

E-Commerce Market Segmentation Based On The Antecedents Of Customer Satisfaction and Customer Retention

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Abstract— The "grow and thrive" of e-commerce players in Indonesia and very diverse nowadays customers are causing the intense competition among the players and therefore effects on low customer retention rate. The purposes of this research are to determine the influence of psychographic factors towards customer satisfaction and customer retention in e-commerce, and secondly to identify e-commerce customer segmentation based on the psychographic and demographic factors. This is an associative-descriptive research where the data is collected through questionnaire distributed to 411 respondents with analysis methods used are Path Analysis, Cluster Analysis, and Cross-tabulation. The research result shows that all the independent factors influence customer retention through customer satisfaction, and based on those factors, there are 3 customer segments of e-commerce, i.e. The Functional Shopper, The Credibility-Matters Shopper, and The Money-Dietary Shopper.

Keywords— e-commerce market segmentation, customer satisfaction, customer retention

I. INTRODUCTION

E-commerce in Indonesia is currently experiencing rapid development from the phenomenon of "online shopping" which has become a trend or boom in recent years. This is evidenced by [1] which states that positive online shop e-commerce growth in Indonesia in 2016 accounted for 26.2 million business players, and according to [2] which states that in the content category frequently visited commercial, there are 62% or 82.2 million out of a total of 132.7 million internet users ever or frequently visit e-commerce sites, with shopper online conversion reaching 10.6% or around 8.7 million people, with the number of transactions which reached \$ 4.89 billion in 2016 - according to alert data by [3]. The huge number of e-commerce players due to its rapid growth has caused customers to tend to do brand switching between one e-commerce to another, according to Hendro Kakalim as CEO of Boneprice.com in [4], this is reasonable in the efforts of customers to get the best value-for-money. The phenomenon of brand switching is often associated with the level of customer retention or customer loyalty, which according to [5], the high level of brand switching caused by the degree of retention, or customer loyalty towards a brand. The lower the level of customer retention, the higher the level of brand switching of a customer. This means that the more risky the brand that we manage, because it can easily and quickly lose customers [6].

In relation to the e-commerce industry, customer retention is often interpreted as the keyword "repurchase". And the statement was reinforced by the preliminary test data conducted on 105 e-commerce customers, where the result showed that in fact as many as 54.1% tend to keep repeating purchases on 2 e-commerce brands that were their favorites, 17.1% do repeat purchase on 3 e-commerce brands, 8.1% repurchase on more than 3 e-commerce brands, while only 23.7% are loyal to 1 particular e-commerce brand.

If an e-commerce loses its customers, of course this is very detrimental if it is associated with the Pareto marketing principle: The 80/20 Rule [7], which one of the principles states "80% of profits come from 20% of customers." Which means 80% percent of the amount of profit of the company can be produced from only 20% of the number of customers. This refers to an insight, if the level of customer retention in the company is higher, the higher the profit the company will get from retained its customers. Another thing was revealed by [8] as CEO of Invesp in his research data on the benefits the company obtained from customer retention, which has the insight that the probability of companies selling a product to an existing customer is as much as 60-70%. It is inversely proportional to new customers who may not retain to a brand, which is only 5-20%. Moreover, according to [9], e-commerce strategies oriented to customer retention are very important to do among others, as a means to increase company growth-revenue, reduce acquisition and maintenance costs by consumers, improve & facilitate marketing, and to know deeper consumer insights and behavior. One of the efforts that can be done by e-commerce players to be able to maintain and improve their customer retention is by keeping a pulse on their satisfaction with the company's service, which means by efforts to improve customer satisfaction through service provided by the company. This is reinforced from the research journal by [10] which states that customer satisfaction has the influence and positive relationship to customer retention.

Seeing the important role of customer retention through customer satisfaction, e-commerce players must be able to understand what factors can influence their customers on these two things. According to [11], there are seven factors that are positively related to customer satisfaction and loyalty or retention in e-commerce, namely perceived usefulness, transaction security, brand image or brand image,

information quality, customer support, customer trust, and promotion. And, [12] added, from the results of his study of independent factors that can cause customers to obtain satisfaction in the context of e-commerce which is divided into two main factors, namely the value factor and service quality. So that from these factors, the researcher grouped 7 factors that were considered suitable for use in this study, namely Perceived Usefulness, Trust, Brand Image, Promotion, Value, and Service Quality.

In the effort to implement a strategy oriented to increasing customer retention through customer satisfaction, along with the influencing factors in it, it is important for e-commerce players to effectively understand the needs or desires of customers in an efficient manner. [13] stated that "in an effort to get customer satisfaction in the midst of competition, companies must first understand what their customers' needs and desires are. A company realizes that the company cannot fulfill the desires of different customers, the company needs to prepare a marketing strategy by choosing the best customer segment." This is similar to [14] study, that market segmentation has a positive and strong relationship to influence customer satisfaction. This indicates that customer segmentation is a crucial thing in e-commerce industry in order for them to satisfy the varied customer behavior, in order to achieve customer retention.

The preliminary test result also supported the urgency of market segmentation in the e-commerce industry. The age group of 17-22 years prioritizes promotion and product offerings as the factors of their satisfaction towards an e-commerce that make them do repeat purchase. While the age group 23-30 years focus on complete information and practical nature of online shopping. Furthermore, for the age group of 31-40 years, security and brand image are the most important factors. And, for the age group of 41-50 years, product authenticity and easy to use are the major answers.

According to [15], market segmentation itself has benefits for a company that does it, namely the influence of sales volume and market share. Deeper about the benefits of e-commerce segmentation is to increase conversion rates, as well as long-term income from customers who have been retained with an e-commerce brand, and to get better consumer insight from the consumer database, in the context of online [16]. It is important for marketers, to divide market into segments that are more specific, so that each segment can obtain a different treatment from marketers, and in the end, the strategy adopted by marketers can be better targeted and lead to an increase in purchasing decisions [17].

Therefore, the purpose of this study is to determine the effect of Perceived Usefulness (X1), Trust (X2), Brand Image (X3), Information Quality (X4), Promotion (X5), Value (X6), Service Quality (X7) towards e-commerce Customer Retention (Z) through Customer Satisfaction (Y), and identifying e-commerce market segmentation based on the seven independent variables as well as demography factors. In the end, the results of this study are expected to provide benefits for e-commerce players to be able to understand the characteristics of each e-commerce customer segment, in order to reach potential target market with the most appropriate marketing strategy.

II. METHODOLOGY

The method used in this study is associative and descriptive research. Path Analysis method is used to determine the effect of independent variables on customer retention through customer satisfaction, Cluster Analysis method is used to identify market segmentation based on independent variables as psychographic factors, and Crosstabulation for the demographic factors. Research data is obtained by distributing questionnaires to 411 respondents with simple random sampling technique and processed by IBM SPSS Statistics 20.0. Below is the operationalization of research variables:

TABLE I. OPERATIONALIZATION OF VARIABLES

Variables	Dimensions	Indicators
Perceived Usefulness (X1) [11]	Perceived Product Information	Customer perception of the truth, details, and amount of information about the product you want to buy
	Convenience Perception	Customer perception that e-commerce offers practicality in how to shop
Trust (X2) [12]; [18]	Transaction Security	Guaranteed security in transacting on e-commerce
	Terms of Payment	Payment Terms, procedures that customers can use to pay for products in e-commerce such as using debit, credit, mobile payment, or other alternatives
	Delivery	There are several criteria for product delivery, such as shipping quality, shipping promos, shipping prices, area coverage, convenience, and shipping security
	Protection of Customer Personal Data	E-commerce can maintain customer personal data, based on elements of confidentiality and privacy
Brand Image (X3) [11]	Brand Identity	Customers know the uniqueness of a brand in building their identity
	Brand Personality	Customers feel characteristics that reflect the characteristics of a brand
	Brand Association	Customers feel everything that can be associated with a brand
	Brand Behavior & Attitude	Customers feel good brand attitudes and behavior in their efforts to communicate and interact
	Brand Competence & Benefit	Customers feel special benefits when choosing a specific brand
Information Quality (X4) [11]	Accuracy	The truth and reliability of information
	Timeliness	E-commerce capabilities to update the latest information
	Completeness	Current and future information fulfillment needs needed by customers
Promotion (X5) [11]	Price Promotion / Discount	An e-commerce provides promotions in the form of discounts or discounts
	Coupon	An e-commerce provides promotions in the form of giving coupons or vouchers
	Free Shipping	An e-commerce provides a promotion in the form of "free shipping"
Value (X6) [12]	Product Offer	Products in e-commerce are diverse, where more variety will be considered to have good value
	Price	An e-commerce can provide competitive prices for products
Service Quality (X7) [12]; [18]	Reliability	E-commerce is reliable and trustworthy in maintaining consistency and credibility of promises for its services

Variables	Dimensions	Indicators
	Convenience	Access Convenience: customers feel comfortable because they can access e-commerce where, and whenever they want
		Search Convenience: Customers feel comfortable because they can find products quickly and precisely
		Evaluation Convenience: Customers can freely and comfortably evaluate products purchased
		Transaction Convenience: Customers can conveniently transact on e-commerce
		Post-purchase Convenience: Customers feel comfortable after the product purchased arrives, without anxiety, such as a guarantee of product returns
Responsiveness	E-commerce customer service can provide service feedback quickly and responsibly	
Assurance	E-commerce can convince customers to make purchase transactions (product authenticity, product information, promotion terms)	
Customization	E-commerce can provide customized services to customers, according to the wishes of customers by using features or functions in it	
Ease of Use		Ease of learning, features found in e-commerce are easy to learn about their functions
		Ease of Use, a feature that is easy to use in e-commerce
		Level of Effort, the use of features in e-commerce does not require a difficult effort
		Level of Understanding, the use of features that are easy to understand
Website Design		Attractive, web design is interesting to see
		Appropriateness, a web design language that is typical of e-commerce
		Color, the role of color in the background as a support for attractiveness for customers
		Text, font types in e-commerce must be consistent in size and style
		Image / Sound / Video, as an alternative to text so that the appearance of a web is more interesting
Customer Satisfaction (Y) [19]	Likeability	Customers are satisfied on the basis of their preferences for services provided by e-commerce
	Pleasure	Customers are satisfied because they are happy with the services provided by e-commerce
	Comfort	Customers are satisfied because they feel comfortable with the services provided by an e-commerce
Customer Retention (Z) [20]	Expectation to Repurchase	Customers want to go back to shopping on e-commerce
	Recommend to Others	Customers will recommend other people to shop on e-commerce
	Overall Satisfaction	Customers feel overall satisfied with this service

III. RESULT AND DISCUSSION

Based on the Path Analysis result, it is known that the Perceived Usefulness (X1), Trust (X2), Brand Image (X3), Information Quality (X4), Promotion (X5), Value (X6), Service Quality (X7) simultaneously influence customer retention (Z) through Customer Satisfaction (Y), as can be seen in the following summary of Path Analysis results in Figure 1.

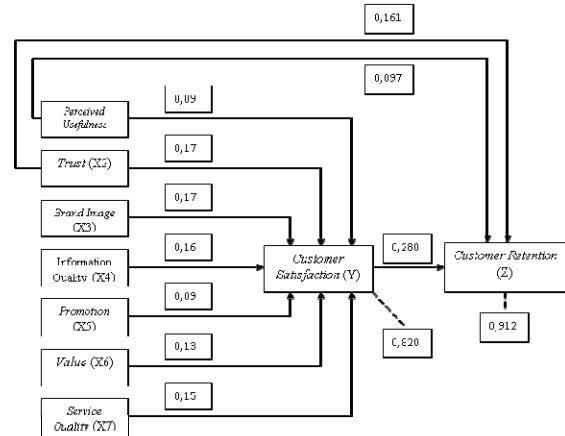


Fig. 1. Research Result Using Path Analysis

However, among all independent factors, only 2 factors directly affect Customer Retention (Z), namely Perceived Usefulness (X1) and Trust (X2). In this study, it can be understood Perceived Usefulness directly influence Customer Retention, and this is in accordance with the results of research by [11] which states that Perceived Usefulness is one of the factors that significantly influence Customer Loyalty, where based on research by [21], Customer Retention and Customer Loyalty are the same in the context of similar strategic objectives. The influence of Perceived Usefulness individually on Customer Satisfaction and Customer Retention, can be assumed if it is very important for e-commerce players to be able to form the usefulness image of e-commerce for customers, so that customers can perceive that they need to do repeat purchase on a particular e-commerce that is useful for them.

In this study, Trust does not only have a significant effect on Customer Satisfaction, but also has an influence on Customer Retention directly as well. This is similar to the results of a study by [12] and [22] which states if Trust has a significant influence on Customer Retention. The establishment of a customer's trust in an e-commerce is certainly not easy, because trust can be formed if a person has put all his beliefs in, and dares to take risks for whatever will happen. To create strong trusts, of course e-commerce must be able to provide a reliable aspect of assurance, and when customers have a high level of trust, this is a good advantage for an e-commerce player. When a customer's trust has been embedded in an e-commerce brand, of course they will not easily move their trust to another e-commerce, in the sense that when they believe they will surely have strong engagement, and tend to return to e-commerce brand they have trusted. In the results of this study, it can be seen that Brand Image, Information Quality, Promotion, Value, Service Quality factors do not directly affect Customer Retention. And this is different from the results of previous

studies by [11], [12], [23], and [22]. However, talking about Brand Image, Information Quality, Promotion, Value, and Service Quality in forming Customer Retention, this is very closely related to Customer Satisfaction. In this study, it is understandable that even if the five factors do not have a direct effect on Customer Retention, these five factors still influence Customer Retention, through an indirect route through Customer Satisfaction.

Associated with Customer Retention, a positive Brand Image will create a perception or expectation for customers, where when these expectations are met with the existing reality, then the first response that will be produced by customers is definitely feeling happy or satisfied. So, in the future they want to go back to shopping again in an e-commerce, in order to obtain maximum satisfaction. Likewise with the other four factors, namely Information Quality, Promotion, Value, and Service Quality. That, a customer will get satisfaction first of fulfilling the information he wants to get both in product information the needs that he wants to get, until other information, and then they will be satisfied also for the existence of promotional programs that are felt to benefit them due to the high value obtained, and the last is a feeling of satisfaction due to the existence of a quality service.

Moreover, Customer Satisfaction has a significant effect on Customer Retention. This is similar to the results of previous studies by [11], [12], [23], [24], and [22], which states that Customer Satisfaction, either individually or as a mediating variable, has an influence on Customer Retention.

From the results of processing data with Path Analysis prove that the seven independent variables, namely Perceived Usefulness (X1), Trust (X2), Brand Image (X3), Information Quality (X4), Promotion (X5), Value (X6), Service Quality (X7) has influences on Customer Retention (Z) through Customer Satisfaction (Y), so that subsequent data processing using Cluster Analysis can be done to identify e-commerce market segmentation based on the seven variables that are available as psychographic factors and Cross-tabulation is also used to identify the demographic segmentation. The following Table II shows the results of data interpretation using Cluster Analysis.

TABLE II. RESEARCH RESULT USING CLUSTER ANALYSIS

	Final Cluster Centers		
	Cluster		
	1	2	3
PU	3.95	2.59	3.34
TR	3.93	4.07	3.71
BI	3.76	4.00	3.53
IQ	4.36	4.27	3.83
PR	3.91	4.22	4.28
V	3.31	4.04	4.29
SQ	4.00	4.13	3.75

From the results of the analysis, it was found that there were 3 cluster groups. As seen in the table above, each cluster has different characteristics. Cluster 1 is an e-commerce customer who perceives that the Perceived Usefulness and Information Quality variables are the most important factors in making repeat purchases on an e-commerce. While Cluster 2 perceives that Trust, Brand Image, and Service Quality are the most important factors in influencing their customer retention in e-commerce. And

Cluster 3 is people who prioritize Promotion and Value in the context of customer retention on an e-commerce.

In addition, the result from data processing using Cross-tabulation shows that age, job, and expenditure can be used as demographic variables in the segmentation. Thus, the results from Cluster Analysis and Cross-tabulation, it can be concluded that three e-commerce market segments are formed with different demographic and psychographic characteristics based on customer satisfaction and customer retention factors that can be shown on Table III below.

TABLE III. E-COMMERCE MARKET SEGMENTATION

Cluster 1 <i>The Functional Shoppers</i>	Perceived Usefulness
	Information Quality
	Age: 22-30 years old
	Job: private employee
Cluster 2 <i>The Credibility-Matters Shoppers</i>	Expenditure: Rp 3.000.000 - Rp 6.000.000
	Trust
	Brand Image
	Service Quality
Cluster 3 <i>The Money-Dietary Shoppers</i>	Age: 31-40 years old
	Job: private employee
	Expenditure: Rp 3.000.000 - Rp 10.000.000
	Promotion
Cluster 3 <i>The Money-Dietary Shoppers</i>	Value
	Age: 17-22 years old
	Job: student
	Expenditure: < Rp 3.000.000

The first segment is called The Functional Shoppers, because the main characteristic of this segment is that they prioritize rational functions in shopping activities. The Functional Shoppers group itself consists of customers with average age of 22 to 30 years, where the majority of this segment has a profession as a private employee with average expenditure as much as <Rp 3,000,000 to Rp 6,000,000 That is, the majority of these segments spend their time working, so they are required to have a high level of productivity, which means they have a mature mindset and have responsibility for each of their needs. Moreover, they have limited time even busy. In fulfilling their needs, the Functional Shoppers is a group that is digital savvy and likes everything practical. In the context of shopping or meeting their needs, the Functional Shoppers will search for as much information on product needs as possible through the internet such as testimonials or online reviews, and tend to buy their needs through the internet because the information factors are good, and they don't want to bother looking products that need to be fulfilled offline because of course it is impractical and time consuming. This customer segment really understands what needs and what needs to be fulfilled, so they will manage every expenditure for their needs, whether individual, family, or social needs. Therefore if an e-commerce understands every characteristic or latent need of this customer segment, and strives to fulfill and provide the best quality information, then an e-commerce will be considered "useful", and then they will be satisfied, and has a high level of retention of an e-commerce. The business suggested to the relevant parties to be able to reach this customer segment is to form a convenient and practical shopping system flow by providing all clear direction information without a complicated system.

The second segment formed is called The Credibility-Matter Shoppers, because the main characteristic of this segment is because they want to find a source or place of shopping that has good credibility and credibility from a brand, which in this study is an e-commerce, in their shopping activities. The Credibility-Matters Shoppers are in the range of ages 31 to 40 years, the majority work as private employees, and have expenditure level ranging from Rp 3,000,000 to Rp 10,000,000. The Credibility-Matters Shoppers have very rational and mature thinking, but it does not involve the problem of need when shopping online, but trust, because they are the type of customers who do not easily trust the credibility of a brand before they can evaluate it, so they understand an evaluator when they do shopping activities. In the context of this research, they will believe in an e-commerce when they get good evaluation results, especially based on their impression aspects of the brand image of an e-commerce. A positive image brand of an e-commerce can be formed from the existence of an identity, characteristics that are clear and different from the others, which are then packaged by the delivery of attitudes and behavior from a good communication. Furthermore, the extent of the brand association is also influential in supporting the roots of an increasingly good brand image growth. However, the most important thing is the competence of the brand itself which will contribute greatly to the formation of a brand image. Furthermore, in terms of Service Quality, this segment can assess whether the services provided by an e-commerce are of high quality or not that are assessed based on the Reliability dimension that refers to reliability whether or not a promise of e-commerce can be trusted and can be consistent. Convenience that refers to whether or not convenient e-commerce can be used. Responsiveness that refers to how quickly the level of service functions of customers can provide feedback quickly. Assurance that refers to e-commerce that can convince customers to transact. Customization refers to services that can be customized for each individual customer according to their needs. Ease of use which refers to the core of whether or not an e-commerce can be used smoothly, and Website Design that refers to the appearance of e-commerce websites that can affect customer impressions so that they can be confident in transacting in an e-commerce. The main points of the characteristics of The Credibility-Matters Shoppers include alert, impression and experience oriented, and high rate loyalty. The e-commerce player's efforts that can be done to be able to reach this customer segment, namely by giving promises or guarantees of customer security that must be fulfilled, then redesigning the platform that is utilized by an e-commerce to impress professionals, with make an adult design language, if it feels the initial design is not in accordance with the characteristics of this segment. Then, by giving more emphasis to the existing testimonial or review features so that customers can trust sales that are good or not an e-commerce. Then, in an e-commerce that has an achievement or award, it is a good advantage, because they can highlight their image even more in various "opportunities" for the achievements that have been made so that customers are more confident and can form a stronger positive image. And, the most important thing is always to improve competence by restructuring services to be very good in terms of quality, and superior to competitors.

The last segment formed is The Money-Dietary Shoppers because the main characteristic of this segment is opportunism, where they will take advantage of opportunities that are considered to benefit them as well as possible. The Money-Dietary Shoppers consist of customer with age range of 17 to 22 years old, whose job is student, and have expenditure levels below <Rp 3,000,000, which from the demographic conditions can be interpreted as being very concerned the value of a product you want to buy, and prioritize the existence of promotional factors in an effort to get the lowest cost. This segment is smart in taking advantage of the opportunity to get the desired item, because the character of this group is price sensitive and will only buy a product that has a relatively low price, or has the opportunity to buy a product at a low price through existing promotions. This causes a relatively high level of brand switching among them, because if there is an e-commerce competitor that offers a lower promotion program, they will tend to move and use the best available promotion, in order to get the best value. However, this segment has a large impact on the contribution of e-commerce sales that are emphasizing promotional programs, or have a positioning that always offers the lowest prices compared to competitors. Therefore, the strategy that can be applied by e-commerce players to obtain this segment is to establish a price psychology strategy that aims to influence the psychological aspects of customers such as making a limited impression of product stocks, giving large discounts, and odd pricing that seems cheaper. In addition, it is needed to create a unique and consistent promotional creation program to attract this segment.

IV. CONCLUSION AND SUGGESTION

Based on the results of research conducted by researchers, it can be concluded that all independent variables, namely Perceived Usefulness, Trust, Brand Image, Information Quality, Promotion, Value, and Service Quality affect Customer Retention simultaneously through Customer Satisfaction. And, based on the seven independent variables, three e-commerce market segments are formed, namely The Functional Shoppers that consist of e-commerce customers who prioritize rational functions in shopping activities, the Credibility-Matters Shoppers that consist of customers who want to find e-commerce that has good credibility and can be trusted in their shopping activities, and the Money-Dietary Shoppers that consist of e-commerce customers who always take advantage of opportunities that are considered to benefit them in shopping.

However, this research has limitation, where the variables investigated are only some of the customer satisfaction and customer retention antecedents. So, the suggestions for further research are to explore other psychographic variables that can be used as the basis for e-commerce customer segmentation, and demographic variables can also be examined in the future to be combined with psychographic variables to get a more comprehensive profile segmentation in the e-commerce industry.

REFERENCES

- [1] S. Deny. (2018, March 15). BPS: Jumlah e-Commerce di Indonesia Capai 26,2 Juta. Retrieved from <https://www.liputan6.com/bisnis/read/2602680/bps-jumlah-e-commerce-di-indonesia-capai-262-juta>

- [2] APJII. (2018, March 15). Survey Pengguna Internet Indonesia. Retrieved from <https://apjii.or.id/content/read/39/264/Survei-Internet-APJII-2016>
- [3] Social Research and Monitoring. (2018, March 15). Transaksi e-Commerce di Indonesia pada 2016 mencapai 4,89 Miliar Dolar AS. Retrieved from <http://www.tribunnews.com/bisnis/2017/02/20/transaksi-e-commerce-di-indonesia-pada-2016-mencapai-489-miliar-dolar-as>
- [4] E. M. Rahayu. (2018, March 15). Hendro Kakalim, Hadirkan Boneprice untuk Perbandingan Harga Online. Retrieved from <https://swa.co.id/swa/profile/profile-entrepreneur/hendro-kakalim-hadirkan-boneprice-untuk-perbandingan-harga-online>
- [5] R. Arshad, I. Akbar, A. Muqtadir, U. Shafique, H. Zia, W. Naseer, and S. A. Amin, "Impact of brand switching, brand credibility, customer satisfaction and service quality on brand loyalty," *IOSR Journal of Business and Management*, pp. 12-20, 2015.
- [6] M. Sumarni and J. Soeprihanto, *Pengantar Bisnis (Dasar-Dasar Ekonomi Perusahaan)*, 5th ed. Liberty, 2010.
- [7] D. Chaffey. (2018, March 15). Pareto's 80:20 Rule in Marketing. Retrieved from <https://www.smartinsights.com/marketing-planning/marketing-models/paretos-8020-rule-marketing/>
- [8] K. Saled. (2018, March 15). Customer Acquisition Vs. Retention Costs – Statistics And Trends. Retrieved from <https://www.invespro.com/blog/customer-acquisition-retention/>
- [9] B. Hayes. (2018, March 15). 4 Reasons Why Customer Retention Matters to Your Customer Acquisition Efforts". Retrieved from <http://customerthink.com/4-reasons-why-customer-retention-matters-to-your-customer-acquisition-efforts/>
- [10] V. Tamuliene and I. Gabryte, "Factors influencing customer retention: case study of Lithuanian mobile operators," *Procedia - Social and Behavioral Sciences*, vol. 156, pp. 447-451, November 2014.
- [11] T. A Napitupulu and H. C. Aditomo, "Factors affecting customer loyalty in business e-commerce: a case of Indonesia," *Journal of Theoretical and Applied Information Technology*, vol. 76, no. 3, pp. 386-392, June 2015.
- [12] N. B. Nguyen, "Customer's satisfaction and loyalty through e-commerce: the case of company X," *Tampereen ammattikorkeakoulu*, March 2015.
- [13] P. Kotler, and G. Armstrong, *Principles of Marketing*, 17th ed. Pearson, 2017.
- [14] P. Puwanenthiren and Y. Udurawana, "Market Segmentation and Its Impact on Customer Satisfaction with Especial Reference to Commercial Bank of Ceylon PLC," *Marketing Information & Strategies: Core for Development*, Scitech Publications (India) Pvt Ltd, January 2014.
- [15] S. Maina, "The impact of market segmentation on the sales volume of a company's product or service," *European Journal of Business and Management*, vol. 7, no. 11, pp. 132-139, 2015.
- [16] Ometria. (2018, March 15). A quick guide to customer segmentation in ecommerce. Retrieved from <https://www.ometria.com/academy/a-quick-guide-to-customer-segmentation-in-ecommerce/>
- [17] A. Gunawan, I. M. Indartoyo, and B. G. Muchardie, "Analysis of kids apparel market segmentation amongst millennial moms (an implication for kids apparel retailer in Jakarta)," *Innovation Management and Education Excellence Vision 2020: Regional Development to Global Economic Growth*, pp. 99-111, May 2016.
- [18] A. Radziszewska and P. Czestochowska, "Assessment of customer's satisfaction in e-commerce services," *Polityki Europejskie, Finanse i Marketing*, vol. 9, no. 58, pp.383-393, 2013.
- [19] F. Nayebe, J. Desharnais, and A. Abran, "The state of the art of mobile application usability evaluation," *25th IEEE Canadian Conference on Electrical Engineering (IEEE CD: 978-1-4673-6/12)* Montreal, May 2012.
- [20] Z. N. Syaquirah and Z. P. Faizzurahman, "Managing customer retention of hotel industry in Malaysia," *Procedia – Social and Behavioural Sciences*, vol. 130, pp. 379 – 389, May 2014.
- [21] R. Singh and I. A. Khan, "An approach to increase customer retention and loyalty in B2C world," *International Journal of Scientific and Research Publications*, vol. 2, no. 6, pp. 1-5, June 2012.
- [22] S. Ullah, S. Khan, and S. Shahzad, "Factors effecting customer retention," *City University Research Journal*, vol. 5, no. 1, pp. 147-161, January 2015.
- [23] M. Zangmo, W. LiampreechaS, and S. Chemsripong, "The impact of service quality on customer retention in airline industry of Bhutan," *International Business Management*, vol. 9, no. 6, pp. 1281-1284, 2015.
- [24] R. Climis, "Factors affecting customer retention in the airline industry," *Journal of Management and Business Administration. Central Europe*, vol. 24, no. 4, pp. 49–69, 2016.