

NETWORK STRATEGIES OF SUBSIDIARY AIRLINES ASIA-PACIFIC REGION CASE STUDY

Sunsook KIM

Faculty of Economics, Doshisha University, Kyoto, JAPAN

Introduction

Airlines that have entered the aviation market in the Asia-Pacific region since 2000 have been able to offer international flight services (beginning in 2004) in line with a trend of liberalization in aviation. In response to the entrance and expansion of new low cost carriers (LCC), existing airlines have established affiliated LCC companies and subsidiaries, or entered into mergers. Specifically, attention has been focused on the increase in the number of domestic air passengers in Asian countries as well as international air passengers in the Asia region.

In the international aviation market in Europe, it is reported that airlines have made capital investments in regional airlines in their own countries, as well as in others, in addition to directly establishing new airlines following the full liberalization of services among the members of the European Union (Chang and Williams, 2002). Additionally, it has been reported that successful business models for allied airlines in Europe and the United States share the same strategy of having been established as airlines that connect low-density, short- and medium-range flights to and from hub and spoke airports (Gillen & Grodos, 2008).

At the same time, another main network LCC strategy is to directly connect spoke airports with other spoke airports, using secondary and regional airports, without going through hub airports. To achieve lower costs and low airfares, flights are operated with a single-model fleet; and, the selection of that model is key in terms of network strategy since it relates to stage distance.

The new airlines in the Asia-Pacific region have diversified their business models, for example, adopting a two-fold competitive strategy of service quality, implementing partially fee-based services, and deploying low airfares. However, all of these models have the common strategic goal of network expansion. Given this current situation, the objective of this research is to elucidate the characteristics evident in the network strategies of airlines that are subsidiaries or allies of existing or new airlines based in the Asia-Pacific region.

To achieve this, we conducted a case study, focusing on AirAsia, Qantas Air (QFA), and Jetstar, which are said to be the most successful in the region, as well as All Nippon Air (ANA) and Korean Air (KAL), which entered the market relatively late. For this case study, we used information such as routes, stage distances, fleets, and traffic volume, referencing the annual reports of each airline and the OAG-Flight Guide Worldwide (Pitfield, Caves and Qudus(2010), Gillen(2006))¹.

In the following discussion, we will describe the network expansion of these new airlines in the Asia-Pacific region. In conclusion, through the case study analysis, we point out that the network strategies of new airlines in the region are limited in terms of their fleets and service differentiation in international medium- and long-range stages, due to geographical characteristics as well as the current state of conditional aviation liberalization.

Development of New Airlines

In the Asia-Pacific region, like in Europe, investments were also made that transcended national borders against a backdrop of a trend in aviation liberalization. The areas included Oceania and the countries of the Association of Southeast Asian Nations (ASEAN). Table 1 shows the capital relationships, years of international flight service, and the presence or absence of service, focusing on the main airlines in the case study. For example, as of 2013, excluding some of the subsidiary and affiliated airlines in Japan, it can be seen that most of the airlines studied are providing international flight service.

¹AirAsia (included Thai AirAsia and Indonesia AirAsia) was the top LCC in the Asia-Pacific region which carried 36.4million passengers in 2012. Jetstar(included Jetstar Asia, Jetstar Pacific) carried 20.6millions passengers with the third of LCC of Asia-Pacific, but Jetstar ranked the first carriers affiliated with incumbent airline (calculated with LCC traffic flows from Air transport statistics 2013, pp.126-127., original source :ICAO).

Figure 1 shows the changes in the number of air passengers in the Asia-Pacific region, and Figure 2 indicates the inter-regional movement. From Figures 1 and 2, we can see that the increase in the number of passengers on domestic flights in Asia contributed the most to the high growth rate of the number of passengers in 2004, 2006, 2009, and 2011. Although moderate in comparison to domestic flights, the number of international air passengers has also increased, as has the number of international flights in the Asia region. In 2013, it is believed that the number of international air passengers increased even more.

Figure 3 illustrates the aviation networks of two companies that were active, as shown in Table 1, in entering the market for international flights using allied airlines. QFA established Jetstar in 2004 and entered the market for international flights in 2006 in order to maintain their domestic flight share amidst the growing popularity of LCCs in Australia and New Zealand, while competing with Virgin Blue, another LCC. At the same time, QFA decided to discontinue service from Australian Airlines, another subsidiary, and transferred the airline's network to Jetstar Asia. This change signified the re-establishment of a network based in Singapore.

In addition, although there are 15 international airports in Australia, it is reported that Airport Traffic Data, The Department of Infrastructure and Regional Development[as Table 2]². QFA concurrently operates a network that links small hubs and a long-range flight network that directly connects hub airports. As a result, it has even made changes to its single model fleet. In addition, the role of Jetstar has grown by focusing on central flight routes in high demand.

In the case of Malaysia's AirAsia, the airline has multiple allied airlines in the Asia region, just like QFA's Jetstar. As of fiscal 2012, AirAsia's domestic flights and international flights accounted for 40% and 60% of its operations, respectively. In Malaysia, out of 39 airports, five are international, and the passenger traffic volume at the Kuala Lumpur International Airport (KUL) in 2012 accounted for approximately 71% of all Malaysia's traffic volume (MOT, MA). AirAsia uses the LCC terminal (LCCT) at KUL and in fiscal 2012, its domestic air passengers accounted for 61.8% of the airport's volume. In terms of international air passengers, AirAsia, including AirAsiaX and Indonesia AirAsia, accounted for 39.2% of the volume at KUL (see Table 3). Although QFA and AirAsia are similar in that they have multiple allied airlines and are looking to expand their networks, as we can see in the market share of KUL passenger volume, as well as the route map in Figure 3 (a) and (b), the introduction of a hub and spoke system is noticeable in AirAsia's international transportation system.

A similar introduction of a hub and spoke system can also be seen in the routes of the subsidiaries of ANA in Japan, and operations are being carried out with each base airport as a hub. Since the introduction of the Asia Gateway Policy in 2007, airports in Japan have continued to experience temporary flight service of foreign airlines. Out of a total of 98 airports in Japan, there are 41 airport locations that have a runway of 2,500 meters or longer, where it is possible for A320s and B737s to take off and landing. Although the hub airports of Peach Aviation and Vanilla Air differ, they are both operating in a range in which it is possible to fly round-trip in terms of stage distance, with their single model fleets of A320s³. In particular, since its full-scale services for international flights are beginning now, with Hong Kong being the only place in China where it will fly, the fact that the airline market environment in the Asia-Pacific region is not yet sufficiently prepared for competition on regional international flight routes is underscored.

Japan Airlines has also expanded its network, with a focus on domestic flights, through the establishment in 2012 of Jetstar Japan, a joint venture as well as the subsidiary presented in Table 1. Although Jetstar Japan began providing international flights in 2013, the focus of this paper is on international air transportation and for this, Jetstar Japan are considered from Qantas Group side.

Due to the operation of single model fleets of the Boeing 737-700 and 800 series (around 140 seats) by new airlines, (including airlines that are not subsidiaries), the stage distance of routes where these companies can gain entry have similar conditions. This is evidenced by the repeated discontinuation

² AIC reported 13 airports in Australia, 25 airports in Malaysia, 8 airports in Japan, 15 airports in Korea (from, Air transport statistics 2013, p.140).

³ A320s Flight distance 3,300nm(6,100km) in Peach Air(Fleet : HP) and Vanilla Air(Aircraft seat no. ; safety report 2012, p.18). The most long flight distance are 2,482km(Peach Air (from KIX to HKG)) and 2,106km(Vanilla Air (from TYO to TPE)).

of services by Hanson Airlines and Yeongnam Air, among the earlier LCCs established between 2004 and 2006 in South Korea. In December 2009, Jin Air, a subsidiary of KAL, began providing services for the first time for short- and medium-range tourist routes to Bangkok, Thailand. Further, due to the fact that regulatory authorities prioritize the distribution of flight routes to new airlines in South Korea, the establishment of Jin Air was the natural choice for KAL in order to maintain its routes and expand its network.

Conclusion

Short- and medium-range air flights have increased in the Asia-Pacific region alongside the liberalization of aviation. New airlines, introducing a LCC business model or diversified business model, have been established or converted, shedding light on the application of the hub and spoke systems used by existing airlines for their international flight networks.

At the same time, in addition to directly connecting long-range flights, QFA introduced the diversification of its subsidiary's fleet depending on stage distance in response to price competition, as through the enhancement of Jetstar's network. In other words, it can be said that there has been a shift from existing airlines to subsidiaries for flights within the Asia-Pacific region and for long-distance flights.

The expansion of airlines such as those covered in this paper can be attributed to the current state of conditional aviation liberalization as well as regional characteristics that place limits on fleets and the service differentiation of medium- and long-distance international flights. As a result, it has become necessary to differentiate aviation services through demand analysis. We hope to develop this topic even further in future research.

Airlines group	Int'l flight	Shareholders	Airlines group	Int'l flight	Shareholders
Qantas(QF)			AirAsia(AA) (2007) 3)	2004	AA; 100%
Jetstar (JQ)(Australia, New Zealand) 2004	2006	QF; 100%	AirAsia X (DX)	2007	AA; 48.5%
Jetstar Asia(XJ) 2004	2004	QF; 49%	Thai AirAsia(TH) 2004	2011	AA; 45%
Jetstar Pacific(BL) 2008	2010	QF; 30%	Indonesia AirAsia(IQ) 2004	2008	AA; 48.5%
Jetstar Japan(JK) 2012	2013	QF; 33%	Philippines' AirAsia(PG) 2010	2012	AA; 50.5%
Jetstar HongKong(JM) 2013	2014 ^{announced}	QF; 33%	AirAsia India(I) 2013	2013	AA; 49%
CantasLink			Thai AirAsia S(XL) 2013	2014 ^{announced}	AA; 49%
Japan Airlines(JL) 2)			All Nippon Airways(NW) 2)		
Japan Transocean Air (NL)1987-1993		JL; 72.5%	Air Japan(NG)* 2002 (only international)	2002	NH; 100%
JAL-Express(JC) 1998		JL; 100%	ANA HAWAII(SH) 2010 (only domestic)		NH; 100%
J-Air(JM) 1996		JL; 100%	Peach Aviation(MM) 2011	2013	NH; 58.7%
Japan Air Commuter(SK)		JL; 60%	Vanilla air(VN)** 2013	2013	NH; 100%
Ryukyu Air Commuter(RI)		JL; 74.5%			
Jetstar Japan(JK) 2012	2013	JL; 32.3%			
Korean Air(KR)			Asiana Air(OZ) 4)		
Jin Air(JL) 2009	2009	Hanjin KAL; 100%	Air BUSAN(BK) 2013	2013	OZ; 49%

source : Qantas(Annual Report2013)p.123, AirAsia (Annual Report 2013, p.28, both quarter report2013)p.12, Japan Airlines(Annual Report2013)p.98, All Nippon Airways (Annual Report2013)p.140, Jin air & Air Busan(from Financial supervisory service) .

note : 1) Philippines AirAsia ("PAA") which has been fully consolidated with AirAsia West(partnership from Feb. 2014, from www.airasia.com/ibccolcomm-on-dual/investor-relations), Thai AirAsia X flight to Incheon (between Bangkok(Domestic) and Incheon from Jan. 2014)(<http://www.airport.intl.jp/flightinfo/>)

2) NH(from FY2005), JC(from FY2011).

3) NG merger ANA&P express in FY2008, merger Air West, Air Central,Air nippon network in FY2010. ** AirAsia Japan until May 2013.

4) Airasia Air announced plan to establish new subsidiary airline Apr. 2014.

Table 1: Airlines Group



Figure 1: Growth rates of the Passenger traffic
 Source: Aviation Statistics (JAPAN)(original source: IATA World Air Transport Statistics)
 Note: (A)Int'l share means int'l flight share of the Asia region

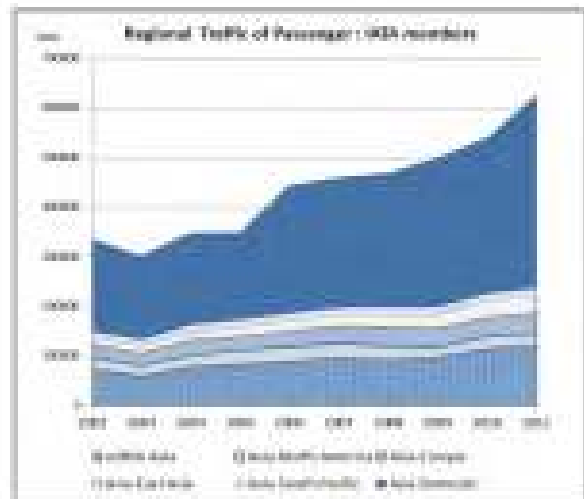


Figure 2: Regional Traffic Passenger
 Source: Aviation Statistics (JAPAN)(original source: regional traffic from IATA World Air Transport Statistics)

	Airport for Civil Air Transportation(only civil)	International Airport
Malaysia	38(18 (1))	5
Australia	102	15 (2)
Japan	98	41 (3)
Korea	12(8 (4))	8

Table 2: Infrastructure: Airports

Source: • Malaysia (from MAHB Ann report 2012, p.4.) • Australia (based on [regular public transport operations only], Airport Traffic Data, The Department of Infrastructure and Regional Development • Korea (Pocket Aviation Status2013, pp.159-162.) • Japan(the Ministry of Land, Infrastructure, Transport and Tourism Home Page; access Jan 24, 2014).

Note: (1) include STL airport (2) included restricted use (3)Liberalization (Asia gateway policy of 2007) (4)Civil only

Airlines	Passenger tra	Airport	market share	state	market share
Dom-AirAsia	7349516	Dom-KLIA	61.8%	Dom-Malaysia	21.3%
Intl-AirAsia(G)	10568705	Intl- KLIA	39.2%	Intl-Malaysia	33.4%
Total-AirAsia(G)	18308321	Total KLIA	45.9%	Total-Malaysia	27.2%

source: calculated by Airline Passenger traffic (data from MAHB Ann-report2012,p.317), (passenger movement (data from KLIA Presentation, p.15).

Table 3: Market share of Passenger traffic: AirAsia (2012)

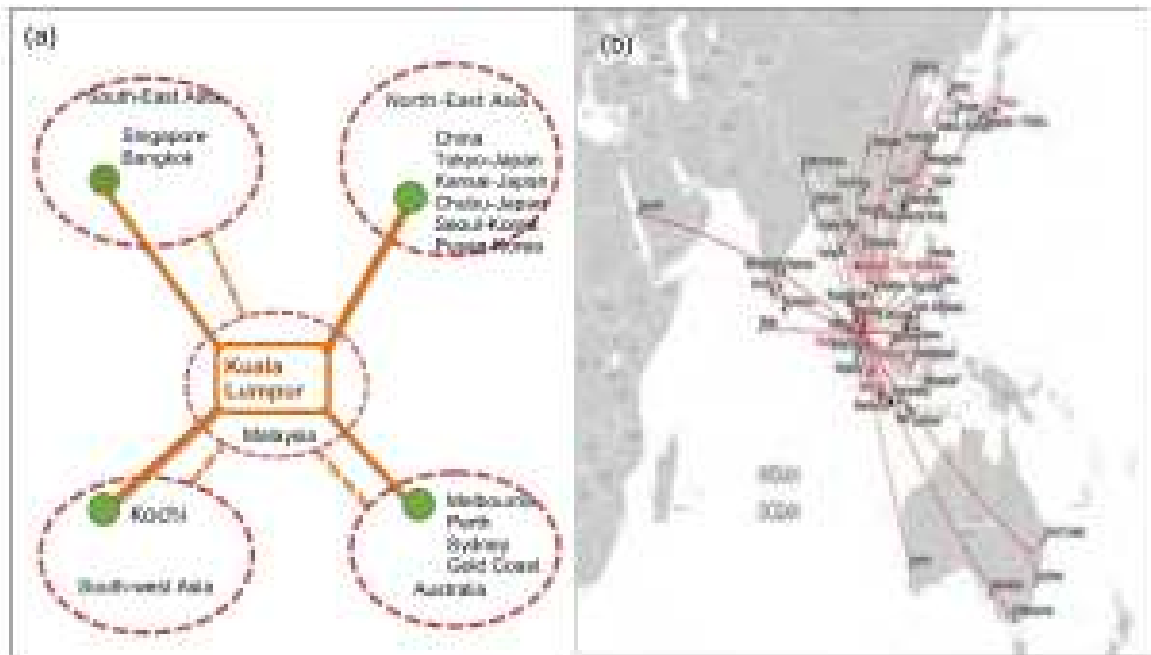


Figure 3: Network of AirAsia
Source: network from AirAsia Annual Report 2013

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THE INFLUENCE OF NATIONAL CULTURE ON USE OF THIRD PARTY LOGISTICS

Phoomhiphai Mingmalrak¹

¹*School of Management, Mae Fah Luang University, Chiang Rai, Thailand 57100, Tel. +665391-8710, p.phoom@gmail.com*

Introduction

Chiang Rai is situated in the northern region of Thailand and is considered as a strategic location of the country because Chiang Rai has a border connected to neighbouring countries such as Myanmar and Laos. With this reason, local people in Chiang Rai have trade activities with local people from Myanmar and Laos along the border. Products from Myanmar and Laos that are traded within these regions are mostly from third countries nearby such as China and Vietnam (Banomyong 2013). Major products from Thai side are food, agricultural products, construction materials, electricity appliances, and car material products (Ishida & Isono 2012). The products that are transported in and out in Chiang Rai province could be in two major modes of transportation, which are boats and trucks. Products that are transported by boats were shipped along Mae Kong River and the products are initially uploaded into the boats from and to China. However, products that are transported by trucks passed through Laos are also from and to China, where Chiang Rai carries a border check point duty both for the import and export products. The logistics system plays a significant role to help transport products receiving from other countries in Chiang Rai province and to distributing to other provinces in Thailand (Banomyong 2013). Third party logistics is a logistics system popularly used in Thailand. The aim of Third Party Logistics is to help businesses to minimise their transportation cost and increase marginal profits to their businesses. This paper also aims to investigate influence of national culture of businesses located along the border region of the northern part of Thailand in using the third party logistics and the impacts causes to them. Previous research highlighted the effect that national culture has on the propensity for small, independent manufacturing enterprises to (1) cooperate with other firms for technological innovation and (2) use equity ties in the formation of these alliances (Steenama et al. 2000). However, national culture represented as an arising of inner feeling of local companies to impact the use and nature of cooperation. For example, many businesses from various industry clusters all over Thailand has been partly attributed to its value system and contributes large income to the country, which fosters efficient cooperation between firms by reducing transaction costs by using the external outsourcing companies for their logistics system.

The structure of this paper comprises with the concept of supply chain and third party logistics, then managing people across culture is summarised. The other topics are implications of the influence of national culture on the use of 3PLs of local businesses in Chiang Rai.

Supply Chain along the Border Area of the Northern Region of Thailand

Natural resources are limited and people all over the world change their behavior in consuming products, whilst this was because they had more educational level. These people attempt and tend to acquire natural resources from other pertinent and consume them. Hence, the process for designing, sourcing, producing and distributing products in the world markets become more important and play a significant role (Gupta & Palsule-Desai 2011). Many researches were then conducted to understand how organisations or businesses can be able to efficiently manage and facilitate of entire supply chain to supply products to their customers. Supply Chain involves with management of information flow, goods and services flow, and financial flow whilst the businesses along the border area in the northern region of Thailand also have similar processes. The collaborations amongst parties and between different companies along the supply chain are of vital for their success. However, the businesses can utilise information to achieve improvements in sharing information with their business partners in their integration of process (Tirkman et al. 2007). Appropriate business processes are basic requirements for the strategic use of information through suppliers to third party logistics to ensure the flow of products and services to reach destinations.

In business operations along the supply chain, process uncertainty can be caused by low performance or by the nature of material flow. The process uncertainty can lead to uncertainty in the delivering products to customers. Each stakeholder along the supply chain must deal with different processes effectively. These processes can vary in terms of quality, post-processing quality from upstream suppliers to downstream customers along the supply chain and through time (Van Der Vorst 2000).

To process the supply chain management efficiently, logistics activities has become a global trend. This paper provide an insight into an aspect of logistics outsourcing or the 3PLs as this technique is intensive and provide benefit reduction outweighing the cost and time (Jharkharia & Shankar 2007). The following section explains third party logistics.

Third Party Logistics

Generally, the 3PLs is a logistics outsourcing that is defined as a subcontract arrangement whereby a logistics service provider performs a range of services for a firm, instead of they provided, in-house (Min 2013). The use of a logistics outsourcing or the 3PLs allows the firm to be able to focus better on their business competency (Mingmalairaks 2011), whilst exploits external resources and expertise in handling their logistics activities (Min 2013). Most countries all over the world are ready for outsourcing, especially small and medium sized enterprises. These small and medium sized businesses attempt to outsource as much as possible to help minimise their business operations cost. The third party logistics is then becoming one of their choices of selection for their product transportations.

Even though the extant body of literature on the 3PLs and the culture in using 3PLs is vital, there is only little effort has been devoted to integrate the literature in the research on 3PLs. An attempt to review the status of literature on 3PLs in this paper is then made to understand the 3PLs that are being used in the Thai context, particularly along the border area in the northern region of Thailand and how the national culture impacts on them.

The third party logistics can be a way to turn environmental problems into business opportunities for many businesses along the supply chain and many companies begin to consider the green aspects can be integrated into their service offerings to their customers. This is because many people have put their awareness of business operations on the green concepts. For example, in China, the customers need more education on logistics because their knowledge in this area was limited in the past. The business owners in China accepted the idea in using third party logistics rapidly when comparing with other countries. This was because' customers trusted that the use of third party logistics helped their business in terms of transportation more efficiently (Lau & Zhang 2006). With this reason, these business owners in China can learn from other experiences and they have more external pressure to improve current products and services to survive their business. The result indicates that domestic businesses in China rather outsource more to enable their business capability and efficiency. Later on, China has emerged as a major logistics hotspot in Asia, a growing number of multinational firms that enhance the logistics efficiency through the use of third-party logistics providers in Asia (Zhou et al. 2008). Therefore, the third party logistics is of vital important for the businesses all over the world and becoming more important for businesses along the border, especially in the northern part of Thailand.

Managing People across Culture

Hofstede (1980) explains his cultural framework, which includes power distance, uncertainty avoidance, masculinity and femininity, and individualism and collectivism. In Hofstede (1980), he explains the importance of set of behaviour in the view of relationship both person and the situation. When the behaviour of a person is observed, the presence of stable mentor programs was inferred (Hofstede 1980). Furthermore, Trompenaars and Hampden-Turner (1998) adopt a wide meaning of culture highlighting national values and preferences. The results in his study demonstrated that training would be a strategic tool for leaders or managers to be able to achieve towards their business goals whilst building a learning organisation and leadership development across cultures would also be considered as another strategic tool for businesses to minimise conflict and guiding for problem resolution (Smith et al. 1996; Trompenaars & Hampden-Turner 1998). Trompenaars and Hampden-Turner (1998) reveal that organisational culture stimulate creative thinking and encourage organisational learning (Al-Alawi et al. 2007). Trompenaars and Hampden-Turner's study related in this study because local business owners learn from their business experience that the third party logistics was useful and help their business transport products efficiently at lower cost. However, this study only highlights three parts of Hofstede's work, which are uncertainty avoidance, masculinity, and individualism. The power distance was not discussed in this study because it referred to which the members of a society expect power to be distributed equally in the organisation. Hence, this paper only focused on the SMEs or local business long the border in the northern region of Thailand. Their

size of organisations were not large and individualism was more appropriate to discuss in this study (Hofstede 1991; Lau & Zhang 2006; Smith et al. 1996).

Figure 1 proposes a study model and framework, which was derived from an extensive literature review and from the discussion with main key informants in Chiang Rai. The major key informants were the Director of Chiang Rai Tourism Association, Director of Chiang Rai Industrial Association, Director of Chiang Rai Chamber of Commerce, and one of key business owners in Chiang Rai.

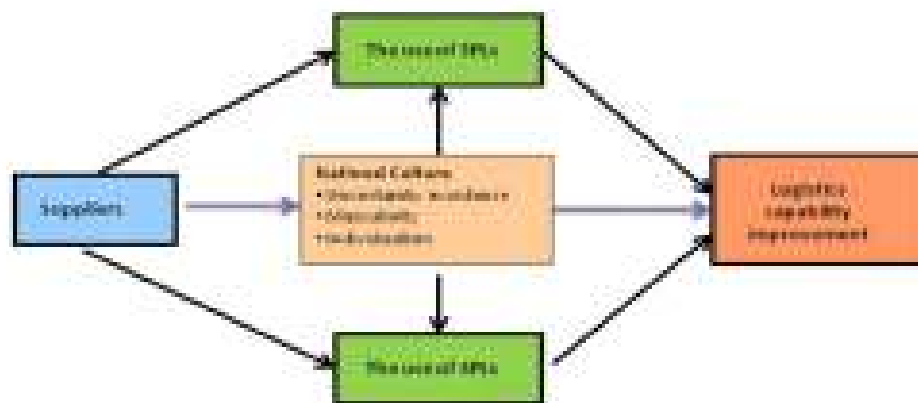


Figure 1: The conceptual framework of national culture towards the use of 3PLs

Figure 1 explains the study approach that focuses on an effect of national culture with an attempt to understand how decision-making is being made by businesses towards the use of third party logistics (3PLs) then proposes conceptual framework. This paper examines three cultural traits, which includes 1) uncertainty avoidance, 2) masculinity (competitiveness), and 3) individualism. Firstly, uncertainty plays an important role in decision making of businesses generally; particularly it was found a relational uncertainty in the local business in the Thai border area of the northern region. Local businesses need to seek appropriate and reliable business partners, especially external outsourcing companies or the 3PLs to help delivering their products and distributing them throughout other location of Thailand. Secondly, to utilise the third party logistics allows the local businesses to empower their business competency, which leading to cost reduction, reduce competition level, and increase business performance. Thirdly, most local businesses maintain their individualistic value, which directly impacts to their business operations (Shane & Venkataraman 2000).

The third party logistics has a relation with the network theory (Granovetter 1983; Walsham 1997), the firm's relations with its logistics service providers through outsourcing contracts constitutes to most valuable intangible resource for businesses such as logistics knowledge and their business competencies (Haldrónsson & Skjott-Larsen 2004), which creates competitive advantages over their competitors in the fierce competition era (Mingmalairaks 2011). However, this study used the exploratory to explain the phenomenon.

The exploratory work approach characterises a brief, fleeting, and focuses at the preliminary stage in the study process leads to understand the real situation and can contributes to the theory (Berg & Lune 2004). The outcome of this exploratory study procedure is the production of inductively derived generalisations about the group, process, activity, or situation of businesses in Chiang Rai province. In-depth interview and observations of major businesses were used to primarily understand their decision-making on the use of 3PLs. The reviewed of literature and interpretive approach were selected in this paper as the paper aimed to understand the phenomena through the meanings that people assigned to their business activities (Patton 2005; Silverman 2011). The works on culture by Hofstede (1980, 1984) and Trompenaars et al. (1996) were used as guided to explain communication and implementation of decision making by local businesses in using 3PL. Theory as practice, organisational culture, and business performance were also used in this study to frame up the conceptual framework (Mingmalairaks 2011; Spee & Jarzabkowski 2011). Hence, this paper developed an understanding of the local businesses towards the national culture on the use of 3PLs efficiently for their business operations.

In the northern region of Thailand, especially the border area of Chiang Rai, products are delivered pass through the border region to other countries such as Myanmar, Laos, China, and Vietnam. The third party logistics has been used as the small and medium enterprises are not willing to initialise their investment for their own transportation because they know that the high investment will not repay them back in a short period of time. With the limitation in the size of businesses, these SMEs have similar limitations in financial investment.

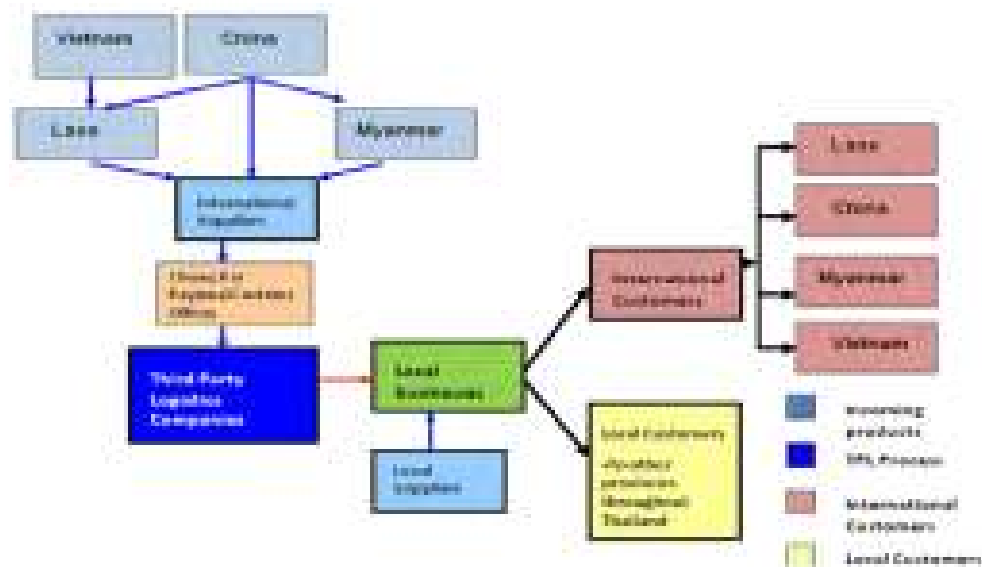


Figure 2: Border trade supply chain and the transportation flow of products in Chiang Rai Border Area.

Figure 2 demonstrates logistics flow of products and how the external outsourcing companies or 3PLs provide their services to local SMEs in delivering products both from other countries then transporting to other provinces within Thailand and from the border area of Thailand to other countries. The figure 1 demonstrates that international suppliers transported their products from Laos and Myanmar, Vietnam through Laos, and China delivers their products through Mae Kong River and also through Laos and Myanmar.

From the information derived from a discussion with major key informants in Chiang Rai, the Director of Chiang Rai Tourism Association, Director of Chiang Rai Industrial Association, Director of Chiang Rai Chamber of Commerce, and one of key business owners in Chiang Rai agreed similarly that compatibility between the user and the provider companies is the most important determinant, which influences the final selection process on the use of 3PLs (Aguezroul 2014; Jharkharia & Shankar 2007). Appropriate flow of information would help logistics flow to reach to consumers efficiently.

Implications of the Influence of National Culture on the Use of Third Party Logistics

The implication of this study highlights on national culture on the decision making in using 3PLs of businesses along the border region in the northern part of Thailand. Even though there was little study in literature of businesses along the border region in the northern of Thailand, why and how they use logistics companies for the border trade is of vital important. This study would provide an understanding of selecting suppliers in relation with the national culture use of 3PLs, which would lead businesses to gain benefits and business operations improvement at lower cost that impact on them. From interviews with key informants in Chiang Rai, the culture in the use of 3PLs could be explained as follows:

Uncertainty avoidance

According to Hofstede (1991), uncertainty refers to the environment that the members of cultures in the society feel threatened by uncertain situation. The uncertainty avoidance in this paper is regarded to the legal system, rules, and regulations that set forth to allow local businesses to operate their business activities. Even though there are some obstacles on trade facilitation along the border area such as a long process at the custom house, according to interviews with major key informants in

Chiang Rai. The business owners from trading countries have to find appropriate way to shorten their logistics process to minimise the lost on delivery of products, as major products are agricultural products. Thus, logistics system allows them to use the 3PLs or the external outsourcing businesses to help them to minimise their logistics costs. Therefore, the uncertainty avoidance at the national level influences the local businesses or entrepreneurs to collaborate with other businesses where they adopt better technological efforts to utilise them to benefit their business operations (Mingmalairaks 2011).

Masculinity

The term masculinity in this study refers to the 'toughness' and competitive environment of businesses and society (Hofstede 1991). The aggressiveness of the business competition environment represents the toughness (Mingmalairaks 2011), which is referred to the masculinity in Hofstede's explanation. However, femininity societies or countries demonstrate preferences for resolving conflicts while enhancing a compromising and negotiation environment for success. This paper revealed that the local businesses along Thai border area in the northern region also adopted uncertainty as to increase a competitive level, whilst to reduce cost of operations and seeking for the use of appropriate 3PLs to run their business efficiently (Hofstede 1991; Trompenaars & Hampden-Turner 1998).

Individualism

Individualism characterises societies in which the ties between individuals are loose and everyone is expected to look after himself/herself while collectivism characterises that people are integrated from birth onwards into strong and cohesive in group (Hofstede 1991). In this paper, the individualism referred to entrepreneurs that operated their business individually under their own decision making and they preferred to use 3PLs to minimise their cost of operations and highlighted their competencies in other areas such as their products and administrative competencies (Mingmalairaks 2011).

According to the interviews with the major key informants in Chiang Rai, the local business owners outsource their entire logistics activities. The use of external companies to manage logistics activities as third-party logistics service providers become a common practice in Thailand and, especially the border trade businesses in the northern of Thailand (Aguzzoul 2014). The culture of using the 3PLs becomes a driver to solve their business need and minimise their cost. This culture of using 3PLs also leads these border trade businesses to concentrate on their core competencies, achieve at their expected level of cost reduction, develop their supply chain partnerships, and improve their services and operations efficiently. The following topic discusses on limitation.

Limitations

This paper proposed a study framework to help outline the following phase in studying the influence of national culture on the use of 3PLs. This paper shredded lightly on the local SMEs perspectives as to generalise the literature with information derived from the main key informants, which were the Director of Chiang Rai Tourism Association, Director of Chiang Rai Industrial Association, Director of Chiang Rai Chamber of Commerce, and one of key business owners in Chiang Rai. However, there are some limitations in this paper. Firstly, the number of key informants is limited and more number of local SMEs would enhance the generalisability of findings and results for further study. Secondly, time constraint was another limitation in a forum discussion with the key informants, whilst there could be more information that were missed out and required appropriate interpretation. Finally, this paper is written on a preliminary stage and more information from observations at the SMEs' premises could be a great source for information.

Conclusion

The major contribution of this paper is a development of a comprehensive methodology to understand the national culture of local business owners in Chiang Rai province incorporates with diversified issues, for the decision of using third party logistics as providers to facilitate their logistics activities. To develop understanding and knowledge on third party logistics and the cultural dimensions that impact on decision making of businesses towards the use of 3PLs are vital for businesses. The paper also provides for a review of the issues, which national culture influences the selection of third party logistics. The important aspects of this study identified and verified the perception of success relationship of national culture and decision making of local businesses in using 3PLs though logistics capability improvements. This paper reviewed extensive literature and determined the impact of

national culture of local business along the border area in the northern of Thailand then developed and proposed conceptual framework to improve logistics capability. Interview was also conducted with business leaders in Chiang Rai such as the Director of Chiang Rai Tourism Association, the Director of Chiang Rai Chamber of Commerce, and the Director of Chiang Rai Industrial Association. The influence of national culture has impacts on the use of 3PLs in three area, which are uncertainty avoidance, masculinity (competitiveness), and individualism.

SMEs or local businesses in the northern of Thailand were in uncertainty avoidance because they attempted to avoid uncertainty by using the 3PLs, thus to reduce cost and avoid uncertainty level in delivering products to the customers. They would have high uncertainty in delivering product to the downstream customers when they use their own logistics system. SMEs in the northern border area of Thailand therefore utilised logistics companies and shared their technology and expertise in logistics rather than making own investment. SMEs or local businesses in the northern of Thailand had both a relatively high level of masculinity as they focused on the competitiveness. A relatively high level of femininity was also observed because these businesses also sought compromising in solving problem for their businesses. The businesses in the Thai border region focused on the competitiveness because they want to gain more profits while reducing their cost of operations. The use of 3PLs helped them to be eligible to focus more on their own business competency, while sharing the expertise of the 3PL companies as they were more expertise in the logistics competency.

The following phase of this study should highlight on how local business owners perceive their business success via the use of the external outsourcing companies to process their logistics functions on behalf of their business operations. Each category of the cultural framework selected for this study should be clarified in relation with the use of 3PLs and explains the usage efficiency of the 3PLs of SMEs or local businesses in this region. Future refining work and a refining method thereafter the observation process and more number of interviews with the users of 3PLs in the next stage would be useful and help contributing vital information for this study.

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A STUDY ON RELIABILITY OF LOGISTICS NETWORK FOR THAI ORGANIC FOOD TO INDIA

Suthep Mimsae¹

¹*School of Management, Mae Fah Luang University, Chiang Rai, Thailand 57100, Tel. +665391-8710, suthep.mls@gmail.com*

Phoomhiphai Mingmalaivaks¹

¹*School of Management, Mae Fah Luang University, Chiang Rai, Thailand 57100, Tel. +665391-8710, phoom@gmail.com*

Introduction

An interest in organic food products has increased throughout the world due to an increasing trend in health awareness at present. Also, an increasing number of world populations, food scares was arising and seen in every spot of the world. Most consumers purchase fresh organic food products are because consumers expect that consuming fresh organic food products would help them to be healthier and to look young, and also the fresh organic food products are environmental friendly (Fritz & Schiefer 2008). Even though the demand for organic food has increased, but the organic food is still only for a niche market and consumers regularly confuse between the various 'pesticide safe' labels and the organic labels because they do not clearly differentiate the products.

Most countries, both in less developed and developing countries have an increasing awareness of the severity of the domestic problem as well as increasing pressure by international trading partners to comply with international standards in Thailand. As a result, the Thai government overhauled its approach to food safety (Reitner-Schobesberger et al. 2008). This leads to an opportunity for the Thai farmers to consider growing organic food products and export them to other countries such as India. Also, it is of vital that consumers have appropriate understanding about unique characteristics of fresh organic production methods, the strict inspection and required third party certification. With this reason, consumers who have high level of health awareness and related concerns feel more comfortable to consume organic food products and number of consumers that consume fresh organic food products tend to be increased rapidly both in Thailand and throughout the world (Krystallis & Chrysoschoidis 2005).

To exports fresh organic food to other countries, there is a need to have appropriate logistics network to transports fresh organic food products, thus minimise defect organic food products while transporting efficiently. This study focuses on the reliability of logistics network system for Thai fresh organic foods to India; this paper focuses on Thai organic fruits. Though the logistics security challenges was a partial concern to businesses in Thai organic food industry exporting to India, information security, transport safety, process safety and storage safety were also included in the major interest of this study.

The paper begins with an extensive discussion of the international literature surrounding the organic food products and organic consumers, then logistics network, obstacles in fresh organic fruits, and the conclusion is made.

Organic Food Products

Many researches and studies concerning consumer organic food products have been conducted in all over the world such as EU countries and the US (Fritz & Schiefer 2008; Kottila & Rönni 2008; Krystallis & Chrysoschoidis 2005; Reitner-Schobesberger et al. 2008). Much of these studies investigated how consumers perceive and understand the organic concept, the consumers' demand for organic produce, consumers' attitudes, and the factors that facilitate the acceptance of these products (Krystallis & Chrysoschoidis 2005). The important issue when producing agricultural products is the link between intensive mass production and its environmental influences. The organic food products have all concerned criteria as they are produced in high environmental concerns in the organic farming (Fritz & Schiefer 2008).

Generally, organic farming refers to a farming system, which uses organic manure, and avoids or largely excludes the use of synthetic fertilizers, pesticides, and chemicals (Gil et al. 2000). There are many reasons indicating an increasing growth rate of organic food products. This would inform the

farmers to know basic requirements in growing fresh organic food products and to learn the opportunity to grow the fresh organic fruits and export to other countries such as India. The fresh organic fruits products have an added value and the market share of the fresh organic food industry is still viable in most countries. India is one of the target markets for the fresh organic fruits, whilst many countries consider Indian markets as their potential market opportunities. Therefore, the potential demand for organic fruits is still at high level and expected to be increased in the near future.

This has resulted in a number of initiatives and labels indicating 'pesticide safe' vegetables and 'organic food' afterward. However, the pesticide-residue problem has proved enduring. This opens a market opportunity for organic foods, which are produced entirely without using synthetic chemicals. The major barriers to purchase fresh organic food are the limited information on organic food products and the lack of information of consumers that have on organic farming procedures in the farms. Consumer is another factor that influences on purchasing organic food products as more number of consumers claim that they are environmentally conscious at present and that places additional standards on manufacturers, distributors, retailers and policy-makers over the organic food products.

The growth of organic food industry is still at moderate low level in Thailand and organic food products are considered as high prices products. The imbalance between supply and demand was still exist, whilst high operating costs, lack of information flow, and poor supply reliability highly were observed in the organic food industry. At present, consumers who tend to purchase organic food products all over the world tend to be older people, higher income level, and have higher education. These customers include customers in India. As little is known on consumer perception of organic foods in India, there is a need to study and investigate the perception of organic food and the logistics network for fresh organic food, especially for the Thai farmers to export their fresh organic food products to India efficiently. The following topic discusses on logistics network.

Logistics Network

Food scares issue and food related to high levels of pesticide residues that regularly found on vegetables and fruits has increased a consumers demand to acquire for a 'safe' foods in Thailand as well as in other parts of the world. In the food industry, which includes the food organic business, one of the main goals of the food business industry is to establish an efficient purchasing, transportation, physical distribution and logistics system together. The integration of an efficient business operations will lead the food company to achieve economies of scale (Bourlakis & Bourlakis 2004). Then, an appropriate logistics network will be a strategy to develop the market for fresh organic foods.

There is growing number of consumers that concern about natural products as well as concerns about food safety and nutrition, where there is a linkage notion of food quality to notions of nature in the fresh organic food products (Goodman & DuPuis 2002). Similarly, an increasing importance of health and the impact that food production has on the environment and consumer food choice is reviewed in various literatures (Gil et al. 2000). Therefore, firstly, knowledge about fresh organic food products is vital for both producers and consumers. Knowing characteristics of fresh organic food products and its food quality are increasingly important. Also, consumers have more concerns about the nutrition, health, and quality of food they eat at present (Goodman & DuPuis 2002; Zanolli & Naspetti 2002). An expansion of differentiated in natural food production networks is a key trend as the fresh organic food products affluences and enhances food safety concerns. As some consumers only search for higher quality and healthier food products, fresh organic food products still encounter with some problems related to consumer product acceptability. It is therefore a need that fresh organic fruits farmers understand their product characteristics and grow them according to the organic food standard and consumers' needs. The result leads to an increasing need of fresh organic food products and a steady growth of fresh organic food products in the food industry.

Secondly, the organic food is unique and relationship between producers and consumers is high. Hence, the aim for minimal transportation and short chains are regularly regarded most suitable for organic food. The major challenge with fresh organic production is the difficulty in selling fresh organic food products in retail food markets because the retail food markets have to be unique. Therefore, there is a need for logistics network to develop logistics network to be able to distribute products to the right target markets (Kottila & Rönni 2008). The relationship between the organic suppliers and the manufactures or the retailers in the mainstream food chain, is a relationship between small and big volume actors because the big manufactures will transport organic food products to their retails and

then to end customers. The organic suppliers are often highly dependent on a few conventional retailers, which offer the only reasonable access to consumers in many countries. Therefore, logistics network also focused on the relationships between the suppliers and the other stakeholders along the supply chain. Previous studies have mainly focused on dyadic relationships. In organic food chains, the relationships need to be studied along the whole chain for the reasons previously highlighted.

Methodology

This study used a qualitative approach. Secondary data was reviewed to find how Thai organic foods were exported to India. Statistical information was also gathered to understand the Indian market and opportunity for Thai businesses to export organic food to India. In-depth interview was used in the qualitative approach whilst the Thai consulate in India and 5 major businesses were interviewed to understand business situation and how logistics network system was implemented. Work system theory, organisational culture, and adoption of IT were used to provide guideline for this study to develop logistics network system for Thai organic food to India as well as to improve reliability of logistics network. Statistical information from secondary source was analysed by using descriptive statistic to explain the trend and situations for Thai organic foods exporting to India. However, narrative approach was used to analyse the data derived from interviews with the Thai consulate in India as well as from the five major businesses that export Thai organic foods to India.

The qualitative approach was adopted in this paper because this paper aims to investigate the real problem and how to develop appropriate logistics network for fresh organic food products (Patton 2005). The real situation as explained in the qualitative approach could be use to develop understanding and guide direction in this exploratory study (Patton 2005, 2008). In essence, the researcher had to interpret information from the key informants from the interviews about what they said and believed (Silverman 2010). An interpretative approach looks for multiple interpretations and a deep understanding of the often conflicting rationalities of the actors involved in information systems innovation (Creswell 2012; Myers & Avison 1997). The interpretive approach in this paper uses interviews together with open-ended and structured questioning methods and looks for meaning to explain in the narratives formed.

Discussion

The interviews were arranged to meet and discuss in India to study general information to understand the business environment and context in India. A personal relationship was used to arrange a contact with the Thai consulate in India at his convenient time and also asked for his advises for arrangement to meet with five major business owners in the organic food industry in India. The Thai consulate provided assistance and information derived from interviews demonstrates in table 1.1.

Organisations	Information inquired
Thai Consulate	<ul style="list-style-type: none"> • General information about economics in India • Import-export and trade information
Business A	<ul style="list-style-type: none"> • Trade information, organisational culture, business strategy, knowledge about products and industry, and logistics network, work system, IT
Business B	<ul style="list-style-type: none"> • Trade information, organisational culture, business strategy, knowledge about products and industry, and logistics network, work system, IT
Business C	<ul style="list-style-type: none"> • Trade information, organisational culture, business strategy, knowledge about products and industry, and logistics network, work system, IT
Business D	<ul style="list-style-type: none"> • Trade information, organisational culture, business strategy, knowledge about products and industry, and logistics network, work system, IT
Business E	<ul style="list-style-type: none"> • Trade information, organisational culture, business strategy, knowledge about products and industry, and logistics network, work system, IT

Table 1: Organisations and information derived from interviews

Even though can produce organic products in their countries but the organic product are not sufficient for all consumers who love organic products in India (Garibay & Jyoti 2003). Therefore, this brings a great opportunity to the Thai farmers to grow organic fruits and export to India. Information derived from key informants at interviews at their premises in India could be summarised and developed in a conceptual framework as demonstrated in figure 1.

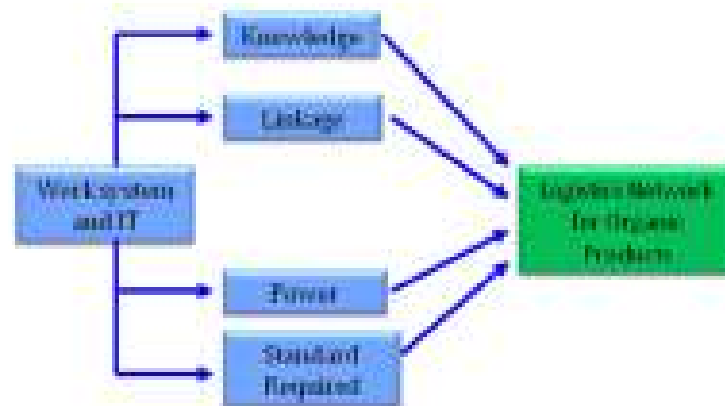


Figure 1: Framework for fresh organic food products logistics network

Figure 1 shows four factors that lead to reliability logistics network for organic food products. The work system theory use as guide associated with the IT to drive the process of network more efficiently at present (Mingmalairaks 2011). Knowledge plays a key role in binding networks together. Knowledge about the networks from producers and distributors liaise the services that distribute organic food products to end customers. Since this organic food product is unique, both producers and customers need to have education and understanding of products. In the farmer side, the minimum requirement is the understanding of the standard of fresh organic food products such as the International Federation of Organic Agriculture Movements (IFOAM).

Network links can ensure that agents and links are influenced to conform to the precepts of the entire network. The linkage in networks is regularly forged by co-operation. Thirdly, power relations in networks are consolidated by some mixture of coercion and consensus. Therefore, power is require while utilising network. This is evident that make network truly effective. However, network requires a degree of trust amongst the participants involved because the use of coercive power in some instances cannot guarantee an integrated cooperation amongst participants involved into the network (Morgan & Murdoch 2000).

The power required as the third component because the fresh organic food products requires short logistics arrangements to avoid contamination on logistics system. The cost of fresh organic food is relatively high and special requirement is needed for this type of products. Lastly, the standard required for organic food products could inform and ensure the customers about the characteristics of products and the value of products that consumers could expect to receive.

Organic food products both fruits and vegetables are major organic food products desired by Indian customers (Garibay & Jyoti 2003). The information was provided by the key informants that major market in India are in major cities such as Mumbai, Bangalore, Delhi, Chennai and Hyderabad. Most of organic food products were traded via traders, wholesalers, and supermarket chains. Therefore, the Thai farmers have to develop appropriate relationship with their network and ensure their logistics network logistics reliability. The logistics network reliability could be achieved by using four dimensions as guideline, which includes knowledge, linkage, power, and standard required. This could be achieved incorporate with work system and IT to minimise their network obstacles.

Obstacles in Fresh Organic Food

Many obstacles were revealed and posed on fresh organic fruit products to India. Knowing about characteristics of fresh organic food products and its benefits are important, Many consumers do not

aware that fresh organic food products could lift their health healthier. Also, the fresh organic production has high costs, especially labor costs, and the difficulty of shifting from conventional to organic farming are considered as other limiting factors that obstruct consumers to know about fresh organic food. In addition, food availability and seasonality are other limiting factors that make fresh organic food products difficult to establish appropriate retail outlets. Therefore, less number of consumers does not wish to purchase organic food products as consuming higher price of food product can cause their monthly expenditure to be higher.

Conclusion

The number of consumers of organic food products tends to be increased. However, characteristics of consumers that consume organic food products are older people, have high level of educational degree, high level of health consciousness, and have high purchasing power (Krystallis & Chrysochoids 2005). This profile is similar in consumers' profile and generalisable with other studies in the western countries on organic food consumers (Creswell 2012). The number of Thai farmers is increased as they see opportunity in this market. The farmers move onward to serve the international market, which includes India in this study. In order to meet the standard and requirements of customers in India, these Thai farmers or producers have to be strict on characteristics and standards of fresh organic food products such as the International Federation of Organic Agriculture Movements (IFOAM) (Geier 2007). To producing fresh organic food products, the farmers have to grow farm products strictly to ensure the consumers that they would consume quality products at their wills. The information derived from the key informants in this preliminary study indicated that appropriate logistics network could lead to an improved business performance (Dejsakulrit 2013; Mingmalaks 2011). The key informants informed that the four components leading to logistics network comprised with knowledge, linkage, power, and standard required.

This study informs that consumers were willing to pay for the price of a "safety" food, which they can find from the organic food, if the products were produced at the standard. The organic food could help them to be healthier. The achievement of this study provides key understanding to improve the logistics network management, which lead to a competitiveness for business operations. This would facilitate both farmers or organic food producers and their logistics network to enhance their capabilities to efficiently distribute their products to their customers in their target market. Consumers understand characteristics of organic products; hence the fresh organic products could be sold at a premium price because of the quality of fresh organic fruits produce. This preliminary study informs that to enhance logistics network for fresh organic food to India market will need to highly concern in four component areas, which are knowledge, linkage, power, and standard required. This study is then can be generalised with previous studies (Creswell 2012).

Theoretically this paper has shown that by understanding the process of business operations and logistics network strategy creation enabled more in depth understanding of how to enhance business performance in the fresh organic food products. The result of this study provides guide for businesses that exports fresh organic food to India to be able to use safe and reliable logistics (Peng et al. 2011). In this highly competitive environment, Thai organic food businesses could manifestly operate their business whilst appropriate logistics system establishment, better flow of communication and lower cost could be achieved (Bourlakis & Bourlakis 2004; Claiborne 2004).

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