

**ANALYSIS OF SMEs COMPETITIVENESS THROUGH THE INNOVATION STRATEGY AND PRODUCT SALE INFORMATION SYSTEM IN THE TRUNAN VILLAGE, MAGELANG CITY**

**Panji Kusuma Prasetyanto<sup>1)</sup>, Jalu Aji Prakoso<sup>2)\*</sup>, Rian Destiningsih<sup>3)</sup>**

<sup>1,2,3</sup> Departmen of Economics Development, Faculty of Economics, Universitas Tidar, Indonesia

**Abstract**

*The role of SMEs in development can be obtained through contributions made by SMEs to GRDP. The Trunan Village located in South Magelang Regency is an area that has the largest SME-producing products in the City of Magelang. The problem caused by SMEs in the Trunan Village, Magelang City, is the lack of product innovation in their production goods. Special tofu producer SMEs in Trunan Village, Magelang City lack understanding of the importance of their production. Another problem suspended by MSMEs in Trunan Village, especially tofu producers in developing their business is the information system of selling tofu products. The problem that has been determined will be determined by the specified target. This study aims to determine the importance of applying the innovation of tofu products and tofu sales information systems in business activities. The results showed that there are 3 important things that must be owned by an entrepreneur to be able to innovate, among others: the desire to improve products, services, and entrepreneurial actions. The information system will build a compilation of information patterns that are developed. Business operators must agree on who sends information and receives information. This activity occurs in the exchange of messages in the media information system. Information that is interrelated will cause feedback from the sender and response from the recipient of the message.*

**Keywords:** SMEs, Inovation, Information System

**1. INTRODUCTION**

Micro, Small and Medium Enterprises (MSMEs) are the driving force of economic development. The role of MSMEs in the economy can be demonstrated through the contribution of productivity generated by MSMEs to the GRDP. The strategic role in the economy is in line with the increasing number of MSMEs each year. The high contribution and the increasing number of MSMEs will have a major impact on improving the economy. One of the regencies / cities in Central Java, namely the City of Magelang from the MSME sector, was able to contribute to The Gross Regional Domestic Product (GRDP) of 53.3% of the total GRDP of the City of Magelang, with the number of MSMEs in the City of Magelang reaching 5,000 MSMEs spread across 3 (3 three) District. The role of micro businesses in the city of Magelang is very effective in strengthening the regional economy if it can be managed properly. The village of Trunan located in the District of South Magelang is an area that has the largest MSME producer of tofu products in the City of Magelang. Tofu entrepreneurs in the village of Trunan reached 62 business units and absorbed a workforce of up to 261 people. Compared to other tofu-producing regions, Trunan Village is in first position, second is Kampung Tidar Campur with 31 units of tofu business units, and third is in Kampung Tidar Baru with 17 units. The distribution of MSMEs engaged in the tofu product processing industry in Magelang City is spread in these three regions. The quality of tofu from the production in Trunan Village is well known even outside of the city of Magelang. The scope of marketing of the tofu product in Trunan Village reaches DI Yogyakarta Province. Potential tofu business potential is reflected in the large number of business units, absorption of the workforce, and the marketing scope of the UMKM (Kuncoro, 2008).

\*Corresponding author. Email address: jaluaji@untidar.ac.id

This condition is in line with the results of Alimudin's (2015) Small And Medium-Sized Businesses (SMEs) are able to make a significant contribution in driving Indonesia's economic growth. This is due to the absorption of SMEs to a very large workforce and close to the small people in (Sripo, 2010). Trunan Village as a center for UMKM tofu products can play a bigger role when tofu production activities are developed with the current economic conditions. Current economic conditions are reflected in the consumption activities of people who have diverse tastes. To meet these needs, producers are required to produce products that innovate. Factors that influence the development of MSMEs are innovations that follow the market needs (Hartini, 2012). Innovative products are products that will be able to compete and become the market leaders of the types of businesses that they do. In addition, innovations carried out by SMEs will have an impact on the sustainability of their business activities (Ernani, 2010).

Tofu products produced in Trunan Village, Magelang City have better quality than tofu production elsewhere. This is certainly a good initial capital to be developed into other processed tofu products. In the midst of the success of knowing the production of Trunan Village, it turns out that there are problems faced by tofu entrepreneurs there. The problem faced by SMEs in the Trunan Village, Magelang City, is the lack of product innovation from their products. The SMEs, especially tofu producers in Trunan Village, Magelang City, do not understand the importance of innovation in their production. The conventional perspective has an impact on people's perceptions of tofu only made into ordinary food. Other regions, such as Batu City in Malang, East Java, are producing apples as a local specialty when apples can be made into various types of processed foods, thanks to the ideas and innovations of apple producers. This certainly contrasts with tofu that has good quality in Trunan Village, but does not have innovative ideas to develop it into various types of processed foods that can increase the value of the typical tofu Trunan village.

Another problem faced by MSMEs in Trunan Village, especially tofu producers in developing their business is the sales information system of tofu products. The conventional sales system has many weaknesses and is less than optimal in making a profit. Sales of tofu products that do not innovate are only done in traditional markets and stalls around the village and are less developed in terms of information that can be obtained by consumers. This will certainly have an impact on constant moving revenue. The importance of marketing information media will support increased production, diversification of tofu derivative products and the number of tofu products marketed (Siswanto, 2018). Increasing the use of information technology will make producers more competitive (Apulu & Latham, 2011). One of the successful industrial activities in increasing the use of information technology to improve business services is the banking industry (Adeosun, Adeosun, Adetunde, & Adagunodo, 2008). Through the application of information systems, the cycle of production activities will have an impact. Thus, it is felt very important for MSMEs to implement information systems in an effort to improve their production capabilities.

This community service has the aim to help the problems faced by the service area. First, this activity aims to help the community in Trunan Village to be able to innovate the resulting tofu products. Bearing in mind, the initial capital in the form of tofu quality produced in Trunan Village is quite good. Innovation is needed in order to create a new paradigm of processed tofu which is not merely an ingredient of basic needs. But also can be used as light processed food products with high selling value. Second, the purpose of community service is to increase literacy in the village of Trunan as a tofu producer to implement information systems in the sale of tofu products. The implementation of the sales information system can have a systemic impact on the production cycle from how to obtain raw materials to selling products.

Problems that occur in the production of tofu is the lack of product innovation and sales systems, it takes a massive innovation by tofu producers, and tofu sales information systems in order to increase the value added of tofu. The description of the problem described earlier will set the absolute target that must be met. The measurability of the community service activities will be very useful when it will see the success of the implementation of community

## **ANALYSIS OF SMEs COMPETITIVENESS THROUGH THE INNOVATION STRATEGY AND PRODUCT SALE INFORMATION SYSTEM IN THE TRUNAN VILLAGE, MAGELANG CITY**

service programs that are carried out. Problems related to product innovation will be prioritized in the development of derivative products from tofu in Trunan Village. The form of innovation can be tofu processing into a form of snack food. Community service activities provided in the form of tutorials for the community in Trunan Village in producing products derived from tofu produced by the community. The expected outcome of this program is that people in Trunan Village are able to produce tofu products and their product innovations in the form of derivatives from tofu. The community will take part in a series of training activities to be able to produce product innovations so that the community in Trunan Village has a variety of processed tofu products. Through these activities it is expected to produce an outcome for producers in the form of an increase in community welfare through the mechanism of increasing community income.

The problem of uncompetitive product marketing will be dealt with by the application of tofu product sales information systems in Trunan Village. Community service activities carried out in the form of an introduction to the form of sales information systems through media that are affordable but have a major impact on the MSME production chain. The community of Trunan Village as the economic activator of the City of Magelang was given a tutorial in the media access information system of tofu product sales and product innovation from tofu. Sales information systems not only provide benefits in marketing ease but up to the production process which will increase because sales of tofu products and tofu product derivative innovations are increasing thanks to the applied sales information system. Thus, the economic capacity of the community will be affected towards a better.

Previous research that was used as a reference in this community service was related to innovations in SMEs. Hall, Lotti, & Mairesse (2009) in their research found that innovation in manufacturing micro small businesses in Italy has an impact on productivity. This research was conducted in manufacturing SMEs in Italy from 1995-2003. Hall, Lotti, & Mairesse (2009) produce a built-in model for information systems innovation that will be applied in these small and medium-sized businesses. Ernani's research (2010) concerning the effect of creativity and innovation on the entrepreneurial attitudes of SMEs. The purpose of this study is to determine the sustainability of SMEs because of the entrepreneurial attitude they have. The results showed that the innovations carried out took the form of; 1) creativity and innovation stimulation affect the entrepreneurial attitude of SMEs, 2) partial creativity influences community entrepreneurship, 3) innovation variables affect entrepreneurship of SMEs, and 4) innovation variables have a big impact on entrepreneurship.

Branzei & Vertinsky's (2006) research examines how MSEs strategies in selecting strategies to determine the conceptual business, business development, product introduction, and commercialization of new products. The study was conducted by classifying SMEs based on their ability and the results of empirical tests related to how the different strategies used by SMEs to produce innovative products. The research results are divided into two findings, first: the ability of SME innovation is known based on the type of product produced. Second: the research findings in the form of efforts to innovate strategies in SME activities in the property sector, namely by making acquisitions, transformation, and capacity building.

Research related to marketing information systems is based on several studies. Such research (Apulu & Latham, 2011) identifies the use of Information and Communication Technology (ICT) in Micro Small Enterprises (SMEs) in Nigeria and reveals that the key to the successful use of ICT adopted by SMEs in Nigeria provides benefits, satisfies consumers and saves time and cost. The results show that the use of ICT in SMEs in Nigeria can help businesses in the process and convey information, communicate with consumers and work partners, and so can assist them in the development process.

Research Jauhari (2014) is related to efforts to improve the competitiveness of SMEs in order to obtain export opportunities and other business opportunities by utilizing the development of Information and Communication Technology (ICT), especially e-commerce. Not only using the internet as a tool to make proposals or find business opportunities, but also must be balanced with good administrative management through the right software. Website

and e-commerce development needs to be done as a means for promotion and marketing of business products, so that it will increase sales volume and increase revenue.

Siswanto (2018) conducted research related to the optimization of social media as a marketing medium for small and medium businesses. Siswanto's research results show that social media as an Integrated Marketing Communication (IMC) is able to provide a competitive advantage for SMEs. Utilization of information technology is a must for SMEs in order to survive amid competition. SMEs as the basis for people's economic strength must be able to market products through more innovative media. So that SMEs can access the system, it is necessary to increase the understanding of SMEs in the use of social media as marketing media.

Previous research literature has been the foundation of thought in community service activities in Trunan Village as a conventional year product-producing area. The framework is structured to solve problems faced by business actors. All SMEs in Trunan Village produce conventional tofu products, no derivative products have been developed in order to create added value. The use of information systems is offered to businesses in order to market their products to a wider market. The expected consequence is there is an increase in product innovation when the use of sales information systems is applied.

## **2. LITERATUR STUDY**

Previous research that was used as a reference in this community service was related to innovations in SMEs. Hall, Lotti, & Mairesse (2009) in their research found that innovation in manufacturing micro small businesses in Italy has an impact on productivity. This research was conducted in manufacturing SMEs in Italy from 1995-2003. Hall, Lotti, & Mairesse (2009) produce a built-in model for information systems innovation that will be applied in these small and medium-sized businesses. Ernani's research (2010) concerning the effect of creativity and innovation on the entrepreneurial attitudes of SMEs. The purpose of this study is to determine the sustainability of SMEs because of the entrepreneurial attitude they have. The results showed that the innovations carried out took the form of; 1) creativity and innovation stimulation affect the entrepreneurial attitude of SMEs, 2) partial creativity influences community entrepreneurship, 3) innovation variables affect entrepreneurship of SMEs, and 4) innovation variables have a big impact on entrepreneurship.

Branzei & Vertinsky's (2006) research examines how MSEs strategies in selecting strategies to determine the conceptual business, business development, product introduction, and commercialization of new products. The study was conducted by classifying SMEs based on their ability and the results of empirical tests related to how the different strategies used by SMEs to produce innovative products. The research results are divided into two findings, first: the ability of SME innovation is known based on the type of product produced. Second: the research findings in the form of efforts to innovate strategies in SME activities in the property sector, namely by making acquisitions, transformation, and capacity building.

Research related to marketing information systems is based on several studies. Such research (Apulu & Latham, 2011) identifies the use of Information and Communication Technology (ICT) in Micro Small Enterprises (SMEs) in Nigeria and reveals that the key to the successful use of ICT adopted by SMEs in Nigeria provides benefits, satisfies consumers and saves time and cost. The results show that the use of ICT in SMEs in Nigeria can help businesses in the process and convey information, communicate with consumers and work partners, and so can assist them in the development process.

Research Jauhari (2014) is related to efforts to improve the competitiveness of SMEs in order to obtain export opportunities and other business opportunities by utilizing the development of Information and Communication Technology (ICT), especially e-commerce. Not only using the internet as a tool to make proposals or find business opportunities, but also must be balanced with good administrative management through the right software. Website and e-commerce development needs to be done as a means for promotion and marketing of business products, so that it will increase sales volume and increase revenue.

## **ANALYSIS OF SMEs COMPETITIVENESS THROUGH THE INNOVATION STRATEGY AND PRODUCT SALE INFORMATION SYSTEM IN THE TRUNAN VILLAGE, MAGELANG CITY**

Siswanto (2018) conducted research related to the optimization of social media as a marketing medium for small and medium businesses. Siswanto's research results show that social media as an Integrated Marketing Communication (IMC) is able to provide a competitive advantage for SMEs. Utilization of information technology is a must for SMEs in order to survive amid competition. SMEs as the basis for people's economic strength must be able to market products through more innovative media. So that SMEs can access the system, it is necessary to increase the understanding of SMEs in the use of social media as marketing media.

Previous research literature has been the foundation of thought in community service activities in Trunan Village as a conventional year product-producing area. The framework is structured to solve problems faced by business actors. All SMEs in Trunan Village produce conventional tofu products, no derivative products have been developed in order to create added value. The use of information systems is offered to businesses in order to market their products to a wider market. The expected consequence is there is an increase in product innovation when the use of sales information systems is applied.

### **3. RESEARCH METHODOLOGY**

The research was carried out using the method of field observation, lectures, tutorials, and discussions with the public. The initial stage carried out in the activity at the service location is a field observation that aims to determine the condition of the problem at the service location to the community. Observations were made in the Trunan village of tofu craft community groups. The purpose of field observations is to determine the condition of the existing area that will be a location of service. The results found from the field observations are tofu entrepreneurs in Trunan Village in tofu production activities only produce one type of product, namely consumption tofu. Meanwhile, marketing of tofu products is done conventionally through traders who bring the results of tofu production to traditional markets.

The second step is the lecture, participants are given a general description material about product innovation and motivation to have creative innovation ideas in their business activities, especially tofu production. The lecture was given to tofu craftsmen in Trunan Village to provide an overview of the importance of innovating tofu products as well as modernizing the marketing system. Tofu product innovation can be in the form of tofu walik, tofu contents, meatball tofu, round tofu, tofu chips, and other derivative products from tofu. The product is offered to the community in Trunan Village as a reference for residents who want to pursue business activities in the form of products derived from tofu.

The third method is a tutorial, where training participants are given Sales Information System material as an illustration of the application in their business. The tutorial given to the community of tofu craftsmen in Trunan village is filled with material on how to sell processed tofu products through the help of sales information systems. Like social media, the information system can help tofu producers to expand their market reach for the sale of tofu and processed products for the year. In this digital age, the use of social media is very effective when used as a medium for selling, especially to the public. The fourth step is a discussion to the public, training participants are given the opportunity to discuss issues related to product innovation and information systems for selling MSME products. Discussions with tofu craftsmen in Trunan Village aim to measure the ability of tofu producers after receiving training in innovation and the use of sales information systems. Through this activity, the program that has been carried out can be evaluated in relation to the community's understanding of the activities that have been carried out.

### **4. RESULT AND DISCUSSION**

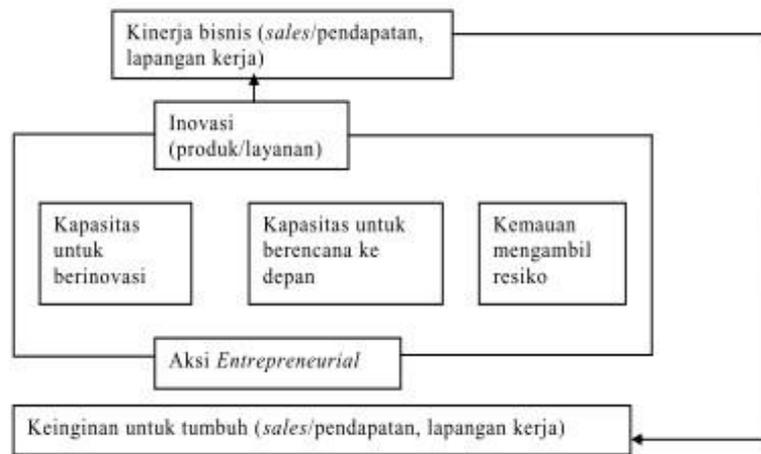
#### **Innovation Strategy in Tofu Product Development in Trunan Village**

Tofu producers in Trunan Village, Magelang City have weaknesses in the innovation of tofu products produced. These weaknesses make tofu production activities not increase in

production. The fixed level of production will have an impact on the income of tofu craftsmen. Community income tends to be fixed. On the other hand, tofu products produced by the people in Trunan Village have good quality tofu. These results become a strength for tofu producers if they will improve their results through tofu product innovation.

Building strengths sourced from within is a step towards creating competitive entrepreneurs. The community of Trunan Village has strength which comes from the conditions in its business activities. The strength is in the form of a good quality product and can be made in the form of other processed tofu. Building entrepreneurial spirit is a challenge in community service activities. Convincing the intention that working hard will give optimal results is the initial effort taken so that the community is aware of this important matter.

Figure 1. Entrepreneurial Process, Innovation and Business Performance



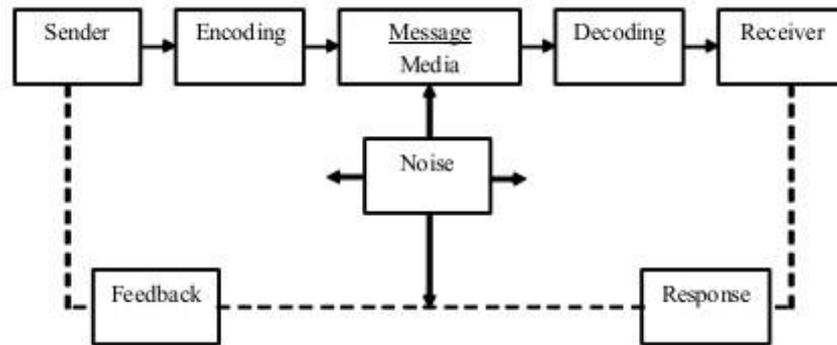
The step taken is the introduction and motivation for business people related to product innovation that can increase public income. There are 3 important things that must be owned by an entrepreneur to be able to innovate, among others: the desire to improve business performance, product / service innovation efforts, and entrepreneurial action. The desire of a producer to improve business performance is the basis that must be thought by business actors. Improved business performance will result in increased producer income. That is, increased welfare will be achieved. Secondly, efforts to innovate produl / services, namely the desire to innovate the products / services produced by businesses. Third, entrepreneurial action is a concrete step to realize the desire of producers to innovate.

### **Information System Implementation as a Means to Increase Sales**

The information system that has not yet been developed in the tofu business group in Kampung Turunan is one of the findings in this service. To build information systems in business activities, several things need to be considered in order to create an information system network. Business actors must determine who is the sender of information and the recipient of the information. These activities take place in the exchange of messages in the media information system. The interconnected information will cause feedback from the sender and response from the recipient of the message. Thus, the information system will be built through the information system roadmap

## ANALYSIS OF SMEs COMPETITIVENESS THROUGH THE INNOVATION STRATEGY AND PRODUCT SALE INFORMATION SYSTEM IN THE TRUNAN VILLAGE, MAGELANG CITY

Figure 2. Business Information Systems



Implementation of information systems becomes very important when undergoing business activities / business in the current era. Consumers have used their gadgets to buy goods and services without having to meet with the seller. One of the most effective buying and selling media for marketing production is social media Instagram. The Trunan village community is equipped with information system materials and their uses. The aim is for the community to be able to become entrepreneurs who are able to compete in the digital era as it is today. The use of sales information systems will certainly bring a systemic impact in the form of increased production, the desire to innovate products / services, increased production quality and other impacts.

### 6. CONCLUSION

The conclusion drawn from the community partnership (PKM) activity is to increase knowledge for the SMEs of tofu producers in Trunan Village. In this study, there is an interesting phenomenon in the field, namely a lack of understanding by MSME producers knowing about the importance of applying the innovation of tofu products and tofu sales information systems in their business activities, not yet able to know the SMEs of tofu producers in making the innovation of processed tofu products and applying the information system of selling tofu product sales in order to increase the value of tofu and the benefits generated, so that it impacts on their well-being, as well as the level of knowledge that is still lacking.

### References

- Adeosun, O. O., Adeosun, T. H., Adetunde, I. A., & Adagunodo, E. R. (2008). Strategic application of information and communication technology for effective service delivery in banking industry. *Proceedings of the 2008 International Conference on Computer and Electrical Engineering, ICCEE 2008*, 135–140. <https://doi.org/10.1109/ICCEE.2008.194>
- Alimudin, A. (2015). Peningkatan Daya Saing Produk Konveksi Usaha Kecil Berbasis IPTEK Desa Tri Tunggal Kecamatan Babat Lamongan. *Prosiding Seminar Nasional Teknologi Terapan SV UGM*, 64–68.
- Apulu, I., & Latham, A. (2011). Drivers for Information and Communication Technology Adoption: A Case Study of Nigerian Small and Medium Sized Enterprises. *International Journal of Business and Management*, 6(5). <https://doi.org/10.5539/ijbm.v6n5p51>
- Branzei, O., & Vertinsky, I. (2006). Strategic pathways to product innovation capabilities in SMEs. *Journal of Business Venturing*, 21(1), 75–105. <https://doi.org/10.1016/j.jbusvent.2004.10.002>
- Ernani, H. (2010). Kreativitas dan Inovasi Berpengaruh Terhadap Kewirausahaan Usaha Kecil. *Jurnal Manajemen Dan Kewirausahaan*, 13(1), 8–16. Retrieved from <http://ced.petra.ac.id/index.php/man/article/view/18240>

- Hall, B. H., Lotti, F., & Mairesse, J. (2009). Innovation and productivity in SMEs: Empirical evidence for Italy. *Small Business Economics*, 33(1), 13–33. <https://doi.org/10.1007/s11187-009-9184-8>
- Hartini, S. (2012). Peran Inovasi: Pengembangan Kualitas Produk dan Kinerja Bisnis. *Jurnal Manajemen Dan Kewirausahaan*, 14(1), 82–88. <https://doi.org/10.9744/jmk.14.1.83-90>
- Jauhari, J. (2014). Upaya Pengembangan Usaha Kecil Dan Menengah (Ukm) Dengan Memanfaatkan E-Commerce. *Jurnal Sistem Informasi*, 2(1), 159–168. <https://doi.org/2355-4614>
- Siswanto, T. (2018). Optimalisasi Sosial Media Sebagai Media Pemasaran Usaha Kecil Menengah. *Journal Liquidity*, 2(1), 80–86. <https://doi.org/10.32546/lq.v2i1.1>