Case study

The Effect of Marketing Mix toward Brand Equity at Higher Education Institutions: A Case Study in BINUS Online Learning Jakarta

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ABSTRACT
The research aimed to determine the application of e-learning at Higher Education Institutions (HEIs) in response to the analysis of the marketing mix elements, notably product, price, promotion, location, learning processes, people, and physical evidence. At the same time, it was necessary to determine the brand equity elements (brand loyalty, brand image, and perceived quality) and the effect of the marketing mix on brand equity in higher education that implement e-learning, particularly in BINUS Online Learning Jakarta. In order to address the notion, a quantitative approach based on Associative Descriptive Method was adopted. The data collection involved questionnaire instrument to 116 college students of BINUS Online Learning as the target population by undertaking simple random sampling. On that basis, data analysis, using Partial Least Square (PLS), explored SEM-analysis techniques. Evidence derived from the study showed that elements of people, process, and product typified powerful elements of the marketing mix variable. The elements of brand loyalty and perceived quality configured the variable of brand equity. Accordingly, the study highlighted a strong, positive and significant effect of the marketing mix on brand equity.

Keywords: Brand Equity (Brand Image, Brand Loyalty, Perceived Quality), Marketing Mix (7Ps)

INTRODUCTION
Over recent years, a rapid development of science and technology has consolidated the strand of higher education publicly in globalization era. In this respect, the progress of its development requires highly
qualified manpower so that the requirement for higher education concurrently continues to escalate.

The education development in Indonesia, as an archipelago country, inevitably entails developed education system denoting indicative spectra such as more open, flexible, and accessible by anyone who needs regardless of the age, gender, location, socio-economic background, and experience of previous education. As this backdrop, the education system proposed Distance Learning System (DLS) for the equitable distribution of education throughout the archipelago in Indonesia. Following this, distance learning emerged and Open University, as the pioneer, dominated a substantial precedent. As the time progressed, every region partakes to administer it based on applicable regulations. In this point of entry, Bina Nusantara University (BINUS University), as a private university, holds a formal distance education namely Online Distance Learning (ODL) under BINUS Online Learning Division. In addition, Binus University receives the first distance education permit from the Ministry of Higher Education Indonesia in this field. Furthermore, the institution operates and inaugurates Palembang as the first city where the program of BINUS Online Learning is implemented.

In regard to the research, the present study refers to salient previous studies. At a first glance, Yasanallah and Bidram (2012) recognized the status of the marketing mix (7Ps) and offered suggestions to improve the condition of the cooperative in Province of Ilam, Iran. In their study, the hypotheses were attributed to the price, location, promotion, product, management and physical operations which indicated a significant influence. On the other hand, the element of personnel was not significant.

Rajh (2005) study confirmed that the most powerful brand image was influenced by its employees, notably on service companies with the lowest influence of advertising intensity. It convinced that organizations should focus on value creation activities to the customers. In this respect, marketing activities typified managerial efforts and associated with the creation of brand equity that aimed to build a strong brand with a different.

LITERATURE REVIEW

The Marketing Mix in Higher Education

The marketing mix is a set of controllable marketing tools that an institution uses to produce the response it wants from its various target markets. Tangible products have traditionally used a 4Ps model, the services sector on the other hand uses a 7P approach in order to satisfy the needs of the service provider’s customers: product, price, place, promotion, people, physical facilities and processes (Ivy, 2008).

Product. Product is what is being sold. It is in excess of a basic arrangement of unmistakable highlights, it is a perplexing heap of advantages that fulfill client needs. In the case a university students registering for
a degree are the raw materials of education and that the graduates are the products, with employers be the customers (Ivy, 2008).

**Price.** The price component of the services marketing mix is commanded by what is charged for the degree or educational cost expenses that are required to enlist at the college. The estimating component not just influences the incomes that a college gets from its enrolment, yet in addition influences student impression of the quality (Ivy, 2008).

**Place.** Place is the conveyance strategy that the university receives to give the educational cost to its market in a way that meets, if not surpasses, understudy desires. The advancement of elective methods of educational cost has developed fundamentally; never again are understudies limited to the classroom and their speaker to get the information they have to meet the necessities of the course. Distance learning opportunities have also developed through the post, email, the web, video and teleconferencing, block release options and more recently pod-casts (Ivy, 2008).

**Promotion.** Promotion encompasses all the tools that universities can use to provide the market with information on its offerings: advertising, publicity, public relations and sales promotional efforts (Ivy, 2008).

**People.** The people element of the marketing mix includes all the staff of the university that interact with prospective students and indeed once they are enrolled as students of the university. These can be both academic, administrative and support staff (Ivy, 2008).

**Physical Evidence.** Physical evidence is the tangible component of the service offering. A variety of tangible aspects are evaluated by a university’s target markets, ranging from the teaching materials to the appearance of the buildings and lecture facilities at the university (Ivy, 2008).

**Processes.** Processes are all the administrative and bureaucratic functions of the university: from the handling of enquiries to registration, from course evaluation to examinations, from result dissemination to graduation, to name but a few (Ivy, 2008).

**Marketing Mix on Distance Learning**

The marketing mix on Distance Learning refers to Open University of Tanzania (Kidulani, 2014).

**Product.** A product is whatever can be offered to the particular market to fulfill their necessities. In higher learning education educational services were the main products and services provided to the customers in which education services are supported with three main activities of universities as services offered: teaching, research and sector services (Kidulani, 2014).

**Place or Distribution.** Place or distribution refers to an organization, or set of organizations, that is involved in the process
of making a product or service available for use or consumption by a consumer or business user. Place strategy is applied to identify where to bring and provide services at which specific area strategically. The organization must distribute the product to the user at the right place at the right time (Kidulani, 2014).

**Price.** Price in higher learning institution can be as the amount of that consumer (students, parents or employees) must pay to be educated. Arguably that the cost of online programs is not lower than traditional programs if the same quality of the traditional programs is met and these additional costs should be reflected in pricing (Kidulani, 2014).

**Promotion.** The internet, as a medium of information and entertainment, is naturally suitable for promoting products. The most interesting thing about online promotion is that there are many collaboration systems that can be used or used to maximize promotions in achieving the targets, for example Facebook that already has FB Ads, Google Adwords in Google and other search results (Kidulani, 2014).

**Brand.** Kotler (2012) in Rachmawati et al. (2016) defined a brand as a name, sign, symbol or design or a combination thereof used by some marketers of products and services to identify and differentiate their products/services from those owned by competitors.

**Brand Equity.** Brand equity has been characterized as: a lot of benefits, for example, name mindfulness, steadfast clients, saw quality, and affiliations that are connected to the brand and increase the value of the item or administration being advertised. The empirical analysis indicates that brand loyalty, perceived quality and image are more significant in determining brand equity in comparison with brand awareness (Mourad et al., 2010).

**Distance Learning.** Surjono et al. (2008) specified that e-learning became the part of distance learning and online learning was the subset of e-learning. E-learning implied a learning which used electronic gadgets, particularly PCs.

**MATERIALS AND METHODS**

The research was designed to be explorative-based to acquire an overview and understanding of the research problem. The results were used as input for descriptive study. The unit of analysis in this research consisted of BINUS Online Learning students. Time horizons in this study were cross-sectional.

The research adapted survey method to collect primary data directly from the respondents. The survey method in this study involved two types of techniques, namely interviews and questionnaires. The study utilized two sorts of data, namely primary and secondary data. Primary data contained a set of information obtained directly from respondents. The method of primary data
collection applied the questionnaire. The research questionnaire was a collection of statements for respondents with the purpose of providing responses in accordance with field facts. Secondary data encompassed a set of related information from previous studies. The secondary data in this study used a literature review of the relevant theoretical basis. The population in the study consisted of 116 BINUS Online Learning respondents. Sampling method used in the research is probability sampling. The technique utilized random selection sampling. This technique was elected because it created samples that were highly representative of the population. In this respect, the data was tested its validity, reliability, and normality. Following the stage, the data employed SEM-PLS analysis technique.

Variable Operationalization. In the marketing setting, marketing mix variables consisted of seven main dimensions with some important indicators such as:

Product. The product deals with variations of majors in the BINUS Online program. The BINUS Online program is well known in Indonesia. The quality of favorable online learning materials, the number of learning sessions per course is well prepared (10 sessions from 13 regular lecture sessions).

Price. The price dimension symbolizes quality at BINUS Online that is comparable to the quality of the learning provided. In addition, the Binus Online program provided special discounts for students, and tuition payments could be made gradually by installments each semester.

Place. This dimension was marked by new student registration methods can be undertaken online, tuition payment methods could be made flexible from various options such as automated teller machine or transfer, and online learning methods.

Promotion. Promotional dimension was reflected in the form of introduction of courses available at BINUS Online. BINUS Online also held a study exhibition in the form of seminars or workshops. In addition, the existing learning at BINUS Online also involved cooperation with companies or industries. Forms of communication with the community relied on some social media like Facebook and Twitter.

Process. The learning process was performed by using discussion forum in every learning session each week. The learning process was undertaken in several forms such as doing personal and group work for 10 sessions. It could also be done through regular video conferencing. In addition, direct face-to-face learning was also conducted at the site at the initial and final meetings.

People. This dimension consists of marketing staffs who provided the explanations required by prospective students. In addition, BINUS Online’s employees also actively
responded and served with enthusiasm such as answering student questions related to actual operations. Lecturers of BINUS Online consisted of the selected person and competent in the field of study.

**Physical Evidence.** This described a reputable Learning Management System such as the use of a friendly Learning Management System interface. In addition, various learning features within the LMS had been well organized and comfortable lecture rooms to support the learning process.

**RESULTS AND DISCUSSIONS**

**Data of Respondents**

Based on Table 1, it connoted that the majority of respondents comprised 62 women respondents. On the other hand, the male respondents counted for 54 respondents. Table 2 concludes that the employment background of the respondents was categorized into 99 employees, 13 employers, and 4 students. In terms of demographic aspect written in Table 3, the age of respondents varied from the range of below 20, 20-25 years, 26-30 years, 31-35 years, and 36-40 years, and above 40 with the total of 8, 77, 18, 6, 2, and 5 people respectively. Table 4 states the residence, respondents reside majority in Province of Jakarta (71), Banten (21), West Java (20), East Java (1), and outside Java Island (4).

**Marketing Mix and Brand Equity Variable**

Based on data analysis applying SmartPLS, the study revealed that all of the loading factors of Variables of 7Ps Marketing Mix (Product, Price, Place, Promotion, Process, People, and Evidence) is larger than 0.5
and all of the P-value is less than 0.01. The score produced concluded that marketing mix influenced the brand equity strongly and significantly. Additionally, Physical, loading factors of brand equity (Brand Image, Perceived Quality, and Brand Loyalty) is larger than 0.5 and the significance level is less than 0.001. In all, brand equity is strongly and significantly influenced by marketing mix.

Table 5 and Table 6 exhibit all of the loading factors of Marketing Mix and Brand Equity Variables. All of the loading factors > 0.5 proved that Brand Equity was strongly and significantly affected by Marketing Mix.

Table 7 shows that the coefficient of determination \((R^2)\) is 0.54 = 54%, which means that the marketing mix affects brand equity by 54% while the remaining 46% is influenced by other variables outside the model.

Table 5
Parameter estimation of marketing mix

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Parameter Estimation</th>
<th>(R^2)</th>
<th>P.Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>0.76</td>
<td>0.58</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Price</td>
<td>0.71</td>
<td>0.50</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Place</td>
<td>0.61</td>
<td>0.37</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Promotion</td>
<td>0.74</td>
<td>0.55</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Process</td>
<td>0.75</td>
<td>0.56</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>People</td>
<td>0.76</td>
<td>0.57</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Physical evidence</td>
<td>0.69</td>
<td>0.48</td>
<td>&lt; 0.001</td>
</tr>
</tbody>
</table>

Table 6
Parameter estimation of brand equity

<table>
<thead>
<tr>
<th>Brand Equity Dimension</th>
<th>Parameter Estimation</th>
<th>(R^2)</th>
<th>P.Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Image</td>
<td>0.47</td>
<td>0.22</td>
<td>&lt; 0.01</td>
</tr>
<tr>
<td>Brand Loyalty</td>
<td>0.88</td>
<td>0.78</td>
<td>&lt; 0.01</td>
</tr>
<tr>
<td>Perceived Quality</td>
<td>0.84</td>
<td>0.70</td>
<td>&lt; 0.01</td>
</tr>
</tbody>
</table>

Table 7
Estimated structural parameter of marketing mix to brand equity

<table>
<thead>
<tr>
<th>Variable</th>
<th>Brand Equity</th>
<th>(R^2)</th>
<th>P.Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Mix</td>
<td>0.71</td>
<td>0.54</td>
<td>&lt; 0.01</td>
</tr>
</tbody>
</table>

**CONCLUSIONS**

The marketing mix consisted of substantial elements particularly product, price, promotion, place, learning processes, human resources, and physical evidence. The study delineated convincingly that the loading factors of 7Ps in Marketing Mix (Product, Price, Place, Promotion, Process, People, and Physical Evidence) > 0.5 and all of the P-value < 0.01. In this respect,
it evinced that loading factors of Brand Equity (Brand Image, Perceived Quality, and Brand Loyalty) > 0.5 and significance < 0.001. It captivated interests in the study that Marketing Mix influenced the Brand Equity strongly and significantly eventually.

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