

The Influence of Product Development on the Intention of Purchase

Anton Budi Santoso, Shinta Oktafien

Faculty of Business & Management

Universitas Widyatama

Bandung, Indonesia

anton.budi@widyatama.ac.id

Abstract—This study is aims to determine description of product development and purchase intentions of Nokia Smartphone products and Feature Phone Nokia 3310, and to what extent the influence of product development and purchase intentions of Nokia Smartphone products and Feature Phone Nokia 3310. The research method used is a survey method and type of research is associative research. The data were collected through the questionnaire distribution to the diploma students (D3) majoring Management study program class of 2015 with a total sample of 30 people as respondents. Based on the research result, it is known that there is no significant influence between product development with the intention to purchase Nokia Smartphone products and Feature Phone Nokia 3310. Thus, the more innovative products produced by a company can be one of the factors that encourage consumers' buying interest to consume a product.

Keywords—*product; product development; intention of purchase*

I. INTRODUCTION

Along with the increasingly tight business competition that occurs at this time, which is marked by the increasing number of companies that have similar products to one another, inevitably a company must be able to develop new products that have in order to have a strong competitiveness with the product competitors so that the product is well received by its customers. In addition, even now the needs or desires of consumers will be a product consumed becomes more diverse and varied which in turn makes consumers become more demanding will the product produced by the company that can provide benefits or added value for its consumers in accordance with what it needs. Therefore, it is important for a company to be able to produce more innovative products, by not ruling out the needs demanded by consumers and potential customers, which can be done by creating new products or developing existing products.

A typology shows that technology and customers as company competencies influence the development of new products, while also being influenced by the development of new products [1]. By developing (innovation) new products can be one way that can be taken by a company to win an increasingly competitive business competition, without exception to companies engaged in the telecommunications

industry. New product development itself can be defined as a strategy for company growth by offering modified products or new products to existing market segments, developing product concepts into physical products in an effort to ensure that product ideas can be transformed into products that are effectively realized [2]. Some of the characteristics that can affect product development (innovation) as what is expressed by Kotler and Keller, among them [3]: 1) Relative advantage, ie to the extent that innovation looks better than the old product; 2) Compatibility, ie to what extent the appropriateness of innovation with one's value and experience; 3) Complexity, namely to what extent the level of difficulty of innovation can be understood and used; 4) Divisibility, ie to the extent that innovation can be tried in a limited way; 5) Communicability, ie to what extent the benefits of the use of innovation can be seen or explained to others. In analyzing innovative products, it can be analyzed through the internal and external sides of the product. The internal side can be in the form of knowledge, capacity, resources, and technology used by the company in producing a product, while on the external side it can be in the form of consumer needs and owner expectations of the company's products [4].

When a company has been able to create a new product that can meet the needs or desires of consumers or prospective customers, it is expected that the consumer's purchase intention of the product offered by the company can be increased which has an impact on the higher level of product sales. Purchase intention is something related to the consumer's plan to buy a particular product and how many product units are needed in a certain period of time [5]. Schiffman and Kanuk argue that indicators in measuring consumer purchase intentions for a product can consist of several components as follows [6]: 1) Interested in finding information about products; 2) Consider buying; 3) Interested in trying; 4) Want to know the product; and 5) So want to have a product. A measure of purchase intention on a product can be used to identify possible purchases for a product within a specified time period [7].

Product innovation can have a positive influence on purchasing decisions, which means that product innovation developed by the company can affect its customers to want to make continuous purchases of products offered by the company [8-10]. It was also stated that product features can be one of the main decision variables used by marketers to

influence product evaluation and potential customer buying behavior [11]. Thus, product innovation has a very important role in the process of making consumer purchasing decisions [12].

Nokia is one of the largest telecom equipment manufacturers in the world whose headquarters are located in the town of Espoo, Finland. In the mid-1990s, it could be said that Nokia was the king of telecommunication companies that produced cellular phones or cellphones for all major markets and protocols in the world, including GSM, CDMA, and W-CDMA, which were able to produce 2,100 series of Nokia mobile phones. successfully sold successfully in 130 countries and by employing 54,000 workers.

Nonetheless, entering 2010, the level of sales of Nokia products continued to experience a significant decline. This is marked by the increasingly eroded market share of Nokia which originally in 2006 is still able to control 34.6 percent of the world's mobile phone market share, but in 2013 only 13.9 percent of Nokia still control the world's mobile market. In fact, in 2014, since Nokia was acquired by Microsoft with a net worth of 7.2 billion US dollars (about 96.8 trillion rupiah), no more smartphone brand that carries the name "Nokia" for ownership of brand "Lumia" and "Asha" Which is identical to Nokia products has now switched to the new owner, so the two brand names of the mobile phone products are the last product that carries the name "Nokia ". Here is an illustration that shows the level of sales and market percentage of Nokia mobile phone products shown in the image below:



Source: from various sources

Fig. 1. Nokia market percentage rate.

In 2017 Nokia launched its newest mobile phone product, three new products including smartphone products plus one other product, namely Nokia 3310 feature phone products. Through the Global HMD as the holder of the Nokia mobile phone brand, it was stated that all new Nokia products will be released to 120 countries in the world, including Indonesia, which is one of the countries that will be entered, in the second quarter of 2017, although it will not be launched at the same time. With the launch of Nokia's latest mobile phone products, comprising Nokia 6, Nokia 5, and Nokia 3 smartphones, along with Nokia 3310 feature phone, it looks like the company is looking to reclaim market share of the mobile business that is now controlled by Apple products and Samsung are the main competitors. However, it is not easy for this company to re-rule the world's mobile phone business as more and more new mobile phone manufacturers, such as Xiaomi, Oppo, Huawei, Vivo, and others, both want the same market share. Therefore, with the new product Nokia which is one of the development of (innovation) new product owned by this company can give

impact to consumer purchase intention is increasing, so that in the future it is expected this company able to compete again to fight the market of mobile phone business world.

Based on the description above, the author feels interested in conducting research entitled "The Influence of Product Development on the Intention to Buy Nokia Smartphone Products and Nokia Feature Phone 3310 (A Case in the Widayatama University D3 Management Study Program Students)".

II. METHODS

The research method used in this research is associative research, that is the type of research done with the intention to know the relationship between one or more of two variables with the intention to find the important variables which are related to the problem under study.

This study has 2 (two) main variables studied, including "product development (X)" as independent variable and "product purchase intention (Y)" as dependent variable.

The population in this study is all active diploma students (D3) majoring Management study program class of 2015. The total number is 43 students with number of the sample taken is 30 students. In this research, probability sampling or random sample is used, while the sampling technique used is cluster sampling.

Data collection is done through the questionnaires distributed to the respondents. For processing and data analysis used in this study, which is done using simple linear regression analysis, the calculation itself is done using SPSS version 21.0.

III. RESULTS AND DISCUSSION

To find out the relationship between the variables studied in this study, the variable measurement was done by distributing questionnaires distributed to active diploma students majoring Management study program class of 2015 as respondents who were conducted with the aim of getting answers to questions about whether development (innovation) new products can have an effect on consumer purchase intentions. Questionnaires distributed have a total sample of 30 respondents.

This is a table that shows the interpretation of the correlation coefficient used to determine whether the relationship between the two variables is indicated strong or weak.

TABLE I. RESULTS OF CORRELATION TEST ANALYSIS

	Product Development	Customer Purchase Intention
Product Development	Pearson Correlation	1
	Sig. (2-tailed)	.320
	N	30
Customer Purchase Intention	Pearson Correlation	-.188
	Sig. (2-tailed)	.320
	N	30

Based on the data shown in the table 1, it is known that the relationship between the existing variables shows a correlation coefficient of -0.188. These results indicate that there is no significant association or relationship between product development variables with product purchase intentions.

TABLE II. COEFFICIENT OF DETERMINATION

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.188a	.035	.001	2.95358

Based on the data shown in the table 2, it is shown that the value of the determination coefficient (adjusted R2) obtained only has a number of 0.035 which means that only 3.5% of customer purchase intentions can be explained by product development factors, so it can be seen that basically no meaningful influence that can explain the relationship or influence between product development and customer purchase intention.

For the results of data processing can be shown through the table below:

TABLE III. RESULTS OF SIMPLE LINEAR REGRESSION

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	22.591	5.157		4.381	.000
	Product Development	-.092	.091	-.188	-1.012	.320

Based on the results of the data analysis shown in the table 3 it is known that for the simple linear regression equation model that is formed is as follows:

$$Y = 22.591 + (-0.092X) + \epsilon \tag{1}$$

TABLE IV. HYPOTHESIS TESTING

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.938	1	8.938	1.025	.320b
	Residual	244.262	28	8.724		
	Total	253.200	29			

Based on the results of calculations performed with the help of the SPSS program as shown in the table 4, it is known that the F_{count} value has a smaller value compared to the F_{table} or 1.025 < 4.20, so that it can be concluded that if the F_{count} value is smaller than the F_{table} value, then H0 accepted which means that there is no significant or significant influence between product development and product purchase intention.

Based on the results of the data calculation and the previous discussion that talked about the relationship between product development (innovation) and product purchase intention, it was known that the results did not show any significant influence between the two variables. The results of this study certainly have different conditions when compared with

previous studies which often show the influence of product development (innovation) on product purchase intention.

Like the research conducted by Bayu Hendrawan Suroso and Sri Setyo Iriani in his research entitled "The Effect of Product and Price Innovation on the Interest in Buying Noodle Sedaap Cup" which shows that product innovation has a significant influence on the interest in buying Mie Sedaap Cup in Kelintang Kelurahan, Surabaya.

IV. CONCLUSION

Based on the results of the research analysis and discussion that has been done before, it was concluded that by looking at the F_{count} value has a smaller value compared to the F_{table} or 1.025 < 4.20, so that it can be concluded that if the F_{count} is smaller than the F_{table} value, then H0 is accepted which means that there is no significant or significant influence between product development and product purchase intention.

ACKNOWLEDGMENT

On this occasion the author would like to thank, especially addressed to Prof. Dr. Hj. Ratih Hurriyati, M.P and Dr. Vanessa Gaffar, S.E., Ak., MBA, as a lecturer who has given his guidance in the preparation of this research, in addition to the thanks also addressed to all active diploma students (D3) majoring Management study program class of 2015 has been willing to be the respondent in this research.

REFERENCES

- [1] E. Danneels, "The Dynamics of Product Innovation and Firm Competence," *Strategic Management Journal*, vol. 23, pp. 1095-1121, 2017.
- [2] P. Kotler and G. Amstrong Prinsip-prinsip Pemasaran, dialihbahasakan oleh Sindoro. Edisi 12. Jilid 2. Jakarta: PT Indeks; 2003, p. 70.
- [3] P. Kotler and K.L. Keller, *Manajemen Pemasaran*. Edisi 13. Jilid 1 & 2. Jakarta: Erlangga, 2009, p. 309.
- [4] L.C. Seng and N.S. Ping, "The Influence of Product Innovation Toward Consumer Purchase Intention," *International Journal of Economics, Commerce and Management*, vol. 4, no. 4, pp. 773-782, 2016.
- [5] D. Durianto and C. Liana, "Analisis Efektivitas Iklan Televisi Softener Soft & Fresh di Jakarta dan sekitarnya dengan Menggunakan Consumen Decision Model," *Jurnal Ekonomi Perusahaan*, vol. 9, no. 1, pp. 35-55, 2004.
- [6] Schiffman and Kanuk, *Perilaku Konsumen*. Edisi Kedua. Jakarta: PT Indeks Gramedia, 2007, pp. 470.
- [7] M. Brown, N. Pope and K. Voges, *Buying or Browsing?: An Exploration of Shopping Orientations and Online Purchase Intention*. *European Journal of Marketing*. Vol. 37, no. 11, pp. 1666-1684, 2003.
- [8] S.J. Kim, K.H. Kim, and J. Choi, "The Role of Design Innovation in Understanding Purchase Behavior of Augmented Products," *Journal of Business Research*, 2017.
- [9] B. Suroso and S.S. Iriani, "Pengaruh Inovasi Produk dan Harga terhadap Minat Beli Mie Sedaap Cup," *Jurnal Ilmu Manajemen*, vol. 2, no. 4, pp. 1174-1185, 2014.
- [10] T. Mariano-Mello, P.E. Ramirez-Correa and J.E. Rondan-Cataluna, *fecto de la Estética en la Intención de Compra de Teléfonos Inteligentes*. *Informacion Tecnologica*, vol. 29, no. 4, pp. 227-236, 2018.
- [11] T.Z. Chang and A.R Wildt, "Price, Product Information, and Purchase Intention: An Empirical Study. *Journal of the Academy of Marketing Science*, vol. 22, no. 1, pp. 16-27, 1994.

[12] Y. Zhang and P. Tang "The Effects of Product Innovation Locus on Consumers Adoption of New Products-Based on Regulatory Focus and

Information Processing Fluency," *American Journal of Industrial and Business Management (Internet)*. Vol. 7, pp. 191-201, 2017.