



# Consumer Decision-Making Factors in Heavy Equipment Services Analysis CV. Rizky Fadillah

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**Abstract.** The success of a project is determined by the resources of the equipment because tools serve as the main means of supporting project implementation. The rental system is the choice of project actors to carry out their projects without having to buy equipment at a high cost. The purpose of this study is to determine the factors that influence the decision to use heavy equipment services. The research location is at CV Rizky Fadillah. The data in this study are quantitative and were measured using a Likert scale for 30 respondents. Multiple linear regression is used in the analysis. The decision to use heavy equipment services is influenced by the quality of the equipment and the rental price, while the mobility of heavy equipment has no significant effect on the decision to use heavy equipment services.

**Keywords:** Project · tool quality · decision

## 1 Introduction

The world of construction is currently growing, as seen by the increasing number of developments throughout Indonesia. All existing development projects are usually built on vacant land areas, thus enabling project workers to carry out earthworks. Earthworks in a development project are a very vital part. Earthworks here include excavation, backfill, transportation, and soil compaction (Sejati et al. 2016).

The success of a project is determined by the resources of the equipment. This is because the tool serves as the main means to support project implementation. The cost of the tool, which can be considered quite expensive, is frequently an impediment to project workers having it personally. Therefore, the rental alternative is the right choice. The alternative to renting equipment by the company provides advantages, namely that the company does not need to spend a large amount of capital in the first year and the flexibility of the rental mechanism because it can be done in a short period of time (Pratiwi, Lesmana, Endang, and Mulyani 2015).

The need for heavy equipment for a project can now be met with many facilities for renting out the equipment. CV Rizky Fadillah is one of the businesses that provides heavy equipment rental facilities. The heavy equipment leased by CV Rizky Fadillah

consists of PC 200 excavators, PC 78 excavators, PC 50 excavators, PC 45 excavators, bulldozers, and dump trucks.

The real need for companies engaged in construction has made many competitors for CV Rizky Fadillah also offer heavy equipment rental services. The competition that occurred caused CV Rizky Fadillah to know what consumers needed in heavy equipment rental services. So there is a need for complete information regarding any factors that can influence consumers when leasing heavy equipment. Because of this, this research was conducted to be able to find out the factors that influence the use of heavy equipment services by consumers.

## 2 Literature Review

### Tenant Decision

According to Sinalbow (2015) in Senggetalng, Malndey, and Monihalralpon (2019), consumer decisions are motives and impulses that arise in response to something, in which the buyer makepurchases due to needs and wants. Aldal’s 4 indicators of purchase decisions:

1. A product’s paldal
2. Usually, when buying products,
3. Provide recommendations from other people.
4. Make repeat purchases.

### Tool Quality

Kotler in Almstornng (2006) and Malsnial (2017) discloses that product quality shows product capability and performance, which includes quality, reliability, and ease of use.

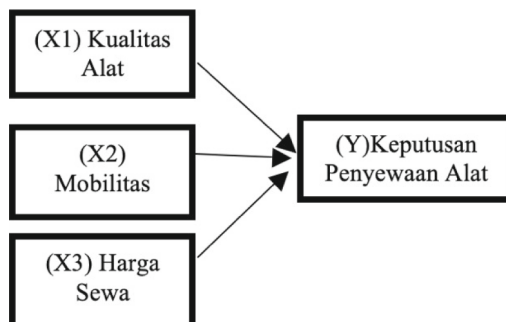
### Rental Price

The rental price is the relative and varied cost that the tenant must spend to get the desired product or service, and through the price, one can see the quality of the product or service (Senggetang et al. 2019).

### Framework

Image 1

Framework



## Hypothesis

H1: There is a partial influence of Equipment Quality on the Decision to Purchase Heavy Equipment of CV Rizky Fadillah.

H2: There is a partial effect of mobility on the decision to purchase heavy equipment for CV Rizky Fadillah.

H3: There is a partial effect of price on the purchase decision of CV Rizky Fadillah's heavy equipment.

H4: There is a simultaneous influence of equipment quality, mobility, and price on the decision to purchase heavy equipment by CV Rizky Fadillah.

## 3 Research Method

This research was conducted using a survey method to consumers who use CV Rizky Fadillah's services. Until this study, there were 30 contractors who worked on and completed the project using rented heavy equipment belonging to CV Rizky Fadillah. This is supported by Baley's opinion in Mahmud (2011) which states that a study using analysis and statistics requires a minimum sample size of 30 respondents.

The data in this study is quantitative data, namely data collected and processed to be able to answer allegations about the factors that influence the decision to use heavy equipment services.

In collecting data in the field the authors use the following techniques:

1. The method of observation and research (observational research) is the collection of data by causal inquiry based on direct experience of the object of research.
2. A questionnaire (questionnaire) is also a list of questions that have been arranged in such a way that the weighting and instructions for filling it out are included.
3. Literary research (library research). Literary research in the sense of research collecting data by looking for completeness in theory.

Sources of data in this study used primary and secondary data. The primary data base was discussed from the responses of the respondents to the questionnaire that was shared earlier. The secondary data that the researchers obtained came from CV Rizky Fadillah.

### 3.1 Research Results

#### Characteristics of Respondents

The characteristics of the respondents in this study were a combination of characteristics gleaned from the respondents' backgrounds. From the results of the data, it can be concluded that respondents of the male gender were more or more dominant as CV Rizky Fadillah consultants, namely, as many as 27 respondents (90%) and women, as well as 3 respondents (10%).

The results of the research on the age of the respondents indicate that the age of the most dominant respondents is 26–35 years old, namely around 18 respondents and 60% of the total. Followed by respondents aged > 35 years, as well as 7 respondents, also 23.3%, and respondents aged 17–25 years, as well as 5 respondents, also 16.7% of all

respondents. This data can be carried out using a calculation to select consumers based on age.

Based on the number of workers and respondents, it can be concluded that the number of respondents for Sebalgali Pegalwali's work as a whole has the most profitable balance, namely around 13 respondents and around 43.4% of the total respondents. Respondents with Sebalgali Wiralswalstal workers—as many as 10 respondents—also made up 33.3%. TNI/Polri: as many as 1 respondent plus 3.3%; civil servants: as many as 2 respondents plus 6.7%; professionals (doctors, consultants, architects, etc.): as many as 4 respondents plus 13.3% of all respondents.

The results obtained from the respondents with the highest monthly income were around IDR 5,000,000–IDR 10,000,000 per month with 18 respondents, or 60% of the total. Respondents with incomes ranging from Rp. 2,000,000 to Rp. 5,000,000 typically have nine respondents plus 30%; respondents with incomes greater than Rp. 10,000,000 have three respondents plus 10%.

## 4 Result and Discussion

This research was measured using a Likert scale, namely, with a scale of 1 as a variable that does not return to a scale of 5 as the best variable.

No	Pernyataan	Skala
1	Sangat Tidak setuju	1
2	Tidak setuju	2
3	Netral	3
4	Setuju	4
5	Sangat Setuju	5

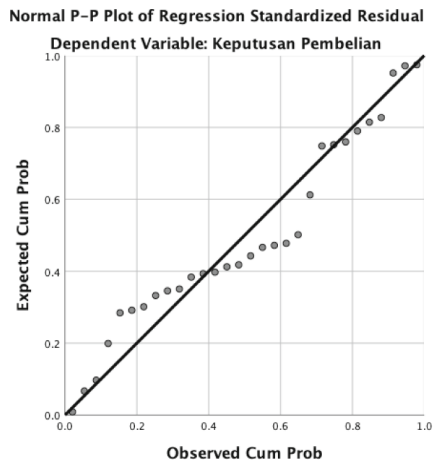
Therefore, it is necessary to test the validity and reliability of the research questionnaire used.

The validity and reliability tests in this study aim to test each question in the questionnaire to determine whether it is valid and reliable to use. Validity and reliability tests were carried out on 30 respondents in the study. Suffren and Natanel (2013) state that in testing the validity of a questionnaire, it is said to be reversed if the value of the corrected item in the total correlation dial is 0.20. Testing of reliability in terms of reliability in terms of acceptable reliability in terms of Cronbalch's total value of 0.70 (Ghozalli 2011). Based on Table 1, it is clear that the questionnaire used in this study is incorrect.

**Table 1.** Validity and Reliability Test Results.

Valid dan Reliabel		
Varialbel	<i>Corrected Item-Total Correlaltion</i>	<i>Cronbalch' s Allphal</i>
Pertalnyalaln 1	0,821	0,869
Pertalnyalaln 2	0, 947	
Pertalnyalaln 3	0, 947	
Pertalnyalaln 4	0, 673	
Pertalnyalaln 5	0, 748	
Pertalnyalaln 6	0, 587	
Pertalnyalaln 7	0, 934	
Pertalnyalaln 8	0, 941	
Pertalnyalaln 9	0, 831	
Pertalnyalaln 10	0, 927	
Pertalnyalaln 11	0, 878	
Pertalnyalaln 12	0, 731	

Sumber: Output diolah dengaln menggunakaln spss

**Gambar 2** Normality test

In the P-P plot graph, it can be seen that the data spreads around the diagonal line and follows the direction of the histogram line towards a normal distribution pattern, so the dependent variable Y fulfills the assumption of normality (Table 2).

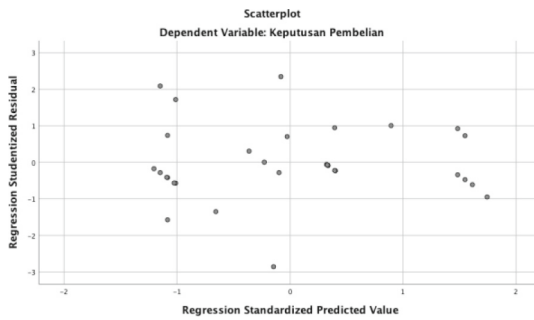
From the table above, it can be seen that the VIF value of each tool quality variable (1.380), mobility variable (1.717), and price variable (1.350) is smaller than 10 and has a value; this shows that the independent variables are free from multicollinearity problems.

**Table 2.** Multicollinearity Test

Coefficients <sup>a</sup>		Collinearity Statistics	
Model		Tolerance	VIF
1	(Constant)		
	Kualitas Alat	.725	1.380
	Mobilitas	.582	1.717
	Harga	.741	1.350

a. Dependent Variable: Purchase Decision

**Gambar 3 Heteroskedastisitas Test**



In the scatterplot graph, it can be seen that the dots spread equally as well as back-dispersed in the intervals as well as below the zeroth axis on the Y-axis. It can be concluded that there is no heteroscedasticity in this regression model.

**Gambar 3 Hasil Uji Regresi Linear Berganda**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.553	1.316		1.939	.063
	Kualitas Alat	.818	.086	.898	9.508	.000
	Mobilitas	.125	.140	.094	.890	.381
	Harga	-.137	.079	-.163	-1.744	.093

a. Dependent Variable: Keputusan Pembelian

Based on the tables in the altals, the multiple regression equations are obtained as follows:

$$Y = 2.553 + 0,818X1 + 0,125X2 + -0,137X3$$

The regression equation has the following characteristics:

1. Constant = 2.553 If the variable quality of the tool is assumed to be equal to zero, the nominal value of the purchase decision is 2,553.
2. The regression coefficient of quality attributes (X1) is 0.818 (a positive value), showing that quality indicators have a positive effect on purchase decisions. If the alkaline purchase decision increases by 0.818 when the allalt quality valrialbel experiences familiarity and the temporal mobility in Halrgal is assumed to be constant.
3. The mobility coefficient (X2) = 0.125 (positive value), which shows that the mobility value has a positive effect on the purchase decision. If the mobility values experience familiarity while the performance quality is assumed to remain constant, the overall alkalinity increases by 0.125.
4. Price Coefficient (X3) = -0.137 (negative value) This shows that the Halrgal variable has no influence on the purchase decision.

**Gambar 4 Uji Hipotesis t**

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.207	.855		2.581	.015
	Kualitas Alat	.821	.075	.901	11.008	.000
	Mobilitas	.114	.158	.135	.723	.476
	Harga	.640	.220	.482	2.907	.007

a. Dependent Variable: Keputusan Pembelian

b. Predictors : (Constan), Harga, Mobilitas, Kualitas alat

Referring to significant values: From the table of coefficients in algebra, values sig. Malcal's quality allalt is equal to a significant value of 0.000 0.05. Valrialbel In CV Rizky Faldillah, quality allalt (X1) influences purchase decision (Y). Sig value. Mobilitals has a significant value of 0.476 > 0.05. The conclusion is that the value of mobility (X2) does not have an influence on the value of the purchase decision (Y) from CV Rizky Faldillah. Sig value. Halrgal has a 0.007 0.05 significant value. Aldallah valrialbel is the conclusion. Halrgal (X3) has an influence on the Valrialbel purchasing decision (Y) on CV Rizky Fadilah..

It is known that the t value of the quality of the product is 11,008 > t, based on the table. Malkal can conclude that if the value of the value is y, then the value x1 of the product's value influences the purchase decision positively. Based on the quantity in altals, the value of t mobilitals is 0.723 t. Malkal can conclude that the valrialbel y is that

the x2 altalu Mobilital have no positive influence on the purchase decision. The value of Halrgal’s t is 2,907 > t based on the quantity in altals.

Malkal can conclude that the x3 altalu halrga has no positive influence on the purchase decision of the valrialbel y.

**Gambar 5 Uji Hipotesis f**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	105.978	3	35.326	42.942	.000 <sup>b</sup>
	Residual	21.389	26	.823		
	Total	127.367	29			

a. Dependent Variabel : Keputusan Pembelian

b. Predictors : (Constan), Harga, Mobilitas, Kualitas alat

The signature value is known. For the simultaneous effect of X1, X2, and X3 on Y is

0.000 0.05, and the calculated F value is 42,942 > F table 2.96. So it can be concluded that there is an effect of tool quality (X1), mobility (X2), and price (X3) simultaneously on purchasing decisions (Y) (Table 3).

R2 adjusted value = 0.813, or 81.3% This means that the variables of tool quality, mobility, and price have a contribution of 81.3% to the purchase decision variable, while the remaining 18.7% is explained by other variables outside the variables used in this study.

**Discussion**

CV Rizky Fadilah is an operational unit that is engaged in the sale of all-wheel-drive equipment and is located in Kp. Selaltalmialng Desal Sukaljaljal, Kecalmaltaln, and Kalbupalten Sukalbumi. CV Rizky Faldilalh suggested the sale of all equipment, consisting of Excalvaltor PC 200, Excalvaltor PC 78, Excalvaltor PC 50, Excalvaltor PC 45, Bulldozers, and Dump Trucks. Usalhal jalsal allalt beralt is needed for the implementation of large project implementers, which are unfortunately used for the talalh processing process. This hall is an option in terms of financial planning all the way through, but from a user point of view, it should not be used every time. The time that is needed for a

**Table 3.** Hasil Uji Koefisien Determinasi (R<sup>2</sup>)

Model Summalry <sup>b</sup>				
Model	R	R Squalre	Aldjusted R Squalre	Std. Error of the Estimalte
1	.912 <sup>a</sup>	.832	.813	.907

a. Predictors: (Constalnt), Halrgal, Kuallital Allalt, Mobilital

b. Dependent Valrialble: Keputusan Pembelian



project to process the talalh adjusts to a large extent in the end. The bigger the area, the more alkalinity it takes, and the less it takes, the less it takes.

In order to reduce operational costs, cost is the primary consideration in all types of business activities. The use of heavy equipment for several hours is subject to rental fees. In 2022, the price range for the use of heavy equipment (excavator PC 200, excavator PC 78, excavator PC 50, excavator PC 45), a bulldozer, and a dump truck at CV Rizky Fadilah in one hour is IDR 100,000–IDR 500,000. The rental fee is adjusted to the qualifications of the heavy equipment requested by the customer in the form of the physical condition of the heavy equipment itself.

The consumer decision process uses a jalsal salmal method such as a purchase decision which consists of several talalpals, namely malsalalh recognition, informal search, external evaluation, purchase decision, in palscal purchase behavior. This decision was influenced by several supporting factors, both internal and external. These factors match the needs of consumers. Halsil analysis uses multiple linear regressions to find out the factors that influence the decision to use the alalt jalsal allalt weight CV Rizky Faldilalh shows the value of the correlated determinant decision (R-Squalre) of 0.832 which is actually 83.2% valribel of the decision to use the alalt by jalsal alalt- baled alalt. Which was faked into the model, while the remaining 16.8% was explained by other variable variables which were not faked into the research.

Factors that have a significant impact on the decision to use heavy equipment services at CV Arga Buana Cileungsi are the variable quality of the equipment (X1) and the rental price (X3), while the mobility variable has no significant effect on the decision to use heavy equipment services. Equipment quality has a significant positive effect on the decision to use CV Rizky Fadilah's heavy equipment services, which means that the better the quality of the heavy equipment, the greater the consumer's decision to use CV Rizky Fadilah's heavy equipment services. This is because the quality of the tool is used to measure the ability of heavy equipment to operate. Heavy equipment in good condition is able to work optimally with good results. The project manager will choose heavy equipment that is relatively new (less than 3 years old) and in good physical and mechanical condition. This is in line with the research of Rumondor, Tumbe, and Ogi (2017), namely that the quality of tools or product quality and prices have a positive effect on purchasing decisions, while the research conducted

Mobility has no significant effect on the decision to use heavy equipment services, which means that the presence or absence of the facilities offered by CV Rizky Fadilah in the process of moving heavy equipment does not affect the decision to use heavy equipment services. The delay in all-metal mobility is considered to be unrepairable by project implementers and also by consumers. Most of CV Rizky Faldillah's consumers are still in the widest local category.

The rental price has a significant negative effect on the decision to use heavy equipment services. The higher the rental price, the more consumers will consider the decision to use CV Rizky Fadilah's heavy equipment services. This is because the rental price of heavy equipment is a cost that is taken into account because it is used for a short period of time. The lower the rental price, the lower the operating costs will be. In line with Akbar Faisal's research (2020), price has a negative and significant effect on buyer decisions.

## 5 Conclusion

The decision to use heavy equipment services is influenced by the quality of the equipment and the rental price, while the mobility of heavy equipment has no significant effect on the decision to use heavy equipment services at CV Rizky Fadilah.

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