

SUSTAINABLE INDUSTRY MANAGEMENT STRATEGIES IN OVOP PROGRAM WITH RAP-FIOVOP METHOD: A CASE STUDY ON TOFU/TAHU INDUSTRIAL CENTER IN UTAN KAYU - EAST JAKARTA

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ABSTRACT - One Village One Product (OVOP) is a successful method in agribusiness that has been applied in various modern countries in the world. With OVOP assists the Indonesia's industry, it open wider opportunities for both domestic and international markets. OVOP method is expected to bring prosperity to its members both within the scope of agriculture, livestock, crafts and other sectors. In this study, sustainability status for OVOP Tofu/Tahu Industry in Utan Kayu, East Jakarta, are assessed from 5 dimensions; Economic Dimension, Social Dimension, Environmental Dimension and Physical Environment, Dimension of Technology, and Leadership Dimension. In order to achieve the research objectives, there are 25 attributes obtained and are analysed to see the sustainability effect of OVOP in Utan Kayu Tofu Industrial Center. This paper also discussed the formulation of alternative sustainable OVOP policies in this industry namely are; 1) Communication with government agencies in encouragement and support of OVOP development facilities; 2) Development of competent human resources; 3) Socializing technology investment; 4) to formulate welfare improvement policy for businessmen; 5) allocation of credit assistance and businessmen funds. All these findings are discussed in detail as the conclusion of this paper.

Keywords: *One Village One Product, OVOP, RAP Analysis, Simulation, Industrial Center, Tofu*

INTRODUCTION

OVOP (one village one product) program is one step towards the clusters of small and medium enterprises which aims to raise regional superior product products in order to grow and enter the wider market. Through the OVOP program, it is expected that the industrial sector of Indonesia which has been buried in rural areas previously, can rise and become one of the engine of Indonesia to position in the world economy.

OVOP program is the embodiment of the welfare dream of rural communities, the pioneers of the concept of OVOP has also assessed that Indonesia has enormous potential to be able to grow to see various aspects of nature and culture owned and products have economic value and high competitiveness for global market.

The revitalization of industrial center can still be maximized by a breakthrough and various step so that the potential of the industry can be saved, in the midst of increasingly heavy market competition. Tofu/Tahu Industrial area is Utan Kayu – East Jakarta is one of the biggest tofu supplier for Jakarta City. With the implementation of the right strategy, the Industrial Center is expected to grow and become the benchmark of similar industrial center in other region.

The OVOP approach as a policy innovation born in Japan and subsequently continues to expand its function at various countries. Basically this approach has been introduced to a number of different

countries to promote a synthesized approach of various existent activities for regional vitalization (Murayama, 2016). OVOP Movement or widely known as one village one product is a regional revitalization movement in the province of Oita, Kyushu Island in Japan. Initially, it was introduced to seek or create regional excellence or what is perceived and become the pride of the region, and enhance quality and marketing those products and/or services with the objective to be accepted and recognized by society nationally, regionally and internationally.

As written by (Mukhjang, 2014) in his book entitled Real Economic Impacts on Villagers Working Under OTOP Project in Thailand, that OVOP movement has three main principles:

1. First Principle: Think Globally, Act Locally
Local Potential Commodities or products must maintain its quality and enhance both in terms of content and packaging (context) in order to get attention and world recognition.
2. Principle Two: Independent Business with Initiative and Creativity (Self Reliance and Creativity).
OVOP movement must arise from each community, the government parts provide facilitation and easiness in order the industrial area can grow and utilized.
3. Third Principle: Human Resource Development.
Human Resources as well as the community should be given knowledge about the OVOP movement and given knowledge of area's value potential so they can become the driving force for OVOP movement in the region.

As in Indonesian language term 'cluster' terminology is identical with the center (sentra), Industrial cluster is a group of core industries concentrated regionally and globally interconnected or interacting dynamically, both with related industries, supporting industries or supporting services, economic infrastructure and related institutions in improving efficiency, create assets collectively and encourage innovation to create competitive advantage ("Regulation of president of republic of indonesia number 8 of 2008 concerning national disaster management agency," 2008).

Understanding industrial centers (Hasan, 2017) are as follows:

- a. Area where there is aggression or grouping of production activities of similar industries.
- b. Area where there are groupings of production activities from various industries
- c. Area where there are groupings different types activities of industries that are closely related to each other.

An important element in retail strategy is the approaches to developing sustainable competitive advantage sustained over the long term. Any retail business activity can serve as a basis for competitive advantage, but it must be maintained over the long term (ÖNER, 2014). Factors that determine the sustainability of OVOP approach are drawn in Figure 1 below.



Figure 1 – OVOP Sustainable Competitive
Source : OVOP Blue Print

OVOP IN PRACTICE

In Malaysia, the OVOP movement began in the 1990s under former Prime Minister Mahathir, and has now grown into a nationwide operation in the form of the Satu Daerah Satu Industry (SDSI) initiative. It was reflected the situation that Malaysia felt necessary to narrow the big economic gap and keep balance between the advanced urban region where enjoyed striking growth and the economically and socially stagnated rural areas. In this sense, the adoption of SDSI was motivated by government intention to promote more balanced and sustainable economic development targeted by Malaysia’s “Wawasan 2020” (*Mission 2020*) concept. However, there is some overlap among programs implemented by different bodies. This causes duplication and precludes communities’ capacity to absorb the initiatives on offer. There also appears to be a lack of good coordination among authorities, and draws unnecessary ramification and conflict among administrative works, while the intention and target of Program are not always able to understand sufficiently among local people. There is a need for Malaysia government to relook at the effective unification and coordination of initiatives, focusing on congruence of purpose and action.(Igusa, 2016)

In addition to Malaysia, Matsuoka compared One Village One Product (OVOP) movement of Oita Prefecture, Japan, with One Tambon One Product (OTOP) movement in Thailand. According to his study, he highlighted the differences in behavior patterns of a bureaucracy in implementing a program can affect the contents of the program to be implemented, the contents of the policy it realizes, and the contents of concrete projects to be conducted for implementing the program. Such behavior patterns of an administrative bureaucracy, that is, the ways of implementing a program, are factors that should be noted in considering the possibility of the nationwide development of OVOP in Japan and OTOP’s individual development in various regions in Thailand. OVOP in Japan with an Operation-oriented Type behavior pattern, had an unstable quality, collapsed abruptly after the government changed. Compare with the OTOP movement in Thailand whose program was implemented by a bureaucracy with an Execution-oriented Type behavior pattern had a stable quality(Matsuoka, 2016)

In the context of Indonesia, OVOP had been implemented in several area such as industrial oriented OVOP Palangkaraya, Kalimantan, Pottery OVOP in Purwakarta and in Bekasi (Badrudin, 2012).The adoption of the OVOP model by Thailand and Japan focused on just the development and marketing of products rather than a more holistic human and community development. The OVOP in Malawi was merely viewed as one of the low-interest loan schemes. Along the same lines, the application of the OVOP in the developing country context was generally treated as a ‘project’ rather than a ‘movement,’ which illustrates the OVOP more accurately, due to its short-term orientation as a government-led

initiative. In addition, one research points out that overseas OVOP initiatives tended to foster dependency on the central governments particularly highlights that the OVOP in Thailand was strongly led by its central government rather than emerging as local initiatives(Kimura, 2016).

RESEARCH METHOD

In order to achieve the research purpose which is to see the application and effect of OVOP approach, this study embarked to a quantitative research method by using descriptive research approach. Descriptive research is a method used to determine the value of independent variables, either one variable or more (independent) without making a comparison, or connect with other variables (Sugiono, 2012). Therefore, research method used in this research is through the application of survey research method, that is research conducted on large and small population, but the data studied is data from samples taken from the population (Sugiono, 2012). The unit of analysis refers to the unified level of data collected during the next data analysis stage (Obeidat et al., 2017). The time horizon used in this study is cross-sectional, in which data is collected only once in a given time period.

Research purposes

T-1: Knowing the current status of OVOP sustainability management in terms of economic, social, environmental and physical surrounding, technology, leadership

T-2: Analyzing the key factors determining the sustainability of OVOP in the Utan Kayu Tofu industrial center, East Jakarta

T-3: Analyzing the simulation results to determine the ideal scenario of sustainable OVOP in Utan Kayu Tofu industrial center, East Jakarta

T-4: Determine the policy formulation of OVOP sustainable management strategy in Utan Kayu Tofu industrial center, East Jakarta

Below are the operational variables applied in this study. In addition to the definition of variables used, Table 1 also shows the attribute, indicators, scales and types of measurement scales for this study. This comprehensive table basically summarized the important information on variables involved.

Table 1 – Summary of the Research Operational

Dimension	Attribute	Indicator	Scales	Measurement Scale
Economy	Easy credit application submission	Respondent Assessment	Ordinal	Likert Scale
	Increased in Business Income			
	Ontime payment			
	Easy Credit Payment			
	Distribution Management			
	Advertising and Packaging			
Social	Government Encouragement and support	Respondent Assessment	Ordinal	Likert Scale
	Public Encouragement and support			
	Public commitment and Responsibility			
	Human Resources Development			
Environment and Physical Surrounding	Infrastructure	Respondent Assessment	Ordinal	Likert Scale
	Pleasant Working Condition			
	Supportive encouragement between workshop			
	Available tofu raw material			
	Waste management is well managed			
Technology	Expert Guidance	Respondent Assessment	Ordinal	Likert Scale
	Technology Investment			
	Product Innovation			
	The addition of value to use through Technology			

	Use of Appropriate Technology			
Leadership	Concern for business welfare	Respondent Assessment	Ordinal	Likert Scale
	Leader's Commitment			
	A trustworthy leader			
	Motivational attitude			
	Stepforward Attitude			

Source: Data Analysis(2016)

Likert scale is basically the most fundamental and frequently used psychometric tools in educational and social sciences research.), Likert scale is used to measure attitudes, opinions and perceptions of a person or group of social events or phenomena. (Joshi, 2015). As for the ordinal scale is classification into ordered categories, but there is no information about the magnitude of differences between categories. Ordinal scale not only categorizes variables into groups, but also ranks categories. Such measurements are called ordinal scales and data for these measurements called ordinal data. Variables measured on a nominal and ordinal scale are generally called non-parametric variables or non-metric variables (Newsom, 2013).

Research Unit of Analysis

The population used in this study are consumers who have purchased and consumed OVOP product of Tofu, in Utan Kayu industrial center, East Jakarta. Originating from different educational and occupational backgrounds, this group of respondents are in the best position to provide feedback on OVOP approach. The sampling for this study was conducted by distributing number of questionnaires to consumers who have purchased and consumed the OVOP product of Tofu, Utan Kayu, East Jakarta which has involved with the interview process either directly or indirectly before. By using simple random sampling technique, sampling of population members is done randomly without regard to strata (level) in the population members. The sample used was 100 respondents with unknown population assumption and statistical error rate of 5%.

Research Method

The method used in this research is descriptive method through survey by using system approach. This system approach is used to formulate recommendations for an ongoing OVOP management strategy.

This research is divided into four stages of research :

- 1) Analysis of sustainability and leverage factor management of Utan Kayu Tofu industrial center, East Jakarta
- 2) Analysis of stakeholder needs of Utan Kayu Tofu Industrial Center, East Jakarta
- 3) Analysis of key factors management of Utan Kayu Tofu Industrial Center, East Jakarta
- 4) Formulation of recommendation of management strategy of Utan Kayu Tofu industrial center, East Jakarta

Validity and reliability test is conducted in 95% Confidence level, 5% level of significance, and for 100 respondents. The df (degree of freedom) is 98, so that r-table obtained is 0.165. OVOP Questionnaire for Utan Kayu Tofu industrial center, East Jakarta consists of 5 parts:

(1) Economic, (2) Social, (3) Environmental & physical environment, (4) Technology, and (5) Leadership.

The Economic Dimension consists of 6 attributes.

The Social Dimension consists of 4 attributes.

The Environmental Dimension & Physical Surrounding consists of 5 attributes.

The Technology dimension consists of 5 attributes.

The Leadership dimension consists of 5 attributes.

The index value and sustainability status of OVOP of Tofu Industrial Center is conduct by multidimensional scaling method called Rap-Appraisal Method (Rapid Appraisal for Indonesian OVOP) method. Rap-FIOVOP analysis will result in sustainability status and index of OVOP Tofu Industrial Center. To know the dimensions that require improvement, it is necessary to do Rap-FIOVOP analysis

on each dimension with each attribute that support the sustainability of Utan Kayu Tofu industrial center, East Jakarta

RESEARCH FINDING

After data are collected, it is then proceed to the stage of data analysis. The result shows that value Index of Sustainability Status of Utan Kayu Tofu Industrial Center with Dimensional Integrity (Multidimensional). Figure 2 shows the sustainability status of Utan Kayu Tofu Industrial Center from various considerations of the dimensions of sustainability ; economic, social, environmental and physical surrounding, technology and leadership.

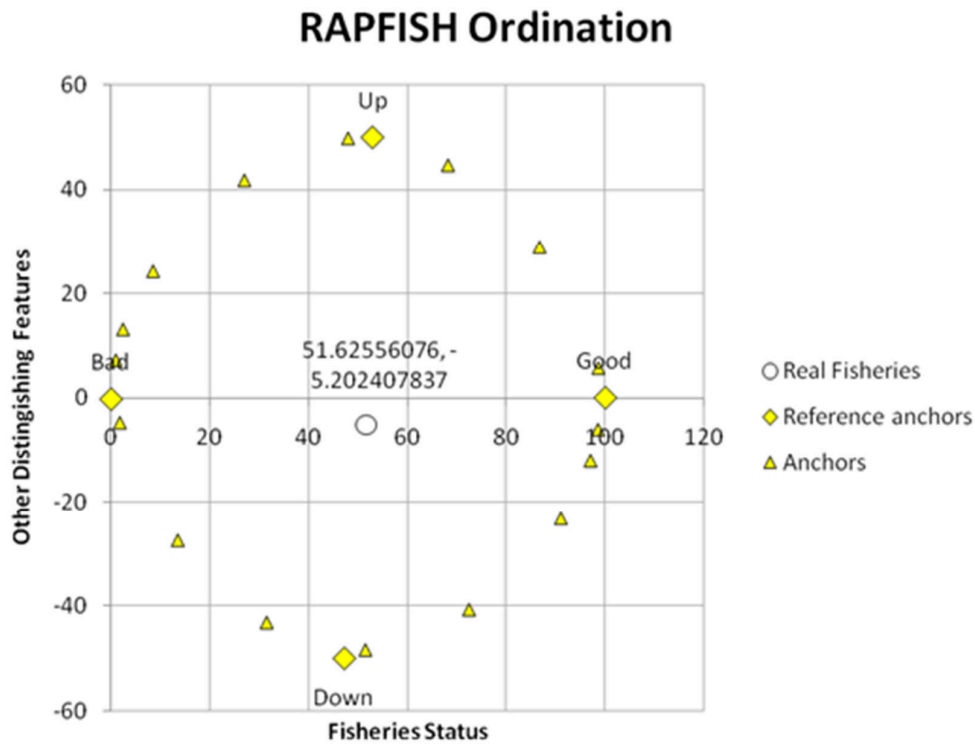


Figure 2 – RAP-FIOVOP Value Index of Sustainability Status of Utan Kayu Tofu Industrial Center with Dimensional Integrity (Multidimensional)
Source : Data Analysis (2016)

Based on Figure 2, the value of the sustainability index is 51.62556076 on sustainability scale 1 - 100. This value indicates that the sustainability dimension of Utan Kayu Tofu Industrial Center is categorized as sustainable enough (Enough: 50.01 <index value <75 , 00). The value of sustainability index of economic dimension, social, environment and physical surrounding, technology and leadership is depicted with the kite diagram, as shown in Figure 3.

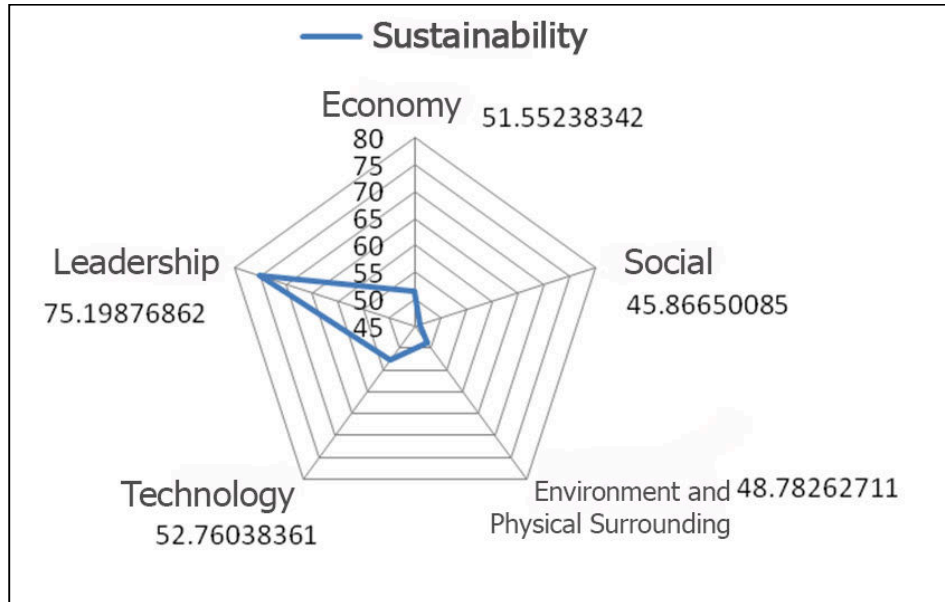


Figure 3 – Kite Diagram of Sustainability OVOP
 Utan Kayu Tofu Industrial Center
 Source : Data Analysis (2016)

After analysis of RAP-FIOVOP conducted, it is necessary to test statistic on coefficient of determination (R²) and stress to know whether the result of RAP-FIOVOP analysis in every dimension or multi-dimensional is feasible and able to resemble the actual condition.

If statistical test results are not appropriate, it is necessary to re-check and add new attributes in the analysis. The economic dimension stress value = 0.173505 shows that the result of analysis is good enough and R² = 0.934152 indicates that the current model has explained 93.42% of the existing model. On the social dimension, stress value = 0.18589 shows that the analysis is good and R² = 0.926559 indicates that the current model has explained 92.66% of the existing model.

Environmental & physical surrounding dimension stress value = 0.178132 indicates that the analysis is good and R² = 0.932556 indicates that the current model has explained 93.26% of the existing model. Technological dimension stress value = 0.178897 shows that the result of analysis is good enough and R² = 0.93177 indicates that the current model has explained 93.18% of the existing model. Leadership dimension stress value = 0.153831 indicates that the result of analysis is good enough and R² = 0.943076 indicates that the current model has explained 94.31% of the existing model. Multi-dimensional stress value = 0.15427 indicates that the result of analysis is good enough and R² = 0.941765 indicates that the current model has explained 94.18% of the existing model.

Both statistic test result stress value and R² shows that all attributes used in the analysis of sustainability of Utan Kayu Tofu Industrial Center can describe analyzed dimension.

OVOP Sustainability Strategy of Utan Kayu Tofu Industrial Center - East Jakarta

Only factors with high influence and dependence among the low factor on the system becomes the driving factor to achieve sustainable OVOP. Description of the sustainability strategy flow:

- Organized Government encouragement and support shows improvement of OVOP sustainability. This sparked the spirit of the Businessman and related parties to continue to work and produce quality products.

- Easy submission / no complicated credit help increase the Businessmen in developing raw materials in production improvement.
- Increased technological investment without the help of experts make the businessman trying trial and error method and failed several times. However, because of several parties support, in long time it will show significant results.

If this strategy occurs, then under such conditions it is anticipated that the OVOP is in continuous level. This strategy is a sustainability strategy whereby cooperatives and related parties are performing good enough.

Compare to current conditions, there is a change of score on each attribute of OVOP sustainability:

Table 2 – Changes in Sustainable OVOP Strategy Driving Factor Score

No.	Driving Factor	Early Condition Score	Sustainable Strategy Score
1	Government Encouragement and Support	1.72	2.22
2	Easy credit application submission	2.9	3.4
3	Technology Investment	2.39	2.89

Source: Data Analysis(2016)

Changes in scores in Table 2. will have implications for the sustainability dimension as follows:

1) Social Dimension

Sustainability strategy will have a positive impact on the social dimension. Organized government encouragement and support will bring new nuances to OVOP in the Tofu Industry Center. This improves positive ambience and improves performance so that satisfactory results can be obtained.

2) Economic dimension

The sustainability strategy will have a positive impact on the economic dimension. Additional Approval of easy / non-complicated credit assistance will increase the businessman potential in generating tofu in larger quantities and with promising quality.

3) Technology dimension

The sustainability strategy will have a positive impact on the technology dimension. Increased technological investment without the help of experts make the businessman trying trial and error method and failed several times. However, because of several parties support, in long time it will show significant results to produce in large quantity and quality that can compete in domestic and international market.

4) Other Dimensions

The sustainability strategy will have a positive impact on other dimensions due to the high level of dependency among factors. Improved performance of key factors makes the performance of related factors increased to create ideal conditions and optimal performance.

RESEARCH DISCUSSION AND CONCLUSION

From this study, the research finding can be discussed in five points. The finding concludes that:

1. Based on field observation and literature study results obtained 25 attributes that affect the sustainability of OVOP Utan Kayu Tofu Industrial Center. These attributes are reflection of the five dimensions of economic dimension, social dimension, environmental and physical surrounding dimension, technology dimension and dimension of leadership.
2. Sustainability status of OVOP Sentra Industri Tahu, Utan Kayu - East Jakarta currently in each dimension, ie economic dimension included in sustainability status (51, 552), Social dimension

- included in less sustainable status (45,867), dimension of Environment and Physical Surrounding including in less sustainable status (48,783), Technology dimension included in sustainability status (52,760), leadership dimension included in sustainable status (75,199).
3. Key factors determining the sustainability of OVOP Utan Kayu Tofu Industrial Center based on the simulation of index calculation conducted on alternative strategy (very pessimistic, pessimist, moderate, optimistic, very optimistic) seen that there is a change of sustainability value index for each index on multidimensional. The recommended strategy is a very optimistic strategy.
 4. The formulation of alternative sustainable OVOP policies are ; 1) Communication with government agencies in encouragement and support of OVOP development facilities; 2) Development of competent human resources; 3) Socializing technology investment; 4) to formulate welfare improvement policy for businessmen; 5) allocation of credit assistance and businessmen funds.

RESEARCH SUGGESTIONS

Based on the findings above, there are five important conclusions derived from this study which are:

1. Scoring on RAP-FIOVOP analysis shows only momentary condition, dynamics in the system cannot be described, the company is expected to conduct periodic research based on the development of attribute in a certain period so that OVOP can become an advantage of Indonesia.
2. To improve the sustainability status of OVOP Utan Kayu Tofu Industrial Center, East Jakarta, it is necessary to make improvements on every attribute that influence OVOP sustainability. It is better to make improvements done thoroughly and gradually not only on sensitive attributes just to get maximum results.
3. Key factors affecting OVOP sustainability need to be improved. In accordance with the strategy recommendations given in order to achieve a very optimistic strategy then the strategies that can be considered are as follows:
 - a. Government Encouragement and Support:
 - Registration of businessmen, traders and other OVOP agents to join in an institution that ensures the safety of work, health, educational assistance for small families etc. so that their welfare is guaranteed and to attract productive generation to participate in the development of Indonesia.
 - b. Credit Aid for Businessmen:
 - The existence of financial consultations with Businessmen in managing credit to provide optimal results in the time period that has been planned so that the development can be organized well and created consistency in both quality and quantity.
 - The allocation of funds in the form of raw materials or cash designed specifically for beginners who want to jump in the business in the hope that more productive generation is incorporated in the industry.
 - The allocation of budget funds in the form of raw materials or cash for Businessmen who will develop their business.
 - Technology Investment:
Socializing the advantages of technology use and cost savings on the Businessmen so more businessmen can utilize the technology.
 - Training of businessmen (coaching resources) every month with experts to transfer knowledge that allows the businessmen in managing resources for optimal results with minimal input.
 - Working together with the academic, especially in the field of technology to get new things and ideas i.e. product development, efficient technology, quality improvement.

CONCLUSIONS

OVOP approach is a beneficial approach in increasing the quality of life through product introduction and development for rural areas in Indonesia. As it has proven in many other countries, Indonesia also can have its advantages in developing the rural areas. But, the implementation and understanding of this approach must be also at the excellent level. Therefore, this study managed to provide some important insight point of view about the dimensions in order to make this approach meaningful. In developing and assisting the rural areas, better understanding about the success factors must be clear and objective. This study managed to highlight the five dimensions of this approach and as it discussed before, these five dimensions should received proper attention in making the approach is success mission.

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