

# The Effect of Marketing Mix and Brand Image on Customer Loyalty at Premixed Mortar

Ariel Diesto Situmorang<sup>1</sup>, Ujang Sumarwan<sup>2</sup>, Megawati Simanjuntak<sup>3</sup>

<sup>1</sup>School of Business, Bogor Agricultural University  
Jl. Raya Pajajaran, Bogor16151, Indonesia  
ariel[at]situmorang.web.id

<sup>2</sup>School of Business, Bogor Agricultural University  
Jl. Raya Pajajaran, Bogor16151, Indonesia  
usumarwan[at]gmail.com

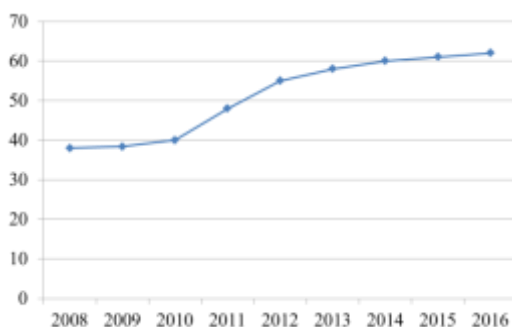
<sup>3</sup>School of Business, Bogor Agricultural University  
Jl. Raya Pajajaran, Bogor16151, Indonesia  
mega.juntakipb[at]gmail.com

**Abstract:** *The premixed mortar in Indonesia have steadily increased over the past years with customer loyalty emerging as a frontrunner in the building material industry. There have been copious studies related to the effects of marketing mix towards customer loyalty. However the majority of the research is on retail industry. Therefore it is the intention of the researcher to identify the effects of marketing mix on customer loyalty in a high rise building project. The researcher will use 7P (four variables to describe the product and three for the services) and brand image for independent variables and customer loyalty for dependent variable. A total of 100 questionnaire surveys have been distributed to customers in greater Jakarta area who became decision maker in high rise building project. The results show that three variables of marketing mix such as product, price, and service, also brand image are equally important. The price is the most important towards customer loyalty is correlated with the product and the service that support the project.*

**Keywords:** marketing mix, brand image, customer loyalty, premixed mortar

## 1. Introduction

The services sector construction is one of the strategic sector to support the national development. According to Dipohusodo (1996), a construction project is a project that pertaining to building infrastructure, who generally covered the work of civil engineering and architecture. An increase in the services sector construction also affecting demand goods consumed at the project, call it cement industry. Cement is one of commodities that encourages the development of construction services. The development especially construction in proportion to the needs of a cement that consumed every year. The data compiled by Asosiasi Semen Indonesia (ASI) the national cement consumption is increasing every year, the latest data show there was a rise in cement consumption on 2016 of 1 mio tons to 62 mio tons (Picture 1).



Sumber: Asosiasi Semen Indonesia (ASI)

**Picture 1:** National Cement Consumption 2008 – 2016 (mio tons)

The development of national cement consumption also affects premixed mortar needs. Now, the trend is going up of a player on premixed mortar. In 2011 recorded premixed mortar only produced by 10 companies, however in 2016 is as many as 104 companies in premixed mortar. The data that obtained from factory production capacity per year, only five companies who could be classified as a large scale (>250,000 tons/year) and the rest are local players. From the data in 2016, Brand A still become a pioneer in the field by 30% from the plastering, masonry (55%) and tile fixing (43%) of the total each category.

The new comer of premixed mortar indicated that the industry is interesting to developed. This new company generally rely on the price relatively cheaper than big players, but they did not provide the products quality and services. Thus it is only about ten companies to compete in project. Consumers who have the good impression in using the project, should be products that product to becomes a consideration to the next project. With this approach, companies apply mix marketing to obtain the distinct impression and responses from the customers as part of the company strategy to improve the company performance. Mix marketing applied seven variables (7P) covering, product, price, place, promotion, process, people, and physical evidence. The company is also shall in the observance to brand image that flourished in the market. The more know about their products, the more loyalty happened. So that the brand image into one variable which important in provides a view to company. Based on the above problem statements, this study aimed to achieve main objectives, namely:

1. How does marketing mix differentiation (product, price, location, promotion, service, human resources, and physical evidence), brand image, and loyalty affect the premixed mortar brand
2. What is the effect of the marketing mix (product, price, location, promotion, service, human resources, and physical evidence) and brand image of premixed mortar customer loyalty?
3. What are the managerial implications that can be applied in premixed mortar for the sustainability of its business in the future

## 2. Literature Review

### Premixed Mortar

Cement is an adhesive used in building materials such as stone, adobe, red bricks or light brick. Cement will be adhesive when mixed with water. In the manner of manual mixing, it is difficult to achieve consistency and homogeneity of the mortar and prevent the entry of mud, dirt and other forms. Along with the time, technology in order to facilitate consumers more practical, consistent and maintain homogeneity product is called premixed mortar (instant cement). The difference premixed mortar and cement in general namely premixed mortar is cement ready-made whose component in the form of are generally cement, sand, filler, and various kinds of an additive that adapted to its function.

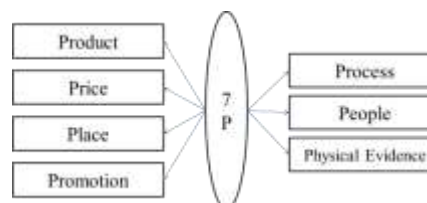
The advantages of using premixed mortar (Arif and Abdillah 2011) are the consistency of quality, easily use, quality, efficiency material and energy efficiency. Premixed mortar has a standard condensed which is useful in determining mortar strength according to its function and usefulness, so it is expected that the mortar that withstand the compressive forces due to the load working on it is not destroyed (Mulyono 2003). Basically a good premixed mortar according to Tjokrodinuljo (1996) should have a cheap, durable, easy to apply (stirred, lifted, fitted and flattened), adheres well with bricks/stone or other media, quick dry and hardened, resistant to water seepage, and no cracks arise after installation.

### Marketing Mix

According to Sumarwan et al. (2009), there are three levels of marketing mix interaction, logically consistent and useful conformance between two or more elements of the marketing mix, integration is a harmonious relationship to each marketing mix variables, and last is leverage is a good and related approach to support any marketing mix variables. According to Kotler (2011), the marketing mix is a systematically developed strategy through tactical marketing, pricing, place and promotion (4P). Products, prices, places and promotions are the factors that cause the business to succeed or failure (Nuseir and Madanat 2015). The company integrates these four variables to produce the desired response in a targeted market.

However, today 4P is evolving into 7P to respond to the nature of the service to the consumer. Booms and Bitner (1981) argue the marketing mix (7P) is a new perspective that

can be developed in marketing to respond to consumer desires in the service industry, ie processes, people and physical evidence. Each variable will interact with each other so that mutual support and sustainability. Lovelock and Wright (2007) say that in the service process there are three additional elements of 4P development that are considered to have a role ie process, is a method of operation or a series of specific actions required in a sequence that has been applied. Second is the person (human resources) ie the employees involved in the interaction. Third is physical evidence of visual cues that provide evidence of the quality of service provided (Picture 2).



Picture 2: Mix marketing components (Lovelock and Wright 2007)

### Customer Loyalty

Sumarwan (2014) states that brand loyalty is defined as a consumer's positive attitude towards a brand, consumers have a strong desire to buy back the same brand in the present and future. Real loyalty can not be formed if the customer does not or has not made the purchase process first. Brand loyalty will lead to the emergence of brand commitment, namely the emotional and psychological closeness of a consumer to a product (Sumarwan 2014). One way to sustain consumers is to maintain good relationships with consumers. Panda (2003) says that the best way of service customer is to create quality relationships. Therefore, companies are competing to retain existing customers, and even to entertain consumers so as not to move to other products. The theory put forward by Griffin (2005) explained that there are four loyal customer variables include:

1. Make a purchase regularly
2. Buying between product lines or services
3. Not affected by competition of other similar products
4. Recommend to others

### Product

Product by Kotler (2011) are everything that can be offered to the market to get attention, bought, used, or consumed that can satisfy the wants or needs. Conceptually the product is a subjective understanding of the producer of something that can be offered as an attempt to achieve organizational goals through the fulfillment of consumer needs and activities, in accordance with the competence and capacity of the organization and the purchasing power of the market.

H1: The product has a significant effect on loyalty.

### Price

The definition of price according to Kotler (2011) is the amount of money charged to a product or service. More broadly, the price is the total value that consumers exchange

for a profit from ownership of a product or service. The price according to Sumarwan (2014) is an amount of money that is worth spending on a number of goods or services. Arokiasamy (2012) suspect the variable forming of consumer loyalty is influenced by the marketing mix and consumer perceptions.

H2: Price has a significant effect on loyalty.

Place

Kotler (2011) stated that the non-strategic location of the consumer allows the possibility of smaller interest in the products offered. Location is a consumer decision to make transactions, buy something they want. Utomo and Nurmalina (2011), expect customer satisfaction and loyalty to be formed from service quality.

H3: Location has a significant effect on loyalty.

Promotion

Promotion can be interpreted as communication, because through effective communication there is a beneficial interaction (Kotler 2011). Promotions by companies vary according to company strategy.

H4: Promotion has a significant effect on loyalty.

Process

A service is a set of methods or operating procedures that require measurements and steps to be taken jointly in the work. Kotler (2011) says the process / service is a set of methods or operating procedures that require measurements and stages to be done jointly in the work. The process of one of the activities is done by providing services to someone.

H5: Process has a significant effect on loyalty.

People

According to Ferrinawati and Djati (2004) in his research on consumer loyalty in the perspective of human resources, the role of employees (sellers) that can reliably affect loyalty through the sense of satisfaction and consumer confidence generated from employee performance. Futrell (2002) says personal selling is a personal communication between sellers and buyers to persuade and prospect consumers to buy something that can satisfy the individual.

H6: People has a significant effect on loyalty.

Physical Evidence

Booms and Bitner (1981) say that physical evidence as a visual sign or tangible aspects that affect the quality of service. The appearance of the company's physical facilities and infrastructure and the circumstances of the surrounding environment are clear evidence of the services provided by the service provider. Physical evidence may include physical facilities (buildings, warehouses, etc.), equipment and equipment used (technology), and the appearance of

employees. Zeithalmet al (2006) state that physical evidence communicates to consumers where and how service organizations play a role in creating service experience in satisfying consumers and in enhancing consumer perceptions about service quality.

H7: Physical evidence has a significant effect on loyalty.

Brand Image

Imagery can not be described physically because it is only in the minds of society / perception. Kotler and Armstrong (2001) argue that brand image is a set of consumer beliefs about a particular brand. Image is a company asset because it gives impact to consumer perception. When consumers believe in a certain brand, it will cause a perception of the brand of the product. Schiffman and Kanuk (2007) define perception as an individual process for selecting, processing, and interpreting the stimulus into a particular picture. Therefore, perception is the view of a person seeing the reality that occurs around him.

H8: Brand image has a significant effect on loyalty.

**3. Methodology**

Data

The research activities were conducted in Jabodetabek. Data collection is done by direct survey to the respondents who have used the product of Brand A and Brand B as much as 100 respondents. This research was conducted during May - August 2017. The selection in Jabodetabek area as a place of research is based on the highest growth rate of development compared to other big cities.

Variables

Exogenous latent variables in this study were product (X1), price (X2), place(X3), promotion (X4), process (X5), people (X6), physical evidence (X7), brand image (X8), endogenous latent variables was loyalty (Y1). Measurement scale used is likert scale (Sumarwan 2015) with 5 (five) points, that is 1 states strongly disagree and 5 states strongly agree.

**Table 1: Likert scale score**

No	Answer	Score
1	Strongly agree	5
2	Agree	4
3	Neutral	3
4	Disagree	2
5	Strongly disagree	1

The research conducted using 7P marketing mix and brand image as an exogenous variable. The eight exogenous and one endogenous variables are:

1. Products (X1). This variable has seven indicators, namely:  
 (X1.1): famous products  
 (X1.2): diverse products  
 (X1.3): the product is easy to apply  
 (X1.4): the resulting product is qualified

- (X1.5): consistency of quality between each product  
 (X1.6): the product is environmentally resistant  
 (X1.7): the product is well packed
2. Price (X2). This variable has three indicators, namely:  
 (X2.1): price according to product quality  
 (X2.2): price competes with other brands  
 (X2.3): acceptable terms of payment
3. Location (X3). This variable has three indicators, namely:  
 (X3.1): large production capacity  
 (X3.2): factory location close to the center of development  
 (X3.3): ease of delivery if product needs undertonase
4. Promotion (X4). This variable has five indicators, namely:  
 (X4.1): the product catalog is informative and easy to understand  
 (X4.2): interesting product samples  
 (X4.3): testimony from previous project  
 (X4.4): conducting periodic field supervision  
 (X4.5): hold periodic gatherings
5. Service (X5). This variable has six indicators, namely:  
 (X5.1): customer service service procession responded quickly  
 (X5.2): the training service procession responded well  
 (X5.3): the mock up service procession responded well  
 (X5.4): the supervision service procession responded well  
 (X5.5): fast procession from the stage of order to delivery of product material  
 (X5.6): delivery of product materials on time
6. HR (X6). This variable has six indicators, namely:  
 (X6.1): friendly sales team attitude towards consumers  
 (X6.2): a well-dressed and standard-looking sales team  
 (X6.3): follow-up by the sales team on a regular basis  
 (X6.4): a trustworthy sales team  
 (X6.5): team sales can be contacted at any time  
 (X6.6): the explanation of the technician team is easy to understand
7. Physical evidence (X7). This variable has four indicators, namely:  
 (X7.1): delivery of products in accordance with operational standards  
 (X7.2): there is a project support letter  
 (X7.3): there are technical data in each product variation  
 (X7.4): the driver is willing to wait for the loading queue
8. Brand Image (X8). This variable has three indicators, namely:  
 (X8.1): the brand is easy to remember  
 (X8.2): the brand is familiar / familiar  
 (X8.3): the brand has a distinctive feature in each product
9. Loyalty (Y1). This variable has four indicators, namely:  
 (Y1.1): make purchases regularly  
 (Y1.2): buy inter product line from offered  
 (Y1.3): not affected by competition of other similar products  
 (Y1.4): recommending the brand to others

**SEM Model**

The tool used in the research is a questionnaire, a set of computers, software SmartPLS 2.0. Data is processed by using PLS (Partial Least Square), PLS is one of alternative

method of SEM (Structural Equation Modeling) which can be used to overcome problems in relationship. The purpose of the PLS is to predict the effect of variable X on Y and explain the theoretical relationships between the two variables (Talbot 1997). PLS has the assumption of free research data distribution, meaning that the research data does not refer to one particular distribution (Ghozali 2008). PLS is an alternative method with a variance-based or component-oriented approach to model prediction, whereas covariance-based SEM methods are oriented toward modeling analysis and require a strong theoretical basis of a relationship model.



Gambar 3 Model SEM LoyalitasKonsumen Semen Instan

**4.Result and Discussion**

**PLSanalyse**  
**Outer model evaluation**

Evaluation of the measurement model is performed on each latent variable by testing the validity and reliability of the construct. The size of a valid indicator if it has a loading factor ( $\lambda$ ) with latent variables to be measured  $> 0.50$  (Igbaria et al 1997) and has a value of t-test  $> 1.96$ . According to Hartono (2008) if the value of t-test is higher with t-table, then the hypothesis is accepted (t-test  $> 1.96$ ) which means the influence of variables on the dependent variable is significant. Based on the loading factor and t-arithmetic obtained and can be seen in Table 1.

**Table 1:** Validity test of the instant cement measurement model

Relation	Brand A		Brand B	
	Loading Factor	T-Test	Loading Factor	T-Test
X1.1 → Product X1	0.538	3.149*	0.826	40.482*
X1.2 → Product X1	0.848	26.966*	0.869	63.632*
X1.3 → Product X1	0.644	6.272*	0.882	55.694*
X1.4 → Product X1	0.885	43.898*	0.846	40.872*
X1.5 → Product X1	0.83	19.882*	0.878	48.877*
X1.6 → Product X1	0.83	20.199*	0.839	39.893*
X1.7 → Product X1	0.862	36.484*	0.873	38.255*
X2.1 → Price X2	0.928	64.247*	0.941	117.271*
X2.2 → Price X2	0.86	38.191*	0.922	99.989*
X2.3 → Price X2	0.884	25.761*	0.958	136.242*
X3.1 → Price X3	0.977	7.095*	0.831	2.989*
X3.2 → Price X3	0.936	7.715*	0.893	4.67*
X3.3 → Price X3	0.965	6.939*	0.596	2.281*
X4.1 → Promotion X4	0.876	4.383*	0.907	54.533*
X4.2 → Promotion X4	0.919	5.47*	0.817	10.168*
X4.3 → Promotion X4	0.887	4.633*	0.884	21.282*
X4.4 → Promotion X4	0.722	3.669*	0.843	17.231*
X4.5 → Promotion X4	0.893	4.634*	0.887	37.656*

X5.1 →Process X5	0.832	32.805*	0.859	6.981*
X5.2 →ProcessX5	0.82	29.444*	0.755	3.932*
X5.3 →ProcessX5	0.851	27.11*	0.877	6.283*
X5.4 →ProcessX5	0.811	17.801*	0.762	3.831*
X5.5 →ProcessX5	0.841	24.597*	0.845	5.583*
X5.6 →ProcessX5	0.815	18.232*	0.903	5.901*
X6.1 →People X6	0.85	3.595*	0.917	62.046*
X6.2 →PeopleX6	0.772	3.139*	0.826	28.778*
X6.3 →PeopleX6	0.791	3.007*	0.888	60.83*
X6.4 →PeopleX6	0.616	2.072*	0.888	49.733*
X6.5 →PeopleX6	0.889	3.526*	0.897	58.565*
X6.6 →PeopleX6	0.92	3.877*	0.789	23.359*
X7.1 →Physical Evidence X7	0.844	3.825*	0.855	21.862*
X7.2 →Physical EvidenceX7	0.902	3.345*	0.838	26.029*
X7.3 →Physical EvidenceX7	0.976	3.402*	0.91	54.539*
X7.4 →Physical EvidenceX7	0.878	3.599*	0.911	50.709*
X8.1 →Brand Image X8	0.591	2.031*	0.885	23.19*
X8.2 →Brand ImageX8	0.763	8.077*	0.87	41.837*
X8.3 →Brand ImageX8	0.908	31.881*	0.918	70.536*
Y1.1 → Loyalty Y1	0.717	14.137*	0.858	32.231*
Y1.2 →LoyaltyY1	0.905	34.352*	0.957	144.706*
Y1.3 →LoyaltyY1	0.869	35.602*	0.931	91.341*
Y1.4 →LoyaltyY1	0.9	48.41*	0.95	134.216*

Note: loadingfactorscore> 0,5; T-Test >1.96 = valid

Based on the results of the loading factor and t-test obtained and can be seen in the table above, it can be concluded that all loading factor from the relationship of indicator variable with latent variable has loading factor > 0.5 and has a value of t-test > 1.96. This indicates that all the indicator variables are valid to measure the latent construct.

Another method that can be used to measure the validity of a construct is to look at the value of AVE in each latent variable. The AVE value for each latent variable has a value> 0.5 is highly recommended. Based on Table 2, the AVE value of the product, price, location, promotion, process, people, physical evidence, brand image, and loyalty indicate that more than 0.5 indicates that each variable is a valid indicator to measure its latent construct.

Furthermore, a variable is said to be quite consistent if the variable has a value of composite reliability> 0.7. Table 2 shows that all values of composite reliability> 0.7, therefore it can be concluded that the indicators used in this study have good reliability or able to measure the construct. The evaluation of the measurement model shows that the overall model fit with the data, so that the results of this study can be declared valid and reliable.

**Table 2:** Nilai AVE, Composite Reliabilityvariabelaten semen instan

VariabelLatent	Merek A			Merek B		
	AVE	Composite Reliability	R Square	AVE	Composite Reliability	R Square
Produk	0.618	0.917	-	0.74	0.952	-
Harga	0.794	0.92	-	0.88	0.958	-
Lokasi	0.92	0.972	-	0.61	0.823	-
Promosi	0.744	0.935	-	0.75	0.939	-
Layanan	0.686	0.929	-	0.7	0.932	-
SDM	0.66	0.92	-	0.76	0.948	-
BuktiFisik	0.812	0.945	-	0.77	0.932	-
Citra Merek	0.585	0.804	-	0.8	0.921	-
Loyalitas	0.725	0.913	0.836	0.86	0.959	0.928

### Indicator Contribution to Variables

#### Indicator Contribution to Product Variable

The amount of loading factor value means the contribution of the indicator to the variable. Indicators on Brand A and Brand B which have the least value are well known product indicators with 0.538 and 0.826 loading factors, indicating that these indicators provide the least relative contribution rate to product variables.

As for Brand A, quality product indicator with loading factor 0.885 is the most contributing indicators of the product. Consumers prioritize the quality of products produced. Unlike Brand B, easy-to-apply product indicators with a 0.882 loading factor is the most contributing indicator of the product. Respondents felt that the product that was easy to apply was a priority in choosing the product.

#### Indicator Contribution to PriceVariable

Based on the results of the study note that the price indicator according to quality, competitive prices, and acceptable payment process is an indicator that contributes significantly to the price variable.

Indicator on Brands A and Brand B that have the least value are price competing with 0.860 and 0.922 loading factors, indicating that the indicator provides the least relative contribution rate to the price variable.

In Brand A, the price indicator corresponds to the product quality with the loading factor value of 0.928 is the greatest contribution. This indicates the quality of the product is proportional to the price offered. Consumers will continue to use the product when the price offered matches the quality provided. Unlike Brand B, the biggest contribution is an acceptable payment process indicator with a value factor loading of 0.958. Flexible payment process, whether it's a pay or a payment is a feature.

#### Indicator Contribution to PlaceVariable

The results of the PLS calculation indicate that the indicator of production capacity, the location of the plant near the center of development, as well as the ease of delivery if the need for undertonase is an indicator that contributes to the location variable. The indicator on Brand A which has the least value is the factory indicator near the development center with the loading factor 0.936, in the smallest Brand B is the delivery of undertonase with the loading factor value of

0.596. This value indicates that the indicator provides the least relative contribution rate to the location variable.

In Brand A, the indicator of production capacity at the factory with the loading factor value of 0.977 is the most contributing indicator. The greater the production capacity, the more products are produced, so the product can be ready to send without waiting for the production queue. Unlike Brand B, the most contributing indicator is factory close to development. This can be known from the closer the factory, the delivery will be faster. The faster the delivery of the product to the location, the activities at the project site will be in accordance with the time set.

#### **Indicator Contribution to Promotion Variable**

Based on the results of the calculation of the PLS show an informative product catalog, interesting product samples, there are testimony / reference from the previous project, the procurement of periodic supervision, and held a periodic gathering is an indicator that contributes to promotional variable. The indicator on Brand A which has the least value is an informative product catalog indicator with a loading factor of 0.876, in Brand B the least affected indicator is an attractive product sample with a loading factor value of 0.817. This value indicates that the indicator gives the least relative contribution rate to the promotion variable.

In Brand A, promotional variable is represented by product samples that contribute the most with a loading factor value of 0.919. It is known that the samples of the products provided are interesting and informative. Especially in one sample consists of many products displayed, making it easier for consumers to see and assess the products listed. As with Brand B, the product catalog with a loading factor of 0.907 is the most influential indicator. Title placement, color selection of writing to be one of the reasons Brand B became the most influential indicator. In addition, the selection of comfortable color backgrounds viewed on each page also represents the indicator.

#### **Indicator Contribution to Process Variable**

Based on the results of the calculation of the PLS shows customer service, training, mock up, supervision, fast procession from the stage of order to the delivery of product materials, and delivery of materials on time products are indicators that contribute to service variable. The indicator on Brand A which has the least value is the indicator of supervision service with the loading factor of 0.811, in Brand B the least influential indicator is the training service with the loading factor of 0.755. This value indicates that the indicator provides the least relative contribution rate to the service variable.

In Brand A, the mock up process with the loading factor value of 0.851 becomes the most influential indicator. This is seen from the better mock up service provided by the company, the higher the loyalty generated by consumers. In Brand B, the delivery of material with a loading factor value of 0.903 becomes the most influential on service variables. This indicates that timely delivery of materials may affect consumer loyalty. Some components of on-time product

delivery are product availability, preparation of ready-to-delivery shipping trucks and loading truck loading trucks. On the contrary, if the material delivery does not match the set schedule, then the customer represented by the team in the project is disturbed and will file a complaint against late delivery. This situation allows the level of consumer loyalty to the goods is reduced.

#### **Indicator Contribution to People Variable**

Based on the results of the calculation of the PLS shows a friendly sales attitude, sales look neat, follow up by the sales team on a regular basis, the sales team can be trusted, the sales team can be contacted at any time, and explanation technician team is easy to understand are an indicators that contribute to people variables. The indicator on Brand A which has the least value is a reliable sales indicator with a loading factor of 0.616, in Brand B the least influential indicator is an easily understood technician explanation with loading factor 0.789. This value indicates that the indicator provides the least relative contribution rate to the people variable.

In Brand A, an explanation by a technician with a value of 0.920 loading factor becomes the most influential. This happens because the project requires information not only technical data products, but also requires field data. Explanation of the technician to strengthen the written data. While on the Brand B, friendly sales became the most influential with the loading factor value of 0.917. Responsive sales and communicate well with consumers become dominant.

#### **Indicator Contribution to Physical Evidence Variable**

Based on the calculation of PLS shows the delivery of products in accordance with operational standards, there is a letter supporting the project, there is technical data in each product, and the driver is willing to wait for the loading queue are an indicator that contributes to the physical evidence variable. The indicator on Brand A which has the smallest value is the product delivery indicator in accordance with the operational standard with the loading factor value of 0.844. In Brand B the least affected indicator is the project supporting letter with the loading factor of 0.838. This value indicates that the indicator provides the least relative contribution rate to physical evidence variables.

In Brand A, the availability of product technical data with the loading factor value of 0.976 is the indicator that most contribute to the physical. Physical evidence on products that has technical data means that the consumer realizes that a good product is a product that has complete data either in the specification, method of application, or chemical data product. This is different from Brand B, the loading queue indicator with the loading factor of 0.911 has the greatest contribution to the physical evidence variable. Project work is always related to material goods, as for high project requirements followed by high material supply as well. Therefore, it is not uncommon queue delivery of goods in the project to be one of the constraints in the process of loading. A shipping truck that can wait for the loading queue becomes an advantage of Brand B.

**Indicator Contribution to Brand Image Variable**

Based on the results of PLS calculations show brand is easy to remember, familiar brand, and brand have characteristics that are indicators that contribute to brand image variable. The indicator on Brand A which has the least value is the brand indicator is easy to remember with the loading factor value of 0.591. In Brand B the least influential indicator is the known brand with the loading factor value of 0.870. This value indicates that the indicator provides the least relative contribution rate to physical evidence variables.

In Brand A, the brand indicator characterizes each product as the indicator that most contributes to the brand image with the loading factor of 0.908. Similar to Brand B, the brand has a feature in every product is the indicator that most contribute to the loading factor of 0.918. This is because product characteristics that other brands do not have can be a product advantage to increase consumer loyalty.

**Indicator Contribution to Loyalty Variable**

Based on the results of PLS calculations showing regular purchases, purchasing each product variant, not being affected by other similar product variants, and recommending products to others are indicators that contribute to loyalty variables. The indicator on Brand A which has the least value is a regular purchase indicator with a loading factor value of 0.717. Similarly, Brand B with the least influential indicator is the regular purchase of 0.858. This value indicates that the indicator provides the least relative contribution rate to physical evidence.

In Brand A, purchasing indicator for each product line with a factor loading factor of 0.905 are the most contributing to loyalty. This is because consumers who buy each product indicate greater loyalty level. This is the same as Brand B with the loading factor value of 0.957, the higher purchase of the product in each line, the higher the loyalty level.

**Inner model evaluation**

The structural model can be evaluated by looking at the R-square value of endogenous latent variables. Table 3 shows that the R-square value of Brand A loyalty variable is 0.836, meaning that the loyalty can be explained by product, price, place, promotion, process, people, physical evidence, and brand image of 83.6%, the remaining 16.4% is other variables outside the model. While in Brand B shows that the value of R-square loyalty variable is 0.928, it means that the diversity of loyalty that can be explained by product, price, place, promotion, process, people, physical evidence, and brand image are 92.8%, the rest of 7.2% is explained by other variables outside the model. If the Goodness of Fit value >0.36, then the model validation is good (Cohen 1988). A value of Brand A of 0.78 over 0.36 indicates that model validation is good. The GoF Brand B value of 0.84 over 0.36 indicates that the model validation is good.

**Table 3: Goodness of Fit score**

Variables	Brand A		Brand B	
	Communality	R-Square	Communality	R-Square
Product	0.618	-	0.738	-
Price	0.794	-	0.884	-
Place	0.92	-	0.614	-
Promotion	0.744	-	0.754	-
Process	0.686	-	0.698	-
People	0.66	-	0.755	-
Physical Evidence	0.812	-	0.773	-
Brand Image	0.585	-	0.795	-
Loyalty	0.725	0.836	0.856	0.928

**GoF Brand A =  $\sqrt{0.727 \times 0.836} = 0.78$**

**GoF Brand B =  $\sqrt{0.763 \times 0.928} = 0.84$**

**Hypothesis Test**

**Table 4: Results of hypothesis**

Relationship	Brand A			Brand B		
	Loading Factor	T-Test	Conclusion	Loading Factor	T-Test	Conclusion
Product → Loyalty	0.279	2.596	Accept H1	0.214	2.563	Accept H1
Price → Loyalty	0.431	3.608	Accept H2	0.679	10.223	Accept H2
Place → Loyalty	0.072	1.631	Reject H3	-0.008	0.259	Reject H3
Promotion → Loyalty	-0.023	0.571	Reject H4	0.031	1.451	Reject H4
Process → Loyalty	0.181	2.013	Accept H5	-0.021	1.129	Reject H5
People → Loyalty	-0.001	0.015	Reject H6	-0.014	0.488	Reject H6
Physical Evidence → Loyalty	0.028	0.698	Reject H7	0.035	1.469	Reject H7
Brand Image → Loyalty	0.146	2.067	Accept H8	0.096	2.141	Accept H8

Note: T-Test > 1.96 = valid

The most influential variable to the loyalty in Brand A is the price with the coefficient loading factor of 0.431 and the t-test of 3.608. Then followed by a product with loading factor of 0.279 and t-test of 2.596, then service with loading factor of 0.181 and t-test of 2.013, then brand image with a large 0.146 and t-test of 2.067.

Result of hypothesis testing for structural model of Brand B, the most influential variable to loyalty is price with loading factor of 0,679 and t-test equal to 10.223. Then followed by product with loading factor of path equal to 0,214 and t-test value 2,563, then brand image with big of 0.096 and t-test value equal to 2,141. The limit to reject or accept the proposed hypothesis is > 1.96. Therefore, the variable price, product, and brand image in both models have a significant influence on loyalty. In the structural equation model of instant cement Brand A and Brand B, physical evidence, promotion, human resources, and location do not affect instant cement loyalty of Brand A and Brand B as seen from the t-test value of <1.96 each. So is the service variable on Brand B that does not affect loyalty because it has a value of

t-test  $1,129 < 1.96$ . This becomes one of the notes that project work requires support from suppliers not only products but also services provided after the goods are delivered. Therefore the relationship between these variables and loyalty is not significant.

**Managerial implication**

Based on the results of the research note that the price becomes very influential variable in the loyalty of premixed mortar either Brand A or Brand B, followed by product, and brand image. As for the project work, the price becomes the most important thing to progress in the negotiation phase of the tender. The more a manufacturer can support the price, then the consumer's chances of using the bigger product will be followed by loyalty to the product. Product is not less important, if the price is competitive but not followed by a good product then it is in vain. Brand image becomes another influential variable, because project work often mirrors the previous projects. The better brand is when workmanship, undamaged, and the services provided are good, the more loyal consumers are towards the brand, and will be considered when the consumer is working on the next project. But there is a difference between Brand A and Brand B, where based on the results of research that service variables become one of the indicators that affect the loyalty in Brand A but not on Brand B. Companies engaged in

premixed mortar, not only associated with the product, but also process or service. Because the company is engaged in products and services. Marketed products must be balanced with good service in order to synergize with each other. Good product but not parallel with good service, then the result is not maximal and vice versa.

For that, it is necessary to determine the appropriate managerial implications for the company in determining the strategy in achieving the company's sales targets. The managerial implications used are segmentations, targeting, positioning (STP). From the segmentation can be determined based on the consumers who have bought and used the product, the large project needs can affect the consumer entry in the criteria of upper, middle, or lower segment. In terms of targets, consumers with large project needs, will always benefit from price, and service. And always have a target to every consumer in a year, if the consumer reaches the target, then there is a bonus that can be given in accordance with the initial agreement of the contract. In terms of positioning Brand A should always be able to create a good image to every consumer in order to keep the name and good relationship between both parties. In terms of positioning Brand B must prioritize services in order to create a good relationship to consumers. Managerial implications can be arranged based on the following variables:

No	Analysis Results	Managerial Implications
1	Price	<b>Price:</b> always critical in responding to the consumer. Open in price negotiation process and share information about project needs and scale. <b>Segmentation :</b> loyal customers with big purchases get special prices <b>Target :</b> consumers with large project needs, get more intense service <b>Positioning:</b> retaining good name and good relationship to consumers, whether the project is running or not.
2	Product	<b>Product:</b> manufacturers maintain consistent product quality; reduce consumer complaints on projects by minimizing product problems, production defects, packaging defects, or application errors. <b>People:</b> fast response to all actions taken by consumers, receive project complaints and immediately provide solutions.
3	Brand Image	Manufacturers keep the company's good name and maintain good relationships with consumers. Holding a gathering, presentation of new product, and refreshment of the product into an agenda that must be done manufacturer. Holding an event marketing becomes one part in strengthening producer ties with consumers.
4	Process	Serving consumers and responding quickly in response to consumer desires into customer satisfaction. Be available at any time if needed. <b>Brand B:</b> focuses not only on the product but also on the service, because this premixed mortar is a company engaged in products and services.

**5. Conclusion**

Based on the analysis of the effect of marketing mix and brand image to premixed mortar loyalty, it can be concluded as follows:

1. There is a significant difference in the significant effect on service variable on Brand A's instant cement, but in Brand B is not significantly affected by service variable.
2. The marketing mix that significantly affects both Brand A and Brand B is product, price, and brand image. The variable that has the greatest effect is the price, followed by the product and the brand image.

**References**

- [1] Arif K, Abdillah R. 2011. Smart Book Building a House. Jakarta (ID). Kanaya Press.
- [2] Arokiasamy ARA. 2012. The Effect of Marketing Mix and Customer Perception on Brand Loyalty. IOSR Journal of Business and Management. 4(2):01-11.
- [3] Booms BH, Bitner MJ. 1981. Marketing Strategies and Organization. Structures for Services Firms, "in Marketing of Strategies. Chicago (US): American Marketing.
- [4] Dipohusodo I. 1996. Project Management & Construction. Kanisius. Yogyakarta.
- [5] Ferrinawati E, Pantja DS. 2004. Attempt to Achieve Consumer Loyalty in Perspective of Human Resources. Journal of Management & Entrepreneurship. 6:15-26.



- [6] Futrell CM. 2002. Fundamentals of Selling: Costumers for Life. 7th edition. New York. McGraw-Hill.
- [7] Ghozali I. 2008. SEM Alternative Method with PLS. Semarang (ID): BadanPenerbitUniversitasDiponegoro.
- [8] Griffin J. 2005. Customer Loyalty: Growing and Retaining Customer Loyalty. Jakarta: Erlangga.
- [9] Hartono JM. 2008. Guidelines Questionnaire: Developing Questionnaire, Overcoming Bias and Increasing Response. Yogyakarta (ID): Andi Offset
- [10] Kotler P, Amstrong G. 2001. Marketing principles.12nd edition. Volume 1. Jakarta: Erlangga
- [11] Kotler P. 2011. Marketing Management. 14<sup>th</sup> Edition. Jakarta (ID): PT IndeksKelompokGramedia.
- [12] Lovelock C, Wright LK. 2007. Marketing Management Services. Jakarta (ID): PT. IndeksKelompokGramedia, Indonesia
- [13] Mulyono T. 2003. Concrete Technology. Andi Offset. Yogyakarta.
- [14] Nuseir M, Madanat H. 2015. 4Ps: A Strategy to Secure Customers' Loyalty via Customer Satisfaction. International Journal of Marketing Studies. 7(4):78-87.
- [15] Panda TK. 2003. Creating customer lifetime value through effective CRM in financial services industry. Journal of Services Research. 2(2):157-171.
- [16] Schiffman LG, Kanuk L. 2007. Consumer Behavior. 9<sup>th</sup> edition. New Jersey (US): Pearson Education International.
- [17] Sumarwan U, Djunaidi A, Aviliani, Singgih HCR, Sayono JA, Budidarmo RR, Rambe S. 2009. Strateic marketing. Jakarta: Inti Prima Promosindo.
- [18] Sumarwan U. 2014. Consumer Behavior. 2<sup>nd</sup> Edition. Bogor: Ghalia Indonesia.
- [19] Sumarwan U. 2015. Methods of Business and Consumer Research. Bogor (ID): IPB Press.
- [20] Talbot M. 1997. Partial Least Square Regression. New York (US): Corp Csi.
- [21] Tjokrodimaljo K. 1996. Concrete Technology. Nafigiri. Yogyakarta.
- [22] Utomo DA, Nurmalina R. 2011. Analysis Customer Satisfaction and Loyalty Prima Fresh Mart (Service Quality Approach). Agribusiness Forum. 1(2): 132-150.
- [23] Zeithaml V, Bitner MJ, Gremler DD. 2006. Service Marketing 2nd edition. Singapore: McGraw Hill.

### Author Profile



**Ariel Diesto Situmorang** received Bachelor of Agriculture in 2013 from Departement of Landscape Architecture, Bogor Agricultural University. The researcher has been subsequently continuing her master study in School of Business, Bogor Agricultural University, majoring in Business Management.