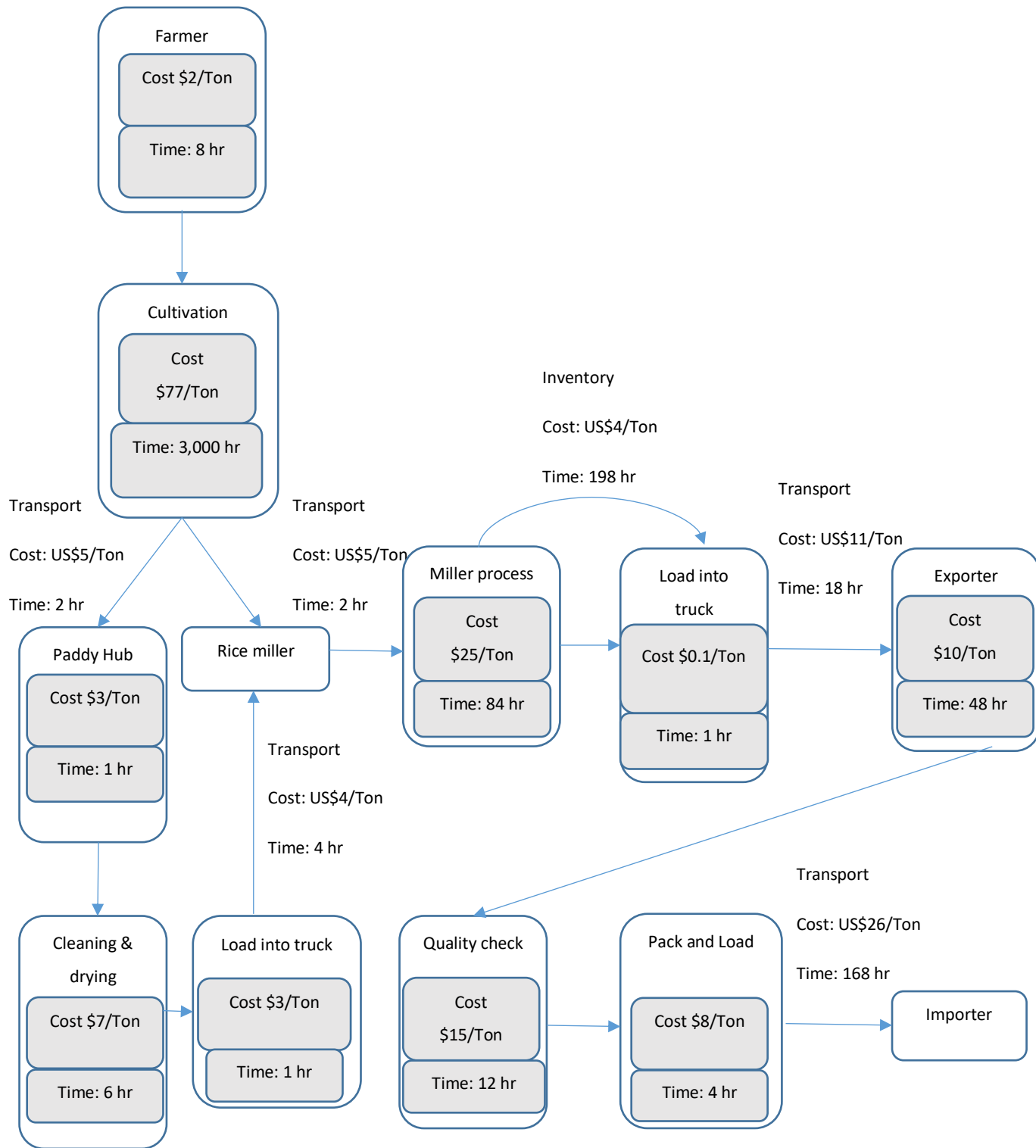


**Figure 3: 3PL logistics integration strategy for Vietnam's rice manufacturers**

According to Interviewee 4, rice processing companies or rice manufacturers of Vietnam must build their own information management system to control the stock level and the flow of rice products shipped from Vietnam to African countries. Then, there is a replenishment which is set up in order to control the information flows between Vietnam's rice manufacturers and the retailers in Africa. Interviewee 5 also provided the same answer for the demand of developing information management system and he further argued that information management system in Vietnam's rice manufacturers and information management system from the buyers and the logistics services providers in African countries must be connected. To ensure proper connection, Radio Frequency Identification (RFID) should be utilized to control the flow of goods before and after. By making different information management systems to be connected with each other, Vietnam's rice manufacturers are able to forecast future demands from the customers and therefore they have a plan to ship rice products in terms of product type and product quantity.

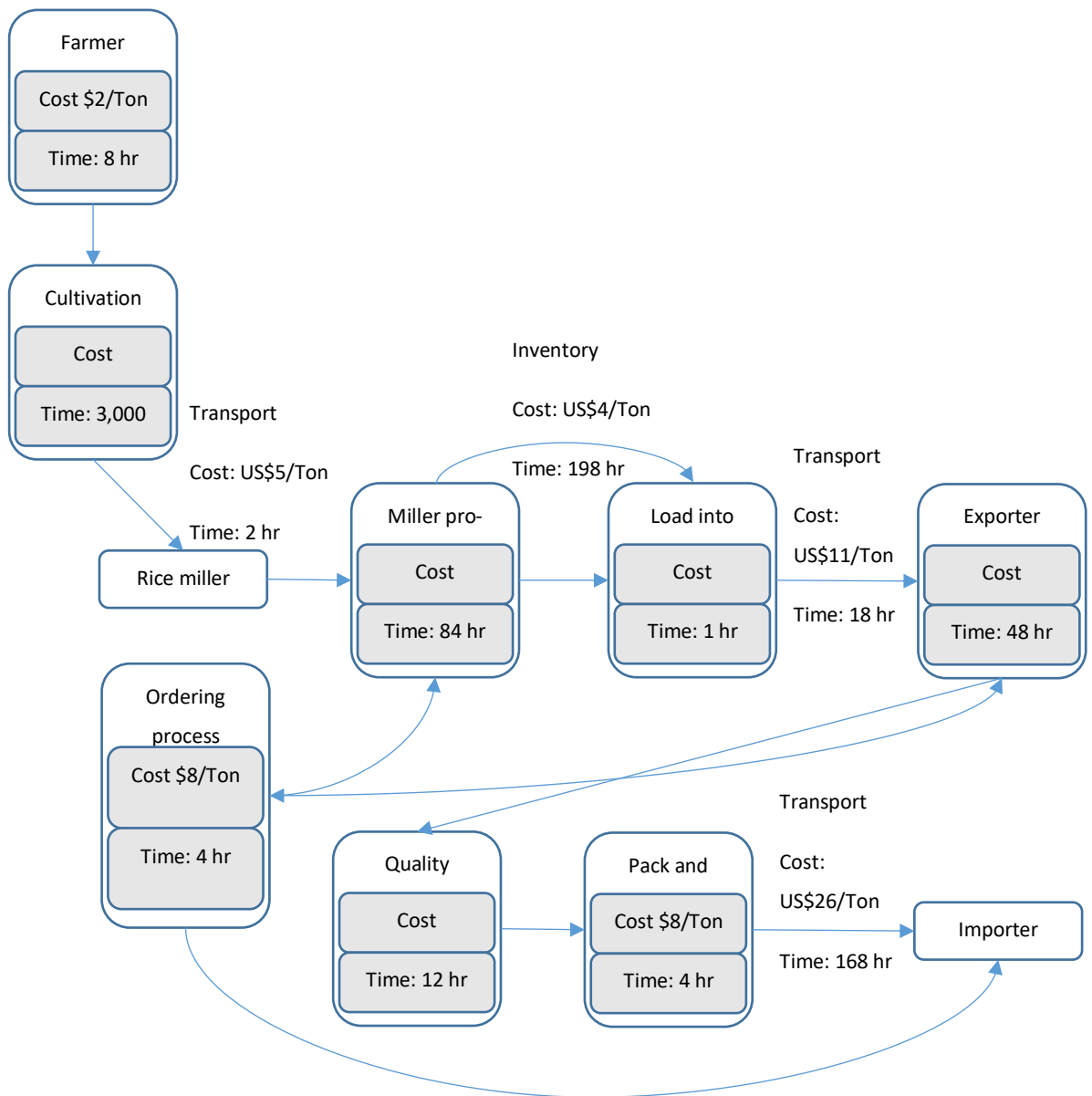
In addition, Interviewee 4 provided the comparison between traditional logistics systems used by Vietnam's rice manufacturers and the value from applying 3PL logistics integration workflow. He highlighted that value stream mapping in Vietnam's rice export process begins with the farmer and ends with the importers in African countries.

For easier illustration, the researcher draws a map with the connection to be established between different parties involved into rice exporting process of Vietnam, including the farmers, rice hub, miller, transporter in Vietnam, exporter, and importer.



**Figure 4: Current value chain process of Vietnam's rice manufacturers**

According to Interviewee 4, total value-added activities in current value chain process of Vietnam’s rice manufacturers was only 40% of total value of activity. Otherwise, non-value-added activities are more than 60%. In this context, he recommended that cleaning and drying process from the paddy hub must be removed and rice will be transported directly from the farmers to the rice miller. He also agreed with the application of information technologies which help Vietnam’s rice manufacturers to better control the orders as well as transportations modes. New process is drawn and illustrated as below:



**Figure 5: Proposed value chain process of Vietnam’s rice manufacturers**

With the new value chain process, Interviewee 4 expected that it will help to increase value-added activities to 60% of totality of activities required to deliver rice products from Vietnam's rice manufacturers to the buyers in African countries.

## **5 CONCLUSION AND SUGGESTION**

### **5.1 Conclusion**

The main objective of this thesis is to identify current problems in exporting Vietnamese rice to African countries and propose solutions to further improve export performance. To accomplish this research objective, there are several research questions proposed and the researcher will provide a summary of answers to each research question.

What are the persistent problems and challenges that are restraining Vietnam's rice export activities to Africa's countries?

This research question is fulfilled through the interview with 5 interviewee who come from Vietnam Food Association and Vietnam Logistics Administration. The interviews with these interviewee revealed 3 persistent problems and challenges. They are the choice of rice product for exporting in which African countries do prefer lower quality products with lower price, the lack of cooperation between Vietnamese governments and other governments in Africa, and fragmented African market that lead to different demand of rice import when global rice price changes.

What are the limitations of the competitive capabilities of Vietnam's rice manufacturers when exporting rice to Africa's countries?

The key limitations of the competitive capabilities of Vietnam's rice manufacturers are clarified through the interviews with 5 experts. Vietnam's rice manufacturers are not good at export planning and stocking plan is underperformance compared to rice manufacturers in China or Thailand. Rice manufacturers from Vietnam do not have good marketing positioning and targeting. Moreover, Vietnam's rice manufacturers do not have logistics centers which are established in Africa.



Is cost leadership strategy suitable in case of Vietnam's rice export to Africa's countries?

This research question is addressed through the interviews with 5 experts. The answer is that cost leadership strategy is suitable with the business objective of exporting rice to African countries. It is because of African countries mostly are poor and they demand for low price products. In addition, Vietnam's rice export to African countries is facing up with high logistics cost due to Vietnam's rice manufacturers have not had logistics centers in Africa and they are renting logistics facilities and logistics services from others, leading to higher cost.

Is 3PL logistics integration strategy suitable in case of Vietnam's rice export to Africa's countries?

This research question is fulfilled through the interviews with 2 people from Vietnam Logistics Administration. They confirmed that 3PL logistics integration strategy brings the benefit of higher operational efficiency and lower transportation cost to Vietnam's rice manufacturers. In addition, Interviewee 4 also provided a new value chain model for Vietnam's rice exporting activities which is expected increasing value-added activities by more than 60% of total activities conducted in the value chain process. However, information technology integration is a concern since it must be setup in both Vietnam's rice manufacturers and the importers in African countries.

## **5.2 Suggestion**

There are some limitations that will be proposed for further improving the export performance of Vietnam's rice manufacturers to Africa. It is recommended that Vietnam's rice manufacturers should strengthen their technology absorption rate and technology adoption attitude in order to increase the economies of scales, to reduce operating cost, and to further meet the new changes in the market. However, there are so many technologies as of now and the cost to invest into new technologies will be very high. Therefore, the government of Vietnam should provide the financial supports and technology aid to Vietnam's rice manufacturers. With the government's supports, it is believed that the manufacturers have more opportunities to access new technologies at reasonable prices. In addition, key technologies that should be implemented very

soon are RFID since it plays prominent role in 3PL logistics integration model. Moreover, Vietnam's rice manufacturers should continuously improve their human resource quality so that their employees are able to operate new technologies.

Beside of the technology recommendation, the researcher believes that rice export to African countries will be further improved if rice manufacturers in Vietnam are able to choose the right market for exporting their products. The interviews with the interviewees showed that there are 5 potential markets for exporting rice but they have not been exploited by local players, including Benin, Nigeria, Gambia, Sudan, and Algeria. Moreover, there are other markets in Africa that should be put into the evaluation to see the potential of exporting deals. When exporting rice products to African countries, it is recommended that the manufacturers should begin with rice products with lower price first due to most of African countries are poor and their citizens are not able to afford high quality products with high prices. The price of rice products exported to Africa must be reviewed in the way of lower level. To do that, Vietnam's rice manufacturers should cut down some necessary costs during transportation process, leveraging the use of technologies in transportations in order to lower the price.

### **5.3 Limitations and future research**

There are some limitations in this research study. The primary data was collected from interviews with 5 interviewee who come from Vietnam Food Association and Vietnam Logistics Administration. the ideas which were provided by these interviewee are personal opinion and it might not be represented for actuality. In this context, future researchers should develop the survey with the importers' side and Vietnam's rice manufacturers to identify the real demand from the buyers as well as examining the capabilities of rice manufacturers.

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