

Can Small and Medium Enterprises Survive in MEA 2025: A Case Study of Agro-industry SMEs in Indonesia

Novi Haryati^{a*}
Apichaya Lilavalicakul^b
Moch. Adi Surahman^c

^aDepartment of Agricultural Social Economics, Faculty of Agriculture, University of Brawijaya, Malang, Indonesia; ^bDepartment of Agroindustrial Technology Management, Kasetsart University, Bangkok, Thailand; ^cFaculty of Communication Science, University of Brawijaya, Malang, Indonesia

Abstract

Food processing agro-industry is a creative industry which immensely contributes to economic development, employment, and Gross Domestic Product (GDP) in Indonesia. Competitiveness is a combination of successful inside and outside of Small Medium Enterprise. Thus, this research aims to 1) get an overview related to the SME food sector and its competitiveness, and 2) understand the influence of entrepreneurial marketing and government policy to Tempe (soybean-cake) chips SME's competitiveness by using Structural Equation Model (SEM) toward MEA 2025. This quantitative research is using 64 soybean cake chips entrepreneurs as a sampled purposively. Data analyzed with Entrepreneurial Marketing concept in 7 dimensions, and SEM PLS to understand the relation between the important factors in developing the SME market. The result shows that the government policy is insignificant, influential policy but the effect is inconsiderably significant because there is technological assistance which is not targeted yet. Regarding capital, the craftsmen prefer using their owned-capital. The entrepreneurs expected for focusing on the service quality, raising the selling price while maintaining the quality, and innovating their business to have a different character than competitors. Good relationships with consumers must be maintained so that the loyalty customer can achieve.

Keywords

Agroindustry; Competitiveness; Entrepreneurial Marketing; Soybean-cake Chips

Received: 13 May 2019; Accepted: 20 June 2019 Published Online: 30 August 2019

DOI: 10.21776/ub.apmba.2019.008.01.1

Introduction

Competitiveness is the purpose of MEA 2025. It is a continuation of MEA 2015 which aims to make the ASEAN economy increasingly integrated and cohesive; competitive and dynamic; increased connectivity and sector cooperation; tough,

inclusive, oriented and community-centered; and global ASEAN. There are 4 main pillars in MEA 2025, namely: a single market and production base, a highly competitive economic zone, a region with equitable and equitable economic development; and Regions that are integrated with the global economy.

The ASEAN Economic Community (MEA) pillar is a form of cooperation to deepen and expand economic integration in the ASEAN region and with regions outside ASEAN. One market and production base in Indonesia is based on industrialization in agriculture (Setnas, 2017).

Entrepreneurs of Tempe chips have experienced difficulties in the lack of skills in dealing with production risks (Irawan, Santoso, & Mustaniroh, 2017), soybean raw materials that are of poor quality and low technology (Wibowo, 2017), marketing (Mindarti & Anggoro, 2016) and capital (Listyaningtyas, 2010). In marketing, not all industries can carry out promotions through print, electronic, or internet media, issues of accessibility or affordability in marketing or distributing products that require more costs and adequate means of transportation, unequal marketing because some industries lack tempe chips. innovative and creative in concocting their products, so they are less desirable in the market (Yusriansyah, 2012). Besides, entrepreneurs have not made efforts to maintain their business by creating product innovations, offering better quality and maintaining customers and improving services (Dwicahyo, 2012). SWOT analysis shows that Internal Factors are influenced by good managerial ability, however, tempe chip entrepreneurs are still not customer-oriented. The external factor is derived from the many opportunities owned by Tempe Sanan Chips SMEs to develop due to support from the Government. However, there are still threats, including incompatible government support such as LPG gas conversion and also threats from a very competitive market. Government support for the creation of fair trade and welfare of entrepreneurs is needed (Haryati, Surahman, Kurniawan, & Amalia, 2018)

Entrepreneurial Marketing is a set of processes to create, communicate and provide value to customers and to manage customer relationships in a way that benefits the organization and stakeholders (Kraus, 2010) it is also an organizational

function and, and it has the characteristics of innovativeness, risk-taking, proactiveness, and maybe done without controlled resources (Moral et al, 2010), According to Kotler & Armstrong (2012) in the early stages, when a company is small, flexible and willing to experience new things, a type of informal marketing is practiced and this will become Entrepreneurial Marketing. The emergence of the concept of entrepreneurial marketing is a response from several research results that show a mismatch between traditional marketing theory and marketing practices in small and medium-sized businesses, or SMEs (Ionita 2012). The purpose of this research is to get an overview related to agribusiness-based food sector SMEs and understand the influence of entrepreneurial marketing and government policy to *tempe* chip SMEs' competitiveness in Malang Indonesia: a structural equation modeling approach.

Methodology

This research is categorized as explanatory research, aimed at explaining the causal relationship between variables through hypothesis testing (Solimun, 2007). It uses probability sampling method with simple random sampling (Solimun, 2017). This research was conducted at the Sanan *Tempe* Chips in Malang from March to May 2018. The number of respondents is 64.

To analyze the second problem related to the factors that provide the strongest relationship of the seven dimensions at the center of the Sanan *Tempe* Chips SME is done by looking for the relationship between endogenous variables (7 EM variables), government policies and competitiveness (Morris, Schindehutte & LaForge, 2002).

Data

This study involved quantitative research. Secondary information was gathered from related concepts, theories, and the literature. Primary

information was sourced using a closed-ended questionnaire to gather the information from representative samples. The Warp PLS Version 5.0 software programs were used to interpret and assess the causal influences. This study used one independent variable (SMEs' competitiveness) and two dependent variables (entrepreneurial marketing and government policy). This research uses 60 respondents as the sample. Warp PLS could be used for sample size that is quite small (Solimun, 2017), The closed-ended questionnaire was divided into four sections: (1) general information; (2) entrepreneurial marketing; (3) government policy; and (4) operating results. The population and samples of the study were the owners of *Tempe* chip small-medium enterprise in Malang Indonesia.

Analysis Method

The analysis method is using Structural Equation Modelling (SEM) with Warp PLS 5.0 software. According to Solimun (2017) some stages to analyze are as follow:

1. Conceptualization of the model, to determine indicators, reflective and normative
2. Determine the method of algorithm analysis (outer model)
3. Determine the method of algorithm analysis (inner model)
4. Determine the resampling method
5. Draw a path diagram
6. Evaluate the model

While the characteristics of PLS-SEM data that make it special are there is no robust data is incomplete (missing values), can work with missing values max 15% of total observations or 5% of the indicator. PLS-

SEM Can estimate with small data (35-50), data > 250 estimations is getting more precise. It does not require nonparametric data distribution assumptions, can work with abnormal data in the extreme. The benefit of PLS-SEM is its measurement scale: metric, ordinal, binary/dummy scale (for exogenous variables), the endogenous variable is limited.

Hypothesis

H1: Entrepreneurial marketing has a positive and significant effect on Competitiveness of *Tempe* Chip SME

H2: Government policy has a positive and significant effect on Competitiveness of *Tempe* Chip SME

Results and Discussion

Profile Variable

There was a decrease in the *tempe* chips industry, due to soaring soybean prices which hampered the supply of raw materials in the form of *tempe* which in 2007 still reached 80-90 *Tempe* chips industry, in 2010 it decreased to 65 *tempe* chips. *Satan* is one of the areas in Malang City which is famous for its *tempe* chips manufacturing industry. The majority of residents living in the *Sanan* area produce *tempe* chips. This is what makes the *Sanan* area dubbed the industrial village of *tempe* chips. Not only men who run the *tempe* chips business in *Sanan*, but many women produce *tempe* chips. The resulting turnover also varies, ranging from one million to tens millions rupiah per month. Overall, the turnover obtained is around Rp. 4,000,000 per month. The following are some of the respondents who participated in this study can be seen in table 1.

Table 1. Respondents

No.	Sex	Amount	Revenue average
1.	Male	36	4.000.000/ months
2.	Female	28	
Total		64	

Source: Primary data processed, 2018

Based on the data in Table 1, it shows that the total respondents in this study were 64 people with a combination of 36 men and 28 women. The average turnover generated by respondents in the *Tempe Chips Sanan UMKM* per month is Rp. 4,000,000. A large number of people who produce *tempe* chips results in high competition among producers, given a large number of people who produce *tempe* chips. Not a few of the *tempe* chips producers also work together with a typical Malang souvenir shop in terms of marketing. This, of course, will also have an impact on the opportunities and threats that will be faced by fellow producers of *tempe* chips.

Education level, experience within the business and age are very important variables to conduct the business. Among 70% of business owner are high school graduates and the rest of them (30%) are university graduates. Result of research has shown that 90% of them has been within the business of almost more than 15 years, while the rest of them (10%) has been within the business below 10 years. The last number of 10% shows that they are the second generation within the family business. They have been trained well to continue the business while the first generation retired. Although they have retired the first generation of the business has continually assisted with the second generation. Most of the business owner is about 30 to 45 age (78%) while the rest of them are about more than 45 age. By having a good education level, experience and age they try to manage their business as good as possible because this activity has been their first income (95%). Only 5% of them think

the business owner of *tempe* chip industry is a side job. This is a group of people who has a big business located near the big road.

SEM Analysis with SmartPLS

Entrepreneurial Marketing (EM) has 7 sub-variables, Government policies have 4 sub-variables and Competitiveness has 4 sub-variables. All of them is formed by reflective variables. The relation between EM and government policy can be seen in Figure 1.

Outer Model Evaluation

Evaluation of the outer model is done to determine the relationship of each latent variable with its indicators. Evaluation of the outer model can be done on indicators that are formative or reflective. There are differences in the criteria for evaluating the second outer model. In this study, only the outer model evaluation on reflective indicators was carried out because all indicators used were reflexive. Several criteria must be fulfilled in evaluating the reflective outer model. Each criterion will be explained directly with the results of the analysis below:

Validity

Convergent validity

Convergent validity shows loading factors of each indicator. The expected value of the loading factor > 0.7 (Hussein, 2015). The following Figure 1 is the results of the analysis:

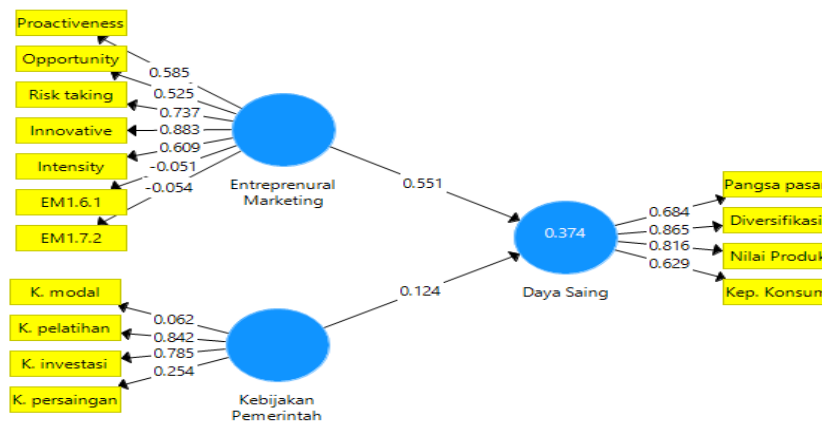


Figure 1. Loading Factor of Each Indicator

From the results of the above analysis, it can be seen that several indicators have a factor loading <0.7 . Indicators that have a loading factor of <0.7 must be dropped or eliminated and re-analysis is carried out. In the Entrepreneurial Marketing variable the indicators that must be dropped are proactiveness, an opportunity focused, customer intensity, while for government policy variables two indicators must be dropped, namely capital facilities policies and business competition regulatory policies. In the competitiveness variable, two indicators must be dropped, namely

the domestic market share and consumer satisfaction with the product. After the drop is done, a re-analysis is carried out to come out with the result.

Figure 2 shows the second analysis, the value of loading factors from each indicator is calculated risk-taking, innovativeness, training facility policy, ease of investment regulation policy, domestic market diversification and product value that meet the criteria of > 0.7 . From the results of the analysis, it can also be concluded that each indicator is valid.

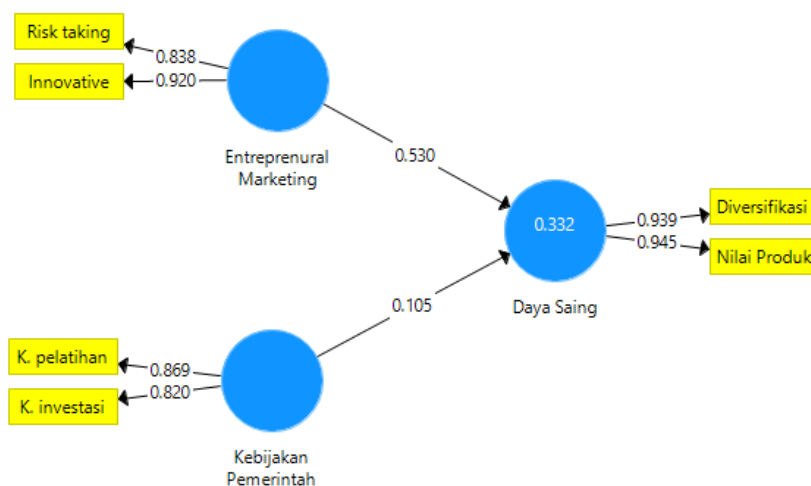


Figure 2. Loading Factor

Discriminant validity

This value is a value of cross loading factor which is useful to find out whether the construct has adequate discriminant. Discriminant validity can be seen in Table

2 below. It is done by comparing loading values to the intended construct must be greater than the value of loading with other constructs (Hussein, 2015). The following is the cross-loading value of the analysis results:

Table 2. Discriminant validity

	Competitiveness	Entrepreneurial Marketing	Government policy
Calculated risk taking	0,409	0,838	0,223
Innovativeness	0,570	0,920	0,394
Investment facility policy	0,269	0,253	0,869
Regulations on ease of investment regulations	0,232	0,371	0,820
Domestic market diversification	0,939	0,517	0,296
Product value	0,945	0,552	0,266

Source: Primary data processed, 2018

Based on the results of the analysis as mentioned in table 2, the expected values of the latent variables with indicators is greater than the other variables. This shows that the criteria for discriminant validity in each indicator are fulfilled and it is acceptable and valid.

Convergent Validity: Average Variance Extracted (AVE)

The next validity test is to look at the value of the AVE and also the square root of AVE. The value of the expected AVE is > 0.5 (Hussein, 2015). Table 3 shows the AVE value of three variables:

Table 3. Result of Average Variance Extracted (AVE)

	Average Variance Extracted (AVE)
Competitiveness	0,887
Entrepreneurial Marketing	0,775
Government policy	0,713

Source: Primary data processed, 2018

Table 4. Results of Comparison of Square Roots AVE

	Competitiveness	Entrepreneurial Marketing	Government Policy
Competitiveness	0,942		
Entrepreneurial Marketing	0,568	0,880	
Government policy	0,298	0,364	0,845

Source: Primary data processed, 2018

The AVE square root value can be seen in table 4. From the results of the above analysis, it is known that the AVE value of each variable has fulfilled the criteria of

Reliability

Reliability testing can be seen from the composite reliability value and Cronbach alpha. According to Hussein (2015), data

more than 0.5 so that it can be said to be valid. The next step is to compare the square root of AVE with the correlation between latent variables in the model.

that has composite reliability of more than 0.7 has high reliability and reliability is also reinforced with a Cronbach alpha value that is more than 0.6. The following table 5 is the results of the analysis of composite reliability and Cronbach alpha:

Table 5. Composite Reliability and Cronbach Alpha

	<i>Composite Reliability</i>	<i>Cronbach Alpha</i>
Competitiveness	0,940	0,873
Entrepreneurial Marketing	0,873	0,716
Government Policy	0,833	0,600

Source: Primary data processed, 2018

Based on the above analysis obtained the composite reliability value for each variable is more than 0.7, whereas in the Cronbach alpha value also obtained a value of more than 0.6. However, the government policy variable has a very low Cronbach alpha value, which is limited to the minimum value. From the results of the analysis, it can be concluded that the three variables are reliable.

Inner model evaluation

Evaluation of the inner model is done by looking at the value of the coefficient of determination (R^2), and the Cohen effect

(f^2). The following are the results of each analysis:

The coefficient of determination (R^2)

The R^2 value is used to find out how much exogenous variables can explain endogenous variables. The results of the analysis in the table below show the results of R^2 of 0.332. This means that the entrepreneurial marketing variables and government policies can explain the competitiveness variable by 63.2% and the remaining 36.8% is influenced by other variables outside the research model.

Table 6. Coefficient Determination

	R Square
Competitiveness	0,632

Source: Primary data processed, 2018

Cohen effect (f^2)

The results of f^2 in table 6 shows that the value of f^2 for all lines. The value f^2 can be used to assess the influence of certain independent latent variables on dependent

latent variables so that they have a substantive effect. The value f^2 is considered to have small, medium and large influences at the structural level if it shows sequentially around 0.02, 0.15 and 0.35.

In this research model, it can be seen that the value of f^2 in the entrepreneurial marketing variable is 0.364. This shows that the entrepreneurial marketing variable has a large influence on competitiveness

variables because it has a value of f^2 close to 0.35. Whereas for government policy variables have a small influence on competitiveness because it has an f^2 value of only 0.014 which is close to 0.02.

Table 7. Cohen Effect

	Effect Cohen (f^2)
Entrepreneurial Marketing	0,364
Government Policy	0,014

Source: Primary data processed, 2018

Hypothesis Testing

This stage is done to find out the research hypotheses proposed in the research model are accepted or rejected. In this study using an error rate of 10% ($\alpha = 0.10$). Hypothetically, If the significance value or p-value is less than α then it is considered

significant. In PLS, testing each relationship is done using a simulation with the bootstrapping method of the sample. This test aims to minimize the problem of research data abnormalities. The results of hypothesis testing on the model can be shown in table 8 below:

Table 8. Variable effect

	Path Coefficient	T statistics	P-value	
Entrepreneurial Marketing → Competitiveness	0,530	5,202	0,000	Significant
Government policy → competitiveness	0,105	0,854	0,394	Not significant

Source: Primary data processed, 2018

Results and Discussion

Based on the results of the analysis above it can be concluded that for the entrepreneurial marketing variable it has a path coefficient of 0.530 and is significant because it has a p-value of less than 0.1. This means that the entrepreneurial marketing variable has a positive contribution and direct effect on competitiveness by 53%. The higher improvement of the entrepreneurial marketing that is possessed by the business owner, the higher competitiveness industry will be in the future. This is supported by the result of research that capacity of entrepreneurial skill is the most important thing to be managed (Dwicahyo, 2012; Haryati, et. Al, 2018).

While for the government policy variable the path coefficient value is 0.105 and is not significant because it has a p value > 0.1. This means that government policy variables have a positive contribution to the competitiveness of only 10.5%. Government policies are insignificant because the assistance provided by the government has not been fully targeted, so it does not have too much contribution in the business being carried out and also many entrepreneurs from *Tempe* chips do not borrow capital from banks or other government agencies.

This result has been supported by evidence in July 2013, with the government raising the price of fuel oil (BBM) greatly impacted on the business of Sanan Kripik

Malang in great decreasing income. This was acknowledged by the Chairperson of Primkopti Bangkit Usaha Sanan Chairul Anwar, "the turnover of Sanan's *tempe* in the past few weeks has decreased to five tons from 15 tons per day" (Dwicahyo, 2012). According to him, the current increase in soybean prices is truly out of the ordinary. The government policy in term of keeping soybean price is also not yet able to help the *Tempe* Sanan Producer. The business owners in Sanan are still in production even though their income is not as much as usual.

Conclusion

The entrepreneurial marketing variable has a positive contribution to competitiveness, while the government policy is not significant. The Government should pay more attention to Small and Medium Enterprises (SMEs) that have become the pillars of life for most people because if the SME sector is destroyed the crisis becomes even more inevitable. The main problem of the Sanan city crispy business in Malang is the problem of raw materials that still rely on imports, so from that the government should strengthen domestic production, especially staple goods so that small and medium enterprises are not too dependent

References

- Dwicahyo, B. (2012). Analisis Strategi Pengusaha Tempe Sanan dalam Mengembangkan Usaha (Studi Kasus pada pengrajin tempe di Sanan Kelurahan Purwanto, Kecamatan Blimbing, Kota Malang). Malang: Universitas Muhammadiyah Malang.
- Ionita D. (2012). Entrepreneurial Marketing: A New Approach for Challenging Times. *Journal of Management and Marketing*.
- Haryati, N., Surahman, M., Kurniawan, M., & Amalia, F. (2018). Entrepreneurial Marketing Strategy on Tempe Sanan Chips SME in
- on foreign countries. To be able to compete for MEA 2025 *Tempe* sanan chip industry needs to develop their entrepreneurial marketing as well as government policy support.
- Notes on Contributors**
- Novi Haryati** is a lecturer and researcher from the Department of Agricultural Social Economics, Faculty of Agriculture, Universitas Brawijaya Malang. Her research and writings are mostly about entrepreneurship and organizational behavior in agroindustry and SME.
- Apichaya Lilavalicakul** is a Lecturer, Department of Agro-Industrial Technology Management, Faculty of Agro-Industry, Kasetsart University. Her research areas are in Food Economics and Marketing, Demand Analysis, Economics of Food Quality, Industrial Organization, Dynamic Optimization and Game Theory.
- Moch. Adi Surahman** is a master student and researcher from Faculty of Communication Science, Universitas Brawijaya Malang. His research is mainly about small and medium enterprise in term of communication and technology.
- Malang. *AFFSSAAE: Advances in Food Science, Sustainable Agriculture and Agroindustrial Engineering*, 34-39.
- Irawan, J., Santoso, I., & Mustaniroh, S. (2017). Model Analisis dan Strategi Mitigasi Risiko Produksi Kripik Tempe. *Industria: Jurnal Teknologi dan Manajemen Agroindustri*, 88-96.
- Kotler, Philip dan Armstrong, Gary. (2012). *Principles of Marketing*. New Jersey: Prentice-Hall.
- Kraus S, Fink M, Rossl D, Jensen SH. (2007). Marketing in small and medium-sized enterprises. *International Business Journal*. 7(3).

- Kraus, S., Harms, R. And Fink, M. (2010). Entrepreneurial Marketing: Moving beyond Marketing in New Ventures. *International Journal of Entrepreneurship and Innovation Management*, 11(1), 19-34.
- Listyaningtyas, D. (2010). Permasalahan Permodalan pada Beberapa Usaha Kecil di Kota Malang. Malang: Universitas Muhammadiyah Malang.
- Mindarti, L., & Anggoro, D. (2016). Peningkatan Daya Saing UMKM Perempuan Melalui Comparative Advantage: Study pada UMKM Keripik Tempe Rohani di Sentra Keripik Sanan Kota Malang. *Journal of Gender Studies Kafa'ah*, 1-12.
- Morish, Sussie C., Miles, Morgan P. And Deacon, Jonathan H. (2010). Entrepreneurial marketing: acknowledging the entrepreneur and customer-centric interrelationship. *Journal of strategic marketing*, 18(4), 303-316.
- Sukowiyono, G., Mulyadi, L., & Nugroho, A. (2018). Perencanaan dan Perancangan Kawasan Sentra Industri Keripik Tempe Kampung Sanan Sebagai Kawasan Wisata Kota Malang. Malang: Institut Teknologi Nasional (ITN) Malang.
- Wibowo, S. (2017). Strategi Perbaikan Kualitas Proses Produksi Keripik Tempe dengan Metode Fuzzy Analytical Hierarchy Process (FAHP) (Studi Kasus Klaster UKM Keripik Tempe Sanan Malang). Malang: Universitas Brawijaya.
- Yusriansyah, M. (2012). Karakteristik Pengusaha Industri Keripik Tempe Berbasis Produk Unggulan di Kota Malang. Malang: Universitas Muhammadiyah .