E-Commerce: The Booster for Brand Advocacy Ratio in Asia

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Abstract—The Brand advocacy ratio is one of the marketing productivities measures that can be applied in various industries. In the present study, the authors examined the role of ecommerce in raising customer's brand awareness, encouraging purchase, and promoting the brand of Apple in Asia. This study was conducted through a survey on 300 respondents. It was revealed that Google’s search engine managed to raise the Apple brand awareness to the highest level, namely top-of-mind awareness. In addition, the availability of Apple’s products in marketplaces such as Amazon, Shopee, and Lazada was proven to promote sales in Asia. One of its websites as proven to increase its brand advocacy ratio because of its comprehensive product information, help service, and information on the nearest Apple’s stores. In today’s digital era, marketing productivity in the form of brand advocacy ratio could be improved by search engines (e.g., Google), marketplace (e.g., Amazon, Shopee, and Lazada), and corporate websites.

Keywords—brand advocacy, e-commerce

I. INTRODUCTION

The ranking of multinational companies from America is Apple, which managed to build popularity in the world, which received the title of Advocacy Top Ranking (table 1) [1].

| Country     | Brand         | Rank | Score |
|-------------|---------------|------|-------|
| Mesir       | Apple         | 1    | 79.7  |
| UAE         | Apple         | 5    | 74.8  |
| Indonesia   | Apple (iPod / iPhone) | 9  | 74.0  |
| Saudi Arabia| iPhone        | 4    | 73.9  |
| Saudi Arabia| Apple         | 6    | 71.7  |
| Thailand    | Apple Store   | 9    | 69.4  |
| Jepang      | iPhone        | 4    | 56.9  |
| The Netherlands | Apple     | 4    | 54.2  |

Brand recommended by other customers can add value and company revenue because they reduce marketing costs. Branding is highly correlated with company profitability [2]. On attractive brand, consumers will buy it and in time become a valuable asset [3]. Considerable effort is needed for marketers to be able to achieve brand advocacy. In the relationship hierarchy it is stated that there are five activities before finally suggesting, namely awareness, trust, transactions, satisfaction, commitment [4]. Ideally for a brand, every customer who interacts with a brand down 5A safely, namely awareness, appeal, ask, act and advocate [5]. Brand advocate must be a stronger measure because the high conversion rate from act to advocate for a brand indicates high affinity [5,6]. Brand provides a good experience as long as the product is used. Brand advocacy ratio is used as a measurement of marketing productivity in various industries.

When customers are willing to advocate for a brand, customers must be involved in cognitive processes, attitudes and behaviours [7]. One of the stimuli that can be used for cognitive, affective and consumer behaviour responses in the digital age is e-commerce site [8]. The survey results showed 75.4% of companies in the world have used e-commerce to improve customer service and sales figures [9]. This situation leads to the question, how can e-commerce drive brand advocacy ratio?

II. METHODS

The research conducted is descriptive in nature with the aim of evaluating e-commerce as a strategy in encouraging brand advocacy. The method carried out by researchers is a survey of 300 users of Apple products in Indonesia. The research instrument used in the form of a questionnaire filled out online by respondents through Google Form as many as 10 questions. The instrument is valid if $t_{value} > 1.701$ and reliable if $r_{value} > 0.361$ at the error limit of 5% (table 2).
TABLE II. INSTRUMENT TEST RESULTS

| Variable | Dimension | Question | tvalue | rvalue | Remark |
|----------|-----------|----------|--------|--------|--------|
| e-Commerce | Attractive | Before entering the website www.support.apple.com, are you used to accessing Google? | 1,844 | 0,495 | Valid |
| | Informative | How often do you visit the www.support.apple.com website when you have trouble using Apple products? | 2,403 | 0,585 | Valid |
| Position | Do you feel helped by the website www.support.apple.com? | 1,765 | 0,481 | Valid |
| Delivery | Do you feel confident about purchasing Apple products at Shopee? | 1,263 | 0,377 | Valid |
| Brand Advocacy | Cognitive response (A1) | How often do you look for information about Apple products? | 3,026 | 0,663 | Valid |
| Affective (A2-A4) | Affective (A2-Appeal) | How often do you remember the Apple brand compared to other brands? | 1,567 | 0,442 | Valid |
| | What do you think about Apple brand? | 2,267 | 0,565 | Valid |
| | How was your experience using Apple products? | 5,769 | 0,849 | Valid |
| Behavior (A4-A5) | Are you willing to give Apple products online? | 0,715 | 0,236 | Invalid |
| | Are you willing to suggest others to use Apple products? | 6,576 | 0,876 | Valid |

Source: Data Analysis 2019

Based on the results of testing the instrument, it is known that the item questions in the delivery dimension questionnaire on the e-commerce variable only applies to respondents in Indonesia. While the question items in the behavioural dimension questionnaire on the brand advocacy variable are simply using the question "Are you willing to suggest others to use Apple products?". This study aims to determine the amount of BAR affected by e-commerce.

III. LITERATURE REVIEW

A. E-Commerce

E-commerce is one of the results of the creation of information and communication technology that is not rejected by any country because it complements the dot com (.com) commercial strategy [10]. For example, the company Apple Inc. provides a website www.support.apple.com to help users of Apple products worldwide get information. Based on the results of research in Saudi Arabia, the ranking of the benefits of e-commerce management in a business run is to provide faster services to customers, provide easier services to customers, create new markets, increase competitive position, reduce operational costs, improve image, reduce administrative costs, meeting customer demand for services, reducing labour [11]. Providing faster services to customers ranked first, even 80% of respondents interviewed plan to do e-shop in the near future. If an internet marketer fails to design a web site then e-commerce looks normal as a business strategy [12]. So the commercial web site must have to look positive in the eyes of the customer. Attributes that affect the effectiveness of design on commercial web sites are attractive (brand names, brand advertisements, affiliations, recommended, traditional media), inform (friendly to use, graphic display, information content), position (discounted prices, convenience, unique merchandise / tailor made products, product variants) and shipping (post-purchase guarantee / service, mode of payment, security, privacy, download time, customer assistance). At present the company is very easy to connect with customers, as if not limited by distance and time. Not infrequently customers choose a brand that provides comfort to be accessed until the transaction. Customers expect companies to provide instant solutions that make it easy for them to get the products and services they need.

B. Brand Advocacy Ratio

If today the customer wants to buy a smartphone with brand A, it could be cancelled and decided to buy a smartphone with another brand on the basis of advice from other parties. Building a brand is a long and winding process of creating attraction, sparking curiosity, gaining commitment and ultimately building affinity. Brand Advocacy Ratio measures how good companies "convert" brand awareness into brand advocacy with an ideal score of 1 [5].

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BAR = \frac{A2}{A1} \times \frac{A3}{A2} \times \frac{A4}{A3} \times \frac{A5}{A4}
\]

Note:
A1 = Aware
A2 = Appeal
A3 = Ask
A4 = Act
A5 = Advocate

Formula 1. BAR's Formula [5].

If related to the three dimensions of brand advocacy, ask (A3) activity is an action on the cognitive response dimension in the search for product brand information. Activity aware (A1) and appeal (A2) are actions on the affective dimension in accepting a product brand. Act activity (A4) is an action on the dimensions of consumer behaviour in purchasing branded products. Basically, the brand advocacy ratio measurement monitors the number of customers who move from conscious (A1) to act (A4) and finally to advocate (A5). Calculated as the number or percentage of people in the market who spontaneously recommend the brand to others.
TABLE III. THEORY [13,14]

| e-Commerce | Brand Awareness | Facebook Fanpage has a positive effect on brand awareness [13]. |
|------------|----------------|-----------------------------------------------------------------|
|            | Purchasing     | According to Kluge and Fassnacht in [14], online access to luxury goods has a positive impact on the desires of the customer's brand. Online access has a positive impact on the convenience of consumers' perceptions and willingness to buy. |

Table III. e-Commerce Hypothesis Brand Advocacy: One of the stimuli that can be used for cognitive, affective and consumer behavior responses in the digital age is e-commerce site [8].

Researchers assume, the main factors affecting Brand Advocacy Ratio are e-commerce (figure 1).

![Fig. 1. Research framework [8,15].](image)

The type of marketing research that will be used is causal. The objectives of causal research design are: (1) Understanding the independent and dependent variables on marketing phenomena. (2) Determine the nature of the relationship between the cause and effect variables that will be predicted, and (3) Test the hypothesis of the cause and effect variable relationship.

IV. RESULTS AND DISCUSSION

A. Results

The first analysis was conducted to determine the value of the regression coefficient on each dimension of e-commerce to dimensions of brand advocacy.

### TABLE IV. REGRESSION COEFFICIENTS

| Dimension       | X   | Y   | Standard Error | t value | Sig  | Remark |
|-----------------|-----|-----|----------------|---------|------|--------|
|                  |     |     |                |         |      |        |
| constant         | 3.125 | 1.096 | 2.851 | 0.006 |       |        |
| Attractive       |     |     |                |         |      |        |
|      Cognitive  | 0.930 | 0.174 | 5.337 | 0.000 | Accepted |        |
|      Position   | 0.144 | 0.215 | 0.061 | 0.506 | Rejected |        |
|      Delivery   | 0.150 | 0.326 | 0.057 | 0.648 | Rejected |        |
| Innovative      |     |     |                |         |      |        |
|      Cognitive  | 0.744 | 0.151 | 4.921 | 0.000 | Accepted |        |
|      Position   |     |     |                |         |      |        |
|      Delivery   | 1.119 | 0.951 | 2.229 | 0.029 |        |        |
| innovative      |     |     |                |         |      |        |
|      Affective  | 0.173 | 0.187 | 0.925 | 0.358 | Rejected |        |
|      Position   | 0.097 | 0.178 | 5.081 | 0.000 | Accepted |        |
|      Delivery   | -0.330 | 0.220 | -1.499 | 0.139 | Rejected |        |
| Position        |     |     |                |         |      |        |
|      Affective  | 0.895 | 0.334 | 2.678 | 0.009 | Accepted |        |
|      Position   | 0.750 | 0.213 | 3.520 | 0.001 | Accepted |        |
|      Delivery   | 0.603 | 0.399 | 1.510 | 0.136 | Rejected |        |

The second analysis is carried out to determine the level of relationship between e-commerce and brand advocacy.

### TABLE V. MODEL SUMMARY

| Model | R  | R Square  | Adjusted R Square | Std.Error of the Estimate | Change Statistics |
|-------|----|-----------|-------------------|--------------------------|-------------------|
|       |    |           |                   |                          | R Square Change  | F Change | df1 | df2 | Sig. F.Change |
| 1     | .742 | .550      | .543              | 9.531                    | .550              | 78.339 | 1   | 299 | .000        |

* Predictors: (Constant, e-Commerce)

*b Dependent Variable: Brand Advocacy

Source: Data Analysis 2019

Based on Table 5, the coefficient of the relationship between e-commerce and brand advocacy is expressed with an R value of 0.742. If coefficient interval of 0.60-0.799 shows the level of relationship between e-commerce and brand advocacy is high. While the R² value of 0.550 is expressed as the coefficient of determination between e-commerce and brand advocacy. That is, e-commerce affect brand advocacy by 55%. While 45% are other independent variables outside the regression model.

The third analysis is conducted to find out whether the three dimensions of e-commerce simultan affect to brand advocacy.
In this study there is a main hypothesis that is tested that e-commerce significantly influences brand advocacy.

![Table VI. ANOVA](image)

| Model       | Sum of Square | df | Mean Square | F     | Sig. |
|-------------|---------------|----|-------------|-------|------|
| Regression  | 7116.659      | 1  | 7116.659    | 78.339| .000*|
| Residual    | 5814.008      | 299| 20.044      |       |      |
| Total       | 12930.667     | 300| 43.102      |       |      |

*Predictor: (Constant), e-commerce

If significance value 0.00 < 0.05 then Hypothesis is accepted. That is, e-commerce significantly influences brand advocacy. The results of this study are assumed to be widely applied outside the focus of research on the effect of e-commerce on Apple’s brand advocacy by providing the same research results in different samples. The results of this study have similarities with the opinions of Liu et al [8], which states that One of the stimuli that can be used for cognitive, affective and consumer behaviour responses in the digital age is e-commerce site.

Based on the results of the analysis, the dimensions of e-commerce that affect brand advocacy are cognitive response, affective and behaviour. The e-commerce that describes Apple is excellence in attractive, innovative, position and delivery of customer.

B. Discussion

Based on the results of the study, an overview of e-commerce owned by Apple Inc. in the form of a web site www.support.apple.com in Asia is done through an attractive dimension (score 80 high categories), informative (score 124 high categories), position (score 23 high categories) and shipping (score of 14 low category). Before customers access the website, most users of Apple products use Google's search engine. Google's search engine is used to access corporate websites with the aim of getting information in the form of help. Users of Apple products find it helpful to have a website www.support.apple.com considering that electronic products are one of the hitech product categories that require detailed information before use. The website is easily accessed by customers around the world, making Apple more recognizable by its customers. For users of Apple products in Asia, they better recognize Shopee as a marketplace that can be used as an alternative to purchasing a new smartphone. Even though Amazon and Lazada are no less interesting as a marketplace that has long been engaged in their field.

Based on the results of the study, a description of Apple’s brand advocacy in Asia was carried out through the dimensions of cognitive response (score 148 categories very high), affective (score 269 categories high) and behaviour (score 97 categories enough). The involvement of product users on cognitive responses can be seen from the high number of product users who prefer to search for information from the internet compared to asking other parties to help solve problems using the product. This is a pretty good strategy for the company because product users share information quickly through the internet media. As an international brand, Apple is deeply embedded in the minds of product users. Most of those who use Apple products feel they have a higher prestige, feel safe when using the device and are comfortable because there are not many distractions and online advertising when accessing the internet. Almost all Apple users do not want to switch to another product, because it is already compatible with Apple products. Of the 30 respondents, 19 were willing to recommend the Apple brand for use.

The purpose of this study is to uncover the influence of brand advocacy behaviour in after sales Apple. Academic literature studies the identification of the advocacy brand, but is not tested the effect is empirical. In addition, previous research did not isolate the effects of e-commerce to brand advocacy. While potential strengths are related to brand advocacy by e-commerce it has been reported, anecdotal accounts about the negative results of brand advocacy making current research appropriate and necessary. The implications of the work are discussed next.

V. CONCLUSION

Here are the results of the Brand Advocacy Ratio calculation:

![Fig. 2. Test BAR result. Data Analysis 2019](image)

From a population of 300 Apple users in Indonesia, all of them remember the Apple brand spontaneously. Of the 300 people, only 270 mentioned that the Apple brand was very attractive. With the same number of 270 people, they routinely search for information about the Apple brand. As many as 240 people bought Apple brand products shortly after getting information. Out of 300 respondents, finally only 240 people recommended the Apple brand spontaneously. Since the beginning the Apple brand has been able to convince smartphone users to use it. Seeing the BAR as 0.8 shows that the performance of the Apple brand is good in Asia. Because it has succeeded in converting brand awareness to brand advocacy at the 80% level. Because in the Asian market, electronic devices need to compete with Samsung and LG brands.

Although brand advocacy behaviour is positively related to e-commerce, it is a different concept because it represents the extent to which employees engage in beneficial communication of brand values and offers to customers during service meetings. As such, he has a clear work focus while other concepts also consider friends and family as recipients of the brand communication.
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