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Analytical Hierarchy Process Approach on Regional Product Competitiveness in Magelang, Central Java

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Abstract

This study aims to identify and analyze the data and information to determine the local featured products through the aspects of value-added, market expansion and production technology. The location is the town of Magelang in which there are many small and medium industries with a wide range of their products. The analytical tools used include common analytical technique used to determine a featured product. They are scoring, value chain and Analytical Hierarchy Process (AHP). The result of the study shows that the main criteria for weighting the featured products are competitive advantage, stakeholders' acceptance and societal benefits. Through all three criteria, there are three main local featured products becoming the. They are getuk (the result of processed cassava), kerupuk tahu (tofu crackers) and ceriping ketela (cassava crackers). Furthermore, through a comparative analysis of the criteria, it can be concluded that the product getuk can be considered as the Regional Industry Core Competence based featured product from Magelang.

Keywords: *Analytical Hierarchy Proces, Regional Product, Competitiveness*

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1. INTRODUCTION

The main purpose of economic development is not only improving the high economic growth, but also be able to reduce the level of poverty, inequality and unemployment. In a broader scale, economic development goals lead to the improvement of public welfare. The benchmark for the success of development can be seen from the economic growth, economic structure, and smaller income inequality among the population, across sectors and across regions / territories (Kuncoro, 2004).

Regional development is influenced by optimizing the utilization of the region potentials, in the form of sector and featured product development expected to have multiplier impacts on economic growth. The featured product is a source of competitive advantage (having a big contribution in giving benefits to market) and also potential to apply in various markets.

Featured products in further analysis is closely related to the regional core competence and the regional industry core competence (prime mover) (Ministry of Industry, 2007). A regional core competence will determine the direction of the region development aimed at increasing the level of a region economic condition and create the competitiveness of the local level to the state level. The regional core competence should be characterized by: (1) developing a new product or service and doing the prospects to public; (2) having something unique and difficult for other regions to imitate (Presidential Decree No. 28/2008).

Magelang is one of the leading areas in Central Java province having the superior potentials covering medium and small industries producing a variety of products in agriculture, farming, fisheries, trade and services, including higher education and tourism. The exisiting industrial activities in Magelang are mostly medium and small industries and oriented to the needs of the household. The existence of small and household industry is variously scattered in almost every region, from food to handicrafts.

Nevertheless, the sector of processing industry for the last 10 (ten) years has only been able to contribute to the output (GDP) by 13-14 percent (CBS, 2015). Various issues happen at the policy level as well as business people. The competitiveness of products, raw materials, market access expansion and local governments' lack of focus on the local industry based on the core competence make the processing industrial sector in Magelang city stagnant.

The growing industry in Magelang today is an industry associated with the image of Magelang city as the City of Services, City of Transit and City of Education, including food, snacks, and crafts (SEA of Magelang City, 2014). The strategic region and the development of trade, services, and tourism are the driving factors for the development of small and medium industries. In addition, the presence of universities in the region also encourages the development of small scale creative industries.

The region's position as a node for the surrounding districts as well as geographical proximity to Special Region of Yogyakarta also make Magelang city as a industrial goods market from the surrounding regions. Therefore, this study will assist the local government in formulating a featured product roadmap based on core competence so that the competitiveness of small and medium industries increases more. Besides, the more popular the unique and not-easily-imitated featured products, the more the economical value of the products.

2. LITERATURE REVIEW

2.1. Core Competence

Competitive advantage owned by a company depends on the uniqueness of its resources and capabilities, as well as the difficulty level of other companies to imitate the uniqueness and capabilities. The more difficult a competitive advantage is imitated, the higher the cost the competitors should spend to replicate this competence. Thus, core competence is the source of competitive advantage for the company. Gary Hamel and C.K. Prahalad (1990) introduced the concept of core competence as a combined learning and coordination skills enable companies to produce certain products. Core competence is a collection of skills and technologies enable companies to provide certain benefits for its customers.

The model developed by Hamel and Prahalad is a "from inside to outside" model-oriented, that is the advantage from the main ability or core competence of an organization. Every organization needs to develop key areas of expertise (core competence) that are unique and crucial for the growth of the organization in the long term. Hamel and Prahalad (1990) later suggested that core competence is:

1. The set of integrated capabilities of a series of resources and tools supporting accumulation as a result of the learning process, which will benefit the competitive success of a business.
2. The collective learning, particularly about how to coordinate assorted production capabilities and integrate them with the current evolving technologies.
3. The alignment of technology flows, about the organization's work and the delivery of value to customers.
4. The communication, involvement, and deep commitment to working across organizational boundaries.
5. The core competence is not absolute. Instead, it tends to be flexible to adapt and evolve in response to changes occurring inside and outside the organization.

According to Hamel and Prahalad, core competence derives from an effective integration of technology and production skills. The core competence can be characterized as follows:

1. Enabling access to enter various types of markets: a core competence allows the creation of products and / or services in order to achieve competitive excellence.
2. Contributing significant benefits to customers as the users of the product: a core competence enables an organization to meet the needs of its customers. Thus, the customers will choose the products or services of the organization rather than the products or services of the competitors.
3. Being difficult to replicate: competence should be difficult to imitate by competitors to provide long-term advantages for the company.

The core competence comes from the ability to integrate and coordinate activities within the organization. If there is a part of the core competence not owned by the company, it can be obtained through the acquisition retaining its competence {such as through alliances or license usage, and others). Competency acquisition may also be

acquired through a series of learning activities to master the skills and technology needed.

The core competence is manifested in the form of core products having a role as a liaison among the various existing competences with the final product. The core products allow the value creation process in the final product. If an organization has a successful core product, it can expand the use of this product to achieve a cost advantage. Honda, as an example, has a core product in the form of petrol-fueled machines; the core product is used in various products, such as various motorcycles).

According to Javidan (1998), Prahalad and Hamel's perspective is too narrow, because in their competence concept, core competence and capabilities are as synonymous. That definition only focuses on a small part of the organization's value chain and has obscured the sense of competence and capability. Javidan divides core competence, competence, capabilities and resources according to itsdifficulty and value into a hierarchy as illustrated below.

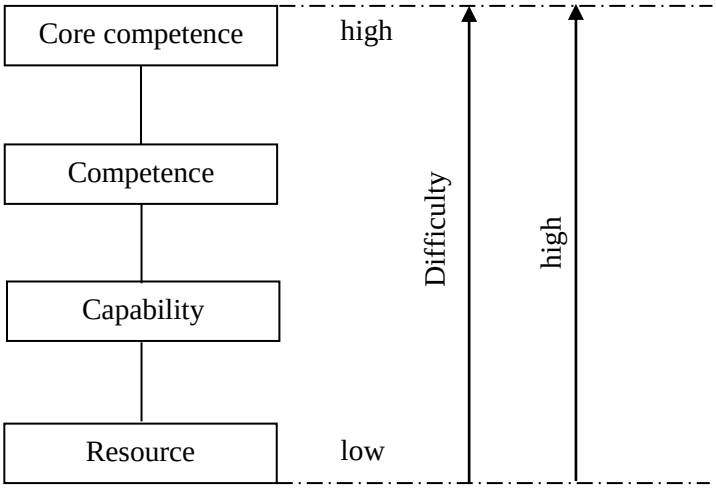


Figure 1. Competence Hierarchy (According to Javidan, 1998)

Capability is defined as the ability to exploit certain resources through certain business processes and to direct interaction among resources. The core competence is the interfunction integration and coordination of capability. The core competence is an interaction among competences and shared by strategic business unit. To be able to utilize the core competencies within the organization, the entire management team must understand well and participated in five management tasks. They are as follows (Hamel and Prahalad, 1990):

1. **Identifying the core competence today**. It is necessary to distinguish between competence and the products and services where these competencies are contained. Its utilized core competencies should be separated from non-core activities.
2. **Establishing a core competence acquitition plan**. This plan is determined by the organization's strategy. To develop the plan, Competence-Product Matrix can be used.

CORE COMPETENCE		Now	Recently
	Recently	**Premier plus 10** What new core competence is needed to protect the position and expand the market today?	**Mega-opportunities** What new competence is required to participate in the most promising markets in the future?
	Now	**Fill in the blanks** How is the potential for increasing the organization's position in the current market by leveraging the core competence possessed at this time with a better way?	**White spaces** What new products can be created by combining the currently owned core competences creatively?

Figure 2. Core Competence–Product Matrix

3. **Building core competence**. The core competence requires a long time (years) to be developed. Consistency of effort is needed during this period. Success depends on a consensus on the built and supported competence; also depends on the stability of the management team having the task to develop this competence.
4. **Utilizing core competence**. Competence should be allocated in order to give benefits on the assets of the organization. Competence is in humans. Competence should be divided to business units and not properly controlled only by one particular unit. Benefits of competence depend on the speed of the spread.
5. **Keeping and maintaining the organization's core competence**. Leadership in core competence can be lost due to lack of funding, fragmentation as a result of decentralization, the loss of management support, subjection to alliance partners or divestitures. A community of people as a 'carrier' of core competence needs to establish.

2.2. Featured Products and Core Competence

The development of a sector or subsector is actually a reflection of a group of products or services in the sector. Often in a subsector there are products / services or commodities in which the current developments and future development potential are obviously better than other commodities. These commodities are often known as regional featured commodities, due to the high contribution of the activities for the development of basic commodities to the regional economy. Although the regional core competence is not the same as the concept of featured commodities, determining the regional core competence is often started by determining the priority of the leading featured commodity. It is based on the thinking that the excellence of a commodity is an indicator of the sources of excellences competing in the region and causing the commodity to thrive well. However, the source of excellence is not always the same for every commodity: some commodities grow and develop due to natural factor, some due

of the skills already long occupied by the local community, some possibly due to the typical tradition and other reasons.

Some researchers have proposed several methods to identify core competence where mostly have tried to devise a way to identify a number of exisiting competences so that it can be perceived as a core competence in a particular industry (Y. Zhang, 2009). Walsh and Linton (2001) tried to summarize results of the efforts in identifying the competence of few industries considered as "a basis in the process of identifying the competence of an organization" by trying to extract the core competence based on the observation of 4 aspects: raw materials, manufacturing-fabrication and assembly, knowledge based services and knowledge embedded services. Walsh and Linton also pointed out that most of the difficulties in identifying the core competence arise due to the hierarchical and multi-dimensional nature of competence.

Tampoe (1994) proposed a process to identify core competence referring known as a core competence insulation process. This process begins by identifying the main products/services and analyzing the revenue streams. The used resources to produce products/services are then isolated through the analysis of the attributes from the resources. In practice, it is important to prepare the appropriate criteria to measure the attributes of these resources, so subjectivity in judgment can be avoided.

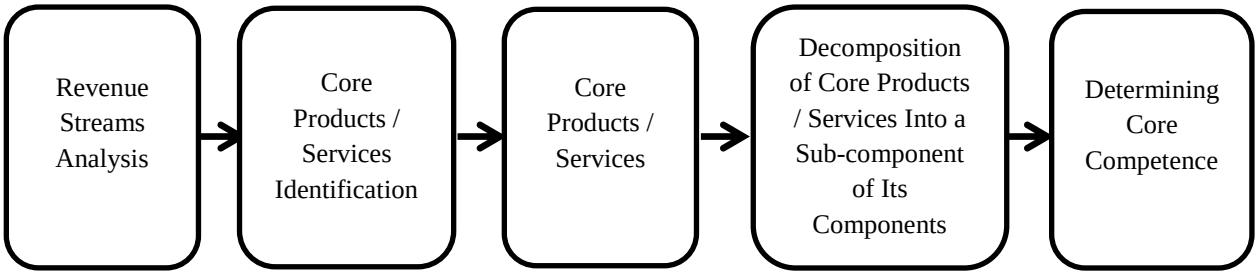


Figure 3. The Process of Core Competence Identification Through The Competence Isolation Process (Tampoe, 1994)

Hafeez, et al. (2002) developed a process begun by evaluating the capabilities of the various departments within a company using the balance score card. The obtained results are called "key capabilities", and then the collectivitness and uniqueness of the various key capabilities are evaluated. The conclusion is drawn after the evaluation of resource redeployment and routine reorganization used to determine whether the key capabilities are feasible to support business in the future. The possibility of ambiguity is attempted to be covered by using an inclusive scoring and measurement system.

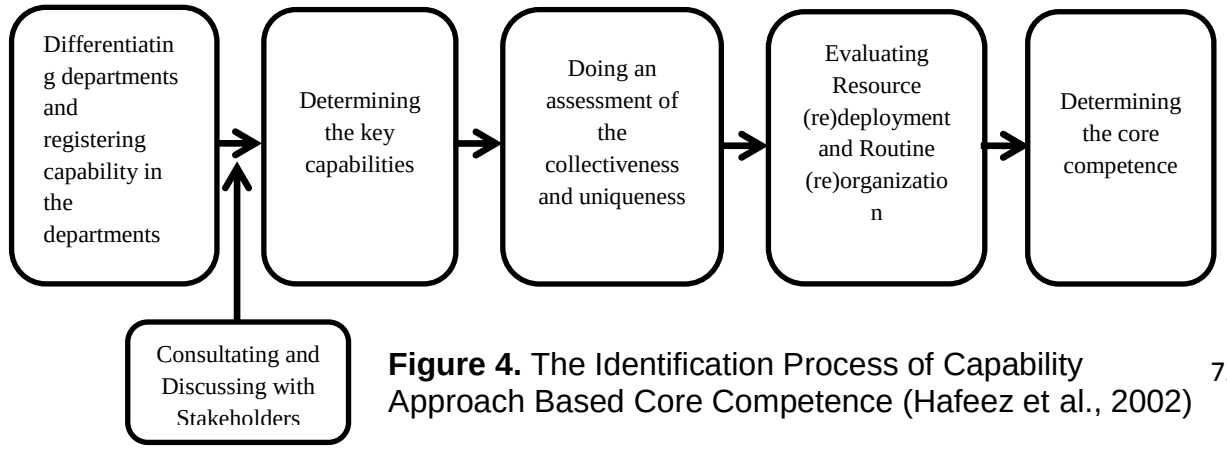


Figure 4. The Identification Process of Capability Approach Based Core Competence (Hafeez et al., 2002)

Lewis (1995) developed an approach that relies on the activities of the workshop and discussions to identify core competence, and to conduct an analysis to the related data and information comprehensively to overall business by involving devices outside the organization. The first step conducted is to introduce the concepts fully, followed by a SWOT analysis and then the structure and activity mapping. By paying attention to involved sources in the mapping of activities, a discussion with decision makers is conducted to formulate the final result.

Lewis approach is quite heuristic by including the factors influencing the perception of decision makers into the methodology. As the result, the overall process takes several months to get to the effective final conclusion. It is because this approach is based on a complex and iterative cycle to come to the most appropriate conclusion. Therefore, Javidan (1998) stated that the approach of workshops and discussions needs to be supported by an organizational culture supporting the discussion, thought and collective decision making.

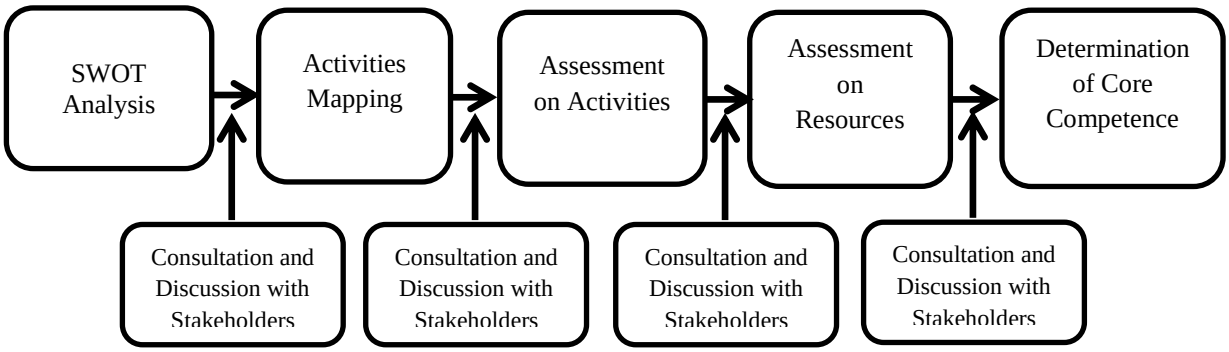


Figure 5. Identification Process Core Competency-Based on Workshops and Discussions (Lewis, 1995)

These approaches incidentally are the activities in performing an extraction process and capability within an enterprise organization still continuing to grow over time, so that the development of the concepts and new identification ways are still possible.

2.3. RELATED STUDIES

One of the studies on featured products and regional core competence was conducted by Daryono and Wahyudi (2008). Through the criteria establishment covering the value of production, investment/unit, the amount of labors and interviewee's preferences, batik products and production became the first rank in the decision matrix excellent products of small industries. Solo Batik has unique and various motives, but they have featured competence dominant in characteristics, design and innovation power, as well as philosophical meaning.

Kurniyati (2010) used the technique of scoring to the potentials and a wide range of variables of industrial core competence in the Bangkalan Regency. The industries' raw materials were from forests (people) and fisheries. The core competence in Bangkalan Regency was still determined by the resource-based industries rather than market-based industries. In other words, the industrial core competency was

determined more by the potential resources needed in the industrial process, mainly from local human resources.

Research conducted by Grace et al (2011) by applying the AHP technique showed that the core competence of Tangerang Regency was related to the textile industry and products. While the development strategy was based on three phases: early stage through the support of government policy and infrastructure as well as finance; the main stage through machining restructuring and human resource development; and the final stage through productivity improvement and industrial cluster strengthening. In line with Rahmat et al (2011), using the same technique as Thomas (2011) in Belu Regency, they found that the featured commodity/product becoming a core competence in Belu Regency is patchouli. Patchouli and Patchouli Oil were considered feasible to replace almost extinct Sandalwood and Sandalwood Oil.

Rahab and Istiqomah (2013) used AHP technique and Interpretive Structural Modeling to analyze the determinants of local industrial core competence in Banyumas Regency. The study showed that local batik industry was the most potential to be regarded as a local industrial core competence in Banyumas Regency. The local batik competitive excellence was based on three stages of development, namely: (1) the initial stage (infrastructure, finance and license support), (2) the main stage (human resource development, management and marketing, brand and uniqueness of batik) and (3) the final stage (productivity and initiation increase associated with the support of the industry).

Niskha et al (2015) used AHP technique to identify cluster-based featured products in Malang and prioritize strategies for the development. The results showed that the criteria for determining the cluster-based featured product in Malang are: unique/typical/special products from the region; contribution to the local economy; market; input conditions (the availability of infrastructure, human resources, technology, capital); partnership; policy and institutional support; impact on the environment; and level of competitiveness. Based on these criteria, with the AHP, the study resulted that the cluster-based featured products in Malang were *tempe* (soybean cake) and *keripik tempe* (soybean cake chips) produced by industrial centers of Sanan *tempe* and *keripik tempe*.

3. METHODOLOGY

3.1. Research Design

To complete this study, qualitative and quantitative approaches were used. In addition, this study used development economics, public policy, industrial economics and management as the disciplines. A qualitative approach was used to answer the question on how to determine the regional core competence based featured products. Meanwhile, the quantitative approach was used to analyze the profile of small and medium industries, market potential, competitiveness of products, human resource potential, institutional, and respondents' answer illustration and decision on the regional featured product settlement.

This research was located in Magelang. The data collection was done by conducting structured and in-depth interviews, observation, survey and FGD (Focus

Group Discussion) with stakeholders. Respondents and interviewees were those involving in the association of small and medium industries, the Department of Industry and Small and Medium-Sized Enterprises, academia, *BAPPEDA* (Regional Body for Planning and Development), FEDEP (Forum for Economic Development and Employment Promotion) of Magelang city. The selection of respondents was conducted by purposive sampling technique.

3.2. Technique of Analysis

The analytical tool to achieve the purpose of this study was essentially aimed at analyzing and evaluating the factors used to determine the regional featured products/commodities and their development. The main analytical tool used included scoring method and Analytical Hierarchy Process (AHP).

a. Scoring Method

This method is an easier, simpler, and moe practical procedure.The featured product determination are based on certain criteria in which then scored to arrange their development priority. Regarding to the data availability on a regional scale broken down by sectors, scoring is proven very helpful. Although simple and practical, this procedure must have a high degree of subjectivity than the technique of backward and forward linkage. In addition, the scoring technique presents only limited information regarding to the regional competitiveness and performance. The criteria and scores used in the determination of featured commodities in a region are (Kepel et al., 2000):

1) Absorption of labor
   Score: (1) small, (2) medium, (3) big
2) Contribution to economy
   Score: (1) small, (2) medium, (3) big
3) Regional economic based sector
   Score: (1) small, (2) medium, (3) big
4) Ability to refurbishe
   Score: (1) small, (2) medium, (3) big
5) Utilization of the social cultural element and local wisdom in production
   Score: (1) small, (2) medium, (3) big
6) Availability of the market (Marketing)
   Score: (1) small, (2) medium, (3) big
7) Guarantee of environmentally friendly raw material availability
   Score: (1) small, (2) medium, (3) good
8) Availability of capital
   Score: (1) small, (2) medium, (3) big
9) Availability of production facilities and infrastructure
   Score: (1) small, (2) medium, (3) good
10) Relevant, useful and not-easily replicated technology
   Score: (1) small, (2) medium, (3) good
11) Condition of business management
   Score: (1) small, (2) medium, (3) good
12) The price (profit)
   Score: (1) small, (2) medium, (3) big

b. AHP Method

After getting a list of featured products, the next step was to set the prioritized featured commodity (one product). Therefore, AHP analysis tool with a set of criteria aimed at assessing each featured commodity was used. In determining the prioritized featured commodity, a set of criteria aimed at assessing each commodity and many aspects was implemented. The criteria used in determining the featured commodity becoming the basis of Regional Industry Core Competence are: (1) Criteria for Excellence, consisting of: a) Effectiveness of Supply Chain, b) Commodity Insight, c) the Support of Human Resources; (2) Criteria for Benefits, consisting of: a) Economic Contributions, b) Labor Absorption, c) The Region Image; and (3) Criteria of Stakeholders' Acceptance, consisting of: a) the Readiness and Willingness of Government, b) the Readiness and Willingness of Society, and c) the Readiness and Willingness of Business World.

4. ANALYSIS AND DISCUSSION

4.1. Determination of Featured Product

To determine a product to potentially be the Regional Industry Core Competence certainly needs to consider that the product has an excellence in accordance with the criteria of featured product. Therefore, from a long list of products of SMEs in Magelang city, scoring based on the featured product criteria was conducted. The following result was obtained from scoring result.

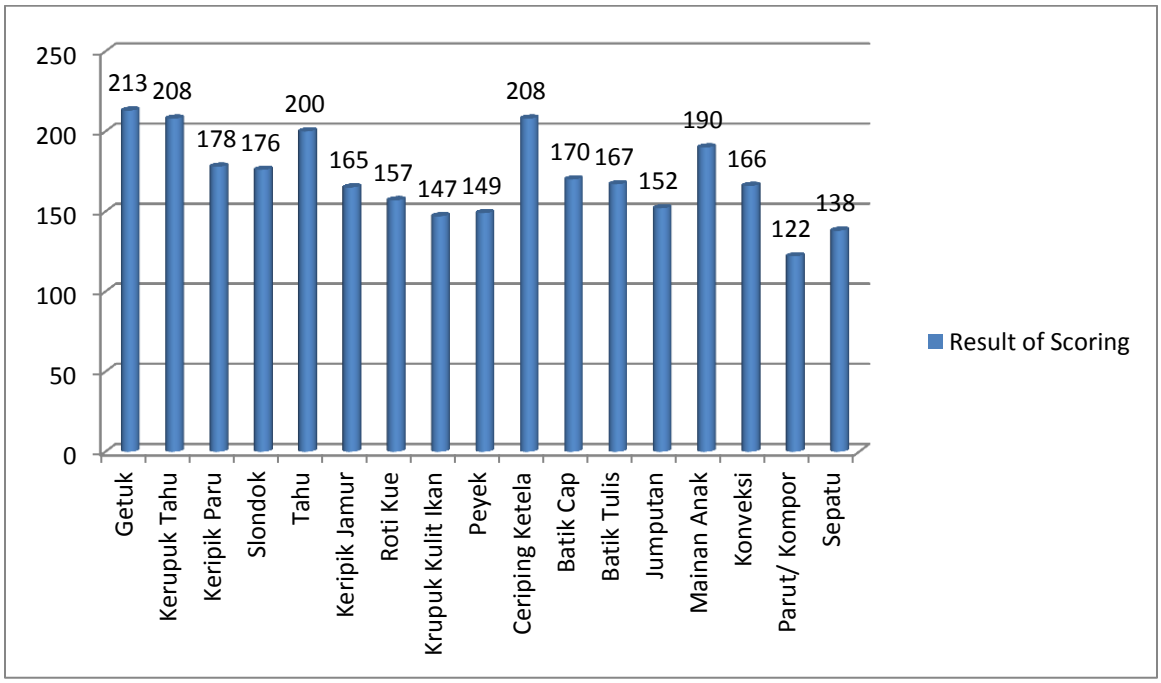


Figure 6. Scoring Analysis Results of SME Products in Magelang City

From the analysis above, 5 products of SMEs in Magelang were nominated as featured product, namely:

1. *getuk* (the result of processed cassava)
2. *ceriping ketela* (cassava crackers)
3. *kerupuk tahu* (tofu crackers)
4. *tahu* (tofu)
5. *mainan anak* (children' toys)

Further evaluation of five featured products above determined one regional featured product through some criteria by applying AHP device. The results of the main criteria in order to evaluate the featured products nominated as priority products can be seen as follows:

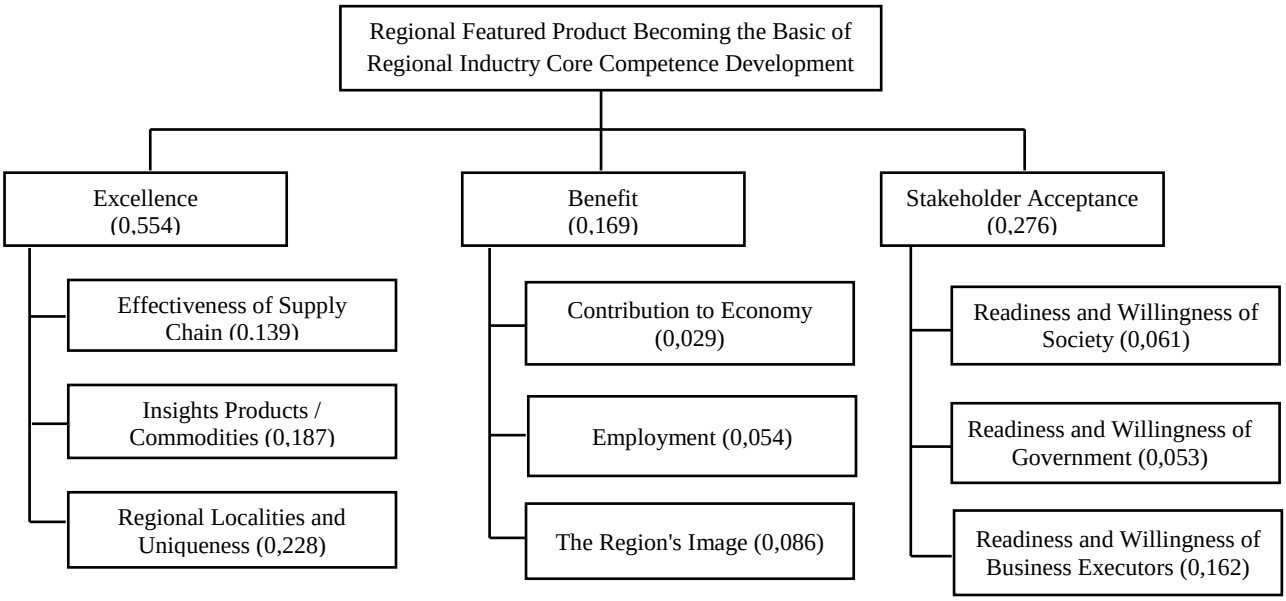


Figure 7. Hierarchy and Scoring of Decision Making Criteria in Determining Featured Commodities in Magelang

Based on the scoring results by AHP analysis method above, the ranking to five feature products of SMEs was conducted and the results became the consideration for choosing the main featured product of SMEs in Magelang. The results of scoring to the products decided three nominees of featured products. They were *getuk* (6.51), *kerupuk tahu* (4.95), and *ceriping ketela* (4.26). The three featured products could be also descriptively compared through main criteria as shiws on table 4.1.

Thus, based on the phases of the above analysis, it could be recommended that *getuk* could be the basis product of SMEs in Magelang. It was due to the uniqueness of this product long been identical and helped to create the image of Magelang. Moreover, the consideration of the stakeholders' well-acceptance to the product could be seen from the presence of many quite big-scale *getuk* SMEs sploying many labors.

Table 1. Comparative Analysis of Three Priority Commodities in Magelang

Criteria	*Getuk*	*Kerupuk Tahu*	*Ceriping Ketela*
Excellence	• It is the main product widely known by society and identical with Magelang. • The effectiveness of commodity supply chain is good and the raw materials are pretty much. • The market demand is large enough. • Capital (investment and working capital) is not too much and easily obtained. • Infrastructure and facilities of production are quite provided. • It uses appropriate technology, and is not easily imitated.	• The market potential for *kerupuk tahu* is already national. • Raw materials are widely available in the market at competitive prices. • Infrastructure and facilities of production are easily obtained. • It uses relevant and appropriate technologies.	• The effectiveness of commodity supply chain is good and the raw materials are pretty much. • The market potential for *ceriping ketela* is already international. • Capital (investment and working capital) is not too much and easily obtained. • infrastructure and facilities provided enough production • It uses appropriate technology, and is not easily imitated.
Benefits	• It absorbs many skilled labors, and has a lot of business units. • It has formed the image of Magelang.	• It absorbs many skilled labors, but has a small number of business units.	• It absorbs many skilled labors, but has a small number of business units.
Stockholders' Acceptance	• Government's acceptance ro the product is good enough. • The society's acceptance is good enough since *getuk* has long existed and become one of the featured products in Magelang. • Business people's acceptance is really good, in which there have been quite big-scale growing SMEs.	• Govenrment's acceptance to the product is good enough. • Society's acceptance to the products is good enough. • Business people's acceptance is good enough, in which there have been medium-scale growing SMEs.	• Govenrment's acceptance to the product is good enough. • Society's acceptance to the products is good enough. • Business people's acceptance is very enough, in which there have been quite big-scale growing SMEs.

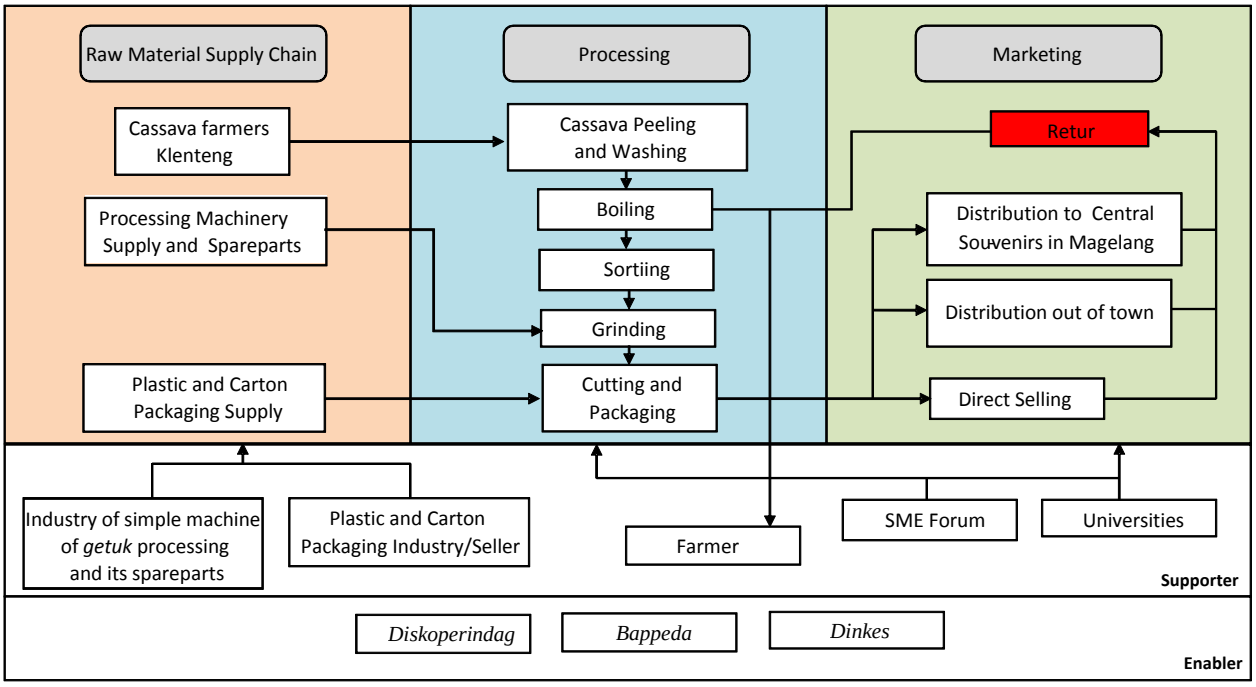
4.2 The Analysis of the Selected Featured Product Value Chain

In choosing the form of business compatible with the capabilities and resources owned (as well as the competence to be developed), all activities involved in the creation of value for consumers ranging from procurement of raw materials to finished products being in consumer's hands needed to be studied earlier. Value chain diagram was used to show the stage of value increase, the doer(s) in each phase, as well as direct supporters and indirect enabler in various stages.

Getuk was one of wet food from fresh cassava processing. Therefore, the resilience of *gethuk* reached only 2-3 days. *Getuk* marketing in Magelang was marketed not only inside the city, but also in other regions, such as Semarang, Yogyakarta, Solo, and the most distant in Surabaya and Jakarta. The process of production to marketing

was the main process performed by business people. Meanwhile, the process by direct supporters and indirect enablers was described as follows.

1. Supporter
   a. Industry of simple machine of *getuk* processing and its spareparts.
   b. Plastic and cardboard packaging industry/seller
   c. SME forum, in form of business development with the support of training facilitation, and collective and organized food certification arrangement.
   d. Universities, in form of supporting research on product development.
   e. Breeders, accommodating/taking the unused production for feeding animals.
2. Enabler
   a. *Diskoperindag* (Department of Trade and Industry): Technically responsible for industrial human resource development, technology development, marketing support and institutional support. It also helps facilitating the arrangement of business certification and business capital.
   b. *Bappeda* (Regional body for planning and development): Technically responsible for budget planning and strategy in the development of featured product.
   c. *Dinkes* (Department of Health): Technically responsible for facilitating counseling and making of *SPIRT* (Certification for Household-Food Typical Industry) for SMEs.



Industry of simple machine of *getuk* processing and its spareparts

Figure 8. Diagram of SME *Getuk* Value Chain in Magelang

4.3. Roadmap of Featured Product and the Regional Industry Core Competence

Based on the previous analysis results, regional industry core competence development framework was arranged with *getuk* as the featured product of SMEs. Roadmap framwork included the goals, strategies, short-term and long-term development plans, and supporting elements in strengthening and developing SMEs.

Table 2. Roadmap Framework for Developing and Strengthening the Featured Product and Regional Industry Core Competence of Magelang

<table>
<tr><th>Core Industry</th><th>Supporting Industry</th><th>Related Industry</th></tr>
<tr><td>The food processing industry
Focus: SMEs Getuk</td><td>Cassava Supply from the surrounding region,
IT groups for marketing support</td><td>Plastic and carton packaging supply, industrial of cassava peel utilization</td></tr>
<tr><th colspan="2">Medium-Term Goals
(2017-2021)</th><th>Long-Term Goals
(2017-2026)</th></tr>
<tr><td colspan="2">1. Development of SME products of Magelang with high quality standards and complete administration.
2. Creation of strong institution and cooperation with relevant stakeholders.
3. Use of information technology in product marketing (e-commerce)
4. Creation of a good management and processing system of SMEs.</td><td>1. Realization of Magelang city development as the city of service with featured product support
2. Realization of the development of tourism in Magelang with featured product support
3. Development of diversification and differentiation of featured product of Magelang</td></tr>
<tr><th colspan="3">Main Strategies</th></tr>
<tr><td colspan="3">1. Institutional improvement
2. Product quality improvement
3. Marketing improvement
4. Supply chain strengthening</td></tr>
<tr><th colspan="2">Principles Of Medium-Term Action Plan</th><th>Principles Of Long-Term Action Plan</th></tr>
<tr><td colspan="2" rowspan="2">1. The use of appropriate technology to support the industrial equipment development center.
2. Institutional strengthening of the SME Forum in Magelang
3. Facilitation improvement for the arrangement of SME certification, such as SPIRT and SNI (Indonesian National Standard) from both government and SMEs
4. Implementation for visitors to be able to see the production process of getuk as service improvement and tourism development.
5. Preparation of venture capital facilitated by the government or cooperation
6. Research from both departments and universities to utilize cassava parts more optimally
7. Utilization of IT in marketing, one of which cooperating with blogger village in Magelang
8. Cooperation strengthening for SMEs to have</td><td>1. Institutional improvement
2. Product quality improvement
3. Marketing improvement
4. Supply chain strengthening</td></tr>
<tr><td>9. Special partnership between the farmers and getuk entrepreneurs related to the provision of qualified raw materials
10. Skill training, including foreign languages as an effort of Magelang SME human resource readiness to receive international tourists from Borobudur
11. Implementation of effective and efficient business management
12. Implementation of the product control quality system to maintain the quality of the product.</td></tr>
</table>

a better access to capital.	13. Product packaging improvement

5. CONCLUSIONS

5.1. Conclusions

Based on the conducted research by the search of secondary data, survey results, FGD, scoring analysis and AHP, it can be concluded that Magelang city has Regional Industry Core Competence (*KIID*) in the form of *getuk*, processed cassava product. This product has the greatest potential to be able to be Magelang Featured Product. In addition, it has been identical and attached to the image of Magelang. This product has also developed well and many SMEs in Magelang sell this product.

Factors, such as raw material availability, many *getuk* SMEs having quite good quality, and continuously growing market potential, become considered factors in determining *getuk* SME as Regional Industry Core Competence (*KIID*) of Magelang. Furthermore, Getuk SMEs has quite potential value chain to develop, like industrial engineering (machines for cutting and grinding cassava), plastic and cardboard packaging industry, as well as the stockbreeding around Magelang. *Getuk* marketing can be also likely packed as a tourist attraction where buyers can see the direct processing of cassava into *getuk*. It is in line with the development of Magelang tourism supported by featured product.

5.2. Managerial Implication

Based on the results of the analysis, suggestions for the development of Magelang featured products can be formulated as below.

1). Institutional improvement, covering:
   a. Implementing Mayor Regulation about regional featured product development
   b. Socializing Magelang featured product
   c. Engaging featured product development program in every department *RKPD* (Local Government Working Plan).
   d. Monitoring and Evaluating
   e. Strengthening the capital facilitated by the government or cooperation
   f. Strengthening cooperations, so that SMEs have better access to capital
   g. Strengthening the SME Forum in Magelang
   h. Implementing efficient and effective business management

2). Product quality improvement, covering:
   a. Implementing product qualiy control system to maintain the quality of the product
   b. Training skills including foreign languages as an effort of Magelang SME human resource readiness to accept international tourist from Boroudur
   c. Conducting university research to utilize cassava parts more optimally
   d. Improving facilitation for the arrangement of SME certification, such as *SPIRT* and *MUI* (Indonesian Council of Ulama)
   e. Using appropriate technology to support the development center of industrial equipment
   f. Improving product packaging

3). **Marketing improvement**, covering:
   a. Utilizing IT in marketing, one of which is to cooperate with Magelang blogger village.
   b. Implementing the facilitation of visitors to see *gethuk* production process as service improvement and tourism development

4). **Supply chain strengthening**, covering the establishment of a special partnership between farmers and *gethuk* entrepreneurs related to the provision of qualified raw materials.

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