CRITICAL SUCCESS FACTORS OF JAVA PREANGER COFFEE CHAIN IN BANDUNG REGENCY

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Abstract: The Purpose of this research is to identify and analyse the critical success factor of Java Preanger Coffee in achieving competitive advantage. The method of these research is using qualitative method using critical success factor analysis. Data analysis technique using descriptive analysis qualitative that compared obtained data with the theories. An Strategy to improve competitive advantage of coffee Java preanger will be the main objective of these researchThe factors that become the critical factor is aroma, serving methods, Price, Packaging, stock, roasting quality, innovation, roasting date, Serving quality, Barista role. Strategy to improve the product and make a market penetration to increase market competitiveness. Based on the result of analysis can be concluded that aroma and roasting quality have a high point of critical sucess with score of 6.58 and 6.55 from maximum 7 points. Packaging having the lowest score with 5.82 points. These results show us that the important role from coffee industry was the production, post harvest and processing factor that create an unique aroma and flavour for the competitive advantage and increase the benefit and value. The Purpose of this research is to identify and analyse the critical success factors of Java Preanger Coffee in achieving Competitive advantage. The method of these research is using critical success factor analysis. The observation and data collected are used to describe factors affecting Java Preanger Coffee. The results found that the factors used for improvemen in competitive advantage of coffee Java preanger are aroma, serving methods, price, packaging, stock, roasting quality, innovation, roasting date, serving quality, and barista role. Based on the results can be concluded that aroma and roasting quality have a high point of critical sucess with score of 6.58 and 6.55 from maximum 7 points. Packaging has the lowest score with 5.82 points. Additionally, the important role of coffee industry was the production, post harvest and processing that create an unique aroma and flavour for the competitive advantage and increase the benefit and value.

Keywords: Critical success factor, java preanger coffee, aroma, roasting quality

INTRODUCTION

Indonesian export in coffee commodities increase 9,2 % / year , 40 % was arabica coffee or likely known as single origin coffee or geographical coffee (Ditjenbun, 2014). Arabica Coffee is premium grade coffee that processed by post harvesting technology with detail monitoring to make special flavour and fragrance.

Price and demand of single origin coffee increasing rapidly compare with other coffee. Consumption pattern in world change from just consuming become coffee apreciate, thisi pattern called as third wave coffee. Research by National

Coffee Association showes that specialy arabica coffee consumption reach 30 % coffee consumption in America (Gaille, 2013).

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Indonesia has various types of arabica coffee that will be potential commodities in the domestic and international coffee industry. Arabica coffee which is widely known in the global market is Lintong Coffee, Toraja Coffee, Gayo Coffee, Bali Kintamani Coffee, Baliem Arabica Coffee and Flores Bajawa Coffee and Java Preanger Coffee from West Java.

Java Preanger was part of single origin coffee that has potential to develop especially in marketing aspect. This coffee has an historical background as the first Indonesian coffee that exported to Amsterdam in 1711. It is known as A Cup of Java. This background will be a benefit to compete in Global Value Chain or international market. Java Preanger arabica coffee has uniqueness in the aroma and taste. The smell is the smell of caramel and nuts. In addition, this coffee can be said to be light or smooth coffee. These attributes increase the added value and will be able to compete in the global market.

Java preanger coffee type is named after the mountain in West Java such as Manglayang Mountain, Malabar Mountain and Puntang Mountain. Java Preanger is a coffee from West Java that has been exported and has good marketing potential to enter the international market.

The research is needed to analyze the key factors or crtical factors that influence consumer preference to consume Java Preanger Coffee. These research objectives are to identify critical sucess factors in Java Preanger Coffee in Bandung Regency.

Grunert et al. (2005) defined market orientation in value chain as a condition which the actors in chain should responding need and consumer preference now and in the future. Critical Success Factor's Analysis useful for knowing which factors that important in coffee products and will become producer concern to improve their product, especially in on-farm and off-farm to fullfill the consumer preference.

RESEARCH METHODS

Study Area and Data Collected

This study was conducted in Bandung Regency, West-Java Province, Indonesia. The data were collected on April up to June 2017. The total respondents are 43 respondents consist of 40 java preanger coffee consumer and 3 java preanger coffee producer/ farmer.

Critcal Success Factor Method

Critical Success Factor (CSF) was an analysis tool to see the impact factors of success or failure in product. The objective of this analysis is to get information that useful to increase competitive advantage of the product. CSF plays important role in strategic planning because it becomes a media that connect bussiness startegy with coffee farmer, with detail and strategic planning. This will

generate the useful information to make a priority of which factors that important it will make improvement for the product especially in competitiveness related to consumer preferences in arabica coffee.

Factors that become key success of the product have special elements such as information, competency in technology and innovation. These elements will affect product and company bargaining in the market. Two type factors of CSF in company are internal and external factor. Internal factors are affected by management activity like costs, quality, and service and external factors are affected by competitor behaviour, Government policy and technology (Krugman and Anthony, 1995)

After identifying the factors, we will continue with scoring the factors in order to understand which factors are the important factors in Java Preanger coffee industry. The scoring methods was based on scale of importance of the factors in industry, scoring from point 1 = Not very important, 2 = not important, 3 = Moderately important, 4 = Not too important, 5 = Fairly important, 6 = important, dan 7 = Critically important (Kaplinsky and Morris, 2000).

Table 1. Assesment Scale of CSF

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Scale	Assesment	
1	Not very important	
2	Not Important	
3	Moderately Important	
4	Not too Important	
5	fairly Important	
6	Important	
7	Critically Important	

Source: Kaplinsky Morris 2001

RESULTS AND DISCUSSION Respondent Characteristics

The respondents characteristic regarding the age distribution shows that coffee consumer are in young people with the age less than 30 years, i.e 62.5% from total 40 respondents. There is only 27.5% in 30-40 years old coffee consumer. In education level, the majority of coffee consumer has education in high school education or college. It is about 80% of respondents.

Java preanger or single origin coffe have a specified consumer usually at the middle and high income, based on survey 68% consumer of Java

Preanger coffee respondents have income more than IDR 2.5 million.

Coffee producers especially coffee farmers in Bandung Regency have various pattern and methods to sell their products to the hands of end consumers. The value chain connects the producer to the market in various ways either directly or indirectly. The condition will determine the characters of value chain, including in buyer and producer characteristics. The analysis in this step tries to identify factor that affect consumer preference in coffee industry. Factors that become main observation in this analysis are aroma, price, packaging, standard, serving method, roasting quality, roasting date, barista role, service, Innovation and technology.

These factors will be analyzed by scale of importance 1 until 7 and it will comparing the importance factor between producer perspective with consumers. From the gap beetween producer and consumer, there will bean opportunity for improving ad upgrading coffee industry. Besides that it will be tested by validity and reliability test to shows how far the measuring instrument is used in measuring what is measured. Detail definition of the factors showed in Table 2.

Tabel 2. Critical Success Factor (CSF) Java Preanger Coffee Definition

No	Variable	Definition	Indicator
1.	Aroma	Aroma was a fragrance in coffee after brewing process	Have a specific fragrance and not having a bad smell
2.	Serving Method	Method to brewing coffee such as V60, espresso, French press, and others.	Serving method must done based in procedure and in the right step of process.
3.	Price	Product value that indicate by willingness to pay by the consumer	Price above production cost
4.	Packaging	Standard packaging that attractive and also safe for consumption and storage	The packaging size corresponds to the product's weight, does not leak and displays product-related information with details.
5.	Stock	Coffee bean availability	Stock fulfilled
6.	Roasting Quaity	The condition and type of roasted coffee is done by a roaster that has certification of expertise	Pass the cupping stage and have a level of roasting that is suitable and evenly distributed

7.	Innovation &	Increasing quality of coffe product by	Developing sustainable
			innovation and
	Technology	modern technology and innovation	
		una mno rumon	update the modern
		especially in	technology in
		seedling and	coffee industry
0	D	processing phase	Th
8.	Roasting	The processing date	The date always
	date	of roasting phase	available
9.	Service	Procedures in	Customer
		performing services	satisfaction
		and presentation to	
		consumers	
10.	Barista role	A person who brings	Perform brewing
		coffee with various	of coffee
		types of presentation	according to the
		methods and has	procedure and
		special expertise	make it interesting
		•	and on time
11.	Standard	Standard	Halal certification,
		specification	circulation
		procedures based on	certification and
		safety, health,	distribution
		environmental	authorization
		safety, science and	
		technology	
		development.	

Source: Survey 2017

Validity and Reliability Test Results

Validity is a test done to see how well items in questionnaire measure of a variable are. Comparing the correlation index of Pearson moment productivity uses 5% significant level. Or by comparing the significance with alpha = 5%, it is said to be valid if the value is r > r critical or the value of significance <0.05, otherwise if the value r count < r critical or significance value > 0.05 then the item is said to be invalid. The results can be seen in Table 3.

Table 3. Validity and Reliabilities Test Score

No	Variabel	r_{stat}	Sig	g r	Alpha Cronba ch
1	Aroma	0.504	0.001	Valid	
2	Serving Method	0.446	0.004	Valid	
3	Price	0.473	0.002	Valid	
4	Packaging	0.517	0.001	Valid	
5	Stock	0.501	0.001	Valid	
6	Roasting Quality	0.425	0.006	Valid	0,665
7	Innovation and technology	0.431	0.005	Valid	
8	roasting date	0.467	0.002	Valid	
9	Service	0.55	0.000	Valid	
10	Barista roles	0.442	0.004	Valid	
11	Standardization	0.594	0.000	Valid	

Source: Analysis results, 2017

Based on Table 2, it is understood that, CSF indicators such as scent, presentation method, price, packaging, stock, roasting type and quality, innovation and technology, roasting date, service, barista role, certification and standardization are all valid. One invalid component is flavor because r counts smaller than r table. The result of Alpha Cronbach value is 0.665> 0.6. Based on the determination, it can be concluded that the critical success factor (CSF) indicator is reliable.

Comparison of coffee farmer's interest rate with consumers

The variables in this study consist of scent, presentation method, price, packaging, stock, type and quality of roasting, innovation and technology, roasting date, service, barista role, certification and standardization. This variable will be compared between coffee producers, in this case is farmers, and also the responses from consumers. So, it can be seen the gap preference between consumers and producers. Next, it will be used as one input in doing upgrading or improvement of the product. The following is the calculation of critical success factor of agroindustry and final consumer as presented in Table 4.

Table 4. Critical Success Factor value

CSF Variable	Perc	Cara		
CSF variable	Farmer	Consumer	Gap	
Smell	6.33	6.58	0.25	
Serving method	6.00	6.18	0.18	
Price	6.33	6.03	0.31	
Packaging	5.33	5.82	0.48	
Stock	6.00	6.11	0.11	
Roasting quality	7.00	6.55	0.45	
Innovation and technology	5.33	6.13	0.8	
Roasting date	6.33	6.18	0.15	
Service	6.33	5.97	0.36	
Barista roles	6.33	6.16	0.18	
Standardization	6.33	6.16	0.18	

Source: Analysis Results 2017

Based on Table 4, it explans about Critical Success Value in each variable. It can be seen that from the farmer point of view factors the important variables are type and roasting quality. It reaches the highest with a score of 7. This is because the roasting process has an important role in determining the character of coffee and to improve the quality and price of coffee products.

In addition to these prices, services, baristas roles, certifications, roasting dates and aroma become another important factor with a high score of 6.33. Those attractive factors are important in increasing consumer interest to buy coffee products.

While the factors that have the lowest score on the producer side are packaging, innovation and technology, those are because majority farmers did not package their products themselves. Roasters and other processors package and develop more the product.

The most important factors that affect the consumer is the scent with a score of 6.58. The aroma in coffee becomes the variables that determine the quality of the coffee. The aroma of coffee became one of the appeal factors for consumers. The aroma of the Java Preanger coffee is the aroma of nutty and caramel which is similar to the aroma of nuts and floral, with the level of acidity like lime and sweet combination of roasted tubers, the post-tasting contour feels comfortable and the sensation vibrates afterwards.

Another important factor according to the consumer is the type and quality of roasting with a score of 6.55. This factor determines the character of coffee such as flavor and aroma. So, it has an important role for consumers. The lowest factor of interest according to the consumer is the packaging with a score of 5.82. Consumer perception of coffee packaging is quite low due to the majority of ordinary coffee lovers enjoying coffee at cafes and shops and consumed in the form of a cup of coffee. Next, in Figure 1 will be seen the difference gap of producers and consumers of coffee.

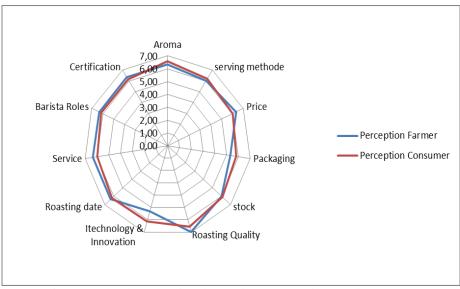


Figure 1. The chart showing the gap between producer and consumer

The factors that become the hope for the consumer have been mostly fulfilled by producers. Although, there are several factors that can not be fulfilled which is shown through the large gap value between farmers and consumers, such as presentation methods, aroma. packaging, innovation and technology and stock or inventory. These five things are an opportunity to upgrade coffee products that will be done by coffee business actors in this case farmers and other entrepreneurs. Aroma becomes a factor that related to the roasting process. Aroma will represent the quality of the roasting and post harvesting method. Aroma, taste and apperance becoming the quality attributes for consumer (Daviron and Ponte, 2005)

The greatest gap conditions exist in innovation and technology. This is because consumers are always looking for new things from the coffee either by type of processing, product or type of coffee. So, the coffee product should be developed and tried to find something new regularly.

The packaging has a score that is relatively low. Consumers expect it to become better package and informative. The product should be safe to eat and also the growing trend that coffee began to be brewed at home or become one of the typical souvenirs from each region.

CONCLUSION AND SUGGESTION

Based on analysis results, critical factors which affect consumer interest in buying Java Preanger coffee products are aroma, presentation method, price, packaging, stock, roasting quality, innovation and technology, roasting date, service, barista role, certification or standardization.

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The most critical factor according to farmers is the type and quality of roasting obtained from the processing with roasting machine. While the most critical factor according to the consumer is the aroma and the type of roasting quality. Comparison the gap of fsctors importance level between farmers and consumers are innovation and technology of 0.80; packing of 0.48. This inward processing downstream has an important role in meeting consumer preferences in terms of good aroma and packaging

Farmers in this case farmer groups and producer cooperatives can pay attention to the critical factors considered by consumers in buying Java Preanger coffee products. So, they can meet what the end market preference is and it can increase the competitive advantage.

The government in this case must support both the regulation and direct assistance, especially related to the increase of added value and competitiveness of West Java coffee products. Assistance of UPH machine (processing unit of Results) and training about marketing and processing of coffee need to be improved. Then, there is a policy of protection and promotion of local coffee Indonesia such as the implementation of import tariffs of processed coffee products from abroad and the implementation of export subsidy for roasting bean coffee Indonesia for farmers to get added value.

REFERENCES

- Australian Center for International Agricultural Research. 2012. Making Value Chains Work Better For Poor, Australia
- Daviron, B. and S. Ponte.2005. The Coffee Paradox. London [etc.]: Zed Books
- Direktorat Jenderal Perkebunan (Ditjenbun). 2014. Pedoman Teknis Budidaya Kopi Yang Baik. Ditjenbun. Jakarta. 60 hal.
- Gaille, B. 2013. 25 Coffee Shop Industry Statistics and Trends.

 http://brandongaille.com/25-coffee-shop-industry-statistics-and-trends/ access date 02 November 2016
- Grunert, K. G. 2005. How changes in consumer behaviour and retailing affect

- competencerequirements for food producers and processors. Economia Agraria y RecursosNaturales 6(11).
- Kaplinsky, R., and M. Morris, 2001. A handbook for value chain research. Ottawa, Canada, International Development Research Center.
- Paul Krugman & Anthony J. Venables, 1995.

 "Globalization and the Inequality of Nations," The Quarterly Journal of Economics, Oxford University Press, vol. 110(4), pages 857-880.