

The Analysis of The Role of Instant Coffee Price and Quality in Consumer Preference and Purchasing Decision, in Malang, Using *Partial Least Square* Method

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Abstract

Consuming instant coffee has become a culture in various major cities. This can be seen from the greatly increasing numbers of coffee shops as well as coffee drinkers drinking outside their homes. This research is to analyze the role of instant coffee price and quality in consumer preference and purchasing decision. The respondents are 99 out of intended 100 individuals. Data analysis method used in the research is Partial Least Square (PLS). The Mathematical model formed is $Y_2 = 0.256 X_1 + X_2 + 0.719 Y_1$. This research shows that the price of instant coffee has influence on consumer preference, however the quality of instant coffee has no significant influence on their preference. Furthermore consumer preference has significant influence in the decision to purchase instant coffee.

Keywords: Price, Quality, Purchasing Decision, Preference

INTRODUCTION

Increasingly sharp competition has demanded every business to be more efficiently managed. Consumers actively consider a number of aspects while deciding a purchase.

In this era of increasingly competitive business, companies are required to be more creative in making a product, in order to be able to compete with other products. The effort is done to survive in the increasingly sharp business competition. In order to be able to compete with companies with similar business, management shall apply the right strategies to maintain or even enhance company's market position. A company will not be able to survive if it does not understand the needs and desires of its consumers. Consumer satisfaction is the comparison between service obtained and service expected by consumer [1]. If consumers think that the actual service obtained is better than the expected service, they will be happy. However if the actual service is less than the expected, they will be dissatisfied. Consumer awareness to consume or use a product or

service consists of consumer's perception and reaction [2].

That consumers have been increasingly smart and selective in choosing a product, has caused increasingly sharp business competition. Producers shall perform and act quickly to handle the competition. Changing and improving lifestyle has given a chance for producers to create more products that eventually will cause the increase of product types offered to consumers. The key factors for consumers when choosing a product are product price and quality.

Price is the amount being paid upon receiving a quality of product or service. Even, price is regarded as aggregate of all value given by customer to have the benefit of having or using a product or service [3]. Some studies show that generally lower price has positive effect on consumer demand and preference [4]. Nevertheless, price and quality are often inversely proportional. On the other hand, the increase of the quality of a product will be accompanied with the increase of its price. The considerations on those two things will affect consumer's desire to purchase a product. Study [5] shows that packaging, brand and price have important roles in purchasing decision. Refer to [6] if a product is made according to standard

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and product quality dimension, it will affect consumer interest to purchase.

Nowadays one of the industrial sub-sectors that is growing rapidly is beverage industry. Coffee is a traditional refreshing beverage. Coffee is drunk any time, any place and in various occasion (coffee break) by villagers as well as urban communities. In other words, coffee is a drink for general public.

Malang is a big city with a very diverse society. A characteristic of urban community is the tendency to consume instant products, one

No	Variable	Note
1.	Price (X1)	I know instant coffee products with affordable price. I think the instant coffee price is reasonable.
2.	Quality (X2)	I think the instant coffee product has specific taste. I think that the instant coffee product has specific aroma. I think that consuming coffee can fulfill health need. I think that consuming instant coffee can improve mood. I feel more energetic by consuming instant coffee.
3.	Consumer preference (Y1)	I consume instant coffee as part of a lifestyle I buy instant coffee because the product quality meets my expectation.
4.	Preferensi (Y2)	I often see and observe instant coffee advertisement, so I purchase. I buy instant coffee because of recommendation from family and friends. I buy instant coffee and recommend the product to family and friends. I buy instant coffee because it is easy to carry and prepare.

Table 1. Variables dan Indicators of the research.

of them is instant coffee. The availability of instant coffee is intended to provide the convenience and practicability in consuming. Consumers enjoy instant coffee easily with the expectation to have the same taste as traditionally brewed ground coffee. Currently instant coffee has been rapidly developed. Consumers enjoy instant coffee with various flavors, such as ginger milk, cappuccino and many other flavors.

Study [6] indicates that there are some important variables that influence purchasing behavior of coffee consumer. The most

important variable is hospitality service, while the least important variable is advertising media. Nevertheless, research results [7] regarding the preference of instant coffee consumers reveals that there are 4 consumer groups, which are pure coffee lover, mixed-coffee drinkers, occasional coffee drinkers and infrequent coffee drinkers.

Price is one of consumers' main considerations. Research [8] shows that most consumers, especially the ones with relatively low income, behave sensitively towards price. This is assumed to be related to consumer' income and buying power.

This research is intended to analyze the influence of price and quality of instant coffee product on consumer preference and purchasing decision.

RESEARCH METHOD

This research is performed in Malang City started in November 2015. The research uses quantitative approach. Data collection is done by distributing questionnaire to respondents who meet specified criteria. Data retrieval technique used is *direct sampling*. The questionnaire used in this research is Likert scale questionnaire, with ratings ranging between 1 to 5. Variables and indicators of the research are shown in Table 1.

Testing Instrument in this research is SPSS Statistic 17.0. Instrument testing questionnaire is conducted to get validity and readability levels of the questionnaire. The effects and relations between variables of this research are analyzed with analysis tool of *Partial Least Square* (PLS) [10]. PLS method is used to acquire and predict the effect of variables of price and quality of instant coffee on consumer preference and purchasing decision.

Data Collection Method

Malang City is the second biggest city in East Java. Malang City is continuously developing corresponding to the fast growing of trading, office, industry and institution centers.

That population and economy of Malang has grown rapidly is an indication that generally the economy level of Malang residents has been well developed. This has been one of thrust factors in the development of buying power of the residents, for example in eating and drinking out. Drinking habit of Malang residents is an appeal for businessmen and has been the reason for the appearance of many kinds of drinking places, ranging from drinking places in shopping

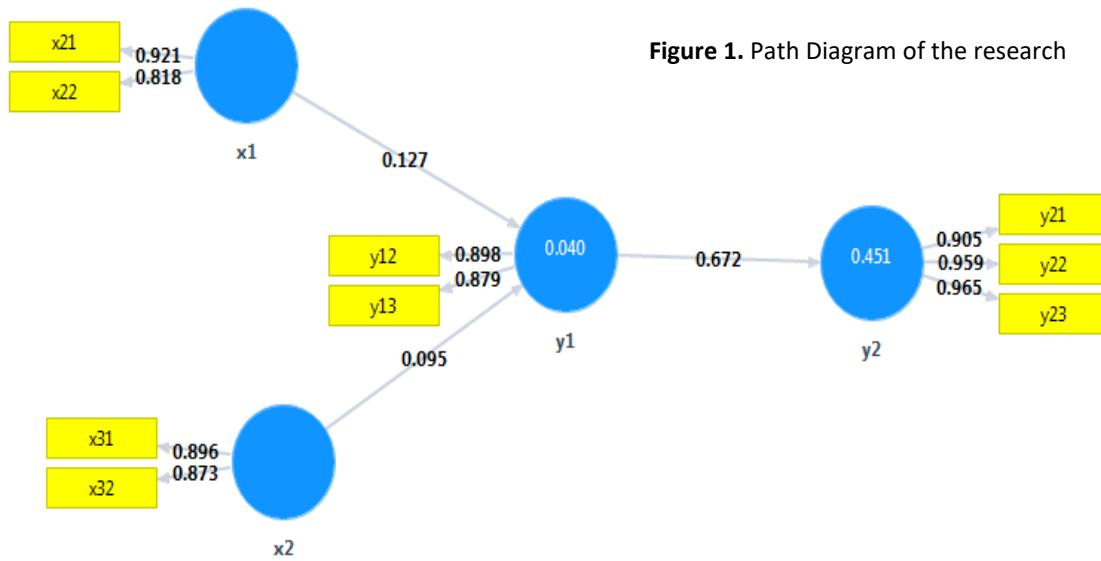


Figure 1. Path Diagram of the research

centres to drinking places at sides of roads.

The consumption pattern of Malang citizens, particularly for drinks, has shifted from traditional to instant. Therefore it promotes the growth of modern stalls or cafes that serve instant coffee in Malang. People think that consuming coffee is not merely to have a drink, but also to relieve stress. Drinking coffee is also considered as a media for communication with friends or relations.

There are 99 respondents for this research. Respondent selection is with slovin, with the population of Malang as polulation size and significance level of 10%. The criteria of respondents are minimum age of 18 years old and have consumed instant coffee more than twice. The criterion of minimum age is because, in that age respondents are assumed to have consumed instant coffee and competent to provide needed information.

RESULTS AND DISCUSSION

Characteristics of Respondents

122 sets of questionnaire have been distributed for this research. After tabulation and checking process, 99 respondents, who are qualified for further analysis, are selected. The selected respondents also meet the criteria of having consumed instant coffee at least twice in a week and are above 17 years old. The characteristics of respondents in several aspects are as seen in Table 2.

Table 2 : The characteristics of respondents.

Characteristi cs	Respondent	Numbe r	Percentag e %
Sex	Female	47	47
	Male	52	52
Age (year)	17-25	91	91
	26-55	8	8
Education	SMP	1	1
	SMA	48	48
	College/ university	51	51
Occupation	Student	50	50
	Prive employee	22	22
	Housewife	5	5
	Unemployed	11	11
Income	Others	11	11
	<IDR 2.000.000	75	75
	IDR 2.000.000- IDR 3.000.000	8	8
	IDR3.001.000- IDR 4.000.000	8	8
	IDR 4.001.000- IDR 5.000.000	3	3
	>IDR 5.000.000	5	5

Analysis results show that the most respondents who drink instant coffee are male (53%), whereas female respondents is 47% of total respondents. It indicates that the majority of coffee drinkers are male. This is in accordance with research results [11], [12] that show the percentage of male coffee drinker is 82%. It indicates that generally the majority of coffee consumer is male.

Based on the age, coffee is mostly consumed by 18 to 25 year-old respondents, with the number of 91 respondents or 91%. In term of education, the majority of respondents that consume instant coffee are in college/university, with the number of 51 respondents or 51% of

total respondents. It shows that general respondents are students or university students in productive age. This result is parallel with research result [11] that shows that most respondents are below 30 years old with percentage of 40,58%. It means that people below 30 years old is the potential market for the expansion of coffee consumer. Another research [13] also indicates a similar thing that the majority of coffee consumer is young generation.

Based on allowance or income level, the majority of respondents are with income level of <IDR 2.000.000 with 75 respondents or 75% of total respondents. It shows that most students in Malang, despite the allowance of <IDR 2,000,000, have the culture or habit of consuming instant coffee. Therefore the improvement of coffee product and its diversification shall consider the buying power of consumers who mostly have income of less than IDR 2,000,000. Similar thing has also been shown in research [14], that 77 % of coffee consumers earn < IDR 2 million. The finding shows that most consumers are from middle to lower circle.

Prediction Models

Structural model using SmartPLS2,0 is as shown in Picture 1. Research model is formulated and tested using prediction pattern of relational ties and clausal relationship. Measurement model is used to analyze the levels of construct validity and instrument reliability.

Research Instrument Test Results

Analysis shows that all research indicators in the questionnaire have met the requirement, which is $r \text{ count} > r \text{ table}$. The reliability test shows positive value of *Cronbach' alpha*, for all variables have the value of *Cronbach' alpha* greater than 0,6. Based on the analysis, instruments in this research are valid and reliable.

Evaluation Results on Measurement Model (Outer Model)

Based on the analysis, loading factors of all indicators which represent the construct have positive values, which are $> 0,5$. All AVE values in this research are greater than 0,5. Therefore all variables and indicators used in this research are valid. By considering the construct, it can be seen that the construct has good reliability. It means that the variables and indicators can be used for further analysis.

Evaluation Results on Structural Model (Inner Model)

Structural model in PLS is evaluated with R^2 . R^2 is used to analyze the variation level of independent variables change as compared to dependent variables. The developing of consumer preference model is affected by factor of price and quality by 40%, whereas the variable of consumer purchasing decision is affected by variable of consumer preference by 41.5%. Therefore the value of $Q^2 \text{ predictive relevance}$ can be formulated as follows: $Q^2 = 1 - (1 - 0,4) - (1 - 0,451) = 0,949$. Q^2 value in this research has met the requirement of construct with feasible relevance predictions, and can be used since $Q^2 > 0$. Various research results show varying Q^2 value, which is a reflection of the contribution of variables to model forming.

Hypothesis Testing

The results of hypothesis testing on hypothesis significance are shown in Table 2. Table 2 shows that, if $t\text{-count} > t\text{-table}$ in the significance level of 5%, the hypothesis is significant.

Table 2. Hypothesis Testing Results

Static Hypothesis	Outer Loading	t-count	t-table	Note
Price-preference	0,256	1,925	1,66	Significant
Quality-preference	0,117	0,770	1,66	Not significant
Preference-Decision	0,719	12,926	1,66	Significant

The influence of price to consumer preference

Hypothesis testing shows that price affects consumer preference. This is in accordance with the opinion [6] that consumer purchasing decision of a product is affected by consumer behavior. Change in a product price will cause high demand on the product. Generally, lower price will have a positive effect on the increase of product demand. This finding is different from research result [15], which states that price has no effect on decision of online purchase. Thus besides preference, some other aspects such as reachability and buying power of the intended segment shall also be considered while deciding the price of a product.

Instant coffee products on the market are relatively cheaper than coffee products from cafes or coffee stalls. Instant coffee price varies depending on brand and type of coffee. This is corresponding to the intended market of coffee

instant, which is student or college/university student. Instant coffee is targeted for potential market of students not only because it is relatively cheap, but also it is easily found in shops or shopping centres.

The majority of coffee instant consumers in Malang are students and college/university students with the average income below IDR 2,000,000. These coffee consumers drink instant coffee as part of their lifestyle. Instant coffee is consumed while they are staying up late doing their assignment, hanging out with friends, or merely relieving their exhaustion.

Certain segment of instant coffee consumers consider the product quality, but the price is still the main factor. This research result is in accordance with some previous researches [4]; [6], which discover that price greatly affects consumer demand. Higher instant coffee price will cause decreasing of product demand. Nevertheless, some instant coffee products, which are intentionally developed for certain market, have relatively higher price. This is to aim a specific market segment with specific social status, as well as to meet that specific consumer preference.

The influence of quality on consumer preference.

Hypothesis testing results indicates that there is no sufficient evidence showing that instant coffee quality influences consumer preference. Presumably this is because the general consumers have income of < IDR 2.000.000,- per month. Consequently consumers would rather consider the price than the quality. This is because the majority of the respondents are students who considers the price more than the quality while making their preference. The factor of quality is less considered because students care more on how to meet their lifestyle. Discussion with some respondents reveals that curiosity and the need to hang out with friends have been the main factors for these (student) consumers to drink instant coffee in certain place. The majority of respondents (91% of total respondents) in this research are 18-25 year-old teenagers.

The influence of consumer preference on purchasing decision.

Analysis results show that consumer preference influences purchasing decision. This is corresponding to various researches that analyze

the role of preference in purchasing decision. According to [16], preference has influence on consumer's purchasing decision. Another research [17] also shows similar finding, that consumers deeply consider some aspects that influence their preference while making decision to purchase. It also reveals that brand affects preference and purchasing decision.

While making decision to purchase an instant coffee product, consumers purchase instant coffee because of their need. Most of the respondents in this research are students aged 18 to 25 years old. Instant coffee consumers drink instant coffee as a part of their lifestyle, a stress relief and a media for hanging out with their friends. Before deciding to purchase an instant coffee product, consumer does some information search regarding the product. This information search is done through some advertisements on TV and other social media. When consumers get appropriate and accurate information regarding the instant coffee product (including price, ingredients and serving suggestion), they will buy it.

When consumers are satisfied with the instant coffee product, they will recommend the product to friends and family. According to research [18] there are 4 factors that influence consumer to purchase, which are quality, price, brand and availability of the product.

Managerial Implications

Price is the key factor that influences consumer preference in consuming instant coffee. Product quality, although in this research has insignificant influence, still needs to be overseen in order to provide the finest service for consumer.

CONCLUSIONS

1. Product price is proven to have significant influence on consumer preference. Similarly, consumer preference has influence on purchasing decision. The variable of quality shows insignificant influence on consumer preference. It indicates that consumer considers the price more than the quality while making preference and purchasing decision.
2. As the implication of this research, producer shall consider the aspect of more efficient production and lower production cost to improve consumer preference. It consequently will have the effect on purchasing decision.

BIBLIOGRAPHY

- [1]. Lovelock, C., Wirtz, J. 2011. *Service Marketing: People, Technology, Strategy*. 7th edition. Upper Saddle River - Pearson Hall. New Jersey.
- [2]. Lalit MJ., Kanokthip S. 1998. Greenmarketing of cosmetics and toiletries in Thailand. *Journal of Consumer Marketing*. 15(3): 265 – 281.
- [3]. Alter, AL., Oppenheimer, DM., Epley, N., Eyre, RN. 2007. Overcoming intuition: Metacognitive difficulty activates analytic reasoning. *Journal of Experimental Psychology: General*. 136(4). 569–576.
- [4]. Andreyeva, T., Long MW., Brownell, D. 2010. The Impact of Food Prices on Consumption: A Systematic Review of Research on the Price Elasticity of Demand for Food. *American Public Health Research*. 100(2):216-222.
- [5]. Harith, ZT., Ting, CH., Zakaria, NNA. 2014. Coffee packaging: Consumer perception on appearance, branding and pricing. *International Food Research Journal* 21(3): 849-853.
- [6]. Medina, O., Me'ndez, JL., Runio, N., 2004. Price–Quality and Market Share of Consumer Goods in Spain: Retail Brands and Manufacturer Brands. *Int. Rev. of Retail, Distribution and Consumer Research*, 4 (2): 199–222.
- [7]. Hung, L. 2012. A Study of Consuming Behaviour of Budget Coffee. *Business and Management Research*. 1(1): 48-61
- [8]. Geel, L., Kinnear, M., de Kock, HL. 2005. Relating consumer preferences to sensory attributes of instant coffee. *Food Quality and Preference*. 16:237-244.
- [9]. Jones, E., 2014. An Empirical assessment of Consumers' Preferences for coffee. *Journal of Food Distribution Research*. 45(2) : 135-160.
- [10]. Feng, Y. 2008. Partial Least Squares Regression Based Cellular Automatic Model for Simulating Complex Urban System. *The International Archives of The Photogrammetry, Remote Sensing and Spatial Information Science*. 3 (2). 225-276.
- [11]. Faisyal, Murwani, IA. 2008. Analysis of factors affecting consumers SES AB in brand choice of coffee powder in DKI Jakarta. (Text in Indonesia) *Journal of Business Strategy and Execution*, 1(1): 121-134.
- [12]. Satyajaya, W., Rangga, A., Nurainy, F., Al Rasyid, H., 2014. Consumer decision-making process and product attributes instant coffee in sachets (text in Indonesia). *Jurnal Teknologi Industri dan Hasil Pertanian*, 19(2):297-306.
- [13]. Rukhbaniyah, LY., Utami, DP., Wicaksono, IA. 2013. Perilaku konsumen terhadap kopi tubruk dan kopi instan di Kecamatan Pejagoan Kabupaten Kebumen. *Surya Agritama*, 2(1: 31-40.
- [14]. Utami, RW. 2009. Segmentation and analysis of consumer behavior coffee powder (text in Indonesia). *J-SEP*, 3(2):49-58.
- [15]. Murwatingsih, Apriliani, EP. 2013. The influence of risk and the price of the purchase decision through consumer confidence (text in Indonesia). *Jurnal Dinamika Manajemen*. 4(2):184-191.
- [16]. Wardhani, W., Sumarwan, U., Yulianti, LN. 2015. Effect of Consumer Perceptions and Preferences of the Residential Green Product toward Purchasing Decisions (text in Indonesia). *Jurnal Manajemen dan Organisasi*, 6(1):45-63.
- [17]. Mulyadi, A., Fauziyah, E. 2014. Consumer preferences on the purchase of Instant noodles in Bangkalan. *Agriekonomika*. 3(1):65-80.
- [18]. Kumar, MPS. 2014. Brand preference and buying decision –A study with reference to organized Indian edible oil brands. *African Journal of Marketing Management*, 6(2) : 17-26.