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Increasing the Competitiveness of Micro, Small and Medium Enterprises of Skin Crackers in Padang City West Sumatra Province Indonesia

Increasing the Competitiveness of Micro, Small and Medium Enterprises of Skin Crackers in Padang City West Sumatra Province Indonesia

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Abstract. Innovation is needed by micro, small, and medium enterprises (SMEs) to grow and survive in an increasingly competitive business competition. However, innovation must be adapted to the existing constraints considering the limited number of employees, total assets, total revenue, and the amount of the budget for innovation. Forms of innovation that can be carried out by a business in an effort to increase its competitiveness include business model innovation, marketing, organization, processes and technology, products, services, and supply chains. Human resources is an important factor in improving the performance and innovation of micro, small, and medium enterprises. This study aimed to design an innovation strategy in accordance with the constraints, human resource capabilities and innovation opportunities in an effort to increase competitiveness. The analysis was done by using the structural equation modelling method with partial least square approach. It was proven that human resources play an important role because they greatly affect the success of both overcoming obstacles and the implementation of innovation.
Keywords: SMEs, Innovation, Human Resources, Strategy

1. Introduction

Economic globalization is recognized as an opportunity for both developed and developing countries to enhance their economic prosperity through improving their participation in the global trade [1]. Rapid technological changes and market globalization have a major effect on the competitive environment for business and create new possibilities to strengthen the development of small and medium enterprises [2]. The level of economic benefits of SMEs from their involvement in domestic trade and global trade or for the survival of SMEs in the era of globalization mainly depends on their respective competitiveness in the global market [3]. The modern knowledge-based economy has applied a variety of financial and production methods, creativity and innovation, expertise and high human resource efficiency. Competition already has a global dimension. Therefore, policies aimed at developing SMEs must be improved by the government, so that SMEs can achieve a competitive advantage.

Like a wise in Indonesia, the role of Small and Medium Enterprises (SMEs) in the economy is quite large at a time when Indonesia is facing the challenges of a prolonged economic crisis. SMEs can be considered as one of the solutions for society to survive the crisis, which is by involving themselves in small business activities, especially those with informal characteristics. The development of SMEs does not only occur in Indonesia, but also in other developing countries in which the role of SMEs will determine their economic growth. SMEs have received increasing policy attention in recent years, especially in third world countries. It is partly because of disappointment over a development strategy that focuses only on capital-intensive, large-scale industrial factories and high import dependence [4].

The contribution of business in Indonesia in 2012 was still dominated by large-scale businesses of 40.92%, micro-businesses of 38.81%, small businesses of 9.68% and medium-sized businesses of 13.59%, while SMEs contributed 7-16% to GDP and the following year it increased to 34.64%. This shows that there is a shift in the proportion of businesses from the Large Business group to the MSME group, where the proportion of MSMEs has become larger, which has contributed to the Gross Domestic Product (GDP) by 60%. This shows that the development of MSMEs continue to increase and is even able to support the national economic growth.

Micro, Small and Medium Enterprises do not only support the economy of Indonesia, but also ASEAN. Data shows that around 88.8% to 99.9% of businesses in ASEAN are MSMEs with employment reaching 51.7% to 97.2% [5]. The rapid development of MSMEs cannot be separated from the role of business owners and supporting factors that are able to survive and compete in the global economy. According to [6], the development of MSMEs is due to the availability of supporting factors that enable MSMEs to continuously operate. These factors include venture capital, entrepreneurial characteristics, and marketing strategies. Even though SMEs are the driving force of the economy, various obstacles are still found in their operations. The development of UKM is not easy, it is often hampered by internal and external constraints. These constraints may be different from one region to another, rural to urban areas, between sectors and, among employers in a sector [7]. According to [8] examined the main constraints of SMEs in Bhutan. He found that business policy and regulatory issues, infrastructure and geophysical constraints, and finance were the main obstacles for the development of SMEs in this country. He also found different constraints in urban and rural areas according to size, sector and ownership [9] investigated the constraints for establishing SMEs in Bangladesh. He found that inadequate infrastructure, lack of financial support, and political instability were major obstacles. According to [10] examined various factors related to entrepreneurial development and entrepreneurial performance in India. He found that the regulatory framework, market conditions, access to finance, R&D and technology-related factors, physical infrastructure, entrepreneurial and marketing capabilities.

Every region in Indonesia has great potential in the development of SMEs, including SMEs for processing livestock products. As in West Sumatra province, it has a lot of livestock processing businesses, both from cattle, goat, poultry and their by-products. The processed commodities produced include beef rendang, lamb rendang, egg rendang, chicken meat rendang, cowhide products in the form of skin crackers and so on. This study analyzed SMEs that process skin crackers made from fresh skin from slaughtered cows. This skin cracker SMEs have grown rapidly, resulting in problems, ranging from the low availability of fresh raw materials, financial constraints, regulatory constraints, to physical technical constraints. Marketing problems are constrained due to pandemic, in which an online marketing system is needed but it has not been mastered by the skin cracker manufacturers. For raw materials, you even have to pivot to get a larger amount of fresh skin. Although imported raw materials in the form of preserved skin can be obtained, they are more expensive and must be purchased in large quantities. In addition, due to the selection of business location that is less strategic, there is no market or network center. Market competition is faced not only from local and national markets, but also from international markets, with the implementation of the ASEAN free market, the Indonesian economy is facing new challenges with the initiation of the Economic Community. ASEAN (MEA) [11].

According to [12], the strength of MSMEs in general is the freedom to act to adapt products to demand, but is constrained by the low quality of human resources. Meanwhile, [13] stated that the general obstacles for MSMEs according to a survey done by the Central Statistics Agency in 2011 included lack of capital, marketing difficulties, intense business competition, difficulty in raw materials, technical production and expertise, lack of managerial skills and accounting skills. Micro, small and medium enterprises (MSMEs) need innovation to survive in the midst of increasingly fierce competition. In addition, MSMEs need innovation to grow and survive. However, the intended innovation must be adjusted to the existing constraints given the limited number of workers, the number of assets, the amount of income and the amount of the budget for innovation. This study wanted to answer how to deal with the obstacles in increasing the competitiveness of MSMEs and prioritizing opportunities for applicable forms of innovation, how to overcome the ability of human resources who are still weak to face global competition and how much human resources affect the competitiveness of products in the market, as well as analyzed the role of human resources in overcoming obstacles and making innovations

to increase business competitiveness. Furthermore, these results were taken into consideration for designing and formulating strategic assumptions so that they can be an innovation strategy that has a significant effect on efforts to increase the competitiveness of the skin cracker business in Padang City.

The ASEAN Economic Community (AEC) Agreement is a new challenge that must be faced by MSMEs. SMEs should not only rely on their comparative advantages but also have a competitive advantage compared to the efforts of the neighbouring ASEAN countries. Therefore, SMEs in Indonesia are expected to continue to innovate. Businesses that are not innovative will be unable to compete with competitors who are always innovating. Innovation can increase company's competitiveness. Innovations include product innovation, service innovation and process innovation [14].

This study wanted to answer how to deal with the obstacles in increasing the competitiveness of MSMEs, prioritizing opportunities for applicable forms of innovation, how to overcome the ability of human resources who are still weak in facing global competition, and how much do human resources affect the competitiveness of products in the market, as well as analyzed the role of human resources in overcoming the obstacles and making innovations to increase business competitiveness. Furthermore, these results were taken into consideration for designing and formulating strategic assumptions so that they can be an innovation strategy that has a significant effect on efforts to increase the competitiveness of the skin cracker business in Padang City. The main objective of this research was to design an innovation strategy to increase the competitiveness of Skin Crackers MSMEs in Padang City. Meanwhile, the specific objectives of this study were to analyze the main constraints in increasing competitiveness, analyze opportunities for forms of innovation in an effort to increase competitiveness, analyze the role of human resources in solving obstacles and make innovations to increase competitiveness and formulate innovation strategies to increase the competitiveness of MSMEs.

2. Materials and Methods

The data analysis method used was structural equation model using the Partial Least Square approach. The analysis method used was descriptive qualitative and quantitative analysis. Data analysis in the study was carried out in four stages, those are:

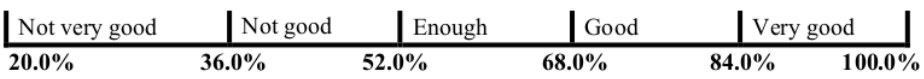
2.1 Analysis of the constraints of the skin cracker business in increasing competitiveness

The first stage is the analysis of constraints in increasing the competitiveness of MSMEs. This activity was carried out to find the obstacles faced that hampered the increasing competitiveness of MSMEs. The constraint variable was taken from tracing the results of previous studies as conducted by [12], [13], [11], [13] and [15] regarding the constraints and key factors that affected the improvement in MSMEs. The obstacles faced are: Marketing, capital, appropriate technology, raw materials, human resources, financial and administrative managerial, location, partnership, inefficient production processes**,** tight competition, promotion, and unplanned waste handling**.** The constraints that were used as questions in the questionnaire were taken in the field as primary data. The respondents involved at this stage were all skin crackers business in Padang City (40 businesses). Respondents described the obstacles they faced by rating them on a scale of 1–5. To find out the criteria for respondent responses, the respondents' responses were divided into 4 categories, which are, Very Bad, Not Good, Good, and Very Good**.** To get the score limit for each category, the following calculations were carried out:

- The maximum index value is: (highest score value x number of respondents x number of questions)
- The minimum index value is: (lowest score x number of respondents x number of questions)
- Interval distance: (maximum index value - minimum index value): number of categories
- Percentage score: (total score according to the questionnaire: ideal total score) x 100%.

Then, the responses are presented at the Maximum as follows.

Continuum Line



2.2 The Analysis of the form of innovation in an effort to increase competitiveness

Furthermore, the data were processed using the partial least squares structural equation modelling of SMARTPLS 2.0. The results of this stage were prioritized on the obstacles faced and the innovations to be carried out as well as the effect of human resources on the obstacles faced and innovations that will be implemented to achieve competitiveness.

2.3 Analysis of the influence of human resources in increasing the competitiveness of skin cracker SMEs Analysis of the role of human resources based on the results of data processing through Partial Least Square (SMARTPLS)

3. Results and Discussion

3.1 Overview of Research Objects

Padang City is a provincial capital, located on the west coast of Sumatra. Socially, Padang City is the center of the provincial government. Padang City is also located at the crossroads of West Sumatra and Riau mainland province. Padang City is a tourist destination because of its beautiful beaches, therefore the demand for culinary products is quite high. There are many SMEs working on culinary products. Padang City is also famous for its worldwide Padang cuisine. Among the available culinary foods, most of them are made from livestock such as egg rendang, chicken rendang, duck meat rendang, beef rendang, mutton curry, pulmonary rendang and various types of jerky. *Rendang* is an authentic Minangkabau dish which is very popular among both domestic and foreign tourists.

One of the many culinary SMEs is the processing of skin crackers, which are typical food from West Sumatra. Skin crackers are very popular with people who usually eat *Lontong* Vegetables, satay and soup. There are quite a lot of skin crackers in Padang City. There are around 70 skin crackers SMEs, but due to the Covid pandemic, the number has decreased since the pandemic makes it difficult to get the raw material for cowhide and the marketing of the products is somewhat choked up. Based on the results of the survey that has been conducted, there were as many as 42 skin crackers SMEs engaged in the processing of livestock products as respondents.

The profile of business actors was at the age range of 29 - 70 years old, who mostly are at the age of 29-43 years old by 45%, 44-59 years old by 36%, and over 59 years old by 16%. The average education level of them is Senior High School by 43%, Junior High School by 32% and Elementary School by 23%. The length of working period in SMEs for processed livestock products is 1 - 10 years, while based on gender, 70% are male and 30% female.

3.2 The Analysis of constraints in increasing the competitiveness of SMEs.

This activity was conducted to find out the obstacles faced which prevented the improvement of the competitiveness of skin cracker MSMEs. The types of obstacles to increase the competitiveness were obtained from tracing secondary data from previous research and tracing related documents. Based on research conducted by [12], [11], [15], [16], [17], [13], and [18]. The constraints based on the research above were proven in the field by conducting interviews using a questionnaire. The views of producers on the constraints of increasing competitiveness, possible innovations and the condition of human resources are presented in Table 1, Table 2 and Table 3.

Based on Table 1, it can be seen that the biggest obstacle faced by skin cracker producers is the availability of raw materials. There are only two indicators that do not significantly hinder the improvement of competitiveness, which are marketing and financial administration. The availability of raw materials is a major problem in the skin cracker business. However, among the 12 indicators that were asked to the respondents, 9 indicators were categorized as enough. Almost all indicators showed the constraints in achieving competitiveness in different degrees. Capital constraints is related to the raw materials that can be obtained, because they have to deposit money as collateral to get the skin. Capital shortage makes it impossible to meet the bail so that fresh skin raw material cannot be obtained. For technology factors, in general, the respondents' answers are quite adequate. The application of appropriate technology such as dryer machine and cutting machines will be able to increase productivity. In general, cutting the skin manually and drying only by drying in the sun during rainy season makes the skin dries up and the quality is low.

Table 1. Responses of Skin Crackers Producers on Obstacles to Increase Competitiveness

No	Indicator	Score			Category
		Total	Score ideal	%	
1	Marketing	459	630	72.86	Good
2	Capital	383	630	60.79	Enough
3	Appropriate technology	398	630	63.17	Enough
4	Sufficient raw material is available	302	840	47.94	Not good
5	Human Resources	510	630	60.71	Enough
6	Financial and administrative managerial	446	630	70.79	Good
7	Location	374	630	59.37	Enough
8	Partnership	477	840	56.79	Enough
9	The production process is less efficient	372	630	59.04	Enough
10	Tight competition	401	630	63.65	Enough
11	Promotion	465	840	55.36	Enough
12	Waste handling	236	420	56.19	Enough

Source: *primary data processing results*

It is necessary to increase the ability of these 9 factors, in order to increase the performance of skin cracker SMEs. The producers' responses to the innovations that should be applied to skin cracker SMEs in order to gain competitiveness are presented in Table 2

Table 2. Responses of Skin Crackers Producers regarding innovations for increased competitiveness

No	Indicator	Score			Category
		Total	Score ideal	%	
1	Business Model Innovations	383	630	60.79	Enough
2	Marketing Innovation	554	840	65.95	Enough
3	Organizational Innovation	401	630	63.65	Enough
4	Production technology innovation	363	630	57.20	Enough
5	Product Innovation	443	840	52.74	Enough
6	Service Innovation	567	840	67.50	Enough
7	Supply Chain Innovation	472	630	74.92	upgraded

Source: *primary data processing results*

Based on Table 2, it can be seen that the six innovations offered that most producers wanted are supply chain innovations. This is related to raw material availability which constraints skin to be obtained. Fresh beef skin supply chain is not all that complicated when viewed from the length of the supply chain, but is heavily associated with the financial capacity of SMEs to guarantee the acquisition of the skin. As for the marketing of half-finished crackers products and ready to eat crackers, each producer has its own market share. More innovation is good enough to be applied in achieving competitiveness.

Producers' responses regarding labor or human resources for increased competitiveness are presented in the Table 3.

Table 3. Producers' responses regarding labor or human resources for increased competitiveness

No	Indicator	Score			Category
		Total	Score ideal	%	
1	Gender	531	840	63.21	Enough
2	Education	315	630	50.00	Not good
3	Age	238	420	56.67	Enough
4	Experience	343	420	81.67	Good
5	Salary Amount	323	420	76.90	Good
6	Training	308	630	48.89	Not good
7	Internet capabilities	243	420	57.86	enough

Source: *primary data processing results*

Based on Table 3, according to the producer, the most important thing in improving the ability of human resources is the level of education and the level of training. This is because in general, the labor

currently owned by SMEs is low-educated, mostly women who take advantage of their spare time, after household work is complete. This activity is carried out to increase the household income.

3.3 The Analysis of innovation in improving competitiveness

This section discusses the identification of models created by the data processing that was evaluated by using SmartPLS and constructs formed. It also explains the effect of the quality of human resources on the constraints of increasing competitiveness and what innovations will be fixed so that increased competitiveness of skin crackers can be achieved. The final results of analysis explain the effect of human resources as exogenous latent variables (X) to the obstacles of SMEs, while the innovation is endogenous latent variables (Y1 and Y2).

3.3.1 Evaluating the outer model

To evaluate the outer model which shows the effect of indicators on latent variables, 5 tests were used, those are the measurement model for validity and reliability tests, the coefficient of model determination, and the multicolinearity test. To form an equation model, the path coefficient was used which can be seen in Figure 1.

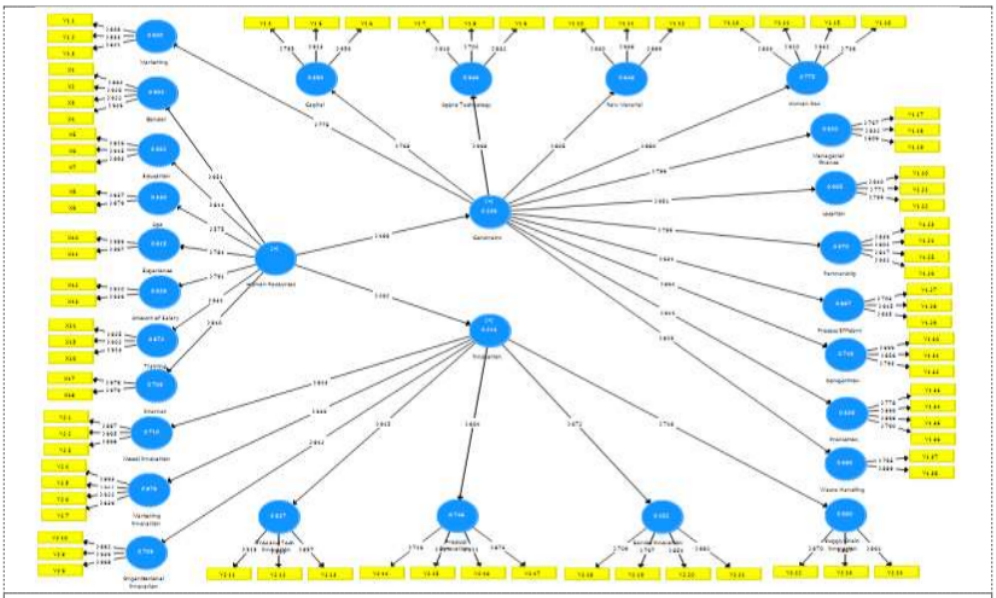


Figure 1. Measurement model (path coefficient)

Validity and Reliability Test

Based on Figure 1, it can be concluded that Table 4. Loading Factor values, Table 5. Discriminant values, Validity, Table 6 Multicolineority and Table 7 Convergent validity and Composite Reliability as follow.

Table 4. Loading factor

Indicator	O-Sample	Crit. Point	Concl.	Indicator	O-Sample	Crit. Point	Concl.	Indicator	O-Sample	Crit.Point	Concl.
	Human resources				Constraint				Organizational Innovation		
X1	0.804	0.5	Valid	Y1.1	0.331	0.5	Valid	Y2.1	0.603	0.5	Valid
X2	0.866	0.5	Valid	Y1.2	0.341	0.5	Valid	Y2.2	0.781	0.5	Valid
X3	0.904	0.5	Valid	Y1.3	0.787	0.5	Valid	Y2.3	0.751	0.5	Valid
X4	0.901	0.5	Valid	Y1.4	0.604	0.5	Valid	Y2.4	0.821	0.5	Valid
X5	0.637	0.5	Valid	Y1.5	0.710	0.5	Valid	Y2.5	0.895	0.5	Valid
X6	0.683	0.5	Valid	Y1.6	0.724	0.5	Valid	Y2.6	0.875	0.5	Valid
X7	0.801	0.5	Valid	Y1.7	0.878	0.5	Valid	Y2.7	0.769	0.5	Valid
X8	0.458	0.5	Valid	Y1.8	0.673	0.5	Valid	Y2.8	0.832	0.5	Valid
X9	0.325	0.5	Valid	Y1.9	0.823	0.5	Valid	Y2.9	0.830	0.5	Valid
X10	0.734	0.5	Valid	Y1.10	0.722	0.5	Valid	Y2.10	0.699	0.5	Valid
X11	0.783	0.5	Valid	Y1.11	0.816	0.5	Valid	Y2.11	0.869	0.5	Valid
X12	0.659	0.5	Valid	Y1.12	0.672	0.5	Valid	Y2.12	0.877	0.5	Valid
X13	0.783	0.5	Valid	Y1.13	0.639	0.5	Valid	Y2.13	0.750	0.5	Valid
X14	0.828	0.5	Valid	Y1.14	0.795	0.5	Valid	Y2.14	0.537	0.5	Valid
X15	0.801	0.5	Valid	Y1.15	0.796	0.5	Valid	Y2.15	0.811	0.5	Valid
X16	0.833	0.5	Valid	Y1.16	0.761	0.5	Valid	Y2.16	0.787	0.5	Valid
X17	0.817	0.5	Valid	Y1.17	0.474	0.5	Valid	Y2.17	0.780	0.5	Valid
X18	0.827	0.5	Valid	Y1.18	0.500	0.5	Valid	Y2.18	0.381	0.5	Valid
				Y1.19	0.810	0.5	Valid	Y2.19	0.558	0.5	Valid
				Y1.20	0.873	0.5	Valid	Y2.20	0.599	0.5	Valid
				Y1.21	0.807	0.5	Valid	Y2.21	0.608	0.5	Valid
				Y1.22	0.701	0.5	Valid	Y2.22	0.851	0.5	Valid
				Y1.23	0.468	0.5	Valid	Y2.23	0.493	0.5	Valid
				Y1.24	0.823	0.5	Valid	Y2.24	0.498	0.5	Valid
				Y1.25	0.469	0.5	Valid				
				Y1.26	0.654	0.5	Valid				
				Y1.27	0.609	0.5	Valid				
				Y1.28	0.878	0.5	Valid				
				Y1.29	0.877	0.5	Valid				
				Y1.30	0.764	0.5	Valid				
				Y1.31	0.753	0.5	Valid				
				Y1.32	0.705	0.5	Valid				
				Y1.33	0.616	0.5	Valid				
				Y1.34	0.880	0.5	Valid				
				Y1.35	0.883	0.5	Valid				
				Y1.36	0.641	0.5	Valid				
				Y1.37	0.548	0.5	Valid				
				Y1.38	0.785	0.5	Valid				

Table 5. Discriminant Validity

Cross Loading					
HRD		Constraint		Org-Innovation	
X1	0.804	Y1.1	0.331	Y2.1	0.603
X2	0.866	Y1.2	0.341	Y2.2	0.781
X3	0.904	Y1.3	0.787	Y2.3	0.751
X4	0.901	Y1.4	0.604	Y2.4	0.821
X5	0.637	Y1.5	0.710	Y2.5	0.895
X6	0.683	Y1.6	0.724	Y2.6	0.875
X7	0.801	Y1.7	0.878	Y2.7	0.769
X8	0.458	Y1.8	0.673	Y2.8	0.832
X9	0.325	Y1.9	0.823	Y2.9	0.830
X10	0.734	Y1.10	0.722	Y2.10	0.699
X11	0.783	Y1.11	0.816	Y2.11	0.869
X12	0.659	Y1.12	0.672	Y2.12	0.877
X13	0.783	Y1.13	0.639	Y2.13	0.750
X14	0.828	Y1.14	0.795	Y2.14	0.537
X15	0.801	Y1.15	0.796	Y2.15	0.811
X16	0.833	Y1.16	0.761	Y2.16	0.787
X17	0.817	Y1.17	0.474	Y2.17	0.780
X18	0.827	Y1.18	0.500	Y2.18	0.381
		Y1.19	0.810	Y2.19	0.558
		Y1.20	0.873	Y2.20	0.599
		Y1.21	0.807	Y2.21	0.608
		Y1.22	0.701	Y2.22	0.851
		Y1.23	0.468	Y2.23	0.493
		Y1.24	0.823	Y2.24	0.498
		Y1.25	0.469		
		Y1.26	0.654		
		Y1.27	0.609		
		Y1.28	0.878		
		Y1.29	0.877		
		Y1.30	0.764		
		Y1.31	0.753		
		Y1.32	0.705		
		Y1.33	0.616		
		Y1.34	0.880		
		Y1.35	0.883		
		Y1.36	0.641		
		Y1.37	0.548		
		Y1.38	0.785		

Table 6. VIF

VIF		
HRD	Constraint	Org-Innovation
3.043	2.365	2.376
4.704	2.332	1.874
5.062	1.296	2.019
5.424	1.706	4.324
1.758	4.626	5.715
2.869	3.733	3.783
2.341	2.405	2.541
1.290	1.387	5.332
1.290	1.926	7.313
3.739	3.553	2.725
3.739	3.550	3.780
2.039	2.487	5.431
2.039	2.240	2.374
1.818	8.434	1.664
3.036	9.910	3.905
3.148	1.460	3.413
6.099	2.352	2.659
6.099	2.570	1.553
	1.205	1.942
	3.481	2.384
	1.691	2.424
	2.452	1.484
	6.292	3.496
	2.031	3.429
	4.979	
	4.124	
	1.353	
	3.296	
	3.582	
	2.347	
	2.039	
	1.501	
	5.318	
	9.766	
	9.738	
	5.203	
	1.159	
	1.159	

Source: *primary data processing results with SmartPLS*

Table 7. Convergent validity dan Composite Reliability dan Cronbach's Alpha

	Average Variance Extracted (AVE)	Critical point	Cronbach's Alpha	Composite Reliability	Conclusion
Innovation	0.539	0.5	0.960	0.964	Good
Obstacles	0.520	0.5	0.974	0.976	Good
Human resources	0.589	0.5	0.957	0.962	Good

Based on Table 4, Table 5, Table 6 and Table 7 it can be explained that

Human resources.

Human Resources is an exogenous latent variable (X), which has 18 indicators to assess the validity of indicators against sub-latent variables. Convergent validity of the measurement model by using loading factors indicate that all indicators have factor loading values greater than 0.5. Indicates that all indicators are valid. To evaluate discriminant validity, the value of loading factor indicators of X1-X18 was used to have a higher cross loading value for the SDM variable than the other variables, so it is concluded that the X1-X18 indicator has good discriminant validity. Based on Table 6, the VIF value is smaller than 10, indicating that there was no multicolinearity. Convergent validity of the measurement model used the AVE value. Based on Table 7, all variables had an AVE value greater than 0.5. Then it is concluded that the convergent validity is good.

Besides the construct validity test, the construct reliability was also carried out as measured by composite reliability and Cronbach's alpha. The construct is declared reliable if it has a composite reliability value above 0.7 and Cronbach alpha above 0.6. Based on Table 7, all variables have a composite reliability value above 0.7 and Cronbach's alpha above 0.6. It can be concluded that all of these variables have good reliability. It can be concluded that the Human Resources Endogenous Variable indicator has good validity and reliability. It is in line with [19] that the composite reliability (CR) value and the cronbachs alpha (CA) value met the standard of construct evaluation (more than 0.6) which means that the indicator value was reliable.

Constraints are endogenous latent variables (Y1)

This variable was a reflexive model formed 38 sub-latent variables consisting of indicators 1-38. The sub-latent variables that were reflected are marketing (Y1.1), capital (Y1.2), appropriate technology (Y1.3), raw materials (Y1.4), human resources (Y1.5), financial managerial and administration (Y1.6), location

(Y1.7), partnership (Y1.8), production efficiency (Y1.9), intense competition (Y1.10), promotion (Y1.11) and waste management (Y1.12).

Based on Table 4, all Y1 indicators had a loading factor of greater than 0.5 indicating that all indicators are valid to measure the exogenous variables. Based on Table 4, all Y1 indicators had a loading factor of greater than 0.5 indicating that all indicators are valid to measure the exogenous variables. Likewise, based on Table 5, all indicators of Y1.1 to Y1.38 had a higher cross loading value for the Competitive Constraints variable compared to other variables, so it is concluded that indicators Y1.1 to Y1.38 have good discriminant validity. Based on Table 6, the VIF value of each indicator was below the value of 10, indicating that multicollinearity did not occur, while based on Table 7, all variables had a composite reliability value above 0.7 and Cronbach's alpha above 0.6. So it can be concluded that all of these variables have good reliability. It can be concluded that the exogenous variable indicators are constraints in achieving competitiveness, have good validity and reliability.

Innovation as endogenous latent variable (Y2)

This variable was a reflexive model for 7 sub-latent variables consisting of indicators Y2.1 to Y2.24. The sub-latent variables that were reflected are business model (Y2.1), marketing (Y2.2), organization (Y2.3), process and technology (Y2.4), product (Y2.5), service (Y2.6), and the supply chain (Y2.7). Based on Table 4, all Y2 indicators had a Loading Factor greater than 0.5 indicating that all indicators are valid in measuring endogenous variables.

Likewise, based on Table 5, all indicators Y1.1 to Y1.38 had a higher cross loading value for the Innovation variable compared to other variables, so it is concluded that the Y1.1 to Y1.38 indicators have good discriminant validity. Based on Table 6, the VIF value of each indicator was below the value of 10, indicating that multicollinearity did not occur, while based on Table 7, all variables had a composite reliability value above 0.7 and Cronbach's alpha above 0.6. It can be concluded that all these variables had good reliability. It was concluded that exogenous variable indicator of innovation, had good validity and reliability.

3.3.2 Evaluation of the inner model

There are two things that can be explained through the results of SmartPLS testing based on Algorithm 2, those are:

1. To see the effect of the independent variable on the dependent variable, which is looking at the involvement of the human resource variable in facing obstacles to increase its competitiveness, and implementing innovations in skin cracker SMEs which can be seen based on the results of structural testing with SmartPLS. The evaluation used R square and the path coefficient value for the independent variable.
2. To determine the significance based on the t-statistic value and the respective Path coefficient. R square and Path Coefficient values can be seen from Algorithm 2.

Based on Algorithm 2, the following equation was obtained:

a. Y1 = 0.488 X, R2 = 0.238.

This means that the obstacles faced in achieving competitiveness are affected by the Human Resources variable by 23.8%, while the rest is affected by other factors which are not examined in this study. SDM had a path coefficient of 0.488 with a positive direction meaning that there is unidirectional relationship. If the human resource capacity increases by 1 unit, the ability to face obstacles to increase competitiveness will increase by 0.488. This is in line with the research results conducted by [20] that the innovation capacity of SMEs is positively related to human resource performance. The results also showed that the skills and mastery of SME technology by workers have a positive effect on their innovation performance. If SMEs increase their innovation capacity by investing in human resources, they can expect better innovation performance. In addition, the results show that the relationship between government and public policy and SME innovation performance is mediated by the internal innovation capacity of SMEs. These results implied that both skills, technology innovation and government policy is an important contextual factor affecting the increase in innovation performance of SMEs.

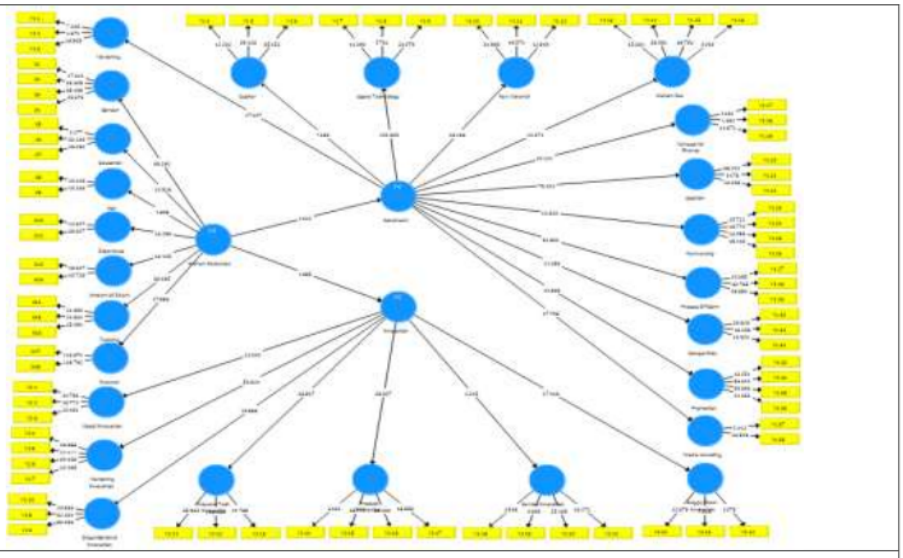


Figure 2. Standardized model

In the skin cracker SMEs in Padang City, the human resources used generally have low quality seen from the level of education and work experience. The use of less qualified labor is associated with low wages. SMEs do not have financial ability to improve the quality of its labor. In accordance with the opinion given by [3], the ability of SMEs to adopt innovations in business technology is limited mainly due to a lack of financial capital, human resources, and marketing knowledge or skills.

b. Y2 = 0.462 X, R square = 0.213

This means that the introduction of innovation in the organization is affected by the quality of human resources by 21.3%, while the rest is affected by other factors which are not examined in this study. Human resources have a path coefficient of 0.462 with a positive direction, meaning that there is a unidirectional relationship. If the human resource capacity increases by 1 unit, the application of innovation in the organization to increase competitiveness will increase by 0.462.

In the skin cracker SMEs in Padang City, the use of low-quality labor greatly affects the application of technological innovation in its business. This condition causes business owners not to dare to take risks in the use of modern technology. Likewise with the application of digital marketing innovations, because almost all workers are not internet literate. According to [2], the survival of SMEs is very dependent on the company's ability to implement sustainable innovation. Furthermore, Simel said that an important factor affecting the competitiveness of SMEs is Access to finance, Innovation activity, Intellectual property, Internationalization, Best practices: ICT, human capital and strategic management, Economic policies for enhancing SME competitiveness. Padang city government policy is needed to support the development of skin cracker SMEs by giving assistance in the form of capital and providing training for various technological innovations.

Partial hypothesis test

Ho: there is no influence of independent variables on the dependent variable

Ha: there is the influence of independent variables on the dependent variable

Test criteria: Ho is rejected if t statistic> 1.96 and Ho is accepted if t statistic <1.96

To assess the significance of the prediction model in structural model testing, it can be seen from the t-statistic value between the independent variable and the dependent variable in the following path coefficient table:

Table 8. Path Coefficients (Mean, STDEV, T-Values)

	Original Sample (O)	T Statistics	P Values
Human Resources -> Organisational Innovation	0.462	3.158	0.002

Human Resources -> Competitiveness Constraints	0.488	3.962	0.000

Based on Table 8, it can be concluded as follows:
1. In the regression relationship between HR and Organizational Innovation, the HR variable has a statistical t-value of 3.158 with a p value of 0.002. Since the t-statistic is greater than 1.96 and the p value is lower than 0.05. Ha is accepted, meaning that HR has a significant influence on Organizational Innovation.
2. In the relationship between HR regression and competitiveness constraints, the HR variable has a statistical t value of 3,962 with a p value of 0,000. Because the t statistic is greater than 1.96 and the p value is lower than 0.05, then Ha is accepted, meaning that HR has a significant effect on competitiveness constraints.

4. Conclusion

Small and medium-sized cracker skin enterprises in Padang City face many obstacles in developing their business and improving competitiveness. The biggest factor that becomes an obstacle to increase the competitiveness is the supply chain of skin raw materials. Producers must provide security deposits to suppliers of fresh cowhide in order to obtain raw materials. Without a guarantee money, the producers will certainly not get the fresh skin, so they cannot produce.

The next obstacle is the quality of human resources who work at the skin cracker SMEs. With low levels of education, the labor productivity is also low. In addition, their acceptance of innovation is also low. Based on the SmartPLS results, HR has a great effect on the application of organizational innovation. So when the quality of human resources is low, then the application of innovation is also low which resulted in low competitiveness of skin crackers SMEs.

In order to increase their competitiveness, it is recommended that the skin cracker SMEs increase the amount of capital in order to obtain fresh cow skin to be processed into skin crackers, in various ways, either with bank credit or by means of a profit-sharing capital partnership system. The quality of human resources need to be improved by providing formal and informal education such as training of the production process and marketing. It is suggested to the Government to provide assistance through capital and training policies on skin crackers SMEs so that the production process can be run properly and efficiently which in turn the skin crackers SMEs can be competitive in the livestock industry.

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