Value Chain Management and Business Performance of One Tambon One Product Businesses in the Southernmost Province of Thailand

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Abstract

Efficient value chain management and good business performance are needed by all business entrepreneurs. The objectives of the study were to 1) develop and validate a causal relationship model between the value chain management and business performance with empirical data and 2) determine the value chain management approaches to enhance business performance. This research was carried out using both quantitative and qualitative research methods. Data collection was done through questionnaire distribution to 308 OTOP entrepreneurs in Thailand coupled with an in-depth interview with 20 OTOP entrepreneurs. Analysis of quantitative data was performed using basic statistics and structural equation model analysis, while analysis of qualitative data was done using content analysis and then presented in descriptive writing. The findings of the study revealed that the developed relationship model between value chain management and business performance was consistent with empirical data. Primary and support activities in the value chain had direct positive effects on business performance. The guidelines for value chain management to enhance business performance were still focused on all activities in the value chain.

Keywords: Value chain management, Business performance, One Tambon One Entrepreneurs.

INTRODUCTION

Today's business operations in a changing, complicated, and uncertain environment makes business entrepreneurs need to face and cope with pressures from running their businesses in order to develop the business operations (Taouab & Issor, 2019). The fourth industrial revolution is, moreover, a game-changer causing widespread business disruption and many challenges in running a business. Small businesses in all regions, in particular, are concerned about developing domestic and export markets. There are reports of high levels of unsustainability in these businesses (Sidek et. al., 2020). Additionally, the level of competition has increased dramatically in all types of businesses with no exception for small and medium-sized businesses (Akingbade, 2020). The majority of private businesses in developing countries are small and medium-sized enterprises which play a key role in driving the country's economic growth (Asheq & Hossain, 2019; Prasanna et. al., 2019). Business performance of these businesses has a great influence on the competitiveness and productivity of the country's economy (Saqib, Zarine, & Udin, 2018). However, business

operations of small and medium-sized enterprises are still needed to develop and adapt to the business circumstances that arise. If they fail to react promptly to this, it will result in the business being in a more difficult situation (Rekarti & Doktoralina, 2017). Based on data of entrepreneurs of community products in the sub-districts of Thailand, also known as One Tambon One Product (OTOP), they still encounter the same problems, including business network building, management, marketing, production, finance and sources of funding, technology, and government supports (Chiarakul, 2014). It is apparent that such problems are a result of different business functions which are interrelated in business operations. An analysis of business activities from the acquisition of inputs to the distribution of finished goods to final consumers is important. To enable the business to move forward, entrepreneurs should adapt their business operations to suit the business environment, understand business activities that are strong and those which are weak that need to be improved, and to make all these activities consistent and effective. These require an analysis of the value chain (Chinpaisal, 2017).

The value chain is considered a management concept that assists entrepreneurs to understand business activities in an organization to lead to a competitive advantage, and it can be used as a basis for analyzing the organization's capabilities. The value chain represents the value linkages in the conversion of inputs into finished goods or services that create value for customers (Porter, 1985). An analysis of the value chain illustrates business operations of the whole system, starting from production to final consumption. In addition, this provides information of any activities that create value to the eyes of consumers and relevant, necessary information between organizations and stakeholders involving different activities in the value chain (Barua, Rahman, & Barua, 2021). This information is useful for solving problems and improving all types of business activities in business operations: upstream, midstream, and downstream. Moreover, this information is beneficial in framing activities within the value

chain to increase the opportunity and competitive advantage of an organization (Kongsompong, 2014). Creating and maintaining the competitive advantage is important to the strategic process making the organization have good business performance (Kaleka & Morgan, 2017; Potjanajaruwit, 2018).

Good business performance is the ultimate goal of all business entrepreneurs. Therefore, they put very much effort to improve and develop business activities to be effective. The 12th National Economic and Social Development Plan (2017-2021) and the direction of the 13th National Economic and Social Development Plan of Thailand focus on the grassroots economy and promoting entrepreneurial societies to strengthen the country's economy (Office of the National Economic and Social Development Board, 2016; 2021). OTOP entrepreneurs are one of the key target groups that public sectors aim to develop. However, based on the survey of OTOP businesses in the southernmost province of Thailand, very little data has been found on studies using value chain management as a tool to improve and develop business activities for the entire business system. As a result, the study of the value chain management and business performance is carried out with an aim to develop and validate a causal relationship model between the value chain management and business performance with empirical data as well as to determine the value chain management approach. The findings of the study are used in the development of OTOP businesses in order to have better business performance and benefit the development of community economy, which is an important foundation of the country's economy in order to make it stable and prosperous in a sustainable way.

Literature Review

In this study, the concepts of the value chain, balanced scorecard, and research findings of previous studies on business performance were used as a basis for

rationalizing the link between value chain management and business performance of OTOP businesses in Thailand. The following relevant literature was reviewed.

Value Chain

Basic concepts of the value chain and competitive advantage were first introduced by Porter in 1985. He describes the primary and supporting activities of an organization from an initial stage to the production process and delivery of finished goods to final consumers. Business entrepreneurs have been trying to look at the best position and practice of designing and integrating business activities in the value chain for decades. In other words, the value chain is a key business strategy. All activities in the value chain help create value for consumers (Walters & Rainbird, 2007). The value chain illustrates the necessary business activities of the entire business and frames the relationship of stakeholders involved in business operations in the whole business system (Linkov et al., 2020). Activities in the value chain are processes of continuous value creation and intertwined until a product or service is produced that can meet the customer needs. However, when the customer needs change, the value of a product or service will inevitably change according to the customer needs. Business entrepreneurs have to analyze which activities are of the greatest importance in order to make a plan for strengthening the development of prominent values of an organization. The activities in the value chain concept are classified into two categories: primary and support activities. Primary activities include five sub-categories: inbound logistics, operations, outbound logistics, marketing and sales, and service. Support activities comprise four sub-categories: firm infrastructure, human resource management, technology development, and procurement (Porter, 1985).

Business Performance

Business performance is viewed as the ability of an organization to adapt to environment and market situations involving customers, rivals, and other powers that can make changes in the business operations (Rekarti & Doktoralina, 2017). Also, it means the ability of an organization to access and manage its resources to achieve its goals and objectives (Sangiorgi & Siboni, 2017). Business performance also means the ability to meet stakeholder needs and the survival needs of the organization (Obeidat, 2016). Business performance evaluation is considered a key activity that allows business entrepreneurs to know how efficient and successful the current business operations are. A tool that can be used to evaluate business performance in all aspects and to help transform the organization's mission and visions into a comprehensive set of business performance indicators in both financial and non-financial aspects is the Balanced Scorecard (Taouab & Issor, 2019). The concept of this tool is introduced by Kaplan and Norton in 2006, suggesting that components of business performance evaluation can be classified into four perspectives: financial, customer, internal process, and learning and growth perspectives.

Value Chain and Business Performance

Previous studies on the relationship between value chain management and business performance claim that in running a business, entrepreneurs need to perform a value chain analysis by examining business activities that will lead to having products or services superior to those of the rivals. This will enable them to know the ability to carry out the activities within the value chain and the opportunity to create values for customers through the activities in today's competitive environment. Also, entrepreneurs need to try to optimize all activities in the value chain, which will lead to a competitive advantage as well as a profit at a higher level (Prasetyo & Dzak, 2020). An analysis of the value chain can create a strategic, competitive advantage, help identify management options that maximize the shareholders' value, and help to increase operational efficiency and revenue for the business (Nauhria, Kulkarni, & Pandey, 2018). Based on the findings of previous studies on the causal relationship between the management of primary activities in the value chain and business performance on the OTOP

business in Thailand, they reveal that all primary activities have a positive correlation with business performance (Suwannapusit, Pongyeela, & Siripanit, 2016). It is also reported that activities in the value chain, including human resources management, marketing and sales, service, and procurement have a positive correlation with the business success based on the Balanced Scorecard concept (Bunnak & Prasertsang, 2021). The correlation between all activities in the value chain and business performance is also discovered (Ditprom, 2013). Previous studies, however, have never been conducted to investigate the correlation of the management of primary and support activities in the value chain and business performance, particularly with the OTOP entrepreneurs in Thailand. Thus far, this study is carried out to fill this knowledge gap. Expectedly, this study of the management of the value chain of both primary and support activities would lead to a positive correlation with business performance under the following assumptions:

H1: The management of primary activities in the value chain has a positive influence on business performance.

H2: The management of support activities in the value chain has a positive influence on business performance.

Conceptual Framework

From the above literature review, this study established a conceptual framework for an investigation of value chain management based on the generic value chain introduced by Porter (1985) and of business performance based on the Balanced Scorecard proposed by Kaplan & Norton (2006) to determine a value chain management approach to increase business performance of OTOP businesses in Thailand as exhibited in Figure 1.
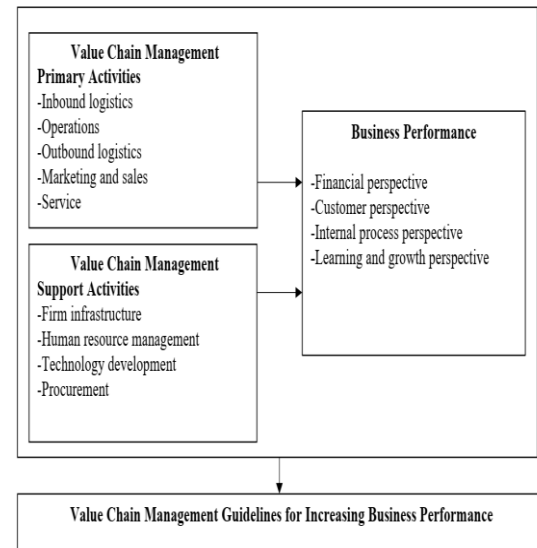

Figure 1 *Research Framework*

Research Methodology

This study is a mixed-methods based on the convergent design. The study was carried out in Yala Province, the southernmost province of Thailand. The population included 820 OTOP entrepreneurs (Yala Community Development Office, 2020). Data were collected through quantitative and qualitative methods as detailed below:

Quantitative Data Collection

The sample size was determined based on the criteria of 20 samples per one variable (Hair,

Black, Babin & Anderson, 2010). Since this study consisted of 13 variables, the sample size was equal to 260 samples. However, to prevent the unacceptable response rate of questionnaires, the estimated response rate should be on average at least two-thirds, or 67 percent (Vanichbuncha, 2008). This study, therefore, determined a sample size of 400 OTOP entrepreneurs by using a disproportional stratified random sampling technique based on each product type and taking into account the number of populations available. A sample was classified into 5 groups: 100 OTOP entrepreneurs of food products; 100 of gift, household, and decorative products; 100 of

textile and clothing products; 50 of beverage products, and 50 of non-edible herbal products.

The research instrument was a questionnaire which was divided into 3 parts: Part 1 consisted of 8 items of personal data; Part 2 comprised 36 items of value chain management, based on value chain concept introduced by Porter (1985); Part 3 included 20 questions about business performance, based on Kaplan & Norton's (2006) balanced scorecard concept, which were closed-ended questions with 5 Likert scales. The questionnaire was validated for content validity by 3 experts; it was found that all questions had an index of consistency (IOC) greater than 0.5. After using the questionnaire with OTOP entrepreneurs who were not in the sample group to check the reliability of the questionnaire using Cronbach's alpha coefficient method, the results showed that the Cronbach's alpha coefficient values of part 2 and part 3 were 0.955 and 0.945 respectively, which were acceptable values of greater than 0.700 (George & Mallery, 2003). Regarding the discrimination for item-total correlation, it was found that the discrimination values of questions in parts 2 and 3 ranged from 0.375-0.786 and 0.522-0.796 respectively, which were acceptable values of greater than 0.3 (Engelhart, 1965) Basic data analysis of samples and variables was performed through percentage, mean, standard deviation, and correlation coefficient. The research model was analyzed employing the structural equation modeling (SEM) technique using Lisrel software version 8.80.

Qualitative Data Collection

Key informants for in-depth interviews were 20 OTOP entrepreneurs in Yala province chosen by a purposeful sampling technique. They were community producers and rated in a quadrant A by the Department of Community Development. They produced high quality products with large quantity and having continuous production as well as having a market for both domestic and international sales. The interview was performed according to the following areas: value chain management, business performance, the relationship between value chain management and business performance, and value chain management approaches to increase business performance. Data collected were used to conduct content analysis and presented in descriptive writing.

Results of the Study

Sample population profile

There were 308 entrepreneurs who returned a questionnaire, accounting for 77% of the response rate. The results of personal data showed that most respondents were female, accounting for 75.97%. Their ages ranged between 24 and 72 years, with an average age of 44 years. They graduated from high school or with a vocational certificate, accounting for 44.81%. Number of years of running their business ranged from 1-30 years, with an average of 8 years. Relevant to product types, it was found that their business was mostly food products, accounting for 32.47%, followed by gift, decorative items, and souvenirs, accounting for 23.38%, fabric and clothing accounting for 21.43%, non-edible herbal products accounting for 12.66, and beverage products accounting for 10.06%. The highest number of stars obtained was 4 stars, accounting for 35.06%. Their organization had members ranging from 1-5 people which equaled 47.73% of the total population. Their income ranged from 20,001-30,000 baht a month, which accounted for 29.87%.

Descriptive Statistics

The management of primary activities in the value chain showed the highest mean value ($\bar{X}$=3.970, S.D.=0.581). Considering each aspect of primary activities in order from the highest to least of mean value were service ($\bar{X}$=4.059, S.D.= 0.678), outbound logistics ($\bar{X}$=4.015, S.D.= 0.627), operations ($\bar{X}$=3.979, S.D.=0.665), inbound logistics ($\bar{X}$ = 3.953, S.D.= 0.641), marketing and sales ($\bar{X}$= 3.843, S.D.= 0.707). The management of support activities in the value chain was at a high level ($\bar{X}$=3.871, S.D.=0.633) In all, the human resource management aspect showed the highest mean value ($\bar{X}$= 3.924, S.D.=0.668),

then, firm infrastructure ($\bar{X}$= 3.916, S.D.= 0.655), procurement ($\bar{X}$=3.821, S.D.= 0.653), and technology development ($\bar{X}$=3.786, S.D.=0.766). The overall business performance was also at a high level ($\bar{X}$=3.794, S.D.=0.669). Considering each perspective in descending order of mean value were learning and growth ($\bar{X}$= 3.856, S.D.= 0.667), internal process ($\bar{X}$= 3.822, S.D.= 0.726), customer ($\bar{X}$= 3.771, S.D.= 0.682), and financial ($\bar{X}$=3.742, S.D.=0.748).

In addition, all observed variables were also tested for normality, with the values of skewness and kurtosis being analyzed in particular to assess the normality scores. The skewness and kurtosis ranked between -0.541 to -0.167 and -0.869 to -0.310, respectively. Based on the recommendation, if the absolute values of the skewness are not more than 2 and the absolute values of kurtosis are not more than 7, data are considered to be normal (Hair, Black, Babin, & Anderson, 2010). The values of skewness and kurtosis of all observed variables were within the critical values, therefore, indicating the normality of the distribution of the collected data in the sample.

Hypotheses testing

Regarding the development and validation of a causal relationship model of value chain management and business performance, initially, confirmatory factor analysis was also performed to verify the measurement model of latent variables. It was found that the measurement model of primary and support activities in the value chain and business performance could be measured from their specified observed variables as theorized. Then, the developed structural model of the research was verified. The model-fit criteria used in the study were relative $\chi^2 \leq 5.00$, comparative fit index (CFI), goodness of fit (GFI), adjusted goodness of fit index (AGFI) $\geq$ 0.90, root mean square error of approximate (RMSEA) < 0.08, CFI, and standardized root mean square residual (SRMR) < 0.05 (Diamantopoulos & Siguaw, 2000). The fit indexes of the model were χ^2 = 58.514, df= 33, relative χ^2 =1.773, CFI=0.997, GFI= 0.972, AGFI= 0.921, RMSEA = 0.050, SRMR = 0.016. Therefore, the proposed model has an appropriate fit. The primary and support activities in the value chain had direct positive effects on the business performance with a value of influence of 0.506 (p < .01) and 0.422 (p< .01) respectively. It was apparent that hypotheses 1 and 2 are acceptable. In addition, the management of primary and support activities in the value chain could explain the variance in business performance by 82.50%, as detailed in Table 1 and Figure 2.

Table 1. *Path Coefficient of the Proposed Model*

Causal Variable	Effect Variable Business Performance		
	Total Effect	Direct Effect	Indirect Effect
Value Chain Management			
Primary Activities	0.506** (0.104)	0.506** (0.104)	-
Support Activities	0.422** (0.103)	0.422** (0.103)	-
R^2	.825		
χ^2 = 58.514, df= 33, relative χ^2 =1.773, CFI=0.997, GFI= 0.972, AGFI= 0.921, RMSEA = 0.050, SRMR = 0.016			

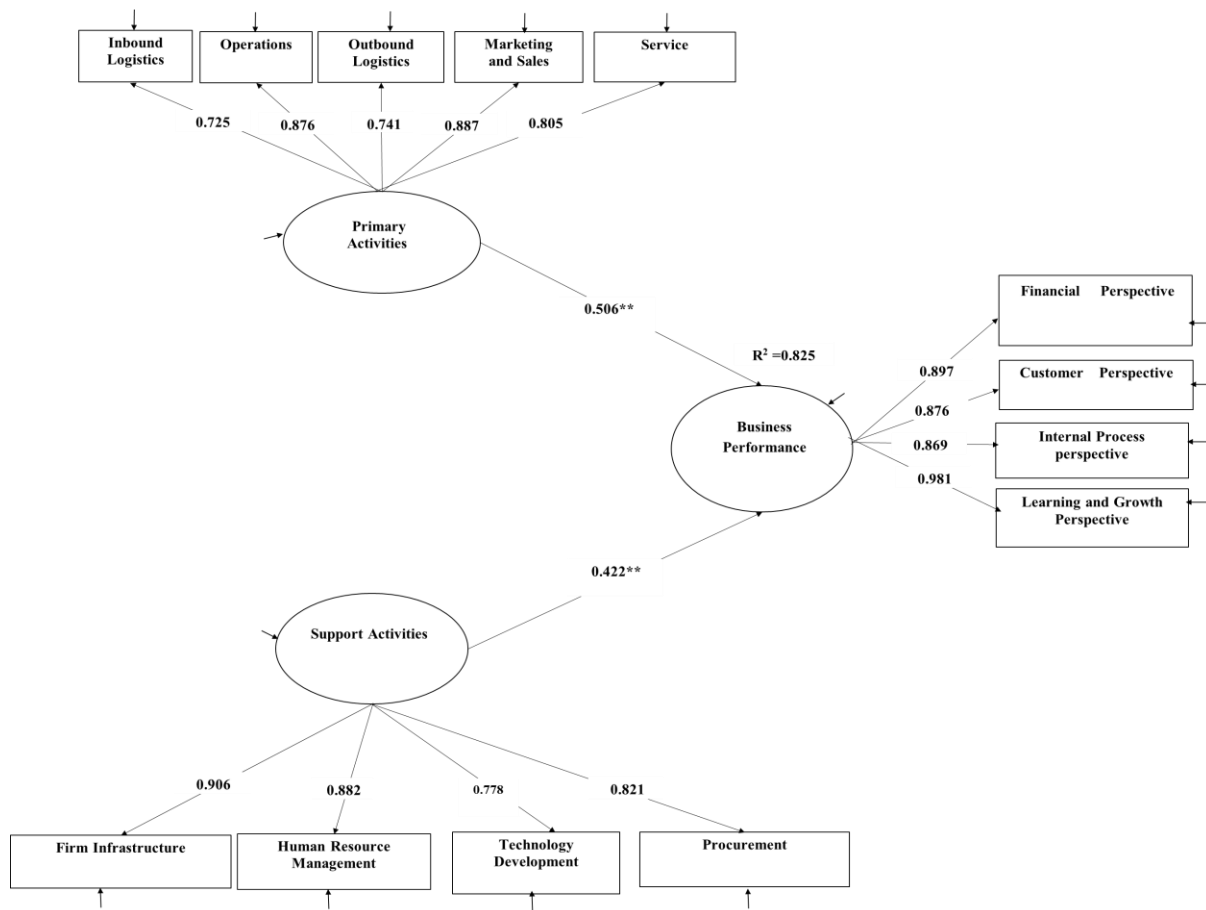Note **p<.01, The value in parenthesis is the standard error.

Figure 2 *Test of a Structural Equation Modeling*

Value chain management approaches to enhance business performance

Based on the interviews, all interviewees mutually agreed that every activity in the value chain was important to increase business performance outcomes in line with the following guidelines for managing each activity.

Primary activities

1. Inbound logistics involved planning the procurement of raw materials/production materials to get them on time and reduce transportation costs or travel expenses to procure them, counting and checking the quality of raw materials/production materials, and focusing on inventory control.

2. Operations referred to activities that should be emphasized, including production planning and controlling every production process to meet standards. If producing food products, focus must be on hygiene and sanitation. In addition, entrepreneurs of all types of products should develop their production to obtain standard marks to create confidence for customers as well as being aware of the reduction of waste in the production process.

3. Outbound logistics pays attention to verifying the delivery of goods, selecting packaging that maintains product quality during delivery, and finding a delivery method that was convenient, fast, and cost-effective.

4. Marketing and sales was another activity that should be emphasized, including developing products to have identity, branding, choosing packaging that was suitable and beautiful, participating in exhibitions, seeking both domestic and international markets that continuously order products, increasing online sales channels, and publicizing the business in a manner that creates good images while doing something for the community or showing social responsibility.

5. Service referred to delivery service to customers, building relationships by facilitating various aspects of customers, listening to opinions from customers, and willingly accepting a replacement for faulty products.

Support Activities

1. Firm infrastructure should focus on planning and controlling work operations, organizing work system in different functions, adjusting operations suitable to business situations. Moreover, leaders must have leadership quality and the ability to coordinate and build good relationships with members and others from outside organizations in both public and private sectors.

2. Human resource management concentrated on a fair allocation of returns, development of members' knowledge and production capabilities, enhancement of a good working atmosphere, and promotion of morale in the workplace.

3. Procurement gave special attention to planning raw materials for continuous production runs and selecting raw materials of good quality and suppliers.

4. Technology development focused on selecting machinery and production equipment that helped save labor and increase product quality, using technology and social media in marketing, and facilitating a method of payment and communication with customers.

Discussion of the Research Findings

Managing primary and supporting activities in the value chain positively affected business performance in a direct way. This was consistent with the results of the interviews in which all interviewees agreed that all activities in the value chain were duties that have to be performed in the business operations, and these helped promote better business performance. This might be due to the fact that those activities were interrelated and interconnected to create value for products and services, resulting in better business performance. This was in line with previous studies, claiming that

the value chain management increased business revenue (Nauhria, Kulkarni, & Pandey, 2018) and made more profits (Prasetyo & Dzak, 2020). Additionally, the results of this study asserted that the management of all primary activities in the value chain positively affected business performance in a direct way (Suwannapusit, Pongyeela, & Siripanit, 2016). Support activities, including human resource management, and procurement had a positive correlation with business performance (Bunnak & Prasertsang, 2021). Also, the findings of the previous study reaffirmed that all activities in the value chain had positive correlation with business performance (Ditprom, 2013).

Approaches to managing the value chain to boost business performance should be undertaken with all activities in both primary and supporting categories in the value chain. The primary activities, particularly operations, and marketing and sales should be emphasized, i.e. the operating activities gave special attention to production planning, product development to obtain the standard mark and the reduction of waste from the production process. This might be due to the fact that operating activities were a process of converting inputs into valuable products and adding value to them. If business entrepreneurs manage the operating activities well, it will make the products have good quality and meet the target quantity and at a cost which is not too high to compete in the market. This was consistent with the previous study which indicated that productivity helped businesses deliver valuable products to their customers (Lin & Tsai, 2016). Receiving standard marks helped products reach the market more easily and increase customer satisfaction and good business performance (Gandhi, Nurcahyo, & Gabriel, 2021). Marketing activities focused on developing unique products, branding, packaging suitability and beauty, participating in an exhibition, adding online distribution channels, and publicizing a good image of business through exhibiting corporate social responsibility. This was due to the fact that marketing activities helped deliver products to final consumers efficiently while meeting the needs or satisfaction of customers. This

reaffirmed the results of previous study claiming that market ability helped businesses deliver valuable products to customers (Lin & Tsai, 2016). Focusing more on markets and customers positively affected business performance (Asheq & Hossain, 2019). Electronic marketing helped boost business performance of small businesses (Sidek et. al., 2020). Brand management had positive effects which were significant to a level of business operations (Guzman, Castro, & Gonzalez, 2018). Product differentiation helped influence purchasing decisions of customers (Gandhy & Hairuddin, 2018). Good packaging design had a key role in conducting marketing activities and product value (Kwaku & Fan, 2020). Social media influenced an effective digital marketing communication platform for better business results (Chille, 2018). Changing ad content from product attribution to more social activities had a good impact on business operations (Mandal & Banerjee, 2018).

In managing the primary activities in the value chain, the management of service and inbound and outbound logistics activities also needed more focus, i.e. the service activities must be concentrated on delivery and building good relationships with customers. If the business can deliver good services that meet the needs of the target customers and the standards determined, this will create satisfaction and get good feedback from customers resulting in better business performance. This corresponded to the previous study claiming that good quality services helped increase the profitability of small and medium-sized enterprises (Akingbade, 2020). Inbound logistics activities should focus on planning and managing the on-time delivery of raw materials with cost-efficiency and the effective inventory control. As for outbound logistics activities, the importance should be focused on the correct delivery of goods, the selection of appropriate packaging for delivery, and the use of a convenient, fast, and cost-effective shipping method. While the efficient management of inbound logistics activities helped the production operations to be carried out conveniently and continuously, the efficient outbound logistics activities helped satisfy customers resulting in good business performance. This was consistent with the previous study claiming that inbound logistics activities were viewed as core functions of an organization which were important to business performance. Control of punctual delivery in particular helped improve the efficiency of inbound logistics activities (Ndubi, Iravo, & Ochiri, 2016). Moreover, control of efficient inventory contributed to business performance (Atnafu & Balda, 2018). Logistics functions correlated to financial performance of a business (Ayantoyinbo & Gbadegesin, 2021). Logistics processes had a positive impact on customer service and business performance (Qadir & Ali, 2017). Small business entrepreneurs should focus on inbound and outbound logistics to improve their business performance in today's competitive environment and to increase customer satisfaction (Ayantoyinbo & Gegeleso, 2018).

In addition, the management approach of supporting activities in the value chain focused on business infrastructure, including planning and controlling operations, organizing work processes, adapting operations appropriate to business situations, and having leadership quality resulting from business infrastructure supportive to other activities in the value chain. This corresponded to the previous study, suggesting that the ability to manage was positively correlated with business performance (Salehi & Moghadam, 2019). The achievement of the organization's goals and objectives depended on leadership styles (Ibrahim & Daniel, 2019). The approach to management of support activities in the value chain also focused on human resources management, including allocating fair return, developing members' knowledge and production, enhancing a good working atmosphere, and promoting morale at work. If personnel have knowledge and ability, are ready to perform their tasks as assigned and with job satisfaction, and intend to remain in an organization, this will produce good performance for the organization. This was consistent with previous studies indicating that human resources management operations helped promote learning and create good cultural values of the

corporation, conducive to business performance (Moustaghfir, Fatihi, & Benouarrek, 2020; Lai, Saridakis, & Johnstone, 2016). The effective management of procurement activities helped the production operations to go smoothly. Businesses were able to offer products to customers well. In the same way, they could receive such a service from suppliers. This reaffirmed the results of previous studies indicating that procurement capabilities of a business contributed to achieving superior business performance (Namusonge, Mukulu, & Iravo, 2017). An organization having the strategic procurement operations would have an advantage over the dynamics of change resulting in better performance (Omari & Mungai, 2020). Another important activity in the value chain management was the development of related technologies, which was perhaps directly related to adding value to products and services. As numerous studies reported the link between technology development and business performance of small and medium-sized enterprises, claiming that technological advances had brought the good business results, including improvements in product quality and productivity, economies of scale, efficient use of resources, reduced costs, increased market value, market intelligence, better service quality, and strengthened good relationships with business partners (Prasanna et. al., 2019). Moreover, technology development and innovation in digital media also increased the number of customers in the customer database and helped in making advertisements and marketing campaigns. More effective communication contributed to better business performance (Nuseir, 2019).

Summary

This study was an empirical analysis of the relationship between the value chain management and business performance of the OTOP businesses in Thailand. It was found that the management of primary and support activities in the value chain had an impact on business performance. Regarding an approach to the management of the value chain in order to enhance business performance, entrepreneurs should focus on all 5 key primary activities in the value chain, namely inbound logistics, operations, outbound logistics, marketing and sales, and services. In addition, entrepreneurs needed to pay attention to 4 supporting activities in the value chain, namely business infrastructure, human resource management, technology development, and procurement. However, entrepreneurs should especially emphasize operation and marketing and sales activities.

New knowledge from the study

This study created a body of knowledge in terms of the management approach of value chain in order to increase the business performance of OTOP businesses in Thailand as shown in Figure 3.
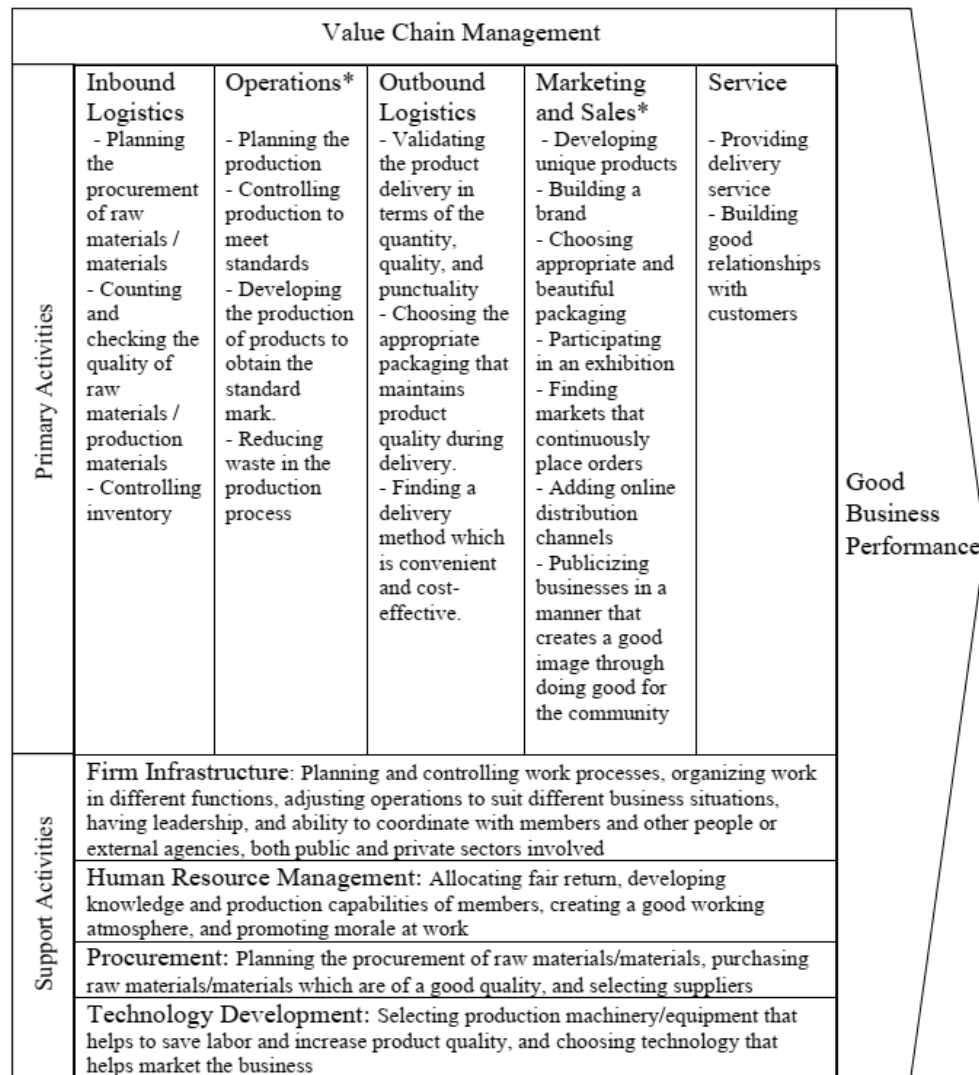
Figure 3 *Value chain management approaches to boost business performance of OTOP businesses*

Recommendations

Based on the research findings of this study, the following recommendations for further research should be considered:

Recommendations for utilizing the research results

1. The management of primary and support activities in the value chain had a direct positive effect on business performance. Therefore, OTOP entrepreneurs should continually monitor and improve the management of all activities in the value chain in accordance with different business situations both in the primary activities, including

inbound logistics, operations, outbound logistics, marketing and sales, and service and in the support activities, including firm infrastructure, human resource management, technology development, and procurement.

2. The approach to the value chain management was to undertake all activities in the value chain with a more emphasis on marketing and sales activities and operations, rather than any other activities. Therefore, OTOP entrepreneurs should focus on and develop the management of such activities to be effective as well as to improve the management of other activities in the value chain. In addition, relevant government agencies should utilize all these 9 activities in the value chain as a framework to provide knowledge and upgrade the business

skills of OTOP entrepreneurs in Thailand in order for them to be strong and able to survive in today's dynamic business environment.

Recommendations for Further Research

The key finding in this study was the causal relationship between the value chain and business performance. It could then be applied to entrepreneurs of small and medium-size businesses who produced local products, giving a high priority to the management of all activities in the value chain. For further research issue, other factors affecting the development of the value chain of community enterprises and business performance should be investigated in order to have more thorough information. Also, further research should be carried out with OTOP entrepreneurs in other regions of Thailand to compare and analyze the obtained data for best practices in managing all activities in the value chain and with separate groups of OTOP entrepreneurs producing each type of local product. This would make the study possible to clearly identify the development guidelines in different contexts of business operations.

Acknowledgment

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