



## GUIDELINES FOR UPGRADING ONE TAMBON ONE PRODUCT TO CREATE COMPETITIVE OPPORTUNITIES IN THE DIGITAL ECONOMY

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### ABSTRACT

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In organizations, the guidelines of upgrading One Tambon One Product (OTOP) can be applied by taking it on the action plan's agenda in building steady and explicit operational targets, and to create a solid base in terms of creating competitive opportunities. A mixed method research design was adopted for this study. The quantitative data was collected by questionnaires from 500 small business entrepreneurs on four variables: resource preparation, alliance collaboration, product development, and competitive advantage. The qualitative research design used the In-depth interview technique to collect data from nine experts, identified through purposive sampling method, and divided into three groups of equal size comprising 3 members: a group of successful business entrepreneurs, a group of government leaders and related agencies and a group of academics. The study found that the element of resource preparation created competitive opportunities in the digital economy through transparent leadership; alliance collaboration made a collaboration arrangement with other companies; product development expanded the idea to be concrete; and competitive advantage kept individuals with expertise and experience with the company. The study recommends improving the model by considering the Modification Indices obtained from the packaged program with theoretical academic principles and eliminating some improper observational variables.

**Contribution/Originality:** This study is unique in the sense that entrepreneurs can study how to build business science expertise by analyzing OTOP strategy to improve competitiveness in the digital economy. It requires transparent leadership; alliance collaboration with other companies; concrete product development; and competitive advantage to keep individuals with expertise and experience with the company.

### 1. INTRODUCTION

National Economic and Social Development Plan No. 12 (P.Prof. 2017-2021) outlined economic development policies that implemented strategy of fairness creation and reduced societal inequality.

The goal was to increase the potential of the community and to strengthen the fundamental economy to build the community self-reliant and gain more share of economic benefits; development guidelines: community capacity building, community economic development, and strengthening the financial foundation based on sufficient economic philosophy. Therefore, the community can be self-reliant with the right to manage capital, land, and resources within the community by fostering a learning community in the educational process and the transfer of

knowledge in the community. It also helped to solve the problems in this area and extend the knowledge to commercial domains, including promoting the use of information technology and create knowledge management for the community.

The cooperation among the private sector and educational institutions caused the development of theoretical knowledge and private sector was able to apply it in practice. The development of capacity for communities to create business and to support government policies under the poverty alleviation strategy reduces inequality and grows from within (Office of the National Economic and Social Development Board, 2016).

Thailand faced a huge economic crisis known as "the bubble bust" in 1997. During the crisis, the Thai government concentrated on creating employment and producing money in the basic economy by beginning to become tangible.

In 2001, the government integrated the government agencies involved in community work along with issued a policy of the One Tambon One Product project, also called OTOP. This project was applied from Japanese local product development based on OVOP (One Village One Product) project, which created jobs and generated income as well as strengthened the community. Additionally, it also empowered members of the community to think for themselves, produce for themselves, earn revenue and livelihoods to support their families, and enhance local wisdom. Furthermore, encouraging the development of human resources as well as the inventiveness of community members in the process of product creation in accordance with local lifestyle and culture (Uanlum, Morachat, & Jungwimutipphan, 2017).

The OTOP program is considered by most businesses an opportunity that can generate a lot of revenue for the country. The program is capable of stimulating the government and all its relevant departments as well as the entrepreneurs to develop quality product consistent with the needs of consumers by using cultural community strengths lifestyle, and wisdom and to connect the manufacturing and service sectors (Community Enterprise Promotion Division, 2018).

The OTOP also refers to a community enterprise focusing on products or services provided by a group of people with mutual relationships and common way of life. The Community enterprises include entrepreneurship, thinking processes, production management, and resources like raw materials, all types of resources, community wisdom in order to create product, economic, and social development.

Pengporru (2016) indicates an extension of market opportunities and regional economic stimulation for increasing revenue for the community, promoting conservation, and the creation of Thai wisdom to be more widely known. Furthermore, the activities that entrepreneurs engage in to gain profit and growth are distinguished by innovative and creative techniques. Entrepreneurs are constantly looking for approaches to enhance their competitiveness and to build and transform an organization's economic and social potential (Darmawan, Soetjipto, Djatmika, & Wahyono, 2021).

Customers' purchasing behaviors have shifted tremendously over the years. The technological world is continually evolving. Technology and societal developments have an effect on consumer demand for product and services, as a result of which operating outcomes have showed that entrepreneur must adapt in order to survive in business. Moreover, it included items and services catering to a large number of target clients; adapting the way sales are presented changes the business strategy; and prioritizing the buyer's requirements in order to create things and services.

It sold more than simply producing for their own benefit and diversified sales channels in order to improve public knowledge of such items and services. Additionally, today's technology contributes to the low cost, making it suitable for community product operators' adaption. It is necessary to be cautious of the use of social media in product presentation, since this has altered the lifestyle and behavior of customers in the modern period. Online marketing is a phenomenon that has garnered widespread attention throughout the world. It prompted a shift in business model, provided a platform modification to better support the use of OTOP operators. It offered new

opportunities to trade on social media and to select channels to upgrade online trading. This was necessitated due to the increasing volume of users, variety of target customers, ease of access, and convenience, all of which are facilitated by using the Digital Economy approach as a guideline to drive growth (National Research Office, 2021). The government has also recognized the importance of small businesses. Therefore, there is a policy to promote and drive small businesses to have greater potential by supporting environmental factors to facilitate business operations and strengthen competitiveness Wasi (2018).

This will encourage businesses to grow in a balanced manner according to the potential of the area from the government's policies and push towards promoting small businesses make small business entrepreneurs. There is an increasing number of registrations, with a total number of 4,124,962 in 2017-2020 (Office of Small and Medium Enterprises Promotion, 2018).

The current research aimed at upgrading OTOP for creating competitive opportunities in the digital economy with the following specific objectives: 1) to study the structure and operational characteristics of OTOP; 2) to study the components of the guidelines of upgrading OTOP for creating competitive opportunities in the digital economy; and 3) to develop a structural equation model of guidelines of upgrading OTOP for creating competitive opportunities in the digital economy.

These objectives are also the guidelines of upgrading community enterprises to small businesses. Wingwon (2014) found that the operations of community enterprises relied on traditional local wisdom with the application of appropriate technology, design new looks on product to create a specific identity. Santipolvut (2016) also found that the approach to entrepreneurship is to develop the image of the group's product, to create a website for electronic commerce and personnel development, and new product development. Kenaphum (2015) identified guidelines for the development of the effectiveness of community enterprises. These guidelines included development of production potential and the improvement of product quality standards, expanding business network development, and building partnerships between the public and private sectors to promote community enterprises to be strong and self-reliant. Furthermore, Kee, Teerawut, Thawee, and Wichian (2016) also observed a few models for capacity development of community enterprise entrepreneurs in the central province consisting of five main factors including leadership, knowledge, expertise, and self-development, community enterprise planning communication and coordination, and moral ethics. These factors guide the upgrade of community enterprises development of efficiency and effectiveness, and entrepreneurial capacity development. Most of the relevant research consists of website preparation for electronic commerce, personnel capacity development, producing product that reflect local identity by using technology or innovation. Furthermore, these studies created added value, promoted specialized marketing of product, expanded production capacity development, upgraded product quality standards, created distribution channels, strengthened management capacity, developed a community enterprise network to strengthen research innovation and to improve product quality, and lastly, created partnerships between the public and private sectors in order to promote community enterprises. Therefore, the above studies and problems emanated out of them motivated this study to examine the guidelines that upgrade community enterprise and small businesses to create competitive opportunities. It also aimed at reviewing the characteristics of community enterprise type, complete in all aspects and for elevation to become a small business entrepreneur, creating competitive opportunities that can be applied in the organization, to be defined in the action plan to create stable and clear operational goals that can be applied as a body of knowledge to help entrepreneurs of community enterprises in the area appropriately and can strengthen the economy at the foundation level.

## 2. LITERATURE REVIEW

### 2.1. Resource Availability

Resource availability is important for successful administration. Managers must utilize their knowledge and abilities to select the approach that best meets their needs and the atmosphere that is most conducive to their work.

Originally, the variables that aided in the achievement of management were man, money, material, and management. However, in today's globalized world, information and technology, which is usually referred to as Information technology (IT), are progressively playing a key role in the achievement of work goals (Rynes, Colbert, & Brown, 2020). Furthermore, fundamental resources that are crucial to the organization and must be employed as a factor in the operation in order for it to be effective and fulfill the stated goals in terms of philosophy, determination, vision, and mission. The keys factor of administrative resources include personnel factors (Man), management factors (Management), material factors (Material), budget considerations (Money), and information technology factors (Management Information System: MIS) (Vest, 2021). The organization has brought in a management resource to assist its operations in driving the management process and effectively achieving the specified objectives. The management resources include man, money, material, management, work process or method, market, and time, which can be developed in order to be prepared in terms of operational resource management to fulfill organizational goals (Bowin & Harvey, 2019).

### *2.2. Networking and Business Connections*

A network is a social structure composed of people (individuals or organizations) or groups of two or more connected persons. The overview of social networks enables the analysis of society's structure as well as the development of several hypotheses characterizing the patterns of social structure. Network study is used to investigate these systems because it identifies patterns of individual and global locations, to determine influential units and keep an eye on network movement. A social network is also defined as a collection of individuals (nodes) of a network who are connected by various types of social ties and exchanges such as friendship, family, coworkers, conversations, guidance, trust, information exchange, email, and social media communication.

Furthermore, collaboration includes co-authorship and citations of research findings, among other things (Wiphawin, 2019). Business networking is a collaboration of organizations that can compete in the global economy to help drive the business to expand and move into a larger market. Strategic alliances and joint ventures are examples of business networks that have been brought together for economic purposes. It is also beneficial in attracting comparable groups of clients to aid in the creation of customer happiness. The purpose of establishing a network for collaborative investments is to improve the business's reliability. This is conducted to broaden the target client base and boost the investment amount. The reciprocal process is built on the sharing of ideas, information, suggestions, and exchanges through word-of-mouth, incentive, and to improve people's quality of life through personal and professional ties (Doper & Starkey, 2021).

### *2.3. Product Development*

Product development refers to the process of creating a new product or product with new features or different characteristics that have additional or that can create new benefits for customers. Product development is also related to editing, changing an existing product or item in terms of appearance, presentation, and formula to make new product meet the needs of customers or satisfy market demand (Booz, 2021). It is also related to items that have been on the market for a long time and have been improved. It includes new products that are improved from the original product, or are the replacements of our existing product in new appearances, new flavors, new scents, new packaging, even a new shape, and so on. This creates a change, making customers feel some difference as they had felt monotonous for a long time. This would also provide another channel for new groups of clients to become acquainted with the new product (Irena, Maris, & Liene, 2019). Product development is also associated with the process of updating or changing current product both in terms of look, presentation, and formulation, to ensure that new product suits client demands or is adequate to market demand (Thiamchan, 2020). It is the process of developing a new product or modifying an existing product to include new features or qualities that provide extra or potential advantages to customers.

#### 2.4. Competitive Advantage

Competitive advantage refers to an organization's unique abilities that competitors cannot imitate or require a significant amount of time to adjust before they can emulate our capabilities, such as innovation, internal management systems, organization management and system corporate image, and so on. The most fundamental aspect in gaining the competitive advantage is the knowledge that a company must aim to build through learning and evolving into a learning organization, and then leaders must draw on the information that staff have to produce innovation for the organization (Bharadwaj & Fahy, 2020). In other words, an organization's capacity to manage its company or produce more value than its competitors. The organization must distinguish itself from its competition in three areas: cost leadership, distinctiveness, and rapid reaction, which includes skill approaches and valuable resources (Day & Wensley, 2021). The organization can conduct the business efficiently, which can be reproduced in business advantages continually, and is the leader in cost and distinction in goods, which must be based on resources and solid strategies. Organizations that rivals cannot imitate. This will have an impact on long-term business performance (Banner, 2019). The key to successful strategy implementation is how a company is able to optimize its resources, and when that happens, a company will gain a competitive advantage based on the perspective of a resource-based view, competitive advantage will be achieved if a company has superior resources, including capabilities, processes, attributes, and knowledge, compared to its competitors. Competitive advantage will enable the firm to choose and implement strategies that will set it apart from its competitors. All aspects of the company, whether in the form of resources or activities, can provide a competitive advantage (Rita, Sarwoko, Arief, & Nurfarida, 2021).

### 3. METHODOLOGY

This study adopted a mixed method research design using both quantitative and qualitative approaches. The quantitative data was collected by questionnaires from 500 small business entrepreneurs. The questionnaire comprised items belonging to four variables: resource preparation, alliance collaboration, product development, and competitive advantage.

The qualitative research design used the In-depth interview technique to collect data. The sample of the qualitative research consisted of nine experts, identified through purposive sampling method. The sample was divided into three groups of equal size comprising 3 members: a group of successful business entrepreneurs, a group of government leaders and related agencies and a group of academics (Niratisayakul, Bua-In, & Shoosmuangpak, 2021).

Furthermore, the participants of focus group in this research were 11 experts, selected through purposive sampling (Lata, 2020). The sample size was determined by previous researches on small business entrepreneurial enterprises that used a classified number of sample less than 30 or between 30-50 employees (Tantayanon, 2017).

The determination of the sample size was done by making use of the criteria of elemental analysis and a structural equation model (Leepaitoon, Lata, & Worawattanaparinya, 2020). The sample size was determined as recommended by Silcharu (2020) who used a multi-stage sampling method and recommended a cluster sampling procedure by categorizing businesses according to the number of personnel into two sizes.

### 4. RESULTS

The data analysis of the findings about OTOP revealed that the organization's primary business categories were textile and clothing businesses covering 33% with utmost certification; community product standards 54.35%, with utmost distribution through middlemen picking up products for resale. Such business was opened for the operating period of less than 10 years. Table 1 presents the results of the analysis of information on the structure and operating characteristics of the OTOP:

Table 1. Analysis of information on the structure and operating characteristics of the OTOP.

No.	Analysis of information on the structure and operating characteristics of the OTOP	Percent (%)
1	Working capital and reserve funds	29.00
2	Acceptance of products and services of the organization	33.60
3	Encouraging the team to develop skills or knowledge	30.20
4	Retaining existing customers, including reaching new customers	31.40
5	Unique business processes, hard to replicate	24.60
6	Flexible organizational structure that focusses on teamwork	33.20
7	Allocating workloads to each member	31.20
8	Keeping commitments and terms in accordance with agreements	27.60
9	Setting the clear marketing goals	31.20
10	Making the decision based on available information	30.40
11	Do not take advantage of customers or seek benefits for themselves	37.60
12	Providing a systematic process of creating, storing, and applying knowledge	29.00
13	Improving product quality for the most satisfied customers	30.80
14	Planning is a clear step	30.80
15	Compensation from the amount of goods each member can produce or sell	25.60
16	Changing of government policy and governance	22.60
17	Leadership emphasizes transparency, honesty, morality	28.40
18	Honesty and fairness	37.40
19	Providing a potential place to sell products such as trade shows	35.80
20	Promoting and funding processes to finance.	23.40

To study the components of the guidelines for upgrading OTOP to create competitive opportunities in the digital economy, it was statistically analyzed by applying SPSS program and by employing Mean and SD value for result. The results found that the overall picture is very significant, with an average of 4.11. When considering on a case-by-case basis, it was found that the availability of resources was very significant ( $\bar{X} = 4.18$ , S.D. = 0.47) by individuality, the leader manages with transparency, honesty, and morals which are of utmost significance. It was compared by mean and standard deviation of the element's significance level of guidelines for upgrading OTOP to create competitive opportunities in the digital economy.

By overall picture, it was found that number of personnel less than 30 employees had ( $\bar{X} = 4.07$ , S.D. = 0.50) and number of personnel 30-50 employees had ( $\bar{X} = 4.15$ , S.D. = 0.41). In terms of networking and alliance collaboration, results were very significant ( $\bar{X} = 4.07$ , S.D. = 0.50). It is consistent with the list of agreements between other organizations that offered the same product and service type of the highest significance. Product development was very significant ( $\bar{X} = 4.04$ , S.D. = 0.58) by a list of ideas for product development to be concrete by actual implementation, the highest significance was in creating a competitive advantage, significantly at ( $\bar{X} = 4.15$ , S.D. = 0.47). It also kept the personnel with the expertise and experience stay with the organization for the longest and highest priority, considering the classification by the number of personnel less than 30 people.

This overall picture was very important, as it had an average of 4.07 when considering on a case-by-case basis. It was also found that the availability of resources was very significant ( $\bar{X} = 4.14$ , S.D. = 0.50). The networking and business alliances were very significant ( $\bar{X} = 4.04$ , S.D. = 0.58). Product development has a great significance ( $\bar{X} = 3.98$ , S.D. = 0.63). The aspect of competitive advantages had a high significance ( $\bar{X} = 4.11$ , S.D. = 0.51), respectively. In addition, the number of staff of 30-50 people found that overall, it was at a very high level, the mean was 4.15 and when considering each aspect, it was found that the resource preparation was of high significance ( $\bar{X} = 4.22$ , S.D. = 0.44), Networking and Business Alliances were very significant ( $\bar{X} = 4.10$ , S.D. = 0.46). The product development aspect was of high significance ( $\bar{X} = 4.07$ , S.D. = 0.54). Lastly, the aspect of Competitive Advantage was very significant ( $\bar{X} = 4.20$ , S.D. = 0.43).

To develop a structural equation model of the guidelines for upgrading OTOP to create competitive opportunities in the digital economy, the analysis of the model was presented in an unstandardized estimate mode, as shown in Figure 1. The standardized estimate mode after the model update is presented in Figure 2:

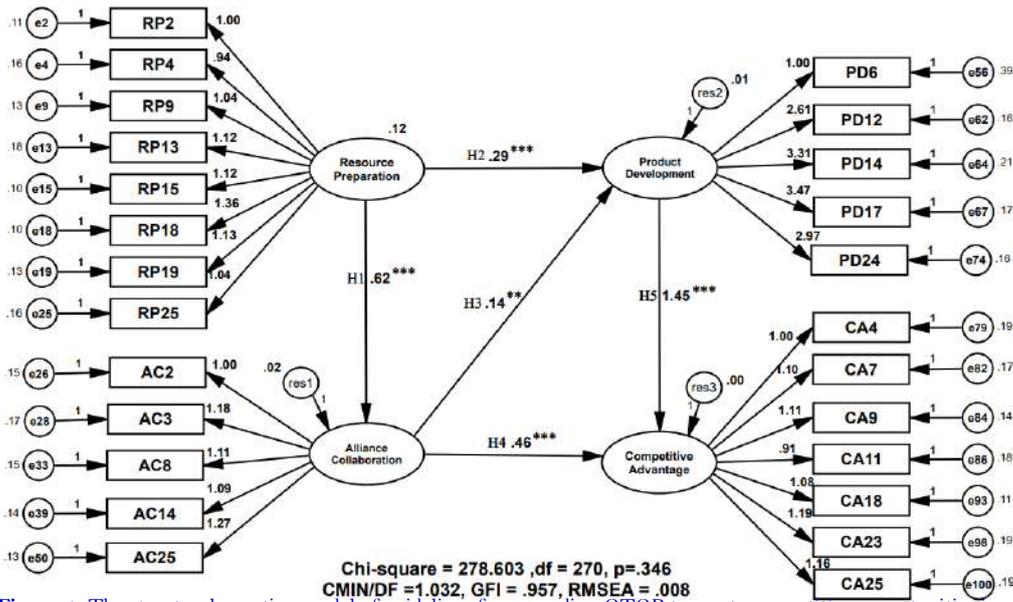


Figure 1. The structural equation model of guidelines for upgrading OTOP to create competitive opportunities in the digital economy in unstandardized estimate mode after model improvement.

Note: \*\* It was statistically significant at the level of 0.01, \*\*\* It was statistically significant at the level of 0.001.

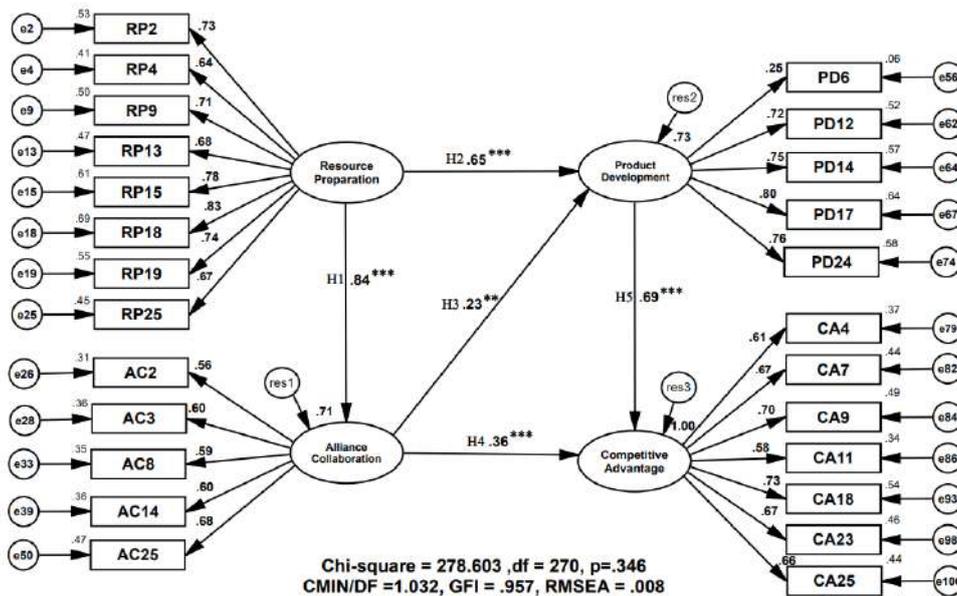


Figure 2. A structural equation model of guidelines for upgrading OTOP to create competitive opportunities in the digital economy in unstandardized estimate mode after model improvement.

Note: \*\* It was statistically significant at the level of 0.01, \*\*\* It was statistically significant at the level of 0.001.

Figure 1 and Figure 2 present a structural equation model of guidelines for upgrading OTOP to create competitive opportunities in the digital economy after the model improvement. The figures clearly indicate resource preparation components, whose variance is 0.12, and which directly influences the elements of alliance collaboration at the standardized regression weights 0.84. It is statistically significant at the 0.001 level ( $R^2 = 0.71$ ). When the variance is 0.62 it directly influences the product development component at the standardized regression weights of 0.65 and is statistically significant at the 0.001 level. The squared multiple correlations ( $R^2$ ) shows 0.73 when the variance is 0.29, the components of alliance collaboration. If the variance is 0.71, it directly influences the components of product development at the standardized regression weight of 0.23, and is statistically significant at the 0.001 level ( $R^2 = 0.73$ ). When the variance is 0.14, it directly influences the competitive advantage component at the standardized regression weight 0.36, and is statistically significant at the 0.001 level ( $R^2 = 1.00$ ). The

component of product development also found a variance of 0.73 which directly influenced the competitive advantage component at the weight. Lastly, when the standardized regression weight is 0.69, it is statistically significant at the 0.001 level ( $R^2= 1.00$ ), and the variance is 1.45 respectively.

## 5. DISCUSSION

This research has studied key issues concerning the guidelines for upgrading OTOP to create competitive opportunities in the digital economy. These guidelines not only created competitive opportunities in the digital economy but also contributed in the resource preparations. The study found that leaders who organized their work with transparency, honesty and integrity, had the highest average of 4.72, followed by building a website as a distribution channel which received an average of 4.71. The utilization of limited resources for optimum benefit in order to meet the goals, and to access to raw materials in order to make products at low prices and with uniform quality received an average of 4.67.

Furthermore, the reason why entrepreneurs view their leaders with the highest levels of transparency, honesty and integrity is that successful businesses must manage their business with integrity, transparency, accountability, and compliance. It corresponds to Wiset (2019) who observed that entrepreneurs must be honest to customers in terms of product quality and must build their trust in being a good debtor of the bank, be a good master of subordinates as well as being honest with partners, to family and to themselves. Noorit, Thapayom, and Pornpundejwittaya (2020) observed that leadership is an essential element, and modern leaders should be the leaders who are capable to gather people from all around and to create a network to share their vision with virtual powers. The new age of information technology is therefore created to support a network of intelligence that comes from everyone. These leaders gather the power of knowledge to transform both organizations and individuals.

In terms of networking and business alliances, which received the highest mean of 4.77, entered into cooperative partnerships with other firms that offered the same products and services. It was followed by being open to comments, complaints, and difficulties with consumers to discover solutions. In addition, consent to the disclosure of administrative and corporate product information to third parties, with an average of 4.73, required that the academia and government agencies should continue to develop knowledge for other organizations.

Lastly, the variable of asking for financial planning assistance from a bank or a corporate lender received a combined average of 4.70. This proves that a successful business organization must have a collaborative network of businesses in the form of building relationships and doing business together. It also needs connectivity in production or marketing so that both parties can benefit from that cooperation. This finding is consistent with the research results of Kenaphum (2015) who observed that the strategic approach to development by enhancing the management capacity of community enterprises is to create integrated cooperation with relevant agencies, and to systematically promote and support community enterprises by developing a strong community enterprise network.

The study also felt the need for research innovations to improve product quality and create cooperation between the public and private sectors to promote community enterprises and to become strong and self-reliant. Thongma (2015) assert that the creation and development of OTOP business cooperation networks for community-based tourism would develop a network of business cooperation in the kind of a wheel networking structure. It will give group members the freedom to make decisions and carry out activities under their roles and obligations or agencies at the community, sub-district, district, and province levels. However, in terms of coordination and mutual benefit, it invited network coordinators from each multilateral sector to convene and discuss difficulties or barriers on a regular basis. Finally, it was found that the community grew together by using Sufficiency Economy Philosophy concepts as a guide for decision making.

The product development was found to be successful variable under the goals of the organization when the product was presented in a tangible manner. This is consistent with the results of Muenpho (2016) who observed that the model for developing the potential of community entrepreneurs to develop product based on the creative

economy concept. The community enterprises groups developed prototype creative product. There were various product developments that consumers were inclined to make high-level product purchase decisions. The group learned important lessons in improving and developing the product, designing a model for developing the potential of community entrepreneurs, and to have the knowledge and ability to produce creative product to be able to respond to actual work or to be able to see concrete benefits.

Additionally, according to [Siriwittayakul and Hoiphun \(2018\)](#) product quality enhanced standards to attain special strengths but it necessitated continual product development, originality, brand creation, and restoring the village's specific cultural heritage and customs. By using technology to decrease manufacturing costs, local knowledge resources may be used to generate products and services with strengths and added value which are in demand in both domestic and international markets.

In terms of creating competitive advantage, it was found that there was creativity in designing and constantly improving the product image with the highest mean of 4.69, followed by evaluating operational feasibility objectives to see whether they are in line with the plan with an average of 4.66, and offering items to clients with honesty and sincerity to encourage repeat purchases and word of mouth, with an average of 4.65, respectively. This served the purpose that product development through innovation created outstanding product development. As a result, the customers are loyal to the product, as suggested by [Worawatapriya and Musyamas \(2020\)](#), who also observed that entrepreneurs' attributes require vision and creativity as important in formulating strategies for organizations. They also need innovation, out-of-the-box thinking, creativity in new things, seeking opportunities, and generating the ideas different from competitors. It required an entrepreneurial vision to define the clarity and goals how an organization should be. It is consistent with [Irena, Maris, and Liene \(2016\)](#) who found that a major component of economic success in building an economic competitive advantage is the development of new goods.

The product life cycle is extremely short and is getting shorter by the year. It means that innovation has become the major driver of the economy; the innovation process has been directed at new products; and new product development is one of the essential determinants for any country's success and competitive advantage.

## 6. CONCLUSION

The objective of this research was to study the structure and operational characteristics, components and develop a structural equation model of the guidelines for upgrading OTOP to create competitive opportunities in the digital economy. The study found that while analyzing the guidelines for upgrading OTOP to create competitive opportunities in the digital economy, using the qualitative research design and in-depth interview techniques with experts, four components were evident namely resource preparation, alliance collaboration, product development, and competitive advantage.

The overall level of significance for competition was of high significance with an average of 4.11 for resource preparation, the highest average of 4.18 for alliance collaboration, the mean of 4.07 for product development, and average of 4.03 for competitive advantage. It had a great significance when classified item-wise in each aspect by highest to lowest priority. It was found that the resource preparation component was leadership with transparency, honest and moral with an average of 4.72, followed by creating a website to be a channel to distribute product. It received an average of 4.17 and allocated limited resources to the best use to achieve the goals and access to the source of raw materials to produce products at lower prices and with standardized quality of an average of 4.67, respectively.

Alliance collaboration were devised as collaborative agreements, that offered the same product and services, with an average of 4.77, followed by opening to comments, complaints, and problems with customers to find solutions and agreeing to provide management and corporate product information to third parties from academics and government agencies to create knowledge for other organizations with an average of 4.73 and obtaining

financial planning advice from financial institutions or money lenders to the organization, with an average of 4.70, respectively.

Similarly, product development included building on the idea of product development to become concrete by implementing it, with an average of 4.61, followed by providing a product quality control system from the source of raw materials and production process until becoming a new product released for sale with an average of 4.59 and brainstorming of employees to seek creative ideas for product development with an average of 4.56, respectively. Competitive advantage referred to maintaining skilled and experienced workers to stay with the organization as long as possible with an average of 4.69, followed by selling product to customers with honesty and sincerity to encourage repeat purchases and word of mouth. The workers regularly reviewed operational feasibility goals, whether they were consistent with the plan or not at an average of 4.66, according to the product line to meet the needs of customers and created a bond and encouraged customers to be loyal to the brand of the product with an average of 4.65, respectively.

Comparison of significance levels of elements of the guidelines for upgrading OTOP to create competitive opportunities in the digital economy overall was significantly different at the 0.05 level. When Structural equation modelling of guidelines for upgrading OTOP to create competitive opportunities in the digital economy was done, it was evident that the Mean Square Root Index of Estimation Error (RMSEA) was 0.073, passing the criteria for harmonization with the model's empirical data. However, for Chi-Square Probability Level was 0.000, Chi-Square Relation (CMIN/DF) was 3.661, and GFI of 0.376 had not yet qualified assessments.

It was also found that the probability of chi-square was 0.346 greater than 0.05, indicating that this model was not statistically significant. The relative chi-square (CMIN/DF) of 1.032 was less than 2, the correlation index (GFI) was 0.957 is greater than 0.90, and the Root Mean Squared Error Index (RMSEA) was equal to 0.008, was less than 0.08, so it can be concluded that all four statistics passed the assessment criteria consistent with empirical data. The study recommends to improve the model by considering the Modification Indices obtained from the packaged program with theoretical academic principles to eliminate some improper observational variables one by one, and then proceed to reprocess the structural equation model, taking this step until analyzing a structural equation model with all four statistical values meets the criteria after the model adjustment has been completed.

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