

# During the Pandemic Perceived Quality Forms Customer Loyalty via Brand Equity Oppo Smartphone Users

Ade Onny Siagian<sup>1\*</sup>, Dodi Prasada<sup>2</sup>, Agus Sudarsono<sup>3</sup>, Hadion Wijoyo<sup>4</sup>

<sup>1</sup> Bina Sarana Informatika University, Indonesia

<sup>2,3</sup> Pamulang University, Indonesia

<sup>4</sup> STMIK Dharmapala Riau, Indonesia

\*Corresponding author. Email: ade.aoy@bsi.ac.id

## ABSTRACT

This study aims to determine whether during the pandemic Perceived Quality has an effect on Customer Loyalty through Brand Equity on Oppo brand smartphone users in the Depok area. By using a quantitative research approach and SEM factor analysis methods as well as SPSS Amos 23 test equipment. The object of the analysis is consumers "Oppo brand smartphone users" in Depok. The research design used a single cross sectional, a sample of 150 respondents. The results showed that perceived quality had a significant effect on brand equity on Oppo smartphones in Depok with a regression coefficient of 0.882 and a critical ratio value of 6.891. Brand equity has a significant effect on customer loyalty on Oppo brand smartphones in Depok with a regression coefficient of 0.612 and a critical ratio value of 5.696. Perceived quality directly has no significant effect on customer loyalty on Oppo brand smartphones in Depok with a regression coefficient of 0.043 and a critical ratio value of 0.385. The indirect effect of perceived quality on customer loyalty > the direct effect of perceived quality on customer loyalty is 0.482 > 0.043, meaning that brand equity mediates between perceived quality and customer loyalty on Oppo Brand smartphones.

**Keywords:** *Pandemic, Perceived Quality, Brand Equity, Customer Loyalty*

## 1. INTRODUCTION

The Indonesian smartphone market was able to survive in the midst of the Covid-19 pandemic that changed how people interacted. The need for smartphones is soaring, whether it's to support work from home (WFH), home based learning or learning from home, entertainment streaming services, or just communicating virtually. Indonesia as a country with the fourth largest population in the world is a strategic market share for the growth of every business, including the growth of the telecommunications business.

The development of an increasingly broad and dynamic market for smartphone products has created intense competition in the marketing of smart phone products. Marketers are competing to create superior smartphone products with various brands and increasingly sophisticated technology.

The number of choices makes the demand for smartphones increase but loyalty to a certain smartphone brand tends to decrease [1], [2], [3]. There are five smartphone brands that dominate the market in Indonesia today.

Indonesia Smartphone Market Share by Sales (%)	Q2 2019	Q2 2020
VIVO	7.8%	21.2%
OPPO	17.5%	20.6%
SAMSUNG	27.0%	19.6%
XIAOMI	21.9%	17.9%
REALME	7.6%	13.6%
OTHERS	18.3%	7.1%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>

Source: IDC

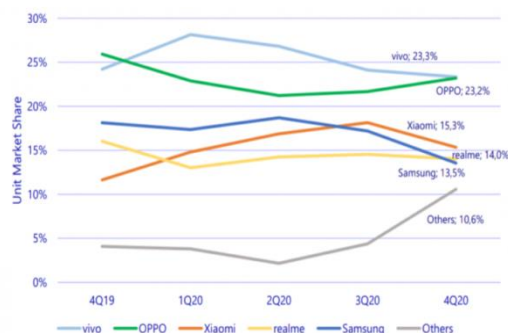
**Figure 1:** Top 5 Smartphone Brands in Indonesia in 2019 and 2020

In Figure 1 it can be seen that there are 5 top brands that dominate the smartphone market in 2019 – 2020 in Indonesia, as follows: The Vivo brand still occupies the first position with a market share of 7.8% in 2019, an increase of 13.4% to 21.2%. 2020. While the second position is held by Oppo with a market share that increased from 17.5% in 2019 to 20.6% in 2020, an increase of 3.1%. The third position is occupied by

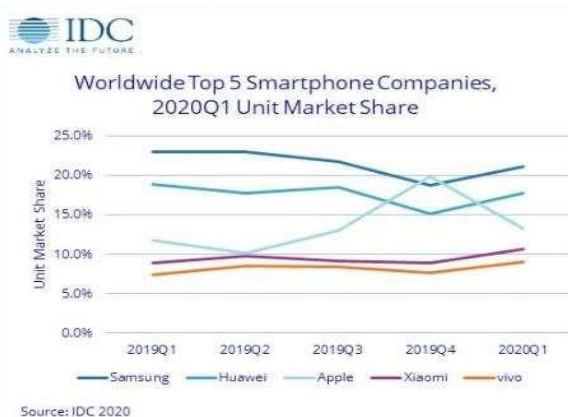
Samsung, with an increase in market share of 1% in 2018 by 18% and in 2019 by 19%. The fourth position is occupied by Xiaomi with a decrease in market share of 21.4% from 17.9% in 2019 to 7.4% in 2020. The fifth position is occupied by Realme which succeeded in displacing Advan with an increase in market share of 7.6%. from 2019 by 6%. to 13.6% in 2020. Here we can see a phenomenon that occurs from year to year is the increase in the market share of the Oppo brand smartphone in Indonesia but is unable to shift the power of the Vivo smartphone brand. It's no secret that the Covid-19 pandemic has occurred for a year longer duration around the world has had an adverse impact on various sectors of the economy. Regional lockdown decisions, social restrictions and various other policies to break the Covid-19 chain have caused many workers to be laid off. The purchasing power of the people has also decreased.

Including the business of technology devices such as smartphones. The industry has also been affected. However, for domestic conditions, the smartphone market in the country during the pandemic is said to be relatively sustainable.

5 Perusahaan Smartphone Teratas di Indonesia, Pangsa Pasar 4Q20



Source: IDC, 2021



Source: IDC 2020

Source : IDC

**Figure 2:** Top 5 brands of smartphone market share in the world in 2020

Figure 2 shows that the 5 best and best-selling smartphone brands in the world fall to Samsung. In the following order: Samsung has a world market share of

21.1%, Huawei holds the second position in the world with a market share of 17.8%, Apple has a market share of 13.3% in the world, while Oppo only has a market share of 10.7%. and vivo has a market share of 4.8%.

The research entitled "*Perceived Quality in Forming Customer Loyalty through Brand Equity on Oppo Brand Smartphone Users in Depok*".

### Research purposes

1. To determine the effect of perceived quality (PQ) on Brand Equity (BE) on Oppo Brand Smartphone users in the Depok area?
2. To find out the effect of Brand Equity (BE) on Customer Loyalty (CL) on Oppo Brand Smartphone users in the Depok area?
3. To find out the direct effect of Perceived Quality (PQ) on Customer Loyalty (CL) on Oppo Brand Smartphone users in the Depok area?
4. To determine the indirect effect of Perceived Quality (PQ) on Customer Loyalty (CL) through Brand Equity (BE)

## 2. LITERATURE REVIEW

Brand Equity (Brand Equity) according to [4]; [5] is a set of brand assets and liabilities associated with a brand, its name and symbol that can increase or decrease the value provided by a product both to the company and to consumers.

According to [6] and [7] in their research showed that Brand Equity is a set of brand assets and liabilities related to a brand, name, and symbol provided by a product or service to consumers.

"Brand Equity has five categories", namely:

1. Brand Loyalty (brand loyalty)
2. Brand Awareness (brand awareness)
3. Perceived quality (perceived quality)
4. Brand Associations
5. Other proprietary brand assets.

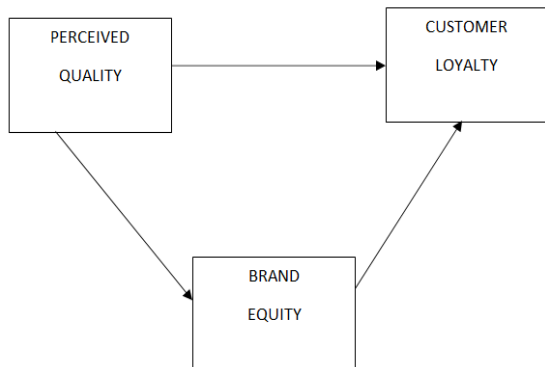
Customer Loyalty according to [8]; [9] "suggests that loyalty can be based on the actual buying behavior of products associated with the proportion of purchases". [10] "defines brand loyalty as a deep commitment to consistently repurchase a preferred product or service in the future by repurchasing the same brand despite situational influences and marketing efforts that can lead to switching behavior."

## 3. RESEARCH METHODOLOGY

This research is a quantitative study with factor analysis methods, and SEM and SPSS Amos 23 test equipment. The object of the analysis is consumers who use Oppo brand smartphones in the Depok area.

The research design used was single cross sectional, with a sample size of 150 respondents.

With the research model as follows:



**Figure 3:** Research Model

**Hypothesis:**

1. H1 = Perceived quality (PQ) has a positive and significant effect on Brand Equity (BE) on Oppo Brand Smartphone users in the Depok area
2. H2 = Brand Equity (BE) has a positive and significant effect on Customer Loyalty (CL) on Oppo Brand Smartphone users in the Depok area
3. H3 = Perceived Quality (PQ) has a positive and significant effect on Customer Loyalty (CL) on Oppo Brand Smartphone users in the Depok area

4. H4 = Perceived Quality (PQ) has a positive and significant effect on Customer Loyalty (CL) through Brand Equity (BE)

**4. RESULTS AND DISCUSSION**

The following are the results of a descriptive analysis of the respondents' answers: Hipotesis:

1. H1 = Perceived quality (PQ) has a positive and significant effect on Brand Equity (BE) on Oppo Brand Smartphone users in the Depok area
2. H2 = Brand Equity (BE) has a positive and significant effect on Customer Loyalty (CL) on Oppo Brand Smartphone users in the Depok area
3. H3 = Perceived Quality (PQ) has a positive and significant effect on Customer Loyalty (CL) on Oppo Brand Smartphone users in the Depok area
4. H4 = Perceived Quality (PQ) has a positive and significant effect on Customer Loyalty (CL) through Brand Equity (BE)

The following are the results of a descriptive analysis of the respondents' answers. Table 1 illustrates that the perceived quality of the Oppo smartphone is at an average score of 3.77 in the good category.

**Table 1.** Descriptive Analysis of *Perceived Quality*

Variable/Instrument		Average Score	Category
<i>Perceived Quality</i>	Oppo brand smartphones have good quality	3.67	Good
	Oppo brand smartphones have price match with quality	3.98	Good
	Oppo brand smartphones have a good reputation	3.74	Good
	Oppo brand smartphones have high benefits and value	3.71	Good
<b>Average Score <i>Perceived Quality</i></b>		<b>3.77</b>	<b>Good</b>

Source: Data processing, 2020

**Table 2.** Descriptive Analysis of *Brand Equity*

Variable/Instrument		Average Score	Category
<i>Brand Equity</i>	Oppo brand smartphone suits me personally	3.31	Not good
	I feel proud to use Oppo brand Smartphone	3.13	Not good
	I feel happy to use Oppo brand Smartphone.	3.41	Good

Variable/Instrument	Average Score	Category
Average Score <i>Brand Equity</i>	3.28	Not good

Source: Data processing, 2020

Table 2. Informs the data that the brand equity of the Oppo smartphone is at an average score of 3.28 which is included in the poor category.

**Table 3.** Descriptive Analysis of *Customer Loyalty*

Variable/Instrument		Average Score	Category
<i>Customer Loyalty</i>	Willing to pay Higher Oppo brand Smartphones Compared to other brands	2.45	Not good
	Committed to stay choose a smartphone brand Oppo Compared to other brands	2.89	Not good
	Stay true to the Oppo brand on smartphones	2.95	Not good
<b>Average score <i>Customer Loyalty</i></b>		<b>2.75</b>	<b>Not good</b>

Source: Data processing, 2020

Table 3. Shows that the Oppo Smartphone Customer Loyalty is at an average score of 2.75 in the poor category. Confirmatory Factor Analysis

**Table 4.** CFA Models Test Results

Variable	Statement	Loading	Criteria	conclusion
<i>Perceived Quality</i>	Brand smartphones Oppo has good quality	0.91	0,30	Valid
	Oppo brand smartphones have price match with quality	0,63		Valid
	Oppo brand smartphones have a reputation the good one	0.73		Valid
	Brand smartphones Oppo has high benefits and value	0.74		Valid
<i>Brand Equity</i>	Oppo brand smartphone suits me personally	0.82		Valid
	I feel proud use Oppo smartphones	0.88		Valid
	I feel happy using the brand Smartphone Oppo	0.82		Valid
<i>Customer Loyalty</i>	Willing to pay higher for Oppo brand Smartphones than other brands	0.66		Valid
	Committed to keep choosing Oppo brand Smartphones over other brands	0.92		Valid
	Stay true to Oppo brand smartphones	0.93		Valid

Source: Amos 23 Data Processing Results, 2020

Table 4. Provides information that all indicators in this study have valid criteria with a standard loading factor value > 0.3.

**Table 5.** Evaluation of AVE and CR Values

No	Variable	AVE	Criteria	CR	Criteria	Conclusion
1	<i>Perceived Quality</i>	0.59	0,50	0.85	0,60	Valid and reliable
2	<i>Brand Equity</i>	0.62		0.83		Valid and reliable
3	<i>Customer Lyalty</i>	0.72		0.92		Valid and reliable

Table 5. Explains that the four variables have an Average Variance Extract (AVE) value > 0.50 and a Construct Reliability (CR) value > 0.60, so it can be concluded that all of these variables are Valid and Reliable.

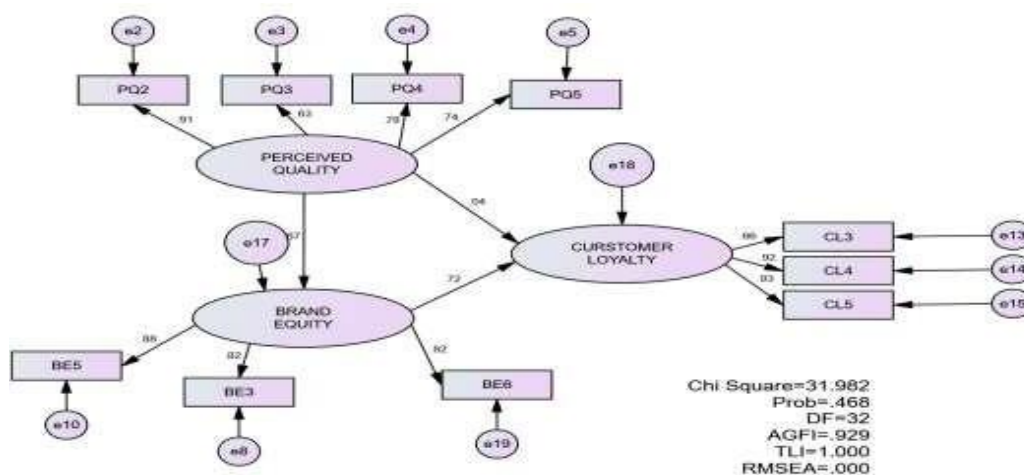
**Goodness of Fit**

**Tabel 6.** Goodness of Fit

Criteria	Modelini Result	Critical Value	Model Evaluation
Chi-Square $X^2$ CMIN	31.982	large, $X^2$ with df=32	Good
Probability (P)	0.468	$\geq 0.05$	Good
$X^2$ Relatif (CMIN/DF)	0.999	$\leq 2.0$	Good
GFI	0.958	$\geq 0.90$	Good
AGFI	0.929	$\geq 0.90$	Good
TLI	1.000	$\geq 0.95$	Good
CFI	1.000	$\geq 0.95$	Good
RMSEA	0.000	$\leq 0.08$	Good

Table 6. Above illustrates that the "Confirmatory Factor Analysis" in measuring this research model is good, where the value of GFI, AGFI is higher than the recommended level of 0.9; TLI and CFI values were higher than the recommended level, namely 0.95; RMSEA value 0.00 0.08 including other criteria.

**SEM equation using the Amos 23 program**



**Figure 4.** SEM Standardized Model

**Table 7.** Statistical Test of the Direct Effect of Regression Weights Model

<i>Regression Weight</i>	<i>Estimate</i>	<i>Standardised Estimate</i>	<i>C.R</i>	<i>P</i>	<i>Result</i>
<i>Brand Equity &lt;--- Perceived Quality</i>	.882	.128	6.891	***	significant
<i>Customer Loyalty &lt;--- Brand Equity</i>	.612	.108	5.696	***	Significant
<i>Customer Loyalty &lt;--- Perceived Quality</i>	.043	.110	.385	.700	Not Significant

Source: Amos Data Processing Results 23, 2020

**Table 8: Statistical Test of Indirect Effect of Regression Weights Model**

<i>Regression Weight</i>	<i>Indirect Influence</i>	<i>Direct influence</i>	<i>Criteria</i>	<i>Result</i>
<i>Customer Loyalty &lt;--- Perceived Quality</i>	0.482	0.043	Indirect Influence > Direct Influence	Mediate

Source: Amos Data Processing Results 23, 2020

The Regression Weight test in table 7 above shows a direct effect on hypothesis 1 which has a significant effect with a CR value of  $6.891 > 1.96$  and Hypothesis 2 has a significant effect with a CR value of  $5.696 > 1.96$ , while hypothesis 3 has no significant effect with a CR value of  $0.385 < 1.96$ .

Table 8 shows that the indirect effect of perceived quality on customer loyalty through brand equity is greater than the direct effect of perceived quality on customer loyalty, this means that brand equity mediates between perceived quality and customer loyalty.

## 5. CONCLUSIONS AND SUGGESTIONS

### 5.1. Conclusion

1. Perceived quality has a significant effect on brand equity on Oppo brand smartphones in the Depok area with a regression coefficient of 0.882 and a critical ratio value of 6.891.
2. Brand equity has a significant effect on customer loyalty on Oppo brand smartphones in the Depok area with a regression coefficient of 0.612 and a critical ratio value of 5.696
3. Perceived quality directly has no significant effect on customer loyalty on Oppo brand smartphones in the Depok area with a regression coefficient of 0.043 and a critical ratio value of 0.385.
4. The indirect effect of perceived quality on brand equity  $>$  the direct effect of perceived quality on customer loyalty is  $0.482 > 0.043$ , so it can be

concluded that brand equity mediates between perceived quality and customer loyalty on Oppo brand smartphones in the Depok area.

### 5.2. Suggestion

1. Based on the responses of respondents who scored less well on the statement "Oppo smartphone suits me personally" and the statement "I am proud to use an Oppo brand smartphone" it is recommended to increase the brand equity of the Oppo brand smartphone.
2. Based on the respondents' unfavorable answers to the statement "I am willing to pay more for an Oppo smartphone" it is recommended to increase customer loyalty through improving reliability, quality, technology and features.
3. Brand equity is statistically proven to play a role in mediating between perceived quality and customer loyalty variables. It can be concluded that the brand equity of Oppo brand smartphones will be well formed if perceived quality can affect customer loyalty. So it is recommended to smartphones brand Oppo Depok area to maintain and improve the perceived quality that is already good at this time. Table 8 shows that the indirect effect of perceived quality on customer loyalty through brand equity is greater than the direct effect of perceived quality on customer loyalty, this means that brand equity mediates between perceived quality and customer loyalty.

## ACKNOWLEDGMENTS

The author would like to thank one of the smartphone employees using the OPPO brand in Depok who has provided material and moral support in writing this article. We also thank the Journal of the International Conference on Management, Business, and Technology 2021 which has provided the opportunity to share knowledge as well as academic lecturers for their invaluable advice.

## REFERENCES

- [1] C. H. Yeh, Y. S. Wang, and K. Yieh, "Predicting smartphone brand loyalty: Consumer value and consumer-brand identification perspectives" *International Journal of Information Management*, 2016.
- [2] Y. S. Chen, T. J. Chen, and C. C. Lin, "The Analyses of Purchasing Decisions and Brand Loyalty for Smartphone Consumers," *Open Journal of Social Sciences*, 2016.
- [3] R. Saleh, and A. O. Siagian, "Sponsorship dalam Menciptakan Sikap Merek," *Jurnal Bisnis Terapan*, vol. 4, no. 1, pp. 13–22, 2020.
- [4] D. R. Srivastava, (2017). "Book Review: David Aaker, Aaker on Branding: 20 Principles that Drive Success" *Vision: The Journal of Business Perspective*. vol. 21, no. 3, pp. 335–36, 2017.
- [5] D. A. Aaker, *Strategic Market Management*. New York: John Wiley & Son, 2005.
- [6] S. Dwiantari, "Pengaruh Citra Merek dan Kualitas Produk terhadap Loyalitas yang Dimediasi oleh Kepuasan," *Jurnal Ilmiah Aset*, vol. 22, no. 1, pp. 51–62, 2020.
- [7] Y. Meyka, D. A. H. Lestari, and D. Haryono, "Tingkat Kepuasan Dan Loyalitas Konsumen Produk Susu Cair Dalam Kemasan Koperasi Peternakan Bandung Selatan (KPBS) Di Kota Bandung." *Jurnal Agribisnis*, 2014.
- [8] A. O. S. N. Indra, "Analisis Kualitas Pelayanan Kepuasan Dan Pemanfaatan Teknologi Terhadap Pelanggan Go-Jek Pada Masa Pandemi Covid – 19," *Journal of Chemical Information and Modeling*, 2021.
- [9] M. Akbari, M. Mehrali, N. SeyyedAmiri, N. Rezaei, and A. Pourjam, "Corporate social responsibility, customer loyalty and brand positioning," *Social Responsibility Journal*, 2019.
- [10] R. S. Ebrahim, "The Role of Trust in Understanding the Impact of Social Media Marketing on Brand Equity and Brand Loyalty," *Journal of Relationship Marketing*, 2020.