Customer-based brand equity for a tourist destination
(A study on Nusantara tourists at Maimun Palace, Medan City)

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Abstract. Maimun Palace is one of the historical heritage buildings for people in Medan City and the object of cultural tourism, which is visited with Nusantara tourists. This study aims to analyze the dimensions of Customer-based Brand Equity, namely Awareness, Image, Quality, and Loyalty towards the tourism destination of Maimun Palace in Medan City, and show the most dominant dimension towards the number of visitors to the tourist site. The method of the data analysis in this study was regression analysis. Regression analysis was used to determine the effect of the independent variable, namely Customer-based Brand Equity on the dependent variable, namely the Tourism Destination. Linear regression analysis in this study used SPSS 21 software application. The partial results of the study found that only Loyalty variable was significant towards the tourism destination, while the Awareness, Image, and Quality variables did not significantly influence the tourism destination. The simultaneous research results found that Awareness, Image, Quality, and Loyalty determined significantly towards the tourism goals.

1. Introduction
Tourism has enormous potential as a source of foreign exchange. To date, the development of tourism is important because it can guide humans in their lives. More importantly, humans have become part of the growing tourism industry. The notion of tourism is still confusing because there is no clear distinction that is generally accepted [1]. Although there is a close relationship between tourism with travel, recreation, and leisure, the relationship is still confusing for lay people in studying tourism as a branch of science. As a multi-ethnic nation, Indonesia has diverse natural and cultural tourism which enrich its tourism sector. Geographical environment, historical background, regional development, and differences in religion or belief, provide special characteristics as a unique culture and tourism in each region in Indonesia. Tourism in Indonesia is a regional mainstay sector that still requires intensive development and conservation due to the potentials and characteristics of Indonesia, which is rich in natural, cultural, and adventure aspect. In this case, tourism destinations have become significant assets for the formation of regional economies and the development of human resources.

A brand is an important element of tourism. Brands are not only names, logos, or symbols, but it also has a greater role than that [2]. Brands are closely related to the human mind, which includes everything
that exists in the minds of consumers towards the brands, such as feelings, experiences, images, perceptions, beliefs, and attitudes. Thus, brands are immaterial, which can change or transform something tangible into valuable [3]. In addition, brands can act as a representation in selling goods or services, as companies, as people, or even as a country. Brandless products will become a commodity, but products with brands will have a higher value in consumers. Brands are identical to a name nationally and internationally. Famous brands depend on the ability of persuasion, cooperation, and management control to make the company effective. Likewise, the powerful brand of the company can distort brands in a tourism destination. For example, if the tourism destination brand is more local, the brand value in the consumers or tourists will be smaller. Conversely, if the brand name of the tourism destination is more famous, it will attract consumer interest to continue visiting the tourism destination.

Brands have become the most valuable company assets. Besides being helpful in market penetration, a strong brand can create loyalty. A brand is also more meaningful than a product. The importance of building a brand causes this problem is no longer a matter of mere marketing managers. The brand has become the responsibility of a stakeholder because wrong branding decisions can destroy the entire value of the company. In contrast, if the company can make the right branding decisions, the company can increase its brand equity so that the brand can boost the company performance and bring the company in an increasingly tight competition [4]. Products only explain the physical attributes and dimensions, so it is no more than commodities that can be exchanged and traded, while brands can explain emotions and relationships specifically with customers [5]. Brands link between the company's marketing activities and consumer perceptions of the functional and emotional elements with certain products and the way the products are presented to them [6]. Brands are important for companies because they can show the value of a product offered to the market. However, if the brand does not have strong brand equity, it will mean nothing. Having strong brand equity is the goal of every company, so the company can have several ways. The first way is to build and develop a brand from scratch. The second way is to buy another company brand that has the potential to generate strong brand equity. Although the first and second ways are often used by many companies, each path has its own risks.

Medan City is one of the historical centers of civilization in North Sumatra Province. Medan City is rich in tourism potential, historic city that is full of cultural tourism, and a center for Malay ethnic. Maimun Palace is a historic building located in the center of Medan. Maimun Palace is one of the destinations of tourists in North Sumatra Province in addition to Lake Toba in Samosir Island. Maimun Palace is one of the mainstays of tourism because it can be a source of regional income. Tourism becomes the region's mainstay sector because the potential and characteristics are related to the Malay culture. One of the efforts of the Medan city government in maintaining or preserving cultural sector tourism is linking history and tourism by opening tourism objects of Maimun Palace. Maimun Palace tourism object is one of the destinations of tourists when visiting Medan. It has a strategic location in the center of Medan, which is at Jalan Brigjend Katamso Medan. It is strategic because it is the main gate that is often passed to reach Medan City. [7] Maimun Palace tourism object is still used for education and the use of cultural values for commercial interests that can have an impact on improving the people's economy.

2. Methods

2.1. Population
There is a fundamental issue in the definition of population. Quantitative research, the population is defined as a generalized area consisting of objects or subjects that have certain qualities and characteristics applied by researchers to be studied, and conclusions are drawn [8]. The population in this study were consumers of the Maimun Palace with an unknown population and could be categorized as infinite.
2.2. Samples
A sample is part of the number and characteristics possessed by a population [9]. The sample is part of the selected population, which follows certain procedures so that they can represent the population [10]. The criteria of respondents to be taken as samples in this study were as follows:

1. Consumers of Tourist Object of Maimun Palace which were in the research object location;
2. Nusantara Travelers;
3. Willing to be respondents.

Sampling in this study was done using calculations [11]. This was due to an unknown or infinite number of populations. The Lemeshow formula is:

\[ n = \frac{z_{1-\alpha}^2 p (1 - p)}{d^2} \]

Which:
- \( n \) = number of samples
- \( z \) = z score on 95% confidence = 1.96
- \( p \) = maximum estimate 0.5
- \( d \) = alpha (0.10) or sampling error = 10%

Through the formula above, the number of samples was:

\[ n = \frac{1.96^2 \cdot 0.5 \cdot (1-0.5)}{0.1^2} = \frac{3.8416 \cdot 0.25}{0.01} = 96.04 \approx 100 \]

Based on the calculation results of Lemeshow, the number of samples was 100 respondents.

2.3. Data Analysis Methods
Data analysis is a process of collecting, classifying, analyzing, and presenting data in the form of information that is easy to read and understand. Data analysis method in this study was regression analysis. Regression analysis is used by researchers to determine the effect of independent variables, namely Customer Based Brand Equity (X) on the dependent variable, namely Tourism Destinations (Y). Linear regression analysis in this study used SPSS 21 software application. In this case, it will be analyzed with:

1. Linear Regression
2. Individual Significance Test (T)
3. Simultaneous Significance Test (F)
4. Determination Coefficient Test

3. Literature Review
Kevin Lane Keller proposed a model for building brand equity in order to create a brand that customers can realize and have strong, likable, and unique brand associations. Customer-based brand equity (CBBE) is defined as the differential effect possessed from brand knowledge to consumer responses in response to marketing. This model combines the latest theoretical progress and managerial practice in understanding and influencing consumer behavior. Kevin Lane Keller (2003:59) [12] :“Customer Based Brand Equity model is that the power of a brand lies in what customers have learned, felt, seen and heard
about the brand as a result of their experiences over time”. Although a number of useful perspectives on brand equity have been put forward, the CBBE model provides a unique perspective on what brand equity is and how it should be built, measured, and managed. Based on this model, a brand is said to have a positive Customer-based brand equity if the customer reacts more positively to a product and the product is marketed when its brand is identified, compared to its unidentified brand. A brand is said to have a negative Customer-based brand equity if consumers react less favorably to marketing activities for that brand compared to an unnamed or fictitious version of the product (Figure 1).

Figure 1. Customer-Based Brand Equity Pyramid

A brief description of the Customer-based brand equity (CBBE) model as outlined by Keller, the first step of the Customer-based brand equity (CBBE) model is to ensure the correct brand identity. Answering the first question that customers ask about the "How Are You?" Brand or who the brand is. The aim is to create brand identification, and relationships with certain classes or product needs (Keller, 2003 in Kerri Kuhn and Frank Alpert, 1-8). The initial step consists of brand building parts or brand significance. The second step answers the customer's question "What Are You?" Or brand news on the customer by building brand meaning in their minds, and connecting brand associations with certain properties (Keller, 2001 Kerri Kuhn and Frank Alpert, 1-8). The two parts of brand building are a step in the performance and image of the brand. The next step is the "What About You" brand response, in which customer responses to brand identification and meaning are proposed (Keller, 2003 in Kerri Kuhn and Frank Alpert, 1-8). This step is achieved by 'judgment' and 'feeling' from the building part, and answering the question "What About You and Me" or what about the brand relationship with the customer. Brand relationship is the final step in the Customer-based brand equity (CBBE) pyramid where brand responses are transformed into intense active loyalty relationships between...
customers and brands (Keller, 2001 in Kerri Kuhn and Frank Alpert, 1-8) [13]. Addressing customers' questions about how brands are with customers, the last part of building a brand is the top of the pyramid that is resonance. The Aaker and Keller models share the same principle, namely that brand equity reflects the added value a product receives as a result of previous marketing investments in the brand concerned.

4. Discussion

This study aims to analyze the dimensions of Customer-based Brand Equity, namely Awareness, Image, Quality, and Loyalty towards the tourism destination of Maimun Palace in Medan City, (1) show the most dominant dimension towards the number of visitors to the tourist site. (2) Analyze the effect of customer based brand equity on tourism destinations. The method of the data analysis in this study was regression analysis. Regression analysis was used to determine the effect of the independent variable, namely Customer-based Brand Equity on the dependent variable, namely the Tourism Destination. The influence of CBBE on tourism destinations received a positive response in terms of customer satisfaction and trust. It proposes and tests a model that is driven by the theory by Keller. Increased CBBE is an inevitable part of management process of a tourist attraction. This study is also supported by previous research which states that (Anish, Insya, And Anil, 2017) [14], stated that the framework of measuring brand equity in tourism marketing only focuses on the brand awareness and brand association dimensions and only highlights how to build tourism brand equity, but fails to explain how to develop strong psychological commitments and maintain tourist involvement in tourism activities. (Im et al., 2012) [15], regarding measurement of brand equity, this study has sought to explore multidimensionality using brand quality and brand attitude, brand image and brand awareness as independent indicators of brand equity. Brand awareness and brand associations are treated as separate constructs, there are limitations that must be recognized to measure the brand equity scale by the relationship between the four dimensions of brand equity in the context of tourism. (Lim and Weaver, 2014) [16] argues that the cognitive and affective image of a tourism destination has a relationship with the product provided by the manufacturer, because the cognitive and affective image influences brand expansion in the tourism destination. Product images related to tourism destinations must be implemented and promoted because there is a relationship between tourist preferences and products related to tourism destination brands.

5. Findings

5.1. Linear Regression Test

| Coefficients | Model | Unstandardized Coefficients | Standardized Coefficients | t | Sig. |
|--------------|-------|-----------------------------|----------------------------|---|------|
| (Constant)   | 8,561 | 1,980 | 4,324 | .000 |
| Awareness    | .263  | .053 | .474 | .636 |
| 1            | - .067 | .126 | -.061 | -.533 | .595 |
| X1           | .125  | X1 |
| X2           | .126  | -.061 | -.533 | .595 |
Based on the processing data results in Table 5.1, linear regression equation models can be formulated:

\[ Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e \]

\[ Y = 8.561 + 0.125 + 0.067 + 0.148 + 0.554 \]

These equations can be described as follows:

1. Constant \((a) = 8.561\), which indicates a constant value; if the \(Customer\ based\ brand\ equity\) variable \((X)\) which consisted of \(awareness\), \(image\), \(quality\), and \(loyalty\) = 0, the tourism destination \((Y)\) in the Maimun Palace in Medan city would remain at 8.561.

2. Coefficient \(X_1\) \((b) = 0.125\). This shows that the \(awareness\) variable \((X_1)\) did not have a positive effect on the tourism destination \((Y)\).

3. Coefficient \(X_2\) \((b) = 0.067\). This shows that the \(image\) variable \((X_2)\) did not positively influence the tourism destination \((Y)\).

4. Coefficient \(X_3\) \((b) = 0.148\). This shows that the \(quality\) variable \((X_3)\) did not positively influence the tourism destination \((Y)\).

5. Coefficient \(X_4\) \((b) = 0.554\). This shows that \(loyalty\) \((X_4)\) positively influenced tourism destination \((Y)\). In other words, if \(loyalty\) is increased by one unit, the tourism destination of Maimun Palace in Medan city will increase by 0.554.

5.2. Individual Significance Test (T-Test)

Testing the effect of Awareness on the Tourism Destination

Based on the calculation results of the coefficient value on Nusantara tourists, the path coefficient value obtained \(t_{\text{count}} = 0.474\) whereas the \(t_{\text{table}}\) value with a significance level of 0.000 was \(\pm 1.96\), so \(t_{\text{count}} (0.074) < t_{\text{table}} (1.96)\). Thus, \(H_0\) was accepted, and \(H_1\) was rejected, which means that \(Awareness\ did\ not\ have\ a\ significant\ and\ positive\ effect\ on\ the\ tourism\ destination\).

Testing the effect of Image on the Tourism Destination

Based on the calculation of the coefficient value on Nusantara tourists, the path coefficient value obtained \(t_{\text{count}} = 0.533\), whereas the \(t_{\text{table}}\) value with a significance level of 0.000 was \(\pm 1.96\) which means that \(t_{\text{count}} (0.533) < t_{\text{table}} (1.96)\). Thus, \(H_0\) was accepted, and \(H_1\) was rejected, which means that the \(image\ did\ not\ have\ a\ positive\ and\ significant\ effect\ on\ the\ tourism\ destination\).

Testing the effect of Quality on the Tourism Destination

From the calculation of the coefficient value on Nusantara tourists, the path coefficient value obtained \(t_{\text{count}} = 1.294\), while the \(t_{\text{table}}\) value with a significance level of 0.000 was \(\pm 1.96\), so \(t_{\text{count}} (1.294) < t_{\text{table}} (1.96)\). Thus, \(H_0\) was accepted, and \(H_1\) was rejected, which means that the \(quality\ did\ not\ have\ a\ positive\ and\ significant\ effect\ on\ the\ tourism\ destination\).

Testing the effect of Loyalty on the Tourism Destination
Based on the calculation of the coefficient value on Nusantara tourists, the path coefficient value obtained $t_{count} = 4.074$, while the $t_{table}$ with a significance level of 0.000 was $\pm 1.96$, $t_{count} (4.074) < t_{table} (1.96)$. Thus, $H_0$ was rejected, and $H_1$ was accepted, which suggest that loyalty did not have a positive and significant effect on the tourism destination.

5.3. Simultaneous Significance Test (F-Test)

Table 2. F Test

| Model  | Sum of Squares | df  | Mean Square | F   | Sig. |
|--------|----------------|-----|-------------|-----|------|
| Regression | 56,996       | 11,243 | 4          | 227,983$^b$ | |
| 1      | Residual      | 435 973 | 86          | 5,069 | |
| Total  | 663 956       | 90    |             |      |      |

As seen in table 5.2, the $F_{count}$ was 11.243, while the $F_{table}$ value at a 95% confidence level ($\alpha = 0.05$) was 2.5. Based on hypothesis test criteria, if $F_{count} > F_{table}$, $H_a$ is accepted, and $H_0$ is rejected. The data processing results showed that the $F_{count}$ value was greater than the $F_{table}$ value (11.243 > 2.5), and a significant level of 0.000 was smaller than $\alpha = 0.05$. This shows that the study results rejected $H_0$ and accepted $H_a$, which means that there was a positive and significant effect consisting of awareness, image, quality, and loyalty dimensions simultaneously had a positive and significant effect on the tourism destination in Maimun Palace in Medan city.

5.4. Determination Coefficient Test

Table 3. Determination Coefficient Test

| Model | R     | RSquare | Adjusted R Square | Std. Error of the Estimate |
|-------|-------|---------|------------------|---------------------------|
| 1     | .586$^A$ | .313    | 2.25155          | .343                      |

Table 5.3 shows that the R-value = 0.586 which means that the relationship between the independent variable and the dependent variable was 58.6%. $R$-Square value = 0.343 means that 34.3% of the factors of the tourism destination can be explained by the independent variable, while the remaining 65.7% was explained by other factors which were not examined in this study.
6. Conclusions

Based on the research results, the problem formulation, and the research objectives to investigate the Customer-based brand equity for a Tourism Destination (a study on Nusantara tourists at Maimun Palace in Medan city) conclude that only Loyalty dimension had a positive and significant effect on the tourism destination of Maimun Palace in Medan city for Nusantara tourists. Other than the loyalty dimension, there was no positive and significant effect found on the tourism destination of Maimun Palace in Medan city. Based on the simultaneous test of Nusantara tourists visiting the Maimun Palace in Medan, the conclusion was that the dimensions of Awareness, Image, Quality, and Loyalty had a positive and significant effect on the tourism destination of the Maimun Palace in Medan city.

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