EXPLORING BUYER-SELLER RELATIONSHIP FOR YELLOWFIN TUNA SUPPLY CHAIN IN SEMPORNA, SABAH, MALAYSIA

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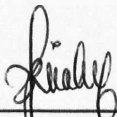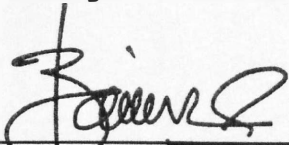|		
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DECLARATION

I hereby declare that this dissertation is based on my original work except for citations and quotations which have been duly acknowledged. I also declare that no part of this dissertation has been previously or concurrently submitted for a master degree at this or any other university.

11 April 2017

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ABSTRACT

Semporna is among the three important areas which produce yellowfin tuna apart from Penang and Labuan. Generally, tuna supply chain in Semporna is changing in the demand as well as supply due to low in the production stage and quality issue. Hence, this study which use a relationship marketing approach aims to explore the buyer-seller relationship and the influence towards their business performance. Buyer and seller are everywhere seeking ways to perform a creative environment such as creating value to their business relationship. While, business performance received diverse research on determining the efficiency and efficacy of the business. Yet, little is known on the study of the successfulness of buyer-seller relationship in this high commodities industry. Thus, the study takes the fisherman's (seller) perspectives towards their buyers. A mixed method was used to elicit the required information in order to achieve the objective of study. At the qualitative stage, 10 key informants were interviewed consists of five sellers, three officers from Fisheries Department and Fishery Authority Development, and two buyers using snow ball sampling. The results identify six relational exchanges which are communication, information sharing, interdependency, cultural similarity, flexibility, and price satisfaction as the determinants of trust. At the quantitative stage, a total of 98 hook-and-line tuna fisherman in Mabul Island were interviewed using purposive sampling. The results later analysed using SmartPLS. The study reveals four determinants which are communication, information sharing, interdependency and flexibility are positively influencing to increase the fisherman's trust towards their buyers. Trust and satisfaction has no direct influence to business performance. While, commitment has direct influence to enhance business performance. Price satisfaction negatively influences business performance. Results may imply the importance of creating trust and relationship quality to determine the business performance. The findings from this study can guide the fisherman to enhance their relationship with their buyers.

ABSTRAK

PENEROKAAN HUBUNGAN PENJUAL-PEMBELI BAGI RANTAIAN BEKALAN TUNA SIRIP KUNING DI SEMPORNA, SABAH, MALAYSIA

Semporna merupakan salah satu kawasan utama dalam pengeluaran tuna sirip kuning selain dari Pulau Pinang dan Labuan. Umumnya, aktiviti rantaian bekalan perikanan tuna di Semporna berdepan dengan penawaran dan permintaan yang tidak menentu disebabkan hasil pengeluaran yang rendah dan juga isu kualiti tangkapan. Oleh itu, dengan menggunakan pendekatan hubungan pemasaran, objektif kajian ini adalah untuk mengenalpasti hubungan penjual-pembeli dan pengaruh elemen kepercayaan terhadap prestasi perniagaan mereka. Pembeli dan penjual mencari jalan untuk melaksanakan persekitaran yang kreatif seperti mencipta nilai kepada hubungan perniagaan mereka. Sementara itu, prestasi perniagaan juga telah dikaji secara meluas dalam menentukan kecekapan dan keberkesanan perniagaan. Namun, kajian terhadap kejayaan sesuatu hubungan pembeli-penjual dalam industri tuna di Malaysia agak terhad. Oleh itu, kajian ini memilih perspektif nelayan tuna (penjual) terhadap kepercayaan kepada pembeli mereka. Kaedah campuran dijalankan bagi memperoleh maklumat dan mencapai objektif kajian. Pada peringkat kualitatif, 10 responden iaitu lima orang nelayan, tiga pegawai masing-masing dari Jabatan Perikanan Semporna dan Lembaga Kemajuan Ikan Semporna (LKIM), dan dua pembeli telah ditemubual secara persampelan bola salji. Hasil temubual mendapati 6 pertukaran hubungan iaitu komunikasi, perkongsian maklumat, saling bersandar, persamaan budaya, fleksibiliti dan juga kepuasan harga sebagai pengaruh kepercayaan terhadap pembeli mereka. Pada peringkat kuantitatif pula, sejumlah 98 orang nelayan tuna di Pulau Mabul telah ditemuramah secara persampelan bertujuan. Kemudian, dapatan kajian dianalisis menggunakan SmartPLS. Kajian ini menunjukkan bahawa komunikasi, perkongsian maklumat, fleksibiliti dan saling bersandar telah mempengaruhi secara positif dalam meningkatkan kepercayaan nelayan terhadap pembeli mereka. Kepercayaan dan kepuasan tidak mempunyai pengaruh langsung kepada prestasi perniagaan manakala komitmen mempunyai pengaruh secara langsung untuk meningkatkan prestasi perniagaan. Kepuasan harga tidak mempengaruhi prestasi perniagaan. Dapatan kajian ini boleh menandakan kepentingan untuk mewujudkan kepercayaan dan kualiti hubungan bagi menentukan prestasi perniagaan. Penemuan daripada kajian ini boleh membantu nelayan untuk meningkatkan hubungan mereka dengan pembeli.

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LIST OF ABBREVIATIONS

AVE	-	Average Variance Extracted
BP	-	Business Performance
BSR	-	Buyer-seller relationship
B2B	-	Business-to-business
CR	-	Composite reliability
CTI-CFF	-	Coral Triangle Initiatives-Climate Change – Fisheries and Food Security
DOF	-	Department of Fisheries
EEZ	-	Exclusive Economic Zone
EU	-	European Union
FAD	-	Fish Aggregating Devices
FAO	-	Food and Agriculture Organization
FP	-	Financial Performance
HACCP	-	Hazard Analysis Critical Control Point
LKIM	-	*Lembaga Kemajuan Ikan Malaysia*
MITP	-	Malaysian International Tuna Port
NFP	-	Non-financial performance
PLS	-	Partial Least Square
RM	-	Relationship Marketing
RQ	-	Relationship Quality
SAFMA	-	Sabah Fish Marketing
SCS	-	South China Sea
SEM	-	Structural Equation Model
SET	-	Social Exchange Theory

SSME	-	Sulu-Sulawesi Marine Eco-Region
TCE	-	Transaction Cost Economic
UK	-	United Kingdom
UMS	-	Universiti Malaysia Sabah
US	-	United States
WCPO	-	Western and Central Pacific Ocean

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CHAPTER 1

INTRODUCTION

1.1　Overview

Tuna industry in Malaysia has been dominated by small-scale fishermen (Department of Fisheries Malaysia, 2008). Malaysia generated approximately RM334 million annually from the tuna industry for local and international market (Ramli, 2007). Tuna industry in Malaysia allocated into three geographical terms, which are Peninsular Malaysia, Sabah and Sarawak. Tuna major landing sites in Malaysia are divided into two main sites that focus on the neritic tuna (South China Sea and Straits of Malacca) and oceanic tuna (Indian Ocean). The major gears used to catch tuna are the purse seine in the Malacca Straits area and the troll line, purse seine, and drift gillnet in the South China Sea area.

Malaysia reported that the three major tuna landing hubs are at Pulau Pinang, Labuan and Semporna, Sabah (Malaysian International Tuna Port, 2008). The data updated in 2016, Malaysia produced nearly 67, 000 metric tonnes of tuna in 2013 (Department of Fisheries Malaysia, 2016). The tuna production in Malaysia for neritic tuna was aggregated in five years consecutively since 2009 (see Table 1). The tuna production is expected to surge up to 80 percent (80%) by 2020 and this resulted well developed and active activities of exporting fresh and frozen tuna to Europe and Japan among the Malaysian exporters (Department of Fisheries Malaysia, 2014).

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
■ Oceanic	3,817	4,447	2,774	2,174	733	3,400	1,495	1,693	3,006	3,014	1,625	1,912	1,831	1,889
■ Neritic	55,52	51,66	61,88	52,65	43,95	41,56	54,04	51,32	64,21	53,46	57,96	58,21	64,36	66,74
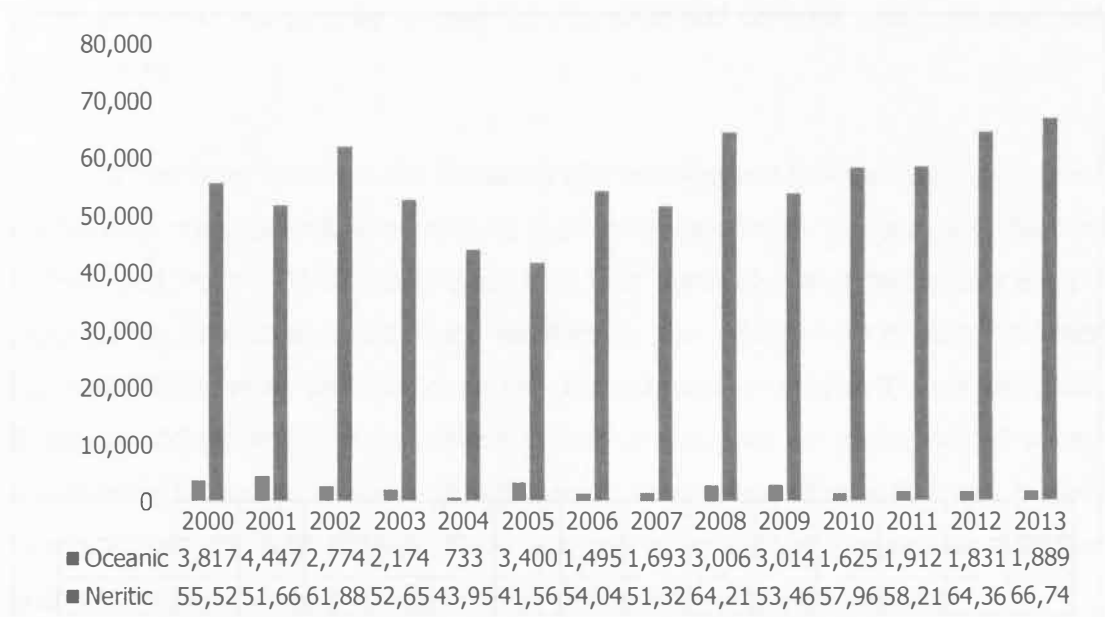
Figure 1.1   **: Tuna landing data in Malaysia from 2000 – 2013**
Source   : Department of Fisheries Malaysia (2016)

In conjunction with the growing demand, increasing number of tuna buyers, processors, wholesalers, restaurants and direct consumer demands, consequently generating persistent competition in the market. It is crucial to scrutinize and strengthen the buyer-seller relationship to cater more competent supply chain and engage in a long term relationship.

In Sabah, Semporna is well-known as the tuna haven for Sabah and had been in the tuna business with both local and foreign markets for the past decades (Department of Fisheries Sabah, 2008). Mabul Island is the prominent area for yellowfin tuna in Semporna in arrears to the Malaysian-Philippines borders. Skipjack *(Katsuwonus pelamis)*, and yellowfin tuna *(Thunnus albacares)* are the most catches by Mabul fisherman. For fisherman and buyers, fish quality is important because it relates to fish grading and pricing. As fish is a highly, perishable, it will deteriorate quickly if it not handled, processed, and stored appropriately. Based on the preliminary study by Albat, Boniface, Komilus, Tanakinjal, Sondoh and Kamu (2014), the market was dominated with fisherman (sellers) and controls by few buyers. This situation shows that the level of interdependency among them was high because the price is controlled by the buyers. In the presence of oligopoly market, developing

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buyer and seller relationship is essential (Boniface and Stringer, 2012; Morgan and Hunt, 2004).

It has been known in the literature that building and maintaining buyer-seller relationship provides mutual benefits to both sellers and buyer. For example, Zaheer, McEvily and Perron (1998), suggested that trust leads to higher performance via a reduction in transaction costs. Price satisfaction also influence on building stronger business relationship and could secure regular and inconsistent tuna supplies. Existing relationship between fishermen and the buyers are quite crucial where improvements needed in terms of relationship marketinga strategies which in turn increase business performance. Thus, a competitive market encourages effective business relationship by promoting closer relationship between partners.

1.2   Problem Statement

The tuna industry in Semporna has been undergoing a rapid change because of the evolving market demand (local and export). This current situation pushes the key players especially fishermen to increase their production efficiencies, quicker production cycles and accurate delivery time as strategies to reduce inventories. This demanding business environment requires urgent needs for businesses to improve their business performance as these were observed to give dramatic impacts to the industry. Inconsistent quality and quantity (Department of Fisheries Sabah, 2008), small volume of supply (Sulu-Sulawesi Marine Eco-region, 2012), insufficient handling and tuna processing over-dependence on foreign workers and the issue of bargaining power on price (Albat *et. al.*, 2014) were the contributing factors that affected tuna industry in Semporna.

Information pertaining to buyer-seller relationship in tuna fishery was still limited (Albat *et. al.*, 2014). Thus, this study aimed to analyse the BSR in Semporna by examining the tuna supply chain and its contributing variables that determine the tuna business. The study enables to fills the gap in buyer-seller relationship theories. The potential of Yellowfin tuna supply chain in Semporna as the major landing site throughout Sabah is depending on a systematic value chain factor like Buyer-Seller Relationship (BSR).

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Several studies on relationship building between buyer and seller in agricultural products were conducted by Somogyi and Gyau (2010) on grape/winery relationship in Australia, Eka Puspawati (2011) on determinants of trust among potato farmers in Indonesia while Boniface (2012) explored buyer and seller relationship in Malaysia's milk supply chain. However, little is known on the BSR for tuna industry in Malaysia.

The purpose of this study is to analyse the buyer-seller relationship in the yellowfin tuna supply chain in Semporna by exploring the influence of seller's (fishermen) trust towards the buyer and its influence towards seller's business performance. In addition to that, the rationale of this study is also to explore the influence of price satisfaction towards the seller's business performance.

1.3   Research Objectives

The study focuses on the role of buyer-seller relationship in Semporna yellowfin tuna supply chain that lead to business performance. The research objectives of this study presents as follows:

a) To identify the determinants of seller's trust towards their buyer/s;
b) To determine the influence of Relationship Quality (RQ) towards Business Performance (BP) in the Yellowfin tuna supply chain; and
c) To identify the influence of price satisfaction to the seller's business performance (BP).

1.4   Research Questions

The research questions for this study addresses in line with the research objectives are as follows:

a) What are the determinants of fishermen's (seller) trust towards their buyer in the buyer - seller relationship of Yellowfin tuna supply chain?;
b) What are the influences of fishermen's (seller) trust and Relationship Quality (RQ) towards their Business Performance (BP)?; and
c) What is the influence between price satisfaction and business performance (BP)?

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1.5   Significance of Study

A number of research studies have been conducted on the buyer-seller relationship throughout the world in any respective field such logistic, horticulture and banking industry. Since the trend of transactional marketing has shifted to the relationship marketing, the buyer-seller relationship concept appears to be the area that need to develop further. Several studies have been done in Malaysia is regarding the influence of buyer-seller relationship towards the contract farming in horticulture industry and long-term relationship in dairy industry. However, little studies known on determining the trust among the tuna supply chain in Semporna. Thus, this study aims to identify the fisherman's (seller) trust determinants towards their buyer/s. The outcomes of the study would offer necessary information for buyers and sellers in developing business relationship and improving business performance. The study would also provide critical suggestions for policy formulation and managerial implication to the industry.

1.6   Scope of Study

The scope of this study is to identify the contributing variables in determining the fisherman's trust towards their buyer/s as well as to boost their business performance. The data was obtained in two stages. The first stage is in-depth interview with 10 key informants and followed by face-to-face questionnaires with 98 of hook-and-line fisherman in Mabul Island, Semporna. The data collection was conducted on July 2013 until March 2015. Mabul Island is the main site for this study because majority of hook-and-line tuna fisherman are from Mabul Island (WWF, 2008).

1.7   Definition of the Terms

The key variables used in this particular study were defined below for the purpose of a better understanding in general perspective:

1.7.1 Business Performance

Business performance is a system that enables to inform decisions to be made and actions to be taken. Business performance quantifies the efficiency and effectiveness

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of past actions through the acquisition, collation, sorting, analysis, interpretation, and dissemination of appropriate data (Neely, 2007).

1.7.2 Satisfaction

Satisfaction is derived from the result of an evaluation between the preferred seller's performance and the buyer's expectations (Fornell, 1992). It is based on the performance which is if the seller's performance exceeds expectations, satisfaction will increase, and whenever performance is out of the expectation, customers will become dissatisfied.

1.7.3 Commitment

When party believes the relationship is worth working on to ensure that it endures indefinitely Morgan and Hunt (1994). The definition also corresponds with Moorman, Zaltman, and Deshpande (1992) which define as an enduring desire to maintain a valued relationship.

1.7.4 Trust

Trust is defined as a willingness to rely on an exchange partner in whom one has confidence Batt and Wilson (2000).

1.7.5 Communication

Formal or informal sharing of meaningful and timely information between firms or organizations is crucial to building trust and loyalty (Anderson and Narus, 1990).

1.7.6 Information Sharing

Information sharing is important to the value of innovation, integration and teamwork (Boehlje, Akridge, and Nicholas, 2002).

1.7.7 Interdependency

An exchange partner who are dependent on each other will only continue to interact or exchange as long as each party benefits. Thus, if one party is more powerful (less dependent) than the other up to the extent that the other ends up being worse off

compared to the alternatives it has outside the relationship (Anderson and Narus, 1984).

1.7.8 Cultural Similarity

Culture affected the way in which members communicated their ideas to each another. Organizational culture captures the essence of what the organization is and how it operates as a social collectivity (Meek, 1988).

1.7.9 Flexibility

Flexibility is an individual's ability to continuously adapt to changing environmental states which cannot be perfectly foreseen by the individual (Roemer, 2012).

1.7.10 Price Satisfaction

Price satisfaction refers to several relationship studies which stated that the economic outcome is important for the evaluation of the relationship (Jarvelin, 2001) and thereby positively affects the development of trust.

1.8 Summary

In the next chapter, a comprehensive review of relationship marketing literature and overview of the Semporna's tuna industry are presented. The formulation of the research framework is also showed and discussed.

CHAPTER 2

LITERATURE REVIEW

2.1 Overview

Research in buyer-seller relationship have been widely discussed in the school of marketing. Most researcher viewed the transition of transactional marketing to relationship marketing has created new paradigm in marketing. It changes the patterns of business-to-business deals too. This chapter would discuss the evolution of buyer-seller relationships that enhance business performance. Higher relational variables namely trust, satisfaction, and commitment were also discussed and link to relevant determinants. This chapter would also present the importance of tuna industry in Sabah and its viability in the long run. The needs to understand the tuna producer's needs, want and preferences are essential in order to develop the small scale but competitive industry.

2.2 Buyer-Seller Relationship

The shifting trend from transactional marketing to relationship marketing explains the formation of a long term relationship between the buyer and seller that involves relationship values like trust and commitment (Gronroos, 2008; Webster, 1992). In business-to-business (B2B) context, relationship marketing is important to both buyer and seller. There is urgency in understanding sellers' needs and wants so buyers will be able to cope with the right demand and produces the right product. Successful relationship occurs when both buyer and seller understand each other and have mutual goal in their business (Ramsay and Wagner, 2009). This helps to nurture the importance of business relationship rather than business transaction.

There had been numerous studies conducted on buyer-seller relationship (BSR) and most of them suggested that building and sustaining long-term relationship could bring profit to both buyer and seller (Palmier, Dant, Grewal and Evans, 2006; Anderson and Narus, 1990). Boniface, Gyau and Stringer (2010) stated that gaining, managing and maintaining BSR offers a number of advantages to the