THE OPERATION OF MANUFACTURERS OF PROVINCIAL THREE STAR OTOP PRODUCT CHAMPIONS IN NONTHABURI PROVINCE

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Abstract—The purposes of this research were to The operation of manufacturers of provincial three star OTOP product champions in Nonthaburi province Sample group in this study included 91 OTOP producers in Nonthaburi selected by purposive sampling technique. The research tools were interview and questionnaire consisting of 3 parts with the reliability of 0.84.Descriptive statistics were used in data analysis. Commercial statistics analysis program was used for data analysis using percentage, frequency and means. The results revealed that: 1) The In general view, it was found that the ranking of the 6 aspects of technology were: a. technology for quality and standard was the highest at 95.60% by inspecting the products before distributing. b. They employed technology in environmental conservation and safety at 92.30% by providing sufficient lighting and controlling vibration.

Index Terms—Operation, manufacturers of provincial, production process

I. INTRODUCTION

One Tambon One Product (OTOP) project in The main objectives of the projects are to create jobs and income communities, to promote the communities development using local wisdom and self-reliance. OTOP product is based on local materials and creativities. Under this project, there were totally 37, 840OTOP producers and 13, 970products in the products championship contest in 2006[1].



Fig. 1 Prototype development for Continuity

The government have been a major supporter of the products from provincial product development to global product distribution. The product standard is classified as 1- 5level [2]. The quality level is rated as 3- 5stars which have a strong potential in terms of marketing. However, a huge number of the same products are poured into the market. This drives the price and the margin of product lower. A number of the OTOP entrepreneurs struggled to compete and some eventually failed. The failure possible caused by the entrepreneurs themselves who couldn't discover their own identity and produce as a distinct product.Moreover, there is a repetitive problem of middlemen who constantly corner the OTOP market. Local OTOP producers become easy preys since they do not know how to add more values, how to create and maintain their own brand name, and how to create proper packaging and labeling. The suggested solutions to local OTOP producers are to adopt modern management techniques, to find knowhow to add more values to products and to unravel other marketing problems[3].Nonthaburi is a fertile province on both agriculture and handicraft. The community is rich with raw materials appropriate to response the government's policy on OTOP. OTOP policy can support self independence and local strength based on the idea of local intellectual by local people. So, the OTOP products have their own identity needed by local mal market and oversea market [4]. The assessment on the application of technology in producing Nonthaburi OTOP is based on the 3 foundations: 1) Local Yet Global 2) Self-Reliance-Creativity and 3) Human Resource Development.

The objective of this study is to the assessment on the application of technology in producing Nonthaburi OTOP. This is based on the government policy about OTOP in 2001 stating that the objective of OTOP is to 1) promote jobs and income to the community 2) promote local strength to enable local development 3) promote local wisdom 4) promote human resource development.

II. OBJECTIVES OF THE STUDY

The operation of manufacturers of provincial three star OTOP product champions in Nonthaburi province.

I. RESEARCH FRAMEWORK

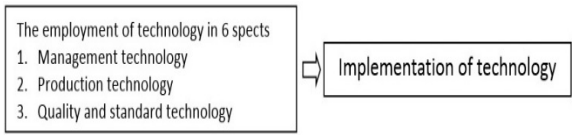


Fig. 2Research framework

III. METHODOLOGY

This research has been designed both qualitative and quantitative methods by using questionnaires and interview to collect the data.



Fig. 3 Continuity of Development tools

The area for this study covered 6 Districts, 52 Sub-districts in Nonthaburi Province. There were 176 OTOP products certified with 1-5 star awards

Table I: Population and sampling group

District	Population	Sampling
Muang	56	24
Banggruay	23	13
Bangyai	20	7
Bangbuathong	35	19
Sianoi	12	8
Pakkred	30	20
Total	**176**	**91**

Research tools

The questionnaires in this study consisted of 3 main parts. Survey of technology in production in 3 aspects

1) Management technology: The questions in this part included planning, controlling, training steps, budget, and accounting.
2) Production technology: The questions in this part included production planning technique, logistic, machine, and production management by computer technology.
3) Quality and standard technology the questions in this part included inspection and quality control.



Fig. 4 brand of prototype

IV. RESULTS

The Employment of technology in production

A. Management technology

Table II: Management technology

Management aspects	Percentage	Rank
Planning prior to operation	84.60	1
Appropriate work environment	82.40	2
Staff assignment with responsibility empowerment	78	3
Reserved raw materials from procurement	78	3
No budget support from outside	72.50	4
Control system with work evaluation	64.80	5
Accounting	60.40	6
Distribution channel arrangement	53.30	7
Knowledge from outside	51.60	8
Customer profiling	38.50	9

Table II showed that they planned their work prior to the operation at 84.60%, followed by appropriate work environment at 82.40% while the customer profiling was the least at 38.50%.

B. Production technology

Table III: Production technology

Aspects	Percentage	Rank
Improvement every fiscal year	75.80	1
Production planning suits with raw materials	73.60	2
Using computer and electronic system in production	65.90	3
Estimation of unit producing time	63.70	4
Equipped with machine	56	5
Using technique for value added	50.50	6
Bach-up plan in production	47.30	7
Knowledge exchange with others	46.2	8
Problems in raw material order	45.1	9
Production space expansion	42.90	10

Table III showed that It can be seen from Table 2 that the producers improved their products at every fiscal year at 75.80% followed by‘Production planning suits with raw materials’ at 73.60% and the least aspect was on‘Production space expansion’ at 42.90%.



Fig. 5 Packagingandlogo

C. Quality and standard technology

Table IV: Quality and standard technology

Aspects	Percentage	Rank
Product inspection before distribution	95.6	1
Define standard and product quality	90.10	2
Product quality control	89	3
Chemical free products	86.80	4
Certified by outside organization	85.70	5
Standardization on raw materials	83.5	6
Products fulfill the customer	82.4	7

Table IV reported that ‘Product inspection before distribution’ is the highest at 95.60% followed by defining standard and product quality at 90.10% while the least aspect was joining product competition at 51.60%.

D. The overall 3 aspects in technology production

Table V: The overall 3 aspects in technology production

Aspects	Percentage
1. Management technology	
1 . 1Planning prior to operation (the most)	84.60
1 . 2Some Customer profiling) the least(	38.50
2.Production technology	
2 . 1Production improvement within 1 year)the most(	75.80
2 . 2Expansion in production space)the least(	42.90
3. Quality and standard technology	
3 . 1Production inspection before distribution (the most)	95.60
3 . 2Join the product competition every time (the least)	51.60

Table V showed that It can be seen from the 3 aspects that: 1) Quality and standard technology was on production inspection before distribution at 95.60%. 2)Environmental technology and safety was on sufficient lighting and no vibration effect at 92.30% 3)Management technology was on planning prior to operation at 84.60%.

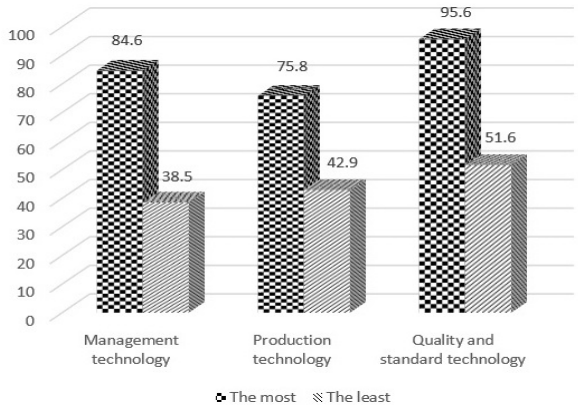


Fig. 6 Theoverall 3 aspects in technology production



Fig. 7 Handicraft prototype

V. DISCUSSION

According to the results, it can be discussed that on the production and design aspect, the producers used local raw materials [5]-[6]. Stating that local raw materials can be used with the highest benefit resulting in low cost [7]. and no effect on environment. Moreover, revealed that the use of local materials helps in production resource planning and availability of reserved raw materials. It can be concluded that the OTOP producers in Nonthaburi employed technology without affecting the environment by using local raw materials or leftover materials in their production [4]. High skills and precision operation resulted in higher standard products causing more customer confidence and product satisfaction. That product inspection was an important process in controlling mistakes and promoting production standard.

CONCLUSION

The operation of manufacturers of provincial OTOP. There should be training on the experience exchange among the communities.

The operation of manufacturers of provincial OTOP. there is a repetitive problem of middlemen who constantly corner the OTOP market. Local OTOP producers become easy preys since they do not know how to add more values. to find knowhow to add more values to products. There should be maintain their own brand name, and how to create proper packaging and labeling.

The solutions to local OTOP producers are to adopt modern management techniques. Moreover, there should be a support on using technology in OTOP production for the sustainable development.

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