

Article

The Effect of Price and Product Quality on Consumer Purchasing Decisions through Brand Image

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Abstract: Indonesia is categorized as Southeast Asia's largest economic potential, with abundant natural resources spread across various provinces. Indonesia experienced global financial crises and a slowdown in early 2019 due to the coronavirus (COVID-19) pandemic. Many sectors, such as mining, energy, and construction, use heavy equipment, especially Crawler Excavators. The Mining sector is still the prima donna of business in Indonesia due to the increasing price of commodities such as coal and other minerals, so there are also many companies as heavy equipment manufacturers, especially PT. Zoomlion Indonesia Heavy Industry. Thus, this study examines the effect of price and product quality on consumer purchasing decisions through brand image. This study is designed using this quantitative method. It is carried out with an exploratory approach which aims to explore and examine more deeply the phenomena that occur between the constructs under study. The population is all companies that shop or buy 20 ton Class Crawler Excavator heavy equipment products, namely PT. Zoomlion Indonesia Heavy Industry in East Kalimantan from 2017-2021, totaling 130 product sales. The results indicated that price and product quality positively and significantly affect purchase decisions. Also, price and product quality positively and significantly affect brand image. Besides that, this study found that brand image mediates the relationship between price and product quality in purchase decisions. This study concludes that brand image plays an important role as a mediator between price and product quality in purchase decisions at PT. Zoomlion Indonesia Heavy Industry.

Keywords: price; product quality; purchase decision; brand image.



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1. Introduction

Indonesia is one of the developing countries with the largest economic potential in Southeast Asia. In addition, Indonesia also has abundant natural resources spread across various provinces in Indonesia. As an archipelago, Indonesia experienced global financial turmoil and a slowdown in economic turnover in early 2019. One of the factors that caused this was the emergence of the coronavirus pandemic, which spread

throughout the world, especially in Indonesia. After almost 2 (two) years of this virus spreading, which began in March 2020 in Indonesia, the government has made various ways to prepare plans that can be implemented in the community so that the wheels of economic rotation continue to run hand in hand with the pandemic that lasts until its time slowly decreases. One sector that continues to run amid the pandemic and global economic difficulties is the construction and mining sector. Many things are needed to run a business in the construction and mining sectors, including using heavy equipment. Several complex construction activities are being carried out using various types of construction equipment. The increasing demands of industrialization in the construction industry also rely on utilizing machinery to achieve effectiveness and efficiency. The placement of heavy equipment at construction sites not only enhances the capabilities of the workers but also shortens the completion time of the activities at work. The following is the development of supply and demand for heavy equipment in Indonesia from 2012 to 2021, as shown in Figure 1. Figure 1 shows in 2017, the need for heavy equipment amounted to 97,656, while the availability of heavy equipment only reached 33,906. This figure does not reach 50% of the heavy equipment requirements. However, in 2018 the availability of heavy equipment is predicted to increase by around 27% from the previous year. But this figure, when compared to the need in 2018, there is still a sizable difference between supply and demand. This large gap is predicted to continue until 2020.

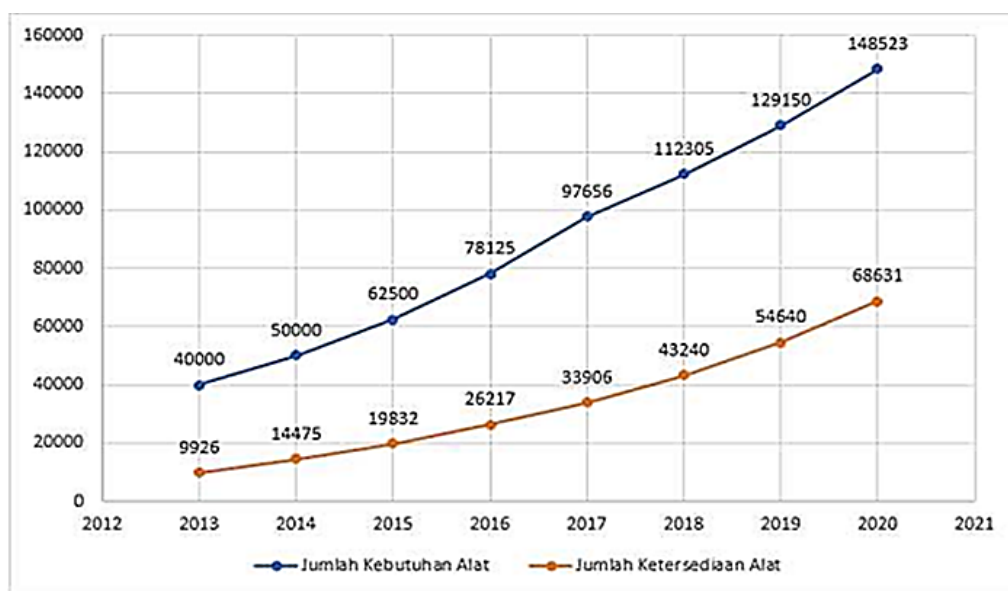


Figure 1. Development of Heavy Equipment Supply and Demand in Indonesia from 2012 to 2021.

On the basis of data from ERG also, in 2022, heavy equipment sales in Indonesia in 2021 reached 15,745 units, where the most widely used model is the GPE Crawler Excavator, with sales reaching 11,481 units. Many sectors, such as mining, energy, and construction, use heavy equipment, especially Crawler Excavators. The Mining sector is still the prima donna of business in Indonesia due to the increasing price of commodities such as coal and other minerals, so there are also many companies as heavy equipment manufacturers, especially PT. Zoomlion Indonesia Heavy Industry is in Balikpapan City, East Kalimantan province.

PT. Zoomlion Indonesia Heavy Industry, or Zoomlion Heavy Industry Science and Technology Co. Ltd, is a Chinese manufacturer of heavy equipment and sanitation equipment. Although it produces various types of heavy equipment, Zoomlion specializes in high-tonnage truck-type heavy equipment and its various variants for road construction and mining projects. Crawler excavators are categorized into various classes based on the unit's weight. Some models that enter Indonesia vary from 5 tons to 200 tons. For the market in Indonesia itself, the 20-ton crawler excavator class dominates because this type of excavator can work in various places or job sites such as plantations, construction, and mining. When the product produced can meet consumer expectations or desires for the use of heavy equipment, it indirectly impacts purchasing decisions made by consumers.

One of the dimensions in purchasing decisions is brand choice; in choosing a brand, consumers see the suitability of price, benefits, and good product image. Without a positive and strong brand image, companies cannot get a good market share (Achrol & Kotler, 2016). Products with good quality in a company will

create interest in involving themselves in a product or service. Customers involve themselves in getting a valuable experience so that it can indirectly encourage purchasing decisions. In creating purchasing decisions, consumers or users consider various factors such as price, product quality, and company brand image.

Price is the value of a product which can give a brand image to the company, and also is the final value of a consumer behavior involving purchasing decisions and can refer to products that provide experience and create value and generate more positive responses due to aspects that support brand image in a company. When the price set by the manufacturer is the acceptance by the heavy equipment user company, the industry or business entity certainly finds out. It considers the quality of heavy equipment products used in the work. Prices that are consumer expectations or desires affect the consideration or purchase decisions made, especially if the brand image or image of the manufacturer is very good so that indirectly the brand image acts as a mediator that drives the effect of price on industrial purchasing decisions of heavy equipment users.

In line with research conducted by Purnamasari & Murwatiningsih (2015), price indirectly affects purchasing decisions through brand image. Other research from Hendrayani et al. (2022) proved that brand image mediates the effect of price on purchasing decisions. It reinforces that brand image has an influential role between prices and purchasing decisions. Brand image is a public perception of a company or product. Brand image plays a very important role in the consumer purchasing decision process; therefore, a good brand image can increase consumer desire in purchasing decisions for a product (Achrol & Kotler, 2016).

Good product quality aims to create satisfaction in consumers. If consumers are satisfied, these consumers will make repeat purchases, increasing purchasing decisions. The brand image also helps a product to get its consumers because if the brand image that the product has is very strong, it will certainly result in brand perceptions that exist in consumers being good so that consumers feel confident in making product purchasing decisions and so that brand image also acts as a mediator to improve the relationship between product quality and purchasing decisions. In line with research conducted by Arifin et al. (2022), product quality influences purchasing decisions through brand image as a mediating variable. Other research from Saraswati & Giantari (2022) proved that brand image mediates a positive and significant effect of product quality on purchasing decisions. It strengthens the role of brand image as a variable that mediates positively and significantly the effect of product quality on purchasing decisions.

2. Literature Review

Previous studies on the same topic discuss the impact of brand image, price, and product quality on consumer purchasing decisions. These previous studies can be used to explain the theoretical framework and see how each variable affects other variables.

2.1. Underlying Theory

In business competition today, businesspeople must be able to see and master the market they are aiming for so that entrepreneurs can provide what needs are thought to be able to get the largest market. So, entrepreneurs or a company must be sensitive to the surrounding environment and the phenomenon of the business market. Companies that are sensitive to the surrounding environment will be able to compete with one company with another, especially if the company is engaged in the same field. The company should be able to understand the market again. In the era of modern markets that today have experienced many developments that can make consumers have more choices in terms of bargaining so that if the company cannot provide the wants and needs of consumers, sooner or later, consumers will look for other products or even the same product but with a different brand. It applies to all business markets in the Business to Customer (B2C) and Business to Business (B2B) markets.

According to Hutt & Speh (2021), Business Marketing Management or B2B "is a market for products and services both locally and internationally where transactions are carried out between fellow companies, governments, and institutions used for the company's consumption or resale. Markets that indirectly contribute to the business market are those that transact directly for goods used for personal/individual use. Meanwhile, Achrol & Kotler (2016) argue that Business to Business (B2B) Marketing is a marketing system that involves one company with another company that is unique and does not use marketing techniques or methods as commonly known by the market, which in Business to Business (B2B) marketing the scope is very limited and not for the whole community because for decision making in purchasing only a few people are needed, namely representatives of each company. Business to Business (B2B) is a company activity that

sells business goods or services that involves facing professional consumers who are trained and have a lot of knowledge and are skilled in assessing competing offers.

2.2. Theory of Consumer Behavior

Consumer behavior is the dynamic interaction between influence and awareness, behavior, and the environment in which humans exchange aspects of life (Olson, 2013). Meanwhile, Hawkins & Mothersbaugh (2018) state that consumer behavior is the study of individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the customer and society. This explains that consumer behavior is the study of individuals, groups, or organizations and the processes they use to select, secure, use, and eliminate products, services, experiences, or ideas to satisfy needs and the impacts of these processes on customers and society.

Furthermore, according to Pyszczynski et al. (2015), customer behavior studies the processes involved when individuals or groups select, purchase, use, or dispose of products, services, ideas, or experiences to satisfy needs and desires. It explains that customer behavior studies the processes involved when individuals or groups select, purchase, use, or dispose of products, services, ideas, or experiences to satisfy needs and desires. Achrol & Kotler (2016) explain that consumer behavior refers to how individual consumers make purchasing decisions using available resources and then exchange them for goods or services to feel the benefits. It illustrates how the consumer behavior model can be studied, as in Figure 2 below:

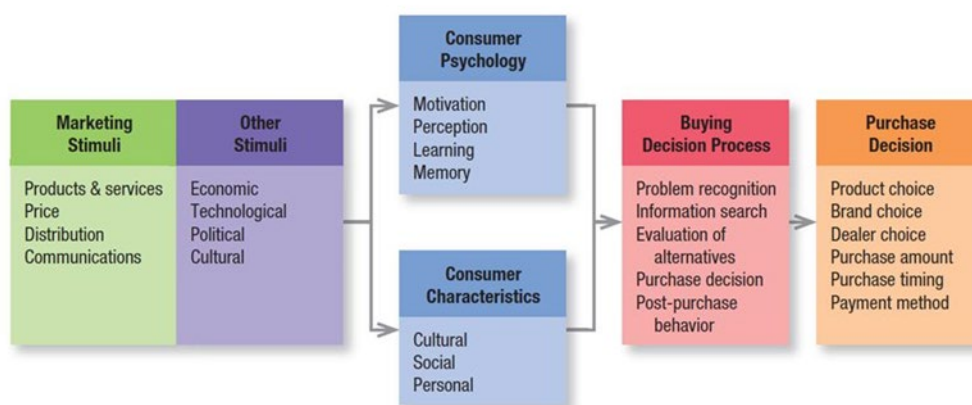


Figure 2. Model of Consumer Behavior

Source: Achrol & Kotler (2016)

Figure 2 displays the starting point for understanding consumer behavior is to understand the consumer behavior model, as well as external stimuli in the form of marketing stimuli, namely products and services, prices, distribution channels and communication, as well as other stimuli such as economics, technology, politics and culture can influence consumer choices and have two elections in terms of consumer psychology, namely motivation, perception, learning, and memory, and also consumer characteristics, namely cultural, social, and personal. This second selection can be known before purchasing a product through problem recognition, information search, alternative selection, purchase decisions and post-purchase behavior. Therefore, the marketer's job is to understand what happens in the consumer's consciousness between the arrival of external marketing stimuli and the final purchase decision. According to Achrol & Kotler, (2016), consumer behavior is the study of how individuals, organizations, and groups buy, choose and use ideas, products and services to satisfy customer needs and desires. The concept of a consumer behavior approach teaches that marketers tend to have more customer orientation and not just sell what the company produces. Consumer behavior is the things that underlie consumers to make purchasing decisions.

2.3. Price

Price is the overall sacrifice consumers are willing to make to obtain a specific product or service (Tjiptono, 2017). Then, Achrol & Kotler (2016) state that price is the amount of money charged for a product or service or the sum of values that customers exchange for the benefits of having or using the

product service". It means that price is the amount of money charged for a product or service or the sum of values that customers exchange for the benefits of owning or using it. In a narrow sense, price is the amount of money charged for a product or service. In a broad sense, price is the sum of all the values customers give up benefiting from owning or using a product or service. Price is the only element in the marketing mix that generates revenue. Price is also one of the most flexible elements of the marketing mix (Kotler et al., 2017). Pricing is an important thing that can affect total revenue and costs. Price is a major positioning factor and must be decided according to the target market, product assortment mix, services, and competition (Saleh & Said, 2019).

2.4. Product Quality

According to Alma (2014), a product is a set of attributes, both tangible and intangible, including color problems, price, good factory name, good name of the store that sells (retailers), and factory services and retailer services, which buyers accept to satisfy their desires. Meanwhile, Assauri (2015) states that product quality is a factor contained in an item or result that causes the item or result to be the purpose for which the item or result is intended. According to Achrol & Kotler (2016), product quality is a product's ability to perform its functions, including durability, reliability, and accuracy, which is obtained by the product as a whole. Companies must always improve the quality of their products or services because improving product quality can make customers feel satisfied with the products or services provided and will influence customers to repurchase these products. Further, Kotler et al. (2017) explained that product quality is a product or service characteristic that depends on its ability to meet stated or implied customer needs. Based on the several definitions above, product quality is the ability of a product to fulfill consumer desires. These consumer desires include product durability, reliability, ease of use, and other valuable attributes free from deficiencies and damage.

2.5. Brand Image

According to Hasan (2018), a brand is interpreted as a combination of a name, symbol, or design used to identify goods and services from a business or business group that is developed or implemented into a trademark (brand image) that can make a difference with competitors or competitors, create influence, and generate value for the company. Then, Ledikwe (2020) found that brand image is the overall perception of attributes, functions, and meanings that consumers associate with a brand. This means that brand image is the overall perception of attributes, functions, and meanings that consumers associate with a brand. Meanwhile, Lee & Kotler (2019) state that brand image is how consumers prioritize thoughts, feelings, and actions on a brand. Brand image is considered a type of association that arises in the minds of consumers when remembering a particular product or brand. It means that brand image is how consumers prioritize thoughts, feelings, and actions on a brand. Brand image is considered a type of association that arises in the minds of consumers when thinking of a product or brand. By the definitions described, brand image results from consumer views or research on a good or bad brand. It is based on consideration or selection by comparing the differences in several brands so that the brand whose offerings match the needs will be selected. Building a positive brand image can be achieved with a strong and unique marketing program for the product. Its advantages can be highlighted, making it different from other products. As previously described, a good combination of supporting elements can create a strong brand image for consumers.

2.6. Purchase Decision

Purchase decisions are an integrated process carried out to combine knowledge to evaluate two or more alternatives and choose one of them so that purchasing decisions can be interpreted as making choices by consumers on two or more choices to meet their needs (Makrufah, 2017). Then, according to Schiffman & Kanuk (2013), a decision is a selection of the action from two or more choices. It means a decision is a selection of actions from two or more choices. Purchasing decisions are part of consumer behavior, namely the study of how individuals, groups, and organizations choose, buy, use, and how goods, services, ideas, or experiences satisfy their needs and wants. (Kotler et al., 2017). Then, Kotler et al. (2017) explained that a purchase decision is a buyer's decision about which brand to buy. The complex decision-making process often involves several decisions. Consumers have goals or behaviors to be achieved or satisfied when making a purchase decision. Consumers will decide about the behavior they want to do to solve their problems, where problem-solving is a continuous reciprocal flow between environmental factors, cognitive and affective processes, and behavioral actions.

2.7. Hypothesis Development and Conceptual Framework

2.7.1. The Effect of Price on Brand Image

According to Schiffman & Kanuk (2013), the factors that form a brand image are quality, reliability, benefits, service, risk, price, and image owned by the brand. Image is a view, agreement, and information related to the brand of a product. Image is important in the company because it can influence consumer perceptions. In line with Erlitna & Soesanto (2018), the price positively and significantly affects brand image. Other research from Hendrayani et al. (2022) proved the same thing regarding prices which have a positive and significant effect on brand image. It makes it clear that the higher the price value perceived by consumers or customers, the better the brand image in the minds of consumers. The hypotheses formulated in this study are based on the theoretical and empirical studies disclosed above.

H1: Price has a positive and significant effect on brand image.

2.7.2. The Effect of Product Quality and Brand Image

According to Achrol & Kotler (2016), brand image is a consumer response to a brand based on the good and bad brands that consumers remember. Brand image is a belief formed in consumers' minds about the product objects they have perceived. Brand image can form positive perceptions and consumer confidence in products or services, strengthening brand loyalty. Brand loyalty can form a good image, right, and consumer tastes for the products and services it produces. In line with research conducted by Erlitna & Soesanto (2018), they proved that product quality positively and significantly affects brand image. Then, other research from Arifin et al. (2022) strengthens the evidence that product quality positively and significantly affects brand image. It makes it clear that the better and higher quality of a product can encourage the creation of a positive image perceived by consumers regarding the brand or product offered. The hypotheses formulated in this study are based on the theoretical and empirical studies disclosed above.

H2: Product quality has a positive and significant effect on brand image.

2.7.3. The Effect of Brand Image on Purchasing Decisions

The brand image represents the brand's overall perception and is formed from information and past experiences with the brand. Brand image is related to attitudes in the form of beliefs and preferences for a brand. Consumers, who have a positive image of a brand, will be more likely to make purchases (Setiadi, 2013). According to research conducted by Purnamasari & Murwatiningsih (2015), brand image has a positive and significant effect on purchasing decisions. Other research from Suhaily & Darmoyo (2017) proved that brand image positively and significantly affects purchasing decisions. It makes it clear that the better the brand image, the higher the consumer's decision to purchase. The hypotheses formulated in this study are based on the theoretical and empirical studies disclosed above.

H3: Product quality has a positive and significant effect on brand image.

2.7.4. The Effect of Price on Purchasing Decisions

According to Alma (2014), a purchasing decision is a consumer decision that is influenced by financial economics, technology, politics, culture, product, price, location, promotion, physical evidence, people, and process to form an attitude in consumers to process all information and draw conclusions in the form of a response that appears what product will be purchased. Research conducted by Purnamasari & Murwatiningsih (2015) proved that price positively and significantly affects purchasing decisions. Other research from Adirinekso et al. (2021) proved that price also positively and significantly affects purchasing decisions. It clarifies that the high or low-price value applied by a business entity or industry can encourage purchasing or business decisions. The hypotheses formulated in this study are based on the theoretical and empirical studies disclosed above.

H4: Price has a positive and significant effect on purchasing decisions.

2.7.5. The Effect of Product Quality on Purchasing Decisions

According to Kotler et al. (2017), product quality is one of the most used by a marketer in marketing a product. The better the quality of the products produced, it will provide opportunities for consumers to make purchases, and the company is no less competitive than its competitors. Research conducted by Suhaily & Darmoyo (2017) proved that product quality positively and significantly affects purchasing decisions. Another research from Rahman & Sitio (2020) also proved the influence of product quality on purchasing

decisions. It makes it clear that better quality or product quality can affect purchasing decisions made by consumers. The hypotheses formulated in this study are based on the theoretical and empirical studies disclosed above.

H5: Product quality has a positive and significant effect on purchasing decisions.

2.7.6. The Effect of Price on Purchasing Decisions Mediated by Brand Image

According to Achrol & Kotler (2016), one of the dimensions in purchasing decisions is the choice of brands that consumers consider. In choosing a particular brand, consumers will see the suitability of price, benefits, and good product image. Companies cannot get a good market share without a positive and strong brand image. Products with good quality in a company will create interest in involving themselves in a product or service. Customers involve themselves intending to get a valuable experience so that it can indirectly involve purchasing decisions. Price is the value of a product which can give a brand image to the company and also be the final value of consumer behavior that also involves purchasing decisions and can refer to products and services that provide experiences and create value and generate more positive responses because of the aspects that support brand image in a company. In line with research conducted by Purnamasari & Murwatiningsih (2015), price indirectly affects purchasing decisions through brand image. Other research from Hendrayani et al. (2022) proves that brand image mediates the effect of price on purchasing decisions. It reinforces that brand image has an influential role in price and purchasing decisions. The hypotheses formulated in this study are based on the theoretical and empirical studies disclosed above.

H6: Price positively and significantly affects purchasing decisions mediated by brand image.

2.7.8. The Effect of Product Quality on Purchasing Decisions Mediated by Brand Image

According to Achrol & Kotler (2016), brand image is the public's perception of a company or product. Brand image plays a very important role in the consumer purchasing decision process. Therefore, a good image of a brand can increase consumer desire in purchasing decisions for a product ". Good product quality aims to create satisfaction in consumers. If consumers are satisfied, these consumers will make repeat purchases, increasing purchasing decisions. The brand image also helps a product to get consumers because if the brand image that the product has is very strong, it will certainly result in brand perceptions that exist in consumers being good so that consumers feel confident in making product purchasing decisions and so that brand image also acts as a mediator to improve the relationship between product quality and purchasing decisions. In line with research conducted by Arifin et al. (2022) proves that product quality influences purchasing decisions through brand image as a mediating variable, while in other research also from Saraswati & Giantari (2022) proves that brand image mediates positively and significantly the effect of product quality on purchasing decisions. It strengthens the role of brand image as a variable that mediates positively and significantly the effect of product quality on purchasing decisions. The hypotheses formulated in this study are based on the theoretical and empirical studies disclosed above.

H7: Product quality positively and significantly affects purchasing decisions mediated by brand image.

2.8 Conceptual Framework

On the basis of the background description and the formulation of problems and hypotheses formulated, the research conceptual framework to prove the effect can be seen in Figure 3 below.

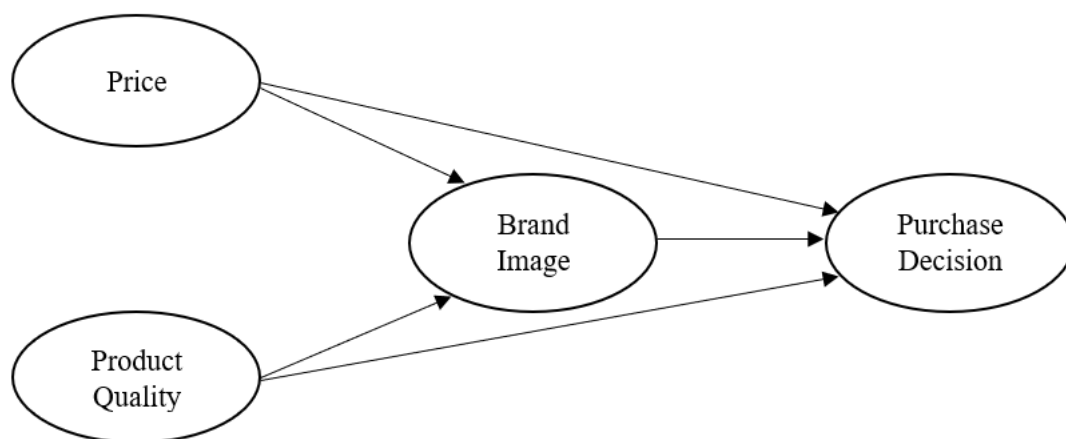


Figure 3. Research Framework

3. Materials and Methods

3.1. Research Design

This study is designed using a quantitative approach. According to Hair et al. (2019), quantitative data refers to measurements where numbers are used to directly represent the characteristics of something because this method is recorded directly with numbers suitable for statistical analysis. The research design using this quantitative method is carried out with an exploratory approach that aims to explore and examine more deeply the phenomena between the constructs under study.

3.2. Types and Data Sources

The design of this study is a quantitative method. It is done with a type of survey research with a reciprocal or reciprocal relationship approach, which in this type is carried out by compiling a list of questions or structured questionnaires submitted to respondents in the form of a sample from a population and then testing the reciprocal relationship when 2 (two) or more variables affect or strengthen each other. In this survey research, the type or type of data used are primary data obtained directly through respondents who shop for 20 Ton Class Crawler Excavator heavy equipment at PT. Zoomlion Indonesia Heavy Industry in East Kalimantan with a measurement scale using intervals or ratios.

3.3. Instruments

Research instruments are measurements of the value of the variables studied because research instruments can be used in measuring data which means that quantitative data can appear. Therefore, the instrument has a scale. The measurement scale is an agreement used as a guideline for determining the interval length found in the measuring instrument. Therefore, if used in measurement, this measuring instrument can generate quantitative data. According to Hair et al. (2019), the Likert scale tries to measure attitudes or opinions. Likert scales often use a 5 (five) point scale to assess the strength of agreement or disagreement about a statement. Through the Likert scale, the variables to be considered are described as variable indicators. Then this indicator becomes the starting point for the preparation of instrument items, which can be questions or statements. Instruments that use a Likert scale can be described with choices, namely:

Table 1. Likert Scale Score

Score weight	Measurement category
5	Strongly Agree
4	Agree
3	Neither
2	Disagree
1	Strongly Disagree

Source: Hair et al. (2019)

3.4. Data Collection

Researchers utilize questionnaires to collect primary data for their research. The definition of a questionnaire is a technique used to collect data by distributing a series of questionnaires designed so that respondents can be filled in and then returned to the researcher. The use of questionnaires in data collection has several advantages, such as being more efficient if the researcher knows clearly (definitely) about the variables he wants to measure, relatively low cost and relatively short time, and it is suitable for a large number of respondents. It can use intermediaries or field officers to distribute or collect questionnaires. Researchers collect their research data by distributing a list of questions in the form of a closed questionnaire that will be filled in by consumers who shop for 20 ton Class Crawler Excavator heavy equipment in East Kalimantan through a combination of methods, namely offline with a physical questionnaire (hardcopy) and online using a tool, namely Google Form. Filling out the questionnaire is prioritized using Google Forms, while physical questionnaires are only given to respondents who cannot use Google Forms.

3.5. Population and Sample

The population used by researchers is all companies that shop or buy 20 Ton Class Crawler Excavator heavy equipment products at PT. Zoomlion Indonesia Heavy Industry in East Kalimantan from 2017-2021, totaling 130 product sales. The sampling technique used in this study used a purposive sampling technique. Purposive sampling has certain considerations (Noeraini & Sugiyono, 2016). According to Noeraini & Sugiyono (2016), the method of determining saturated or total sampling is a sampling technique when all population members are used as samples. From this explanation, the number of samples taken based on the amount of existing purchase data is 130 consumers who have purchased 20 Ton Class Crawler Excavator heavy equipment products at PT. Zoomlion Indonesia Heavy Industry in East Kalimantan.

3.6. Data Analysis

The data analysis method used in this study uses descriptive statistical analysis with data processing assisted by using IBM SPSS 28 software to process respondent characteristics distribution data and screening data and inferential statistical analysis assisted by using SmartPLS 3.0 software.

4. Results and Discussion

4.1. Demography Profile of Respondents

In processing this respondent characteristic data, the number of respondents sampled in this research was 130 people. Based on the filled questionnaires, the demographics of respondents can be identified based on 3 (three) characteristics, namely job position; income; and number of units purchased. The characteristics of respondents based on job positions are shown in Table 2 below.

Table 2. Characteristics of Respondents' Job Position

Job Position	Frequency	Percentage
Owner as approver and decider	63	48%
Department Head as Initiator	45	35%
Operator as Influencer	20	15%
Others as buyer	2	2%
Total	130	100%

Table 2 describes the Job Position classification, namely Owner, as many as 63 people with a percentage of 48.00%; Technical Decision, as many as 45 people with a percentage of 35.00%; Operator, as many as 20 people with a percentage of 15.00%; While Other Job Position as many as 2 people with a percentage of 2%. The following are the characteristics of respondents based on the company's turnover category in Table 3 below.

Table 3. Characteristics of Respondents' Company Turnover

Company Turnover	Frequency	Percentage
Rp 2 M	22	17%

Company Turnover	Frequency	Percentage
Rp 2,5 M – Rp 3 M	51	39%
Rp 3,5 M – Rp 4 M	43	33%
≥ Rp 4 M	14	11%
Total	130	100%

Table 3 for the classification of Company Turnover, namely Rp 2 M as many as 22 people with a percentage of 17.00%; Rp 2.5 M - Rp 3 M as many as 51 people with a percentage of 39.00%; Rp 3.5 M - Rp 4 M Million, as many as 43 people with a percentage of 33.00%; and ≥ Rp 4 M as many as 14 people with a percentage of 11.00%. The following are the characteristics of respondents based on the category of the number of purchase units in Table 4 below:

Table 4. Characteristics of Respondents' Purchasing Units

Purchasing Units	Frequency	Percentage
1-5 Unit	60	43%
6-10 Unit	50	36%
>10 Unit	20	21%
Total	130	100%

Table 4 shows that the number of unit purchases who purchased 1-5 units was 60 respondents with a percentage of 43%, and the number of respondents who purchased 6-10 units was 50 respondents with a percentage of 36%. Meanwhile, respondents purchased more than 10 units were 20 respondents with a percentage of 21.00%.

4.2 Structural Equation Modeling (PLS-SEM)

This study uses the SmartPLS 3.0 software to analyze the following data analysis. The stages in testing are divided into 3 (three), namely.

4.2.1. Measurement Model (Outer Model)

The following criteria must be met in testing this measurement model (outer model), namely as follows:

4.2.1.1. Convergent Validity

This test is done by looking at the standardized loading factor. The value describes the magnitude of the correlation (relationship) between each indicator and its construct. The loading factor value that can be valid is if it has a value greater than 0.7. However, some researchers say that if the loading factor value is greater than 0.5, the item is valid. SmartPLS 3 output for loading factors provides results in Table 5 below.

Table 5. Result of Convergent Validity Testing

Item(s)	Brand Image	Price	Purchase Decision	Product Quality
X1.1		0.830		
X1.2		0.800		
X1.3		0.786		
X1.4		0.808		
X2.1				0.728
X2.2				0.704
X2.3				0.802
X2.4				0.803
Y1.1	0.866			
Y1.2	0.825			
Y1.3	0.831			

Item(s)	Brand Image	Price	Purchase Decision	Product Quality
Y2.1			0,805	
Y2.2			0,797	
Y2.3			0,771	
Y2.4			0,785	
Y2.5			0,765	
Y2.6			0,777	

Table 5 above shows that the indicators used to measure each variable in this study all have a loading factor value of more than 0.50, so it can be concluded that all indicator items are valid to explain the variables (constructs). No indicators are omitted in this research. In addition, this measurement model is used to explain the relationship between latent variables and manifest variables or indicators, as shown in Figure 4 below.

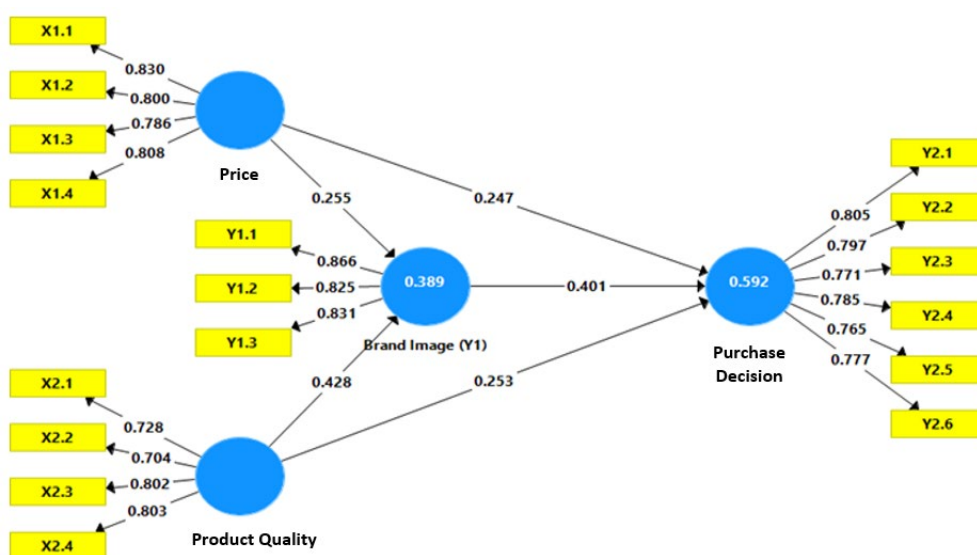


Figure 4. Result of the PLS Algorithm

4.2.1.2. Discriminant Validity

This test is carried out by looking at the value of the cross-loading between indicators on the construct and Fornell-Lacker's cross-loading. Cross-loading between indicators is used to compare the correlation between indicators with their constructs and other block constructs. Meanwhile, Fornell Lacker's cross-loading value looks at the root value of AVE between constructs and other constructs. The cross-loading value between indicators must show that the correlation between indicators and their constructs is higher when compared to other constructs. In brand image research as mediating the effect of price and product quality on consumer purchasing decisions for 20-ton class Crawler Excavators in East Kalimantan. The following are the results of discriminant validity testing based on the cross-loading value shown in Table 6.

Table 6. Result of Cross Loadings

Item(s)	Brand Image	Price	Purchase Decision	Product Quality
X1.1	0.500	0.830	0.573	0.589
X1.2	0.363	0.800	0.473	0.573
X1.3	0.378	0.786	0.450	0.413
X1.4	0.451	0.808	0.497	0.490
X2.1	0.321	0.493	0.422	0.728
X2.2	0.275	0.485	0.339	0.704

Item(s)	Brand Image	Price	Purchase Decision	Product Quality
X2.3	0.526	0.517	0.602	0.802
X2.4	0.577	0.482	0.538	0.803
Y1.1	0.866	0.493	0.539	0.531
Y1.2	0.825	0.413	0.480	0.495
Y1.3	0.831	0.431	0.684	0.470
Y2.1	0.590	0.452	0.805	0.510
Y2.2	0.621	0.520	0.797	0.555
Y2.3	0.532	0.504	0.771	0.409
Y2.4	0.485	0.500	0.785	0.579
Y2.5	0.444	0.488	0.765	0.477
Y2.6	0.515	0.465	0.777	0.514

Table 6 shows that some discriminant validity test results for each indicator of each latent variable still have a cross-loading value greater than the loading value when associated with other latent variables. It means that each construct or latent variable has good or high discriminant validity where the indicators in the construct indicator block are better than those in other blocks. As for the Fornell-Lacker cross-loading value, the root AVE value between constructs must be greater than the value with other constructs. In research on a brand image mediating the effect of price and product quality on consumer purchasing decisions for 20-ton class Crawler Excavators in East Kalimantan, the root value of AVE between constructs for each construct has met the requirements so that it can be used in research. Fornell-Lacker's cross-loading value can be seen in Table 7.

Table 7. Result of Discriminant Validity using Fornell-Lacker Criterion

Variable(s)	Brand Image	Price	Purchase Decision	Product Quality
Brand Image	0.841			
Price	0.531	0.806		
Purchase Decision	0.682	0.623	0.783	
Product Quality	0.592	0.644	0.650	0.760

Table 7 above shows that Cronbach's alpha value is greater than 0.6 and the composite reliability is greater than 0.7 of all research variables, indicating that the instrument used to measure the constructs in this study is acceptable or reliable. In the results of this construct reliability test, an average variance extracted (AVE) root value is used to measure the discriminant validity test in addition to Table 7 above. Each variable's average variance extracted (AVE) value must be greater than 0.5. Table 7 shows that all variables in the estimated model meet good discriminant validity criteria because 0.5 or 50% of the variance of the indicators can be explained.

4.2.1.3. Reliability Test

This test is carried out by looking at the composite reliability value with a threshold of 0.7. The composite reliability value for the four constructs used in this study is above 0.7 so that all constructs meet the requirements for use in brand image research as mediating the effect of price and product quality on consumer purchasing decisions for 20-ton class Crawler Excavators in East Kalimantan. The highest composite reliability value in the purchasing decision construct is 0.905 and the lowest value for product quality is 0.845. The composite reliability value for each construct can be seen in Table 8.

Table 8. Result of Reliability Testing

Variable(s)	Cronbach's Alpha	Composite Reliability
Price	0.821	0.881
Product Quality	0.764	0.845

Variable(s)	Cronbach's Alpha	Composite Reliability
Brand Image	0.794	0.879
Purchase Decision	0.874	0.905

Table 8 above shows that Cronbach's alpha value is greater than 0.6, and the composite reliability is greater than 0.7 of all research variables. It indicates that exploratory research with instruments used to measure constructs in this study is acceptable or reliable.

4.3. Structural Model (Inner Model)

4.3.1. Coefficient of Determination (R² or R square)

The coefficient of determination (R² or R square) determines how much influence between endogenous and exogenous variables. The R² (R square) value for each endogenous variable is the predictive power of the structural model, where the R square value can be seen in Figure 5.1 above. Changes that occur in the R² (R square) value can be used to assess exogenous variables' ability to explain endogenous variables' influence. The following are the results of testing the R² (R square) value of the endogenous variables in Table 9 below.

Table 9. Result of Coefficient Determination (R square)

Variable(s)	R Square	Adjusted - R Square
Brand Image	0.389	0.380
Purchase Decision	0.592	0.582

Table 9 shows that the R² (R square) value for the brand image variable (Y1) is 0.389 or 38.9%, while for the purchasing decision variable (Y2), it is 0.592 or 59.2%. These results indicate that the brand image variable (Y1), with a coefficient of determination of 0.389 or 38.9%, is influenced by price (X1) and product quality (X2). In comparison, other variables outside this research influence the remaining 61.1%. For the purchasing decision variable (Y2), with a coefficient of determination of 0.592 or 59.2%, is influenced by price (X1), product quality, and brand image (Y1), while other variables outside this research influence the remaining 40.8%. According to Ghazali & Latan (2015) in Chin (1998) explains that the R² (R square) values of 0.67, 0.33, and 0.19 is categorized as strong, moderate, and weak. According to the test results, the R² (R square) value for the brand image variable (Y1) is 0.389 and the purchasing decision variable (Y2) is 0.592, so the model is in the moderate category.

4.3.2. Goodness of Fit (GoF)

Goodness of Fit (GoF) is used to test the feasibility of a model, where this test is carried out for overall model validation. The goodness of fit (GoF) value in PLS (partial least square) analysis can be seen from the predictive relevance (Q²) value, also known as Stone Geisser's. The Q² value is calculated based on the R² value of each endogenous variable. The Q² value is calculated based on the R² value of each endogenous variable. The Q² value is 0.751, with a percentage of 75.1%. According to Chin (1998) in Ghazali & Latan (2015), the R-square value for each endogenous variable in the structural model is 0.67 and above indicates a strong model category, 0.33 to 0.67 indicates a moderate or moderate category, and 0.19 to 0.33 indicates a weak category. The Q² results above show a value of 0.751 with a percentage of 75.1%, which means it falls into the strong category so that the model can be relevant to the value or predictive model. In addition, the predictive relevance value of 75.1% indicates that the diversity of data distribution that the model can explain is 75.1%. In other words, the information contained in this research is 75.1. In comparison, the remaining 24.9% is explained by other variables or those not yet contained in the model and errors.

4.4. Hypothesis Testing

The basis used to test the significance value or hypothesis results is the value contained in the structural model image (inner model) as shown in Figure 5 below.

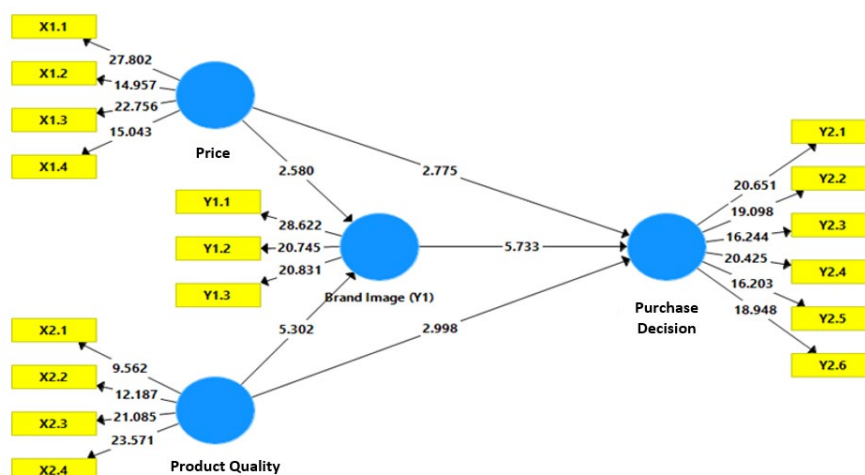


Figure 5. Structural Model Results (Inner Model)

Figure 5 shows the inner model of the relationship among study variables, which will be obtained by making hypothesis decisions. In testing the hypothesis in this study, it is reflected in the T-Statistics value (t-count) and the P-Values value, which can be stated that the hypothesis is accepted if $t\text{-count} > t\text{-table}$ (1.96) with a significance value (P-values) < 0.05 or 5%, but otherwise if it does not comply with these provisions, the hypothesis is rejected. The following hypothesis testing results are obtained through the inner model, as shown in Table 10 below.

Table 10. Result of Hypothesis Testing

Path Analysis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Brand Image -> Purchase Decision	0.401	0.410	0.070	5.733	0.000
Price -> Brand Image	0.255	0.262	0.099	2.580	0.011
Price -> Purchase Decision	0.350	0.360	0.097	3.612	0.000
Product Quality -> Brand Image	0.428	0.431	0.081	5.302	0.000
Product Quality -> Purchase Decision	0.424	0.427	0.072	5.868	0.000

Table 10 shows that the effect between price and brand image is significant with a t-test of $(2.580 > 1.96)$. The estimated value is positive, namely 0.255, which indicates that the direction of the relationship is unidirectional. Thus, hypothesis H1 in the study states that price affects brand image on using 20-ton class Crawler Excavator heavy equipment in East Kalimantan" is accepted. Furthermore, product quality with the brand image is significant with a t-test of $(5.302 > 1.96)$. The estimated value is positive, namely 0.428, which indicates that the direction of the relationship is unidirectional. Thus, the H2 hypothesis in the study states that "Product quality affects Brand Image on the use of 20-ton class Crawler Excavator heavy equipment in East Kalimantan" is accepted.

Brand image with purchasing decisions is significant with a t-test of $(5.733 > 1.96)$. The original sample estimate value is positive, namely 0.401, which indicates that the direction of the relationship is unidirectional. Thus, the H3 hypothesis in the study, which states that Brand Image affects purchasing decisions on the use of 20-ton class Crawler Excavators in East Kalimantan, is accepted. In addition, the price with purchasing decisions is significant with a t-test of $(3.612 > 1.96)$. The estimated value is positive, which is 0.350, which indicates that the direction of the relationship is unidirectional. Thus, hypothesis H4 in the study states that price affects purchasing decisions on using 20-ton class Crawler Excavator heavy equipment in East Kalimantan is accepted. Product quality with purchasing decisions is significant with a t-test of $(5.868 > 1.96)$. The estimated value is positive, which is 0.424, which indicates that the direction of the relationship is unidirectional. Thus, the H5 hypothesis in the study, which states that product quality affects purchasing decisions on using 20-ton class Crawler Excavators in East Kalimantan is accepted.

4.5. Mediation Testing

Furthermore, to examine the effect of brand image construction as a mediating variable can be seen in Table 11 below.

Table 11. Result of Mediation Analysis

Path Analysis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Statistics ((O/ST DEV))	P Value
Price -> Brand Image -> Purchase Decision	0.102	0.108	0.046	2.246	0.026
Product Quality -> Brand Image -> Purchase Decision	0.172	0.177	0.045	3.793	0.000

Table 11 above shows price has a positive and significant effect on purchasing decisions mediated by brand image. The hypothesis test above shows that the effect between price and purchasing decisions with brand image mediation is significant with a t-test of (2.246 > 1.96). The estimated value is positive, namely 0.102, which indicates that the direction of the relationship between price and purchasing decisions with brand image mediation is unidirectional. Thus, hypothesis H6 in the study states that "price affects Purchasing Decisions mediated by Brand Image for users of 20 Ton Class Crawler Excavators in East Kalimantan" is accepted. Then to review the mediating role of brand image variables that influence prices on purchasing decisions, the VAF formula can be used, which is 0.225 or 22.5%. According to the results of this calculation, the mediating role of the brand image variable that affects price on purchasing decisions is 0.225 or 22.5%, which means it shows the category of partial mediation role.

Product quality positively and significantly affects purchasing decisions mediated by brand image. The hypothesis test above shows that the influence between product quality and purchasing decisions with brand image mediation is significant with a t-test of (3.793 > 1.96). The estimated value is positive, namely 0.172, which indicates that the direction of the relationship between product quality and purchasing decisions with brand image mediation is unidirectional. Thus, hypothesis H7 in the study states that "Product Quality affects Purchasing Decisions mediated by Brand Image for users of 20 Ton Class Crawler Excavators in East Kalimantan, is accepted. These results also mean that brand image acts as a mediating variable affecting product quality on consumer purchasing decisions using 20-ton class Crawler Excavators in East Kalimantan. Then to review the mediating role of brand image variables that influence product quality on purchasing decisions, the VAF formula can be used, which is 0.288 or 28.8%. According to the results of this calculation, the mediating role of the brand image variable that affects price on purchasing decisions is 0.288 or 28%, which means it shows the category of partial mediation role.

5. Conclusions

This study concluded that price positively and significantly affects brand image. Furthermore, this study also found that the price offered by Zoomlion's crawler excavator products can build a good brand image in the eyes of customers who have bought them. The company must keep this value stable in the eyes of consumers. Product quality has a positive and significant effect on brand image. With the quality offered and competitive prices in the heavy equipment market, Zoomlion's crawler excavator products have built a good brand image in the eyes of consumers despite being a newcomer to the Chinese brand. It will be a motivation for Zoomlion Indonesia to be able to capture more market share in the 20 ton class in Indonesia. Price has a positive and significant influence on purchasing decisions. The price offered by Zoomlion crawler excavator products is competitive in the Kalimantan heavy address market so that consumers can make purchasing decisions to buy Zoomlion products.

Product quality positively and significantly influences purchasing decisions. Companies that buy 20 Ton Class Crawler Excavator heavy equipment products agree with the statement that the company decided to buy a 20 Ton Class Crawler Excavator heavy equipment in East Kalimantan because durability shows the age of the product. Brand Image has a positive and significant influence on purchasing decisions. The company makes decisions based on the 20 ton class Crawler Excavator heavy equipment brand and assesses the superiority of heavy equipment products. In addition, price and product quality positively and significantly influence purchasing decisions through brand image.

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