

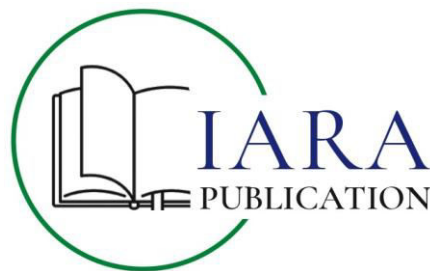
# Improving Competitiveness of Seafood Enterprises:

A Case Study in BR-VT

AI HUU TRAN  
NAM VONG THINH



# **Improving Competitiveness of Seafood Enterprises: *A Case Study in BR-VT***



**India | UAE | Nigeria | Uzbekistan | Montenegro | Iraq |  
Egypt | Thailand | Uganda | Philippines | Indonesia**  
**[www.iarapublication.com](http://www.iarapublication.com)**

# **Improving Competitiveness of Seafood Enterprises: *A Case Study in BR-VT***

*Authors*

**Ai Huu Tran**

Lecturer of Faculty of Economics, Van Hien University, Ho Chi Minh City, Vietnam

**Nam Vong Thinh**

Ph.D, Lecturer at Faculty of Economics, Ho Chi Minh City University of Technology  
and Education, Vietnam

First Impression: July 2023

**Improving Competitiveness of Seafood Enterprises: a Case Study in BR-VT**

**ISBN : 978-81-19481-14-9**

**Rs. 1000/- ( \$80 )**

No part of the book may be printed, copied, stored, retrieved, duplicated and reproduced in any form without the written permission of the editor/publisher.

**DISCLAIMER**

Information contained in this book has been published by IARA Publication and has been obtained by the authors from sources believed to be reliable and correct to the best of their knowledge. The author is solely responsible for the contents of the articles compiled in this book. Responsibility of authenticity of the work or the concepts/views presented by the author through this book shall lie with the author and the publisher has no role or claim or any responsibility in this regards. Errors, if any, are purely unintentional and readers are requested to communicate such error to the author to avoid discrepancies in future.

Published by:  
IARA Publication

## Preface

Improving business efficiency is an important issue, paid attention to by many businesses, especially in the context of international economic integration today. The basic way to improve business efficiency is to find ways to increase sales or reduce costs, or make sales grow faster than others. Business efficiency reflects business relationships through the active involvement of employees in the organization. Therefore, managers need to develop, establish positive relationships between employees and businesses and encourage serious, dedicated employees.

These studies aim to identify factors affecting the performance of aquatic enterprises in Vietnam. The study results show that consumers make buying decisions according to market conditions and to various attributes of the product, namely the specie, the form, the place of purchase, the size and the quality. Consumers perceive fish as a safe, healthy and nutritious food product. Factors of access to financial resources and government policies are economic factors that can affect to improved business performance. The risk factors in the supply chain affect supply chain linkages, including risk from the supply, market risks, information risks and export barriers.

Vietnam's seafood exporters have contributed greatly to the industrialization and modernization of the country. To better play their role in the coming period, Vietnam's seafood exporters must take advantage of all their strengths and limit their weaknesses to create competitive products big in the country and in the world. On the other hand, the state needs to create a common legal framework and other necessary policies, export assistance and promotion programs designed to increase the competitive advantage of Vietnam's seafood export industry.

## **Acknowledgement**

The seafood processing industry is now developing into one of the critical economic sectors, with large-scale commodity production, leading to international economic integration. With fast and effective growth, seafood processing has positively contributed to the transformation of agricultural and rural economic structures, effectively contributing to hunger eradication and poverty reduction, and job creation in the world. 435,000 direct workers and over 4 million workers in the fisheries industry in general, improving the living standards of communities throughout the rural, coastal, plain, midland, and mountainous areas and contributing to an essential part in the protection of national security and defense in the sea and the island of the country.

**Ai Huu Tran**

**Nam Vong Thinh**

## Table of Contents

|   |                  |
|---|------------------|
| <b>Preface</b>  | <b>IV</b>        |
| <b>Acknowledgement</b>  | <b>V</b>         |
| <b>Table of Contents</b>                                      | <b>VI</b>        |
|   |                  |
| <b>Contents</b>   | <b>Page. No.</b> |
| <i>Chapter – 1</i><br>Research Overview                       | 1 – 24           |
| <i>Chapter – 2</i><br>Theoretical Basis And Research Model    | 25 – 43          |
| <i>Chapter – 3</i><br>Study Design                            | 44 – 51          |
| <i>Chapter – 4</i><br>Research Results and Discussion         | 52 – 89          |
| <i>Chapter – 5</i><br>Conclusions and Management Implications | 90 - 130         |

*Chapter - 1*

*Research Overview*



## **1.1. REASONS FOR CHOOSING THE TOPIC**

In the context of economic globalization, competition is no longer confined to the country but extends beyond international borders. Vietnamese businesses are facing stiff competition from companies and corporations around the world. Reality has proven that there are many successful companies and failures (Terziovski, 2010). Thanks to the excellent exploitation of the 305.4km length of the coastline and the right investment in the development of the fisheries sector, BR-VT province has become one of the major fisheries centres of the country with a large amount of exploited seafood nearly 300 thousand tons/year. Over the years, the province's seafood industry has contributed significantly to the socio-economic growth of Ba Ria - Vung Tau province. In order to survive and develop, IPR enterprises need to improve their competitiveness. Discovering, nurturing and developing resources to create a sustainable competitive advantage is a prerequisite of any business.

Traditional competitive theory (Porter, 2004) has its roots in economics, arguing that industry structure is an important factor in creating competitive advantage. On the other hand, a firm's competitiveness in an industry based on differentiation will not last long because it is easy for competitors to imitate (Barney, 1991). However, most of the classical theories of competition have not deeply analyzed the factors that create sustainable competitive advantage. The resource theory developed by Wernerfelt (1984) has overcome this shortcoming because it focuses on analyzing the competition and the difference between enterprises, mainly based on the resources of the enterprise. Furthermore, the traditional competitive theory has ignored the differences between firms and the dynamic nature of the environment. Resource theory has partially solved the weakness of Porter's (1985) model when looking for sustainable competitive advantage, but is still not aware of environmental fluctuations.

A theory-based approach to competency-based competencies (Competence-based View). The competency-based perspective is intended as a practical alternative to other theories being used, such as the transaction cost approach, which focuses on contractual issues to explain the nature of the firm. Sanchez et al. (2014), and Teece et al. (1997), provide a theory of maintaining competitive advantage and a unified framework for the strategic management of people. (Barney 2002). Addressed by a competency-based perspective, the latter has become the source of the former: the reproducible, learning-based organization and the defence of the state of competition. The author applies the theory to the analysis of the competitive competence of enterprises in the province of BR-VT.

Among the industries with the largest contribution in the country, seafood is the second strength after oil and gas. The fisheries economy of BR-VT province is based on fisheries in the South East Sea with reserves of about 2 million tons, allowing annual exploitation of about 800 thousand tons. Seafood is increasingly valued and considered a food with many nutritional benefits (Trendsens, 2012). Global fish production has increased over the past decades and an estimated half of the total world fish production is traded internationally (FAO, 2017). Processing is the last stage in the production chain of the seafood industry, contributing to improving the value of seafood products before bringing them to the market for consumption. Processed seafood products not only serve domestic consumption but are also exported, bringing a significant source of foreign currency to the country. The seafood-processing industry is now developing into one of the important economic sectors, with a large scale of commodity production, leading to international economic integration.

Recently, the rate of demand for fishery products is increasing globally (OECD-FAO, 2017) due to the easy exchange of information. Their market becomes a key driver of the transition to more responsible and sustainable seafood production globally (Ling, 2016). Meanwhile, the dynamic competitive environment and rapidly changing consumer needs (Davidow, M. (2003); Huda, 2012) pose great challenges. Seafood products should be carefully considered with an assessment of the current market situation by analyzing external opportunities and threats as well as internal strengths and weaknesses for an effective marketing strategy. (Engle, Quagraine and Dey, 2016).

The fact that Vietnam joined the WTO, AFTA, EFTA, and EVFTA marked a turning point in the process of our country's international economic integration. This event has brought strong and far-reaching impacts to all areas of socio-economic life, including the fisheries sector in general and frozen seafood-processing enterprises BR-VT in particular. Vietnam's commitments to international economic organizations in the fisheries sector allow foreign businesses to participate in providing fisheries services through joint ventures, capital contribution and development to develop several services that are not available in the country. This forces frozen seafood-processing enterprise BR-VT to be aware of the potential impacts and face competitive pressures not only from domestic seafood enterprises but also from foreign enterprises with strong potential in the field of seafood finance, technology and especially experience in management

In the first months of 2022, BR-VT province recorded export growth of agricultural, forestry and fishery products. The export situation of agricultural, forestry and fishery products of Ba Ria - Vung Tau province in October 2022 reached 42.19 million USD. Accumulated in the first 10 months of the year reached 546.14 million USD, reaching 6.01% of the year plan, up 25.73%; The consumer price index (CPI) decreased by 0.04% compared to December 2021 and increased by 3.09% over the same period last year.

In the past years, BR-VT enterprises and industry experts believe that the seafood industry needs to moul, change the old, fragmented and outdated ways of doing things, and move towards large-scale production. Strengthening the competitiveness of frozen seafood-processing products not only meets the essential needs of the people in the province but also creates many jobs, contributing to the implementation of an effective strategy of promoting exports to replace imports. Therefore, it is necessary to find out the status of competitive competence and find out the factors that need to improve, change and enhance the competitive competence of the BR-VT province.

For sustainable development in domestic and foreign markets, frozen seafood-processing enterprises in BR-VT province should focus on improving competitiveness and operational efficiency. Because according to Porter (2008), competitiveness helps enterprises to stand firm in the market, expand market share and increase profits. Competitiveness is also the ability to outperform competitors in achieving the most important goal of profit. Increasing competitiveness allows businesses to create and sustain profits in a rapidly changing environment (Abor J, Quartey P. (2010).

Stemming from the above issues, the author chooses the research topic: "***Improving the competitiveness of seafood enterprises: A case study of Ba Ria-Vung Tau Province***" as the research content of the thesis.

## **1.2. OVERVIEW OF PREVIOUS STUDIES**

Some authors consider the competition, according to the competency approach. This perspective takes a resource-based approach to competition. Developing and deploying capabilities and advantages that create more efficiency than competitors can help achieve world-class competition (Barney, 1991). The primary and past studies that explain the competency-based approach is to explain performance differences between firms. Corresponding explanations of the competency-based perspective, including the core hypothesis and the system of supporting rules, can be derived from the resource-based perspective (Seisreiner 1999). The resource-based view holds that company A is more successful than company B if A control resource better and more efficiently than B (Barney 1991; Hunt 2000). In addition, there are other studies such as:

### **1.2.1. Research to identify and enhance competitiveness**

Research by Tharindu Bandara, L.M. Abeywickrama and K. Radampola (2020). "*Growth performance and competitiveness of frozen fish and shrimp exports in Sri Lanka*". Frozen shrimp and fish are important export products of the Sri Lankan economy. Careful assessment of the growth trends and competitiveness of these products is crucial in developing the value chain and delivering sustainable economic returns. The study examined the growth performance and export competitiveness of frozen shrimp and major finfish exports from Sri Lanka between 2000-2015. The analysis of fin tuna exports shows that biology (*Thunnus obesus*) and yellowfin tuna (*Thunnus albacares*) are the predominant export products. Compound growth rate (CGR) analysis of frozen shrimp shows negative growth in both export value (-9.3%) and export volume (-9.07%) during the period 2000-2015. Fresh chilled fish, frozen fish and fish fillets and other meats had growth rates in export value (5.09, 10.24 and 70.10% respectively). However, considerable instability (11.07 and 11.74 in value and quantity) was noted in fish fillets and other meat. The export competitiveness index (XCI) for fresh/chilled fish, frozen fish and fish fillets shows positive competitiveness ( $XCI > 1$ ) for the period 2001-2015. Comparative advantage (RCA) for finfish exports, showing strong competitiveness ( $RCA \geq 4$ ) for the period 2000-2015. The export of frozen shrimp has weak competition ( $1 < RCA \leq 2$ ) in the period 2008-2015. Fish exports showed a significant growth ( $p < 0.05$ ) in the unit value realization while frozen shrimp exports showed a negligible negative growth ( $p > 0.05$ ) in the unit value implementation. Expanding export markets for Sri Lanka's seafood products, enhancing value, complying with international standards and diversifying shrimp exports are the next important steps to maintaining its competitive position of Sri Lanka. Sri Lankan seafood exports.

**Research by Nguyen Minh Tuan and Bui Thanh Khoa (2020)**, on "*Improving the competitiveness of export enterprises: The case of Kien Giang province, Vietnam*". Economic integration is an inevitable trend in all countries. However, besides the advantages that economic integration brings, there are also limitations, that is, the competition between enterprises between countries in export activities. Vietnam is a developing country with many advantages, especially in the seafood export industry. However, in the face of competitive pressure as well as strategic constraints, Vietnamese seafood exporters still face many difficulties. Therefore, the author analyzes the factors affecting the competitiveness of seafood export enterprises; in the Kien Giang province of Vietnam. The study applies quantitative research methods with a survey of 350 seafood export enterprises in Kien Giang province to achieve the research objectives. Research results have identified 11 main factors affecting the

competitiveness of seafood exporters. Includes (1) the leader's vision and strategy. (2) Competence in human resource management. (3) Organizational capacity; (4) Customer-responsive marketing capabilities. (5) Ability to manage relationships. (6) Technical capacity. (7) Reaction ability of competitors; (8) Acceptability of the business environment. (9) Financial capacity. (10) Capacity to innovate products and services; and (11) brand management. The research results provide a basis to propose some managerial implications to improve the competitiveness of export enterprises in the context of global economic integration.

The subject of the investigation is one of the managers of these enterprises. The sampling method in the study ensures the representativeness of the study and the accuracy of research results. The sample includes a sample of 350 seafood exporters in Kien Giang province, including both public and private companies. The sample was selected by a simple random method with two attributes: business size and type of business. In this study, the informants representing the enterprises responded to the survey questionnaire, i.e., heads, deputy heads of departments, directors, deputy directors or those authorized by the director to participate in leadership. , run the job, run the business.

Seafood exporters need to maintain and expand good relationships with local authorities, thereby transacting by attending seminars and meetings. Enterprises should develop a plan to maintain good relationships with five parties, including farmers, businesses, governments, scientists and financial investors (banks). Enterprises need to pay attention to investment in infrastructure, machinery and equipment; constantly update new technology applications, and learn new techniques to increase productivity as well as competitiveness. Enterprises need to pay attention to investing and training human resources in technology research and development so that they have in-depth professional knowledge. Technology, as the application solutions mentioned above, is also the foundation for developing new technologies in the production and processing of export goods of enterprises in Kien Giang province.

**Research by Shanty Oktavilia et al (2019)** on “*Competitiveness of Indonesian seafood products*”. Research whether this policy is effective in increasing competitive advantage (RCA) as an indicator of the competitiveness of fishery products. The effect of the illegal fishing policy was analyzed using a panel regression on the before and after policy data. This study is empirical using the competitive advantage index (RCA). A country should specialize in empirical production by calculating data on the value of national exports, compared with the value of world exports. This study shows that most of the indices of fishery products are greater than one (>1), which means developing a resource-based comparative advantage model in international trade between regional areas.

Measure the competitiveness of seafood products in this study using the competitiveness index of Balassa (1965) which is referenced by several studies such as Kuldilok et.al. (2013), Laursen (2015), Firmansyah, et al (2017). This study uses empirically the Competitive Advantage (RCA) index. A country's comparative advantage is empirically measured by mathematical calculation of data on the value of a country's exports, compared with the value of world exports. Balassa's comparative advantage calculation is known as the Balassa RCA index. This study shows that most of the RCA index of seafood products is greater than 1, which means its competitiveness in the international market is very high.

Research by Mahida Navghan et al (2017). “Empirical assessment of the competitiveness and performance of Indian seafood exports”. The fisheries sector plays an important role in the

Indian economy, contributing almost 1% to the country's GDP (FAO, 2017). The study focuses on explaining the competitiveness of India's seafood trade and its relative efficiency and advantages in the Indian market. These results suggest that India has a comparative advantage in exporting Seafood and aquatic products. India is facing a decline in the XCI index ( $>1$ ) since two years ago and this has also been repeated in the past and India sees competitiveness in fish exports. With proper attention to export procedures and quality improvement in seafood exports, India can combine competitiveness to make seafood a major foreign currency n. India imports less and exports increase, thus resulting in a positive trade advantage (RTA) and consistent progress. India reflects strong competitive strength in seafood exports as it has an RTA index greater than 1. The study reveals key determinants such as price fluctuations in international markets and exchange rates that should be combined to achieve the expected growth rate.

The study analyzes the growth, performance, and competitiveness of marine fish and fish products from Gujarat and India during the period 2001-2014 using Viz parameters. XCI represents the change in the market share of different products for seafood exports in Gujarat, which shows an improvement in XCI ( $>1$ ) over the years. Therefore, it shows the competitiveness in seafood export from Gujarat. India's seafood exports describe an XCI  $>1$  during the study period. India reflects strong competitive power in seafood exports as it is larger than 1 to a large extent. The RTA has estimated India's exports to be  $>1$  for the period 2001-2015-16, which is likely due to the high RXA and less IMA from India making the country's trade and growth advantages positive and faster. For the current trend of export development in Gujarat and India, there is a need to focus on reducing marine and overfishing, conservation, diversity and policy formulation. Further improvement is still needed to be able to encourage more trade, rural development and foreign exchange in the near future.

Growth Analysis and Growth Performance are measured to estimate the performance of seafood exports from Gujarat. Balassa [1965] developed the first concept of Revealed Comparative Advantage (RCA). Export Competitiveness Index (XCI) The export competitiveness of marine fish was also analyzed using the competitiveness indexes developed by Fertö and Hubbard. Relative Goodwill (RTA). For RCA, these indicators are calculated based on total seafood exports and imports from India and the world.

**Research by Mahida Navghan et al (2017).** *“Empirical assessment of the competitiveness and performance of Indian seafood exports”*. The fisheries sector plays an important role in the Indian economy, contributing almost 1% to the country's GDP (FAO, 2017). The study focuses on explaining the competitiveness of India's seafood trade and its relative efficiency and advantages in the Indian market. These results suggest that India has a comparative advantage in exporting Seafood and aquatic products. India is facing a decline in the XCI index ( $>1$ ) since two years ago and this has also been repeated in the past and India sees competitiveness in fish exports. With proper attention to export procedures and quality improvement in seafood exports, India can combine competitiveness to make seafood a major foreign currency contribution. India imports less and exports increase, thus resulting in a positive trade advantage (RTA) and consistent progress. India reflects strong competitive strength in seafood exports as it has an RTA index greater than 1. The study reveals key determinants such as price fluctuations in international markets and exchange rates. Should be combined to achieve the expected growth rate.

The study analyzes the growth, performance, and competitiveness of marine fish and fish products from Gujarat and India during the period 2001-2014 using Viz parameters. XCI represents the change in the market share of different products for seafood exports in Gujarat, which shows an improvement in XCI ( $>1$ ) over the years. Therefore, it shows the competitiveness in seafood export from Gujarat. India's seafood exports describe an XCI  $>1$  during the study period. India reflects strong competitive power in seafood exports as it is larger than 1 to a large extent. The RTA has estimated India's exports to be  $>1$  for the period 2001-2015-16, which is likely due to the high RXA and less IMA from India making the country's trade and growth advantages positive and faster. For the current trend of export development from Gujarat and India, there is a need to focus on reducing marine and overfishing, conservation, diversity and policy formulation. Further improvement is still needed to be able to encourage more trade, rural development and foreign exchange in the near future.

Growth Analysis and Growth Performance are measured to estimate the performance of seafood exports from Gujarat. Balassa [1965] developed the first concept of Revealed Comparative Advantage (RCA). Export Competitiveness Index (XCI) The export competitiveness of marine fish was also analyzed using the competitiveness indexes developed by Fertö and Hubbard. Relative Goodwill (RTA). For RCA, these indicators are calculated based on total seafood exports and imports from India and the world.

### **1.2.2. Research on factors affecting competitiveness**

**Nguyen Giac Tri and Nguyen Viet Thanh (2022).** *“Studying the impact of factors affecting competitiveness in seafood export enterprises: a case in the Mekong Delta, Vietnam”*. This study aims to explore the factors affecting the competitiveness of seafood exporters in the Mekong Delta by surveying 200 people who are leaders and managers of seafood exporting enterprises in the region. The results show that the factors affecting competitiveness are measured with 10 components in order of importance. (1) Research and development capacity, (2) Brand competitiveness, (3) Human resource capacity, (4) Production technology capacity, (5) Enterprise relationship development capacity, (6) Marketing capacity, (7) Management capacity, (8) Price competitiveness, (9) Financial capacity, (10) Commercial dispute handling capacity. The study makes a number of recommendations for leaders of seafood export enterprises in order to improve their competitiveness.

There are many seafood export enterprises operating in the provinces of the Mekong Delta. Mostly concentrated in Dong Thap, An Giang, Bac Lieu and Can Tho provinces. Many large enterprises enter the top 10 leading enterprises in terms of seafood export value of Vietnam every year such as Vinh Hoan, Hung Ca, and Truong Giang...

Many people such as do not share Michael Porter's views:

First, the view of the "strategic management" school focuses on clarifying resources to ensure competitiveness. The most concerned resources are human resources, capital, technology and marketing. Resources are measured and compared across businesses to determine competitive advantage. This school has typical authors such as Fred David, Arthur A. Thompson, Jr & A.J. Strickland.

The study identified 10 key components for seafood exporters in the Mekong Delta. In, R&D capacity is the most important component, followed by Brand competitiveness, Human resource capacity, Production technology capacity and Business relationship development capacity, respectively. Business capacity, Marketing capacity, Management capacity, Price

competitiveness, financial capacity, and Commercial dispute-handling capacity. These ten components explain 52.1% of the competitiveness of seafood exporters in the Mekong Delta. The results of statistical research on evaluating businesses, according to the average value shown that the average rating score is not high. This shows that the competitiveness of seafood exporters in the Mekong Delta needs to be greatly improved.

**Research by Nguyen Huu Phu et al (2020)**, on “*Factors affecting the competitiveness of Vietnamese seafood exporters: Empirical evidence in An Giang province*”. Vietnam is currently one of the most dynamic emerging countries in East Asia. Vietnam is considered one of the largest seafood exporters in the world. Most seafood export enterprises are in the Mekong Delta. An Giang province is located in this region. This study aims to verify 10 factors constituting the competitiveness of seafood exporters in An Giang province according to SPSS 22.0. The recognition of Cronbach's Alpha, the EFA discovery factor, the CFA confirmatory factor, and the SEM structural equation model are analyzed to make recommendations and recommendations to help seafood exporters improve their capacity to compete in the international market.

Based on the Thompson-Strickland method, we selected 9 factors affecting the competitiveness of enterprises in accordance with the conditions of Vietnam. Adding a new factor to measure the factors affecting the competitiveness of seafood exporters in An Giang province. These are marketing, management, pricing, finance, brand, product, human resources, business development relations, technology and logistics innovation (new factors).

From the research results, we see additional factors proposed in the model affecting the competitiveness of seafood exporters. Testing the reliability of the scales of Human Resources, Brand, Technology, Marketing, Price, Product, Business relationship development, Administration, Finance, and competitiveness, all achieved Cronbach's Alpha  $\alpha$  fluctuates in the range (0.802-0.938) > 0.6 reliability. From the research results, we see the following suggestions: Additional factors in the model affect the competitiveness of seafood exporters testing the Reliability of Human Resources, Brand, Technology, Marketing, Price, and Product. The tests have proved that the model input factor is suitable. These factors greatly affect the competitiveness of enterprises, and the author proposes solutions according to each factor. Although the authors have tried, the research still has certain limitations. The scope of the study only focuses on the An Giang province, so it does not cover the whole country. These are research directions for the future.

**Research by Nguyen Thi Le et al (2019)**, on “*Research on factors affecting the competitiveness of seafood enterprises in the Mekong Delta*”. The objective of the study is to analyze the influence of these factors on the competitiveness of seafood exporters in the Mekong Delta. Data used in the study were collected from 155 enterprises by the convenient sampling method. The results of Cronbach's Alpha scale test, EFA exploratory factor analysis and linear regression analysis show that there are four groups of factors affecting the competitiveness of seafood enterprises in the region: source: materials, human resources, characteristics and capabilities of the enterprise and the ethics and social responsibility of the enterprise. The analysis results of the study are the basis for proposing four managerial implications that contribute to improving the competitiveness of seafood enterprises in the Mekong Delta.

Theo Hair et al., (1998) to ensure that the sample size is consistent with the EFA analysis method, the number of observations must be at least 4-5 times the number of variables. In this study, there are 30 observed variables belonging to the group of independent variables and 9 observed variables belong to the group of dependent variables ie need from 120 to 150 observations. Therefore, the study conducted a survey of 160 observations, but because some enterprises answered the questionnaire with insufficient information, in the end, only 155 relevant observations remained. The subjects of the survey are enterprises with seafood export activities in the provinces and cities in the Mekong Delta. Because of the difficult-to-access nature of enterprises as well as requiring interviewees to be at the leadership level of enterprises, the study used a convenient method to survey.

Factors such as the level of technological innovation, the ability to build brands and comprehensive quality management; have not been proven to have an impact on the competitiveness of enterprises. The cause may come from the reality of enterprises in the provinces and cities in the Mekong Delta. In the process of operation, enterprises have not invested enough in improving processing technology, comprehensive quality management or building a valuable brand in the market. Although there are businesses that have competed better when implementing brand building or total quality management, this number is too small to draw conclusions overall.

The above research results show three important factors affecting the competitiveness of seafood enterprises in the Mekong Delta. That is the source of raw materials, human resources, and characteristics of the enterprise. Practicing ethics and social responsibility will also help businesses compete through trust and love from customers or from the importing country. Businesses that perform social responsibility as much as they can easily gain respect and sympathy from customers.

### **1.2.3. Studies on analytical approaches to improve competitiveness**

**Research by Nguyen Phi Hung (2022,** on “*Two-stage PLS-SEM and hierarchical analysis AHP approach to investigate the export competitiveness of Vietnamese SMEs*” bring great benefits to the seafood export industry, providing many significant production advantages, concluding that it is important to understand the competitiveness of the target market and implement effective strategies. However, due to the COVID-19 pandemic, the value of Vietnamese Pangasius exports leads to low and unpredictable profits for Pangasius farmers. It is clear that recognizing competitiveness is a matter of multi-criteria decision-making (MCDM) in an uncertain business environment. Therefore, this study is the first to propose a two-stage partial least squares analysis method Structural Equation Modeling (PLS-SEM) and Process Equation Hierarchical Analysis Process (FAHP) to identify potential criteria and comprehensively investigate the competitiveness of Vietnamese Pangasius exports Small and Medium Enterprises (SMEs) in the context of the Chinese market. First, a dataset of 186 valid respondents from seafood-exporting SMEs was collected through an online survey from June to December 2020. The PLS-SEM method is applied to determine the positive impact of the proposed criteria to improve the competitiveness of Vietnamese Pangasius in the Chinese market. PLS-SEM results show that all criteria are closely correlated with Pangasius's export competitiveness. The FAHP method was then used to rank the subjective weights of the mentioned criteria based on 12 expert assessments. Knowledge Infrastructure (C3) has the highest ranking in the competitiveness criterion and has the highest weight, followed by



Products (C4). In contrast, Price (C6) was assigned the lowest rating at 0.107 on FAHP results. Furthermore, this study provides insight into stakeholders looking to improve competitive performance.

The author proposes a two-stage approach a PLS-SEM and FAHP including two stages: First, conduct a PLS-SEM analysis to test and confirm the hypothesis about the competitiveness of the topic. Second, the FAHP method is used to determine the relative weights of the proposed competitiveness criteria based on the opinions of experts.

This study proposes a two-stage PLS-SEM and FAHP approach to comprehensively investigate the competitiveness of Vietnamese Pangasius exporting small and medium enterprises in the context of the Chinese market. Then, the data are collected and analyzed using qualitative and quantitative techniques to assess how factors affect the competitiveness of SMEs exporting the Vietnamese Pangasius to Vietnam Chinese market. The seven proposed criteria were tested and validated using the PLS-SEM model. Based on regression analysis, all 7 criteria have a positive correlation with the competitiveness of SMEs exporting Pangasius in Vietnam. According to the results of the FAHP approach, the criterion that has the greatest influence on the "Competitiveness" of small and medium-sized enterprises exporting Vietnamese Pangasius in the Chinese market is Knowledge Infrastructure (C3). Price (C6) has the most insignificant impact on the competitiveness of Vietnamese Pangasius exporters in the selected criteria.

**Recherche by Akhtaruzzaman Khan et al (2022)**, sur "Shrimp export competitiveness and determinants: a new dynamic ARDL simulation method". This study aims to explore the shrimp export competitiveness of Bangladesh, China, India, Indonesia, Thailand and Vietnam between 1990 and 2019. However, Bangladesh is a typical country. , this study examines the factors affecting shrimp export competitiveness, taking into account macroeconomic and policy variables. We used the recently developed symmetric comparative advantage (RSCA) index to quantify export competitiveness, while the dynamic autoregressive distributed lag (ARDL) simulation method only determined factors promoting shrimp export competitiveness. The results show that all of the above countries appear to have some level of shrimp export competitiveness during the study period, while the chain completely lost its export competitiveness after 2004. Bangladesh's shrimp export competitiveness has declined slightly in recent years, despite continued growth in competing countries such as India, Indonesia and Vietnam. Furthermore, economic globalization, institutional quality, trade openness, the number of trade agreements and free trade all have a favorable impact on Bangladesh's shrimp export competitiveness in the long term. While international shrimp prices or export prices have adverse effects affecting the short and long term. Ultimately, these findings have implications for future shrimp exports in Bangladesh.

This study was based on secondary data collected from multiple sources between 1990 and 2019, while five studies were selected due to the availability of data for all variables. Export data for all commodities worldwide and gross domestic product (GDP) per capita are obtained from the World Bank's World Development Indicators (WDI) online database world, while shrimp export data is obtained from FAOSTAT. To determine the competitiveness of shrimp exports, the symmetric comparative advantage index (RSCA) (Laursen, 2015) was used. The RSCA index is by far the most effective tool for determining export competitiveness (Laursen, 2015). In recent research, it has been used routinely (Munir & Sultan, 2019; Naseer, 2019). Therefore, this study explores the shrimp export competitiveness of Bangladesh and compares it

with other export competitors in Asia such as China, India, Indonesia, Thailand and Vietnam during the 1990s. –2019. We also examine the calculated time-varying determinants of Bangladesh's shrimp export competitiveness with consideration of several related macroeconomic and policy variables. For this purpose, this study used the recently introduced Revealed Symmetric tool.

**Research by Vasilii Erokhin, et al (2021)**, on “*Transnational potentials and advantages in trade in fish and fishery products in RCEP member countries*”. For centuries, fish and fishery products have played an important role in establishing food security, especially in poor coastal communities, and contributed to the economic development of many countries and families in the world. With the strong emergence of international exchange in the past decades. Globalization has converged consumption patterns around the world and inextricably linked fish-rich coastal areas with remote markets lacking fish, thereby affecting the sustainability of fish supplies and the global economy bridge. Food Security. According to the most recent estimates by the Food and Agriculture Organization (FAO), from 1976 to 2018, the value of global fish exports increased at an annual rate of 8% in nominal terms and 4% in real terms. Seafood products have become one of the most traded food commodities in the world. More than half of exports to developed countries originate in developing economies in Asia, Latin America and Africa (compared to 39% in the 1970s). The share of developing countries in total fish production has increased from 39% in 1976 to 60% in 2018. Supported by the rapid growth of aquaculture and investment in facilities and facilities export market infrastructure, especially in China and Southeast Asia.

The study was carried out in the case of fifteen RCEP countries (Australia, Brunei Darussalam, Cambodia, China, Indonesia, Japan, Laos, Malaysia, Myanmar, New Zealand, Philippines, Singapore, Korea, Thailand and Vietnam). South) in the year 2000-2019.

Overall, most countries have the potential to increase exports of fish and aquatic products to RCEP partners. Of the 15 RCEP member countries, only China, Indonesia, Brunei Darussalam and Lao PDR have reached their full commercial potential in the overall intra-regional fish trade (Annex A, Table A1). Bilateral fish trade in RCEP is asymmetric. The trade-to-potential ratio represents a significant gap between actual and commercial trade for all types of fishery products in Myanmar, New Zealand and the Philippines. China, the largest fish trader in the RCEP, does quite well in trade with Indonesia, Myanmar, New Zealand, the Philippines and South Korea (actual trade exceeds indicated trade potential). While there is potential for export expansion from China to Brunei Darussalam, Cambodia, Australia, Lao PDR and Singapore (high trade potential in pairs. Smaller traders like Myanmar, Philippines, New Zealand and Cambodia have approx. TT / ITP gap is larger than that of China, Japan, Korea and Thailand This trend is observed across all four-fishery product subtypes included in the study. The high peaks were revealed for Cambodia, Myanmar and the Philippines in the trade in fresh, chilled and frozen fish and dried, salted and smoked fish and for New Zealand and Australia in the trade in crustaceans and molluscs.

**Research by Kazim Saricoban, and Elif Kaya (2017)**, on “*Determining seafood export competitiveness: a comparative analysis of the top ten countries with a large market share from seafood exports*”. The purpose of this paper is to examine the industrial competitiveness of countries in terms of seafood exports. Through this study, one tries to find out whether countries with a large share of seafood exports are also able to compete in exports. Therefore, the top ten

countries with the largest share of seafood exports worldwide are selected, and the product group International Standard Trade Classification (SITC) is used for analysis by the comparative advantage method comparison (RCA). The results of the analysis show surprisingly that Vietnam, Denmark and Chile have a lower share of global seafood exports and have specialization and comparative advantages in seafood exports. While the United States has a higher market share, it is at a competitive disadvantage without specialization. The results show that countries with high export volumes are not as competitive as expected in seafood trade.

Among many other indicators measuring structural competitiveness between countries, the comparative advantage index (RCA) developed by Balassa in 1965 is the most prominent. The Balassa Index is an index that is dividing the exports of a good out of a country's total exports into the proportion of that same commodity in the world's total exports. From there, compare the domestic specialization of a country in a particular good with the specialization of the world (Benigno and Sloboda, 2006:6). Balassa index of a country; exceeding 1 means strong in the industry and exceeding 2 is stronger (Hinloopen and Marrewijk, 2001:1).

In this study, we try to show the competitiveness of countries by industry. For this purpose, the first ten countries with the largest market share in the list of world seafood exports are selected and their export data was collected during the 20 years from 1995 to 2014 (APP 1). In this context, seafood export competitiveness is measured using various RCA indicators, namely the Balassa index, the import-export ratio index and the net export index.

According to the results of the Balassa Index, the United States has a comparative disadvantage in all product categories and the Netherlands has a comparative disadvantage in three products except 034. On the other hand, Vietnam, Chile and Denmark in particular are experiencing a comparative disadvantage have strong comparative advantages. These findings are quite important in indicating which sectors a country should choose to invest its resources in. This means that these countries have specialized in intra-industry exports. From that, it can be seen that Vietnam has strong competitiveness in four product categories worldwide and they should have an export and/or investment policy for the seafood industry accordingly.

**Research by Hasara Rathnasekara et al (2017)**, on “*Sri Lanka's seafood export demand: Is Sri Lanka competitive enough after the civil war?*”. Since the liberalization of trade barriers in 1977, Sri Lanka has attempted to formulate policies to expand its export sector significantly. Following the end of 30 years of civil war in 2008, this effort was directed at industries particularly affected by this period. The fisheries sector is one of the industries that fall into this group as more than 60% of the seafood production area of the island's coastal belt is spread out in the northern and eastern provinces affected by the war. In this study, seafood export demand was estimated using the ARDL limit test method to assess the competitiveness of Sri Lankan seafood in the export market in the post-war period. The results show that the long-run elasticities of income and prices are relatively reduced over the studied period. The structural break test results suggest that this observation is the cause of the conflict. Taken together, these two results suggest that after the war, Sri Lanka was improving its competitiveness in the export markets studied.

Consistent with the objectives mentioned above, this study conducts an estimate of the export demand function for seafood exports in Sri Lanka. The export demand function is widely used in the trade literature to explore the export potential of a particular industry assuming exports

are driven by demand (Ahanasoglou and Bardaka, 2010; Hossain, 2008; Senhadji) and Montenegro, 1999; Islam, 2016; Seo and Kang, 2016). For example, Hossain (2008) estimated the export demand function to investigate the behavior of aggregate export demand in Indonesia with special reference to the 1997-1998 financial crisis. He used both the ARDL bound test and the Johansen cointegration method to examine the long-run relationship between Indonesian exports, world income, and relative prices for Indonesian exports. In addition, alternating regression techniques and frames of reference were used to investigate the presence of structural disruption in Indonesian exports due to the financial crisis. Athanasoglu and Bardaka (2010).

Although an ARDL model can contain multiple model types  $I(0)$  and  $I(1)$ , the time series properties of the data have been tested before estimation since the ARDL model leads to spurious regression for the variables  $I(2)$ . Results of enhanced Dicky Fuller test (ADF) and Phillip-Perron test (PP) for the presence of a unit root at the first level and difference is reported. Both tests show the rejection of the null hypothesis and the presence of a unit root. According to the results, the variables in the data set are stationary at different orders, some are at the level and others are at the first difference. However, none of the variables stops at the 2nd spread.

The results of the critical limit ARDL limit test for the calculated F statistic were higher than the calculated F statistic for all three models (statistically significant at the 1% level). There is a strong long-term relationship between seafood exports, exporters' income and the relative prices of seafood exports.

The long-run conditional ARDL model estimates  $(p + 1)k$  number of regression models for the purpose of choosing the optimal delay length, where  $p$  and  $k$  are the maximum numbers of lags in the model and the number of regression models, respectively number of variables in the model. The trend variable was added to the model to test the impact of the trend.

The coefficients of exporter income and relative price are significant for model 2 (US) and model 3 (Japan). Income elasticity is positive while relative price elasticity is negative according to economic theory. Accordingly, Sri Lanka's exports are both income and price elastic in the international market. In particular, the absolute values of the relative coefficients are larger. This shows that buyers are very sensitive to their income and the relative price of Sri Lankan exports.

**Research by Prathvi Rani et al (2016)**, on “*The current status and competitiveness of seafood exports to the European Union*”. The fish trade is an important source of foreign exchange for India with a total income of US\$5511.12 million in 2014-15. The European Union (EU) is an important market for Indian fish and seafood products with a market share of 20.08% in value. In this study, an attempt was made to analyze the status, performance and competitiveness of Indian seafood exports to the EU. The study is based on data collected from the United Nations statistical database Uncomtrade for the period 2000-2014. Realize the unit value, Comparative Advantage (RCA) and the share of each item in total exports, calculated to measure performance and comparative advantage. Crustaceans, molluscs, frozen/whole fish, chilled/whole fish and fish meat/fillets are the main product components of India's exports to the EU. In seafood products exported over the years, crustaceans contributed the highest (54.74%), followed by molluscs (40%), frozen fish (2.81%) and fish fillets (2%). Realized unit values are high for raw fish (26.24), followed by smoked and treated fish (6.64) and crustaceans (6.6). The RCA for total fish exports revealed that India had a comparative advantage over RCA greater than 1 during this period. However, RCA volatility is a concern unless it is addressed with

appropriate policy measures. The product-savvy RCA shows that India has a comparative advantage in exports of molluscs (3,20) and crustaceans (2.6) and a comparative disadvantage in exports of frozen fish, fillets, and fish raw and chilled. RSCA values show the same trend as RCA.

Export data were collected from the United Nations Uncomtrade statistical database for the years 2000-2014. All export and import values have been expressed in US dollars to eliminate the effects of exchange rate changes.

The share of exports of individual fish and fishery products from India to the EU is calculated according to the following equation:

$$\text{Share of India's fish exports to the EU in the nth year} = \frac{\text{Fish exports (by item) to EU from India in year n}}{\text{Total seafood exports from India in year n} \times 100}$$

India's fish exports to the EU have increased over the years. Increase in value more than in quantity. When analyzing the share of each item in India's total fish exports to the EU, it is found that the main export items are crustaceans (54.74%) and molluscs (40. %), frozen fish (2.81%) and fish fillets (2%). During the period 2000-2014, crustaceans contributed the highest (66.9%), followed by molluscs (29.5%), frozen fish (1.94%) and fish fillets (1.36%). This shows that crustaceans and molluscs are the main exports to the EU, contributing more than 90% of India's total fish exports to the EU. With proper monitoring and updating of fishery standards implemented, the introduction of innovative ideas about value-added in exports. Commodities such as crustaceans and molluscs could help India realize greater competitiveness in the EU. Hence, there is a lot of demand for seafood products from India in these countries. This can also be a positive note for India to gain a competitive edge in the global market. This will help India to establish a strong foothold not only in the EU but also in other international markets and thus be able to sustain fish exports.

**Research by Bertrand Le Gallic (2015)**, on “*Can TV programs enhance the competitiveness of European seafood products? Exploiting results from successful projects*”. The market for aquatic products is characterized by growing global demand and is expected to grow further in the future. However, under the current trade agreement, EU seafood producers cannot fully benefit from the seafood market. The EU H2020 SUCCESS project aims to improve the competitiveness and economic sustainability of the European Fisheries sector. Part of the project deals with understanding consumption patterns in different European countries. In this context, this contribution aims to begin to explore the links between popular cooking shows and seafood consumption patterns. A three-stage approach was taken, including the development of an online questionnaire. Preliminary results indicate that cooking demonstrations appear to encourage the experience of seafood consumption.

The study followed three steps, a) an inventory of past and current culinary television programs in France. b) Analyze the position of aquatic products in a special television program. c) An online survey to investigate whether and to what extent these programs are actually changing consumption patterns for fishery products.

For point b) we focused more deeply on Masterchef, one of the most popular cooking shows in France, and we divided the seafood presentations into market segments (white fish, mussels) and crustaceans). In connection with the survey, we decided to address the restricted audience established by the staff and students of the University of Western Brittany under a) Faculty of

Law, Management and Economics; b) Faculty of Literature and Arts; c) European Marine Institute (IUEM).

Their strong growth since 2000 has seen the profitability of TV shows about food. Relatively cheap when compared to other high-profile TV shows (including overseas adventure shows), they have the potential to generate high revenues. For example, season 3 of Master Chef, in France, grossed €49.4 million in advertising dollars.

For food producers and the seafood industry in particular, the rise of cooking demonstrations seems to reinforce familiarity with products and the techniques for their preparation, as well as end-consumption. From an operational point of view, this situation calls for closer cooperation between the TV industry and the seafood industry, which will benefit all stakeholders.

For example, seafood companies might be interested in sponsoring or even co-producing some culinary TV shows. In addition, the presentation of the recipes in the programs could be improved, causing less stress on the competition side and adopting a more didactic approach.

Another problem is diversity: recipes in TV shows seem to focus on a relatively few species. A highlight of some lesser-known products that could benefit both media outlets and seafood producers. If necessary, specific training sessions for Chefs on certain seafood products may be considered.

As for economic science, this preliminary work needs to be refined and perfected. Engaging a wider audience and including offshore areas are key issues for better understanding the relationship between viewers/non-viewers and seafood. Also, some questions would be better if reformatted, thus allowing for sharper analysis. Finally, it would be helpful to interview program producers about their motivations; expectations, the program's forecast impact, etc.

**Research by Lina Asmara Wati, et al (2013)**, on “*Competitiveness of Indonesian Shrimp Compared with Thai Shrimp in Export Market*”. With water covering 81% of the total area, fisheries are the main business in Indonesia. As one of the world's largest shrimp exporters, Indonesia is also dependent on revenue from shrimp exports in the international market. This study compares the competitiveness of shrimp exports from Indonesia and Thailand to Japan and the US. The index used in this study is the RCA index. In this study, secondary data from 1989 to 2010 were collected for analysis. The results show that the RCA value of Indonesia is higher than 1, which shows the favorable competitiveness of Indonesian shrimp exports in the liberalized markets. However, compared to Thailand, Indonesia is still quite disadvantaged. To strengthen Indonesia's shrimp exports, necessary infrastructure, such as transportation or delivery networks, packaging and transportation, must be improved. Further studies to determine the factors affecting the competitiveness of shrimp exports in the liberalized market are proposed and analyzed to serve the formulation of Indonesia's shrimp export policy strategy in Indonesia market liberalization is also recommended.

Regarding economic globalization and trade liberalization, the future competitive advantage belongs only to goods with comparative advantage. The concept of revealed comparative advantage (Balassa 1965, 1977, 1979, 1986) relates to the relative trade of each country in particular commodities. With the assumption that commodity trade patterns reflect inter-country differences in relative costs as well as in non-price factors, this is assumed to reveal the comparative advantage of country's commerce. The factors contributing to movements in the RCA are economic: structural change, improved world demand, and trade specialization. The revealed comparative advantage index (RCA<sub>ij</sub>) has a relatively simple explanation. If a value is

greater than the unit, the country has a revealed comparative advantage in that product. The objective of this study is to analyze the shrimp export competitiveness of Indonesia compared to Thailand in the liberalized market (in shrimp exports to two major markets (Japan and the US) and will be done by How to use the RCA indicator as follows. Calculation results of Indonesia and Thailand's RCA in exporting three types of shrimp products (fresh, frozen and processed) to two markets (Japan and the US). In the period 1989-2010, Indonesia and Thailand have the advantage comparison in exporting shrimp to two major markets (Japan and the United States with 3 types of shrimp products: fresh shrimp, frozen shrimp and processed shrimp), each worth more than one (on one) and no RCA value less than one. This means that two countries (Indonesia and Thailand) can compete in the liberalized market. When viewed from the RCA value there are fluctuations. Indonesia's RCA value is higher than 1, which indicates favorable competitiveness of Indonesian shrimp exports in liberalized markets.

Indonesia's RCA value is lower than Thailand's RCA value, which indicates that there is still competition among exporters (Indonesia and Thailand). Of the three shrimp exports, Indonesia has the advantage of fresh and frozen shrimp. However, Thailand has an advantage in processed shrimp products. For Indonesia, if it wants to keep the Japanese market, it needs to develop aquaculture with better quality. From this competitiveness, the analysis data shows that Indonesia's shrimp export position is lower than Thailand's shrimp export position. Therefore, the Indonesian government must observe the fishery industry such as identifying or having some good policies on anglers, catching, and exporting

#### **1.2.4. Research on development strategies and competitive advantages**

**Research by O.I. Betin et al (2020)**, on *“Increasing the competitiveness of the fisheries complex through the implementation of the development strategy”*. The study addresses the issue of increasing the competitiveness of the fisheries complex (RFC) of the Russian Federation as the most important direction in the realization of the country's food security industry. Increasing competitiveness requires systemic changes in the production chain of the fishing industry based on the adoption of lean production systems. Its principled management allows you to transform business, focusing on innovation, and saturating the food market with aquatic and seafood products suitable to the needs of consumers. In a lean seafood business organization, the starting point is determining the value of fish and seafood to consumers and the primary goal of all participants in the production chain is the desire to satisfy consumer needs and create value. This goal makes management organizations along the chain identify shortcomings and losses, improve technology, reduce non-production costs, and enhance the benefit of aquatic products. Lean production reduces the risk of loss in all links of the production chain and increases the culture of production, processing and consumption of aquatic products. This methodological approach to increasing competitiveness will allow us to fulfil the tasks of the Russian Fisheries Complex Development Strategy until 2030.

Competitiveness is a multifaceted category. Its content combines many economic categories, such as efficiency, and productivity, and shows the conditions of the external and internal environment, the resources under it, and the multidimensional factors and actions of the management subjects to bring about the desired results. Competitiveness has been studied by many scientists and is the subject of research in all fields of the economy. Systematizing the theories of competitiveness according to different classification criteria allows us to distinguish seven groups: theories of production efficiency, theories of institutions, theories of

technological development (innovation), market marketing theory, national welfare theory, management theory, and mix. Methodological approaches to theories of competitiveness differ in studies at the national, regional and sectoral levels [Bliznyuk, 2018].

Enhancing the competitiveness of the Russian Federation RCC in order to develop dynamically, improve the country's competitive position in the world market and meet the consumption needs of the Russian people for fish and seafood products and healthy products with high benefit. Achieving RCC competitiveness will ensure the achievement of strategic goals in terms of food security, fish and seafood availability, as well as improving people's quality of life. Forming a competitive environment, competition among economic entities of RCC, and attracting investment will allow the introduction of new technologies for WBR treatment, updating physical and technical facilities, and ensuring an enhanced culture of production, processing and consumption of fish products.

At each link in the RCC production chain, implementing a lean production system eliminates the loss of WBR and other resources. Competitive performance is based on the principles of lean manufacturing, which effectively realizes the potential of RCC. In RCC organizations, lean manufacturing creates a new management philosophy, reveals the creative potential of personnel, and changes the organizational structure and production, based on new priorities - the value of the product fish products for consumers, improve benefit, reduce the risk of loss to meet the demand for aquatic products and make a profit.

**Research by Bashir, et al (2019)**, on “*Strategies to enhance the competitiveness of Korean seafood companies in the overseas halal food market*”. This study aims to investigate the current and future status of overseas halal food marketing and develop strategies to improve the competitiveness of Korean seafood companies in the global halal food market bridge. The research method evaluates semi-structured according to the collected data. The material collected is anecdotal evidence, personal reflection and experience. The study also examines the perspectives of different stakeholder groups in the global halal food supply chain.

The global halal food market is forecast to reach \$1.914 trillion by 2021. Currently, South Korea holds a small share of this market. To penetrate the emerging Muslim market, Korea needs to develop strategies. This study proposes strategies to improve the competitiveness of Korean seafood companies in the Halal food market. Improved Halal certification and authentication standards. Understand consumer behavior and develop regional and socio-economic marketing strategies of the respective country; train staff in the industry and develop competitive halal seafood products; exploit Hanryu's growing global influence; establish halal logistics/supply chains and halal industrial parks; and promote digital outreach and tourism. Furthermore, the government should also subsidize the development of halal seafood, as well as provide export and international trade insurance. As the Muslim population continues to grow, so does the importance of global halal food marketing. Therefore, strategies to enhance the competitiveness of Korean seafood companies in the global halal food market should be taken into account.

**Research by Nguyen Thanh Long, and Pham Xuan Giang (2017)**, on “*Effect of supply chain responsiveness on enterprise competitiveness, a case study in Ba Ria-Vung Tau province*”. This study aims to identify the factors that create the responsiveness of the supply chain, affecting the competitiveness of enterprises, studying the case of industrial manufacturing enterprises in Ba Ria Vung Tau province. The research results show that there are 4 factors that create the



responsiveness of the supply chain, affecting the competitiveness of industrial manufacturing enterprises in Ba Ria Vung Tau province, specifically: Firstly, the responsiveness of the operating system. Second, the responsiveness of the logistics process. Third, the responsiveness of the network of suppliers. Fourth, the ability to collaborate with strategic suppliers. From this result, the study provides some managerial implications about the responsiveness of the supply chain for industrial production enterprises in Ba Ria Vung Tau province in the coming time to help these enterprises improve their competitiveness and efficiency. Sustainable Development. This study was conducted through 3 phases:

Phase 1, the content of this stage, the author uses the expert method, based on expert consultation and group discussion to complete the scale and design the survey questionnaire.

Phase 2, the content of this phase will be performed: Testing the reliability of the scale with Cronbach's Alpha coefficient and exploratory factor analysis.

Phase 3, has two contents in this phase, (1) confirmatory factor analysis (CFA) and (2) a test of the research model by analyzing the SEM (Structural Equation Modeling).

The research results show that there are 4 factors that create the responsiveness of the supply chain that have a positive influence on the competitiveness of industrial manufacturing enterprises in Ba Ria Vung Tau province. The importance of each of these factors to the competitiveness of enterprises is different, specifically. First, the responsiveness of the logistics process (Hypothesis H2) with a coefficient of 0.530; Second, the responsiveness of the operating system (Hypothesis H1) with a coefficient of 0.471; Third, the ability to collaborate with strategic suppliers (Hypothesis H4) with a coefficient of 0.337; Fourth, the responsiveness of the supplier network (Hypothesis H3) with a coefficient of 0.225. According to the research results, the responsiveness of the supply chain has a positive effect on the competitiveness of industrial manufacturing enterprises in Ba Ria Vung Tau province, which is completely consistent with the theory and empirical research of Somuyiwa and Adebayo Toyin (2012).

### **1.3. OVERVIEW OF THE RESULTS OF PUBLISHED RESEARCH WORKS AND THE PROBLEM THAT POSES A RESEARCH GAP**

#### **1.3.1. Issues the authors have studied**

In the content from 1.2.1 to 1.2.4, the author has reviewed domestic and foreign research on the contents related to the thesis. Thereby, it can be concluded that the studies have focused on the following main contents:

To learn "Improving the competitiveness of seafood enterprises: A case study of Ba Ria-Vung Tau province". The author has conducted a review of the studies according to the main thematic groups (1) Leadership and executive capacity, (2) Relationship marketing capacity, (3) Human resource capacity, and (4) Competency of human resources, financial capacity, (5) technological and logistics-innovation capacity, (6) adaptive capacity, (7) market impact, (8) legal and regulatory, and (9) infrastructure local floor.

There have been authors studying competitive competence from 1990 to the present (Momaya, (2002, 2004); Flanagan et al., (2007) showing that the theory of competitiveness is widely known. According to the 5 types of competitiveness theory, meanwhile, the research direction of competitive competence according to the capacity theory is not much, especially related to frozen seafood-processing enterprises. The process is very complex (Barney (1991), Sanchez & Heene (2014). Main and past research dominate explanations of competency-based approaches to explain different firms' performance. Corresponding interpretations of the competency-based

view, including the core hypothesis and the system of supporting rules, can be drawn by referring to the resource-based perspective (Seisreiner 1999) on resources suggests that company A is more successful than company B if A controls resources better and more efficiently than B (Barney 1991; Hunt 2000).

From an overview of theories, Competitiveness has a considerable variety in the way strategy is conceptualized and units of analysis. The traditional competitive theory is a central theme of the academic field of strategic management (Hoskisson et al. 1999; Porter 1996). Strategic management is concerned with strategic choice and competitive advantage. Nag et al. (2007) conducted a large-scale survey of strategic management scholars in an attempt to present the following definition. "The area of strategic management refers to (1) the major initiatives that are expected to emerge; (2) performed by general managers on behalf of the owner; (3) related to the use of resources (4) to improve the performance of the companies; (5) in their external environment" (Nag et al. 2007).

The value chain-oriented competitiveness approach theory argues that the sources of value for the company are tied to the competitive situation that characterizes the final product strategic position when the overall assessment of competitive advantage is based on a five-force model (Porter 1979; 1985). The theory of approaching enterprise resource competitiveness (RBV) emphasizes the resources that a company has developed to compete in the environment. Early researchers simply classified resources into three categories: physical, monetary, and human (Ansoff, 1965).

Teece et al. (1997) define dynamic capabilities as resources that can become dynamic capabilities as resources that satisfy four characteristics, which are (1) valuable, (2) rare, (3) difficult to replace, and (4) difficult to imitate." Grant (1996) defines a competency-based organization as "a company's ability to perform a task repetitively through input factor conversion. Summarizing the studies on the above issues, the thesis shows that there is a research gap, which is the relationships in the context of micro- and macro-level (Ebers 1997). The micro-level context deals with the flows of resources, information and mutual expectations between businesses. Relationship marketing and technology and hate innovation, through which people can be creative to solve (Maury, B. (2018).

### **1.3.2. Research Gaps and New Points**

The author has chosen to approach, the perspective of Competency Competency Theory based on Teece et al., (1997) is "A company's ability to integrate, build, and reconfigure internal and external capabilities to address rapidly changing environments". Research on the competitive competence of frozen seafood-processing enterprises in BR - VT province, unlike previous domestic studies, mainly approaches competitive competence according to traditional competition theory. The research direction of competitive competence based on the theoretical approach is still limited, especially in relation to frozen seafood-processing enterprises.

According to the experts' comments, the author proposes a research model consisting of 9 factors. There are 7 inherited factors: (1) Management and operation capacity, (2) Human resource capacity, (3) Financial capacity, (4) Adaptive capacity, (5) Market impact, (6) Laws and regulations, and (7) Local infrastructure. Adding 2 new factors: (1) Relationship marketing capacity and (2) Technology and logistics-innovation competence of the group of factors constituting the competitive competence of the BR-VT province. Although

previous research has also acknowledged the existence of relationships between customers (Baron and Harris, 2010; Martin and Pranter, 1989; Pitta and Fowler, 2005), between multiple stakeholders (Gummesson, 2008; Payne, Ballantyne and Christopher, 2005) and objects such as brands (Fournier, 1998). Technology has brought about new types of relationships that exist between things (e.g. the Internet of Things) and between people and digital devices (e.g. cognitive computing like Watson's ecosystem). IBM).

Two new points in the research analyzed for managers of BR-VT in frozen seafood-processing enterprises show that the marketing mindset is changing from maximizing profit from each deal to maximising profit. Relationship marketing and technology and logistics-innovation capabilities are two of the author's new findings:

**(1) Relationship Marketing Capacity:**

At a time when relationships have become recognized as an integral part of contemporary marketing theory and practice, what role can the sub-discipline of relationship marketing play? Today, marketing acknowledges the existence of multiple relationships and networks of relationships between different actors (Gummesson, 2008; Ford et al., 2011). This shift to a networked economy is partly due to new technologies, and partly to a broader vision of the relationship phenomenon. Although previous research has also acknowledged the existence of a relationship between customers (Baron and Harris, 2010).

In fact, many companies still seem to care more about acquiring new customers than retaining them, offering the best in new or premium customers and building exit barriers. Therefore, successful relationship nurturing strategies are needed, especially in network settings where multiple parties often influence the relationship with the customer, but the customer only interacts with the end supplier or may end up being shuffled from side to side. Consumers can relate to activities in the same way they do with brands, suppliers, other customers or assets, and activities become related objects accordingly. Understanding the relationship between consumers and activities helps marketers answer the question "How to help people cultivate their relationship with desired activities". Thus, offering new ways to communicate with customers, innovating services or products, and strengthening relationships.

The rise of relationship marketing is closely associated with the growth of the service sector characterized by long-term customer relationships, with a focus on customer-company interaction and customer engagement customers on service results. Therefore, researchers argue that relationship marketing will represent a paradigm shift in marketing (Berry, 1983; Gummesson, 1997). In addition, other factors, such as links have established customer loyalty. Profits, as well as technological improvements in customer identification and tracking, have contributed to the growing interest in relationship marketing (Berry; 1995; Chenet, Dagger and O'Sullivan, 2010).

A perhaps less acknowledged issue is the central role of relationship marketing in paving the way to a networked view of value creation (see Morgan and Hunt, 1994), along with the Purchasing and Industrial Marketing (IMP) (Håkansson and Snehota, 1989). Today, marketing acknowledges more than ever the existence of multiple relationships and networks of relationships between different actors (Gummesson, 2008). This shift to a networked economy is partly due to new technologies, and partly to a broader vision of the relationship-marketing phenomenon.

Understanding the element of relationship marketing is that the transition from transactional marketing to relationship marketing is one of the most important trends in marketing today. Know that RM focuses on the long term instead of the short term; focus on customer retention rather than sales; Know relationships are a fundamental company asset; and relationship marketing emphasizes cooperation rather than competition. The company must consider customers as capital that needs to be managed and promoted like any other capital. Maury, B. (2018) considers customers as “assets that add value”. They are the most important assets even though their value is not recorded in the company's books. Recognizing the value of this asset class hopes to help the company re-plan its entire marketing system towards capturing market share and customer lifetime value through product chain development/ its services and brand strategies.

### **(2) Technological and Logistics-Innovation Capabilities:**

The technology of the modern era has brought a complete overhaul to logistics and supply chain management systems. With apps that allow easy product tracking and supply distribution, even small businesses are growing exponentially. Review the literature on the applications of these systems, in relation to technological advancements, in operations and supply chain management strategies, and how managers implement these systems using technology and modern applications. The advent of computers and intelligent machines has changed the way organizations perform supply chain management (Chenet, P., Dagger, 2010). From robotic product packaging to drone delivery systems, artificial and augmented intelligence is the future of logistics as opposed to traditional supply chain management.

Supply chain processes have been accelerated and are being upgraded daily to increase efficiency and reduce the cost of managing product delivery (Tadepalli, 2014). Delivery systems are now widely used in e-commerce businesses, where products are picked from distribution centres and delivered to customers at their homes (Terziovski, Mile). The system has been around for a long time and is now being integrated into everyday necessities like groceries and food ordered and delivered on the same day through an app. Companies like Amazon have already started working to take traditional last-mile delivery to the next level with drones that automatically drop products at customers' homes via satellite communications. Sharma, 2020). Supply chain apps like Kintone help with recruiting, personnel management, note-taking and updating tasks, day-to-day task completion management, and basic organizational management processes (Camison, 2015). When studied further, applications for logistics and supply chains are analyzed. When all this information is added and stored in cloud-based software on a computer, managing, transferring, and sharing it takes seconds, thus saving time and investment in the long run long (High, 2018). The data shows how many companies are implementing modern technology into the supply chain and logistics as these applications are the future of supply chain organizations.

Managing these large-scale distributions will come with challenges, especially in technology deployment. Companies need to regularly test these systems to ensure there are no irregularities or disruptions in the supply flow (Eisingerich, 2002). Flexible logistics allows companies to scale up or down their supply chain operations depending on market demand. It is specifically designed to withstand periods of volatility and manage operations more efficiently.

Understanding Technology and logistics innovation is the means to improve competitiveness and business performance. In the logistics sector, many new technologies play an important role

in the success of the supply chain by improving the efficiency and overall performance of the logistics system. Technology and logistics innovation are key elements of business competition in all sectors. Technology and logistics innovation gives companies the opportunity to adapt to the environment in which they operate. Guan et al., (2006) assert a close intrinsic relationship between technological innovation and competitiveness. In addition, enabling them to identify and control changes in the external environment, so that operators achieve long-term competitiveness. In the field of logistics, information, communication and automation technologies have significantly increased the speed of identification, collection, processing, analysis and transmission of data with high accuracy and reliability (Kocoglu et al., associates, 2012).

## **1.4. OBJECTIVES AND RESEARCH QUESTIONS**

### **1.4.1. General Objective**

Systematize and apply the theory of competitiveness to clarify the competitiveness of the fisheries sector and the evaluation criteria; on that basis, analyze and evaluate the current situation of competitiveness of the BR-VT seafood industry. From there, it shows the opportunities and challenges for the competitiveness of the BR-VT seafood industry when Vietnam integrates deeply and widely into the world economy.

### **1.4.2. Detail Goal**

- Determining the factors constituting the competitiveness of frozen seafood-processing enterprises in BR-VT province.

- Measure the factors constituting the competitiveness of frozen seafood-processing enterprises in BR-VT province and analyze and evaluate the basic strengths and weaknesses of the competitiveness to point out opportunities and challenges. knowledge for enterprises of land property disclosure.

- Consider the difference in factors constituting competitiveness by (manager age, gender, qualifications, experience, enterprise size).

- Giving implication to help improve the competitiveness of frozen seafood-processing enterprises in BR-VT province in the coming time.

### **1.4.3. Research Question**

- What factors constitute the competitiveness of frozen seafood-processing enterprises in BR-VT province?

- What is the level of the factors constituting the competitiveness of frozen seafood-processing enterprises through analysis of opportunities and challenges in terms of competitiveness for enterprises in BR-VT province?

- Is there a difference in the assessment of factors constituting competitiveness according to individual characteristics (management age, gender, qualifications, experience, size)?

- What are the implications for the competitiveness of frozen seafood-processing enterprises in BR-VT province in the coming time?

## **1.5. Subjects, the Scope of Research**

### **• Research Object**

- Research on competitiveness and factors related to the competitiveness of frozen seafood-processing enterprises in BR-VT province.

**• Scope of Research**

- Research space: In the fisheries sector, it includes the following areas: fishing, aquaculture and seafood-processing. According to the Department of Agriculture and Rural Development of Ba Ria-Vung Tau province, the province currently has 129 enterprises and 290 establishments and individuals engaged in preliminary processing and processing of aquatic products, with a total processing capacity of approx. 250,000 tons of finished products/year. Therefore, the author only studies frozen seafood-processing enterprises and the factors constituting the competitiveness of frozen seafood-processing enterprises in BR-VT province.

- Time: data collection from 2017-2019. Primary data collected in 2022. Time of the first survey of managers of frozen seafood-processing enterprises in BR-VT province; 2020-2021 and supplemented from December 1, 2022, to February 1, 2023.

**• Survey Object**

- In qualitative research: Experienced experts in the field of business management, lecturers in business management, managers in the frozen seafood sector and long-time customers trading in seafood.

- In quantitative research: The sample includes a sample of 219/260 enterprises and seafood-processing facilities in BR-VT province, including both public and private companies. The sample was selected by a simple random method with two attributes: business size and type of business. In this study, the informants representing the enterprises responded to the survey questionnaire, i.e., heads, deputy heads of departments, directors, deputy directors or those authorized by the director to participate in leadership. , run the job, run the business.

**1.6. Research Methods****1.6.1. Research Program**

Find the competitive factors of enterprises, and quantify the internal and external factors related to the competitiveness of BR-VT in frozen seafood-processing enterprises. Get an expert opinion. Collected data is used to analyze competitiveness and draw conclusions about the competitiveness of enterprises. The Regression model is used to know the influence of competitiveness of frozen seafood-processing enterprises in BR-VT province. This is the main basis to imply strengthening the competitiveness of frozen seafood-processing enterprises in the BR-VT province.

**1.6.2. Research Methods****1.6.2.1. Quantitative Method**

Dialogue with managers who have real feelings about the competitiveness of frozen seafood-processing enterprises to collect data to determine competitiveness related to frozen seafood-processing enterprises in BR-VT province.

Group discussion and one-on-one dialogue with fisheries management experts, business administration lecturers and managers in the fisheries sector to develop and refine qualitative research (Appendix 1).

**1.6.2.2. Quantitative method:**

- Set up the scale and determine the competitiveness of frozen seafood-processing enterprises BR-VT. The content is described in Chapter 3 Survey through the distribution

of survey forms to collect primary data from managers at frozen seafood-processing enterprises in BR-VT province.

A survey in BR-VT province from 12/2022 to 2/2023. A total of 480 questionnaires were distributed and 440 questions were collected, 38 of which were invalid, and 402 were used, reaching 83.75%.

Using SPSS to process data with tools: Cronbach Alpha, EFA, regression., and average value analysis.

## **1.7. The meaning of the thesis**

### **1.7.1. Meaning of Science**

The thesis approaches the point of view from the Competency-Based Competitive Competence Approach Theory Teece et al., (1997) is the main research theory. The thesis has identified the competitive capabilities of frozen seafood-processing enterprises and quantified each factor related to the competitiveness of frozen seafood-processing enterprises in the BR-VT province.

Proposing to use 7 groups of inherited factors and two new factors constituting the competitive competence of frozen seafood-processing enterprises BR-VT is a new contribution in theory to the capacity-oriented approach of the thesis. Carry out the inspection in the new context is frozen seafood-processing enterprises in Ba Ria - Vung Tau province. According to M. Porter, management capacity can be understood as the rate of change of people relative to the general change (Porter, 2004).

### **1.7.2. Practical Significance**

The thesis examines the reality of the competitive competence of frozen seafood-processing enterprises in BR-VT province, and explores the strengths and weaknesses of BR-VT province in the process of developing the seafood industry, thereby improving the BR-VT seafood-processing industry. VT in terms of participating in international trade. The author proposes managerial implications for BR-VT in frozen seafood-processing enterprises to refer to in order to improve their business advantages. The thesis can be a document for frozen seafood-processing enterprises in BR-VT province, for managers to enhance the competitiveness of frozen seafood-processing enterprises in other localities/provinces.

*Chapter - 2*

*Theoretical Basis And  
Research Model*



## **2.1. BASIC CONCEPTS OF COMPETITIVENESS**

The term "competitiveness" is widely used globally. Competitive competence is considered a dynamic moment that reflects and quantifies the power, intensity and dynamics of production and business operations in the interactive relationship with direct competitors in the defined target market and within a specified time period. However, up to now, this concept has not been uniformly conceived and used. From the fact by referring to different sources, it can be seen that the following conceptions of competitive competence are of interest:

- According to Jeal Louis Muchielli in 2002, the term competitive competence has a Latin origin as "Competitiveness", which means meeting at the same point, indicating the ability to cope with competitive situations and compete with others. Competitiveness is the ability to control relative (superior) advantages over the strongest competitor. The concept of competitive competence is used not only for the competition between products of enterprises, among enterprises but also in comparing the competitiveness of countries in international competition conditions.

- According to the OECD, competitiveness is defined as the production capacity of relatively high income based on effective use of factors of production, making enterprises, industries, localities, countries and regions develop sustainably in international competition.

- According to Bach Thu Cuong, the dictionary of trade policy terms defines competitiveness as the capacity of an enterprise or an industry, a country that cannot be defeated by other enterprises, other industries or countries in terms of economic capacity.

- According to the chairperson of the US Council on Competitiveness, competitive competence is the ability of a country, under the conditions of a free and healthy market, to create products and services that are suitable for the requirement of the international market.

According to the World Economic Forum, competitiveness is the ability of a country to achieve a high and sustainable growth rate of per capita income

## **2.2. LEVELS OF COMPETITIVENESS**

Since the competitive actors may be different, the distinction in the concept of competitiveness should also be divided into different levels.

### **2.2.1. Product Competitiveness**

According to Nguyen Van Thanh (2004): "Product-level competitiveness is understood as the ability of a product to maintain its position in the long term in a competitive market". A commodity product is considered competitive when it meets the needs of customers in terms of quality, price, features, design, uniqueness or difference, brand name, packaging, etc. superior to similar products. But the competitiveness of goods is determined by the competitiveness of enterprises. There will be no competitiveness of high commodity products when the competitiveness of enterprises producing and trading such products is low.

Here it is also necessary to distinguish the competitiveness of products and goods and the competitiveness of enterprises. Those are two different categories but are organically related to each other. The competitiveness of goods is created by the competitiveness of enterprises; but the competitiveness of enterprises is not only determined by the competitiveness of goods, but also depends on many other factors. However, the competitiveness of goods has a great influence and shows the competitiveness of enterprises.

Product competitiveness is often recognized through (i) direct assessment from the market (sales growth, market share), (ii) direct assessment on products (features, quality, price). products,

utilities, designs, etc.) and (iii) assessment from customers' opinions (level of satisfaction of needs, level of product awareness, level of brand loyalty, etc.). For export products, in addition to the above-mentioned identification signs, the export competitiveness of the product can also be assessed through the manifestation competitiveness coefficient (RCA). This coefficient reflects the position of comparative advantage achieved by the product in the international market in relation to the total export value of the country. (Bui Duc Tuan, 2010)

### **2.2.2. Enterprise Competitiveness**

According to author Le Dang Doanh (2015) in the work *Enhancing the competitiveness of enterprises in the time of integration*: "Competitive competence of enterprises is measured by the ability to maintain and expand market share and earn profits for enterprises in three competitive environments in at home and abroad"

Firstly, the concept of competitiveness should be suitable to the conditions, context and level of development in each period. For example, in the former free-market economy, competition was mainly in the field of sales, and competitiveness meant selling more goods than competitors; in perfect competition market conditions, competition on the basis of maximizing the quantity of goods, so competitiveness is reflected in market share; However, in the current knowledge economy conditions, competition means expanding "space for survival", enterprises must compete for space, compete in markets, compete for capital and thus the concept of capacity. competition must also be suitable for new conditions.

Secondly, competitiveness needs to show the ability to compete and compete for businesses not only in terms of the ability to attract and use production factors, the ability to consume goods but also the ability to expand the market. product survival, the ability to create new products.

Third, the competitiveness of enterprises needs to show an appropriate competitive method, including both traditional and modern methods - not only based on comparative advantage but also based on competitive advantage. competitive, rules-based.

According to the book, *"Improving the competitiveness of Vietnamese enterprises in the trend of international economic integration in Vietnam"* (Nguyen Vinh Thanh, 2005), the concept of enterprise competitiveness is mentioned first. A national and international. Competitiveness means achieving the long-term benefits of the business and the ability to secure income for employees and business owners. This definition is also repeated in the UK competitiveness white paper (1994). In 1998, the Ministry of Trade and Industry (UK) issued a definition: "For enterprises, competitiveness is the ability to produce the right product, determine the right price and at the right time. That means meeting customer needs more efficiently and effectively than other businesses" (Nguyen Huu Thang, 2008).

### **2.2.3. Industry Competitiveness**

For an industry, competitiveness is the ability of enterprises (of the country) in the industry to achieve sustainable achievements in comparison to foreign competitors, without protection or subsidies (Franziska Blunck). , 2006). According to the United Nations, the competitiveness of an industry can be assessed through the profitability of enterprises in the industry, the industry's balance of foreign trade, the balance of foreign investment (outward investment and foreign investment), and direct measures of cost and quality at the industry level (United Nations, 2001).

Some criteria for assessing industry competitiveness are the average profit of the industry, the proportion of the industry in the economic structure, the key products of the industry, and the

coefficient of existing comparative advantage (RCA - Revealed Comparative). Advantage: determined on the basis of the ratio between the share of a country's exports of an item in the country's total exports of that item to the proportion of the world's exports of that item to the total world exports in a year), localization rate, number of patents and patents in the industry, level of investment capital, and growth rate of basic and supporting industries (Help).

There are many factors affecting the competitiveness of the industry, which can be divided into the following groups of factors: natural conditions and natural resources; scientific and technological development level; Human Resources; infrastructure; the level of industrial organization and management; economic and social institutions.

Industry-level competitiveness is often seen as a more appropriate sign of the "health" of the economy for the relevant industry than the competitiveness of enterprises. The success of an enterprise in a country can be attributed to possessing specific factors of the enterprise that are difficult or impossible to replicate. In contrast, the success of a few firms in an industry is often seen as compelling evidence of the possession of country-specific factors that can be replicated or improved. The sum of the competitiveness of individual enterprises does not mean the competitiveness of the whole industry (Bui Duc Tuan, 2010).

### **2.3. THE CONCEPT OF COMPETITIVE ADVANTAGE**

Although the concept of competitive advantage has been widely used since the 1980s, no research has provided a formal definition. The works and research on strategy of this period, mainly deal with specific strengths and weaknesses of the firm (Russel, 1970; Andrews, 1971). Mentioned only in a few ambiguous cases (Penrose, 1959); or use the term, but only to describe what a firm needs to compete effectively (Ansoff, 1965). It was not until 1985 that the term "competitive advantage" was first introduced into official use by Michael Porter (1985).

According to different approaches, researchers have proposed different concepts of competitive advantage. Some widely recognized include: "A business is said to have a competitive advantage when it implements a value-creating strategy that no existing or potential competitor can match" (Barney et al., 1991, p. 102).

"When a firm has an economic rate of profit higher than the average rate of economic profit of other firms in the same market, the firm has a competitive advantage in that market" (Besanko, Dranove and Shanley, 2000, p. 389).

"A distinctive competency becomes a competitive advantage when applied in an industry or introduced into a market" (Kay, 1999, p. 14). "Enterprises with superior resources will enjoy rents... Income beyond the break-even point is called rents, rather than profits if its existence does not cause new competition" (Peteraf, 1993, pp. 180; 185).

"Competitive advantage lies at the heart of a business's effectiveness in a competitive marketplace. Competitive advantage is how well a business has put general strategies into practice. Competitive advantage essentially increases beyond the value a business can create for buyers" (Porter, 1985, p. Xv; xvi).

Competitive advantage is classified into two basic types: low-cost advantage and differentiation advantage (Porter, 2011). A cost advantage is achieved when a business provides the same value/utility as its competitors but at a lower cost. The differentiation advantage is achieved when the enterprise provides superior values/utilities than competitors' products/services; The difference here is "something unique, valued by customers more than offering a low price" (Porter, 1985). A business becomes different from a competitor if it creates a product/service

that the competitor cannot, or has a resource that the competitor does not have. And, customers appreciate this and are willing to pay more for that product/service.

The nature of a competitive advantage allows a business to create more value for its customers as well as to generate higher profits for the business.

Essentially, any resource that gives a business the ability to outperform its competitors can be the foundation for building a competitive advantage. Typical traditional resources include financial resources, access to natural resources, and monopoly ownership of certain limited resources. However, in the context of global competition and free integration, these resources are increasingly accessible and easily captured.

#### **2.4. COMPETITIVENESS ACCORDING TO THE CAPACITY APPROACH THEORY**

Competency-based strategic management theory is a way of thinking about how organizations achieve high performance over a significant period of time. In 1990, the competency-based strategic management theory explained how organizations are systematic and structured. Competency-based strategic management theory is an integrated strategic theory that combines economics, organization and behavior within a framework that is dynamic, systematic, cognitive and holistic (Sanchez and Heene, 2004). ). Competency-based management can be found strategically, specifically in human resource management. (Delamare Le Deist fortifications, 2005).

First, competence must include the ability to respond to the dynamic nature of the organization's external environment and internal processes (Sanchez, 2004). The sustainability requirement in the above competency definition covers both types of motivation. To be sustainable, capacity must respond to the market even as changes take place in market preferences and available technology. The basic feature of the law of lack of predictability is that systems have a natural tendency to transition to lower energy states, which take the form of a loss of structure and information content.

Second, competence must include the ability to manage the systemic nature of organizations and their interactions with other organizations (Sanchez, 2004). Requires coordination of resources that address this competency aspect. That is organizational boundaries and direct control of the organization - in the processes that create and realize the product.

Third, competence must include the ability to manage an organization's cognitive processes (Sanchez, 2004). The requirement of resource deployment - directing the organization's resources to specific value-creating activities - addresses this aspect of competence. Determine and ensure that the organization's operations meet at least the minimum efficiency requirements for the implementation of the organization's strategies, In other words, managers are responsible for the effective and efficient use of the organization's resources. (Sanchez, 2004).

Fourth, competence must include the ability to manage the overall nature of an organization as an open system (Sanchez, 2004). The requirement of achieving the goal addresses the diversity of individual and institutional interests that are intertwined and served through any given organization. Thus, the definition of organizational competency recognizes the existence of multiple players and responds to expectations in maintaining an organization's value creation process (Sanchez, 2004).

#### **The Author's Perspective on Competitiveness**

From the above theories, the author makes a point of view on the competitiveness of enterprises as follows: "The competitiveness of enterprises is a structure that receives the influence of a

number of factors, showing the strength and advantages of enterprises compared to other factors. with competitors, satisfying the best requirements of customers to earn higher and higher profits“.

## **2.5. FACTORS RELATED TO THE COMPETITION OF FROZEN SEAFOOD-PROCESSING ENTERPRISES**

### **2.5.1. Factors Inside the Business**

Internal factors best describe the company's characteristics, capabilities, resources, business orientation, and key personnel. Internal factors also emphasize that unique resources, sound finances, and skilled and experienced staff are additional points for successful international adjustment (Senik et al., 2014). Key personnel include employee experience, attitude, and perception (Saurabh Srivastava et al., 2016). Senik et al., (2014) emphasize that unique resources, sound finances, and skilled and experienced staff are plus points for success (Barney, 1991 and 2001; Markman, 2007). Thus, internal factors support the resource-based view, where they emphasize key elements of internal competence such as firm ownership of unique resources and internal ownership as important drivers important when it comes to achieving competitive advantage (Barney, 1991; 2001). In addition, as mentioned by Senik et al., (2014), the company's resources include organizational, relational and network resources (Carole et al., 2013).

Capacity theory, research on the main factors of the ATP model (Flanagan, 2007) and competitiveness criteria of small and medium enterprises (SMEs) show that there are 5 main groups of factors that influence the competitiveness of small and medium enterprises. In terms of the characteristics of the ITS enterprises The province of BR-VT is also a small and medium-sized enterprise, so these factors also include Management and administration capacity; Marketing; finance; technology and logistics; Human Resources.

Analysis of the competitive capacity of the BR-VT province's IPR enterprises today combined with the theoretical point of view of the capacity-based approach of the thesis. Applying Thompson – Strickland method (method using a matrix to evaluate internal factors). To solve this case, Thompson and Strickland proposed a method to assess the competitiveness of enterprises through the Matrix of Internal Factors. The specific steps to build this matrix are as follows:

**Step 1:** Make a list of factors that determine the competitiveness of enterprises in a business industry (usually choose from 10 to 20 factors). These are internal factors of the business, not including external environmental factors. The most important factors can be listed as follows;

- 1) Corporate governance capacity;
- 2) Capacity to research, analyze and forecast domestic and foreign markets...;
- 3) Ability to find customers and reliable partners who are capable of effective business cooperation with enterprises;
- 4) Capacity to organize the production of competitive products on domestic and international markets...;
- 5) Export organization capacity (buying, selling, transporting goods...);
- 6) International payment capacity;
- 7) Ability to handle situations on international trade disputes quickly and effectively...;
- 8) Technological factors: such as technology research capacity, innovation capacity, and information technology use...;
- 9) Factors related to human resources: qualified human resources and highly specialized skills, quality management expertise, a team of experts in product design or

important technology...;

- 10) Elements of corporate culture;
- 11) Elements of adaptive capacity and change management;
- 12) Financial factors;
- 13) Elements of the image, reputation (brand factor);
- 14) Competitiveness on price and cost.

**Step 2:** Determine the importance of the factors to the industry by grading from 0.0 (not important) to 1.0 (most important). This weight shows the relative importance of that factor to the success of firms in the industry.

**Step 3:** Classify from 1 to 4 for each representative element, from the weakest (1 point) to the strongest (4 points). This is a score reflecting the competitiveness of each element of the business compared to competitors in the business industry. It is also possible to give a wider range of scores, for example, 1 to 5 points.

**Step 4:** Calculate the score for each factor by multiplying the importance of that factor by the corresponding classification score.

**Step 5:** Calculate the total score for all the factors included in the matrix by adding the scores of the competitive components of the enterprise. This total score reflects the absolute competitiveness of the enterprise. This is also the scale used in this thesis. The matrix of internal factors helps enterprises to assess their competitiveness in comparison with competitors in the target market. From there, find out the basic advantages to improve the competitiveness of enterprises in the market. This method allows us to identify which competitive factors need to be maintained, which need to be strengthened and which ones need to be built, thereby proposing appropriate solutions to improve the competitiveness of enterprises. Karma.

**Table 1.1:** Describe the evaluation matrix of the internal factors of the enterprise

| Factor       | Weight<br>(0.00 -1.00) | Rating<br>(1 - 4) | Điểm yếu tố  |
|--------------|------------------------|-------------------|--|
|              | A                      | B                 | $K = A * B$  |
| 1) Factor 1  | $a_1$                  | $b_1$             | $k_1 = a_1 * b_1$                                  |
| 2) Factor 2  |                        |                   |  |
| .....        | .....                  | .....             | .....  |
| n) Factor n  | $a_n$                  | $b_n$             | $K_n = a_n * b_n$                                  |
| <b>Total</b> | <b>1.00</b>            | -                 | <b><math>T = \sum K_i (i = 1 \square n)</math></b> |

*Source:* Applying the Thompson – Strickland method to assess and compare the overall competitiveness of enterprises

The author discusses with experts and gets suggestions for changes. Factor marketing capacity into relationship marketing capability and add a technological and logistical-innovation capability factor for the competitiveness group of frozen seafood-processing enterprises in BR-VT province. (Appendix 2: Building and developing the scale). Thus, there are 6 groups of factors inside enterprises affecting the competitiveness of frozen seafood-processing in the BR-VT province studied in the thesis. Including (1) Management and operation capacity (2) Relationship marketing capacity; (3) Financial capacity; (4) Technological and logistical capacity-innovation; (5) Human resource capacity and (6) Adaptation capacity.

**2.5.1.1. Management and Executive Capacity**

The term "leader" is often misunderstood and confused with many other concepts, especially with "manager" or "business owner". Misperceptions and inadequate understanding of leaders themselves have affected the performance of many organizations or groups. Therefore, understanding the concept of "leader" is very important. In general, a leader must ensure three abilities: vision shaping, inspiring and influencing (Anand and Punia, 2013). In other words, a leader is someone who has the ability to create a vision for an organization or group and exercise his or her power to influence those who follow that vision. More importantly, in the ever-changing and turbulent business landscape, a leader also needs to develop a relationship of trust with his or her subordinates and empower them by acknowledging and clarifying their role in the business organization (Martinez-Corcoles et al., 2020). Depending on a particular research aspect, researchers have different definitions of leaders.

**2.5.1.2. Relationship Marketing Capabilities**

Relationship marketing capabilities can help reduce risk, and improve customer contact. Structured and social media, better customer insights, customer focus on profit rather than sales, lots of relationships to drive customer loyalty, engagement and engagement long term with the company. According to the OECD (2013), the lack of marketing skills makes it difficult for SMEs to compete and succeed. Pandya, V., (2012) and Maury, B., (2018) note that an SME's marketing constraints are the same as other limited resources such as finance and human resources.

Relationship marketing gives companies the opportunity to gain a competitive advantage by building relationships early on. Identify customer needs and wants. The process continues with impeccable customer service throughout the purchase transaction, encouraging and driving consumer engagement. As a result, the bond between the buyer and the seller develops a partnership that becomes more sustainable.

Relationship marketing is about improving, growing and maintaining high-value relationships with individual customers, suppliers, employees and partners for the long-term benefit of all stakeholders. Relationship marketing is not only a function of the marketing department but has become a cross-functional function of many departments; rather than just a single customer market like the traditional one; Marketing activities shift from acquiring to acquiring and retaining customers.

**2.5.1.3. Financial Capacity**

According to M. Porter (1990), the ability to manage investment, manages capital risks, contribute capital at the right time to serve the needs of purchasing raw materials, hiring labor to replace machines, and innovating techniques for market development. According to Kuo, Lin & Lu (2017), a company can create value and generate profits to reduce costs or make a difference in the product. In order to increase investment capacity, enterprises need to increase and develop capital sources increase working capital, and effectively use capital sources to create credibility with lenders. One of the criteria to evaluate the financial capacity of an enterprise is capital. Capital is one of the main obstacles for businesses that limit growth. By providing guidance on borrowing, banks should develop mortgage-free, clustered financial products to minimize borrowing costs (Maury, B., 2018).

#### **2.5.1.4. Technology and Logistical Capacity-Innovation**

As noted by Lee (2018), a small business that adopts a higher level of engineering can be expected to grow faster than a similar company that does not. Dennis Yang (2000) notes that new techniques improve efficiency enable greater production and are a source of profit for SMEs. Mitchelmore et al., (2004), technical capabilities bring rapid growth to businesses in many ways: they reduce costs and expand market share, both locally and globally. Yusuf et al., (2003) pointed out that low technical capacity hinders and prevents SMEs from developing. As noted by Walters et al. (2000), countries with high technical growth often have high business growth.

The data show how many companies are implementing modern technology into supply chain and logistics as these applications are the future of supply chain organization. Large companies such as Alibaba, Amazon and Walmart are on their way to upgrading their delivery and distribution systems to reduce the cost of supply chain processes and increase time efficiency (Chiles & Dau, 2005).

IoT is a huge thing in the digital world. It helps companies increase the visibility of their supply chains. Some companies equip their fleets with sensors to achieve real-time tracking updates on shipments and deliveries. They can also improve the location and route management. In the warehouse, IoT solutions can improve visibility in inventory management, storage conditions, and predictive maintenance.

#### **2.5.1.5. Adaptive Capacity**

A successful sustainable transition requires adaptation and is based on an integrated sustainability initiative (Awan et al., 2020). Currently, manufacturing industries in the product-service ecosystem tend to move from a linear system to a circulatory system.

Miles and Snow (1978), Chakravarthy, B.S., (1982), and Hooley et al. (1992) defined adaptive capacity as the ability to identify and access emerging market opportunities. Adaptability and innovation are shaped by attributes of social organization that allow or hinder people's ability to attract external resources, their household or community to cope with or promote change (Pelling and High, 2005; Rogers, 2003). With this capacity, the global context in which innovation increasingly occurs easily has been easily created in the context of innovation and organization (Pandit et al., 2018). Enterprises take advantage of external opportunities as well as changes to respond to the market quickly based on product innovation. Based on restructuring and developing assets, businesses will increase their access to consumers in a changing environment. Moreover, through the renovation of the management system, marketing ability... Will help enterprises maintain and improve their competitive advantages (Nguyen Phuc Nguyen & Vu Quynh Anh, 2015). Innovation capacity is defined as the ability to continuously combine and use different types of knowledge (Harrigan et al., 2017). Thus, each different business will show different adaptability. Innovative BR-VT GIs not only create and promote new technologies but also have competitive advantages.

#### **2.5.1.6. Human Resource Capacity**

Human resource capacity is one of the most important factors for the development of small businesses. According to Hitt, M. A (2000), companies with a qualified and well-trained workforce are probably more efficient. As noted by Lee (2001), human resource capacity is one of the most important areas for the success of small and medium enterprises. Wright, P et al. (2001), pointed out that human resource capacity has an impact on the growth of enterprises,



helping to increase employee skills and motivation, and ultimately lead to improved productivity and long-term sustainability of enterprises. small businesses. One of the problems in most countries is the inability of governance systems to interpret policies that promote and reinforce the indigenous ability to use and adapt to create knowledge and technology. science (Aguirre-Bastos and Weber 2017). However, various studies recognize that low human resource capacity is a major challenge for the development of small and medium enterprises in developing countries.

### **2.5.2. External Environmental Factors**

Researchers use different ways to explain problems related to the growth of SMEs. Some of them considered the external environment to be strongly related to SME performance and growth (Lukas, Bryan A, 2000). Policy documents often distinguish between inputs (usually government investment) and incentives (competitive, openness) as drivers of higher productivity. Porter's work has combined these and other aspects of the national business environment (NBE) into an integrated framework, complementing the quality and presence that tends to benefit (Porter, 1990, 2007). Factor conditions (quality and quantity) have long been considered to be related to firm creation and productivity. Physical infrastructure is associated with innovation in productivity, although there is controversy about the size of infrastructure involved (Calderon and Serven, 2004) as well as the institutions involved in innovation. ; Policies and incentives (Franziska Blunck, (2006).

#### **2.5.2.1. Market Impact**

A market economy system is a combination of different agencies and entities that provide the economic structure that defines the social community. Markets are formed by participating in the buying, selling and exchanging of goods. Various goals can be considered as the desire to influence the market, such as efficiency, growth, freedom and equality. A distinctive feature of green innovation is the use of environmental goals with product and process innovation to structure sustainable development (Awan et al., 2019). In the case of innovation, the use of context is important because it influences the type of innovation practice and the activities needed to generate others. A buzzword for relationship management in today's competitive marketplace is 'fair' - referring to the concept of 'disgust with inequality' (Fehr and Schmidt, 1999).

#### **2.5.2.2. Laws and Regulations**

According to Lumpkin et al., (1996), the growth of small and medium enterprises is related to their business environment. Porter et al., (2004) note that the potential impact that supplier business can have on unfavorable business performance is related to small business growth. Adam J.H. (1994) identified competition as one of the major obstacles to the growth of small businesses. Corbett C. (1993) notes that an unfavorable tax system, complicated rules and regulations are not good for the growth of small firms. Ketels (2006) show that corruption is a major source of increased unfair competition. Krasnoyqi (2002) further emphasizes that the costs of regulatory compliance and increasing tax rates increase small business costs while constraining growth.

#### **2.5.2.3. Local Infrastructure**

In the current environment, renewed interest in new, 'smarter' infrastructure policies takes advantage of the current low-interest rate environment, addressing emerging weaknesses in maintaining infrastructure infrastructure in advanced countries, while providing a moderate

measure of economic stimulus Thimann C. (2017). There is also a clear sense that the physical infrastructure investments are made, they need to be included in a program of building an effective business environment and 'innovation systems' to exploit economic potential World Economic Forum (2018). As a result, disruptions to one system infrastructure can spread to others and ultimately involve different services to businesses' production and business activities.

## **2.6. Theoretical Model of Competitiveness**

The basic nature of the model is to include important features, factors, systems or problems under study and, more importantly, the ability to explain and predict the relevant relationships among them cause and effect factors; The model allows to build of propositions of cause-and-effect relationships. These models include:

### **2.6.1. Diamond Pattern**

According to the Porter Diamond model (Porter, 1990), the characteristics of the host country play a central role in explaining the international competitiveness of enterprises.

- The conditional factor is the first element of the Porter Diamond model, referring to different types of resources that may or may not be available in the host country: human resources, physical resources, knowledge resources, and resources capital and infrastructure. The basic factors include natural resources (climate, minerals, oil) but the mobility of these factors is low. Advanced factors are often more complex, such as human resources and research capabilities.

Demand conditions such as early home buying demand and market size create competitive advantages, for example, when sophisticated buyers in the market pressure companies to innovate faster and create new products that are more advanced than those of foreign competitors. In fact, the basic or core design of a product almost always reflects the needs of the market. Often, the needs of the domestic market even shape how the industry later responds to the global market.

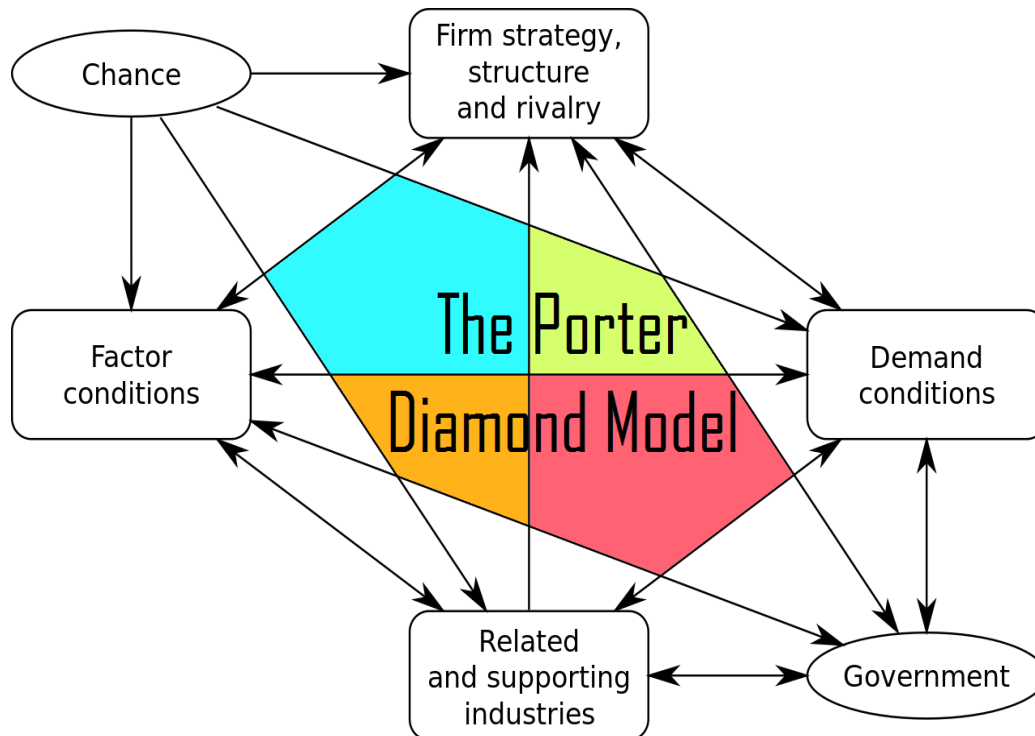
Ancillary and related industries can provide important inputs for innovation and internationalization. These industries provide cost-effective input, but also participate in the upgrading process, thereby stimulating other companies in the innovation chain. The success of an industry is tied to the presence of suppliers and related industries in a given area.

Solid strategy, structure and competition, including how companies are organized and managed, their goals and the nature of competition in the domestic market. The way a company is founded, set goals, and managed is an important factor for success in the international market. However, the presence of stiff competition also makes companies competitive: it creates pressure. The constant competitive pressure forces them to develop competitive products, offer them at competitive prices, and remain competitive overall.

- An authority can have a strong bearing on a company's international competitiveness. Alternatively, it can be related to each of the other five forces in the Porter Diamond model. A country's government can either promote or hinder exports. It may be related to the supply conditions of the main factors of production. It can shape demand conditions in the domestic market, as well as competition between companies. These interventions can occur at the local, regional, national, or even supranational levels.

Opportunity refers to random events that are beyond the control of the company. For international competitiveness, they can be very important: random disruptions can lead to an advantage for some companies and a disadvantage for others. Some companies may gain a

competitive position, while others may lose. Once an industry starts in a given country, the size and effects of clustering can strengthen its position in that country.



**Figure 2.1:** Porter Diamond model

*Source:* Michael Porter, "Competitive Strategy", 1990, p. 78

### 2.6.2. Michael Porter's Five Forces Model of Competition

Porter's Five Forces Model is a method for analyzing a firm's competition. The model draws on the economics of industrial organization to infer five forces that determine the intensity of competition and, therefore, the attractiveness (or lack) of an industry in terms of its profitability. An "unattractive" industry is one where the impact of these five forces reduces overall profits. The least attractive industry would be the "purely competitive" approach, in which the disposable profits of all firms are directed towards normal profits. A change in any force often requires a business unit to reassess the market based on the overall change in industry information. The overall attractiveness of the industry does not mean that every company in the industry will earn the same amount of profit. Porter's five forces include three from 'horizontal' competition; the threat of substitute products or services, the threat of established competitors and the threat of new entrants, and two other forces from 'vertical' competition; bargaining power of suppliers and bargaining power of customers.

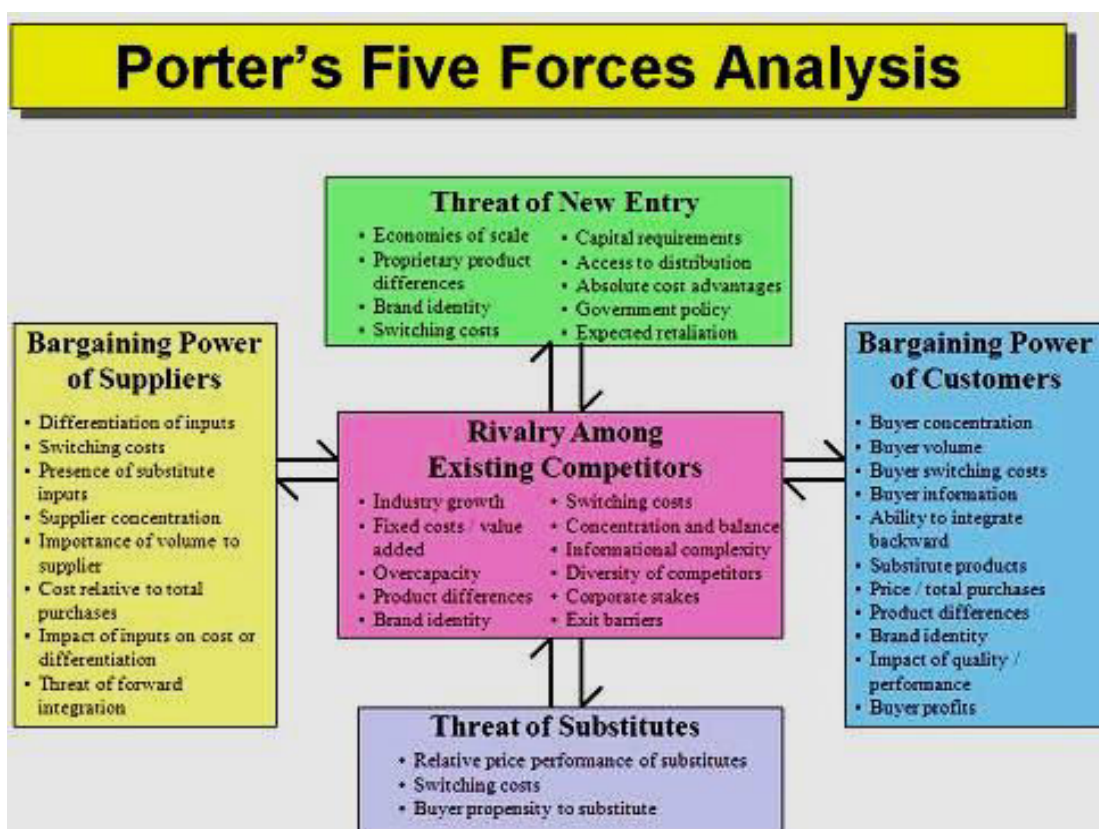


Figure 2.2: Porter's Competitive Model

(Source: Michael Porter, "Competitive Strategy", 1990, p.4)

Table 2.1: Overview of some other studies

| No | Author                          | Title of thesis   | Method   | Influencing factors  | Limitation   |
|----|---------------------------------|---|--|--|--|
| 1  | Kevin Zheng Zhou & cs, 2019     | How to orient the strategy in building dynamic energy in the economy.     | T-test, one-way ANOVA and EFA.                       | Adaptability   | Institutional factors driving SME dynamism and how it interacts with enterprise resources dynamism and performance |
| 2  | Krzysztof Firlej và cs., (2017) | Functional factors and functional analysis of the fish industry in Poland | Porter model for SWOT analysis, statistical analysis | Customer orientation; University competitors; Orientation CN; N/demand is uncertain; Competitive intensity; CN disturbance; Enterprise size. | Using secondary data while assuming other factors remain constant  |

|   |                               |  |                                      |   |  |
|---|-------------------------------|--|--------------------------------------|---|--|
| 3 | Osawe, & cs. (2016)           | competitiveness of fish farming in the state of Lagos, Nigeria: Applying a matrix of policy analysis | Policy Analysis Matrix               | Competitive power in the industry, entry barriers, risk of substitution, roles of suppliers and buyers.   | Limited by sample size and study time  |
| 4 | Pham Thu Huong (2017)         | The competitive capacity of small and medium enterprises, research in Hanoi city                     | The competitive energy model of SMEs | Primary and secondary data were both used for the analysis of the effective protection factor (EPC) and subsidy to manufacturer's values (SRP).                         | Limitations do not fully generalize the size of SMEs                           |
| 5 | Huynh Thanh Nha et al. (2015) | Internal factors related to the competitive capacity of private economic enterprises in Can Tho city | (EFA) and regression analysis        | the capacity to organize and manage enterprises; Technical approach capacity; Financial capacity; NL creates relationships; capacity to organize services; NL marketing | Have not researched product development and branding and relationship building |

- **Comment**

The company's relationship marketing activities in the competitive market require constant attention to improve product quality according to the increasing needs and demands of consumers. Studying the calculation in the price of the consumer characteristics of the product will allow the company from a more objective position to approach the problem of determining the price level for a certain product quality that drives demand. Relationship marketing is more an aspect of long-term customer engagement than short-term goals such as customer acquisition and personal selling.

Technological and logistics-innovation capabilities are key elements of business competition in all sectors, including logistics. Innovation gives companies the opportunity to adapt to the environment in which they operate. In addition, technology and logistics innovation enables the company to identify and control changes in the external environment, which is crucial for managers and executives to achieve long-term competitiveness.

The group of internal (intrinsic) factors of enterprises are factors related to creating the source of competitive advantages of enterprises, within the scope of enterprises themselves, enterprises can create and maintain maintain and control these factors. These are management capacity (some leadership skills...), human capacity (expanding staff training, skills, qualities, and knowledge), and technical capacity (Applicability). , financial capacity, relationship marketing capacity, and adaptive capacity.

The group of factors outside the enterprise is the factors that the enterprise cannot actively create, cannot control and depends on them or can only have a very small impact. These are factors such as Legal and regulatory, local infrastructure and market impact.

## 2.7. RESEARCH MODEL AND HYPOTHESIS

### 2.7.1. Research Models

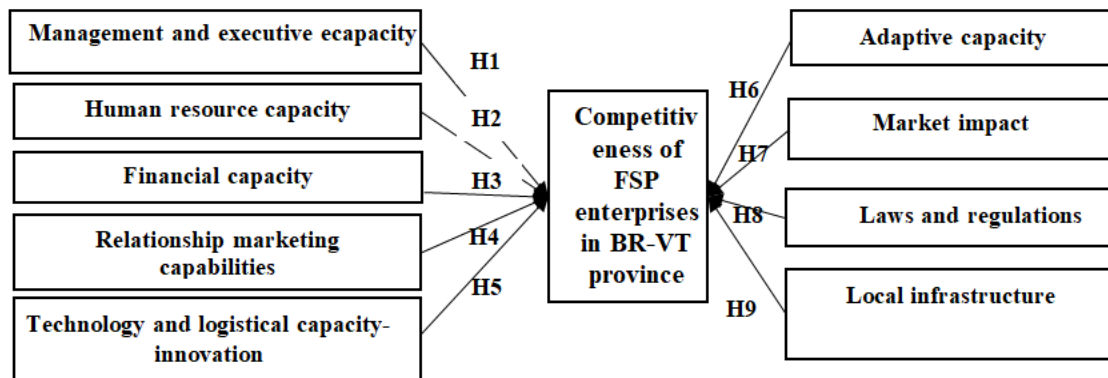
From the basis of capacity theories and independent variables inherited from the Diamond model (Porter) Sharmilee Sitharam et al. (2016), Zahari Goranov (2016), Asma Benzazoua Bouazza et al (2015). Based on the Thompson - Strickland method, the author selects 9 factors affecting the competitiveness of enterprises in accordance with the conditions of BR-VT province and adds two new factors to measure the factors affecting the competitiveness of enterprises. to the competitiveness of seafood enterprises in BR-VT province. Those are (1) Management and operating capacity. (2) Financial capacity. (3) Adaptive capacity. (4) Human resource capacity. (5) Market impact. (6) Legal and regulatory. (7) Local infrastructure. (8) Relationship Marketing capabilities (new factor) and (9) Technological and logistics-innovation capabilities (new factor). Inheriting previous studies of Nguyen Tri Thanh (2022), Nguyen Minh Tuan et al. (2020), Nguyen Thi Le et al., 2(019), Gary W. William & Oral Capps et al., ( 2017), Sharmilee Sitharam et al (2016), Tang Thi Ngan et al (2016), Huynh Thanh Nha et al (2015), Ylvije Borici Kraja, (2015).

Through practical research and discussions with experts, the research model is proposed with the following factors (table 2.2).

**Table 2.2.** Factors constituting competitiveness of frozen seafood-processing enterprises in Ba Ria-Vung Tau province

| No | Scale components                                     | Scale properties  |
|----|--|---|
| 1  | Management and executive capacity                    | Inheritance, Porter, 1990; Thompson Strickland, 2001, Ho, 2005. |
| 2  | Relationship marketing capabilities                  | Discover more through expert discussion                         |
| 3  | Human resource capacity                              | Inheritance, Sauka (2014), Pham Thu Huong, 2017.                |
| 4  | Financial capacity                                   | Inheritance, S. Onar et al., 2010; Pham Thu Huong, 2017.        |
| 5  | Technology and logistical capacity-innovation        | Discover more through expert discussion                         |
| 6  | Adaptive capacity                                    | Inheritance, Hudson 2001; Quinn, Li 2003, Pham Thu Huong, 2017. |
| 7  | Market impact  | Inheritance, Pham Thu Huong, 2017; Tang Thi Ngan et al., 2016.  |
| 8  | Laws and regulations                                 | Inheritance, Pham Thu Huong, 2017; Tang Thi Ngan et al., 2016.  |
| 9  | Local infrastructure                                 | Inheritance, Pham Thu Huong, 2017; Tang Thi Ngan et al., 2016.  |
| 10 | Competitiveness of FSP enterprises in BR-VT province | Inheritance, Michael Porter, 1990); Thompson Strickland, 2001.  |

Source: Author's compilation



**Figure 2.3:** Proposed research model

*Source:* Author's compilation

## 2.7.2. RESEARCH HYPOTHESIS

### 2.7.2.1. Management and Executive Capacity

Kuo, Lin, and Lu (2017) argue that organizations with dynamic capabilities can use integrated resources and services to keep costs low and use assets to gain competitive advantage through competitive advantages feasible in a changing environment. To achieve a competitive advantage, internal resources play a more important role than external factors (Zainudin et al., 2018), organizational growth needs to encourage and contribute to competitive advantages. A leader is someone who has the ability to create a vision for an organization or group and exercise his or her power to influence those who follow that vision.

#### The Hypothesis Posed Is:

**H1:** Leadership and executive capacity have a positive influence on the competitiveness of frozen seafood-processing enterprises in Ba Ria-Vung Tau province helps businesses operate more effectively than competitors.

### 2.7.2.2. Human Resource Capacity

Human resource capacity is one of the most important factors for the development of small businesses. According to Salem & Abdién (2017, reducing absenteeism, absenteeism and increasing job satisfaction have an impact on costs (decreased), work productivity, the efficiency of the process, and a positive effect on the competitive edge." According to Huda, N., A. (2012), companies with a qualified and well-trained workforce are likely to be more efficient. As noted by John Kay (2011), energy Human resource is one of the most important areas for the success of small and medium enterprises.

#### The Hypothesis Posed Is:

**H2:** Human resource capacity has a positive influence the competitiveness of frozen seafood-processing enterprises in Ba Ria-Vung Tau province helps businesses operate more effectively than competitors approach new and more creative things.

### 2.7.2.3. Financial Capacity

Lack of access to external capital is considered a major challenge to the growth of businesses. According to Shanty et al., (2019), financial institutions behave more cautiously when providing loans to SMEs, and SMEs are often charged high-interest rates, high collateral and loans. Krasniqi (2007) finds that lending policies and collateral requirements discourage firms from obtaining loans from banks. Some scholars believe that core competencies and competitiveness

need to be maintained in order to achieve sustainable competitive advantage (Saranga et al., 2018). The hypothesis posed is:

**H3:** Financial capacity has a positive influence on the competitiveness of frozen seafood-processing enterprises in Ba Ria-Vung Tau province helps businesses operate more effectively than competitors do enterprises know the most profitable approach to capital.

#### **2.7.2.4. Relationship Marketing Capabilities**

Berry (1983) argued in the field of service relationship marketing that relationship marketing is a marketing activity for businesses to acquire, maintain and promote effective relationships with customers. Cohesive relationships can overcome these obstacles and reduce the cost of acquiring knowledge by creating a free exchange of knowledge, thereby facilitating the exchange (Luca et al., 2018). However, the existence of competitive advantage (Harrigan and Diguardo, 2017) and the way in which large enterprises or high-tech industries gain competitive advantage in the course of the industrial competition (Kwak et al., 2018) is rarely discussed. The knowledge content is mainly related to procedures, personnel and products (Peng and Lin, 2019). After a long study of the marketing process of the service industry, it has been concluded that the ultimate goal of corporate marketing is not only to develop new customers but also to focus on retaining existing customers. The hypothesis posed is:

**H4:** Relationship marketing capacity has a positive influence on the competitiveness of frozen seafood-processing enterprises in Ba Ria-Vung Tau province helps businesses operate more effectively than competitors. s to improve long-term benefits closely with customers.

#### **2.7.2.5. Technology and Logistical Capacity-Innovation**

Emerging new technologies are creating strategic opportunities for organizations to build competitive advantage in various functional management areas including logistics and supply chain management. However, the degree of success depends on the selection of the right technology for the application, the availability of the right organizational infrastructure, and the right culture and management policies. In the logistics sector, information, communication and automation technologies have greatly increased the speed of identification, collection, processing, analysis and transmission of data with high accuracy and reliability. Technology is a means to enhance business competitiveness and performance. In logistics, many new technologies play an important role in the success of the supply chain by improving the overall efficiency and effectiveness of the logistics system. Competitive pressure is increasing and the only option to face the competition is to adopt technology-enabled activities. The hypothesis posed is:

**H5:** Technological and logistical innovation capabilities has a positive influence on the competitiveness of frozen seafood-processing enterprises in Ba Ria-Vung Tau province helps businesses operate more effectively than competitors., making it easier for enterprises to adapt to the external environment.

#### **2.7.2.6. Adaptive Capacity**

Adaptability by examining performance implications. A firm's performance is comparable to its relative performance in sales growth, return on investment, profitability, and market share relative to major competitors (Gatignon and Xuereb, 1997). Therefore, at frozen seafood-processing enterprises in Ba Ria-Vung Tau province, enterprises equipped with high adaptability can effectively cope with environmental changes and achieve outstanding performance. The concept of ingenuity represents a combination of both the potential for



adaptive knowledge access through distinct groups, units or functions (Peng et al., 2019; Peng and Lin, 2019). The hypothesis posed is:

**H6:** Adaptive capacity has a positive influence on the competitiveness of frozen seafood-processing enterprises in Ba Ria-Vung Tau province helps businesses operate more effectively than competitors. to help enterprises adapt to new environmental conditions and reduce costs.

#### **2.7.2.7. Market Impact**

The market impact has become a topic of increasing business concern. A large transaction can be broken down into a series of smaller transactions than done in one go. However, this exposes the trader to the risk of volatile markets while those trades are being made. In addition, there is still little research to explore the role of accessibility in the context of SME internationalization (Limaj and Bernroider, 2019), which is notable for discussing the importance of international SMEs. in adapting to a rapidly changing environment while operating with limited resources. Networking between companies in an industry can lead to enhanced organizational competition focus on core activities and possible market opportunities. (Cao, Li, Wang, Luo & Tan, 2018). The hypothesis posed is:

**H7:** The impact of the market has a positive influence on the competitiveness of frozen seafood-processing enterprises in Ba Ria-Vung Tau province helps businesses operate more effectively than competitors to help them overcome the impact of international economic integration.

#### **2.7.2.8. Laws and Regulations**

The introduction of competition policies in many developing countries is part of a general economic reform process that can be described as economic liberalization, deregulation and privatization. Overall, these policies aim to improve the way markets work. The profitability of research and innovation may depend on the existence of a complementarity between research and innovation and information and communication technology (ICT), which enables increased productivity from research (Mohnen et al., associates, 2018). Such reforms entail deeper integration into the world economy. The institutionality of an industry that can influence a given market, considers the influence of infrastructure, education, the labor market and others as important features to encourage energy development. organization's competitiveness (Camison & Forests, 2015); Rodríguez-Pose & Hardy, 2016). The hypothesis posed is:

**H8:** Laws and regulations have a positive influence on the competitiveness of frozen seafood-processing enterprises in Ba Ria-Vung Tau province helps businesses operate more effectively than competitors.

#### **2.7.2.9. Local Infrastructure**

Availability of efficient transportation infrastructure, to a larger extent also a communication infrastructure and access to efficient utility providers in terms of electricity, water, etc..., has long been recognized as having an important influence on productivity and competitiveness (Christian Ketels, 2016). What is said to have changed as advanced economies generally see physical infrastructure as a basic requirement that they have well met, there is now a more active discussion about the need for reinvestment and upgrading infrastructure (IMD, 2015). Local infrastructure is a combination of material and technical works that directly serve production and people's life, located on a territory of the province. The hypothesis posed is:

**H9:** Local infrastructure has a positive influence on the competitiveness of frozen seafood-processing enterprises in Ba Ria-Vung Tau, helping businesses to develop smoothly and reduce costs.

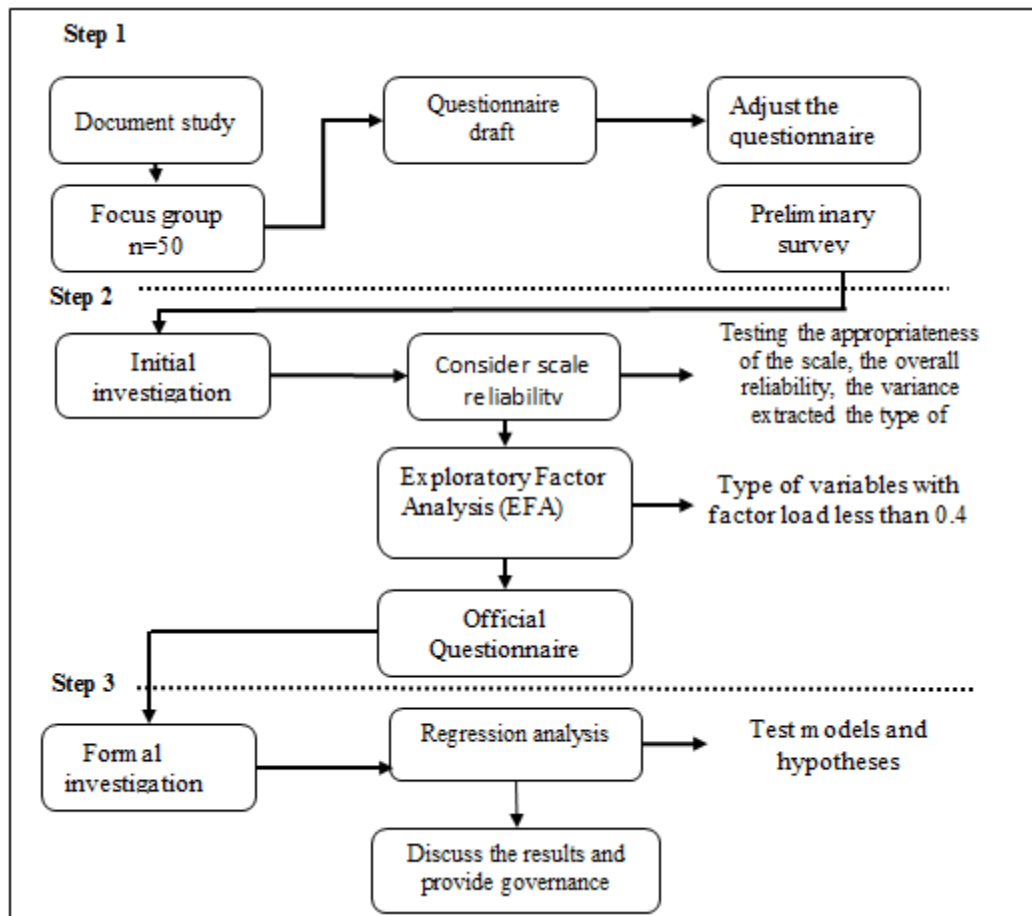
**Chapter 2 Summary**

Chapter 2 has reviewed the literature on defining competency-based perspectives in the context of explaining competitive activities, and identifying internal and external factors. With the above competitiveness approach, Chapter 2 of the thesis has also identified 9 groups of factors and concepts related to the competition of frozen seafood-processing enterprises in Ba Ria-Vung Tau, the groups of factors are: (1) Leadership and executive capacity; (2) Relationship Marketing capacity; (3) Financial capacity; (4) Technological and logistical capacity-innovation; (5) Human resource capacity; (6) Adaptation capacity; (7) Market impact; (8) Legal and regulatory and (9) Local infrastructure. The construction of a scale of each capacity and the relevance of factors to the competition of frozen seafood-processing enterprises in Ba Ria-Vung Tau.

*Chapter - 3*

*Study Design*

**3.1 RESEARCH PROCESS**



**Figure 3.1:** Research process

Source: Author's work

**3.2. CHOOSING A RESEARCH METHOD**

Mixed research methods are relatively new and are still being developed (Creswell, 2003). A mixed method combines quantitative and qualitative methods in the same study to fully understand the phenomenon under study. Thus, a mixture of research methods often yields deeper research results due to “methodological pluralism or eclecticism” (Johnson & Onwuegbuzie, 2004, p. 14).

As stated in the research overview, the aim of the thesis is to identify and measure the factors constituting the competitiveness of frozen seafood-processing enterprises in the BR-VT province. Therefore, the realization of this goal should be based on the above discussion and appropriate models. Meanwhile, in Vietnam, there are few studies on the factors related to the competitiveness of frozen seafood-processing enterprises in the BR-VT province. In addition, the research object of the thesis is frozen seafood-processing enterprises in BR-VT province; operating enterprises have their own characteristics, so it is necessary to change competitive activities to find advantages. Business.

Therefore, in order to determine the factors constituting the competitiveness of frozen seafood-processing enterprises in BR-VT province, the correlation considerations need to be made through two steps:

**Step 1:** Qualitative analysis to determine the factors constituting the competitiveness of frozen seafood-processing enterprises in BR-VT province;

**Step 2:** Quantitative analysis to test the appropriateness of the scale of factors constituting the competitiveness of frozen seafood-processing enterprises in BR-VT province. Thus, the data collection method used in the thesis is a mixed method.

### **3.3. QUALITATIVE RESEARCH**

According to Creswell (2003), "qualitative research is largely inductive, with questioners' meanings generated from data collected in the field". This method can be used if the researcher is uncertain about which variables to control (Creswell, 2003). Therefore, qualitative research methods will be useful in cases where the researcher wants to collect a general idea (not specific) from the subjects, the purpose is to explore, interpret and describe a situation situation

#### **3.3.1. Overview Document**

Reviewing the data allows for in-depth research and higher reliability in data collection, which is correlated with the factors constituting the competitiveness of frozen seafood-processing enterprises in BR-VT province in the program. 1. The thesis identifies the need to continue researching the competitiveness of frozen seafood-processing enterprises in the BR-VT province

#### **3.3.2. Expert Interview**

Interview experts in a more focused and data-exploring phase, such as participatory observation or systematic quantitative survey (Bogner and Torgersen, 2005). Expert interviews also expose them to situations where it may be difficult or inaccessible to a particular field. Expert interviews are of course not only a popular way of collecting information but also a form of research and evaluation. Do expert interviews collect information from managers of frozen seafood-processing enterprises in the BR-VT province or not?

The subjects are 15 experts: experts at universities 8 people, managers of frozen seafood-processing enterprises 5 people, BR-VT Fisheries Department experts 2 people. Gläser and Laudel advocate systematically bringing the issue of "expert quality" into the individual steps of research, from the selection of experts in the analysis of the results.

##### **• Criteria for Selecting Interviewees:**

- + Lecturer: Teaching business administration, and fisheries at universities (University of Economics, University of Finance and Marketing, Hutech University, Van Hien University).
- + Managers in the field of seafood business administration.
- + Managers of the Department of Fisheries BR-VT (those with deep expertise in fisheries).

#### **3.3.3. Draft Questionnaire Design**

Preliminary questions are designed based on the observed variables in the scale of each capacity (table 3.1), adjusted through expert comments into new variables suitable to the content of each question item, in a homogenous form agree or disagree with the content of the question.

**Table 3.1:** Preliminary survey on competitiveness of frozen seafood-processing enterprises in Ba Ria-Vung Tau

| No  | Content   | Level    |       |
|---|---|----------|-------|
|   |   | Disagree | Agree |
| <b>1. Management and operating capacity</b>             |   |          |       |
| 1   | Enterprise leaders, create trust in a leadership capacity                     | 1        | 2     |
| 2   | Enterprises organize and implement plans                                      | 1        | 2     |
| 3   | Enterprises arrange reasonable labor, long-term training                      | 1        | 2     |
| 4   | Enterprises have a suitable management model                                  | 1        | 2     |
| 5   | Leaders are able to communicate values and goals                              | 1        | 2     |
| <b>2. Relationship marketing capabilities</b>           |   |          |       |
| 6   | Good public relations enterprise  | 1        | 2     |
| 7   | Enterprises determine the appropriate target market                           | 1        | 2     |
| 8   | Businesses understand the needs of customers                                  | 1        | 2     |
| 9   | Businesses have a good customer care system                                   | 1        | 2     |
| <b>3. Human resource capacity</b>                       |   |          |       |
| 10  | Workers have the ability to renew products                                    | 1        | 2     |
| 11  | High labor productivity   | 1        | 2     |
| 12  | Labor with appropriate expertise  | 1        | 2     |
| 13  | Human resources to meet job requirements                                      | 1        | 2     |
| <b>4. Financial capacity</b>                            |   |          |       |
| 14  | Enterprises with effective capital turnover                                   | 1        | 2     |
| 15  | Enterprises raise capital easily  | 1        | 2     |
| 16  | Enterprises with annual profits increase                                      | 1        | 2     |
| 17  | Enterprises with healthy financial activities                                 | 1        | 2     |
| 18  | Businesses with good solvency   | 1        | 2     |
| <b>5. Technology and logistical capacity-innovation</b> |   |          |       |
| 19  | Enterprises often update new techniques                                       | 1        | 2     |
| 20  | Enterprises are proactive in sourcing raw materials                           | 1        | 2     |
| 21  | Enterprises with modern production techniques                                 | 1        | 2     |
| 22  | Enterprises have production processes to ensure food safety and hygiene       | 1        | 2     |
| <b>6. Adaptability</b>                                  |   |          |       |
| 23  | Do businesses have the right approach to customer preferences?                | 1        | 2     |
| 24  | The current ability of enterprises to accept market challenges                | 1        | 2     |
| 25  | The current capacity of enterprises is ready for challenges and opportunities | 1        | 2     |
| 26  | Product innovation; difficult to distinguish the brand of enterprises         | 1        | 2     |
| 27  | This market is too competitive, and price wars often happen                   | 1        | 2     |
| <b>7. Market impact</b>                                 |   |          |       |
| 28  | The supply of aquatic products in the country has increased rapidly           | 1        | 2     |
| 29  | The market capacity of seafood raw materials is large                         | 1        | 2     |
| 30  | Competition to buy badly related materials                                    | 1        | 2     |

|  |   |   |   |
|--|---|---|---|
| 31   | High inflation related to seafood prices  | 1 | 2 |
| <b>8. Laws and regulations</b>   |   |   |   |
| 32   | Legal and regulatory stability is well related to TS  | 1 | 2 |
| 33   | Business registration is still difficult  | 1 | 2 |
| 34   | Vietnam's export promotion policy   | 1 | 2 |
| 35   | Managing foreign trade is still difficult   | 1 | 2 |
| <b>9. Local Infrastructure</b>   |   |   |   |
| 36   | Unstable electricity prices related   | 1 | 2 |
| 37   | The vocational training system for seafood export is not good   | 1 | 2 |
| 38   | High shipping cost  | 1 | 2 |
| 39   | Weak water supply system, unsafe quality  | 1 | 2 |
| 40   | Convenient transportation   | 1 | 2 |
| <b>10. Competitiveness of frozen seafood-processing enterprise BR-VT</b> |   |   |   |
| 41   | Seafood enterprise BR-VT provides products with the lowest cost   | 1 | 2 |
| 42   | BR-VT seafood enterprises are always in a competitive position  | 1 | 2 |
| 43   | Products of frozen seafood-processing enterprise BR-VT launched based on product innovation                             | 1 | 2 |
| 44   | Frozen seafood-processing enterprise BR-VT has made good use of the above 9 capacity factors in production and business | 1 | 2 |

*Source:* Results of group discussion

The Working method is through face-to-face meetings, and documents and questions are sent in advance to the respondents by email and google forms. The average time for an expert interview for each appointment is from 20 to 30 minutes, according to the order of asking questions and clarifying by an interview form of each group of factors, the time for group discussion is about 60 minutes. The results of the correlations to the competitive capacity of the BR-VT province are described in Table 3.2.

**Table 3.2:** Competitive factors of frozen seafood-processing enterprises in Ba Ria-Vung Tau

| No | Factor  | Number of opinions agree | Percentage agree |
|----|---|--------------------------|------------------|
| 1  | Management and executive capacity             | 14                       | 93.33            |
| 2  | Relationship Marketing Competency             | 13                       | 86.67            |
| 3  | Financial capacity                            | 15                       | 100.00           |
| 4  | Technology and logistical capacity-innovation | 12                       | 80.00            |
| 5  | Human resource capacity                       | 13                       | 86.67            |
| 6  | Adaptive capacity                             | 14                       | 93.33            |
| 7  | Market impact                                 | 14                       | 93.33            |
| 8  | Laws and regulations                          | 14                       | 93.33            |
| 9  | Local infrastructure                          | 13                       | 86.67            |
|    | A number of experts interviewed               | 15                       |                  |

*Source:* Author's compilation

### **3.3.4. Confirming the Scale Related to the Competition of Frozen Seafood-processing Enterprises in Ba Ria-Vung Tau**

Research is the process of collecting, analyzing and interpreting data for a phenomenon (Leedy & Ormrod). A systematic research process that defines objectives, manages data, and communicates findings within an established framework and consistent with existing guidelines. Guiding frameworks provide researchers with guidance on what to include in a study, how to do it, and what types of inferences can occur.

### **3.4. QUANTITATIVE RESEARCH**

The questionnaire was carried out with a specific target group and can also be carried out on multiple groups along with a comparative analysis of the correlation to the competitiveness of Ba Ria frozen seafood-processing enterprises- Vung Tau. In this way, the accuracy of the results obtained can be easily maintained as many respondents will be addressed using random selection, and survey research conducted in person or by telephone phone. The questionnaire is divided into two parts, the first part aims to collect the opinions of survey subjects on the content of correlation with the competitiveness of frozen seafood-processing enterprises in Ba Ria-Vung Tau. The next section collects personal and business information

#### **3.4.1. Sampling Method**

Linkert (1932) argues that non-probability sampling is where the researcher's knowledge and experience are used to create a sample. Due to the involvement of the researcher, not all members of the target population have the same probability of being selected to be part of the sample, and in the convenience sample, the elements of the sample are selected for only one main reason: location near researcher. These templates are quick and easy to implement because there are no selection parameters. Based on the sample distribution theory, EFA factor analysis requires a large sample to obtain a reliable estimate (Joreskog & Sorbom, 1996; Raykov & Widaman, 1995).

While the question of how large a sample should be has not been completely resolved (Hair et al., 2010), the sample depends on the statistical methods used. However, (Hair et al., 2010) recommend that the ratio of a sample size to the number of these indices should be at least 5:1 when using EFA.

The sample size depends on the processing method such as EFA, and regression, as well as the reliability needed for the study. The larger the sample size, the more reliable it is, but it costs time and money. There are many empirical formulas to calculate the appropriate survey sample size. For this topic, using EFA analysis with 44 variables, 44 observed variables were collected, so the minimum number of samples is 220 samples. (5 samples for 1 observed variable. Hair et al. (1998) think that the minimum size is 50, and the best is 100. However, to increase the reliability of the data set and to eliminate the interview tables. is not valid, 300 samples are acceptable. For a resource using regression analysis, the empirical formula will be  $n > 8m + 50$  ( $n > 122$ ), where  $n$  is the minimum sample size and  $m$  is the number of independent variables included in the model (Bollen (1989).

#### **• Sample Selection Structure**

Specifically, the defined sample structure is selected as 402 samples are selected as follows: The number of surveyed managers (the number of sample units surveyed) of the unit is assessed based on the size of the enterprise. Small enterprises account for 15% -20%; Medium enterprises account for 50% - 70%; large enterprises account for 15% -10% (table 3.3).



- The number of managers surveyed by gender is set within the limits: Females from 30% - 35%, Males from 35% - 65% (table 5.1).

- The number of managers surveyed by age from 25 to 35 years is 10% - 15%; from 35T - 45T is 30% - 50%; over 45 T is 20% - 30%

- The number of managers surveyed, including the Board of Directors of the Company, Director of the Enterprise is 5% - 10%; the head of the department of operations is 40% - 50% and the manager of the workshop and the production department is 30% - 40% (table 3.8) of the managers of the frozen seafood-processing business. The list of surveyed enterprises is described in Appendix 4.

Regarding the structure of the survey subjects: the total number of surveyed enterprises are BR-VT GIs (out of a total of 129/260 surveyed enterprises and establishments of BR-VT). The structure of the survey object after cleaning the survey form is shown in Table 3.3

**Table 3.3:** Survey sample selection structure

| No | Respondents                                    | Expected           |                    | Perform            |                    |
|----|--|--------------------|--------------------|--------------------|--------------------|
|    |  | Total Percentage % | Total Percentage % | Total Percentage % | Total Percentage % |
| 1  | Enterprise leaders (Director, Deputy Director) | 50                 | 5                  | 44                 | 10,9               |
| 2  | Head, Deputy Head of Professional Department   | 350                | 35                 | 215                | 53,5               |
| 3  | Leader of Workshop, Production Department      | 600                | 60                 | 143                | 35,6               |
|    | <b>Total</b>                                   | <b>1.000</b>       | <b>100,00</b>      | <b>402</b>         | <b>100,0</b>       |

*Source:* Author's compilation

The structure of the survey respondents showed that: Enterprise leaders accounted for 10.9%. The deputy head of the professional department accounted for 53.5%, and the leaders of the workshops and production departments accounted for 35.6%. These are middle managers in the surveyed enterprises, so most of them are knowledgeable about the business activities of enterprises, so the results of the survey questionnaires are reliable.

### 3.4.2. Data Processing

#### 1) Collect, Enter and Process Raw Data

The total number of questionnaires distributed was 480 tables, and the number of questionnaires collected was 440 questionnaires. Using the error detection frequency table, clean 440 questionnaires for errors or use the error finding and correction procedure. 38 questionnaires were found invalid, and 402 questionnaires were used, reaching 91.36%.

#### 2) Check the Reliability Factor

Reliability coefficients are used to check and eliminate nonconforming variables variables with total correlation coefficient  $> 0.4$  and confidence coefficient  $> 0.6$  (Nunnally & Bernstein, 1994),

#### 3) Exploratory Factor Analysis

EFA analysis aims to shrink and summarize data. The EFA method analyzes the relationship to see which variables are strongest and remove or combines the unimportant variables into a group of basic variables and major variables. In there:

The scale has the individual values of the factors (Eigenvalue > 1 and the total variance extracted  $\geq 50\%$ ). KMO index must be  $0.5 \leq \text{KMO} \leq 1$ . Barlett test has  $P \leq 0.5$  that the variables are related, with the lowest Factor loading  $\geq 0.3$  or  $\geq 0.5$  (Hair & cs., 2010).

- **Reliability of the Scale**

Assessment of the reliability coefficient (CA): (1) General reliability; (2) Extracted variance, composite reliability ( $\rho_c$ ) and extracted total variance ( $\rho_{vc}$ ). Total extracted variance.

- **Convergence Value**

Gerbring and Anderson suggested that the scale reached the convergent value when the normalized weights of the scales were all high ( $> 0.5$ ) and  $p < 0.05$ .

- **Distinguishing Value**

It is possible to test the discriminant validity of the concepts in the critical model (Martínez- et al., 2013). The correlation coefficient between the component concepts of a large concept must be  $< 0.9$  to reach the discriminant value.

- **Evaluation of Unidirectionality**

A measurement model that fits the market data and does not have the errors of the observed variables correlate with each other, the set of observed variables is unidirectional (Steekamp & Van Tijing).

#### **4) Linear Regression Analysis**

The coefficients of determination,  $R^2$  and  $R^2$  are adjusted to evaluate the fit of the model. The larger the adjusted  $R^2$ , the better the fit of the model.  $R^2$  shows how many percentage of the built-in, linear regression model fits the data. If the VIF of any variable  $< 2$ , there is no multicollinearity. (Nguyen Dinh Tho, 2011, page 497).

The t-test is a method of determining whether two populations are statistically different, while ANOVA determines whether three or more populations are statistically different from each other. Both consider the difference in the means and the spread of distributions (i.e. variance) between groups; however, the way they determine statistical significance is different

### **Chapter 3 Summary**

Chapter 3 has presented the qualitative and quantitative research process; the factors that correlate with the competitiveness of the BR-VT GIs have 09 independent variables and 01 dependent variables. Presents how to select samples, how to process data, test scales, test models and research hypotheses. In which, the initial assessment by reliability coefficient and EFA analysis, regression and test index with values F,  $R^2$ , and correlation coefficient.

*Chapter - 4*

*Research Results and  
Discussion*

#### 4.1. A FRAMEWORK FOR ANALYZING THE CURRENT SITUATION OF COMPETITIVE FACTORS

##### 4.1.1. Criteria to evaluate the competition of frozen seafood-processing enterprises in Ba Ria-Vung Tau

The indicators to measure the competitiveness (competitive capacity) of enterprises are used to evaluate the competitiveness of enterprises. Generalized into 9 groups (1) Management and operations competencies (2) Relationship marketing competencies (3) Financial capabilities (4) Technological and logistics-innovation capabilities (5) Competencies human resources and (6) Adaptation capacity (7) Market impact, (8) Legal and regulatory, (9) Local infrastructure.

**Table 4.1:** Indicators measuring the competitiveness of enterprises

| Index group  | Index group Component indexes  |
|--|--|
| Human resource capacity                              | Human resource capacity -Motivation for employees<br>-Evaluate labor results<br>-Ability to respond to changing work   |
| Technological and logistical capabilities-innovation | -Application of technology in product and service development.<br>-Continuously updating technology applications and technical improvement<br>-Improve customer service through the Internet of things, cloud computing, artificial intelligence<br>-Strengthening qualified human resources for research and technology development |
| Financial capacity                                   | -Modern level of production techniques<br>-Financial capacity -Easily raising capital<br>-Increase in revenue and profit<br>- Capital  |
| Management and executive capacity                    | -Ability to create trust Management and operating capacity<br>- Analyze the appropriate management model<br>- Reasonable labor arrangement, long-term training   |
| Relationship Marketing Competency                    | - Ability to improve product and service quality<br>-Ability to identify core markets<br>- Ability to understand customer needs  |
| Adaptive capacity                                    | - Ability to improve the quality of products and services<br>-Ability to identify core markets<br>- Ability to understand customer needs   |
| Market impact  | - Encourage active competition, antitrust<br>-The year to catch the opportunity to penetrate the international market<br>-Create and maintain a stable market environment  |
| Laws and regulations                                 | - Creating favorable conditions for enterprises doing business in XS<br>-Have a policy to develop business market  |
| Local infrastructure                                 | - Good quality convenient transportation system<br>-Full business support service<br>-Convenient information system  |

*Source:* Author's summary

#### **4.1.2. How to evaluate the competitiveness of frozen seafood-processing enterprises in Ba Ria-Vung Tau?**

Based on the above criteria, the author designed a questionnaire to collect data from BR-VT enterprises; Select and survey your competitors. A survey sheet is in Appendix 3A. Including 9 groups of indicators in Table 4.1. There are 9 groups of indicators that are calculated for each indicator according to the analytical framework, according to the survey years, the average value, the highest value, and the lowest value for comparison. Statistics of competitive energy data and comparison of changes over time, competitors in the same industry with similar business environments and similar business characteristics are the Kien Giang and Ca Mau seafood-processing enterprises.

#### **4.2. Current status of competitiveness of frozen seafood-processing enterprises in Ba Ria-Vung Tau**

##### **4.2.1. Overview of socio-economic resources of Ba Ria-Vung Tau province**

Ba Ria-Vung Tau has a coastline of 305.4 km, of which the mainland is 100 km and an island district, with over 100,000 km<sup>2</sup> of continental shelf, the sea area is about 297,000 km<sup>2</sup>. The waters of Ba Ria - Vung Tau have very rich and diverse seafood resources. The time of near-shore fishing is from 200-250 days/year, large boats fishing far from the shore operate from 300-310 days. Currently, the province has more than 129 enterprises and 290 establishments and individuals engaged in preliminary processing and processing of seafood, more than 42 processing factories meeting HACCP standards with a capacity of more than 250,000 tons of finished products per year. Which, more than 28 establishments were granted CODE-EU certificates (certificates of eligibility to export to the European market).

Since the early years of re-establishing the province (August 1991), the BR-VT Party Committee has developed fishing, aquaculture and seafood-processing to become a spearhead economic sector of the locality. Over the past 22 years, the province has prioritized investment in the construction of three permanent fishing ports, three clusters of semi-permanent ports, and six fishing ports scattered in districts and towns, forming a total length of wharves of 1,575 m, with a total cargo capacity through fishing ports of 360,000 tons/year. BR-VT seafood industry has an average growth rate of 7.78%/year, continuously being one of the three leading localities in the country in the field of fishing, processing and exporting seafood. According to the Department of Agriculture and Rural Development of Ba Ria - Vung Tau province, in the first 6 months of 2018, the province's total aquaculture production reached 8,278 tons, an increase of 8.89% over the same period in 2017. In early 2021, BR-VT province recorded export growth of agricultural, forestry and fishery products. The export situation of agricultural, forestry and fishery products of Ba Ria - Vung Tau province in October 2021 reached 42.19 million USD. Accumulated in the first 10 months of the year reached 405.08 million USD, reaching 158.01 % compared to the previous year with the same period in the first 10 months of 2020 (the first 10 months of 2020 reached 256.08 USD).

##### **(1) Labor and Employment**

Data from the Ba Ria-Vung Tau Department of Statistics show that, at present, each year the province has about 20,000 people added to the labor force. The abundance of this force is really creating great opportunities for the economic development of the province. Once this force is fully utilized intellectually and labor force into production, it will inevitably create a lot of material wealth, creating great-accumulated value for the future of the province.

## **(2) Transportation System**

Ba Ria - Vung Tau province has 3 important national highways including National Highway 51 connecting Ho Chi Minh City, Vung Tau and TP. Bien Hoa Dong Nai; Highway 55 connects TX. Ba Ria with Binh Thuan province and National Highway 56 connecting TX. Ba Ria with TX. Long Khanh (Dong Nai). These national highways have been upgraded to promote the transport needs of the province. In addition, provincial roads 44A, 44B, 328, 329 and district roads are all asphalted; traffic is quite good between districts.

The system of coastal roads, roads to aquaculture areas, fishing ports, fishing wharves and to seafood, processing factories are also well invested. In general, traffic meets the development needs of the fisheries industry in the coming time.

## **(3) Electrical System**

Currently, in Ba Ria - Vung Tau province, there are two major power sources as follows:

- Phu My thermal power center in Tan Thanh district consists of 6 plants with a total capacity of 3,868 MW connected to the national network through the 500 KV Phu My station (Phu My 3, Phu My II.2, Phu My 4 plants). 500 KV power generation) and 220 KV station (Phu My I, Phu My II.1, Phu My II.1MR).

- Ba Ria gas thermal power plant with a total capacity of 354 MW (including 2 \* 20 + 3 \* 33 + 58 MW to generate 110 KV and 220 KV). Between the two voltage levels 220 KV and 110 KV, there is a communication transformer of 125 MVA.

## **(4) Water Supply and Drainage System**

Up to now, the province has 6 water plants with a total capacity of about 120,000 m<sup>3</sup> day/night, ensuring a sufficient supply of clean water for urban areas.

In general, the current water supply system is just enough to serve the socio-economic development of the province. In the future, it is still necessary to renew water plants for industrial zones and new urban areas.

## **(5) Industrial Wastewater:**

The wastewater of enterprises has not been thoroughly treated. Some facilities have treated wastewater, but not in accordance with the process, thus not meeting sanitary standards, and then discharged directly into the canals. Only factories with large investment capital have hygienic wastewater treatment systems.

### **4.2.2. Analysis of Competition of frozen seafood-processing enterprises in Ba Ria-Vung Tau**

#### **4.2.2.1. Human Resource Capacity**

The majority of workers are untrained, relying only on experience in the working process. There is almost no training or self-improvement through practical work, so productivity is not high. According to Table 4.2, the number of employees of BR-VT in frozen seafood-processing enterprises engaged in seafood-processing activities increased and decreased unstable in the period 2017-2019, in 2019 was 103,125 people. Among the surveyed units, 79% of enterprises and establishments use over 90% of human resources for direct production and less than 10% of management work. Regarding direct production workers, only 26.26% -29.52% have intermediate or higher qualifications, 20-25% have seniority of more than 5 years and more than 50% of workers have skill levels below level 4/7. The number of untrained employees is 76.79%, which leads to low product quality, low labor productivity, and poor competitiveness of enterprises.

#### **4.2.2.2. Technology and Logistical Capacity-Innovation**

According to the project report "Assessment of the technical situation of production facilities in Ba Ria-Vung Tau Province in 2016 and Proposes an innovation plan in the Period 2017-2019" (Ba Ria-Vung Tau Department of Science and Technology, 2017), the technical level of seafood-processing in the province is reflected in the following key features. Only 4-6% of businesses use modern European technology, a unit with an advanced IQF instant freezing line. Most enterprises are using outdated technology, the frozen processing capacity accounted for over 91%, which was equipped before 2010.

The overall efficiency of the whole industry is still low, reflected in the capacity utilization factor below 5.25%, and the material utilization factor below 50%. Due to low profits, few units can change techniques and purchase equipment to reduce costs. There 36% of enterprises self-assessed that they have 4% of modern key equipment (although in fact, over 86% of the surveyed equipment has a productive year before 2010), while the majority of units use equipment outdated, in which manual labor accounts for more than 50% of the stages. This shows the asynchronousness of the equipment, as well as the efficiency of the current use of equipment in enterprises frozen seafood-processing enterprises BR-VT, only has a mechanization level not exceeding 50%, many stages of manual labor, equipment innovation coefficient is low below 10%/year. Production machinery and equipment mostly belong to the old generation, with low industrial features; investment is patchy, asynchronous, unbalanced, and lacks the necessary equipment. Although there are, some new technical lines that have a large capacity, in fact, they can only exploit from 50 to 60%. The consumption of raw materials and energy for a product unit usually exceeds 1.2 -1.5 times compared to the average level in foreign countries. Low technical capacity, plus a series of other problems makes enterprises unable to compete.

#### **4.2.2.3. Financial Capacity**

Given the importance of a business's capital structure, the first step in the capital decision-making process is for the company's board of directors to decide how much outside capital to raise for the business. The use of financial advantage is also valuable when the asset purchased with debt capital collects more than the cost of that debt was used to sponsor them. If the company does not have enough taxable income to shield it, or if the company's operating profits are below its critical value, financial advantage will reduce the value of equity and thus the value of the company.

Data from frozen seafood-processing enterprises BR-VT shows an increase in liabilities because the debt ratio is over 40% every year; at the same time, the loan growth rate is fast and continuous over the years; Debt in 2019 increased by 62% (31,310 billion) compared to 2011 (11,866 billion). Many businesses use financial advantage instead of buying more equity, which can reduce the earnings per share of existing shareholders. Financial advantage has two main advantages: Financial advantage can allow an entity to earn a disproportionate amount on its assets. Favorable tax treatment. The ideal level of advantage is to increase a firm's ROE because advantage increases a stock's volatility, increases risk, and therefore returns. Therefore, if advantage increases productivity, its "good" advantage, otherwise, it is bad for performance.

#### **4.2.2.4. Management and Executive Capacity**

According to the report on Development Planning to 2015 and Orientation to 2020 (Southern Fisheries Planning Sub-Institute 2014). The management capacity of managers of frozen seafood-processing enterprises BR-VT is shown in the following main features:

Human resources are still at a low level. The proportion of economic managers with university and post-graduate degrees accounted for 39%, intermediate level, 33%, and high school 25%. The proportions of technical and professional managers are 41% and 34%, respectively

According to the survey results of the owners of unique seafood-processing enterprises in BR-VT, in general, only 44.31% of the owners of frozen seafood-processing enterprises have university degrees; 36.23% have college-intermediate degrees; and the number of owners of frozen seafood-processing enterprises with primary and secondary education is 16.77%. Most of the owners of frozen seafood-processing enterprises in BR-VT, even those with high university education, have little training in economic knowledge and leadership. Only 19.66% of business people are trained in business knowledge, in addition, foreign language skills are very weak. This has much to do with the management ability and legal and regulatory understanding of the frozen seafood-processing enterprises in BR-VT. Despite the lack of knowledge and management skills, the owners of frozen seafood-processing enterprises in BR-VT have not focused on participating in training and retraining to improve their knowledge and skills on management, and qualifications. Education. Management based on experience is 55.62%, with training participation being 44.38%. According to statistics, only 27.84% have attended the professional director class.

#### **4.2.2.5. Relationship Marketing Capabilities**

Relationship marketing is the establishment, development, and maintenance of high-value relationships with individual customers, suppliers, employees and partners. ITBs may have partnerships with export intermediaries with relationship marketing capabilities. Relationship marketing capabilities for positional advantage in export markets. Mainly based on the competitive advantage of resources, the author hypothesizes the main relationships between transnational distance and location advantage and the regulatory effects of the relationship marketing capacity of the country's export intermediary partnerships in the export context.

The survey results of the seafood-processing industry show that more than 46% of existing enterprises have higher prices and are equivalent to the market, 14% have lower prices and 40% have prices equivalent to similar products produced by other provinces. The above results show that there are still many unreasonable costs in the production process and partly represent a weakness in the market promotion. Most businesses have a planning department combined with a Marketing department (61.45%). Only 38.55% of enterprises have a separate marketing department, but most of them are not fully staffed by a standard Marketing department (5 departments). There are 9.45% of enterprises that have a number of new business planning and many enterprises do not have a market strategy for seafood products. Enterprises have not yet realized the need for a professional Marketing department. Many companies fail because they do not have a clear, methodical and long-term marketing plan. It is necessary to have a Marketing relationship strategy to create long-term relationships with customers, or one-to-one relationships with close customers, in order to create sustainable development, especially in difficult markets.



**4.2.2.6. Adaptive Capacity**

Adaptive capacity refers to the ability of systems, organizations, and people to adjust to potential damage, take advantage of opportunities, or respond to the consequences. In the context of socio-ecological systems that go hand in hand, adaptive capacity is often associated with the following characteristics: the ability to learn, store knowledge and experience of organizations and networks, and creative flexibility (IPCC (2014)). In the context that adaptive capacity depends on the interwoven relationship of social, political, economic, technological, and institutional factors operating at many scales (Vincent, Katharine, 2007) BR-VT frozen seafood-processing enterprises need to change their awareness of food safety and hygiene, the origin of raw materials, and ignore the form of trade in frozen seafood small, fragmented, in decision-making, transformation and problem-solving capacity to meet and consider the needs of all stakeholders. With the current capacity, only 12.77% of enterprises can cope. With the challenges and opportunities in the market, frozen seafood-processing enterprises BR-VT has not been able to do it because they have not linked the capabilities of internal resources, and have not created adaptive capacity and profit competitive position in the external market. Only 14.95% of businesses create an enabling environment to foster innovation, experimentation, and the ability to discover the right solutions to capitalize on new opportunities.

**4.2.2.7. Market Impact**

Because the market is an objective, each production and business opportunity is not capable of changing the market and conversely, they must approach to adapt to the market. Obeying market rules, enterprises promote their available capabilities as a guideline for effective operation in the market mechanism. The newly developed transport system has made fresh fish more available in the market and helps to integrate the market at different levels.

The BR-VT fisheries industry is considered a driving force promoting the sustainable development and socio-economic progress of rural fishermen and fish farmers. Almost all activities in the fisheries sector such as fish farming, nursing, feeding, harvesting, transporting, marketing, drying, exporting and other ancillary activities are carried out by the private sector. Research, development, extension and management activities are carried out by the public sector. The current low level of seafood production in Vietnam is due to a lack of technical knowledge and disease control, inadequate management and a lack of skilled workers.

The forms of competition to buy, the purchase, sale and collection of seafood are very related and businesses can only meet 60% of the demand for raw materials for production, competition for raw materials is bad for 36.69% of businesses when collecting purchasing raw materials. The price of raw materials is increased when the market is in short supply of aquatic materials, making the input costs of all enterprises increase, and the competitiveness of enterprises is limited. Lack of skilled labor to 66.05%, so labor productivity is poor, output quality is not high. In addition, the traceability will cause the BR-VT seafood industry to take some time to correct the process and infrastructure. Another negative factor is the dispute between farmers and businesses, which is caused by value and supply chains in industries such as producers, seed companies, purchasing, processing and markets, but in general, the interdependence. The link is still quite loose. When the seafood market is scarce, farmers tend to not comply with the commitments under contracts signed by enterprises. On the contrary, when the seafood market is sluggish and prices fall, farmers can easily fall into the situation of being forced on prices by businesses. The inequality between enterprises and the unsustainable link between enterprises

and aquaculturists above consumes resources of BR-VT seafood when competing in the world market.

#### **4.2.2.8. Laws and Regulations**

Legislation and regulation play a role in adjusting the economic structure, manifesting in two aspects: perfecting policies and legislation that is beneficial to the adjustment of the occupational structure of the labor market, and minimizing obstacles in economic structural adjustment, and as an automatic adjustment tool for economic growth.

Through the study of a number of regulations, enterprises have highly appreciated, although the policy system is not complete and complete and all policies are synchronous, in general, 33.76% of enterprises are satisfied acknowledges the Government's attention and trend of better support for frozen seafood-processing enterprises in BR-VT province. Vietnam's seafood industry is an economic sector that receives a lot of support from the State. However, only 8.48% of frozen seafood-processing enterprises enjoy the support of policy circulars to support businesses.

#### **4.2.2.9. Local Infrastructure**

Hubda (2012) finds that the economic growth of SMEs in Vietnam is hindered by related external factors, such as poor economic conditions and inadequate infrastructure. Businesses must make decisions that not only deal with the opportunities that exist for the business but also with business growth in a changing environment with dynamic, competitive conditions where each competitor competes for competition and tries to do the impossible in order to survive (Scarborough et al., 2009).

The local infrastructure system to serve the population is a set of systems (e.g., water supply, electricity supply, transportation, etc.) as an “infrastructure network” (Pederson et al. et al 2006; Rinaldi et al 2001). What is the difference between modelling national and local interdependencies?

Shortcomings in infrastructure investment and development:

- Assess the vulnerability of key infrastructures, and develop mitigation measures and adaptation plans for identifying critical infrastructures.
- Delivery of infrastructure services delivered through infrastructure assets Management and operational infrastructure: Identify potential risks to critical local infrastructure, maintain critical infrastructure urban services and identify affected communities
- Plan for disaster scenarios and develop disaster management and recovery plans so that disruptions in utility services can be minimized
- Provision of services provided through infrastructure assets (e.g. transit services; telecommunications services; electricity, gas and water supply, etc.)
- Clean water quality affects 16.22% of enterprises, causing variable costs to increase, and product costs by 3%. Therefore, the problem of ensuring product quality and food safety and hygiene of enterprises is still difficult. In the frozen seafood-processing industry, the requirement for fresh ingredients is great pressure on transportation, handling and preservation.

### **4.3. Comparing the competitiveness of frozen seafood-processing enterprises in Ba Ria-Vung Tau province with competitors according to each competitive factor**

#### **4.3.1. Choose a Competitor**

The author chooses Kien Giang seafood-processing enterprises as a counterweight to compare the competitiveness with frozen seafood-processing enterprises BR-VT for the following reasons:

- Having the same start-up conditions, in localities with land bordering the sea with many aquatic products and aquaculture areas.

- Having the same view of finding a competitive advantage through improving capabilities: human resources, leadership, finance, access to technology, and ability to adapt to the market, legal and regulatory influences, local infrastructure is similar.

The perspective of developing seafood-processing and consumption in the two provinces is based on economic efficiency, social stability and minimizing environmental pollution impacts. To encourage and treat all sectors of production and business fairly, creating many jobs, and improving the quality of workers' lives. These are seafood-processing enterprises with organizational structure and linkage models that BR-VT in frozen seafood-processing enterprises can study and learn to rise up and create competitive advantages.

#### **4.3.2. Seafood-processing Enterprises in Kien Giang Province**

Kien Giang is a province located in the southwest of Vietnam in the Mekong Delta. Kien Giang region is located in the Gulf of Thailand with a 200 km long coastline running from the VN-CPC border (Ha Tien) to Ca Mau territory. Kien Giang Sea has 105 large and small islands. Phu Quoc island has the largest area of 573 km<sup>2</sup>. Kien Giang's marine fishery is more than 63,000 square kilometers with rich aquatic resources. Kien Giang has a diverse topography, with seas, rivers, mountains and islands, and a favorable geographical position for economic development such as agricultural and aquatic products for export.

Kien Giang is one of the provinces in the Mekong Delta with advantages in fishing. Annually, the output of two catches accounts for over 15% of the total fishing and seafood production and over 40% of the region's catches. The province has more than 200 enterprises preliminary processing and processing of seafood. In there are more than 23 large-scale seafood-processing and export enterprises, granted codes (codes) eligible for export to countries around the world (Mini, 2021). However, currently, the level and production technology of seafood-processing and export enterprises in Kien Giang province are still limited, and enterprises still have to face many difficulties and challenges to innovate and apply technology new technology to production and business. Most seafood-processing enterprises in Kien Giang province are aware of the positive and effective role of the application of technological innovation. However, the level and the production technology capacity of the majority of seafood-processing enterprises in the province are only at the average level. - Currently, Kien Giang province has an average annual seafood export turnover of 67.4 million USD. The export markets of the EU, Japan, Korea and Russia continue to be stable, especially the US market is facing difficulties and businesses are increasingly looking for new markets in the Middle East, Italy, Spain, etc.

### 4.3.3. Comparison of Competitiveness between Ba Ria-Vung Tau seafood-processing enterprises and Kien Giang seafood-processing Enterprises

**Table 4.2:** Table of results of a survey of competitiveness between Ba Ria-Vung Tau seafood-processing enterprises and Kien Giang seafood-processing enterprises

| No | Average factor of businesses                  | Frozen seafood-processing enterprises BR-VT compared with an average value for the period 2017-2019 |  | Frozen seafood-processing enterprises Kien Giang compared with an average value for period 2017-2019 |  |
|----|---|---|--|--|--|
|    |   | Absolute number   | Absolute Number<br>Relative Number<br>(Percentage) | Relative Number<br>(Percentage)  | Absolute Number<br>Relative Number<br>(Percentage) |
| 1  | Human resource capacity                       | 0.221   | 0.005  | 0.230  | 0.007  |
| 2  | Technology and logistical capacity-innovation | 0.347   | 0.003  | 0.372  | 0.007  |
| 3  | Financial capacity                            | 0.347   | 0.003  | 0.597  | 7.33   |
| 4  | Management and executive capacity             | 0.075   | 0.008  | 0.092  | 0.062  |
| 5  | Relationship marketing capabilities           | 0.50  | 0.0045   | 1.24   | 0.060  |
| 6  | Adaptive capacity                             | 0.17  | 0.002  | 0.31   | 0.009  |
| 7  | Market impact                                 | 0.166   | 0.009  | 0.185  | 0.009  |
| 8  | Laws and regulations                          | 0.168   | 0.002  | 0.71   | 0.080  |
| 9  | Local infrastructure                          | 0.20  | 0.002  | 0.69   | 0.100  |

*Source:* Author's calculation and synthesis

Through actual analysis of the competitiveness of frozen seafood-processing enterprises BR-VT and survey results of frozen seafood-processing enterprises BR-VT compared with other Kien Giang seafood-processing enterprises with Comments can be drawn from the frozen seafood-processing enterprises BR-VT.

The competitive advantages are listed according to specific criteria related to the specific capacity of production and business of the seafood-processing industry to provide analysis and comparison results of the competitive advantages of BR frozen seafood-processing enterprises. - VT compared to Kien Giang seafood-processing enterprises. However, it can be seen that the selection of criteria is for reference now. Some advantages can be transformed very quickly; others are difficult to define or undefined. The identification in Table 4.2 can have very different views and comments.

#### 1) Human Resource Capacity:

Regarding the use of labor and training, on average, each frozen seafood-processing enterprises BR-VT employs 250 employees, with short-term vocational training (46% - 55.7%), followed by the labor group general untrained. In fact, frozen seafood-processing enterprises do not require complex skills, just labor with simple skills. Workers with high qualifications and

formal vocational training in production management and supervision departments should account for only 7-11.2% of the workforce and from 10.03% to 22.3%, respectively for each group.

Meanwhile, Kien Giang seafood-processing enterprises need a large labor demand and resources cannot meet them, so Kien Giang seafood-processing enterprises have to organize their own training. In 2017, Kien Giang seafood-processing enterprises, to solve the labor shortage, by investing in technology applications, reduced labor by over 20% and processing output increased by over 0%. At the labor cost stage, it is easy to manage shrimp diseases and reduce the number of antibiotics and chemicals used in ponds. In general, the human resource capacity of BR-VT frozen seafood-processing enterprises compared to Kien Giang seafood-processing enterprises is still weak, lacking the need for regular intensive training.

### **2) Technological and Logistical Capacity-Innovation**

Regarding the technical level of frozen seafood-processing enterprises BR-VT, most of them are below the average level (67%), due to the outdated equipment and technical lines in seafood-processing, most of which are imported first. 2010, especially the freezing machine for raw shrimp and fish processing products. Frozen seafood-processing enterprises BR-VT has invested in new techniques to expand production facilities and penetrate new markets. About 25.8% had modern equipment, but before 2015 and 28.3% of enterprises imported machinery from industrialized countries. However, the majority of enterprises do it themselves (over 80%), followed by buying services (15 -17.4%), while only 3.8-5% receive the support of the supplier water.

As for Kien Giang seafood-processing enterprises, In general, technological and logistical capacity - equivalent to BR-VT in frozen seafood-processing enterprises, both need to link, improve technology, and gradually increase capacity

### **3) Financial Capacity**

The source of capital for frozen seafood-processing enterprises BR-VT is mainly own capital and loans. Capital from the provincial budget to support speeds up the clearance and relocation of facilities to concentrate processing zones.

With the financial situation using high loans (60%) mainly, the main situation of enterprises is very weak. Currently, BR-VT in frozen seafood-processing businesses' access to finance is a key factor affecting the growth and success of frozen seafood-processing businesses, which can be attributed to many factors. (Haron et al., 2013). More than two-thirds (72%) of owners/managers of frozen seafood-processing businesses believe that access to finance is a major challenge affecting business growth (Table 5). In seafood, access to finance is seen as a major constraint, hindering the survival and growth of newly established frozen seafood-processing enterprises (Mazanai & Fatoki, 2012). The researchers report that access to external finance is a struggle for frozen seafood-processing businesses in Vietnam, especially for companies in emerging economies. (Berger & Udell, 2006). However, the results of the study on financial access difficulties show that only half of SME owners/managers (52.24%) have difficulty accessing finance.

The current study shows that the main source of capital is equity (34.33%), followed by short-term debt (31.34%). According to Beck & Demirguc-Kunt (2006), business finance is divided into two main groups, namely equity finance and loan finance. With finance considered the main constraint to the growth and development of frozen seafood-processing businesses, BR-VT in frozen seafood-processing business owners/managers should learn differently

#### **4). Management and Operating Capacity**

Most of the BR-VT in frozen seafood-processing enterprises is now SMEs. Many of these enterprises perform many stages in the value chain, from farming to processing. The managers of BR-VT in frozen seafood-processing enterprises said that, with the reputation built up along with current efforts; BR-VT BR-VT in frozen seafood-processing enterprises will overcome difficulties in this period to complete the defined targets and plans. Moreover, the concept of management by own experience in a fiercely competitive business environment is not possible, but one must be trained through management courses, techniques and perfecting operating skills.

Kien Giang seafood-processing enterprises have an efficient and flexible organization and have established a good business strategy when the environment changes. Directors of member companies are trained in professional management classes, regularly improve their knowledge, and quickly access new techniques when Kien Giang seafood-processing enterprises deploy and apply new techniques to factories member. This demonstrates the management and administration capabilities of the directors of the member enterprises to meet the requirements of the international market penetration process: knowledge and leadership skills and personal qualities. In general, the management and operation capacity of BR-VT in frozen seafood-processing enterprises is equivalent to that of Kien Giang seafood-processing enterprises.

#### **5) Relationship Marketing Competence**

Most of the BR-VT in frozen seafood-processing enterprises are not aware of the need and importance of the marketing department. BR-VT in frozen seafood-processing enterprises, often incorporates marketing activities into their general business plan, the new way of applying Marketing is mainly used to provide general information, advertising, etc. However, it is in the current period of fierce competition that forces businesses to change their views on the role of marketing in business activities, and businesses need to be exploited effectively.

Kien Giang seafood-processing enterprises have built customer relationships on many levels, depending on the core of the target market. In general, the relationship marketing capacity of BR-VT in frozen seafood-processing enterprises has not been clearly formed. The need to set up a new marketing department comparable Kien Giang's CBTS enterprises.

#### **6) Adaptability**

To find output for products, the frozen seafood-processing enterprises BR-VT has redirected exports to Korea, Taiwan (China), Australia, China, of which 80% is the Korean market. Many products of frozen seafood-processing enterprises BR-VT gradually dominate the domestic and foreign markets, with main products such as surimi, fish, squid, octopus, crabs, crabs, etc., strongly exploit, searching for new markets, improve product quality. Recently, the situation of fierce competition for raw materials has caused many difficulties for many processing enterprises, especially small enterprises.

In 2018, technical barriers to quality standards and environmental safety caused a lot of damage to Vietnam's seafood-processing and export industry. The Kien Giang seafood-processing enterprises had to research to adapt to the above change by applying technology 4.0 in agriculture - aquaculture in countries with international prestige.... And create outstanding values. in production... Kien Giang seafood-processing enterprises research consumer tastes, related to human health, and sell safe products for users with improved designs, quality and reasonable prices.

In general, the adaptability of frozen seafood-processing enterprises BR-VT is not equal to that of Kien Giang seafood-processing enterprises, but it is also able to adapt to each market to solve difficulties and challenges.

### **7) Market Impact**

The source of raw materials used is only 60%, and additional materials must be imported from countries such as India, Indonesia, etc. BR-VT seafood-processing enterprises have not yet met the requirements of properly classifying waste according to the process and only a few enterprises have been granted ISO 9001: 2008, HACCP certificates.

Kien Giang seafood-processing enterprises are also concerned with a serious shortage of raw materials, paying attention to high-value-added products and food safety instead of price competition is helping Pangasius processing enterprises. Kien Giang Seafood regains sympathy in this market. In general, frozen seafood-processing enterprises BR-VT compared to Kien Giang seafood-processing enterprises have not been proactive and visionary about the impact of the market.

### **8) Legal and Regulatory**

Over the past time, BR-VT in frozen seafood-processing enterprises have fully and seriously implemented policies and laws on environmental protection. The Government has been and continues to perfect the institution and the legal system of telecommunications to be in line with international regulations. However, the process of supporting the fishery industry is still slow, the State has many circulars that are still limited when applying, such as Decree 67/2014/ND-CP which has revealed some limitations in the content as well as the organization implementation organization, related to the way Vietnam's export management is still inadequate. These policies have supported Kien Giang seafood-processing enterprises to set up high-tech farming areas in Loc An and Kien Giang to be able to provide a source of good quality, low-cost cleaner shrimp to meet 30% of raw material demand whether the Kien Giang CBTS enterprises?

In addition, to meet the requirements and conform to international standards, food safety and hygiene standards are equivalent to those of importing countries such as standards on production conditions and safety and hygiene for processing to raw material production, purchasing and fishing services. Kien Giang seafood-processing enterprises have researched and built high-tech shrimp farming technologies, and trained field engineers as well as high-tech workers to provide technical shrimp farming areas. High.

In general, BR-VT in frozen seafood-processing enterprises compared to Kien Giang seafood-processing enterprises has not taken advantage of the advantages in taking advantage of tax reductions in Circulars 78, 96 and Decree 218 of the Government and decisions 284/QD-NHNNI of the Governor of the State Bank on lending regulations. Decision 423/2000/QD-NHNN of the Governor of the State Bank on lending policy for farms.

### **9) Local Infrastructure**

To improve the competitiveness of the fisheries sector, BR-VT province needs to perfect the infrastructure system as well as fishery equipment in a modern direction. Upgrade and adjust port infrastructure, improving port management capacity for management boards. Apply modern techniques in fishing, preserving and producing aquatic products in order to reduce damage as well as reduce the value of products after the production process economic efficiency and reduce environmental pollution. Only then will the frozen seafood-processing enterprises have good competitive conditions.

To seize opportunities in the process of the international economic integration of Vietnam when the state joins commodity trade associations such as WTO, ASEAN, and AFTA... In addition, Kien Giang seafood-processing enterprises have improved the quality of the water environment. Currently, the quality of water supply for aquaculture activities is seriously degraded compared to previous years, directly related to the cultured objects. In general, frozen seafood-processing enterprises BR-VT compared to Kien Giang seafood-processing enterprises benefit from the same local infrastructure. However, each locality needs to develop more and more perfectly to help businesses develop better

**4.4. Summary of SWOT of seafood-processing enterprises in Ba Ria - Vung Tau**

**• Analysis of Strengths, Weaknesses, Opportunities and Threats (SWOT) of frozen seafood-processing enterprises BR-VT**

**Table 4.3:** SWOT analysis

|  |   |   |
|--|---|---|
| <b>S<br/>W<br/>O<br/>T</b>   | <p><b>Opportunity O</b><br/>                 O1. Developed economy<br/>                 O2. Join the WTO. EFA,<br/>                 O3. The diverse natural environment, convenient location, border line, a long sea route<br/>                 O4. Demand for seafood at home and abroad increases<br/>                 O5. Commercial development is getting better and better</p> | <p><b>Challenge T</b><br/>                 T1. Community cultural awareness is not high<br/>                 T2. Poorly planned traffic<br/>                 T3. Polluted environment<br/>                 T4. Many complicated regulations and procedures<br/>                 T5. Requirements on quality of products and services increase<br/>                 T6. Joining the WTO will create a fiercely competitive environment<br/>                 T7. Unstable economic market<br/>                 T8. Floods happen a lot<br/>                 T9. Overexploiting resources<br/>                 T11. Rapid urbanization speed</p> |
| <p><b>Strengths S</b><br/>                 1. Price competitiveness<br/>                 2. Financial ability<br/>                 3. Have a strong brand<br/>                 4. Service quality breakthrough<br/>                 5. Distribution network<br/>                 6. Product Variety<br/>                 7. Access to advanced technology</p> <p><b>Weakness W</b><br/>                 1. Market share<br/>                 2. Promotions<br/>                 3. Management system</p> | <p><b>SO Strategies</b><br/>                 S3,4,5+O1,2,3,5: product development → Market development strategy</p>   | <p><b>ST strategies</b><br/>                 S1,4,6+T5,6,11: Product diversification → Competitive strategy of product differentiation</p>  |
|  | <p><b>WO Strategies</b><br/>                 W1,3+O1,2,3: policy to attract good people<br/>                 Strategy for human resource development<br/>                 W1,2,3 +1,2,3,4,5: Promote marketing work → Relationship marketing strategy</p>   | <p><b>WT Strategies</b><br/>                 W1,2,3,4,5+T1+T6+T7: promote brand promotion → Brand consolidation strategy</p>  |

*Source:* Author's compilation



**• Building a Quantitative Strategic Planning Matrix (QSPM)**

Thus, with the SWOT matrix, a number of possible strategies can be selected. In the next step, the author uses the QSPM matrix to quantify the competitiveness of enterprises in BR-VT GI, thereby choosing the most feasible and suitable strategy for the actual conditions of enterprises. Based on the formation of SO, ST, and WO strategic groups, the author uses the expert method inside the company, including 15 experts to evaluate and vote for the attractiveness of each factor for each strategy.

**a) Quantitative strategic planning matrix (QSPM) groups of strengths combined with opportunities (SO)**

SO group QSPM matrix: coordinated to promote internal strengths and take advantage of external opportunities.

**Comment:** QSPM matrix analysis for the SO group showed that the SO1 strategy - selected product development strategy was chosen because of its higher total attractiveness score (TAS = 91) compared to the SO2 strategy (TAS = 91). 85) and lower than SO3 (TAS = 99). Therefore, the selection strategy is: a "strategy to improve product quality" to be implemented first, when the quality improvement strategy is completed, then the frozen seafood-processing enterprise BR-VT plans to implement a market development strategy and continue to implement a product development strategy. This will help businesses promote their strengths to be able to meet the needs and dominate the domestic market

**- Matrix of Strategic Planning to Quantify the Strengths and Challenges (ST)**

ST group QSPM matrix: combine internal strengths and external threats to counter those threats.

**Comment:** Analysis of the QSPM matrix for the ST group showed that the ST2 strategy was rejected because it had a lower total attractiveness score (TAS=95) than the ST1 strategy because of its total attractiveness score (TAS=99). Therefore, in this period, BR-VT's frozen seafood-processing enterprises should focus on a competitive development strategy. With the ST1 strategy, BR-VT's frozen seafood-processing enterprises should focus all necessary resources to cooperate with enterprises in the same field in the domestic area.

**- Matrix of strategic planning to quantify the group of weaknesses combined with opportunities (WO)**

WO Group QSPM Matrix: overcome internal weaknesses and take advantage of external opportunities.

**Comment:** The analysis of the QSPM matrix for the WO group showed that the WO2 strategy was selected because its total attractiveness score (TAS = 90) was lower than the WO1 strategy with the total attractiveness score (TAS = 99). Therefore, in this period, the enterprise should focus on promoting the relationship marketing development strategy. With this WO3 strategy, businesses need to focus on developing the company's marketing system and improving the brand awareness and image of BR-VT in frozen seafood-processing enterprises in the domestic market.

**- Matrix of strategic planning to quantify the group of weaknesses combined with challenges (WT)**

WT Group QSPM Matrix: overcome internal weaknesses and overcome external threats.

**Comment:** Analysis of the QSPM matrix for the WT group showed that the WT2 strategy was chosen because of its higher total attractiveness score (TAS = 99) than the WT1 strategy with

the total attractiveness score (TAS = 92). Therefore, in this period, frozen seafood-processing enterprises BR-VT should focus on promoting marketing development strategies. With this WT2 strategy, frozen seafood-processing enterprises BR-VT needs to focus on developing the enterprise's relationship marketing system and improving brand awareness and image of seafood-processing enterprise's frozen products on the domestic market.

#### • Selected Business Strategies

From the reality of the enterprise and the assessment of experts, the author chooses the strategies summarized in Table 4.4. These are the strategies that BR-VT in frozen seafood-processing enterprises needs to prioritize from now until 2022 because, they are the foundation for businesses to continue implementing the remaining strategies.

**Table 4.4:** Preferred strategies

| Alternative strategy                         | Total points of attraction | Selected strategy                           |
|--|----------------------------|---|
| Market development strategy                  | 85                         | Strategies to develop services and products |
| Service development strategy                 | 91                         |   |
| Product development strategy                 | 253                        |   |
| Technology and logistics strategy-innovation | 99                         | Competitive development strategy            |
| Competitive development strategy             | 92                         |   |
| International integration strategy           | 95                         |   |
| Relationship Marketing Strategy              | 95                         | Relationship Marketing Strategy             |
| Human Resource Strategy                      | 99                         |   |
| Brand development strategy                   | 92                         |   |

**Source:** Author's compilation

#### 4.4.1. Basic Strengths:

- Fisheries is an export product of BR-VT that has a comparative advantage in resources with abundant resources and diversity in the types, is one of the products with export competitiveness due to domestic costs short.

- The potential for labor in the fisheries sector is quite abundant, healthy, educated, and intelligent, with a tradition of industrious labor, able to quickly absorb and apply advanced science creatively. The price of fishery labor in BR-VT is still relatively low compared to other countries in the region and the world.

- Production and export of aquatic products is a spearhead economic sector, one of the priority directions for the development of BR-VT province.

- With the policy of developing aquatic breeds and changing the structure of aquatic breeds, the productivity of aquaculture has been effective initially. BR-VT is fully capable of developing and cultivating high-quality aquatic products with large volumes and low cost of raw materials.

- With the export tax rate of BR-VT's aquatic products of 0% (from February 15, 1998), low export prices will increase the competitiveness of BR-VT seafood products. VT on the world market.

- Besides state-owned enterprises, many enterprises from other economic sectors have been involved in the production and processing of frozen seafood and have gained experience in this activity.

- Currently, the percentage of the Board of Directors with a graduate degree is 2%, the highest is 52.3% for university, 14.8% for college, and 20.9% for technical workers.

#### **4.4.2. Basic Weaknesses**

- BR-VT is a country with a tropical climate, and aquatic resources develop and harvest according to the seasons. The problem of supplying aquatic materials for processing is still Post-harvest preservation is not guaranteed due to the lack of cold storage equipment and specialized cold storage, so the loss at this stage is quite large in both quantity and quality, making the price of raw materials relatively high.

- The seafood-processing stage still faces many difficulties in terms of capacity and technology level and is being assessed at the average level in the world.

- Warehouse conditions for storing and preserving raw materials and aquatic products are not good; sometimes there is not enough ice to freeze for specialized cold storage. The system of warehouses for storing and preserving aquatic materials and products is very scattered and small in scale.

- The problem of packaging aquatic products has not met the requirements of diversifying aquatic products on the market, initially meeting market requirements, but not really stimulating consumer tastes both at home and abroad water.

- The ability to trade, negotiate and access the market of BR-VT seafood businesses and fishermen with foreign customers is low, and the conditions for accessing market information and technology are still weak.

- Human resources of frozen seafood-processing enterprises BR-VT are still weak in almost all stages such as directors are not trained in economic management, business administration, and professional staff poor foreign language, legal knowledge, not a full understanding of international trade practices.

- The ability to access different financial-credit sources to finance their business development investment projects is still weak.

- The overall efficiency of the whole industry is still low, reflected in the capacity utilization factor of less than 70% and the material utilization factor of less than 70%.

- In order to promote the seaport system, Ba Ria Vung Tau province also mobilizes investment capital to develop transport infrastructure and connect with deepwater ports, connecting sea and road transport systems with a number of provinces in the key economic region of the southern region. At the same time, in order to take advantage of the seaport system, the province has also planned and built a system of industrial parks associated with the sea. Up to now, the province has 15 industrial parks with a total area of about 8,510 ha.

- The fishing and seafood-processing industry is also one of the strengths of the province's marine economy. The whole province has 5/8 coastal localities with a relatively large number of boats, up to over 6,200 boats. In recent times, these localities have also focused on investing in development and helping to upgrade the fishing port system.

- Currently, in the whole province, there are 18 fishing ports in operation, of which 7 ports are built with solid wharves. Some fishing ports have invested in modern equipment such as Phuoc Thai fishing port, Loc An fishing port, and Incomap fishing port... These fishing ports

are equipped with almost all necessary services such as ice, food and gasoline and especially it has the ability to stay safe when emergencies occur.

- For the investment and upgrading of the system of fishing ports, not only helps to create favorable conditions for the development of fishing capacity, but it also contributes to ensuring security, order and security in society and helps create an environment to attract provincial investors. In addition, by 2020, the province is also expected to upgrade to 5 mooring areas to avoid storms and can accommodate up to 5000 boats with a capacity of nearly 2000 CV.

#### **4.4.3. Opportunity**

- Legal and regulatory with the subsidy policy to encourage fisheries development, only 5.1% assessed that the locality/facility was entitled to it; 23.9% assessment is not beneficiary; and 70.9% had no opinion. With the tax exemption and reduction policy, 20.5% of the assessment benefited; 3.4% did not benefit and 76.1% had no opinion. As for the insurance policy to encourage fishery development, only 12% benefited, 16.2% did not and 71.8% had no opinion. Even with the credit policy, meeting an urgent need, only 25.6% rated as beneficiaries; 9.4% did not benefit and 65% had no opinion. For the investment policy to encourage fisheries development, which is being implemented, only 12% of the localities/facilities assessed that they have benefited from the investment policy to encourage fisheries development; 17.9% were not beneficiaries and 70.1% had no opinion.

- The demand for seafood in the world is very large, the trend of consuming aquatic products to replace poultry meat is growing and the current market supply is not enough. This is a great opportunity for localities with the potential to produce process and export aquatic products such as BR-VT.

- The main seafood consumption markets of BR-VT such as the United States, China, Japan, EU..., are in high and diversified demand. Regarding aquatic products, BR-VT is capable of farming, catching, processing and exporting in large quantities such as fish, shrimp, bivalve molluscs, etc., due to a large number of consumers and diverse preferences.

- The market of China, ASEAN countries and Asia with low and diversified demand for seafood quality is an opportunity for small and medium enterprises in BR-VT.

- World seafood prices still tend to increase due to insufficient supply and demand and increased production and processing costs due to increased labor costs and raw material exploitation costs.

- State investors always want to find opportunities in seafood production, processing and export in developing countries with large, stable and diversified supply capacities. This is an opportunity to receive capital and modern technology to innovate the fisheries industry in the context of international economic integration.

- Strict regulations on food hygiene and safety standards (HACCP) and equivalent quality systems of the US, Japan, and EU, regulations related to the ecological environment... On the one hand, are the o "Breakthrough" for technical improvement, technological innovation, and equipment modernization in order to create products that are accepted by developed countries' markets?

- In the integration trend, in addition to the traditional markets, BR-VT seafood enterprises always have the opportunity to seek, approach and exploit new hidden markets on all continents.

#### **4.4.4. Challenge**

The infrastructure has not been paying enough attention, lacking and weak. The school system has not yet met the professional requirements, especially the knowledge of import and export business, the knowledge of international law, the skills of foreign languages, informatics and communication are still limited. In recent times, related to the unstable increase in electricity prices, businesses must actively save electricity by producing at off-peak hours, investing in replacing low-power-consuming lighting equipment, replacing some machinery and applying new techniques..., so as not to be related to production and business, Vietnam's transportation system is lacking and weak compared to the requirements of national

- Exported seafood products of BR-VT have to compete with products of the same type from major seafood exporters such as Thailand, Indonesia, China, USA, Japan, Chile, Ecuador, and other countries EU. These are countries with very modern aquaculture and fishing techniques. That are increasingly developing.

- The competition in the world's seafood market will be stronger when the demand for aquatic products is higher than the supply capacity.

- The world seafood market is subject to strong intervention by the governments of other countries through the world view, non-tariff barriers and regulations and laws on the production and trade of fishery products. Compliance with regulations on technical standards, food hygiene and safety standards (HACCP), a system of regulations on the ecological environment ..., becomes a mandatory factor to meet for production enterprises and export BR-VT seafood when entering the market. Especially markets such as the US, Japan, and EU... This is a great challenge and a decisive factor for the success or failure of the export activities of the BR-VT seafood industry.

- BR-VT's export marketing capacity for aquatic products is still low, the market information system is both lacking and weak and unlikely to be improved in the short term.

- Although the seafood export turnover of BR-VT reached nearly 1 billion USD, the main export is still preliminary processed products. the proportion of aquatic products with low processing and processing content has only reached a low level rapidly increasing the export proportion of processed aquatic products to the markets of major importing countries is a difficult problem for BR-VT seafood producers and exporters.

- The investment in building fishery infrastructure in order to lower the cost of exporting aquatic products cannot be solved in a short time.

- Investment in aquaculture, exploitation, processing and export of aquatic products always contains risk factors.

- Human resources for seafood production and export in BR-VT are many in quantity, but their capacity and qualifications are not high, and they are not able to react quickly to market fluctuations.

Up to now, the province currently has about 172 establishments and enterprises producing and trading seafood with a total capacity of 150,000 tons of finished products/year, many businesses have invested in upgrading factories and equipment. , expand production development. The province's seafood exports are now present in over 50 countries, contributing to the settlement of more than 9,000 workers with stable jobs.

- However, the seafood-processing factories mentioned above, mostly developed in the period from 1995-2000. When facing favorable market conditions, a series of processing

factories were built in the ward. 11, Ward 12, Ben Dinh area of the city. Vung Tau has created spontaneous processing zones and these processing zones mostly do not have the waste treatment infrastructure. Some factories developed recently in Loc An commune (Dat Do district) are clearly opposed to the local tourism development orientation. Particularly for the cluster of factories and seafood-processing facilities in Tan Hai (Tan Thanh district), due to spontaneous construction, there is no waste treatment infrastructure and lack of environmental management, so this processing area in recent years, has caused serious environmental pollution.

- The cause of this situation is that at present, in Ba Ria-Vung Tau province, a concentrated seafood-processing industry has not been established. The planning to build specific areas, dedicated to seafood-processing factories, has not been interested in investment by the authorities so far. In addition, due to the specificity of seafood-processing factories, they must be attached to fishing ports and aquaculture areas to actively source raw materials and reduce transportation costs. At the same time, seafood-processing factories must also be associated with the traditional labor source of each locality, avoiding labor shortages during the season.

- The research in a scientific and general way, giving solutions to reduce pollution in the seafood-processing process is an urgent need of BR-VT province.

#### 4.5. RESEARCH RESULTS

##### 4.5.1. Survey Sample Statistics

The survey was conducted from December 2022 to February 2023, with 76/121 businesses disclosing data from BR-VT, through direct delivery of paper questionnaires or via email to respondents. There were 480 direct questionnaires distributed, totalling 440 questionnaires. After data cleaning, 38 questionnaires were invalid (21: answer lacks information; 9: the answer is vague, or 8: lack of consideration in evaluating the same), and there are 402 questionnaires approved use, reaching 83.75%.

**Table 4.5:** Survey frequency sample statistics

| <b>Sex</b>                          |                  |                  |                               |
|-------------------------------------|------------------|------------------|-------------------------------|
|                                     | <b>Frequency</b> | <b>Ratio (%)</b> | <b>Ratio (%) Cumulative %</b> |
| Male                                | 226              | 56.2             | 56.2                          |
| Female                              | 176              | 43.8             | 100.0                         |
| <b>Total</b>                        | 402              | 100.0            |                               |
| <b>Age</b>                          |                  |                  |                               |
|                                     | <b>Frequency</b> | <b>Ratio (%)</b> | <b>Ratio (%) Cumulative %</b> |
| >25 years - =< 35 years             | 52               | 12.9             | 12.9 12.9                     |
| >35 years - =< 45 years             | 217              | 54.0             | 54.0 66.9                     |
| >45 years                           | 133              | 33.1             | 33.1 100.0                    |
| <b>Total</b>                        | 402              | 100.0            | 100.0                         |
| <b>Business size of respondents</b> |                  |                  |                               |
|                                     | <b>Frequency</b> | <b>Ratio (%)</b> | <b>Ratio (%) Cumulative %</b> |
| Enterprise > 500 workers            | 234              | 58.2             | 58.2 58.2                     |
| Enterprise < 500 workers            | 168              | 41.8             | 41.8 100.0                    |
| <b>Total</b>                        | 402              | 100.0            | 100.0                         |

| <b>Level</b>         |                  |                  |                       |
|----------------------|------------------|------------------|-----------------------|
|                      | <b>Frequency</b> | <b>Ratio (%)</b> | <b>Cumulative % %</b> |
| High school          | 59               | 14.7             | 14.7                  |
| Intermediate college | 217              | 54.0             | 68.7                  |
| University           | 114              | 28.4             | 97.0                  |
| After University     | 12               | 3.0              | 100.0                 |
| <b>Total</b>         | 402              | 100.0            |                       |
| <b>Working years</b> |                  |                  |                       |
|                      | <b>Frequency</b> | <b>Ratio (%)</b> | <b>Cumulative % %</b> |
| >3 -=<5 years        | 69               | 17.2             | 17.2                  |
| >5-=<10 years        | 223              | 55.5             | 72.6                  |
| >10-=<15 years       | 73               | 18.2             | 90.8                  |
| >15 years            | 37               | 9.2              | 100.0                 |
| <b>Total</b>         | 402              | 100.0            |                       |

**Type of Business Surveyed**

| <b>Characteristic</b>                  | <b>Frequency</b> | <b>Rate %</b> | <b>Frequency Rate %</b> |
|--|------------------|---------------|-------------------------|
| Joint stock company with state capital | 34               | 26,36         | 23,36                   |
| Private enterprise                     | 95               | 73,64         | 100,0                   |
| <b>Total</b>                           | 129              | 100,0         |                         |

**Workplace**

|  | <b>Frequency</b> | <b>Rate %</b> | <b>Frequency Rate %</b> |
|--|------------------|---------------|-------------------------|
| Enterprise leaders (Director, Deputy Director) | 44               | 10,9          | 10,9                    |
| Head, Deputy Head of Professional Department   | 215              | 53,5          | 64,4                    |
| Leader of Workshop, Production Department      | 143              | 35,6          | 100,0                   |
| <b>Total</b>                                   | 402              | 100,0         |                         |

Source: Author's compilation

**4.5.2. Initial Assessment of the Scales**

The factors that are related to the competitive competence of BR-VT frozen seafood-processing enterprises are (1) Management and executive capacity (MEC), including 5 observed variables (MEC1 -MEC5). (2) Relationship marketing capabilities (RMC) consists of 4 observed variables (RMC1 - RMC4), (3) Financial capacity (FC) includes 5 observed variables (FC1 - FC5), (4) Human resource capacity includes 4 observed variables (HRC1 - HRC4), (5) Technological and logistical-innovation capabilities include 4 observed variables (TLC1 - TLC4). (6) Adaptation capacity includes 5 observed variables (AC1 - AC5) (7) Market impact includes 4 observable variables (MI1 - MI 4), (8) Laws and regulations (LR) includes 4 observed variables (LR1 – LR4) and (9) Local infrastructure includes 5 observed variables (LI1-LI5). The scale of the competitiveness of frozen seafood-processing enterprises (CFS) consists of 4 observed variables (CFS1 - CFS4). Cronbach Alpha coefficient and EFA method are used to evaluate the reliability scales and EFA analysis.

**4.5.3. Evaluation of the Reliability Coefficients of the Scales**

All scales have reliability > 0.7 and the correlation coefficient of all variables is > 0.3. Therefore, the confidence coefficients of all scales are achieved to continue the EFA analysis.

#### 4.5.4. EFA Analysis

##### 1) EFA results of factors related to the competitiveness of frozen seafood-processing enterprises BR-VT

After analyzing the reliability coefficient, continue the EFA analysis.

The results of the first EFA analysis, 40 observed variables in 9 the components of the scale related to the competitiveness of frozen seafood-processing enterprises BR-VT were dispersed into 9 components with the coefficient KMO = 0.757, with an eigenvalue of 1,094 and an extracted Variance of 74,084. Thus, the scale that is correlated with the competitive competence of frozen seafood-processing enterprises from 41 observed variables after the second EFA analysis remains the same 9 components with 40 observed variables, meeting the criteria. Standard reliability coefficient and validity, EFA analysis met the requirements (Table 4.6).

**Table 4.6:** Cronbach's Alpha test after EFA

| No | The scale  | Number of observed variables | Cronbach's alpha | Correlation coefficient - minimum total variable |
|----|--|------------------------------|------------------|--|
| 1  | Management and executive capacity                        | 5                            | 0,908            | 0,713  |
| 2  | Relationship marketing capabilities                      | 4                            | 0,842            | 0,613  |
| 3  | Financial capacity                                       | 5                            | 0,920            | 0,730  |
| 4  | Human resource capacity                                  | 4                            | 0,900            | 0,706  |
| 5  | Technological and logistical capacity-innovation         | 4                            | 0,907            | 0,718  |
| 6  | Adaptive capacity  | 5                            | 0,830            | 0,587  |
| 7  | Market impact  | 4                            | 0,832            | 0,591  |
| 8  | Laws and regulations                                     | 4                            | 0,917            | 0,750  |
| 9  | Local infrastructure                                     | 5                            | 0,841            | 0,581  |
| 10 | Competitiveness of frozen seafood-processing enterprises | 4                            | 0,795            | 0,522  |
|    | <b>Total</b>   | <b>44</b>                    |                  |  |

(Source: Author's compilation)

##### 4.5.5. EFA analysis dependent variable competitiveness of frozen seafood-processing enterprises Ba Ria Vung Tau

The scale of competitiveness of frozen seafood-processing enterprises BR-VT has 4 observed variables. After testing Cronbach's Alpha coefficient  $> 0.7$ , achieving reliability, continue to analyze EFA.

The Competitiveness dependent scale has 4 observed variables dispersed into 1 component with coefficient KMO = 0.740, with eigenvalue of 2,514 and Extracted Variance of 62.857%, Bartlett's value is 542,522 with Sig. = 0.000; Cronbach's Alpha reliability coefficient is 0.795, proving that the analytical data are appropriate. Thus, the dependent variable scale meets the criteria of reliability coefficient and validity.



**Table 4.7:** Summary of EFA results

| Ingredient   | Number of observed variables | Độ tin cậy | Extracted Variance(%) | Evaluation |
|--|------------------------------|------------|-----------------------|------------|
| Management and executive capacity (MEC)                        | 5                            | 0,908      | 74,084                | Qualified  |
| Relationship marketing capabilities (RMC)                      | 4                            | 0,842      |                       |            |
| Financial capacity y(FC)                                       | 5                            | 0,920      |                       |            |
| Human resource capacity (HRC)                                  | 4                            | 0,900      |                       |            |
| Technology and logistical capacity-innovation (TLC)            | 4                            | 0,907      |                       |            |
| Adaptive capacity (AC)   | 5                            | 0,830      |                       |            |
| Market impact (MI)   | 4                            | 0,832      |                       |            |
| Laws and regulations (LR)                                      | 4                            | 0,917      |                       |            |
| Local infrastructure (LI)                                      | 5                            | 0,841      | 62,857                |            |
| Competitiveness of frozen seafood-processing enterprises (CFS) | 4                            | 0,795      |                       |            |

(Source: Author's compilation)

#### 4.5.6. Linear Regression Analysis

The author confirmed the relationships related to the competitiveness of frozen seafood-processing enterprises BR-VT, using regression to predict or infer causal relationships. The p-values help to determine whether the relationship, according to the OLS method with the dependent variable and the 9 independent variables is correlated with the competitiveness of the frozen seafood-processing enterprise BR-VT.

##### 4.5.6.1. Correlation Coefficients

The correlation coefficient is used to measure the strength of the relationship between two variables. The Pearson correlation is the correlation used in statistics. This measures the strength and direction of the linear relationship between two variables. The value is always between -1 (strong negative relationship) and +1 (strong positive relationship). With the SPSS statistical tool, the coefficients of linear correlation between the variables are closely related. The results of Table 4. Show that the dependent variable has a linear correlation with 8 independent variables, while the legal and regulatory variables have no statistically significant correlation so no regression analysis.

**Table 4.8:** Correlation coefficient

|     |                     | Correlations |         |     |    |    |     |    |    |    |     |
|-----|---------------------|--------------|---------|-----|----|----|-----|----|----|----|-----|
|     |                     | HRC          | MEC     | TLC | MC | AC | RMC | LR | FC | LI | CFS |
| HRC | Pearson Correlation | 1            |         |     |    |    |     |    |    |    |     |
| MEC | Pearson Correlation | 0,409**      | 1       |     |    |    |     |    |    |    |     |
| TLC | Pearson Correlation | 0,230**      | 0,281** | 1   |    |    |     |    |    |    |     |

|            |                     |         |         |         |         |         |         |         |         |         |   |
|------------|---------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---|
| <b>MI</b>  | Pearson Correlation | 0,142** | 0,159** | 0,506** | 1       |         |         |         |         |         |   |
| <b>AC</b>  | Pearson Correlation | 0,123*  | 0,146** | -0,028  | 0,096   | 1       |         |         |         |         |   |
| <b>RMC</b> | Pearson Correlation | 0,424** | 0,282** | 0,381** | 0,538** | 0,028   | 1       |         |         |         |   |
| <b>PR</b>  | Pearson Correlation | 0,381** | 0,322** | 0,047   | -0,056  | 0,211** | 0,106*  | 1       |         |         |   |
| <b>FC</b>  | Pearson Correlation | 0,121*  | 0,117*  | 0,505** | 0,497** | 0,069   | 0,330** | -0,064  | 1       |         |   |
| <b>LI</b>  | Pearson Correlation | 0,138** | 0,064   | 0,158** | 0,064   | 0,005   | 0,087   | 0,156** | 0,219** | 1       |   |
| <b>CFS</b> | Pearson Correlation | 0,365** | 0,358** | 0,723** | 0,647** | 0,173** | 0,549** | 0,168** | 0,598** | 0,253** | 1 |

\*\* . Correlation is significant at the 0,01 level (2-tailed),

\*. Correlation is significant at the 0,05 level (2-tailed),

(Source: Author's compilation)

#### 4.5.6.2. Determine the Value of the Equation

R squared is a measure that determines the equation that produces the smallest difference between all observed values and their fit. Strictly speaking, linear regression finds the smallest possible sum of squares for the data set. In this model, R2 is 0.741 Table 4.23. The adjusted R2 coefficient is 0.735 which means that the built linear regression model fits the data set to 50%, the regression model fits the data because the observations and the predicted values are small and unbiased. Unbiased in this context means that the appropriate values are not systematically too high or too low anywhere in the observation space.

| Model Summary <sup>b</sup> |                   |          |                   |                            |                   |          |     |     |               |               |
|----------------------------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
| Model                      | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               | Durbin-Watson |
|                            |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |               |
| 1                          | .861 <sup>a</sup> | .741     | .735              | .23053                     | .741              | 124.532  | 9   | 392 | .000          | 1.134         |

a. Predictors: (Constant), HRC, MEC, TLC, MI, AC, RMC, PR, FC, LI

b. Dependent Variable: CFS

(Source: Author's compilation)

| ANOVA <sup>a</sup> |              |                |     |             |         |                   |
|--------------------|--------------|----------------|-----|-------------|---------|-------------------|
| Model              |              | Sum of Squares | df  | Mean Square | F       | Sig.              |
| 1                  | Regression   | 59.565         | 9   | 6.618       | 124.532 | .000 <sup>b</sup> |
|                    | Residual     | 20.833         | 392 | .053        |         |                   |
|                    | <b>Total</b> | 80.397         | 401 |             |         |                   |

a. Dependent Variable: CFS

b. Predictors: (Constant), HRC, MEC, TLC, MI, AC, RMC, PR, FC, LI

(Source: Author's compilation)

| Coefficients <sup>a</sup> |                             |            |                           |      |        |                         |      |       |
|---------------------------|-----------------------------|------------|---------------------------|------|--------|-------------------------|------|-------|
| Model                     | Unstandardized Coefficients |            | Standardized Coefficients | t    | Sig.   | Collinearity Statistics |      |       |
|                           | B                           | Std. Error | Beta                      |      |        | Tolerance               | VIF  |       |
| 1                         | (Constant)                  | -.385      | .144                      |      | -2.680 | .008                    |      |       |
|                           | HRC                         | .055       | .023                      | .077 | 2.428  | .016                    | .650 | 1.538 |
|                           | MEC                         | .048       | .020                      | .071 | 2.383  | .018                    | .747 | 1.339 |
|                           | TLC                         | .350       | .029                      | .400 | 12.064 | .000                    | .600 | 1.665 |
|                           | MI                          | .206       | .030                      | .245 | 6.942  | .000                    | .530 | 1.888 |
|                           | AC                          | .086       | .021                      | .108 | 4.010  | .000                    | .910 | 1.099 |
|                           | RMC                         | .111       | .029                      | .130 | 3.838  | .000                    | .574 | 1.741 |
|                           | PR                          | .161       | .027                      | .190 | 5.863  | .000                    | .632 | 1.583 |
|                           | FC                          | .049       | .020                      | .072 | 2.422  | .016                    | .757 | 1.321 |
|                           | LI                          | .071       | .020                      | .094 | 3.499  | .001                    | .912 | 1.096 |

a. Dependent Variable: CFS

(Source: Author's compilation)

**Table 4.24: Hypothesis testing**

| No        | Hypothesis  | Test Sig. | Inspection results |
|-----------|---|-----------|--------------------|
| <b>H1</b> | Management and operation capacity, positively influence the competitiveness of frozen seafood-processing enterprises BR-VT.                     | 0,018     | Yes                |
| <b>H2</b> | Human resource capacity has a positive influence on the competitiveness of frozen seafood-processing enterprises BR-VT                          | 0,016     | Yes                |
| <b>H3</b> | Financial capacity has a positive influence on the competitiveness of frozen seafood-processing enterprises BR-VT                               | 0,000     | Yes                |
| <b>H4</b> | Relationship marketing capacity has a positive influence on the competitiveness of frozen seafood-processing enterprises BR-VT                  | 0,000     | Yes                |
| <b>H5</b> | Technological capacity and logistics innovation have a positive influence on the competitiveness of frozen seafood-processing enterprises BR-VT | 0,000     | Yes                |
| <b>H6</b> | Adaptation capacity has a positive influence on the competitiveness of frozen seafood-processing enterprises BR-VT                              | 0,000     | Yes                |
| <b>H7</b> | The impact of the market has a positive influence on the competitiveness of frozen seafood-processing enterprises BR-VT                         | 0,000     | Yes                |
| <b>H8</b> | Laws and regulations have a positive influence on the competitiveness of frozen seafood-processing enterprises BR-VT                            | 0,016     | Yes                |
| <b>H9</b> | Local infrastructure has a positive influence on the competitiveness of frozen seafood-processing enterprises BR-VT                             | 0,001     | Yes                |

(Source: Author's compilation)

#### 4.6. DETECTING NECESSARY ASSUMPTION VIOLATIONS IN LINEAR REGRESSION

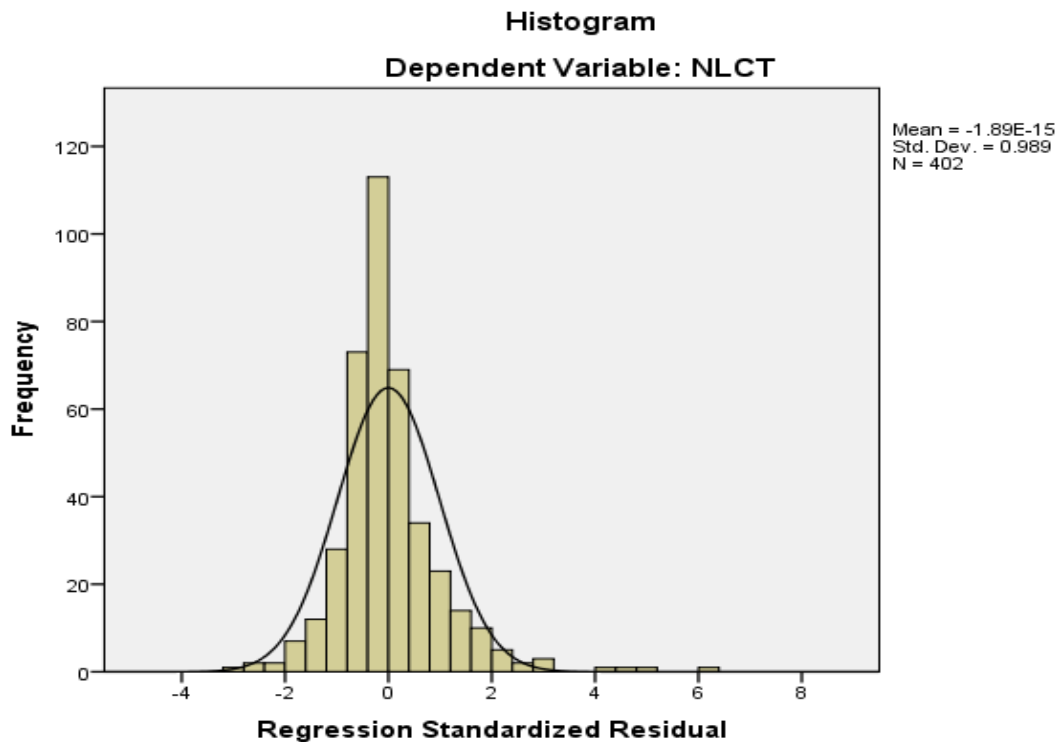
Regression analysis is a form of exponential statistics. The p-values help determine if there is a correlation in observing 402 samples. The p values for each independent variable test the hypothesis that the variables are correlated with the dependent variable. If there is no correlation, then there is no relationship between changes in the independent variable and changes in the dependent variable. This regression result is accepted when:

##### 4.6.1. Multicollinearity

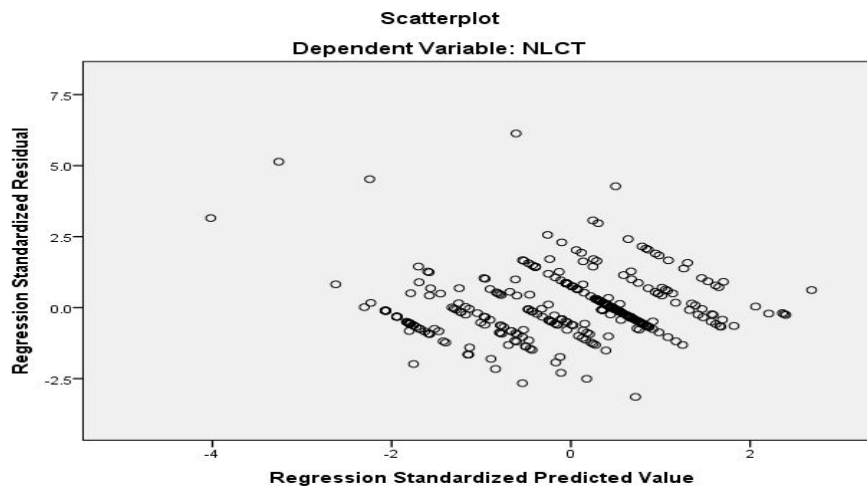
Multicollinearity is a term used in data analysis that describes the occurrence of two exploratory variables in a linear regression model that is found to be correlated through the full analysis, and the degree of accuracy is determined. Predefined. The variables are independent and are found to be correlated in several respects. Multilinearity is tested by the Variance Inflation Factor  $VIF > 2$  indicating the problem of multilinearity. The results show that all tolerance values of the independent variables are  $> 0.530$  and the VIF coefficient ranges from  $1.099$  to  $1.888 < 2$ . Thus, there is no multicollinearity phenomenon.

##### 4.6.2. Normal Distribution of Residuals

If the residuals are normally distributed, then 95% of them will be between -2 and 2. They can be considered anomalous if they are above 2 or below -2. When we perform linear regression, we assume that the relationship between the response variable and the predictors is linear. Observing Figure 4.2, it can be said that the distribution of residuals is approximately standard (Mean =  $-1.89E-15$  and standard deviation =  $0.989 \sim 1$ ). Therefore, the normal distribution of the residuals does not violate.



**Figure 4.2:** Residual frequency chart  
(Source: Author's compilation)



**Figure 4.3:** Scatterplot. scatter plot

*Source:* Author's compilation

#### 4.7. TESTING THE DIFFERENCE IN COMPETITIVE COMPETENCE ACCORDING TO INDIVIDUAL CHARACTERISTICS

Find the difference in competitiveness between groups, distinguishing based on demographics including gender, age of management, education level, seniority, enterprise size, and working position.

For testing the difference between the two sex groups, the study uses the hypothesis test of the mean of the two populations. The remaining factors are age, working position, education level and working seniority with 3 or more sample groups, using ANOVA analysis of variance. This method tests all groups of samples at once with only a 5% chance of error (Hoang Trong & Mong Ngoc, 2005).

##### 4.7.1. Assessing the Relevance of Competitive Competence in Terms of Gender

The Levene test is an inferential statistic used to evaluate the equality of variances for a variable calculated for two or more groups. Levene test results for sig value. = 0.198 < 0.05 shows the variance between the two different sexes. Therefore, the null hypothesis of equal variances is rejected. Use unequal variance results with sig. > 0.05 (sig = 0.189). Usually, the higher the percentage of female workers, the less efficient the product will be. We expect that businesses will be more effective if the leader is male because in general, decisions related to business activities with better results still come from men. However, the results of Table 4.26 show that the working ability of male and female workers does not seem to be different. Therefore, there is no gender difference in the assessment of competence relatedness.

##### 4.7.2. Assess the Relevance of Competitiveness among People of Different Management Ages

One-way ANOVA was used for three or more data groups to obtain information about the relationship between dependent and independent variables. Testing the homogeneity of variance, with sig = 0.025 < 0.05, can tell the variance when assessing the relevance of competitive competence among people of different management ages. Often, leaders too young or too old are not suitable for decisions related to the survival of the business. However, with the significance level sig = 0.000 < 0.05, there should be a statistically significant difference in relation to competing capability between management ages.

**4.7.3. Assess the Relevance of the Competitiveness of People with Different Working Seniority**

One-way ANOVA was used for three or more data groups to obtain information about the relationship between dependent and independent variables. Testing the homogeneity of variance, with  $\text{sig} = 0.004 < 0.05$ , it can be said that the variance when assessing the relationship of competitive competence among other groups with seniority is not different. The production experience and different seniority of employees, and leaders show that the production efficiency of enterprises does not seem to be affected by the number of years working for employees and leaders. However, with the significance level  $\text{sig} = 0.000 < 0.05$ , there is a statistically significant difference in the relevance of competitive competence between groups with different seniority.

**4.7.4. Assess the Relevance of Competitiveness among People with Different Educational Levels**

One-way ANOVA was used for three or more data groups to obtain information about the relationship between dependent and independent variables. Testing the homogeneity of variance, with  $\text{sig} = 0.163 > 0.05$ , it can be said that the variance when assessing the influence of competitive competence among people with different educational levels is not different. Usually, with a higher education level, employees perform better, and leadership decisions will bring more chances of success. However, with the significance level of  $\text{sig} = 0.055 > 0.05$ , there is no statistically significant difference related to competitive competence between people with different education levels.

**4.7.5. Assess the Relevance of Competitiveness among People with Different Working Positions**

One-way ANOVA was used for three or more data groups to obtain information about the relationship between dependent and independent variables. Testing the homogeneity of variance, with  $\text{sig} = 0.306 > 0.05$ , it can be said that the variance when assessing the level of competitiveness relation between people with different working positions is not different. The technical efficiency of frozen seafood-processing enterprises is significantly affected by the position of business leaders and the type of business. However, in the context of international economic integration, digital economy and market competition, we expect production efficiency will be positive if business leaders with high working positions will manage better. However, with the significance level  $\text{sig} = 0.543 > 0.05$ , there is no statistically significant difference related to competitive competence among people with different working positions.

**4.7.6. Assess the Relevance of Competitiveness According to Different Enterprise Sizes**

One-way ANOVA was used for three or more data groups to obtain information about the relationship between dependent and independent variables. Testing the homogeneity of variance, with the significance level  $\text{sig} = 0.003 < 0.05$ , it can be said that the variance when assessing the level of competitiveness relatedness between different sizes of enterprises is different. In fact, production efficiency will be high when enterprises operate on a large scale. However, with the significance level  $\text{sig} = 0.950 > 0.05$ , there is no statistically significant difference in the relevance of competitiveness between different sizes of enterprises.

## **4.8. ANALYZE THE AVERAGE VALUE OF EACH FACTOR RELATED TO COMPETITIVENESS**

To better understand the current competitive situation of frozen seafood-processing enterprises BR-VT, the thesis analyzes each factor related to competitiveness. Specifically

### **4.8.1. Management and Executive Capacity**

Survey results in Management and operation capacity of frozen seafood-processing enterprise BR-VT has the average score of each indicator ranging from 3.56 to 3.69; the average value is 3.63 points

Analysis of each indicator in the scale shows that most of the BR-VT froze seafood-processing enterprises believe that business leaders have relatively low management and administrative capacity, with an average value of 3.63 points, this is based on the results of the answer "Enterprise leaders create trust in operating capacity". The indicator has the lowest average score (3.56 points).

The author's survey results show that the management and operation capacity of BR-VT frozen seafood-processing enterprises is at an average level (3.63 points), this is through the results of the answer "Business planning, determining good business development strategies and plans" in BR-VT frozen seafood-processing enterprises is still quite low (3.63 points).

In recent years, BR-VT froze seafood-processing enterprises have not built a strict organizational structure suitable to the new competitive conditions. Management and administration capacity is reflected in the ability to make effective decisions, through the results of the answer "Business leaders make quick and accurate decisions", the average value is 3.65 points. A frozen seafood-processing enterprise with good governance capacity is an enterprise with a good control system, especially control of raw materials, production process, product quality, food safety, and inventory. This is based on the results of the response "Enterprise has an effective control system", the average value is 3.69 points. Enterprises are currently improving their management capacity by applying a synchronous quality management system according to ISO.

### **4.8.2. Relationship Marketing Capabilities**

Survey results: Relationship marketing capacity of frozen seafood-processing enterprises BR-VT has the average score of each indicator ranging from 3.58 to 3.66; the average value is 3.64 points

Analysis of each indicator in the scale shows that most businesses believe that relationship marketing activity in Understanding consumers. The quality of the relationship has not been as expected with partners and related agencies. Chua established a long-term relationship. Thus, improving relationship marketing capacity is demonstrating the ability to monitor and respond to market changes. Research to establish their target market or identify customer trends. Marketing plays an important role in the success of businesses. Marketing is also one of the biggest challenges faced by frozen seafood-processing businesses in the seafood business.

BR-VT froze seafood-processing business marketers must be willing to discover and satisfy each customer's expectations. This is through the answer "Enterprise creates products that meet customers' expectations", the average value is as low as 3.67 points.

### **4.8.3. Human Resource Capacity**

The results of the survey on the human resource capacity of frozen seafood-processing enterprises BR-VT have the average score of each indicator ranging from 3.69 to 3.84; The average value is 3.78 points.

Analysis of each indicator in the scale shows that most of the surveyed BR-VT froze seafood-processing enterprises believe that the current human resource capacity of enterprises is at an average level, this is the average value of the indicators of human resource capacity are all less than 4. The survey results also show an interesting fact that most of the surveyed enterprises are too focused on creating working conditions for employees. This is through the results of the answer "Enterprise employees meet the job requirements" (the value of the indicator HRC3 is quite high, reaching 3.84 points). However, unlike other industries, most BR-VT in frozen seafood-processing enterprises must have a solution to recruit and "retain" employees, especially during peak holidays such as holidays, New Year or the beginning of the year. During this time, it is very difficult to mobilize workers to return to work after returning home. They do not stick with the job for a long time for many reasons (salary, new opportunities, following the advice of friends...).

### **4.8.4. Financial Capacity**

Survey results on the Financial capacity of frozen seafood-processing enterprise BR-VT have the average score of each indicator ranging from 3.66 to 3.77; the average value is 3.78 points

Analysis of each indicator in the scale shows that most of the surveyed BR-VT frozen seafood-processing enterprises think that the current financial capacity of enterprises is very low, and very few enterprises have enough capital For production and business activities, many respondents said that finding capital sources for production and business activities is very difficult. This is through the results of the answer "Enterprises capable of mobilizing capital" have low scores, with an average of 3.71 points). The debt solvency of enterprises is also very low, all enterprises have difficulty in paying debts. The average score for the question "The company has the ability to pay" has the lowest score of 3.66 points). This proves that the enterprise does not have enough working capital (the average value for the question "Sufficient working capital" is low at 3.64) and the inability to turn capital quickly into business activities (the average score for the question "enterprise with quick capital turnover" is low at 3.69 points) leading to low profitability, low competitiveness (average value for the question "the business has a profitability of business capital") low score of 3.77 points). Table 5.36 accurately reflects the financial capacity of BR-VT in frozen seafood-processing enterprises today.

### **4.8.5. Technology and Logistical Capacity-Innovation**

Survey results in Technological capacity and logistics-innovation of frozen seafood-processing enterprise BR-VT has the average score of each indicator ranging from 3.67 to 3.78; the average value is 3.74 points

Analysis of each indicator in the scale shows that most of the surveyed BR-VT frozen seafood-processing enterprises think that the current technological and logistical-innovation capacity of enterprises is at an average level, although Enterprises are interested in investment and technical research because enterprises face many difficulties in accessing capital to access technology (the average value for the question "Do enterprises have enough capital to invest in innovation)?" technical innovation" with only 3.67 points, the lowest among the measures of technological and logistics-innovation capabilities), so the technological and logistics-innovation capabilities



of enterprises are still quite low. According to Le (2006), the demand for technical innovation by Vietnamese people is relatively low. The average expenditure of SMEs in Vietnam for this purpose accounts for only 0.2-0.3% of total revenue compared to 5% for SMEs in India or 10% for SMEs small and medium enterprises in Korea. This figure shows that BR-VT in frozen seafood-processing enterprises has not demonstrated the ability to upgrade their techniques and equipment to a high level of technical development. This proves that enterprises do not have enough capital to invest in appropriate technical improvements.

#### **4.8.6. Adaptive Capacity**

The survey results in The adaptive capacity of the frozen seafood-processing enterprise BR-VT has the average score of each indicator ranging from 3.621 to 3.33; the average value is 3.26 points (table 4.37).

Analysis of each indicator in the scale shows that most of the surveyed BR-VT in frozen seafood-processing enterprises think that the adaptability of enterprises is currently very low, the indicators of the scale are valuable to the low average value (3.26 points). Environmental instability, a challenge to adaptive capacity, is the result of satisfying consumer expectations and advancing technology and new products. Meanwhile, the frozen seafood-processing enterprise BR-VT faces the external environment but has not adjusted its internal resources and capabilities, so its business performance is not high, according to the results of the response. "Enterprises have the ability to properly react to changes in the market" (average value is as low as 3.25 points). Adaptive capacity focuses on the link between the internal resources of the enterprise such as the capacity to access and innovate, which the frozen seafood-processing enterprise BR-VT has not been able to do because of the linkages between the capabilities of the enterprise and the enterprise. The above strength has not yet created a clear advantage, through the results of answering the question "The current capacity of the enterprise can withstand the challenges that bring about better market entry" (average value reaches very low 3.30 points). Adaptive capacity is to increase the flexibility and linkage of resources of enterprises, focusing on self-adjusting ability to promptly deal with environmental changes that enterprises are slow to respond to, through the results of their responses. "Enterprises have the ability to properly react to changes in the market" (average value reaches a very low level of 3.25 points), through the results of the answer: "This market is fiercely competitive, and the price war is common happens" (average value reached a very low level of 3.21 points).

#### **4.8.7. Market Impact**

Survey results on Market impact capacity of frozen seafood-processing enterprises BR-VT has the average score of each indicator ranging from 3.68 to 3.78; The average value is 3.7 points.

The price of raw materials increased when the market was in short supply of aquatic materials, causing the input costs of all enterprises to increase, resulting in a decline in the competitiveness of enterprises. In addition, the traceability will cause the BT-VT seafood industry to take some time to correct the process and infrastructure, through the results of the answer "Competition to buy related raw materials are bad" (average value reached quite a high level of 3.78 points).

Although this chain of linkages includes all enterprises in the industry such as producers, seed companies, purchasing, processing and markets, in general, the linkage is still quite loose. The unfair competition between enterprises and the unsustainable link between enterprises and aquaculturists consumes the resources of BR-VT seafood when competing in the world market. This is reflected in the results of answering the question "The market for seafood raw materials

in large capacity" (average value is quite low at 3.72 points) or "High inflation related to seafood prices". (The Average value is quite low at 3.68 points).

#### **4.8.8. Laws and Regulations**

Survey results from the Financial capacity of frozen seafood-processing enterprise BR-VT have the average score of each indicator ranging from 3.62 to 3.76; The average value is 3.70 points. In fact, the State regulations have been highly appreciated by enterprises, although the policy system is not complete and complete and all policies are synchronous, but in general, businesses accept the Government's attention and trend of better support for frozen seafood-processing enterprises in BR-VT province.

With regulations on training coastal fishermen and providing support services to improve the socio-economic conditions of coastal fishing communities; There is a need for regulation to control pollution and preserve the environment through strict enforcement of marine fisheries laws and rational use of trash fish currently discarded by fishermen. Close and effective linkages will be developed between the government, in particular local government agencies, NGOs and the private sector involved in the planning, implementation and monitoring of the program's aquaculture development.

Over the past decade, the share of export income from fish and fish products has varied from 7% to 13% of Vietnam's total export earnings. Nearly 90% of the total fish produced in the country is consumed domestically. Compared to the export market, the domestic market is very large, diversified and consolidated in terms of incoming and outgoing goods. Despite broad-based policies and targets set by the government, the desired success in the fisheries sector could not be achieved due to a number of limitations, such as inadequate credit facilities 21%, 6%, scarcity of fish fingerlings 12% and no appropriate regulatory measures in the management of assets in water bodies, proportion of fishermen benefiting 17%, as a result of the response "Policy to encourage processing seafood of Vietnam" (average value 3.76 points).

Inadequate knowledge, degradation of water quality due to indiscriminate use of pesticides and pesticides and industrial waste. The use of the HACCP approach to target quality aspects beyond safety issues, predictive microbiology, traceability and examples of food safety objectives. The quality of fish and fish products is mainly based on products produced in a hygienic and safe manner, through the results of the answer: "Weakness in environmental management and food safety and hygiene" (average score is 3.71).

#### **4.8.9. Local Infrastructure**

Survey results from the financial capacity of frozen seafood-processing enterprise BR-VT have the average score of each indicator ranging from 3.88 to 4.18; the average value is

The shortcomings and limitations in the process of improving the infrastructure at BR-VT stem from the following main reasons:

- The investment attraction policy is incomplete and not attractive to attract enthusiastic investors.
- The mode of arrangement and use of investment resources is still heavily subjective and imposed.
- The school system has not met the professional requirements, especially the knowledge of import and export business, the knowledge of international law, the skills of foreign languages, informatics and communication are still limited.

- Policies on encouraging material and spiritual are still limited, leading to low efficiency in resource development. Frozen seafood-processing enterprises BR-VT want to be fully and professionally trained, through the results of the answer: "The vocational training system for seafood-processing is not good" (the average value is quite high 4, 18 points).

In recent times, related to the unstable increase in electricity prices, businesses must actively save electricity by producing at off-peak hours, investing in replacing low-power-consuming lighting equipment, replacing some machinery applies new techniques..., so that it is not related to production and business. This is reflected in the results of answering the question "The price of the area is unstable related to production and business" (average value 4.17 points).

Vietnam's trading system is not convenient and difficult compared to development requirements. The highlight is that roads and bridges have not met regulations to ensure that the sea is the gateway for international trade and the efficiency of using multi-modal transport in trade is still low. BR-VT province, has a good wharf system, but still does not meet the national standard TCVN 11820-2:2017 on seaport works, based on the results of answering the question "Good wharf traffic system" (average value) 3, 88 points).

#### 4.9. DISCUSSING RESEARCH RESULTS

This study explains the competitiveness of frozen seafood-processing enterprises in BR-VT province with the hypothesis that H1, H2, H3, H4, H5, H6, H7, H8 and H9 all affect the same with the competitive capacity of frozen seafood-processing enterprises in BR-VT.

When the management and administration capacity increases by 1 unit, the competitiveness increases by 0.077 units, provided that the remaining variables remain unchanged; similar for the remaining variables HRC, MEC, TLC, MI, AC, RMC, PR, FC, LI. Based on the normalized  $\beta$  coefficient to determine the level of factors: HRC, MEC, TLC, MI, AC, RMC, P, FC, LI. If the absolute value of any Beta coefficient is larger, that factor is strongly related to the competitive capacity of the frozen seafood-processing enterprise BR-VT, looking at Table 4.23, we see:

- The 1st most strongly related factor: Technological and logistical-innovation (TLC) capacity has a coefficient of  $\beta = 0.400$  ( $p = 0.000$ ), the largest of the Beta coefficients indicating technical approach to production is very important if you want to increase competitiveness. This is completely reasonable in the modern competitive environment, and this result is in agreement with Tang Thi Ngan (2016), Huynh Thanh Nha (2015), Nguyen Dinh Tho (2009). However, managers consider the average value of this factor not high (3.74). In the component Technology and logistics-innovation capabilities, the factors are sorted according to the average value of each of these factors, respectively, TLC3 = 3.80; TLC4 = 3.80; TLC1 = 3.74; TLC2 = 3.70. The technological and logistical-innovation capacity of the BR-VT province is currently quite low on average.

- The second most strongly related factor: Market impact has a coefficient  $\beta = 0.245$  ( $p = 0.000$ ). When we have good, safe products certainly, have a good share in the market; receive and process information, to forecast market changes, thereby formulating business strategies (Narver & Slater, 1990; Day, 1994). However, managers consider the average value of this factor quite good (3.70). In the Market Impact component, the factors are sorted according to the average value of each of these factors, respectively, MI3 = 3.79; MI1 = 3.72; MI2 = 3.74; MI4 = 3.84. This factor helps businesses detect business challenges and barriers on the basis of understanding customers and influencing factors of the market (Keh et al., 2007). This is in

agreement with Nguyen Phuc Nguyen et al., (2016). Impacts on the value chain from changes in production and supply. The impact of the crisis on seafood production and supply was recorded in all surveyed fisheries sectors. Impact of COVID-19 In the industry: Parts of the seafood industry have been somewhat isolated from the impact of the COVID-19 pandemic, demonstrating that food consumption has continued despite the impact of the pandemic for everyday life.

- The third most strongly related factor: is financial capacity with coefficient  $\beta = 0.190$  ( $p = 0.000$ ), frozen seafood-processing enterprises BR-VT often lack the capital, especially in the harvest season. The country needs to expand its lending program for cooperative models, applying high technology and serving seafood. This result agrees with Nguyen Van Vinh (2005). The financial capacity of private enterprises is still weak, working capital is even more inadequate, credit is difficult because of procedures, and there is a lack of valuable collateral. This agrees with Nguyen Quoc Nghi et al. (2012) and Ma Thi Minh Tam (2013). However, managers consider the average value of this factor to be quite high (3.7). In the Financial capacity component, the factors are arranged according to the average value of each of these factors, respectively FC3 = 3.79; FC2 = 3.74; FC1 = 3.72; FC4 = 3.70; FC5 = 3.69. Some studies have convincingly confirmed that certain characteristics have a positive and significant relationship with small business growth while others have found an insignificant relationship (Sidika, I. 2012). Some authors have approached their research from the perspective of entrepreneurship mindset and personality (Wijewardena, et al., 2008), while others have considered it from the point of view of education, and family background family and entrepreneurial abilities (Brown, 2007; Kor, 2003). The data in Table 4.4 of frozen seafood-processing enterprise BR-VT shows an increase in liabilities because the debt ratio is over 60% every year; at the same time, the loan growth rate is fast and continuous over the years; Debt in 2019 increased by 62% compared to 2011. Many businesses use financial leverage instead of buying more equity, which can reduce the earnings per share of existing shareholders. The continuous increase in the debt ratio is very worrisome, especially when the profits of enterprises show signs of going down.

- The fourth strongest factor: Relationship marketing capacity has a coefficient of  $\beta = 0.130$  ( $p = 0.000$ ), which shows that frozen seafood-processing enterprises need to pay attention to relationship marketing activities in the future business. In the face of deep international economic integration and increasingly fierce competition in business activities, businesses need to use relationship marketing tools to develop more sustainable relationships with customers and partners. However, managers consider the average value of this factor to be quite low (3.64). In the Relationship Marketing Competency component, the factors are arranged according to the average value of each of these factors, respectively, MRC2 = 3.65; MRC3 = 3.66; MRC4 = 3.64; MRC1 = 3.57.

For a long time, relationship marketing has been based on the idea that relationships always consist of a win-win situation. Grönroos (1994), promoted by Harker (1999) as the most appropriate definition, states that "relationship marketing is about identifying and establishing, maintaining and enhancing and, when necessary, also terminating relationships with customers and other stakeholders for profit, so that the goals of all parties are met and this is accomplished by mutual exchange and fulfilment of promises." However, relationships Relationships are not always characterized by harmony – as the relationship marketing literature admits, power

struggles and trust influence relationship outcomes (Morgan and Hunt, 1994).

Thus, relationship marketing represents a shift from transactional to relational exchange (Dwyer et al., 1987; Morgan and Hunt, 1994). From customer acquisition to customer satisfaction and retention (Berry, 1995; Bitner, 1995). Similarly, researchers are increasingly concerned not only with the factors that lead to the exchange but also with those that maintain the relationship, such as the relationship benefits (Hennig-Thurau, Gwinner et al., 2002). Relationship values (Ravald and Grönroos, 1996), trust and commitment (Morgan and Hunt, 1994).

Many previous studies have shown evidence of the effectiveness of trust in relationship marketing (Zaheer & Harris, 2006). Trust has been found to be associated with a variety of outcomes, both qualitative and quantitative, such as: Reducing dangerous disputes between parties (Anderson & Narus, 1990), increasing relationship satisfaction levels in partnership (Moorman et al., 1992), increasing the commitment of the parties, increases the quality of information collected from the parties (Mohr & Spekman, 1994), enhance cooperation between partners (Mohr & Spekman, 1994). Morgan & Hunt, 1994), reduce project completion time and increase the economic efficiency of parties (Robson et al., 2008)

• **The fifth strongest factor:** Adaptive capacity has a coefficient of  $\beta = 0.108$  ( $p = 0.000$ ), which is quite strong, showing that BR-VT frozen seafood-processing enterprises need to adapt to enhance efficiency and competitiveness in production and business activities and market expansion. , however, managers consider the average value of this factor to be very low (3.26). In the Adaptive Capacity component, the factors are sorted according to the average value of each of these factors, respectively AC2 = 3.27; AC4 = 3.28; AC1 = 3.22; AC3 = 3.21; AC5 = 3.19. This shows that BR-VT frozen seafood-processing enterprise has the ability to adapt well to the business environment by promoting effective management and sales network efficiency. To improve and enhance the quality of products and services, the quality of the sales network. In order to better meet the needs of customers, contributing to enhancing the reputation and image of enterprises. Approaching technology, economics and policy, adaptive capacity depends on the ability of individuals, communities and organizations to adapt to adversity and events and that is an innovative, flexible and novel approach to dealing with changing markets (Vayda and McCay 1975). This is in agreement with Zhou and Li (2010). On the other hand, in order to meet the needs of customers, businesses are flexible in service time to facilitate transactions with customers. Continuously monitor buyers' quality assessments, how buyers define quality, and what they consider to be key attributes of quality (Maury, B. (2018).

If maximizing profit potential is the goal, the key calculation is the gap between a customer's present and future value (Pavic et al., 2007). As a result, revenue and profit per account increase in the length of a relationship. This is where customer lifetime value comes into play.

• **The 6th lowest relevant factor:** The local infrastructure has a coefficient of  $\beta = 0.094$  ( $p = 0.001$ ), which is also a factor that has a significant impact on the competitiveness of the fisheries sector, so the commercial and after-sales services. Seafood is a bridge in the process of exchanging goods and circulating products. From the field of production to the consumer and help the distribution channel to be convenient. Therefore, it is necessary to have the intervention and support of relevant departments in BR-VT in improving and developing a more convenient logistics system. This is in agreement with Mai Thi Linh et al., (2013). However, managers rated

the average value of this factor very high (4.11). In the component of Local infrastructure, factor 4 are arranged according to the average value of each of these factors, respectively, LI2 = 4.15; LI1 = 4.17 LI4= 4.12; LI3 = 4.00; LI5 = 3.88. Hubda (2012) finds that the economic growth of SMEs in Vietnam is hampered by related external factors, such as inconsistent economic conditions and inadequate infrastructure. At the national scale, infrastructure analysis at the local scale often aims to describe the impacts of local (internal) or national (external) disruption to the infrastructure system's local layer (Salem et al., 2017).

• **The 7th most strongly related factor:** Human resource capacity has coefficient  $\beta = 0.077$  ( $p = 0.016$ ). According to a recent survey, many state-owned frozen seafood-processing enterprises have more than 60% of workers without technical expertise. Particularly for the private CBTS enterprises, about 80% of the employees are not trained, but only take short training courses organized by the enterprises themselves. This is in agreement with Tang Thi Ngan et al. (2016), Huynh Thanh Nha et al., (2015) and Pham Thu Huong (2017). On the part of employers: 30-55% have no technical expertise and 40-75% have insufficient knowledge of the law. Therefore, many frozen seafood-processing enterprises have to "save themselves", the main concern of the unit is training and enhancing skills for workers. However, how to make this human resource meet the quality and requirements of society needs the support of the fisheries authorities. However, managers consider the average value of this factor quite high (3.78). In the Human resource capacity component, the factors are arranged according to the average value of each of these factors. HRC3 = 3.77, respectively; HRC4 = 3.76; HRC2 = 3.7; HRC1 = 3.63.

Enterprises actively organize training courses or send staff to participate in courses to equip them with knowledge about international trade, laws and customs, the culture of importing countries, as well as international practices. In the context of international economic integration, leaders must have foreign language skills to communicate with foreign partners, be able to synthesize and analyze market price information, constantly improve their skills in all aspects of business and be sensitive to developments in the market. According to Zhu, L., & Cheung, S. (2017), besides the quality of human resources, in today's rapidly changing business environment, the flexibility of employees is also a factor that creates an advantage in competition for business. Flexible human resources are capable of handling all internal and external situations such as changes in volume demand, and designs according to customer requirements. This problem is also demonstrated by Francis et al. (2011); however, flexible labor transition will affect better competitiveness..

• The eighth relevant factor is Legal and Regulation with coefficient  $\beta = 0.072$  ( $p = 0.016$ ), showing that although the Prime Minister issued Decision 80/2002/QD-TTg on the implementation of policy on product consumption through contracts, the implementation results are still limited. The association of the "four houses" (farmers, businesses, the state and scientists) still has shortcomings. However, managers consider the average value of this factor to be quite low (3.5). In the legal and regulatory components, the factors are sorted according to the average value of each of these factors, respectively LR1 = 3.46; LR2 = 3.51; LR4 = 3.57; LR3 = 3.58. Difficulties of

policies and legislation related to the production of frozen seafood-processing enterprises, thereby weakening the competitiveness of enterprises because of many inadequate policies such as:

The Circular has not yet regulated the application of the principles of risk management and prioritization in management and specialized inspection of imported aquatic products and aquatic products. Currently, 100% of consignments must be inspected for organoleptic criteria, storage conditions, packaging and labelling specifications. Meanwhile, Resolutions No. 19 and Resolution No. 02 of the Government both require a specialized inspection to follow the principles of risk management.

- In addition, enterprises in traditional economic fields that use technology at an average level, such as aquaculture have a high proportion of enterprises borrowing capital from banks (33.7%). By size, the proportion of enterprises borrowing capital (61.1% and 63.2%) is higher than that of those micro enterprises (30.4%).

The majority of frozen seafood-processing enterprises do not enjoy or do not really care about the tax policy of the Government, specifically: enterprises consider themselves to be not beneficiaries (29.3%), and dossier procedures are too cumbersome and time-consuming (20.2%). It takes "lubrication costs" (32.3%), in addition, nearly a quarter of enterprises that do not enjoy tax incentives think that tax incentives are not attractive (13.4%); and only a small percentage of enterprises (4.8%) do not care about the tax support policy of the CP.

• The 9th strongest related factor: Management and administration capacity has a coefficient of  $\beta = 0.071$  ( $p = 0.018$ ), which shows that business managers have a good market forecasting ability, good vision, and analysis have a degree in business organization management. Therefore, that a new class of business people with market knowledge has been formed. However, managers consider the average value of this factor to be quite low (3.63). In the component Management and operation capacity, the factors are arranged according to the average value of each of these factors, respectively, MEC4 = 3.66; MEC5 = 3.62; MEC2 = 3.62; MEC3 = 3.59; MEC1 = 3.62. This is Tran The Hoang (2011) of the same opinion. It is very important to identify these factors and through these factors, businesses can improve their competitiveness Barclay (2005) and Williams (2007). With accumulated business management experience, they will build good commercial relationships with partners. These are passports to help businesses bring seafood products to the market. This is in agreement with S. Onar & S. Polat (2010).

Therefore, it is necessary to strengthen the management experience, education, knowledge and entrepreneurial experience used to measure management capacity (Homburg and Giering (2001). Financial management and accounting and related problems with knowledge of financial planning Science and technology is constantly developing, so each public manager must consider self-study to enhance qualifications and competence. Only then, can public managers grasp new achievements in science and technology and keep up with changes in the domestic and international environment.

#### **Chapter 4 Summary**

Chapter 4 analyzed and assessed the current situation of competitiveness of frozen seafood-processing enterprises BR-VT and evaluated the factors related to the competitiveness of frozen seafood-processing enterprises BR-VT as presented in Chapter 2. Analysis and assessment of the overall assessment of frozen seafood-processing enterprises BR-VT, the overall of Kien

Giang frozen seafood-processing enterprises. Thereby finding out the strengths and weaknesses in the corporate competitiveness frozen seafood-processing industry BR-VT, shows that the seafood industry currently has too many factors that are hindering and reducing the competitiveness of frozen seafood-processing enterprises BR-VT.

Presenting sample characteristics, testing correlation by reliability coefficient and analyzing EFA to extract 9 components related to the competitiveness of frozen seafood-processing enterprise BR-VT. (1) Management Capacity Management and operations, (2) Human resource capacity, (3) Financial capacity, (4) Relationship marketing competence, (5) Technology and logistics-innovation competence, (6) adaptive forces, (7) Market Impact (MI), (8) Legal and regulatory, and (9) Local infrastructure.

As a result, nine components are related to the competitiveness of frozen seafood-processing enterprises BR-VT at a significant value  $< 0.05$  (significant level of 5%). The model results are tested, and there are nine accepted hypotheses, including MEC, HRC, FC, MRC, AC, TLC, MI, LR and LI.



## *Chapter - 5*

# *Conclusions and Management Implications*

## **5.1. Opportunities for Improving the Competitiveness of the Ba RIA -Vung Tau Seafood Industry**

- The Fishery is identified as a key economic sector in national development. Always receiving the attention of the Party and State, all levels of government in all activities of developing the fisheries economy.

- Favorable natural conditions and the potential for diverse aquatic resources are the basis for the development of fisheries fields.

- Due to population growth and economic development, the seafood market in the province and the world continues to expand, and seafood products increasingly dominate the food market. Despite being affected by the world economic downturn, aquatic foods are still popular, especially in industrialized countries; seafood prices are always stable at high levels.

- Advanced technology and techniques, especially fast and strong development of biotechnology, have been creating opportunities for application in fishery research and production activities.

- Our country's aquatic products have generally met the strict requirements of quality, hygiene and food safety standards of countries in the region and the world.

- Our country's fisheries have developed very early in order to take advantage of abundant human resources and favorable natural conditions. Fishery workers always promote their experience according to the hereditary tradition and apply scientific and technological achievements to develop fishery production.

- With the characteristics of individual occupations, fisheries development is widely deployed from border areas to remote islands and covers the exclusive economic zone at sea, making an important contribution to the preservation of marine resources security order and national sovereignty overseas and islands.

- Vietnam has joined WTO, AFTA, EFTA, and VEFTA, this is a great opportunity to expand the market and compete equally with exporting countries of seafood products.

## **5.2. Challenges to Improve the Competitiveness of the Seafood Industry**

### **A. Environment, Climate Change**

- The environment is changing in a bad direction. More and more untreated waste from river basins and coastal areas pours into the sea, some coastal areas are polluted, the red tide phenomenon appears more and more on a large scale, etc. Important marine ecosystems (coral reefs, mangroves, seagrass beds) have been degraded, lost their habitat and reduced in the area (mangrove loss is about 15 ha/year). About 80% of coral reefs in Vietnam's waters are at risk, of which 50% are at high levels (MOST, 200). The above situation is similar to the seagrass bed ecosystem. That leads to the habitat of aquatic species in some areas being compromised, and the quality of the environment tends to decline more and more.

- In addition, our country is one of the five countries strongly affected by climate change and sea level rise, first of all coastal areas and small islands. Coastal ecosystems, people on the coast and on islands are the most vulnerable and impacted, but so far there is a lack of specific research on this issue, as well as no Integrated solutions and adaptation models of climate change and sea level rise.

- Marine biodiversity and aquatic resources decline: The productivity of extensive shrimp farming in mangroves has decreased from about 200 kg/ha/crop (1980) to only 80 kg/ha/crop and 1 ha of mangroves used to be able to exploit 800 kg of the fishery, but now it is only 1/20 compared to before. There are about 100 species of seafood with different levels of endangered and over 75 species have been included in the Red Book of Vietnam (MARD, 2008). Aquatic resources in coastal waters and freshwater are exploited beyond the allowable limit due to the rapid increase in the number of fishing boats, and the fishing productivity decreased from 0.92 tons/CV (1990) to 0,36 tons/CV (in 2008). Aquatic resources tend to decrease gradually in terms of quantity, output and size of fish caught. In addition, the source of natural seafood, seeds has also decreased significantly compared to before.

- The area of freshwater and brackish water used for aquaculture has increased to the limit; signs of degradation and degradation appear in some brackish water culture areas; the risks in aquaculture are increasing due to environmental pollution, diseases and natural disasters (MARD, 2009).

#### **b. Market**

- The competition in seafood import and export on the world market is increasingly fierce, especially in terms of quality and food safety and hygiene requirements, environmental protection, and product branding taller and tighter.

- The level of technology and techniques applied to fishery activities of some countries in the region has reached a high level, so we will face difficulties in competing on prices and consuming markets for products seafood products.

- Prices of raw materials and main materials used in aquaculture production tend to increase, which will cause significant difficulties for sustainable aquaculture development.

- The world economic recession and crisis are forecasted to happen more often and with higher frequency, negatively impacting the production activities of economic sectors, including the fisheries sector.

- The scarcity of raw materials and energy leads to frequent and fierce market competition, territorial disputes and national conflicts

#### **C. People's Life, People's Intellectual Level**

- The structure of the fisheries industry is not reasonable, showing that there are still some fishing occupations that seriously infringe on resources such as trawling, fishing, electric Cyprus..., and the number of boats still gathering. over-exploiting fishery products in coastal waters due to the poverty of fishermen and forced livelihoods; Offshore fishing has only been partially developed in the national waters, not having enough conditions to reach out to international waters (Ministry of Fisheries, 2005).

- When the level of social life is improved, the process of urbanization takes place strongly, creating more and better job opportunities for rural workers, the attraction of laborers to participate in fisheries development, especially The fishing industry will face many difficulties because it is a low-income, arduous, dangerous and high-risk occupation.

- People working in the fishery industry have a low level of culture, especially in coastal areas, and fishermen are engaged in fishing. That will make it difficult to apply new and advanced technologies to production to increase productivity, and output, and protect the ecological environment (Ministry of Fisheries, 2005) still poor, still facing many

difficulties and taking many risks, low level of security. The participation of local communities in the management process is still very passive, and the issue of ownership and use of coastal land and sea surface has not been clarified for people (Ministry of Fisheries, 2005).

#### **D. Planning, Infrastructure, Policy**

- The situation of potential use of aquatic resources is inefficient and unsustainable due to spontaneous exploitation, lack or non-compliance with planning, giving rise to many conflicts of interest, even in a small geographical area (a bay, an estuary, a coastal area); while giving priority to exploiting natural resources, non-material functional values are given little attention (Ministry of Fisheries, 2005). The situation of fragmented, spontaneous and scattered production is still common; the sense of respect for discipline and law of people involved in seafood production and business activities is not high

The overlap and contradiction in the use of resources, and the development of economic sectors such as agriculture, tourism, industry and fisheries, especially in the coastal areas, is becoming increasingly acute, complex and complex. difficult to solve

- The legal system and policies on the sea and the islands are still inconsistent, with many overlapping points, weak enforcement, and a lack of inter-sectoral coordination and organization of legal support for people. The local government has received little attention and is confused... The limitation in the state management capacity of the sector from the central to the local level is a big challenge to the goal of sustainable human resource development. The consistency in state management and the requirement to implement the policy of decentralization are still confusing. Choosing the methods of organizing fisheries management is currently a challenge to the Government (2004).

- Lack of information system for production organization associated with notification of natural disasters and organization of prevention and rescue, storm shelters.

- The management of aquatic resources and resources still follows the specialized approach, but not completely according to the systematic, integrated, interdisciplinary, ecosystem-based management and co-management approaches.

- The East Sea area is having fierce disputes, so international cooperation and integration for economic development in this area still face many difficulties (Nguyen Kim Phuc, 2008).

#### **5.3. Conclude**

Through research on the topic "Improving the competitiveness of seafood enterprises: A case study of Ba Ria-Vung Tau province", the thesis has achieved the following results: According to the author's point of view, the approach to competitiveness according to the capacity theory is suitable for the characteristics of frozen seafood-processing enterprises in BBR-VT province and the current business environment conditions in Vietnam. With this view, the concept of competitiveness of IPR is understood as capacity-based by delineating this point of view from the resource-based perspective. (Madhok 2002; Saranga et al. (2018), show that the competency-based perspective is moving towards one that takes into account a company's competitive advantage as well as its organizational network (Duschek 2002). This change is absolutely necessary to understand the emergence of both competitive advantages as well as the competitiveness of the enterprise in a comprehensive way.

Because the competitiveness includes the ability to prove yourself in the market and against the threatening forces from competitors and from the business environment. According to Salem & Abdien (2017),

1) A company can compete only if it has the ability to prove itself in market processes with its respective customers and suppliers (vertical level).

2) The competitiveness of enterprises depends on their ability to cope with the competitive forces of their competitors in the market (at par) corresponding to the threatening forces of the market environment.

The competency-based perspective goes a step further. Company A can only be more successful than Company B if Company A is in a position to utilize available capabilities more efficiently and/or better than Company B. This comes with the availability and use of employing competencies that cannot be quickly imitated by competitors (Teece et al., 1997: 524).

By using qualitative and quantitative research methods, the thesis builds a scale and research model with nine hypotheses to be tested. Testing the scale and testing the model's hypotheses using the tools of reliability coefficient, exploratory factor analysis (EFA), regression analysis, and mean value. The results of the study show that the thesis has identified the constitutive factors for the competitiveness of frozen seafood-processing enterprises in BR-VT province and has built up the measurement criteria of each scale to measure these factors. The author has added two new factors that have not been studied before:

Relationship marketing is a shift from transactional marketing to one-on-one relationship marketing. It is based on a method of purchasing motivation research that investigates what influences buyers in the hope that company researchers may discover a better market approach for their products. . Know that relationship marketing focuses on the long term instead of the short term. Focus on customer retention rather than sales; Prioritize customer service. Encourage regular contact with customers; promote customer commitment to the company; exchanges with customers are carried out because of cooperation, commitment and trust; All employees are united in their commitment to providing high-quality products/services to customers.

(2) Understanding Competence Technology and logistics innovation are the means to improve competitiveness and business performance. In the logistics sector, many new technologies play an important role in the success of the supply chain by improving the efficiency and overall performance of the logistics system. Technology and logistics innovation are key elements of business competition in all sectors. Technology and logistics innovation gives companies the opportunity to adapt to the environment in which they operate. Guan et al (2006) assert a close intrinsic relationship between technological innovation and competitiveness. In addition, technology and logistics innovation enable them to identify and control changes in the external environment, so that operators achieve long-term competitiveness. In the field of logistics, information, communication and automation technologies have significantly increased the speed of identification, collection, processing, analysis and transmission of data with high accuracy and reliability (Kocoglu et al. associates, 2012).

The thesis has evaluated the impact level of 9 competitive competitiveness factors of frozen seafood-processing enterprises in BR-VT province as follows (1) Technological and logistical-innovation. (TLC) capacity with coefficient  $\beta = 0,400$  ( $p = 0.000$ ) is the factor that has the strongest impact on the competitiveness of frozen seafood-processing enterprises, respectively,

from high to low is (2) Market impact ( $\beta = 0.245$ ;  $p = 0.000$ ), (3) Financial capacity ( $\beta = 0.190$ ;  $p = 0.000$ ), (4) Relationship marketing capacity ( $\beta = 0.130$ ;  $p = 0.000$ ), (5) Adaptive capacity ( $\beta = 0.108$ ;  $p = 0.000$ ), (6) Local infrastructure ( $\beta = 0.094$ ;  $p = 0.001$ ), (7) Human resource capacity ( $\beta = 0.077$ ;  $p=0.016$ ), (8) Legal and regulatory ( $\beta = 0.072$ ;  $p = 0.016$ ), (9) Management and executive capacity ( $\beta = 0.071$ ;  $p = 0.018$ ).

#### **5.4. Governance Implications for Frozen Seafood-processing Enterprises**

Through analyzing the current situation of competitiveness of frozen seafood-processing enterprises in BR-VT province and research results, the thesis has proposed management implications to improve the competitiveness of enterprises processing frozen seafood in BR-VT province. In addition, it can also be a reference for frozen seafood-processing enterprises.

##### **Implication 1: Technological and Logistical Capabilities-Innovation**

Research results show that Technological and logistical innovation capabilities are the factors that have the strongest impact on competitiveness ( $\beta = 0,400$ ) of frozen seafood-processing enterprises in BR-VT province. However, managers consider the average value of this factor not high (3.74). According to the analysis of each criterion in the composition scale, enterprises have modern production techniques (TLC3), and enterprises have production processes to ensure food safety and hygiene (TLC4). The technological and logistics-innovation capacity of frozen seafood-processing enterprises in BR-VT province is currently at a rather low average level. Although enterprises are interested in investment and technical research, they face many difficulties in accessing capital sources to access technology. The average value for the question "Do enterprises have enough capital to invest in technical innovation" is only 3.70 points. The lowest among the measures of technological and logistical innovation capabilities so the technology and logistics innovation capacity of enterprises is still quite low. According to Le (2006), the demand for technical innovation by Vietnamese people is relatively low. This result shows that BR-VT in frozen seafood-processing enterprises has not demonstrated the ability to upgrade their technology and equipment to a high level of technical development. This proves that enterprises do not have enough capital to invest in appropriate technical improvements.

Only 4-6% of businesses use modern European technology, a unit with an advanced IQF instant freezing line. Most enterprises are using outdated technology compared to the world average from 2 to 3 generations. The frozen processing capacity accounts for over 91% of the technology equipped before 2010.

The overall efficiency of the whole industry is still low, reflected in the capacity utilization factor below 5.25%, and the material utilization factor below 50%. Due to low profits, few units can change techniques and purchase equipment to reduce costs. They are 36% of enterprises self-assessed that 4% of the main equipment are modern (although in fact, over 86% of the surveyed equipment has a productive year before 2010). Most of the units use outdated equipment, in which manual labor accounts for more than 50% of the stages.

As noted by Lee (2018), a small business that adopts a more sophisticated level of technology can be expected to grow faster than a similar company that does not. Rinaldi et al. (2001), and Yusuf et al. (2013) show that low levels of technological capacity hinder and discourage SMEs from realizing their full potential. As noted by USAID (2007) countries with high levels of technological development tend to have high levels of entrepreneurial development.

Technological and logistics-innovation capacity is the ability of enterprises to implement existing techniques and adapt to modern techniques. To strengthen this capacity, BR-VT in

frozen seafood-processing enterprises need to have good people who quickly grasp and master new techniques. At the same time, it is possible to improve old techniques or techniques imported from outside to suit enterprise resources. BR-VT in frozen seafood-processing enterprises needs to renew management mechanisms and financial mechanisms, for scientific and technical activities. Create an open and convenient corridor for organizations, individuals and especially businesses to participate in the implementation of scientific and technical tasks in a timely manner, meeting the requirements and needs of the operation manufacturing business. Enterprises exploit information online to refer to new technical directions. With enough information, the new enterprise can develop a plan to choose a partner to get the optimal technique.

Increase state investment in such aspects, scientific research, application and technology transfer of intensive farming to increase productivity; advanced fishing technology; post-harvest processing and preservation technology; and consumption of aquatic products

Continue to invest in depth, innovate technology and equipment, and mechanize and automate seafood-processing lines, especially attract foreign investment in the seafood-processing industry to access the seafood-processing industry modern transformation of the world. Using the FDI investment channel as an impulse to create spillover effects to promote the development of domestic seafood development.

**Implication 2: Market impact**

According to research results, market impact is the second strongest factor affecting competitiveness ( $\beta = 0.245$ ) of frozen seafood-processing enterprises in BR-VT province. According to the analysis of each indicator in the scale, the component "Competition to buy raw materials is bad", so the price of raw materials increases when the market is scarce for aquatic materials. Since then, the input costs of all frozen seafood-processing enterprises have increased, resulting in a decline in the competitiveness of enterprises. Although this chain of linkages includes all enterprises in the industry such as producers, seed companies, purchasing, processing and markets, in general, the linkage is still quite loose. Unhealthy competition between businesses and unstable links.

The forms of competition to buy, the purchase, sale and collection of seafood are very related and businesses can only meet 60% of the demand for raw materials for production, competition for raw materials is bad for 36.69% of businesses when collecting purchasing raw materials. The price of raw materials is increased when the market is scarce aquatic materials, making the input costs of all enterprises increase, and the competitiveness of enterprises is limited. Therefore, the work of market management and supervision of foreign traders for seafood raw materials needs to be tightened. Enterprises find it difficult to raise capital and cooperate in joint ventures, so investment projects are also behind schedule, and some projects have to be stopped. Reorganization of production must be seen as a breakthrough in the development of the fisheries sector. Reorganize production, according to the product chain from raw material production to processing and consumption of aquatic products. Which, seafood-processing enterprises take the initiative in producing a part of raw materials, and the rest sign contracts with raw material producers? Forming professional associations according to fields of activity to support the production and consumption of aquatic products.

Organize and rearrange the system of seafood-processing and trading establishments. Develop and implement well development programs for key products and new products with market

potential

To increase the import of diversified seafood materials, with an appropriate structure for processing and re-export to meet the requirements of the market's product structure, to overcome the seasonal supply of raw materials for seafood production domestic product.

To create all conditions and a level playing field for all economic sectors engaged in fishery production and business, here special attention is paid to encouraging various types of farm economy and seafood business owners. The private sector has a large scale in the seafood trade such as merchants and barn owners. Bringing the seafood business into a modern business system in the form of industrial and commercial enterprises. Eliminate the current type of small-scale business, too small and scattered business.

### **Implication 3: Financial Capacity**

According to the research results, financial capacity is the third strongest factor affecting competitiveness ( $\beta = 0.190$ ) of frozen seafood-processing enterprises in BR-VT province. , the components "solvable enterprises", (FC4) and "enterprises with sufficient working capital" (FC5) both reached the lowest (3.69) This proves that enterprises do not have enough working capital and cannot rapid capital turnover in business activities (average score for the question "enterprises with quick capital turnover" is low (3.70). The two components that are most appreciated are "enterprises with easy capital raising", (3.74), and enterprises that have revenue growth activities (3.79) leading to low profitability and low competitiveness..

According to the 2018 survey results of VCCI, the financial capacity of Vietnamese frozen seafood-processing enterprises is very low. To improve this capacity, it is necessary for enterprises to make their own efforts, restructure and access finance and invest in key projects. Solving the problem of raising capital has many joint venture channels to form an import-export fund to support each other. Competent enterprises quickly carry out procedures to participate in the stock market to increase a channel to raise capital from public capital. It is recommended to mobilize capital from the internal resources of BR-VT in frozen seafood-processing enterprises by promoting initiatives to improve technology, enhance quality, and work efficiency, increase labor productivity to reduce labor costs and increase the competitiveness of products.

Banks do not provide sufficient capital to SMEs in many of these countries (Borch & Madsen, 2011). Prahalad and Ramaswamy (2004) observe that the majority of frozen seafood-processing enterprises rely on internal financings, such as contributions from owners, family and friends, which are often not enough for frozen seafood-processing enterprises to survive and develop. Therefore, external financing is necessary to reduce the impact of cash flow problems for frozen seafood-processing businesses.

Investment in upgrading and renovating technology is the basis for enterprises to improve quality, lower costs and improve competitiveness for seafood products. To do so, enterprises must mobilize capital for this investment, which can be mobilized from the following sources:

- + From the accumulation capacity of the enterprise and from the source of asset depreciation, the enterprise must have the plan to accumulate and form an investment and development fund to actively invest in technological innovation. However, this source depends on the annual profit level while most seafood-processing enterprises are small in scale.

- + Equities state-owned enterprises to mobilize more capital from the society. For enterprises that already have shares, they will issue more shares.

- + Performing joint ventures with domestic investors to concentrate capital sources for



investment; strengthening joint ventures and linkages with enterprises of importing countries to promptly grasp demand and tastes and limit trade barriers raised by importing countries.

The procurement of technological equipment requires appropriate research and selection. First, it must ensure food safety and hygiene conditions, be able to diversify products and produce ready-to-eat products, and value-added products. However, not every modern technology is good, but it is necessary to consider investment efficiency and take advantage of abundant human resources.

#### **Implication 4: Relationship Marketing Competence**

According to research results, relationship marketing capacity is the 4th strongest factor affecting competitiveness ( $\beta = 0.130$ ) of frozen seafood-processing enterprises in BR-VT province. According to the analysis of each indicator in the scale, the majority of the enterprises in the field of LURC said that relationship-marketing activities understand the transition from transactional marketing to relationship marketing as one of the most important trends of marketing today. However, the average values of "businesses improve quickly with new things" (3.57) and "enterprises understand customers' needs" (3.65). Show that enterprises with original property claims need to understand how relationship marketing can help reduce risk, improve exposure to customers, structure and social communication, understand customers better, focus customers on profit rather than sales, have a lot of relationships in the relationship marketing system. Relationship marketing is not only a function of the marketing department, but has become a cross-functional function of many departments. There are many markets or groups involved, not just a single customer market as in the tradition; marketing activities changed from acquiring to acquiring and retaining suitable customers "enterprises with customer care system" (MRC4 = 3.64) and "enterprises with identifying core markets" (3.66).

Most businesses have a planning department combined with a Marketing department (61.45%). Only 38.55% of enterprises have a separate marketing department, but most of them are not fully staffed by a standard Marketing department (5 departments). There are 9.45% of enterprises, that have a number of new business planning and many enterprises do not have a market strategy for seafood products.

Strengthening Relationship Marketing Capability BR-VT frozen seafood-processing enterprise br-vt is about building long-term, reliable, win-win relationships to serve to maximize customer satisfaction and retention (Eleni Kaimakoudi et al., 2014). Communicate with customers intimately and you will know what their needs are (Wright et al. 1993). It provides more information than advertising and retaining existing customers, rather than focusing on finding new customers (Wuangwe, 1995).

#### **Implication 5: Adaptability**

According to the research results, financial capacity is the fifth strongest factor affecting competitiveness ( $\beta = 0.108$ ) of frozen seafood-processing enterprises in BR-VT province. According to the analysis of each indicator in the scale, the component "Does businesses have the right approach to customer preferences" (3. 22). Therefore, BR-VT's frozen seafood-processing enterprise faces the external environment but has not adjusted its internal resources and capabilities, so its business performance is not high. "Current capacity of enterprises is ready for the challenges and opportunities" (3, 21) because Adaptive capacity focuses on the linkage between internal resources of enterprises such as the capacity to approach and innovate. Frozen seafood-processing enterprises BR-VT has not been able to implement because of the

links of the above capabilities, so they have not created a clear advantage and "This market is too competitive and the price wars often occur" (3, 24). Because frozen seafood-processing enterprises BR-VT lack enhanced flexibility and the alignment of their resources, focusing on the ability to self-regulate to promptly deal with environmental changes that enterprises cannot react to slow response. Currently, the competitiveness of frozen seafood-processing enterprises is not ready for the challenges and opportunities new products; difficult to distinguish the brand of enterprises" (3.19).

Only 14.95% of businesses create an enabling environment to foster innovation, experimentation, and the ability to discover the right solutions to capitalize on new opportunities. With the current capacity, only 16.82% of frozen seafood-processing enterprises can promote and integrate well with the market. Here, with the current capacity, only 22.43% of enterprises can withstand the competition and price wars that often occur in the marketplace. While 24.30% of frozen seafood-processing enterprises make decisions and forward-looking management to flex the system and react to related changes. (Eva and Simon 2010), Cinner et al., (2018) recommend building adaptive capacity across five areas: assets that people can use when needed; the flexibility to change strategy; the ability to organize and act collectively; learning to recognize and respond to change; and the agency to determine whether changes should be made.

Increasing awareness of BR-VT in frozen seafood-processing business managers about the choice of ways to improve adaptive capacity is to demonstrate the ability to adjust, modify the internal system or change behavior corresponding to customer behavior. Enhance adaptive capacity through customer expectations. Respect includes giving the customer a choice on a personal level, what product information the customer wants to disclose, and at the same time providing the customer with something of value (Kaplinsky et al. 2001).

To increase the import of diversified seafood materials, with an appropriate structure for processing and re-export to meet the requirements of the market's product structure, to overcome the seasonal supply of raw materials for the seafood production domestic products.

Develop and implement well development programs for key products and new products with market potential. Applying advanced preservation technologies along with forming a system of fishing ports and fish markets to minimize post-harvest losses. At the same time, reorganize the buying and selling system, promote the positive role and limit the negative aspects of this system in order to gradually manage the raw material market well.

#### **Implication 6: Local Infrastructure**

According to the research results, local infrastructure is the sixth strongest factor affecting the competitiveness, ( $\beta = 0.094$ ) of frozen seafood-processing enterprises in BR-VT province, according to the analysis, analyzing each indicator in the scale, the component "Vocational training system for seafood-processing is not good" (average value is quite high 4, 15). Frozen seafood-processing enterprises BR-VT wish to be fully trained and professional. "The price of the area is not stable related to production and business" (4, 14) businesses must actively save electricity by producing at off-peak hours, investing in replacing lighting equipment that consumes less electricity, replacing some machines applying new techniques so that they are not related to production and business. "Good wharf traffic system" (3, 88).

Thus, the provision of infrastructure services through infrastructure assets (e.g.) transportation services; telecommunications services; electricity, gas and water supply, etc.) In the condition

that Vietnam's road system is still limited, traffic jams occur frequently, and the price of tolls through the station increases, making transportation costs very high, affecting 18.02% of seafood-processing enterprises. Frozen. In addition, logistics costs in import and export are increasing, creating a great burden for most enterprises, reducing competitiveness, and hindering the development of enterprises.

The state budget needs to increase the level of investment in the fields, especially breeding animals, application of technical advances, transfer of new technologies into production, construction of fishery infrastructure, and vocational training. Building a communication system, surveying fishery resources, forecasting fishing grounds, logistics services at sea and islands, and supporting fishermen to change careers. To ensure that when changing jobs, they must have higher incomes than the old ones, and support fishermen with interest rates to encourage organizations and individuals to develop offshore fishing and marine farming.

### **Implication 7: Human Resource Capacity**

According to the research results, human resource capacity is the 7th strongest factor affecting competitiveness, ( $\beta = 0.077$ ) of frozen seafood-processing enterprises in BR-VT province. According to the analysis of each indicator in the scale, the components "Enterprise employees meet job requirements" (average value of HRC3 is quite high, reaching 3.77) and "Human resources meet job requirements". " (HRC4= 3, 76). It shows that most BR-VT in frozen seafood-processing enterprises must have a solution to recruit and "retain" employees, especially during peak holidays such as holidays, New Year or the beginning of the year. During this time, it is very difficult to mobilize workers to return to work after returning home. They do not stick with the job for a long time for many reasons (salary, new opportunities, following the advice of friends...).

Human resource management is a job that is related to the success of each enterprise. A business that is strong in strategy and technique is still not enough to operate effectively, but it must have a team of highly qualified personnel with an appropriate management capacity. Currently, frozen seafood-processing enterprises in BR-VT province are using about 11% - 13% of the total labor force working in enterprises in general. This is a trained force higher than the common level in enterprises, the rest is low because the job is simple, the guide is familiar with the job, and the income is stable, so it is easy to attract workers when needed.

Due to the specificity of the frozen seafood-processing industry, which is related to health, the enterprise attaches special importance to the staff of food quality and hygiene inspectors. The higher the standard of living, the more and more consumers demand clarity on food safety and hygiene standards. The policy of quality assurance is disseminated to all members of the enterprise, ensuring that all members are thoroughly understood. The food safety and quality policy can be made into written regulations and hung in the appropriate locations.

+ For employees, enterprises regularly organize on-the-spot training courses or send them to vocational schools to study seafood-processing skills, aquatic safety and hygiene standards, and prevention of risk of infection so that workers can actively and consciously avoid hazards in accordance with HACCP regulations. Enterprises also create an environment to encourage employees to regularly improve their skills such as organizing skills contests, professional development and scientific salary and bonus regimes.

+ Focus on training fisheries managers with good professional and social knowledge to be able to manage the industry for sustainable development. Training scientific staff capable of absorbing the world's advanced technical and technological in all fields.

Train inspectors and controllers in all areas from resource protection to food safety and hygiene.

+ Develop mechanisms, policies, training plans and career development orientations for all economic sectors based on actual production needs. Promote international cooperation in human resource training. Organize the transfer of scientific and technological achievements to organizations, individuals and businesses engaged in fisheries activities.

### **Implication 8: Laws and Regulations**

According to the research results, legal and regulatory is the 8th strongest factor affecting the competitiveness, ( $\beta = 0.072$ ) of frozen seafood-processing enterprises in BR-VT province. According to the analysis of each indicator in the scale, the component "Vietnam's seafood-processing promotion policy" (average value 3.57), in fact, the State regulations have been highly appreciated by enterprises. . Although the policy system is not complete and complete, all policies are synchronous. Without appropriate regulatory measures in the management of assets in water bodies, the proportion of fishermen benefiting is only 17%. "Weakness in environmental management and food safety and hygiene" (3, 58) The quality problem of fish and fish products mainly relies on hygienically produced products, with safe ingredients. There is no clear standard yet.

The monitoring system for fishing vessels at sea is still lacking, and ships operating at sea are not safe. Although the legal and regulatory system is not complete, complete and synchronous, businesses all acknowledge the Government's attention and better support trend towards businesses. including frozen seafood-processing enterprise BR-VT.

Credit policy has not met requirements, disbursement is slow, and procedures are still difficult for fishermen, affecting 22.02% of frozen seafood-processing enterprises in lending for business operations. The investment policy is not close to actual production, affecting 17.61% of frozen seafood-processing enterprises.

Improve the efficiency of using investment capital from the state budget by innovating the state management of investment in the direction of eliminating the closed situation in the management of capital construction investment, separating the management functions state with business management. Thereby, enhancing publicity, transparency and effective investment implementation, avoiding spreading. Improve the quality of planning and implementation of investment management, according to the planning. Overcome the negative situation, waste and loss in investment, strengthen investment supervision, check, control, detect and strictly handle violations of regulations on investment management.

It is necessary to continue to strengthen and improve the effectiveness of policies to encourage domestic investment in order to attract investment capital from the private sector. The current investment promotion policy needs to be understood and applied with a broader connotation. Investment promotion policies need to be developed more in favor of equal treatment in all fields among economic sectors (State, non-State and foreign-invested capital).

In the short term, it is advisable to focus on solving the problems that foreign investors still have in order to put the licensed projects into operation. The foreign investment policy should aim to attract companies with great capital potential and high ability in research and technology

transfer to Vietnam. For ODA capital, in order to improve efficiency, it is necessary to promote the role of national ownership from the mobilization stage to the stage of project use and exploitation and select appropriate areas to mobilize ODA, thereby maximizing the effectiveness and spillover effects of ODA programs and projects.

**Implication 9: Management and Executive Capacity**

According to the research results, management and administrative capacity is the 8th strongest factor affecting competitiveness, ( $\beta = 0.071$ ) of frozen seafood-processing enterprises in BR-VT province. According to the analysis of each indicator in the scale, the component "Leaders of enterprises creates trust in executive capacity", has the lowest average score (3.56). By managers of seafood-processing enterprises frozen BR-VT managed by experience is 55.62%, with training is 44.38%. According to statistics, only 27.84% have attended the professional director class. In fact, the survey results show that 292 owners of frozen seafood-processing businesses in BR-VT were interviewed, and up to 175 business owners answered that they had never attended a training course related to the profession of professional director accounting for 59.97%. Moreover, more than 97% of BR-VT in frozen seafood-processing enterprises are small and medium-sized, but the tendency to link up to create large-scale enterprises is still very weak.

Attention should be paid to the context of the implemented EFA and EVFTA agreements. EVFTA will be a huge boost to Vietnam's exports, helping to diversify export markets and products, especially agricultural and aquatic products as well as Vietnamese products that have many competitive advantages. The commitments to give fair, equal treatment, safe and full protection of each other's investments and investors in the IPA Agreement will also contribute positively to building a legal and investment environment transparent investment, from which Vietnam will attract more investors from the EU and other countries.

Moreover, SMEs in Vietnam face more policy and institutional challenges than large enterprises do. Senior managers of SMEs in Vietnam spend a higher percentage of their time (about 25%) dealing with government regulatory requirements. Actively train the management team of enterprises in both professional knowledge, and management knowledge and in law, informatics, and foreign languages... Regularly practice management skills in all jobs in the enterprise the person responsible for managing the functions of a business, such as organization, production, accounting, marketing, and many others.

Consolidate a number of state-owned enterprises to play a leading role in public services. Application and transfer of new technologies; train cadres and guide other economic sectors to operate in accordance with the Party's line and the State's policies; create conditions to support economic sectors, complement each other for development; encourage the development of new cooperatives and forms of cooperative economy in fishery production and business

The cooperative economic organizations and the cooperative economy should move in the direction of cooperation to support each other to improve competitiveness and combat market and price pressures, as well as strengthen credit power, information, marketing, and vocational training.

Ownership diversification: State-owned enterprises that are currently operating at a profit (accounting for a very low percentage) need to be equitized quickly, in order to attract investment capital, improve technology, innovate management, and increase capacity production capacity and commodity competition.

State-owned enterprises that are operating inefficiently should be considered to either be dissolved or operate in the form of a financial lease for a period of 1 -15 years, the process is the same as for a business enterprise effective. Equitization of state-owned enterprises, the establishment of joint-stock companies and joint-stock cooperatives. To encourage the establishment of joint ventures with foreign countries and foreign enterprises to directly invest in the fisheries sector.

### 5.5. Limitations and Directions for Further Research

- The study is only conducted in one locality, the small sample is only representative of 2/3 of enterprises in the whole province of BR-VT is developing a scale for the seafood-processing industry. The sample selected only frozen seafood-processing enterprises are not representative of all fishing and aquaculture enterprises in the BR-VT province.

- Major issues are of great interest to many people, so building a system of arguments and proposals needs time to test and complete.

- Due to limited research capacity, time and resources, some issues the author has not studied some in-depth and cannot cover all enterprises in the seafood-processing industry of Ba Ria - Vung Tau.

### REFERENCES

1. A Lobe (2012). Fight against unfair competition. Volume I. Truth Publishing House.
2. Abor J, Quartey P. (2010). Issues in SME Development in Ghana and South Africa. *Int. Res. J. Finn. Econ.*, 39: 218 – 228.
3. Aguirre-Bastos C, Weber MK (2017). Foresight for shaping national innovation systems in developing economies. *Technol Forecast Soc Change*, 128:186–196.
4. Adam Smith (1776). *The Wealth of Nations*, pp. 12-15,400-401,436-437.
5. Anderson, James C. and James A. Norris (1998). Business Marketing: Understand what customers value. *Harvard Business Review*, 76(6). 53-61.
6. Anderson, J. C., & Narus, J. A. (1990). A model of distributor firm and manufacturer firm working partnerships. *Journal of Marketing*, 54(1), 42–58.
7. Akhtaruzzaman Khan, Emran Hossain, Sayemul Islam, Takibur Rahman & Madan Mohan Dey (2022). Shrimp export competitiveness and its determinants: a novel dynamic ARDL simulations approach. Pages 221-248.
8. Aldington Report (1985). “Competitive micro environment of small residential building contractors”. Istanbul Technical University, Turkey
9. Anoop Madhok et al. (2014). Towards an action-based perspective on firm competitiveness. *Business Research Quarterly*, 17(2): 77–81.
10. Arthur A Thompson AJ Strickland (1995) Strategic Management: Concepts and Cases (8th Ed) International Student Edition USA: Irwin - Volume 1 Issue 1.
11. Bach Thu Cuong (2002). “Discussing global competition”. Information Publishing House.
12. Bai, Y. Xu, Z. Shen, M., Y. (2009). Bank and Small- and Medium-sized Enterprise (SME) Lending: Evidence from China. *Journal of World Development*, Vol 37, No 4, pp. 800-811.
13. Bárbara Larran eta, F. Xavier Molina-Morales and Ines Herrero (2018). Centrality in networks of geographically proximate firms and competitive capabilities. *Business Research Quarterly*, oil, 128, pp14.
14. Baron, S. and Harris, K. (2010). Toward an understanding of consumer perspectives on experiences. *Journal of Services Marketing*, Vol. 24 No. 7, pp. 518-531.

15. Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17, 99-120.
16. Belkacem Laabas (2002). "Meaning and Definitions of Competitiveness", Arab Planning Institute, Kuwait.
17. Berumen, S. A. (2006). Una aproximación a los indicadores de la competitividad local y factores de la producción. *Cuadernos de Administración*, 19(31), 145-163.
18. Berry, D. C. (1983). Metacognitive experience and transfer of logical reasoning. *The Quarterly Journal of Experimental Psychology A: Human Experimental Psychology*, 35A (1), 39-49.
19. Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to CoronaVirus pandemic. *Asian Journal of Distance Education*, 15(1), i-vi.
20. Buckely PJ et al. (1991). Foreign Market Servicing Strategies and Competitiveness. *Journal of General Management*, 17(2), pp. 34-46.
21. Bui Duc Tuan (2010), "Competitiveness of Vietnam's seafood-processing industry", PhD thesis in development economics, National Economics University, Hanoi. Tiếng Anh
- 22.
23. Camison, C., & Fores, B. (2015). Is tourism firm competitiveness driven by different internal or external specific factors: *New empirical evidence from Spain*. *Tourism Management*, 48, 477-499.
24. Cao, D., Li, H., Wang, G., Luo, X., & Tan, D. (2018). Relationship Network structure and organizational competitiveness: Evidence from BIM implementation practices in the construction industry. *Journal of Management Eng.*, 34(3), 34.
25. Carole R. Engle & Nathan M. Stone (2013). Competitiveness of U.S. aquaculture within the current U.S. regulatory framework. *Aquaculture economics & management*, 17(3), pp. 251-280.
26. Chenet, P., Dagger, T., & O'Sullivan, D. (2010). Service quality, trust, commitment and service differentiation in business relationships. *Journal of Services Marketing*, 24 (5), 336 – 346.
27. Christian Ketels (2016). "Competitiveness frameworks review an analysis conducted for the National Competitiveness Council". Dublin.
28. Day, G.S. (1994). The capabilities of market-driven organizations. *Journal of Marketing*, 58 (4), 37-53.
29. David Besanko, David Dranove, Mark Shanley. Wiley, (2010). "Business & Economics" - 593 pages.
30. Davidow, M. (2003). Have you heard the word? The effect of word of mouth on perceived justice, satisfaction and repurchase intentions following complaint handling. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior Provo*, Vol. 16, (2003): 67-80.
31. Delamare Le, Deist F., Winterton J. (2005). What is competence? *Human Resource Development International*, 8, 27-46.
32. Donalson, Dave (2018). Railroads of the Raj: Estimation the Impact of Transportation Infrastructure. *American Economic Review*, 108(4/5): 899-934.
33. Eisenhardt KM, Bhatia M. (2000). "Organizational complexity and computation". In *Companion to Organizations*, Baum JAC (Ed.). Blackwell: Oxford, UK.

34. Eisingerich, A. B. and Bell, S. J. (2006). Relationship marketing in the financial services industry: The importance of customer education, participation and problem management for customer loyalty. *Journal of Financial Services Marketing*, Vol. 10, No. 4, pp. 86-97.
35. Eleni Kaimakoudi, Konstantinos Polymers and Christos Batzios (2014). Investigating Export Performance and Competitiveness of Balkan and Eastern European Fisheries Sector. *Procedia Economics and Finance*, Volume 9, Pages 219-230.
36. FAO (2017). “*The 2030 agenda and the sustainable development goals: the challenge for aquaculture development and management*”. FAO Fisheries and Aquaculture Circular. Rome Iss. C1141, (2017): I, IV, VII, 1-62.
37. FAO (2012a). “*World review of fisheries and aquaculture 2012*”. Food and agriculture organization, Rome, Italy.
38. Fehr, E. and Schmidt, K.M. (1999) A Theory of Fairness, Competition, and Cooperation. *Quarterly. Journal of Economics*, 114, 817-868.
39. Flanagan, R., W. Lu, L. Shen, C. Jewell (2007). Competitiveness in construction: a critical review of research. *Construction Management and Economics*, Vol. 25(9), pp. 989-1000.
40. Franziska Blunck (2006), What is Competitiveness?; The Competitiveness Institute.
41. Fearne, A., Martinez, M.G. and Dent, B. (2012). Dimensions of sustainable value chains: implications for value chain analysis. *Supply Chain Management: An International Journal*, Vol. 17, No. 6, pp. 575-581
42. Fred. R. David (2006). Strategic management: Concepts and cases: A competitive advantage approach.
43. Garvin, D.A. (1987). Competing in the Eight Dimensions of Quality. *Harvard Business Review*, 87, 101-109.
44. Gundlach, H. and Neville, B. (2012). Authenticity: Further theoretical and practical development. *Journal of Brand Management*, Vol. 19, pp. 484-499.
45. Gummesson, E. (2008). Extending the service-dominant logic from customer centricity to balanced centricity. *Journal of the Academy of Marketing Science*, 36, 15-17.
46. Gummesson, E. (1997). Relationship marketing as a paradigm shift: Some conclusions from the 30R approach. *Management Decision*, 35(4), 267–272.
47. Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. (2010). “*Multivariate data analysis. Prentice Hall*”. Upper Saddle River, NJ.
48. Harrigan, K. R., and Diguardo, M. C. (2017). Sustainability of patent-based competitive advantage in the U.S. communications services industry. *J. Technol. Transfer*, 42, 1–28.
49. Håkan Håkansson and Ivan Snehota. Scandinavian (1989). The network concept of business strategy. *Journal of Management*, vol. 5, issue 3, 187-200.
50. Huda, N., A. (2012). The Development of Islamic Financing Scheme for Small and Medium Enterprises in a Developing Country: The Indonesian Case. *Procedia-Social and Behavioral Sciences*. Vol 52, pp179-186.
51. Inese biuksane và Ilze Judrupa (2017). “*Evaluation of the competitiveness of fisheries sector cluster*”. Research for Rural Development 2016, volume 2.
52. IMD (2015). “*Methodology and Principles of Analysis, in: IMD World Competitiveness Yearbook IMD*”. Lausanne
53. IFC Annual Reports & Financial Statements (2013). International Finance Corporation. 17T15:59:09Z.



54. Jeal Louis Muchielli (2002). “*Competitive, define, indication of determination*”. Accomex Paris.
55. Huynh Thanh Nha (2015). Evaluation of COMPETITIVE STRENGTH of private economic enterprises in Can Tho city. *Journal of Science*, Vol. 6 (2), 30 – 36
56. Hoang Trong and Chu Nguyen Mong Ngo (2008). “*Research data analysis with SPSS*”. Hong Duc Publishing House.
57. Hinloopen, J., and Van Marrewijk, C. (2001). On the empirical distribution of the Balassa index. *Weltwirtschaftliches Archiv* 137, 1 - 35.
58. John Kay (2011). Think Again: Summer 1993 the Structure of Strategy. *Business Strategy Review*, Vol. 22, Issue 2, pp. 80-85.
59. K. Marx (1978). “*Magnetic Jealousy Complete*”. Truth Publishing House
60. Kang, M., and Lee, M. J. (2017). Absorptive capacity, knowledge sharing, and innovative behaviour of R&D employees. *Technol. Anal. Strat. Manag*, 29, 219–232. doi: 10.1080/09537325.2016.1211265.
61. Karakas, A., & Sariçoban, A. (2017). The Impact of Watching Subtitled Animated Cartoons on Incidental Vocabulary Learning of ELT Students. *Teaching English with Technology*, 12, 3-15.
62. Kazim Saricoban, Elif Kaya (2017). Determination of the seafood export competitiveness: the comparative analysis of top ten countries having lion share from seafood export. *Journal of Business, Economics and Finance*, (JBEF), ISSN: 2146 – 7943.
63. Ketels, C. and Protsiv (2013). Clusters and Competitiveness: Porter’s Contribution. In Huggins and Izushi (Eds.) *Competition, Competitive Advantage and Clusters: The Ideas of Michael Porter*, pp. 173–191. Oxford: Oxford University Press.
64. Khawaja Muhammad Imran Bashir Jin-Soo Kim, Md Mohibullah, Jae Hak Sohn, Jae-Suk Choi (2018). Strategies for improving the competitiveness of Korean seafood companies in the overseas halal food market. *Journal Of Islamic Marketing*, <https://doi.org/10.1108/JIMA-03-2018-0056>.
65. Kotler, B & Keller, K. L. (2006). “*Marketing Manag*”, Pearson Prentice Hall, USA.
66. Kuo, S-Y., Lin, P-C., & Lu, C-S. (2017). the effects of dynamic capabilities, service capabilities, competitive advantage, and organizational performance in container shipping. *Transportation Research Part A*, 95, 356-371.
67. Krzysztof Firlej, and Sebastian Kubala (2017). Factors of functioning and chances of development of fish industry in Poland. *Economy Econocy Ekonomia*, 16 (2) 2017, 33–43.
68. Kuo, S-Y., Lin, P-C., & Lu, C-S. (2017). the effects of dynamic capabilities, service capabilities, competitive advantage, and organizational performance in container shipping. *Transportation Research Part A*, 95, 356-371.
69. Kveton, V., & Horak, P. (2018). The effect of public R&D subsidies on firms competitiveness: Regional and sectoral specifics in emerging innovation systems. *Applied Geography*, 94, 119-129.
70. Kwak, D. W., Seo, Y. J., Mason, R., Brown, S., and Hill, A. (2018). Investigating the relationship between supply chain innovation, risk management capabilities and competitive advantage in global supply chains. *Int. J. Operat. Prod. Manag*, 38, 2–21. doi: 10.1108/ijopm-06-2015-0390.

71. Lee, J. and Karpova, E. (2018). Revisiting the competitiveness theory in the new global environment: review and analysis of the competitiveness definition. *Int. J. Competitiveness*, Vol. 1, No. 3, pp.189–205.
72. Le Dang Doanh (1975). "Competitiveness of enterprises is measured by the ability to maintain and expand market share and make profits for enterprises in a competitive environment at home and abroad". [5, p. 28]
73. Ling, F. Y. Y., & Li, S. (2016). Business models for foreign firms offering construction-related consultancy services in China. *Construction Management and Economics*, 34(4-5), 218-235.
74. Lopez-Gamero, M. D., & Molina-Azorin, J. F. (2016). Environmental management and firm Competitiveness: The joint analysis of External and internal elements. *Long Range Planning*, 49, 746-763.
75. Madhok, A., & Marques, R. (2014). Towards an action-based perspective on firm competitiveness. *Business Research Quarterly*, 17, 77-81.
76. Mahida Navghan and Nalini Ranjan Kumar (2017). An Empirical Assessment of Indian Seafood Export Performance and Competitiveness *Int. J. Pure App. Biosci.* 5 (6): 329-336.
77. Martinez-Corcoles, M., Stephanou, K.D. and Sch € obel, M. (2020). Exploring the effects of leaders individualized consideration in extreme contexts. *Journal of Risk Research*, Vol. 23 No. 2, pp. 167-180.
78. Maury, B. (2018). Sustainable competitive advantage and profitability persistence: Sources versus outcomes for assessing advantage. *Journal of Business Research*, 84, 100-113.
79. Mendieta-Peñalver, L. F., Perles-Ribes, J. F., Ramon-Rodriguez, A. B., & Such-Devesa, M. J. (2018). Is hotel efficiency necessary for Tourism Destination Competitiveness: An integrated approach? *Tourism Economics*, 24(1), 3-26.
80. Mendieta-Peñalver, L. F., Perles-Ribes, J. F., Ramon-Rodriguez, A. B., & Such-Devesa, M. J. (2018). Is hotel efficiency necessary for Tourism Destination Competitiveness: An integrated approach? *Tourism Economics*, 24(1), 3-26.
81. Muhammad Yusuf and Torbjørn (2014). Trondsen *Journal of Agribusiness in Developing and Emerging Economies. Emerald Group Publishing Limited*, Vol. 4, No. 1., pp. 78-96. DOI 10.1108/JADEE-02-2013-0008.
82. Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *The Journal of Marketing*, 58(3), 20–38.
83. Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between providers and users of market research: The dynamics of trust within and between organizations. *Journal of Marketing Research*, 29(3), 314–328
84. Muzhar Javed, Muhammad Amir Rashid and Ghulam Hussain (2017). Well-governed responsibility spurs performance, *Journal of Cleaner Production*, 166, (1059).
85. Naorem Dinesh Singh and M. Krishnan (2019). Composition, competitiveness and comparative advantage of Indian shrimp exports. *Infofish International*, vol 2/2019. <https://www.researchgate.net/publication/331247753>.
86. Nguyen Van Hieu (2017). "Center for International Studies (SCIS)". Ho Chi Minh City University of Social Sciences and Humanities.

87. Nguyen Phi Hung (2022). A two-stage PLS-SEM and hierarchical analysis AHP approach to investigate the export competitiveness of Vietnamese SMEs. *CMC*, vol.72, no.2
88. Nguyen Thi Le et al (2019). Research on factors affecting the competitiveness of seafood enterprises in the Mekong Delta. *Scientific Journal of Can Tho University*, 55(6): 65.7.
89. Nguyen Tuan Minh and Bui Van Khoa (2020). Enhancing the competitiveness of export enterprises: The case of Kien Giang province, Vietnam. *Journal of Asian Finance, Economics and Business*, Vol 7 No 6 (2020) 495 – 508.
90. Nguyen Phuc Nguyen & Vu Quynh Anh (2015). Dynamic capacity - a new approach to sustainable development. *Journal of Economic Sciences*, 3 (1), 1-10.
91. Nguyen Tran Sy (2013). Dynamic capabilities – a new approach to create competitive advantages for small and medium enterprises in Vietnam. *Development & Integration*, No. 12 (22): 15-13.
92. Nguyen Phu, Le Duc Toan Toan, Thi Ho, Phi Y (2020). Factors Affecting the Competitiveness of Vietnam Aquatic Exporters: Empirical Evidence in an Giang Province. *WSEAS Transactions on Business and Economics*, 17 (2020):397-409.
93. Nguyen Huu Thang (2008) “*Improving the competitiveness of Vietnamese enterprises in the current trend of international economic integration*”. National political publishing house.
94. Nguyen Vinh Thanh (2005). Enhance the competitiveness of Vietnamese enterprises today. *Economic Development Magazine*, No. 2, November 2005.
95. Nguyen Dinh Tho & Nguyen Mai Trang (2009). The ministerial-level project has carried out a study on the dynamic COMPETITIVE STRENGTH of businesses in HCMC.
96. Nguyen Minh Tuan and Bui Thanh Khoa (2020). Enhancing the competitiveness of export enterprises: The case of Kien Giang province, Vietnam. *Journal of Asian Finance, Economics and Business*, Vol 7 No 6 (2020) 495 – 508.
97. Nunnally, J., & Bernstein, I. (1994). “*Psychometric theory*”. New York: McGraw-Hill.
98. Nurliza, Anita Suharyani, Aditya Nugraha (2021). The Product Features, Functions, and Benefits of Seafood Products for Competitive Repositioning. *Journal of Agribusiness and Rural Development Research*, Vol. 7 No. 1 January – June 2021, Pages: 91-110.
99. OECD (2013). “*Economic Policy Reforms 2013: Going for Growth*”. OECD Publishing. <http://dx.doi.org/10.1787/growth-2013-en>.
100. OECD (2009). “*Organization for Economic Co-operation and Development*”. Paris.
101. Osawe, O.W. and Salman, K.K. (2016). Competitiveness of Fish Farming in Lagos State, Nigeria: An Application of Policy Analysis Matrix. *Journal of Agriculture and Sustainability*, Volume 9, Number 1, 58-82.
102. Papalia, R. B., Calia, P., & Filippucci, C. (2015). Information theoretic Competitiveness composite indicator at micro level. *Social Indicators Research*, 123, 349-370.
103. Peng, M. Y. P., Lin, K. H., Peng, D. L., and Chen, P. (2019). Linking organizational ambidexterity and performance: the drivers of sustainability in high-tech firms. *Sustainability* 11:3931. doi: 10.3390/su11143931.
104. Peteraf MA (1993). The Cornerstones of Competitive Advantage: A Re-resource-based View. *Strategic Management Journal*, 14, pp 179-191.
105. Porter, M.E. and Kramer, M.R. (2004, 2011). Creating shared value. *Harvard Business Review*, Vol. 89, No. 1, pp.2–17.

106. Porter, M. E. *The Competitive Advantage of Nations*. New York: Free Press, 1990.
107. Rabbani, A. Kamran. (2013). Challenges in banks, finance to the SME sector. *Pakistan Business Review*, Vol 15 No 2, pp106-120.
108. Ricardo. David (1817). *On the Principles of Political Economy and Taxation*. Piero Sraffa (ED). *Works and Correspondence of David Ricardo*. Cambridge University Press, pp. 135.
109. Rodríguez-Pose, A., & Hardy, D. (2016). Firm Competitiveness and regional disparities in Georgia. *Geographical Review*, 107(2), 1-28.
110. Robson, M. J., Katsikeas, C. S., & Bello, D. C. (2008). Drivers and performance outcomes of trust in international strategic alliances: *The role of organizational complexity*. *Organization Science*, 19(4), 647–665.
111. Robert Kay, (1999). “*Corresponding Author. Centre for Systemic Development, School of Agriculture and Rural Development*”. University of Western Sydney, Hawkesbury, Richmond, New South Wales, Australia .... Pages 273-281.
112. Salem, I. E-B., & Abdien, M. K. (2017). Implementation of employee cross-training during perilous conditions in hotels. *Tourism Management Perspectives*, 23, 68-74.
113. Salem, M. A., Shawtari, F. A., Shamsudin, M. F. & Hussain, H. I. (2016). The relation between stakeholder’s integration and environmental competitiveness. *Social Responsibility Journal*, 12(4), 755-769.
114. Sanchez, R., & Heene, A. (2014). “*A Focused Issue on Building New Competences in Dynamic Environments*”. Bingham: Emerald Group Publishing Limited.
115. Sapienza HJ, Autio E, George G, Zahra SA (2006). A capabilities perspective on the effects of early internationalization on firm survival and growth. *Acad. Manage. Rev.*, 31(4): 914-933.
116. Saporito, P. A., Chen, C. C., & Sapienza, H. J. (2004). The role of relational trust in bank–small firm relationships. *Academy of Management Journal*, 47(3), 400–410.
117. Saranga, H., George, R., Beine, J., Arnold, U. (2018). Resource configurations, product development capability, and competitive advantage: An empirical analysis of their evolution. *Journal of Business Research*, 85, 35-50. .
118. Sauka, A. (2014). Measuring the competitiveness of Latvian companies. *Baltic Journal of Economics*, 14(1-2), 140-158.
119. Saurabh Srivastava, Abid Sultan and Nasreen Chashti (2016). Influence of innovation competence on firm level competitiveness: an exploratory study. *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 11 No. 1, pp. 63-75.
120. Sauka, A. and F. Welter (2014). Determinants of Business Insolvencies during Economic Growth and Recession in Latvia. *Journal of Baltic Studies*, 45:3.
121. Saricoban, K. and E. Kaya (2017). Determination of the seafood export competitiveness: the comparative analysis of top ten countries having lion share from seafood export. *Journal of Business, Economics and Finance (JBEF)*, V.6, Iss.2, p.112-124.
122. Senik Zizah Che, Rosmah Isa, Ridzuan Md Sham and Abu H Ayob (2014). A Model for Understanding SMEs *Internationalization in Emerging Economies Journal Pengurusan*, 41:25-42.
123. Shanty Oktavilia, Firmansyah1, FX Sugiyanto, M Aulia Rachman (2019). “*Competitiveness of Indonesian fishery commodities*”. *Earth and Environmental Science* 246.

124. Simatupang, T.M., Piboonrungraj, P. and Williams, S.J. (2017). The emergence of value chain thinking, *International Journal of Value Chain Manage.*, 8(1):40.
125. Skinner, W. (1984). Operations technology: blind spot in strategic management. *Interfizce*, 4(1): 116-125.
126. Sri Hidayati, Dwidjono H. D, Masyhuri, and Kamiso H. N. (2015). Analysis of Determinant Indonesian Tuna Fish Competitiveness in Japanese Market. *International Journal of Agriculture System (IJAS)*, Volume 3 Issue 2, P.169-178.
127. Subramanian, N., & Gunasekaran, A. (2015). Cleaner supply-chain management practices for twenty-first-century organizational competitiveness: Practice-performance framework and research propositions. *International Journal of Production Economics*, 164, 216-233.
128. Talik, E., Laguna, M., Wawrzenczyk-Kulik, M., Talik, W., Wiacek, G., Vingoe, G., Huyghe, P. (2012). The AstraManager tool: A method of measuring competencies of micro firm's managers. *Human Resource Management Research*, 2: 9-14.
129. Tang Thi Ngan, To Minh Chien, Nguyen Minh Tan and Vo Van Nhi (2016). Factors related to competitive strength of pangasius enterprises in Can Tho city. *Journal of Science Can Tho University*, vol. 10(2), 52 – 62
130. Teece DJ (2007). Explicating Dynamic Capabilities: The Nature and Micro foundations of (Sustainable) Enterprise Performance. *Street. Manage. J.*, 28(13): 1319-1350.
131. Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533. <https://www.jstor.org/stable/3088148>
132. Terziowski, Mile, (2010). Innovation Practice and its Performance Implications in Small and Medium Enterprises (SMEs) in the Manufacturing Sector: *A Resource-Based View. Strategic Management Journal*, 31 (8): pp. 892-902.
133. Tharindu bandara, L.M. abeywickrama and K. Radampola (2020). Growth performance and competitiveness of finfish and frozen shrimp exports in Sri Lanka Indian. *J. Fish*, 67(3): 118-126.
134. Trondsen, T. (2012). Value chains, business conventions, and market adaptation: A comparative analysis of Norwegian and Icelandic fish exports. *The Canadian Geographer*, 56(4), pp. 459-473.
135. Thimann C. (2017). The Microeconomic Dimensions of the Eurozone Crisis and Why European Politics Cannot Solve Them. *Journal of Economic Perspectives*, Vol. 29 No. 3, pp. 141-164.
136. Thompson, A.A., Strickland, A.J. and Gamble J.E. (2007). *“Crafting and Executing Strategy: Concepts and Cases”*. 15th Ed. New York, McGraw Hill.
137. US Council on Competitiveness (2001). *“US competitiveness 2001: Strengths, Vulnerabilities and long – term Priorities”*. Washington D.
138. USAID (2007). *“United States Agency for International Development”*. USAID /Nepal Economic Growth, Education and Food Security Program. <http://nepal.usaid.gov/our-work/program-area/economic-growth-education-a-od-security.html>. (Accessed 22 June 2010).

139. Vatamanescu, E -M., Andrei, A. G., Dumitriu, D-L., & Leovaridis, C. (2016). Harnessing network-based intellectual capital in online academic networks. From the Organizational policies and practices towards Competitiveness. *Journal of Knowledge Management*, 20(3), 594-619.
140. Vayda Andrew P. and Bonnie J. McCay. 1975. New Directions in Ecology and Ecological Anthropology. *In Annual Review of Anthropology*, 4:293-306.
141. World Economic Forum (2006). “*Global Competitiveness Report*”. Geneva – Switzerland.
142. WEF (World Economic Forum) (2007). The Travel & Tourism competitiveness report 2007. Furthering the process of economic development. Geneva, Switzerland.
143. Wernerfelt (1984). A Resource-Based View of the Firm *Strategic Management Journal*, Vol. 5, 171-180 (1984).
144. World Economic Forum (2018). “*Guidelines for National Competitiveness Reports*”. World Economic Forum (WEF). Geneva.
145. Yang, J., Zhang, F., Jiang, X., Sun, W. (2015). Strategic flexibility, green management, and firm competitiveness in an emerging economy. *Technological Forecasting & Social Change*, 101, 347-356.
146. Yusuf, M. And Trondsen, T. (2013). A market-oriented innovative quality framework for the investigation of competitive entry opportunities into new seafood markets for producers. *International Journal of Quality and Innova.*, 2(2), pp. 175–192.
147. Zaheer, A., & Harris, J. (2006). “*Interorganizational Trust*. In O. Shenkar and J. Reuer (Eds.)”. Handbook of Strategic Alliances (pp. 169–97). Thousand Oaks, CA: Sage Publications.
148. Zhou KZ, Li CB (2010). How strategic orientations influence the building of dynamic capability in emerging economies. *Journal Bus. Res.*, 63(3), 224-231.
149. Zhu, L., & Cheung, S. (2017). Harvesting Competitiveness through building Organizational innovation capacity. *Journal of Management Engineering*, 33(5).

**LIST OF WORKS OF THE AUTHOR**

1. **Tran Huu Ai (2020)**. Competitiveness of seafood enterprises: the case study of Ba-Ria-Vung-Tau province, Vietnam. E3S Web of Conferences 164, 06001 (2020).<https://doi.org/10.1051/e3sconf/202016406001>. SCOPUS.
2. **Tran Huu Ai (2018)**. Competitive Assessment Factors of Seafood Exporters In Vietnam. (The EUrASEANs: journal on global economic dynamics, Bangkok, Thailand 4 (11) – 7 & August 2018.
3. **Tran Huu Ai (2017)**. Managerial efficiency on the performance of aquaculture enterprises in Vietnam. The EUrASEANs: journal on global economic dynamics, Bangkok, Thailand 4 (5) – 7 & 8/2017.
4. **Tran Huu Ai (2017)** Environmental impact on small and medium enterprises effective. The case of the sector is legal in Vietnam). The EUrASEANs: journal on global economic dynamics, Bangkok, Thailand, 2 (3) 3&4/2017.
5. **Tran Huu Ai (2016)**. Factors affecting consumer behavior towards eco-friendly seafood in Ho Chi Minh City, Vietnam. The EUrASEANs: journal on global economic dynamics. Bangkok, Thailand, (1), December 2016.
6. **Tran Huu Ai (2016)**. Seafood Export Barriers at International Markets. Scientific. Economic Journal, Practical Problems of Economics, №2 (176), 2016. SCOPUS.
7. **Tran Huu Ai (2014)**. The impact of management factors on the performance of seafood exporters Ba Ria - Vung Tau. Economic Development Magazine - Ho Chi Minh City University of Economics, No. 286 8/2014.
8. **Tran Huu Ai (2013)**. Factors affecting competitiveness in frozen seafood-processing enterprises in Vietnam. The case of frozen seafood-processing enterprises in Ba Ria - Vung Tau, Economic Development Magazine, Ho Chi Minh City University of Economics No. 269, March 2013.

**APPENDIX: SURVEY RESULTS****Frequency Statistics**

| <b>Size of enterprise</b> |                           |           |         |               |                    |
|---------------------------|---------------------------|-----------|---------|---------------|--------------------|
|                           |                           | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                     | Firm > 500 Labor          | 234       | 58,2    | 58,2          | 58,2               |
|                           | Firm <500 Labor           | 168       | 41,8    | 41,8          | 100,0              |
|                           | Total                     | 402       | 100,0   | 100,0         |                    |
| <b>SEX</b>                |                           |           |         |               |                    |
|                           |                           | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                     | Male                      | 226       | 56,2    | 56,2          | 56,2               |
|                           | Female                    | 176       | 43,8    | 43,8          | 100,0              |
|                           | Total                     | 402       | 100,0   | 100,0         |                    |
| <b>POSITION</b>           |                           |           |         |               |                    |
|                           |                           | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                     | Board of manager          | 44        | 10,9    | 10,9          | 10,9               |
|                           | Head of Deputy Department | 215       | 53,5    | 53,5          | 64,4               |
|                           | Workshop Manager          | 143       | 35,6    | 35,6          | 100,0              |
|                           | Total                     | 402       | 100,0   | 100,0         |                    |

| <b>AGE</b> |                    |           |         |               |                    |
|------------|--------------------|-----------|---------|---------------|--------------------|
|            |                    | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid      | >2 ages =<35 ages  | 52        | 12,9    | 12,9          | 12,9               |
|            | >35 ages =>45 ages | 217       | 54,0    | 54,0          | 66,9               |
|            | >45ages            | 133       | 33,1    | 33,1          | 100,0              |
|            | Total              | 402       | 100,0   | 100,0         |                    |

| <b>LEVEL</b> |                      |           |         |               |                    |
|--------------|----------------------|-----------|---------|---------------|--------------------|
|              |                      | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid        | High school          | 59        | 14,7    | 14,7          | 14,7               |
|              | Intermediate college | 217       | 54,0    | 54,0          | 68,7               |
|              | University           | 114       | 28,4    | 28,4          | 97,0               |
|              | After University     | 12        | 3,0     | 3,0           | 100,0              |
|              | High school          | 402       | 100,0   | 100,0         |                    |

| <b>SENIORITY</b> |                      |           |         |               |                    |
|------------------|----------------------|-----------|---------|---------------|--------------------|
|                  |                      | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid            | >3 years =<5 years   | 69        | 17,2    | 17,2          | 17,2               |
|                  | >5 years =<10 years  | 223       | 55,5    | 55,5          | 72,6               |
|                  | >10 years =<15 years | 73        | 18,2    | 18,2          | 90,8               |
|                  | >15years             | 37        | 9,2     | 9,2           | 100,0              |
|                  | Total                | 402       | 100,0   | 100,0         |                    |

**Reliability Analysis (Cronbach Alpha)**



| <b>Reliability Statistics</b> |            |
|-------------------------------|------------|
| Cronbach's Alpha              | N of Items |
| ,900                          | 4          |

| <b>Item-Total Statistics</b> |                            |                                |                                  |                                  |
|------------------------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
|                              | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| HRC1                         | 11,24                      | 3,918                          | ,717                             | ,891                             |
| HRC2                         | 11,17                      | 3,905                          | ,706                             | ,895                             |
| HRC3                         | 11,10                      | 3,483                          | ,860                             | ,839                             |
| HRC4                         | 11,11                      | 3,506                          | ,826                             | ,852                             |

| <b>Reliability Statistics</b> |            |
|-------------------------------|------------|
| Cronbach's Alpha              | N of Items |
| ,908                          | 5          |

| <b>Item-Total Statistics</b> |                            |                                |                                  |                                  |
|------------------------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
|                              | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| MEC1                         | 14,49                      | 7,143                          | ,724                             | ,897                             |
| MEC2                         | 14,44                      | 7,254                          | ,741                             | ,893                             |
| MEC3                         | 14,47                      | 6,913                          | ,809                             | ,878                             |
| MEC4                         | 14,40                      | 7,641                          | ,713                             | ,898                             |
| MEC5                         | 14,44                      | 7,000                          | ,859                             | ,868                             |

| <b>Reliability Statistics</b> |            |
|-------------------------------|------------|
| Cronbach's Alpha              | N of Items |
| ,907                          | 4          |

| <b>Item-Total Statistics</b> |                            |                                |                                  |                                  |
|------------------------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
|                              | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| TLC1                         | 11,31                      | 2,572                          | ,718                             | ,904                             |
| TLC2                         | 11,34                      | 2,426                          | ,743                             | ,897                             |
| TLC3                         | 11,25                      | 2,351                          | ,846                             | ,859                             |
| TLC4                         | 11,25                      | 2,361                          | ,857                             | ,855                             |

| <b>Reliability Statistics</b> |            |
|-------------------------------|------------|
| Cronbach's Alpha              | N of Items |
| ,832                          | 4          |

| <b>Item-Total Statistics</b>  |                            |                                |                                  |                                  |
|-------------------------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
|                               | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| MI1                           | 11,24                      | 2,604                          | ,750                             | ,748                             |
| MI2                           | 11,26                      | 2,816                          | ,638                             | ,798                             |
| MI3                           | 11,32                      | 2,775                          | ,591                             | ,819                             |
| MI4                           | 11,14                      | 2,583                          | ,671                             | ,783                             |
| <b>Reliability Statistics</b> |                            |                                |                                  |                                  |
| Cronbach's Alpha              |                            |                                | N of Items                       |                                  |
| ,920                          |                            |                                | 5                                |                                  |
| <b>Item-Total Statistics</b>  |                            |                                |                                  |                                  |
|                               | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| FC1                           | 14,92                      | 4,576                          | ,753                             | ,911                             |
| FC2                           | 14,90                      | 4,526                          | ,809                             | ,900                             |
| FC3                           | 14,84                      | 4,721                          | ,730                             | ,915                             |
| FC4                           | 14,94                      | 4,487                          | ,847                             | ,892                             |
| FC5                           | 14,94                      | 4,488                          | ,835                             | ,894                             |
| <b>Reliability Statistics</b> |                            |                                |                                  |                                  |
| Cronbach's Alpha              |                            |                                | N of Items                       |                                  |
| ,842                          |                            |                                | 4                                |                                  |
| <b>Item-Total Statistics</b>  |                            |                                |                                  |                                  |
|                               | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| MRC1                          | 10,95                      | 2,643                          | ,613                             | ,828                             |
| MRC2                          | 10,87                      | 2,665                          | ,646                             | ,812                             |
| MRC3                          | 10,86                      | 2,657                          | ,721                             | ,782                             |
| MRC4                          | 10,88                      | 2,527                          | ,731                             | ,775                             |
| <b>Reliability Statistics</b> |                            |                                |                                  |                                  |
| Cronbach's Alpha              |                            |                                | N of Items                       |                                  |
| ,917                          |                            |                                | 4                                |                                  |

| <b>Item-Total Statistics</b> |                            |                                |                                  |                                  |
|------------------------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
|                              | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| LR1                          | 10,66                      | 4,179                          | ,755                             | ,910                             |
| LR2                          | 10,61                      | 4,084                          | ,750                             | ,912                             |
| LR3                          | 10,54                      | 3,630                          | ,886                             | ,864                             |
| PR4                          | 10,55                      | 3,664                          | ,852                             | ,877                             |

| Reliability Statistics |            |
|------------------------|------------|
| Cronbach's Alpha       | N of Items |
| ,841                   | 5          |

| Item-Total Statistics |                            |                                |                                  |                                  |
|-----------------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
|                       | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| LI1                   | 16,15                      | 5,710                          | ,665                             | ,803                             |
| LI2                   | 16,14                      | 6,433                          | ,581                             | ,825                             |
| LI3                   | 16,29                      | 5,993                          | ,681                             | ,800                             |
| LI4                   | 16,17                      | 5,765                          | ,681                             | ,798                             |
| LI5                   | 16,41                      | 5,699                          | ,627                             | ,815                             |

| Reliability Statistics |            |
|------------------------|------------|
| Cronbach's Alpha       | N of Items |
| ,795                   | 4          |

| Item-Total Statistics  |                            |                                |                                  |                                  |
|------------------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
|                        | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| Competitive Strength 1 | 11,49                      | 1,842                          | ,769                             | ,668                             |
| Competitive Strength 2 | 11,47                      | 1,835                          | ,594                             | ,753                             |
| Competitive Strength 3 | 11,46                      | 2,035                          | ,522                             | ,785                             |
| Competitive Strength 4 | 11,45                      | 2,005                          | ,562                             | ,765                             |

**Exploratory Factor Analysis (EFA)**

| KMO and Bartlett's Test                          |                    |           |
|--|--------------------|-----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy, |                    | ,757      |
| Bartlett's Test of Sphericity                    | Approx, Chi-Square | 15244,456 |
|  | df                 | 780       |
|  | Sig,               | ,000      |

| Total Variance Explained |                     |               |              |                                     |               |              |  |
|--------------------------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|--|
| Component                | Initial Eigenvalues |               |              | Extraction Sums of Squared Loadings |               |              | Rotation Sums of Squared Loadings <sup>a</sup> |
|                          | Total               | % of Variance | Cumulative % | Total                               | % of Variance | Cumulative % | Total  |
| 1                        | 8,872               | 22,181        | 22,181       | 8,872                               | 22,181        | 22,181       | 5,560  |
| 2                        | 5,528               | 13,821        | 36,002       | 5,528                               | 13,821        | 36,002       | 5,480  |
| 3                        | 3,400               | 8,500         | 44,502       | 3,400                               | 8,500         | 44,502       | 3,857  |
| 4                        | 3,197               | 7,991         | 52,493       | 3,197                               | 7,991         | 52,493       | 4,458  |
| 5                        | 2,344               | 5,861         | 58,354       | 2,344                               | 5,861         | 58,354       | 5,073  |
| 6                        | 1,921               | 4,802         | 63,156       | 1,921                               | 4,802         | 63,156       | 3,593  |
| 7                        | 1,751               | 4,379         | 67,535       | 1,751                               | 4,379         | 67,535       | 5,704  |
| 8                        | 1,526               | 3,815         | 71,349       | 1,526                               | 3,815         | 71,349       | 5,039  |
| 9                        | 1,094               | 2,735         | 74,084       | 1,094                               | 2,735         | 74,084       | 4,706  |
| 10                       | ,970                | 2,424         | 76,509       |                                     |               |              |  |
| 11                       | ,765                | 1,912         | 78,420       |                                     |               |              |  |
| 12                       | ,727                | 1,818         | 80,239       |                                     |               |              |  |
| 13                       | ,662                | 1,654         | 81,893       |                                     |               |              |  |
| 14                       | ,648                | 1,620         | 83,513       |                                     |               |              |  |
| 15                       | ,607                | 1,518         | 85,031       |                                     |               |              |  |
| 36                       | ,059                | ,147          | 99,782       |                                     |               |              |  |
| 37                       | ,039                | ,098          | 99,880       |                                     |               |              |  |
| 38                       | ,025                | ,064          | 99,944       |                                     |               |              |  |
| 39                       | ,019                | ,049          | 99,993       |                                     |               |              |  |
| 40                       | ,003                | ,007          | 100,000      |                                     |               |              |  |

Extraction Method: Principal Component Analysis,

a, When components are correlated, sums of squared loadings cannot be added to obtain a total variance,

| Pattern Matrix <sup>a</sup> |           |      |   |   |   |   |   |   |   |
|-----------------------------|-----------|------|---|---|---|---|---|---|---|
|                             | Component |      |   |   |   |   |   |   |   |
|                             | 1         | 2    | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| FC2                         | ,888      |      |   |   |   |   |   |   |   |
| FC1                         | ,866      |      |   |   |   |   |   |   |   |
| FC5                         | ,862      |      |   |   |   |   |   |   |   |
| FC4                         | ,858      |      |   |   |   |   |   |   |   |
| FC3                         | ,734      |      |   |   |   |   |   |   |   |
| MEC3                        |           | ,963 |   |   |   |   |   |   |   |
| MEC5                        |           | ,956 |   |   |   |   |   |   |   |
| MEC1                        |           | ,799 |   |   |   |   |   |   |   |

|      |  |      |      |      |      |      |      |      |      |
|------|--|------|------|------|------|------|------|------|------|
| MEC4 |  | ,788 |      |      |      |      |      |      |      |
| MEC2 |  | ,784 |      |      |      |      |      |      |      |
| AC4  |  |      | ,910 |      |      |      |      |      |      |
| AC5  |  |      | ,871 |      |      |      |      |      |      |
| AC1  |  |      | ,853 |      |      |      |      |      |      |
| AC3  |  |      | ,782 |      |      |      |      |      |      |
| AC2  |  |      | ,716 |      |      |      |      |      |      |
| LR3  |  |      |      | ,948 |      |      |      |      |      |
| LR4  |  |      |      | ,941 |      |      |      |      |      |
| LR1  |  |      |      | ,866 |      |      |      |      |      |
| LR2  |  |      |      | ,818 |      |      |      |      |      |
| HRC1 |  |      |      |      | ,870 |      |      |      |      |
| HRC3 |  |      |      |      | ,862 |      |      |      |      |
| HRC4 |  |      |      |      | ,860 |      |      |      |      |
| HRC2 |  |      |      |      | ,828 |      |      |      |      |
| LI4  |  |      |      |      |      | ,819 |      |      |      |
| LI3  |  |      |      |      |      | ,815 |      |      |      |
| LI1  |  |      |      |      |      | ,793 |      |      |      |
| LI5  |  |      |      |      |      | ,781 |      |      |      |
| LI2  |  |      |      |      |      | ,706 |      |      |      |
| TLC4 |  |      |      |      |      |      | ,937 |      |      |
| TLC3 |  |      |      |      |      |      | ,910 |      |      |
| TLC2 |  |      |      |      |      |      | ,798 |      |      |
| TLC1 |  |      |      |      |      |      | ,797 |      |      |
| MRC4 |  |      |      |      |      |      |      | ,915 |      |
| MRC3 |  |      |      |      |      |      |      | ,767 |      |
| MRC1 |  |      |      |      |      |      |      | ,720 |      |
| MRC2 |  |      |      |      |      |      |      | ,562 |      |
| MI1  |  |      |      |      |      |      |      |      | ,910 |
| MI2  |  |      |      |      |      |      |      |      | ,692 |
| MI4  |  |      |      |      |      |      |      |      | ,666 |
| MI3  |  |      |      |      |      |      |      |      | ,512 |

Extraction Method: Principal Component Analysis,

Rotation Method: Promax with Kaiser Normalization,<sup>a</sup>

a, Rotation converged in 6 iterations,

| <b>KMO and Bartlett's Test</b>                   |                    |         |
|--|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy, |                    | ,740    |
| Bartlett's Test of Sphericity                    | Approx, Chi-Square | 542,522 |
|  | df                 | 6       |
|  | Sig,               | ,000    |

| Total Variance Explained |                     |               |              |                                     |               |              |
|--------------------------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
| Component                | Initial Eigenvalues |               |              | Extraction Sums of Squared Loadings |               |              |
|                          | Total               | % of Variance | Cumulative % | Total                               | % of Variance | Cumulative % |
| 1                        | 2,514               | 62,857        | 62,857       | 2,514                               | 62,857        | 62,857       |
| 2                        | ,644                | 16,093        | 78,950       |                                     |               |              |
| 3                        | ,560                | 13,993        | 92,943       |                                     |               |              |
| 4                        | ,282                | 7,057         | 100,000      |                                     |               |              |

Extraction Method: Principal Component Analysis,

| Component Matrix <sup>a</sup> |           |
|-------------------------------|-----------|
|                               | Component |
|                               | 1         |
| Competitive Strength 1        | ,894      |
| Competitive Strength 2        | ,788      |
| Competitive Strength 3        | ,755      |
| Competitive Strength 4        | ,724      |

Extraction Method: Principal Component Analysis,  
a, 1 components extracted,

Correlation coefficients

| Correlations |                     |        |        |        |        |        |        |        |        |           |   |
|--------------|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|---|
|              |                     | HRC    | MEC    | TLC    | MI     | AC     | MRC    | PR     | FC     | CSHTDPCFS |   |
| HRC          | Pearson Correlation | 1      |        |        |        |        |        |        |        |           |   |
| MEC          | Pearson Correlation | ,409** | 1      |        |        |        |        |        |        |           |   |
| TLC          | Pearson Correlation | ,230** | ,281** | 1      |        |        |        |        |        |           |   |
| MI           | Pearson Correlation | ,142** | ,159** | ,506** | 1      |        |        |        |        |           |   |
| AC           | Pearson Correlation | ,123*  | ,146** | -,028  | ,096   | 1      |        |        |        |           |   |
| MRC          | Pearson Correlation | ,424** | ,282** | ,381** | ,538** | ,028   | 1      |        |        |           |   |
| PR           | Pearson Correlation | ,381** | ,322** | ,047   | -,056  | ,211** | ,106*  | 1      |        |           |   |
| FC           | Pearson Correlation | ,121*  | ,117*  | ,505** | ,497** | ,069   | ,330** | -,064  | 1      |           |   |
| LI           | Pearson Correlation | ,138** | ,064   | ,158** | ,064   | ,005   | ,087   | ,156** | ,219** | 1         |   |
| CFS          | Pearson Correlation | ,365** | ,358** | ,723** | ,647** | ,173** | ,549** | ,168** | ,598** | ,253**    | 1 |

\*\* , Correlation is significant at the 0,01 level (2-tailed),  
 \* , Correlation is significant at the 0,05 level (2-tailed),

**Regression Analysis**

| Model Summary <sup>b</sup> |                   |          |                   |                            |                   |          |     |     |               |               |
|----------------------------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
| Model                      | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               | Durbin-Watson |
|                            |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |               |
| 1                          | .861 <sup>a</sup> | .741     | .735              | .23053                     | .741              | 124.532  | 9   | 392 | .000          | 1.134         |

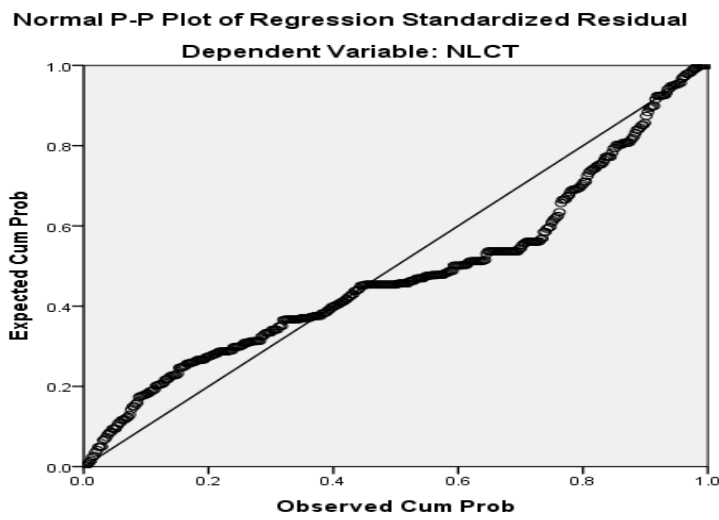
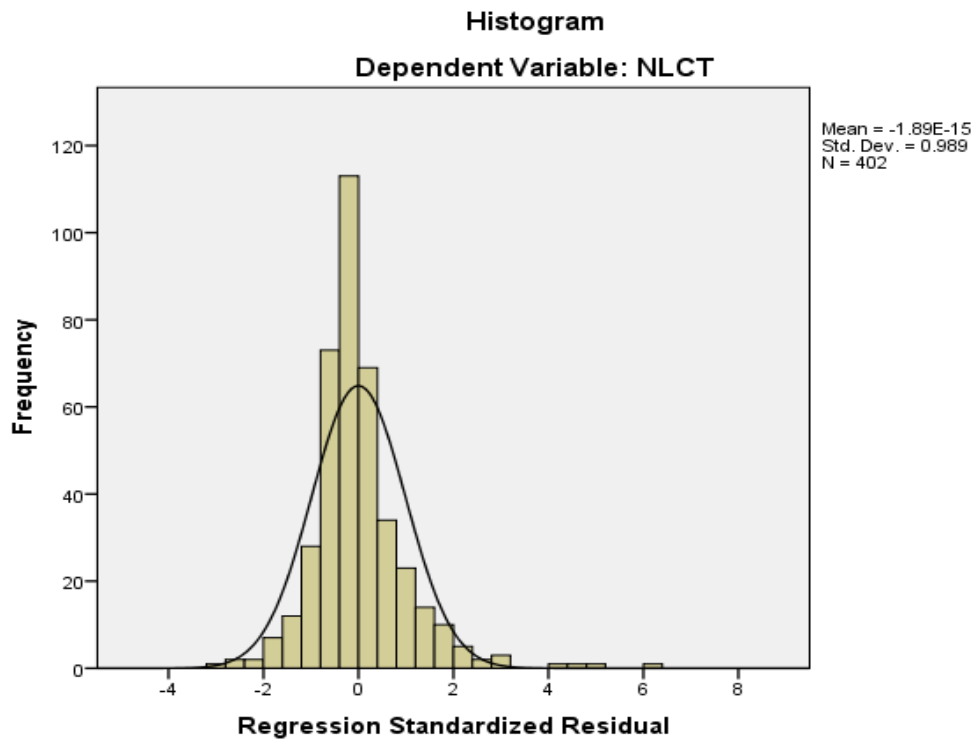
a. Predictors: (Constant), LI, AC, MRC, LR, TLC, MEC, FC, HRC, MI  
 b. Dependent Variable: Competitive Strength

| ANOVA <sup>a</sup> |            |                |     |             |         |                   |
|--------------------|------------|----------------|-----|-------------|---------|-------------------|
| Model              |            | Sum of Squares | df  | Mean Square | F       | Sig.              |
| 1                  | Regression | 59.565         | 9   | 6.618       | 124.532 | .000 <sup>b</sup> |
|                    | Residual   | 20.833         | 392 | .053        |         |                   |
|                    | Total      | 80.397         | 401 |             |         |                   |

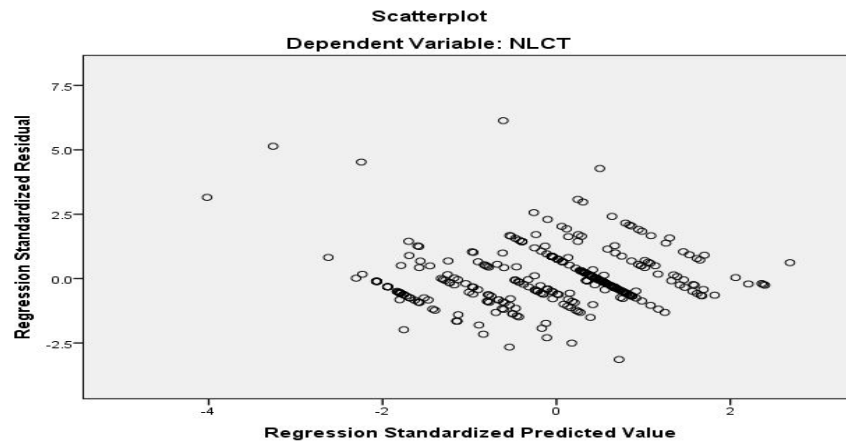
a. Dependent Variable: Competitive Strength  
 b. Predictors: (Constant), LI, AC, MRC, LR, TLC, MEC, FC, HRC, MI

| Coefficients <sup>a</sup> |            |                             |            |                           |        |      |                         |       |
|---------------------------|------------|-----------------------------|------------|---------------------------|--------|------|-------------------------|-------|
| Model                     |            | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. | Collinearity Statistics |       |
|                           |            | B                           | Std. Error | Beta                      |        |      | Tolerance               | VIF   |
| 1                         | (Constant) | -.385                       | .144       |                           | -2.680 | .008 |                         |       |
|                           | HRC        | .055                        | .023       | .077                      | 2.428  | .016 | .650                    | 1.538 |
|                           | MEC        | .048                        | .020       | .071                      | 2.383  | .018 | .747                    | 1.339 |
|                           | TLC        | .350                        | .029       | .400                      | 12.064 | .000 | .600                    | 1.665 |
|                           | MI         | .206                        | .030       | .245                      | 6.942  | .000 | .530                    | 1.888 |
|                           | AC         | .086                        | .021       | .108                      | 4.010  | .000 | .910                    | 1.099 |
|                           | MRC        | .111                        | .029       | .130                      | 3.838  | .000 | .574                    | 1.741 |
|                           | FC         | .161                        | .027       | .190                      | 5.863  | .000 | .632                    | 1.583 |
|                           | LR         | .049                        | .020       | .072                      | 2.422  | .016 | .757                    | 1.321 |
| CSPTDP                    | .071       | .020                        | .094       | 3.499                     | .001   | .912 | 1.096                   |       |

a. Dependent Variable: Competitive Strength







**The Average Value**

| Descriptive Statistics |     |         |         |      |                |
|------------------------|-----|---------|---------|------|----------------|
|                        | N   | Minimum | Maximum | Mean | Std. Deviation |
| HRC1                   | 402 | 1       | 5       | 3.63 | .694           |
| HRC2                   | 402 | 1       | 5       | 3.71 | .705           |
| HRC3                   | 402 | 1       | 5       | 3.77 | .732           |
| HRC4                   | 402 | 1       | 5       | 3.76 | .746           |
| Valid N (listwise)     | 402 |         |         |      |                |

| Descriptive Statistics |     |         |         |      |                |
|------------------------|-----|---------|---------|------|----------------|
|                        | N   | Minimum | Maximum | Mean | Std. Deviation |
| MEC1                   | 402 | 1       | 5       | 3.56 | .819           |
| MEC2                   | 402 | 1       | 5       | 3.62 | .781           |
| MEC3                   | 402 | 1       | 5       | 3.59 | .804           |
| MEC4                   | 402 | 1       | 5       | 3.66 | .717           |
| MEC5                   | 402 | 1       | 5       | 3.62 | .752           |
| Valid N (listwise)     | 402 |         |         |      |                |

| Descriptive Statistics |     |         |         |      |                |
|------------------------|-----|---------|---------|------|----------------|
|                        | N   | Minimum | Maximum | Mean | Std. Deviation |
| TLC1                   | 402 | 1       | 5       | 3.74 | .563           |
| TLC2                   | 402 | 1       | 5       | 3.70 | .603           |
| TLC3                   | 402 | 1       | 5       | 3.80 | .578           |
| TLC4                   | 402 | 1       | 5       | 3.80 | .570           |
| Valid N (listwise)     | 402 |         |         |      |                |

| Descriptive Statistics |     |         |         |      |                |
|------------------------|-----|---------|---------|------|----------------|
|                        | N   | Minimum | Maximum | Mean | Std. Deviation |
| MI1                    | 402 | 1       | 5       | 3.74 | .633           |
| MI2                    | 402 | 1       | 5       | 3.73 | .623           |
| MI3                    | 402 | 1       | 5       | 3.67 | .667           |

|                    |     |   |   |      |      |
|--------------------|-----|---|---|------|------|
| MI4                | 402 | 1 | 5 | 3.84 | .687 |
| Valid N (listwise) | 402 |   |   |      |      |

| Descriptive Statistics |     |         |         |      |                |
|------------------------|-----|---------|---------|------|----------------|
|                        | N   | Minimum | Maximum | Mean | Std. Deviation |
| FC1                    | 402 | 1       | 5       | 3.72 | .626           |
| FC2                    | 402 | 1       | 5       | 3.74 | .608           |
| FC3                    | 402 | 1       | 5       | 3.79 | .600           |
| FC4                    | 402 | 1       | 5       | 3.70 | .597           |
| FC5                    | 402 | 1       | 5       | 3.69 | .603           |
| Valid N (listwise)     | 402 |         |         |      |                |

| Descriptive Statistics |     |         |         |      |                |
|------------------------|-----|---------|---------|------|----------------|
|                        | N   | Minimum | Maximum | Mean | Std. Deviation |
| AC1                    | 402 | 1       | 5       | 3.22 | .653           |
| AC2                    | 402 | 1       | 5       | 3.27 | .653           |
| AC3                    | 402 | 1       | 5       | 3.21 | .760           |
| AC4                    | 402 | 1       | 5       | 3.24 | .674           |
| AC5                    | 402 | 1       | 5       | 3.19 | .680           |
| Valid N (listwise)     | 402 |         |         |      |                |

| Descriptive Statistics |     |         |         |      |                |
|------------------------|-----|---------|---------|------|----------------|
|                        | N   | Minimum | Maximum | Mean | Std. Deviation |
| MRC1                   | 402 | 1       | 5       | 3.57 | .671           |
| MRC2                   | 402 | 1       | 5       | 3.65 | .641           |
| MRC3                   | 402 | 1       | 5       | 3.66 | .601           |
| MRC4                   | 402 | 1       | 5       | 3.64 | .641           |
| Valid N (listwise)     | 402 |         |         |      |                |

| Descriptive Statistics |     |         |         |      |                |
|------------------------|-----|---------|---------|------|----------------|
|                        | N   | Minimum | Maximum | Mean | Std. Deviation |
| LR1                    | 402 | 1       | 5       | 3.46 | .677           |
| LR2                    | 402 | 1       | 5       | 3.51 | .707           |
| LR3                    | 402 | 1       | 5       | 3.58 | .751           |
| LR4                    | 402 | 1       | 5       | 3.57 | .762           |
| Valid N (listwise)     | 402 |         |         |      |                |

| Descriptive Statistics |     |         |         |      |                |
|------------------------|-----|---------|---------|------|----------------|
|                        | N   | Minimum | Maximum | Mean | Std. Deviation |
| LI1                    | 402 | 1       | 5       | 4.14 | .800           |
| LI2                    | 402 | 1       | 5       | 4.15 | .679           |
| LI3                    | 402 | 1       | 5       | 4.00 | .717           |

|                    |     |   |   |      |      |
|--------------------|-----|---|---|------|------|
| LI4                | 402 | 1 | 5 | 4.12 | .774 |
| LI5                | 402 | 1 | 5 | 3.88 | .835 |
| Valid N (listwise) | 402 |   |   |      |      |

| Descriptive Statistics |     |         |         |      |                |
|------------------------|-----|---------|---------|------|----------------|
|                        | N   | Minimum | Maximum | Mean | Std. Deviation |
| Competitive Strength 1 | 402 | 1       | 5       | 3.79 | .524           |
| Competitive Strength 2 | 402 | 1       | 5       | 3.82 | .618           |
| Competitive Strength 3 | 402 | 1       | 5       | 3.83 | .570           |
| Competitive Strength 4 | 402 | 1       | 5       | 3.84 | .560           |
| Valid N (listwise)     | 402 |         |         |      |                |

| Descriptive Statistics |     |         |         |        |                |
|------------------------|-----|---------|---------|--------|----------------|
|                        | N   | Minimum | Maximum | Mean   | Std. Deviation |
| HRC                    | 402 | 1       | 5.00    | 3.7183 | .63099         |
| MEC                    | 402 | 1       | 5.00    | 3.6114 | .66277         |
| TLC                    | 402 | 1       | 5.00    | 3.7618 | .51142         |
| MI                     | 402 | 1       | 5.00    | 3.7469 | .53245         |
| AC                     | 402 | 1       | 5.00    | 3.2269 | .56557         |
| MRC                    | 402 | 1       | 5.00    | 3.6300 | .52618         |
| FC                     | 402 | 1       | 5.00    | 3.7269 | .52861         |
| LR                     | 402 | 1       | 5.00    | 3.5311 | .64844         |
| LI                     | 402 | 1       | 5.00    | 4.0587 | .59653         |
| Competitive Strength   | 402 | 1       | 5.00    | 3.8220 | .44776         |
| Valid N (listwise)     | 402 |         |         |        |                |

| Group Statistics |     |     |        |                |                 |
|------------------|-----|-----|--------|----------------|-----------------|
|                  | SEX | N   | Mean   | Std. Deviation | Std. Error Mean |
| CS               | NAM | 226 | 3.8722 | .46907         | .03120          |
|                  | NŨ  | 176 | 3.7575 | .41119         | .03099          |

| Independent Samples Test |                             |   |      |                              |         |                 |                 |                       |   |        |
|--------------------------|-----------------------------|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|--------|
|                          |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |         |                 |                 |                       |   |        |
|                          |                             | F                                       | Sig. | t                            | df      | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |        |
|                          |                             |   |      |                              |         |                 |                 |                       | Lower                                     | Upper  |
| CS                       | Equal variances assumed     | 1.661                                   | .198 | 2.568                        | 400     | .011            | .11478          | .04470                | .02689                                    | .20266 |
|                          | Equal variances not assumed |   |      | 2.610                        | 394.391 | .009            | .11478          | .04398                | .02831                                    | .20124 |

**AGE**

| Test of Homogeneity of Variances |     |     |      |
|----------------------------------|-----|-----|------|
| Competitive Strength             |     |     |      |
| Levene Statistic                 | df1 | df2 | Sig. |
| 3.712                            | 2   | 399 | .025 |

| ANOVA                |                |     |             |        |      |
|----------------------|----------------|-----|-------------|--------|------|
| competitive strength |                |     |             |        |      |
|                      | Sum of Squares | df  | Mean Square | F      | Sig. |
| Between Groups       | 7.535          | 2   | 3.767       | 20.630 | .000 |
| Within Groups        | 72.863         | 399 | .183        |        |      |
| Total                | 80.397         | 401 |             |        |      |

**LEVEL**

| Test of Homogeneity of Variances |     |     |      |
|----------------------------------|-----|-----|------|
| Competitive Strength             |     |     |      |
| Levene Statistic                 | df1 | df2 | Sig. |
| 3.170                            | 3   | 398 | .024 |

| ANOVA                |                |     |             |        |      |
|----------------------|----------------|-----|-------------|--------|------|
| Competitive Strength |                |     |             |        |      |
|                      | Sum of Squares | df  | Mean Square | F      | Sig. |
| Between Groups       | 6.301          | 3   | 2.100       | 11.283 | .000 |
| Within Groups        | 74.096         | 398 | .186        |        |      |
| Total                | 80.397         | 401 |             |        |      |

**SENIORITY**

| Test of Homogeneity of Variances |     |     |      |
|----------------------------------|-----|-----|------|
| Competitive Strength             |     |     |      |
| Levene Statistic                 | df1 | df2 | Sig. |
| 4.487                            | 3   | 398 | .004 |

| ANOVA                |                |     |             |       |      |
|----------------------|----------------|-----|-------------|-------|------|
| Competitive Strength |                |     |             |       |      |
|                      | Sum of Squares | df  | Mean Square | F     | Sig. |
| Between Groups       | 3.897          | 3   | 1.299       | 6.758 | .000 |
| Within Groups        | 76.501         | 398 | .192        |       |      |
| Total                | 80.397         | 401 |             |       |      |

**Location**

| Test of Homogeneity of Variances |     |     |      |
|----------------------------------|-----|-----|------|
| Competitive Strength             |     |     |      |
| Levene Statistic                 | df1 | df2 | Sig. |
| .432                             | 2   | 399 | .649 |

| ANOVA                |                |     |             |      |      |
|----------------------|----------------|-----|-------------|------|------|
| Competitive Strength |                |     |             |      |      |
|                      | Sum of Squares | df  | Mean Square | F    | Sig. |
| Between Groups       | .332           | 2   | .166        | .827 | .438 |
| Within Groups        | 80.065         | 399 | .201        |      |      |
| Total                | 80.397         | 401 |             |      |      |

**Enterprise size**

| Test of Homogeneity of Variances |     |     |      |
|----------------------------------|-----|-----|------|
| Competitive Strength             |     |     |      |
| Levene Statistic                 | df1 | df2 | Sig. |
| 8.735                            | 1   | 400 | .003 |

| ANOVA                |                |     |             |      |      |
|----------------------|----------------|-----|-------------|------|------|
| Competitive Strength |                |     |             |      |      |
|                      | Sum of Squares | df  | Mean Square | F    | Sig. |
| Between Groups       | .001           | 1   | .001        | .004 | .950 |
| Within Groups        | 80.397         | 400 | .201        |      |      |
| Total                | 80.397         | 401 |             |      |      |

**One-Sample Test**

| Test Value = 3 |        |     |                 |                 |   |       |
|----------------|--------|-----|-----------------|-----------------|---|-------|
|                | t      | df  | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |       |
|                |        |     |                 |                 | Lower                                     | Upper |
| HRC            | 22.824 | 401 | .000            | .71828          | .6564                                     | .7802 |
| MEC            | 18.497 | 401 | .000            | .61144          | .5465                                     | .6764 |
| TLC            | 29.867 | 401 | .000            | .76182          | .7117                                     | .8120 |
| AC             | 8.043  | 401 | .000            | .22687          | .1714                                     | .2823 |
| MRC            | 24.005 | 401 | .000            | .62998          | .5784                                     | .6816 |
| FC             | 27.570 | 401 | .000            | .72687          | .6750                                     | .7787 |

| <b>One-Sample Statistics</b> |     |      |                |                 |
|------------------------------|-----|------|----------------|-----------------|
|                              | N   | Mean | Std. Deviation | Std. Error Mean |
| HRC1                         | 402 | 3.63 | .694           | .035            |
| HRC2                         | 402 | 3.71 | .705           | .035            |
| HRC3                         | 402 | 3.77 | .732           | .037            |
| HRC4                         | 402 | 3.76 | .746           | .037            |

| <b>One-Sample Test</b> |        |     |                 |      |                 |   |  |
|------------------------|--------|-----|-----------------|------|-----------------|---|--|
| Test Value = 3         |        |     |                 |      |                 |   |  |
|                        | t      | df  | Sig. (2-tailed) |      | Mean Difference | 95% Confidence Interval of the Difference |  |
|                        |        |     |                 |      | Lower           | Upper                                     |  |
| HRC1                   | 18.321 | 401 | .000            | .634 | .57             | .70                                       |  |
| HRC2                   | 20.089 | 401 | .000            | .706 | .64             | .78                                       |  |
| HRC3                   | 21.118 | 401 | .000            | .771 | .70             | .84                                       |  |
| HRC4                   | 20.462 | 401 | .000            | .761 | .69             | .83                                       |  |

| <b>One-Sample Statistics</b> |     |      |                |                 |
|------------------------------|-----|------|----------------|-----------------|
|                              | N   | Mean | Std. Deviation | Std. Error Mean |
| MEC1                         | 402 | 3.56 | .819           | .041            |
| MEC2                         | 402 | 3.62 | .781           | .039            |
| MEC3                         | 402 | 3.59 | .804           | .040            |
| MEC4                         | 402 | 3.66 | .717           | .036            |
| MEC5                         | 402 | 3.62 | .752           | .037            |

| <b>One-Sample Test</b> |        |     |                 |                 |   |       |
|------------------------|--------|-----|-----------------|-----------------|---|-------|
| Test Value = 3         |        |     |                 |                 |   |       |
|                        | t      | df  | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |       |
|                        |        |     |                 |                 | Lower                                     | Upper |
| MEC1                   | 13.828 | 401 | .000            | .565            | .48                                       | .64   |
| MEC2                   | 15.967 | 401 | .000            | .622            | .55                                       | .70   |
| MEC3                   | 14.633 | 401 | .000            | .587            | .51                                       | .67   |
| MEC4                   | 18.510 | 401 | .000            | .662            | .59                                       | .73   |
| MEC5                   | 16.590 | 401 | .000            | .622            | .55                                       | .70   |

| <b>One-Sample Statistics</b> |     |      |                |                 |
|------------------------------|-----|------|----------------|-----------------|
|                              | N   | Mean | Std. Deviation | Std. Error Mean |
| TLC1                         | 402 | 3.74 | .563           | .028            |
| TLC2                         | 402 | 3.70 | .603           | .030            |
| TLC3                         | 402 | 3.80 | .578           | .029            |
| TLC4                         | 402 | 3.80 | .570           | .028            |

| <b>One-Sample Test</b> |  |  |  |  |  |  |
|------------------------|--|--|--|--|--|--|
|------------------------|--|--|--|--|--|--|

|      | Test Value = 3 |     |                 |                 |   |       |
|------|----------------|-----|-----------------|-----------------|---|-------|
|      | t              | df  | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |       |
|      |                |     |                 |                 | Lower                                     | Upper |
| TLC1 | 26.400         | 401 | .000            | .741            | .69                                       | .80   |
| TLC2 | 23.410         | 401 | .000            | .704            | .64                                       | .76   |
| TLC3 | 27.774         | 401 | .000            | .801            | .74                                       | .86   |
| TLC4 | 28.197         | 401 | .000            | .801            | .75                                       | .86   |

| One-Sample Statistics |     |      |                |                 |
|-----------------------|-----|------|----------------|-----------------|
|                       | N   | Mean | Std. Deviation | Std. Error Mean |
| MI1                   | 402 | 3.74 | .633           | .032            |
| MI2                   | 402 | 3.73 | .623           | .031            |
| MI3                   | 402 | 3.67 | .667           | .033            |
| MI4                   | 402 | 3.84 | .687           | .034            |

| One-Sample Test |                |     |                 |                 |   |       |
|-----------------|----------------|-----|-----------------|-----------------|---|-------|
|                 | Test Value = 3 |     |                 |                 |   |       |
|                 | t              | df  | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |       |
|                 |                |     |                 |                 | Lower                                     | Upper |
| MI1             | 23.564         | 401 | .000            | .744            | .68                                       | .81   |
| MI2             | 23.471         | 401 | .000            | .729            | .67                                       | .79   |
| MI3             | 20.175         | 401 | .000            | .672            | .61                                       | .74   |
| MI4             | 24.620         | 401 | .000            | .843            | .78                                       | .91   |

| One-Sample Statistics |     |      |                |                 |
|-----------------------|-----|------|----------------|-----------------|
|                       | N   | Mean | Std. Deviation | Std. Error Mean |
| FC1                   | 402 | 3.72 | .626           | .031            |
| FC2                   | 402 | 3.74 | .608           | .030            |
| FC3                   | 402 | 3.79 | .600           | .030            |
| FC4                   | 402 | 3.70 | .597           | .030            |
| FC5                   | 402 | 3.69 | .603           | .030            |

| One-Sample Test |                |     |                 |                 |   |       |
|-----------------|----------------|-----|-----------------|-----------------|---|-------|
|                 | Test Value = 3 |     |                 |                 |   |       |
|                 | t              | df  | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |       |
|                 |                |     |                 |                 | Lower                                     | Upper |
| FC1             | 23.019         | 401 | .000            | .719            | .66                                       | .78   |
| FC2             | 24.297         | 401 | .000            | .736            | .68                                       | .80   |
| FC3             | 26.426         | 401 | .000            | .791            | .73                                       | .85   |
| FC4             | 23.388         | 401 | .000            | .697            | .64                                       | .76   |
| FC5             | 22.998         | 401 | .000            | .692            | .63                                       | .75   |

| <b>One-Sample Statistics</b> |       |      |                 |                 |   |       |
|------------------------------|-------|------|-----------------|-----------------|---|-------|
|                              | N     | Mean | Std. Deviation  | Std. Error Mean |   |       |
| AC1                          | 402   | 3.22 | .653            | .033            |   |       |
| AC2                          | 402   | 3.27 | .653            | .033            |   |       |
| AC3                          | 402   | 3.21 | .760            | .038            |   |       |
| AC4                          | 402   | 3.24 | .674            | .034            |   |       |
| AC5                          | 402   | 3.19 | .680            | .034            |   |       |
| <b>One-Sample Test</b>       |       |      |                 |                 |   |       |
| Test Value = 3               |       |      |                 |                 |   |       |
|                              | t     | df   | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |       |
|                              |       |      |                 |                 | Lower                                     | Upper |
| AC1                          | 6.726 | 401  | .000            | .219            | .15                                       | .28   |
| AC2                          | 8.249 | 401  | .000            | .269            | .20                                       | .33   |
| AC3                          | 5.644 | 401  | .000            | .214            | .14                                       | .29   |
| AC4                          | 7.253 | 401  | .000            | .244            | .18                                       | .31   |
| AC5                          | 5.571 | 401  | .000            | .189            | .12                                       | .26   |
| <b>One-Sample Statistics</b> |       |      |                 |                 |   |       |
|                              | N     | Mean | Std. Deviation  | Std. Error Mean |   |       |
| MRC1                         | 402   | 3.57 | .671            | .033            |   |       |
| MRC2                         | 402   | 3.65 | .641            | .032            |   |       |
| MRC3                         | 402   | 3.66 | .601            | .030            |   |       |
| MRC4                         | 402   | 3.64 | .641            | .032            |   |       |

| <b>One-Sample Test</b>       |        |      |                 |                 |   |       |
|------------------------------|--------|------|-----------------|-----------------|---|-------|
| Test Value = 3               |        |      |                 |                 |   |       |
|                              | t      | df   | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |       |
|                              |        |      |                 |                 | Lower                                     | Upper |
| MRC1                         | 17.102 | 401  | .000            | .572            | .51                                       | .64   |
| MRC2                         | 20.453 | 401  | .000            | .654            | .59                                       | .72   |
| MRC3                         | 21.925 | 401  | .000            | .657            | .60                                       | .72   |
| MRC4                         | 19.906 | 401  | .000            | .637            | .57                                       | .70   |
| <b>One-Sample Statistics</b> |        |      |                 |                 |   |       |
|                              | N      | Mean | Std. Deviation  | Std. Error Mean |   |       |
| PR1                          | 402    | 3.46 | .677            | .034            |   |       |
| PR2                          | 402    | 3.51 | .707            | .035            |   |       |
| PR3                          | 402    | 3.58 | .751            | .037            |   |       |
| PR4                          | 402    | 3.57 | .762            | .038            |   |       |



| <b>One-Sample Test</b> |                |     |                 |                 |   |       |
|------------------------|----------------|-----|-----------------|-----------------|---|-------|
|                        | Test Value = 3 |     |                 |                 |   |       |
|                        | t              | df  | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |       |
|                        |                |     |                 |                 | Lower                                     | Upper |
| PR1                    | 13.626         | 401 | .000            | .460            | .39                                       | .53   |
| PR2                    | 14.604         | 401 | .000            | .515            | .45                                       | .58   |
| PR3                    | 15.481         | 401 | .000            | .580            | .51                                       | .65   |
| PR4                    | 14.998         | 401 | .000            | .570            | .49                                       | .64   |

| <b>One-Sample Statistics</b> |     |      |                |                 |
|------------------------------|-----|------|----------------|-----------------|
|                              | N   | Mean | Std. Deviation | Std. Error Mean |
| LI1                          | 402 | 4.14 | .800           | .040            |
| LI2                          | 402 | 4.15 | .679           | .034            |
| LI3                          | 402 | 4.00 | .717           | .036            |
| LI4                          | 402 | 4.12 | .774           | .039            |
| LI5                          | 402 | 3.88 | .835           | .042            |

| <b>One-Sample Test</b> |                |     |                 |                 |   |       |
|------------------------|----------------|-----|-----------------|-----------------|---|-------|
|                        | Test Value = 3 |     |                 |                 |   |       |
|                        | t              | df  | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |       |
|                        |                |     |                 |                 | Lower                                     | Upper |
| LI1                    | 28.601         | 401 | .000            | 1.142           | 1.06                                      | 1.22  |
| LI2                    | 33.921         | 401 | .000            | 1.149           | 1.08                                      | 1.22  |
| LI3                    | 27.974         | 401 | .000            | 1.000           | .93                                       | 1.07  |
| LI4                    | 28.995         | 401 | .000            | 1.119           | 1.04                                      | 1.20  |
| LI5                    | 21.208         | 401 | .000            | .883            | .80                                       | .96   |

| <b>One-Sample Statistics</b> |     |      |                |                 |
|------------------------------|-----|------|----------------|-----------------|
|                              | N   | Mean | Std. Deviation | Std. Error Mean |
| Competitive Strength 1       | 402 | 3.79 | .524           | .026            |
| Competitive Strength 2       | 402 | 3.82 | .618           | .031            |
| Competitive Strength 3       | 402 | 3.83 | .570           | .028            |
| Competitive Strength 4       | 402 | 3.84 | .560           | .028            |

## ABOUT THE AUTHORS



**Ai Tran Huu**, Lecturer of Faculty of Economics, Van Hien University, Ho Chi Minh City, Vietnam. Research interests: markets of agricultural products functioning, and government support SMEs, organic food markets, ecological economics, environmental issues of economic development, and corporate social responsibility. Published more than 100 papers in international journals, (including 30 Scopus articles) member of the editorial board of international journals.



**Nam Vong Thinh** Ph.D, Lecturer at Faculty of Economics, Ho Chi Minh City University of Technology and Education, Vietnam. Research fields: Agricultural development, processing industry, trade and tourism. There have been many research works in recent years in these areas. Published more than 40 articles in domestic journals and some articles in international journals.

## ABOUT THE BOOK

"Improving Competitiveness of Seafood Enterprises: A Case Study in BR-VT" is a comprehensive and insightful book that delves into the challenges faced by seafood enterprises in the BR-VT region and offers practical strategies for enhancing their competitiveness. Drawing upon extensive research and real-life case studies, this book provides valuable insights and actionable recommendations for seafood businesses seeking to thrive in a highly competitive industry. In today's global market, seafood enterprises face numerous obstacles, including changing consumer demands, market volatility, environmental sustainability concerns, and technological advancements. This book addresses these challenges head-on, focusing on the specific context of the BR-VT region, known for its rich seafood resources and vibrant seafood industry.

### Key Features:

**Case Study Approach:** The book employs a case study approach, providing a detailed analysis of actual seafood enterprises operating in BR-VT. This methodology allows readers to understand the practical implications of the strategies discussed and encourages critical thinking and problem-solving skills.

**In-depth Research:** The author presents a comprehensive review of the seafood industry landscape in BR-VT, incorporating recent market trends, competitive dynamics, and regulatory frameworks. The book combines academic rigor with practical relevance to offer a holistic perspective on the subject.

**Competitiveness Enhancement Strategies:** Readers will find a range of proven strategies and best practices for enhancing the competitiveness of seafood enterprises. Topics covered include supply chain optimization, product differentiation, market diversification, sustainability practices, branding and marketing, innovation and technology adoption, and more.

**Stakeholder Perspectives:** The book examines the role of various stakeholders in the seafood industry, including government agencies, industry associations, seafood processors, fishermen, distributors, and consumers. Understanding the dynamics and interactions among these stakeholders is crucial for driving positive change and improving competitiveness.

**Practical Recommendations:** Throughout the book, the author provides practical recommendations that seafood enterprises can implement to improve their competitiveness. These recommendations are backed by research and real-world examples, ensuring their relevance and effectiveness.

**"Improving Competitiveness of Seafood Enterprises: A Case Study in BR-VT"** is an invaluable resource for seafood industry professionals, policymakers, researchers, and students interested in the field. By combining theoretical knowledge with practical insights, this book equips readers with the tools necessary to navigate the complexities of the seafood industry and drive sustainable growth and success in BR-VT and beyond.



India | UAE | Nigeria | Uzbekistan | Montenegro | Iraq | Egypt | Thailand | Uganda | Philippines | Indonesia

[www.iarapublication.com](http://www.iarapublication.com)