

Review Article

Analysis of Marketing Mix Strategies for Sales of Agricultural Products on E-Marketplace in Indonesia

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Abstract - Agriculture is an important sector in Indonesia with the largest contribution in the economic sector. The biggest obstacle faced by farmers is the length of the distribution chain for agricultural products to reach consumers. The length of this distribution chain has resulted in high prices for agricultural products, but this has not been matched by an increase in farmer income. The E-marketplace is expected to be an alternative in selling agricultural products, so the consumer can get the products directly and pay attention to the elements of the marketing mix in order to determine the right marketing strategy to attract consumers to buy agricultural products on e-marketplace. This study discusses purchasing decisions made by agricultural product e-marketplace users by paying attention to 7P's elements of the marketing mix. The data collection method used a questionnaire and analyzed using multiple linear regression. The results of this study indicate that simultaneously all elements of the marketing mix (product, price, promotion, place, people, physical evidence, process) have an effect on purchasing decisions of agricultural products.

Keywords - Agriculture, E-Marketplace, Marketing Mix, Purchase Decision.

I. INTRODUCTION

Agriculture became the largest economic sector in Indonesia in 2020, although cumulatively, economic growth in Indonesia contracted by 1.26% compared to 2019. The agricultural sector recorded the highest growth with a growth rate of 2.19% in 2020, followed by the Information and communication sector. The information and communication sector helps the agricultural sector in activities to introduce and sell agricultural products to consumers. The existence of technological developments has changed the behavior of consumers in spending money.

The emergence of e-marketplaces as a form of change and development carried out by sellers in selling products

has been enthusiastically welcomed by all groups. This change also occurs in the agribusiness sector, where sellers can market their agricultural products through the e-marketplace. However, it must be remembered that e-marketplace is not a product but a method for delivering agricultural products [1]. E-marketplaces are trading activities carried out via the internet to facilitate transactions in the world of business and commerce [2], and the agribusiness industry is proactive towards e-marketplaces by setting up websites or buying and selling products online.

Activities carried out through e-marketplace can shorten the time, both in buying and selling transactions and in searching for information about the desired product, so that distance and time constraints can be shortened through e-marketplace [3], [4]. The decision to use an e-marketplace cannot be separated from choosing the right strategy by paying attention to 7P's elements of the marketing mix. A marketing mix is a combination of the right tactics used to achieve goals by effectively marketing products or services to consumers [5]. Choosing the right marketing strategy will be able to influence consumer purchasing decisions for the products offered. Purchasing decisions are based on needs that must be met by consumers [6], [7].

This paper focuses on marketing strategies by considering the 7P's elements of the marketing mix to influence consumer purchasing decisions. The synopsis is that the agricultural industry can use the e-marketplace as a forum for selling agricultural products so that it can shorten the marketing channels for agricultural products, and consumers can get complete information about agricultural products through the e-marketplace. The use of e-marketplaces as a medium for online transactions is expected to increase the income of the agricultural sector because 90% of the world's population has access to a cellular network.



II. LITERATURE REVIEW

The length of distribution channel in agricultural marketing occurs due to the large number of participants involved, such as intermediaries, distributors, processors, packers, which causes the income of farmers to be very low. Technological changes followed by economic and social changes have opened up opportunities for innovation in product marketing, and innovation in agriculture has developed and has its own characteristics with more emphasis on awareness and knowledge [8], [9], [10], [11], [12]. E-marketplaces for the agricultural product are an innovative form of online marketing that brings together producers, agricultural suppliers, and consumers in one system by offering the convenience of online buying and selling transactions [13]. The development of e-marketplace occurs in line with technological developments followed by the development of internet users in the world.

Consumer behavior is a major concern for the company. The company's understanding of consumer behavior will greatly help companies to understand how consumers think and choose from the various alternative products and brands offered [14]. Consumer behavior to make purchases is influenced by environmental, social, cultural, personal, and psychological factors [15]. Purchasing decisions are behaviors carried out by consumers and are the ultimate goal of the company's marketing activities. Purchasing decisions are activities that involve the exchange of goods and services followed by payment. Sometimes buying activity is also an investment [16], where consumers buy an item to be resold. Consumers make various considerations before making online purchases, such as trust and celebrity endorsements [17], as well as elements of the marketing mix that are of concern to consumers.

The elements of the marketing mix consisting of 7P's are considered by consumers before deciding to buy a product. The concept of a marketing mix consisting of twelve elements of the marketing mix was first introduced by Neil Borden [18], who was later labeled the 4P's of marketing by McCarthy, namely product, price, place, promotion [19], in its development the marketing mix was expanded by adding three 3P's elements, namely people, process, physical evidence [20]. Agriculture companies need to consider elements of the marketing mix to be able to influence consumers to purchase their products, where previously the company conducted a SWOT analysis before deciding to use digital marketing, this was done to first understand the internal and external factors that could affect companies marketing activities [21].

Agricultural companies that will use e-marketplace as a medium for selling their products must be able to focus on the target market by choosing the right product features to sell through the e-marketplace, prices that are in accordance with product benefits, good distribution to reach consumers, word choice- the right words in promoting products [22]. Other things that need to be considered from the elements of

the marketing mix are the services provided by e-marketplace to consumers, the ease of purchasing, payment, and delivery processes, as well as the appearance of the e-marketplace, which is considered attractive to consumers which must also be noticed by the company. The company's attention to consumer needs is expected to influence consumers to purchase agricultural products through the e-marketplace.

III. RESEARCH METHODOLOGY

This study uses a quantitative descriptive approach using a survey method, then tests the effect of variable X (product, price, promotion, place, service, physical evidence, process) on variable Y (purchasing decisions) for agricultural products sold through e-marketplaces. The population in this study are consumers who have purchased agricultural products online through the e-marketplace. The sample in this study is 100 respondents were obtained using random sampling techniques. The data used in this study are primary data obtained directly from respondents' answers through questionnaires. The questionnaire in this study was made using Google Forms and then distributed online to respondents who were judged according to the topics and criteria for this study.

The data that has been collected will then be processed using the SPSS application. The questionnaire given to respondents is divided into 2 parts; the first is descriptive information or consumer demographics which contain information about consumers (gender, age, professional education) and consumer statements related to research variables. The Likert scale is used in this study, which is the scale used to measure the perceptions, opinions, and attitudes of research respondents towards the phenomenon being studied [23]; the scale used in this study is a scale of 1-5, where 1 means strongly disagree, and 5 means strongly agree. Data regarding respondents is presented in Table 1.

Table 1. Demographic Characteristics of Respondents

Profile	Characteristic	%
Gender	Male	42
	Female	58
Age	16-20 years old	25
	21-25 years old	45
	26-35 years old	16
	36-45 years old	10
	>45 years old	4
Education	Senior high school	22
	Diploma	6
	Bachelor's degree	51
	Master's degree	14
	Doctor's degree	7
Profession	Freelancer	9
	Private employee	41
	Lecturers	9
	Students	25
	Entrepreneurs	16

Table 1. contains information on respondents who have filled out the questionnaire used in this study. Table 1. shows that the majority of respondents in this study were women

with the largest age range being 21-25 years, the majority of respondents' education was bachelor's degree, and the profession of most respondents was a private employee.

IV. RESULT AND DISCUSSION

This study aims to examine the 7P's elements of the marketing mix (product, price, promotion, place, people, physical evidence, process) on purchasing decisions of agricultural products using 100 respondents. The validity test

is conducted to test the items used in the questionnaire, and the statement in the questionnaire is said to be valid if it shows a significant value ($p < 0.05$) and is greater than r table 0.197. The reliability test was conducted to determine the level of consistency of a questionnaire used in the study, and the questionnaire was said to be reliable if the Cronbach alpha value was > 0.60 . The results of the validity and reliability tests are presented in Table 2.

Table 2. Validity and Reliability Test Results

Construct	Indicator	Pearson Correlation	Cronbach's Alpha	Construct	Indicator	Pearson Correlation	Cronbach's Alpha
Product	PD1	0.690	0.802	People	PP1	0.717	0.749
	PD2	0.713			PP2	0.793	
	PD3	0.742			PP3	0.718	
	PD4	0.830			PP4	0.588	
	PD5	0.789			PP5	0.706	
Price	PC1	0.754	0.741	Physical Evidence	PE1	0.689	0.802
	PC2	0.736			PE2	0.827	
	PC3	0.583			PE3	0.803	
	PC4	0.683			PE4	0.700	
	PC5	0.735			PE5	0.722	
Pro motion	PR1	0.765	0.690	Process	PS1	0.558	0.807
	PR2	0.730			PS2	0.838	
	PR3	0.736			PS3	0.825	
	PR4	0.547			PS4	0.822	
	PR5	0.591			PS5	0.713	
Place	PL1	0.829	0.819	Purchase Decision	BD1	0.515	0.699
	PL2	0.793			BD2	0.717	
	PL3	0.635			BD3	0.668	
	PL4	0.828			BD4	0.740	
	PL5	0.749			BD5	0.638	
					BD6	0.473	

The results in Table 2. show that all questions used in the questionnaire are valid and can be used in research, and the reliability test shows that the data used in the questionnaire can be trusted. The next classic assumption test is the normality test, the purpose of the normality test is to test whether the data used in the study is normally distributed, and data is said to be normally distributed if the significance value is > 0.05 . The results of the normality test are presented in Table 3.

Table 3. Normality Test Results
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters ^b	Mean	0E-7
	Std. Deviation	2.12546668
Most Extreme Differences	Absolute	.123
	Positive	.089
	Negative	-.123
Kolmogorov-Smirnov Z		1.232
Asymp. Sig. (2-tailed)		.096

a. Test distribution is Normal.
b. Calculated from data.

The results of the normality test in Table 3. show that the significance value is 0.96, which means > 0.05 , which means that the data in this study are normally distributed. The next test will be a regression analysis to see the effect of the independent variable on the dependent variable. The results of multiple linear regression tests are presented in Table 4.

Table 4. t-Test Results (Partial)
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	6.977	2.886		2.418	.018
Product	-.243	.135	-.208	-1.801	.075
Price	-.408	.195	-.288	-2.091	.039
Promotion	.535	.174	.397	3.071	.003
Place	.393	.184	.276	2.135	.035
People	.144	.208	.097	.692	.491
Physical Evidence	.860	.191	.624	4.490	.000
Process	-.494	.201	-.344	-2.456	.016

a. Dependent Variable: Purchase Decision

Table 4. shows the results of the regression test, where the product and service variables (people) have no effect on consumer purchasing decisions for online agricultural products. This happens because usually, consumers who search for products on e-marketplaces already know what products are needed, so consumers only need to look for e-marketplaces that have become subscribed to or feel comfortable making purchases. This result is in line with previous research, which states that convenience is needed by consumers when purchasing products [22], [24]. On the other hand, service is no longer a major consideration for consumers because consumers who shop online are accustomed to searching for information and conducting transactions independently by following the guidelines given in an e-marketplace so that services are no longer needed.

The results showed that price, promotion, distribution, physical evidence, and processes affect consumer purchasing decisions for agricultural products. Consumers who already know the product to be purchased will choose an e-marketplace that can provide cheaper prices with the same quality. The number of e-marketplaces allows consumers to freely choose the e-marketplace that can offer the best price. Promotion is important to convey to consumers about agricultural products sold through e-marketplaces. The choice of words that can attract consumers to buy agricultural products on the e-marketplace and the selection of the right promotional media will be very helpful in convincing consumers to buy agricultural products offered. The results of this study are in line with previous research, which states that good promotions will attract consumers to purchase products [24].

Distribution is another consideration for consumers in deciding to buy agricultural products. Speed and tidiness in product delivery are very important because agricultural products will be better received by consumers when they are still fresh and intact. Choosing the right e-marketplace will give satisfaction to consumers [25] so that consumers will be interested in repurchasing. This should be a concern for producers because shipments of agricultural products are prone to damage. The results of this study are in line with previous research, which states that punctuality in the delivery of agricultural products is needed [22].

Other variables that influence agricultural product purchasing decisions are physical evidence and process. E-marketplace that is user-friendly and provides convenience and smooth access will attract consumers to visit and find the products they need. Ease of payment processing is another consideration for consumers to choose to shop at an e-marketplace. E-marketplaces that offer agricultural products with an attractive and easy-to-access website, and provide convenience in the payment process, will easily attract consumers to buy the products. Producers should pay attention to things like this when selling agricultural products in an e-marketplace. The simultaneous test results show that the marketing mix variables (product, price, promotion,

place, people, physical evidence, process) affect consumer purchasing decisions for agricultural products, as shown in Table 5.

Table 5. Simultaneous Test Results ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	369.667	7	52.810	10.863	.000 ^b
	Residual	447.243	92	4.861		
	Total	816.910	99			

a. Dependent Variable: Purchase Decision

b. Predictors: (Constant), Process, Promotion, Product, People, Place, Price, Physical Evidence

The coefficient of determination (R squared) is significant as the contribution of the influence of the independent variable (X) to the dependent variable (Y). The coefficient of determination is useful for predicting and seeing how much influence the variable X contributes simultaneously to variable Y, as presented in Table 6.

Table 6. Results of the Determination Coefficient Test Model Summary b

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	.673 ^a	.453	.411	2.205

a. Predictors: (Constant), Process, Promotion, Product, People, Place, Price, Physical Evidence

b. Dependent Variable: Purchase Decision

The result of the determination coefficient test shows the value of 0.453 or 45.3%, and this number implies that the 7P's marketing mix variable simultaneously affects the purchase decision by 45.3%, while the remaining 54.7% is influenced by other variables not examined in this study.

VI. CONCLUSION

The marketing mix, which consists of 7P's, is a marketing attribute that can be controlled by the company; therefore, the company must be able to pay attention to this. Purchasing decisions for agricultural products will be made by consumers after consumers have assessed and evaluated the right e-marketplace in accordance with what consumers expect. The results of the study state that physical evidence has the greatest influence on consumer purchasing decisions of agricultural products compared to other elements of the marketing mix, this means that the appearance of the e-marketplace and the ease of access is the main concern of consumers in determining where to shop for online agricultural products, although overall the 7P's elements of the marketing mix can influence consumers in deciding to purchase agricultural products.

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