



# The Influence of Brand Extension Smartphone Samsung Galaxy Variable towards Brand Equity of Mother Brand of Samsung

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## ABSTRACT

**Objective** – The purpose of this study is to identify the influence of similarity, reputation, perceived risk, and innovation as brand extensions of smartphones developed by Samsung, toward brand equity.

**Methodology/Technique** – This study uses explanatory research. The population in this study consists of consumers of Samsung Galaxy mobiles for at least one month. Questionnaires were delivered to the respondents, after it had passed the validity and reliability tests. Following on from the statistical testing, the data was analysed using a multiple linear regression. Then, the classical assumption test was conducted to determine the goodness of fit of the model. The data was collected using a questionnaire consisting of a closed statement, measured by a Likert Scale

**Findings** – The results of this study show that similarity, reputation, perceived risk, and innovation as the variable dimensions have a significant effect on Brand Equity of Samsung Galaxy mobiles.

**Type of Paper:** Empirical.

**Keywords:** Brand Extension; Brand Equity; Similarity; Reputation; Perceived Risk; Innovation; Explanatory Research.

**JEL Classification:** M3, M30, M39.

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## 1. Introduction

The importance of this study lies in the determination of the role of brand extension on brand equity of in a specific electronic product. This is a very contemporary issue, given the relative easy with which information flows in the 21st century, and the increased accessibility of brand information by consumers. Brand information today is gathered from primarily the internet or social media sites; this includes not only expensive high-end products, but also daily Fast-Moving Consumer Goods (FMCG) (Matarid, et al, 2014).

Samsung is a well-known technology manufacturer, and takes up the majority of the mobile phone market in Indonesia. The high number of product variations offered by Samsung enables customers to choose their

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desired product. Samsung's success is the result of one key brand development strategy, in the mobile phone market (Leveraging Brand Strategy), through the expansion of their brand (brand extension).

Samsung's Sustainability Report (2013), highlights the rapid development that Samsung has experienced in the mobile phone market. In 2010, Samsung controlled only 8% of the smartphone market share and in 2011, Samsung controlled 19.9% of the market share. Further, in 2012, this market share had increased to 30.4%. This increase occurred very rapidly, which shows that customer loyalty for Samsung's smartphone products has increased.

The increase in market share is a direct result of the success of the brand itself. Therefore, Samsung pays increasing attention to brand development. Intangible assets owned by a brand may provide value to consumers and manufacturers, which is referred to as brand equity (Hem and Iversen, 2008). The value of the Samsung corporation is large, therefore, to maintain this value, Samsung must seek to continue increasing its market share. Any decline in Samsung's brand equity may affect the future sustainability of the company. This may then result in losses for the company, both material and immaterial, such as a reduction in the public's confidence in the Samsung brand.

Keller (2008) identifies brand extension in a company when a new product is developed while previous products are still in existence (parent brand). Brand extension is achieved by Samsung in several ways: similarity, reputation, perceived risk and innovation

## **2. Literature Review**

### **2.1 Brand Extension and Brand Equity**

Keller (2008) defines brand extension as the use famous brand names in the launch of new products. This forms part of brand strategy, which can be divided into 5 categories: extension of product lines, brand extension, multiple brands, new brands and co-branding (Kotler and Armstrong, 2000). Based on this definition, brand extension has both positive and negative effects on the products' parent brand. The positive impacts include developing a greater market share, greater advertising efficiency, increased ease to enter new product categories; and increased brand recognition (Matarid et al., 2014; Chen and Gu, (2012); and Hem and Iversen (2008)).

The study by Matarid et al. (2014) examines 475 Egyptian consumers of FMCG and found that brand familiarity and brand image both have an influence on brand equity, while similarity factors do not. This is supported by other research (Chen and Gu, 2012). Hem and Iversen (2008) conduct a study on how consumers evaluate brand extension, examining 760 Norwegian people. Some variables, such as consumers' knowledge and perceived similarity, can also have an effect on brand extension.

However, brand extension also involves certain drawbacks such as the risk of negative attitudes of consumers towards other products made by the manufacturer, and the risk of brand dilution.

Brand equity is the total assets of a brand name that adds value to the goods and services offered by the company or the customer (Aaker, 2008: 157). Based on this understanding of brand equity, it can be said that brand equity includes awareness, trust, associations, and loyalty, which provides positive and negative effects on the expansion of the brand (brand extension). The measure of brand extension depends on the strength of the products' brand equity.

### **2.2 Similarity, Reputation, Perceived Risk and Innovation**

Matarid, (2014), Hem and Iversen (2014) state that similarity refers to the assumption by consumers that if a product is undergoing expansion, it will have a greater similarity with the original brand, and the greater the influence this will have on consumers, both positively and negatively. In fact, it is believed that where the new product are of a higher quality or a better standard than the original products of the brand, then the results generated by the expansion of the brand will be increased. Hem (2008) found that the perceived

similarity between products tends to have an impact on brand extension. This depends on the nature of the parent brand. In the case of Samsung, as the parent brand of the Samsung Galaxy smartphone, brand extension is always used in the launch of any new product. In fact, Samsung has introduced a variety of new series for the Samsung Galaxy, including such as the S series, E series, A series, J series, and others.

Hem et al., (2001: 7; 2003: 1) states that brand reputation is an assessment derived from the assumption that if a brand is strengthening its position in the market, then attempts at brand extension are more likely to be successful. Samsung used brand extension to launch their new product in a new product category (smartphone Samsung Galaxy series). Reputation in this case refers to the number of results obtained from the quality of the Samsung Galaxy smartphone. Samsung's products are ordinarily known for their high brand quality and this enables them to better carry out brand extensions compared to others brands whose products are of a lower quality.

Hem et al., (2001; 2003) and Hem and Iversen (2008) state that perceived risk refers to a brand extension strategy that involves risk. The presumption is that a multidimensional consumer will experience uncertainty about a whether to purchase a product. This uncertainty usually has two dimensions: the consequences of making a purchasing mistake and uncertainty surrounding the results obtained if the product is purchased (Chen and Gu, (2012).

Innovation is an aspect of personality associated with consumers' willingness to try new products (Hem et al., (2001:7; 2003:1). Consumers who have high levels of innovation often undertake a stringent evaluation on brand extension products. Therefore, to service these consumers, Samsung must continue to innovate their products.

### **3. Methodology**

#### **3.1 Research Design**

The research design used in this research is an explanatory research, to explain the relationship between the dependent and independent variables through hypothesis testing or research explanations (Sekaran, 2003). This study examines brand extension as the predictor of brand equity.

#### **3.2 Types and Sources of Data**

The type of data used in this research is an interval data, collected through the out cross section from January to June 2015. Using a Likert Scale, the responses are enumerated for statistical data analysis.

#### **3.3 Population and Sampling Procedures**

The population of this research is Jember University students who have used the Samsung Galaxy smartphone for at least one month. The sampling technique used in this study is a combination of quota sampling and convenience sampling. Quota sampling in this research specifies the number of research samples of 8 people from each faculty at the University of Jember. This is described as  $(8 \times 15 = 120)$ , meaning that there are 15 students used in this study. The study also uses convenience sampling, by standing in public places that are considered a meeting point for students. The students that have used a Samsung Galaxy smartphone are then examined by the researchers at the meeting point.

#### **3.4 Data Analysis**

The methods of data analysis used in this study are: (1) descriptive statistics such as the frequency to describe the intention of the brand extension variables, (2) multiple linear regression analysis used to test the hypothesis and (3) classical assumption test form: a) normality testing (testing for normality in this study using the normal probability plots) b) multicollinearity testing (to test for the presence or absence of

symptoms of multicollinearity using the value of the Variance Inflation Factor (VIF) with a tolerance of  $>0.10$ . When  $VIF < 10$  this means that there are no symptoms of multicollinearity, and on the other hand, if the value of tolerance  $< 0.10$  and  $VIF > 10$  then the multicollinearity assumption is violated (Hair et.al, 2009))  
 c) heteroscedasticity testing (a good regression model has neither homoscedasticity or heteroscedasticity).

To analyse the data where there is no clear pattern, as well as to assess the points above and below the number 0 on the Y axis, then there is no indicia of heteroscedasticity, and (4) partial hypothesis testing with a significance level of 5%, then the criteria testing is as follows: a) when a significant p-value  $\leq 0.05$ , then  $H_0$  is rejected, meaning that there is a significant relationship between brand extension and brand equity, b) if p-value  $> 0.05$ , then  $H_0$  is accepted, meaning that there is no significant relationship between the predictors and the predicted variable.

## 4. Results

### 4.1. Descriptive Analysis of Research Variables

Descriptive statistics are used to describe the sample as representative of the population. The results of the distribution of the respondents and the answers from each of the indicators in the study questionnaire are as follows:

Table 1. Perception on Brand Extension

Variable/Indicator	Consumers Response Frequency					Total
	5	4	3	2	1	
Similarity (X1)						
X1.1	20	76	22	2	0	120
X1.2	33	66	20	1	0	120
Reputation (X2)						
X2.1	20	76	22	2	0	120
X2.2	33	66	20	1	0	120
Perceived Risk (X3)						
X <sub>3.1</sub>	37	67	15	1	0	120
X <sub>3.2</sub>	32	66	22	0	0	120

Innovation (X4)						
X <sub>4.1</sub>	11	48	52	9	0	120
X <sub>4.2</sub>	39	68	11	2	0	120

Table 1 describes the perception of the variable of brand extension including similarity, reputation, perceived risk and innovation. The similarity is measured by two indicators. It can be seen that for logo used by the Samsung Galaxy Series is similar to the that used by the Samsung Group: 20% strongly agree, 76% agree, 22% mildly agree, and 2% disagree. Based on this description, most respondents (as many as 76%) believe that the brand name used by the Samsung Galaxy Series reminds them of the Samsung brand name.

Further, the brand name used by the Samsung Galaxy Series reminded the respondents of the Samsung brand name: 33% strongly agree, 66% agree, 20% mildly agree and only 1% disagree. Based on this description, the majority of respondents (66%) stated that the brand name used by the Samsung Galaxy Series reminds them of the Samsung brand name.

Reputation is measured by two indicators. The quality of the Samsung Group's products can provide a positive effect on the Samsung Galaxy Series: 20% strongly agree, 76% agree, 22% mildly agree, and 2% disagree. Based on this description, most respondents (as many as 76%) believe that the quality of the Samsung Group's products can provide a positive effect on the Samsung Galaxy Series.

The quality indicators for Samsung Group can also have a positive effect on the Samsung Galaxy Series: 33% strongly agree, 66% agree, 20% mildly agree and 1% do not agree. Based on this description, the majority of respondents (66%) believe that the reputation of the Samsung Group's products can generate support for the products in the Samsung Galaxy Series.

Perceived risk is measured by two indicators. Use of Samsung products can have a positive effect on the Samsung Galaxy Series: 37% strongly agree, 67% agree, 15% mildly agree, and 1% disagree. Based on this description, the majority of respondents (67%) believe previous use by consumers of Samsung products will have a positive effect on Samsung Galaxy Series products.

Further, prior use of Samsung products is found to increase consumers' confidence in the Samsung Galaxy Series: 32% strongly agree, 66% agree and 22% mildly agree. Based on this description, the majority of respondents (66%) believe that prior use of Samsung products will make customers more confident when purchasing the products from the Samsung Galaxy Series.

Innovation is measured by two indicators. Innovation and the introduction of new products by the Samsung Group will attract new customers: 11% strongly agree, 48% agree, 52% mildly agree and 9% disagree. Based on this description, the majority of respondents (52%) believe that innovation by the Samsung Group will attract new customers.

Further, expansion of the Samsung brand in accordance with the personalities of their consumer who like to try new things will increase confidence in the Samsung Galaxy Series: 39% strongly agree, 68% agree, 11% mildly agree and 2% disagree. Based on this description, the majority of respondents (68%) believe that brand expansion by Samsung in accordance with the personalities of their consumers will increase confidence in the Samsung Galaxy Series.

Table 2. Perception on Brand Equity

Indicator	Consumers Response Frequency					Total
	5	4	3	2	1	
Y1.1	39	68	11	2	0	120
Y1.2	25	61	28	6	0	120
Y1.3	23	59	33	4	1	120
Y1.4	20	56	40	4	0	120

Table 2 shows that the variables of brand equity can be measured using four indicators. The first is television advertising and the ability of respondents to recall the brand and products: 68% agree. The second is whether the product meets customer expectations: 61% agree. The third is whether the product enables consumers to stay up to date with the latest technology: 59% disagree. The last is recommendations from other consumers: 56% agree.

#### 4.2. Multiple Linear Regression Analysis

Multiple linear regression testing is used to gain an understanding of the level of influence of the independent variables (similarity, reputation, perceived risk, and innovativeness) on the dependent variable (brand equity). The results obtained from the multiple linear regression analysis are outlined in the following table:

Table 3. Regression Results

Model	Unstandardized Coefficients		t	p-value
	B	Std. Error		
1 (Constant)	0.840	0.395	2.218	0.036
1 Similarity	0.185	0.088	2.097	0.038
1 Reputation	0.193	0.061	3.165	0.002
1 Perceived Risk	0.200	0.800	2.507	0.014
1 Innovativeness	0.202	0.800	2.532	0.013

### 4.3. Partial Hypothesis Testing (t test)

H0 in this study states that there is no relationship between the dependent and independent variables. At 95% confidence level, the hypothesis is stated as follows:

a) When the statistical analysis results in a p-value of  $\leq 0.05$ , then H0 is rejected, meaning that there is a significant relationship between the independent and dependent variables.

b) If the p-value is  $> 0.05$ , then H0 is accepted, meaning that there is no significant relationship between the independent and dependent variables.

Based on the results in Table 3, the influence of each independent variable on the dependent variables are as follows:

#### 4.3.1 Effect of similarity (X1) on brand equity (Y)

The results for this show that the p-value = 0,038 which is smaller than ( $\alpha$ ) of 0.05, therefore H0 is rejected.

#### 4.3.2 Effect of reputation (X2) on brand equity (Y)

The p-value of reputation for predicting brand equity is 0.002, which is smaller than ( $\alpha$ ) of 0.05, hence H0 is rejected.

#### 4.3.3 Effect of perceived risk (X3) on brand equity (Y)

The partial test results of the p-value of perceived risk is 0.014, which is smaller than ( $\alpha$ ) of 0.05, hence H0 is rejected.

#### 4.3.4 Influence of innovation (X4) on brand equity (Y)

The p-value of innovation on brand equity is 0.013, which is smaller than ( $\alpha$ ) of 0.05, hence H0 is rejected.

### 4.4. Classic Assumption Test

To obtain a proper empirical model, the regression coefficient should satisfy the Best Linear Unbiased Estimation (BLUE). To obtain a coefficient that satisfies BLUE, it must qualify the classical assumptions.

#### a) Normality test

Testing for normality in this study is achieved using the normal probability plots which takes shape as a normal graph with plots that provide a pattern of dots spread around the diagonal line and its distribution follows the direction of the diagonal line. If this occurs, the regression model is feasible because it meets the assumptions of normality.

#### b) Multicollinearity Test

To test the presence or absence of symptoms of multicollinearity, the Variance Inflation Factor (VIF) and Tolerance is used. The results of the multicolleniarity test are presented in Table 7.

The value of Tolerance of all of the independent variables is greater than 0.10 and the VIF of all of the independent variables is smaller than 10.00. Hence, there is no multicollinearity violation.

### **c) Test of Heteroschedasticity**

Heteroscedasticity was tested in this research by looking at the scatterplot graph on the basis of the analysis where there is a specific pattern, such as dots that have no particular form (wavy, widened and then narrowed). The pattern of scatter plot indicated that there is no heteroscedasticity.

## **5. Discussion**

The results of the analysis of the regression analysis are as follows.

### **5.1. Similarity Effect on Brand Equity of the Samsung Group**

Similarity has a significant effect on the brand equity in the Samsung Group. These results are consistent with research by Matarid, et.al. (2014), and Afzal (2013). The regression test results show that the coefficient for the effect of similarity on brand equity is 0.185. This is measured using indicators such as similarity between the logo and the brand name on brand extension products and the parent brand. Brand extension products that have a lot of similarities with the parent brand are more likely to have a positive affect on the perceptions of the product by the consumer.

### **5.2. Effect of Reputation on Brand Equity of the Samsung Group**

The results shows that brand reputation has a significant effect on brand equity, with a coefficient of 0.193. This means that the better a brand's reputation is, the higher the brand equity of the parent group will be. These results are consistent with the findings of Matarid, et.al. (2014) and Afzal et al. (2013). Consumer perceptions on the reputation of brand extension products will have an affect on brand equity. Reputation is usually linked to the quality of a product. Brand expansion based on poor brand reputation will therefore have a negative effect on the parent brand. Further, if the reputation of the parent brand declines, this will also decrease the overall brand equity of the products it produces.

### **5.3. Effect of Perceived risk on Brand Equity of the Samsung Group**

The results also show that perceived risk has a significant effect on brand equity, with a coefficient of 0.200. This means that the better a customer's perception is regarding perceived risk, the higher the brand equity of the parent group will be. These results are consistent with research by Afzal (2013). Perceived risk is typically identified with respect to the behavior of consumers who tend to be risk-averse when deciding to purchase a new product. Consumers tend to choose products that already exhibit strong brand equity.

### **5.4. Effect of Innovation on Brand Equity of the Samsung Group**

Further, innovation also has a significant effect on brand equity, with a coefficient of 0.202. This means that the better a consumers' perception of brand innovation, the higher the brand equity of the parent brand. These results are consistent with research by Afzal (2013).

Innovation has an effect on consumer acceptance of new brands. Consumers tend to exercise innovation when evaluating brand extension products. Innovation performed consumers can also affect overall product ratings, for both the brand extension products and and the brand equity of the parent brand.

## **6. Conclusion**



Based on the discussion above, the following conclusions can be made.

When consumers can easily to identify brand extension products, it can be said that the brand is directly linked to the parent brand. The better the consumers' perception on the similarity of the Galaxy series, the higher the value of brand equity.

The reputation of the Samsung Galaxy Series significantly affects the Samsung Group's brand equity, particularly when the reputation of the Galaxy Series is positive. Adversely, if the reputation of the Galaxy series is negative, then the brand equity of Samsung as the parent brand will decline.

The perceived risk of the Samsung Galaxy Series also has a significant effect on the brand equity of the Samsung Group. This is because consumers tend to be risk-averse to new brands.

Lastly, innovation has a significant effect on the brand equity of the Samsung Group, because consumer innovation may affect overall product ratings, in both the brand extension products and the Samsung Group. The better the perception of the Samsung Galaxy Series, the higher the brand equity of the mother brand, Samsung.

## 7. Recommendations

Based on the conclusion above, the authors provide the following recommendations. Similarity has the smallest effect on brand equity of the Samsung Group. Therefore, the Samsung Group should aim to improve the similarity between their brand extension products and the parent brand. Further, reputation does not have a significant effect on brand equity hence Samsung should continue to enhance the product's reputation by improving the quality of the Samsung Galaxy Series and being more assertive in promoting the excellence and sophistication of its products through various media outlets.

The perceived risk of the Samsung Galaxy Series also affects brand equity. This is because consumers tend to be risk-averse to new brands. Hence, it is suggested that the Samsung Group should better aim to meet the needs and desires of its consumers, through the development of new products, and also to maintain and even improve the quality of existing products. In addition, the innovation of the Samsung Galaxy Series also has an affect on brand equity. Samsung should continue innovating its product line, aiming to become leaders in innovation in the smartphone market.

## References

- Aaker, David A ,(2008). *Managing Brand Equity: Capitalising on the Value of Brand Name*, New York Free Press
- Afzal, S., Chandio, A.K.,Shaikh, S.,Bhand, M.,Ghumro, B.A.,Kuhro, A.K., (2013). Factors Behind Brand Switching in Cellular Networks, *International Journal of Asian Social Science*, Vol 3(2) pp. 299-307
- Chen Si Jia and Gu Jing (2012). *The Analysis of Challanges and Opportunity in Brand Extension*, Master Thesis, Halmstad University
- Haag and Keen, (1996). *Information Technology: Tomorrow's Advantage Today.*, Hammond, Mcgraw-Hill College
- Hair, Joseph J.,Black William, C.,Babin Barry J.,Anderson, Rolph E. (2009). *Multivariate Data Analysis*, Pearson
- Hem, Leif, E., Chernatony, de Leslie and Iversen, Nina M (2001). *Factors Influencing Succes Full Brand Equity*. Norwegian: Paper of Norwegian School of Economics and Business.
- Hem, Leif, E., Chernatony, de Leslie and Iversen, Nina M., (2003). *Factors Influencing Successful Brand Extensions*, *Journal of Marketing Management*, Vol. 19, Iss. 7-8, publish online mar 2012 at <http://dx.doi.org/10.1080/0267257X.2003.9728237>
- Hem, Leif, E., and Nina M. Iversen (2008). *Effect of Different Types of Perceived Similarity and Subjective Knowledge in Evaluation of Brand Extension*. *International Journal of Market Research* Vol 51 Issue 6.
- Keller, Kevin Lane, (2008). *Strategic Brand Management: Building, Measuring and Managing Brand Equity*, Prentice Hall
- Kotler, P.,(2007). *Marketing Management*, Pearson Education

Martin, E. (1999). *Managing Information Technology What Managers Need to Know* (3rd ed.). New Jersey, Pearson Education International.

Matarid, N.M., Youssef, M.A., & Alsoud, G.A. (2014). The Impact of Brand Extension Strategy on the Brand Equity of Fast Moving Consumer Goods in Egypt, *European Journal of Business and Management*, ISSN 2222-1905, Vol 6 No.21

Sekaran, U. (2003). *Research Methods for Business* (4ed.). USA; John Willey & Sons, Inc

SoungSoo S, Euiheon J, Daeson P. (2013). *Samsung Sustainability Report 2013*(Global Harmony with People, Society and Environment). Korea., Samsung Electronics.