



# OTOP Distribution Potential of Phum Riang Silk, Thailand

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This research was aimed to study the OTOP distribution potential of Phum Riang Silk, Surat Thani Province. The population of this study was 4 producers of One Tambon One Product (OTOP) of Phum Riang Silk, Chaiya District, Surat Thani Province, using the questionnaire for OTOP distribution potential of Phum Riang Silk, Surat Thani Province. The findings revealed that 4 aspects of OTOP distribution potential of Phum Riang Silk, Surat Thani Province were in the high level: 1) quality of OTOP of Phum Riang Silk, it was impressed, re-purchased and recommended by the customers, the overall was in the high level; 2) time of product distribution to respond to the customers' needs timely, and choosing the suitable, timely and reliable logistics by the entrepreneur, the overall was in the high level; 3) marketing, suitable inventory management process to respond to the market needs, and quick product turnover, the overall was in the moderate level; and 4) product distribution, there was no issue on storage, bounce rate and damage during delivery, the overall was in the moderate level.

**Keywords:** *Product Distribution Potential, Phum Riang Silk, OTOP Products*

## Introduction

OTOP, or One Tambon One Product, is a government project which aimed to promote and support the process of local development sustainably, strengthen the community, encourage self-dependence, and enhance the public's status which is widely successful and well-known. Thailand's OTOP project was initiated in 2001 and continues until nowadays but some OTOP of local fabrics have failed. In consequence, the researcher focused on Phum Riang silk weaving which is the southern local handicraft of Phum Riang Sub-district, Chaiya District, Surat Thani Province in order to present Thainess and sustainable local development including community enterprise development. This will increase the opportunity for export abroad especially Malaysia and Indonesia, so the entrepreneur and community should understand the elements and key success factors of OTOP development. The researcher has gathered data from

articles, research, surveys and in-depth interviews to analyse the success of OTOP of Phum Riang silk.

Product distribution management is the operation planning process to control the product and service turnover efficiency covering the raw material finding, inventory management, transportation cost management, value chain management, and delivery. Logistics is a part of the transportation management process which supports and controls the activity to flow efficiently and effectively including the storage from the beginning to the termination in order to respond to the customers' needs. The researcher focused the study on the OTOP distribution potential of Phum Riang Silk, Chaiya District, Surat Thani Province in the 4.0 era to solve poverty and strengthen the entrepreneur and small enterprise for more stable occupation, income, life quality, and cultural uniqueness of southern products as the basis of community economic development sustainably.

### **Objectives**

1. To study the factors affecting the entrepreneur's OTOP distribution potential of Phum Riang Silk, Chaiya District, Surat Thani Province.
2. To analyse the entrepreneur's OTOP distribution efficiency of Phum Riang Silk, Chaiya District, Surat Thani Province.
3. To evaluate the entrepreneur's OTOP distribution potential of Phum Riang Silk, Chaiya District, Surat Thani Province.

### **Literature Review**

#### **Concept and background of the One Tambon One Product project**

One Tambon One Product project (<http://www.thaitambon.com>) is a government project to subsidise and support the local wisdom for product development by educating new knowledge and management knowledge to link the local product with markets, both regional and international. This is done by using a store network system and the internet in order to promote and support the local development process, strengthen the community, encourage self-confidence, earning income by applying local resources and wisdom for developing the quality, unique and value-added product and service to respond to the market needs both regional and international (Panyathai, 2010). Types of OTOP: fabric and costume; weaved natural and synthetic fabric such as Praewa silk and crochet; costume and accessories such as scarves, hats, bags, belts, necklaces, earrings and shoes (Panyathai, 2010).

#### **Phum Riang silk**

Phum Riang silk (Information of Surat Thani Province, 2018) is *Pha Yok* with a beautiful and unique design that is different from other regions as it is weaved with silk or lace. In the past,

it was woven with cotton and silk; cotton for daily life and silk for any ceremonies. Phum Rieng silk weaving is the southern local handicraft by the Thai-Muslim group in Ban Huan Lane Moo 2, Phum Rieng Silk, Chaiya District, Surat Thani Province. It is inherited by observation, memorising and practice without taking notes for many generations from the late Sri Ayudhaya to the early Rattanakosin era, combining the local culture of Thai-Muslim and Thai-Buddhist. The famous silks include *Pha Yok* such as *Pha Yok Chud Na Nang*, *Pha Yok Dok Tom Gaysorn* and *Pha Yok Dok Lai Chueng*. The weaving machine is Huuk, so it is called Huuk weaving.

### **Entrepreneurial potential concept**

Potential is a personal competency of business knowledge and experience, working concepts, business networks and related factors. The entrepreneur has to face risk through business management skills and focus on the organisational innovation as the innovator to make a marketing chance by using the resource combination; 1) offer a new quality product; 2) using a new production method; 3) create a new market; 4) find a new source or raw material; and 5) establish a new business as the entrepreneur has a key role in the new business era including being an innovator of new products and services both regional and international to be the market leader on the global stage.

### **Logistics concept**

“Logistics” is a process of planning, operating and controlling efficiently including cost saving in all production processes and delivery. Logistics management is a management of product or raw material flow process from the beginning to the termination as follows:

1) Customer service, 2) Forecast and supply planning, 3) Inventory management, 4) Logistics communication, 5) Raw material management, 6) Purchasing process, 7) Packaging, 8) Spare parts and service, 9) Factory and warehouse location, 10) Finding a product or raw material, 11) Returned product management, 12) Bounced logistics, 13) Traffic and transportation, and 14) Warehouse and storage.

In consequence, the heart of logistics is finding products or services by the customers’ needs and to deliver them in a timely manner at a suitable cost.

### **Product distribution concept**

Product distribution is a basis of economic activity, and the imbalance of time, quantity and type of product that affects the business exchange. The beginning of production is an exchange between the producer and supplier, and the product distribution is an exchange between the producer and customer.

Lancioni and Grashof (1997) said that physical distribution is the complicated process comprising all activities related to product transportation from the manufacturer to the final customer. The main activities of product distribution are warehousing, transportation, order processing and inventory control which aim to operate at the lowest total cost with the highest customer satisfaction which is consistent with the objectives of logistics management.

The product distribution process is a part of logistics comprised of distribution channels, both internal and external, which link all activities between the producer and the customer to deliver the product or service to fulfil the customers' needs such as product size and delivery duration at the suitable cost. The distribution channel structure is defined by the marketing staff of each organisation.

### **Concept of strategy that increases potential and competitiveness**

Porter, M.E. (1980), said that the competitive advantage strategies to enhance the business potential and competency were as follows:

1. Cost leadership – the business should have a lower cost structure than the rival by using strict cost control, financial control through budgeting and setting the quantity goal (Porter, 1980: 272).
2. Differentiation – the business should have specific product characteristics and higher pricing than general as they said, *“Differentiation of product is a threat of the market’s newcomer. Differentiation is a cost difference and a higher price. Good differentiation will achieve success including brand loyalty and defensive wall to the rival”* (Porter, 1980: 37; 1985: 14).
  - 2.1 Innovation differentiation – the innovator has invented and marketed the new products and created more utility than the rival. Product development is combining creative thinking, prudential being and risk acceptance. Consumer behaviour is a factor in product research and development. Consequently, the organisation’s executive who has experience in research and development will drive the new product market and expect better operational achievement (Beal and Yasai-Ardekani, 2000: 734).
  - 2.2 Marketing differentiation – the experience in using marketing techniques and sales promotion. All advertisements that are presented to the customer are made by the expert marketer. Consequently, the organisation’s chief who has experience in marketing will focus on the resources, the product’s unique image and service, and expect better operational achievement (Beal and Yasai - Ardekani, 2000: 735).
  - 2.3 Quality differentiation – Dean and Evans (1994: 302 and Garvin (1984: 25) suggested that the industrial product should have 8 qualities; beauty, reliability, right qualification,

after-sales service, durability, usability, gimmicks and good quality which focused on the final product design as the engineer's responsibility (Dean and Evans, 1994: 302). Additionally, the standard of quality, product development and production process is also the engineer's responsibility. Consequently, the organisation's executive who has experience in engineering will focus on the quality control staff and better product development than the rival who has no experience in engineering, and expect better operational achievement.

3. Focus – the focus strategy is different from the cost reduction strategy and the differentiation strategy; it focuses on the specific industrial part or group, adjusts the strategy to suit the product and service for differentiation. The key factor of focus is the niche market which is different from the mass production; if it is not different from the other groups, the focus strategy will not achieve success. The focus strategy will create a competitive advantage by the specific product characteristic to offer for the target group to achieve success in the competitive advantage. Rapeeporn Srijampa (2009), said that the strategy is important for the economic recession, all staff of the organisation have to “enhance the strength in all aspects” by monitoring and evaluating their own performance and sales volume, understanding the customers' needs and behaviour including an effect for the customer, creating the new method, and conserving and developing the old method by careful consideration. There are 9 marketing strategies for business survival and sustainability: 1) Price strategy, 2) Differentiation strategy, 3) Brand loyalty strategy, 4) Media strategy, 5) Research strategy on customer's attitude and behaviour towards the product brand, 6) Customer relationship management strategy, 7) Research strategy on purchasing behaviour, 8) Differentiation strategy on service, and 9) Convenience strategy.

### **Strategic production**

There are many factors for business survival in all excessive competitions. The executive's production strategy will create a competitive advantage and the marketing staff will have the responsibilities (Supanya Chaichan, 2011: 17-19) as follows:

1. Cost efficiency – creating a product or service at the lowest cost will define its price with customer satisfaction and gain profit as profit is equal to price minus cost. In the case of the production in the free market with a market mechanism for pricing, the cost reduction is very important to win the rival.
2. Quality – product quality is from the customers' needs as customers are more willing to buy products with a “special quality”. In the general case of the same business type, the product with the better quality will have more opportunity.

3. Dependability – distributing a product covering the most markets possible. The production department is responsible for timely producing and transporting, and the product being convenient to buy anytime and anywhere.

4. Flexibility – operating to respond to the customers' needs timely and efficiently, and using the multi-purpose production system which is adjustable to create and produce many types of products at the targeted speed rate.

### Quality characteristic

Quality characteristic is an important element for customer satisfaction as the customer has defined the characteristic of a quality product. It can be defined in the sales contract for the specific product or service (Poonsuk Sangrungs et al., 2013: 180-182) as follows:

1. Quality of design – cultural diversity is affected by the individual difference in lifestyle, fondness, attitude, belief, consumption and affordability. Consequently, the producer should create different products or services to respond to the customers' needs with the quality of design.
2. Quality of conformance – scope of product or service to respond to the specifications as designed. The quality of input and process will affect the quality of output or product.
3. Abilities – usability period will affect the quality of the product or service.
4. Service – it should monitor and evaluate the product or service to survey the customer's feedback for improvement and development including after-sales service as an important element of quality by defining details of service clearly, providing equipment of maintenance efficiently and sufficiently, and training all staff for service.

### Related research

Korakot Phubanchao (2006) reported *Analysis of Storage and Distribution of Agricultural Products Export* by selecting the regional product such as rice, sugar and cassava originated from the northeastern to Bangkok and Laem Chabang Port. The location of product storage and distribution is analysed by using 3 processes of linear programming for the lowest cost: 1) Analysis of transportation cost by truck, 2) Selection of product storage and distribution by train for the lowest cost, and 3) Comparison of truck and train efficiency. The findings revealed that truck transportation cost 17,613.67 million baht while train transportation cost 12,945.73 million baht, a cost saving of 26.50% and fuel saved of 285.49 million litres.

Tantikorn Pichpibul and Ruengsak Kawtummachai (2007) aimed to study the transportation system from cargo to the product distribution in all provinces around the country by considering the quantity and route. Additionally, the result shown that the delivery had to plan for round-trip transportation by using the heuristic method which managed the transportation route and efficiency for the lowest total cost. The researcher has developed the transportation management software with high efficiency and that easy to use.

Jarita Hintao et al. (2009), *OTOP Product Management: Case of Samakkhi Phattana Housewife Group, Ban Tam Tao Moo 1, Samakkhi Phattana Sub-district, Agad Amnuay District, Sakon Nakhon Province* revealed that the group always dye the cotton fabrics after their agricultural duties with 3 production processes as the big provincial producer. Their strengths are the creative design and weaving skills, but weaknesses are the lack of package development and innovation for the value-added product. Their product distributions are direct sales to local housewives and at the provincial OTOP store. It indicated that there were restrictions of product distribution: 1) administration, there were new members and networking continuously but there was no decentralisation of decision making, and 2) finance and accounting, there was incompleteness and inconsistency of the accounting system.

### Conceptual framework

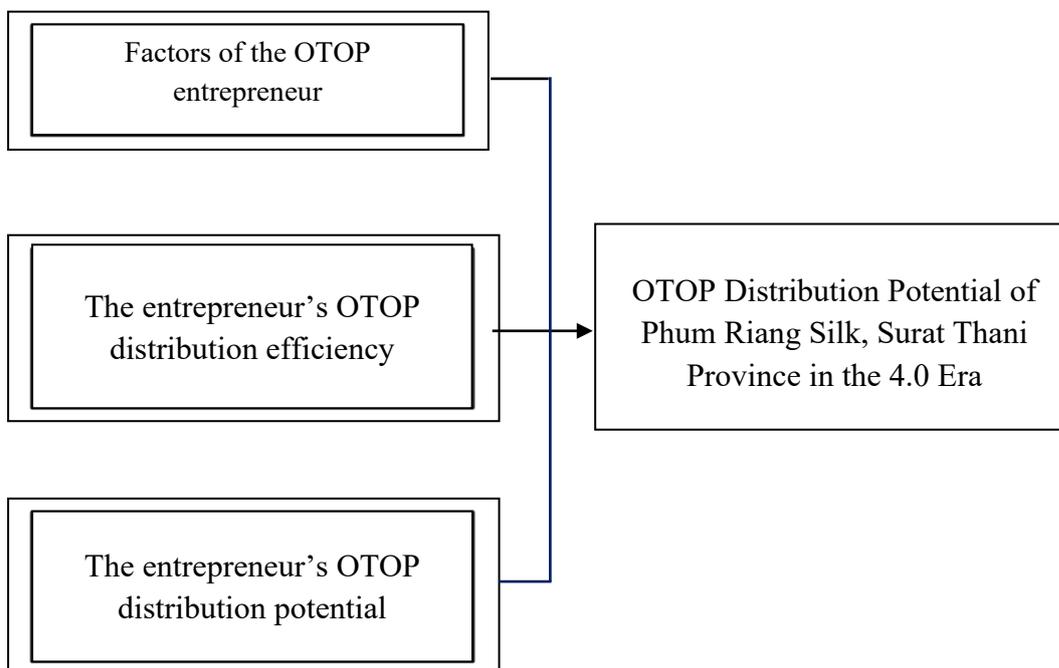


Figure 1: Conceptual framework of the study

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## Methodology

### Research scope

This study was the survey research which aimed to study the factors affecting the entrepreneur's OTOP distribution potential of Phum Riang Silk, Chaiya District, Surat Thani Province.

### Population and sample group

The population of this study was 4 producers of One Tambon One Product (OTOP) of Phum Riang Silk, Chaiya District, Surat Thani Province.

### Data gathering

The data was gathered as follows:

1. Secondary data
  - Textbooks, articles, research and related websites
  - Commercial Office of Surat Thai Province
  - Community Development Office of Surat Thai Province
2. Primary data: the questionnaire and interviews for OTOP producer of Phum Riang Silk, Surat Thani Province.

### Data analysis

1. The secondary data was gathered and analysed for accurate information by the objectives.
2. The primary data was gathered and analysed for categorising and statistical analysis by using the descriptive statistics: frequency, percentage, mean, maximum and minimum.

## Results

1. The findings revealed that most of the OTOP entrepreneurs of Phum Riang Silk, Surat Thani Province were female (100.00%), in the age group of 46-55 (50.00%), their marital status was married (75.00%), their education attainment was bachelor's degree (100.00%), their monthly income was more than 80,000 baht (50.00%) and their occupation was the business owner (100.00%).

2. The overall opinions of OTOP entrepreneurs of Phum Rieng Silk, Surat Thani Province was as follows:

**Table 1: The opinion of OTOP distribution of Phum Rieng Silk**

<b>OTOP distribution of Phum Rieng Silk (N = 4)</b>	<b>Mean (X)</b>	<b>Standard Deviation (SD)</b>	<b>Level of important</b>
<b>Product quality</b>			
The customer was impressed with the product quality.	4.00	0.00	High
The customer re-purchased both products and services.	4.75	0.50	Highest
The customer recommended products to others.	4.75	0.50	Highest
The overall satisfaction of customers towards product quality.	4.25	0.50	Highest
<b>Total</b>	<b>4.43</b>	<b>0.10</b>	<b>Highest</b>
<b>Time of product distribution</b>			
The product distribution has responded to the market or customers' needs in a timely manner.	4.00	0.66	High
The product distribution chosen is suitable and reliable transportation.	4.50	0.89	Highest
The product distribution has delivered in a timely manner	4.25	0.53	Highest
<b>Total</b>	<b>4.25</b>	<b>0.28</b>	<b>Highest</b>
<b>Marketing</b>			
The systematic inventory management process.	3.50	0.57	Moderate
The suitable inventory has responded to the market needs.	3.50	0.57	Moderate
The quick product turnover.	3.00	0.81	Moderate
<b>Total</b>	<b>3.33</b>	<b>1.39</b>	<b>Moderate</b>
<b>Product distribution</b>			
Have you ever had issues with storage?	2.50	1.00	Low
Have you ever had issues with the bounce rate?	3.50	1.91	High
Have you ever had issues with damage during delivery?	3.50	1.91	High
<b>Total</b>	<b>3.16</b>	<b>1.69</b>	<b>Moderate</b>
<b>Overall</b>	<b>3.79</b>	<b>0.36</b>	<b>High</b>

From Table 1, the overall was in the high level ( $X = 3.79$ ) as follows: The overall product quality of Phum Riang Silk, Surat Thani Province was in the high level ( $X = 4.43$ ) as it was impressed, re-purchased and recommended by the customers; The overall of time product distribution was in the high level ( $X = 4.25$ ) as it had responded to the customers' needs in a timely manner, and choosing suitable, timely and reliable transportation by the entrepreneur; The overall marketing was in the moderate level ( $X = 3.33$ ) as it has the suitable inventory management process to respond to market needs, and quick product turnover; and The overall product distribution was in the moderate level ( $X = 3.16$ ) as there was no issue with storage, bounce rate or damage during delivery.

### Conclusion and Discussion

The results of the opinions of entrepreneurs about selling OTOP fabrics, Phuriang, Surat Thani Province is at a high level ( $X = 3.79$ ) as follows: The overall product quality of Phum Riang Silk was high level ( $X = 4.43$ ) because customers are impressed and repeat purchases and recommend to other; The time of product distribution was in the high level ( $X = 4.25$ ) because of the reliable transportation of the entrepreneur; The overall marketing was in the moderate level ( $X = 3.33$ ) because the entrepreneurs have implemented proper inventory management and been respond to market demands and product turnover quickly; and The overall product distribution was in the moderate level ( $X = 3.16$ ) as the storage of goods has a product bounce rate and low damage during delivery.

It was consistent with Dean and Evans (1994: 302) who suggested that the quality differentiation of industrial products should have 8 qualities; beauty, reliability, right qualification, after-sales service, durability, usability, gimmicks and good quality. It was consistent with Supanya Chaichan (2011: 17-19) who stated the quality of product is very important, "special quality" of product will attract customers and in the general case of the same business, the product with the better quality will have more opportunity.

It was consistent with Sittha Chotisukrat (2003) who stated transportation execution is a process of delivering quality products in a timely manner. It was consistent with Tanit Sorat (2007) who said that logistics is an integrated process of getting products and services, transportation, storage and distribution from source to the market focusing on efficiency and effectiveness of delivering the product in a timely manner, of cost reduction, customer satisfaction, and value-added products and services. It was consistent with Alan Ratchatan et al. (2006: 450) who stated factors of consignment affect the decision making of choosing the best transportation method for the specific order.

It was consistent with the product distribution concept of Kritchakrit Na Wattanaprasert (2015: 139) where it is a process of product distribution planning with the right quality, quantity, time, place and condition by the customers' needs as a good service. It was consistent with Jarita Hintao et al. (2009: abstract), a study of *OTOP Product Management: Case of Samakkhi Phattana Housewife Group, Ban Tam Tao Moo 1, Samakkhi Phattana Sub-district, Agad*

*Amnuay District, Sakon Nakhon Province* who revealed that the group always dye the cotton fabrics after their agricultural duties with 3 production processes as the big provincial producers: input, process and output by environment-friendly methods. Their strengths are the creative design and weaving skills, but weaknesses are the lack of package development and innovation for the value-added product. Their product distributions are direct sales to the local housewives and at the provincial OTOP store. It was consistent with Tantikorn Pichpibul and Ruengsak Kawtummachai (2007), *Study of A Suitable Method of Round-Trip Transportation* which aimed to study a system to manage the transportation of products from the central warehouse to distribution units or customers in each province around the country by considering the volume of each transportation including the routes to each point. It was consistent with Kotchakorn Bunyarittipol (2010: abstract), *Strategies to Increase the Logistics Service Efficiency by Customer Relationship Management Theory*, who revealed that it should increase the service efficiency: 1) accessible location: distance, cost and transportation; 2) sufficiency of service car: to decrease the number of customer's refusal, decrease an opportunity cost and increase an opportunity of new customers; and 3) promotion: seasonal promotion will respond to the customers' needs and increase opportunity.

### **Suggestions**

There are suggestions for the related sections to promote factors affecting the OTOP entrepreneurs of Phum Riang Silk, Surat Thani Province as follows:

1. There should be more public relations by the provincial public sections.
2. There should be more marketing management such as festival events.
3. This should be equally supported in all shops.
4. The researcher should gather all related issues and effects of merchandise from the entrepreneurs to offer the related sections in order to apply for further operation, problem-solving and encouraging the entrepreneur to learn new things, understand consumer behaviour and marketing management for more opportunities such as choosing colours by the trend and style of the customer in both regional and international areas.



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International Journal of Innovation, Creativity and Change. [www.ijicc.net](http://www.ijicc.net)  
Volume 15, Issue 7, 2021

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