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Brand auditing and the development of the brand salience management model of the Statistics Study Program

Deddy A. Suhardi¹, Adhi Susilo², Sony Heru Priyanto^{3*}  and Antonius Surya Abdi⁴

*Correspondence:
sonecid@yahoo.com

³ Entrepreneurship
Program, Universitas Agung
Podomoro, Central Park Mall
Lt 3, Unit 112, Podomoro
City, Jl. Let Jend S. Parman
Kav 28, Jakarta, Barat 11470,
Indonesia
Full list of author information
is available at the end of the
article

Abstract

This research contains a novelty in producing a study program brand audit method and developing a brand salience development model in higher education, which has not been widely discussed. A quantitative-explanative research method was used in this study by collecting online survey data on the potential market for the Statistics Study Program with a total of around 1000 people from all over Indonesia, which is related to the understanding, association, perception, experience, brand equity, and consumer brand salience towards the Statistics Study Program. The data were analyzed using structural equation modeling (SEM). The results obtained are the formulation of a brand audit model and a salience brand management model for the Universitas Terbuka Statistics Study Program.

Keywords: Statistics Study Program, Universitas Terbuka, Branding, Brand salience, SEM

Introduction

It is undeniable that the brand of a university will affect students enrolling in the university. The university's brand image is important in developing a strong university brand and brand equity. Higher education institutions that have a specific and distinct image will have a competitive advantage over other institutions and remain competitive in the ever-evolving global market. Having a strong and distinct brand not only helps the university but also builds a unique image in the minds of key stakeholders. This increases students' willingness to apply to the institution as opposed to others (Curtis et al., 2009; Marrs et al., 2011).

Company brand management in higher education is very important, especially the brand management process, corporate identity, and image for various stakeholders. A clear definition of the university brand combined with strong leadership is one of the significant aspects to successfully increase student intake. The alignment between corporate branding, which consists of corporate identity, image, corporate reputation, and organizational culture contributes to awareness among all stakeholders of what the university is and what it stands for. Internal acceptance of the revised brand at all levels

plays an important role in promoting the company's brand to external stakeholders and making the institution have long-term sustainability (Curtis et al., 2009).

To build a university's brand positioning, it is necessary to carry out four procedural stages. First, a brand audit should be implemented; second, an evaluation of position options must be conducted; third, a formal organizational positioning statement should be devised; and fourth, a marketing communication campaign needs to be developed. When management follows these procedures, the process of managing and implementing the company's brand becomes easier (Curtis et al., 2009).

Universitas Terbuka Indonesia is a large university with the number of registered students as of 12 April 2021 totaling 310,974, spread across all corners of Indonesia, both from cities and villages, which implement an open and distance learning system. The term 'distance' means that learning is not carried out face-to-face, but uses media, both printed media (modules) and non-printed media (audio/video, computer/Internet, radio broadcasts, and television). The term 'open' means that there are no restrictions on age, year of diploma, study period, registration time, and frequency of taking exams. The only limitation is that every UT student must have completed senior secondary education (high school or the equivalent).

What about the management's effort to attract students to enter the Statistics Study Program? The number of Statistics Study Program students is 635 people or about 0.20%, in contrast to other study programs which number in the tens of thousands. Some of the reasons that have been found are the lack of an in-depth understanding of the brand of the Statistics Study Program, the unknown source of its brand equity, and the lack of efforts to improve and utilize the brand equity. The results of brand audits and developing them can help brand managers in building strong study and university brands. As evidenced by the university's website, many departments are segmented and there is no single clear theme. A clear theme is needed regarding the comprehensive involvement of all faculty members, staff, students, alumni, and stakeholders who will be personally involved in the branding process. It is pertinent to conduct campaign training to ensure that the message from the university is uniform and meaningful. It is imperative for the university to have a strong and effective brand in order for students to admissions and stay competitive in the global market. The brand also integrates the values of the external stakeholders but still applies them to the values of the internal brand (Marrs et al., 2011).

Statistics is difficult to understand for many people. It is not surprising that there are very few new student applicants entering this study program. Even more surprising, well-known universities only provide limited seats (under 50 people) for each batch, even though almost all organizations or companies are related to statistics. How is this possible?

If you pay attention to the comparisons made by higher education institutions, even those which are well-known, it seems that they have not been able to improve the brand image in the minds of prospective students and people in general. The presentation and packaging of the Statistics Study Program is still limited to technical knowledge about data, when in fact the meaning of statistics is very important in management, public policy, and other professional fields. Maybe that also causes prospective students to be reluctant to enter the Statistics Study Program.

The reluctance of prospective students to enter the Statistics Study Program cannot be separated from their perceptions and experiences related to statistics. There are several theories that can explain this, but unfortunately no one has discussed this behavior in higher education. Many previous studies have discussed non-higher education goods and services, for example the problem of prospective students' perceptions of the Statistics Study Program. However, it is actually related to their memories, values, and expectations. These things are related to brand management, especially brand salience.

Brand salience is the extent to which a brand appears in a set (number) of customer considerations when a consumer is in the process of buying a product. Brand salience is a psychological phenomenon that helps during a customer's purchasing decision, based on perceptions made in the brain over a certain period of time (<https://www.mbaskool.com/business-concepts/marketing-and-strategy-terms/6815-brand-salience.html>).

Even though it is important, brand salience still needs to be explored, for example related to the connection between these variables and how these variables relate to other variables (Ngo et al., 2021). It is necessary to strengthen the relationship between brand salience and brand awareness (Yadavalli, 2021) and examine further the impact of brand salience on buying intention (Koo et al., 2021).

Related with the construct and its measurements, empirically, there is no research that specifically measures the brand salience of a study program, including in tertiary institutions. In theory, brand salience still has many differences in the antecedent model and its consequences. This research strives to construct a model of brand salience that is preceded by formulating brand salience measurement in universities.

Brand salience is really important for the company including university. Unfortunately, the brand salience research in Universitas Terbuka has not been done yet. This research strives to explain the societal perceptions (branding) about the Universitas Terbuka Statistics Study Program, elaborate on the Statistics Study Program at Universitas Terbuka or another higher education institution, enlighten on the brand salience of the Statistics Study Program at Universitas Terbuka, and formulate the branding needs of the Universitas Terbuka Statistics Study Program.

Literature review

As the most valuable invisible asset, the brand represents the essence of the company. Brands function as strong differentiators and as decision-making tools for customers (Aaker, 1996a, 1996b; Keller, 1993).

In today's global economy, branding efforts are not limited to traditional "consumers"; companies in various service industries have tried to take advantage of branding strategies to build stronger brands. In this regard, colleges and universities have recognized the value of branding and the need to build strong and sustainable brands. Branding has become a strategic issue for universities and colleges to be able to develop different brands to communicate their strengths (Jevons, 2006).

Jevons (2006) stated that in today's complex and highly competitive market, universities and colleges have turned to branding as a solution in facing global challenges. Mazzarol (1998) focuses on marketing and branding to identify factors that are important when marketing and promoting a university and/or in determining its position.

Universities can serve the needs of different segments and with different offerings, they must understand how these differences are perceived by different segments. However, to develop a strong university brand, the brand manager and/or administrator at the university must undertake an in-depth study of the university's branding efforts and strategies.

Brand audit

A brand audit is "a comprehensive examination of a brand to find brand equity" (Keller, 1993). The purpose of a brand audit is to study what consumers want from a product as well as what they currently know about the brand in order to profile potential customers and act strategically and informed to determine the position of the product or service to be provided. Brand audits are consumer focused and are used as an assessment tool "to determine the health of a brand, reveal the source of its brand equity, and suggest ways to increase its equity" (Keller, 1993). Audits often define the strategic direction for a particular brand and are an important aspect of creating new strategic changes. Moreover, it is important to ask the following question, as posed by Keller (1993): "Are current sources of brand equity satisfactory? Do certain brand associations need to be strengthened? Is the brand less unique? What opportunities exist and what potential opportunities exist for brand equity?"

Based on the concept of the Customer-Based Brand Equity (CBBE) Pyramid, there are 4 steps to build brand equity (Keller, 1993). The goal of each step is to continue to grow and achieve the goals set out in the previous step. According to Keller (1993), the steps are: "1. to identify brands with customers and brand associations in the minds of customers with the product class or customer needs, 2. to firmly establish the totality of brand meaning in the minds of customers by strategically linking things that are visible and things that are not in a brand, 3. to get the right customer response to the brand identification and brand meaning, and 4. to change the response to a brand to create an intense loyal relationship between the customer and the brand.

The CBBE pyramid consists of 6 brand building blocks. CBBE's first building block is a trademark of the brand. Brand characteristics talk about how often and easily the brand appears in various situations or circumstances (Keller, 1993). This can be measured from its breadth and depth. The area is measured from the various purchases and uses of the brand in certain situations. It is about how the brand is remembered from the consumer's knowledge of the brand.

In it, it is measured by how likely it is and how easy it is to remember the brand. CBBE's second building block is performance. According to Keller (1993), there are five important attributes and benefits that often underlie brand performance as follows: (1) the main ingredients and additional features; (2) product reliability, durability, and ease of service; (3) effectiveness, efficiency, and service empathy; (4) style and design; and (5) price.

CBBE's third building block is the brand image. According to Keller (1993), brand image depends on the extrinsic nature of the product or service, including the way in which the brand seeks to meet the psychological or social needs of customers. Keller (1993) stated that there are many things that are invisible and can be connected to a brand, but there are four main aspects as follows: (1) user profile; (2) purchase and use

situations; (3) personality and values; as well as (4) history, heritage, and experience. CBBE's fourth building block is appraisal. A brand assessment is a customer's personal opinion about a brand along with an evaluation of the brand. According to Keller (1993), there are many types of assessments with regard to brands but the quality, credibility, consideration, and excellence are the most important. CBBE's fifth building block is the brand feeling. The feeling of a brand is a customer's emotional response and reaction to the brand (Keller, 1993). It talks about how the customer feels when the customer uses the brand. The sixth building block of CBBE is resonance. Brand resonance describes the nature and extent to which customers feel that they are "out of sync" with the brand. According to Keller (1993), brand resonance can be measured in terms of behavioral loyalty or repeat purchases and how much they buy. Apart from behavioral loyalty, there must also be a strong personal attachment to the brand.

Brand salience

Brand salience relates to the awareness aspects of the customer towards a brand. How easily and frequently does a brand rise up in a variety of situations or circumstances? How high up is the brand in the main customer's mind and easy to remember and recognize? How strong is brand awareness? Salience forms the building blocks of brand equity development and serves three main functions. First, salience influences the formation and strength of brand associations that create brand image and brand meaning. Second, the establishment of a high level of brand salience in the category of identification and fulfillment of needs is very important when there are opportunities for purchase and consumption. Brand salience is also important when consumption requires maximizing potential usage. Third, when customers are at a low point in a product category, they may only base their choices on brand salience.

Lans (2008) stated that brand salience represents a brand visualization of its competitors, and it is an important point of purchase by consumers based on the perception of product features and has an important influence in the search for the performance of a product brand. The identity of a company is communicated to the outside world through a brand strategy (Karjalainen, 2008). A special brand name is usually the main function of the manifestation of the corporate identity. The principle of the main mission of corporate identity is full recognition. Furthermore, Zimmermann (2008) stated that brand identity must be able to trigger a willingness to buy from consumers. So, it makes perfect sense for companies to invest in brand identity if consumers are also interested in buying that brand.

Brand salience is the level at which a brand is thought of and considered when a customer is in a buying situation (Daye, 2010). A strong brand will have a high salience brand. On the other hand, a weak brand will only have a small salience brand or even none at all. This explains to some extent why large brands have a greater brand salience than small brands. If no one is thinking about a brand at the time the purchase is made, the brand will be neglected and go unnoticed.

According to Romaniuk (2004), brand salience is a function of the quantity and quality of the consumer's memory structure. (1) Memory quantity is in a buying situation, where consumers are often directed by mental cues that trigger their thinking about a brand. For example, a consumer will think about buying a product brand that fits one's

budget, but also suits one's consumption needs. The larger the memory structure of the brand is related to each other, the greater the salience of the brand will be, and the brand will be thought about the most as long as consumers are in a buying situation. So, the quantity of the consumer's memory structure will make a difference. (2) Memory quality is the brand salience quality, which is a function of the strength of the association and the relevant structure. By building the quantity and quality of the memory structure, it will maximize the number of consumers who think about a brand and the amount of time consumers think about a brand in various buying situations.

Achieving a good brand identity means creating brand salience with customers. Brand salience measures the awareness of a brand. Brand awareness plays a role in creating a sale, especially for products that are not well understood (Pitta, 1995). Since consumers have little time and effort in purchasing decisions for poorly understood products, familiarity with a brand name is sufficient to determine a purchase. The most important aspect of brand awareness is the formation of information in memory the first time around. Without a brand point in memory, it is impossible to build an image about the brand. According to Aaker (1996a, 1996b), brand awareness can influence customers' perceptions and attitudes, and brand awareness reflects the salience of a brand in the minds of consumers. There are several stages in brand awareness: (1) introduction (Have you ever heard of a Rinnai gas stove?); (2) restart (What brand of gas stove can you name?); (3) top of mind (Brand name first mentioned); (4) brand dominance (Only the only brand named); (5) brand knowledge (I know a lot about this brand); and (6) brand opinion (I have an opinion about this brand).

According to Tuominen (2009), brand awareness that reflects the salience of a brand is related to the strength of the brand node in memory which is reflected in the ability of consumers to identify a brand in different conditions. Brand awareness consists of: (1) brand recognition that reflects the consumer's ability to confirm a brand, and (2) brand repetition that reflects the consumer's capacity to mention a brand again when there is a product category, who can mention the product category or type of product. The depth of brand awareness is indicated by being recognized, remembered, and mentioned, while the breadth of brand awareness relates to a variety of purchasing and consumption situations in which a brand exists in the minds of consumers.

Brand salience related to the aspect of brand awareness is one of the fundamentals of the dimension of brand equity (Moisescu, 2000). He said that this is often considered as the main factor influencing purchasing decisions by consumers, because it represents the main factor including a brand in a series of considerations. In reflecting on the salience of a brand in the minds of consumers, awareness is the first and main dimension of the overall brand knowledge system in the minds of consumers, reflecting the ability of consumers to identify a brand in various conditions, just as brand names come directly to consumers' minds and make it easier to make a buying decision.

Brand salience is defined as the tendency for a brand to be thought of by the buyer (i.e., "stand out" from memory) in a buying situation (Romaniuk & Sharp, 2004), with the aim of being remembered for reasons that are intended not just to achieve general awareness (Aaker, 1996a, 1996b). This assumes that product category hints are the only mechanism for buyers to think about brands in media buying and consumption situations. However, research into how information in memory is accessed suggests that this

implicit assumption is invalid. Brand recall from memory does not only depend on one guide, namely the product category, but also on a brand's attention. Therefore, it seems appropriate to reexamine brand salience in terms of marketing and the implications for measurement (Guido, 1998; Jraisat et al., 2015; Pike et al., 2010).

The measurement of brand salience consists of a good name and reputation, quick to mind, immediate to mind, very famous, and advertising or promoting (Jraisat et al., 2015; Pike et al., 2010) and how often the brand of a product appears in the minds of customers. From the results of data testing, only three are important, namely quick to mind, very famous, and advertising or promoting (Pike et al., 2010). However, other researchers suggest using measures of brand recognition and reduction, brand dominance, and brand opinion (Aaker, 1996a, 1996b). In the building blocks of a brand, brand salience occurs when all the other building blocks of the brand are established and the customer of the product expresses a high level of brand loyalty. This criterion can be seen when customers actively interact with brands and share their experiences with others when true brand salience is present. Measuring brand salience can use an instrument like: What product brand or service category can you think of? Have you heard of this brand? Which brand might you use in the following situations? How often do you think about this brand? (Keller, 2001).

Related to the measurement of brand salience, there are several ways to measure it. One of the ways is the one proposed by Romaniuk and Sharp (2004), which contains various representative attributes/cues used to think about the brand, position itself against competitors' brands, and focus on whether the brand has value or not.

Cohen et al. (2009) revealed that the approach does not measure the extent to which each attribute or feature represents a region, brand, or product. Therefore, the relative importance of various feature cues needs to be measured by another approach. They use the best worst scaling (BWS) method where the respondents are asked to select the best (most representative) versus the worst (least representative) feature of an area to determine the most valued and most prominent cues. BWS was developed by Louviere et al. (Finn & Louviere, 1992). BWS models cognitive processes, in which the respondents compare three or more items and then choose one that represents most of the characteristics and one that represents the least of the characteristics. In doing so, the objective is to measure the relative utility of the problem, item, or attribute that belongs to that set of problems, items, or attributes. The statistical information gathered from each selection set is much richer because the BWS measures all problems on the same scale with one problem to start (Finn & Louviere, 1992). This model assumes that the respondents behave as if they are examining every possible pair in each subset and then they select the most different pairs as the best, worst, and maximum difference pairs (Cohen & Neira, 2003). Therefore, the BWS model requires the respondents to make trade-offs among the benefits, which makes BWS a more discriminatory way of measuring attribute importance than either the rating scale or the pairwise comparison method (Cohen, 2003).

There is also an assessment of brand salience using the analytical hierarchy process in measuring a brand (Esan et al., 2018). There are also those who use functional magnetic resonance imaging (fMRI) in combination with a semantic differential in measuring a brand (Schaefer & Rotte, 2010). That means there are still different views on this matter,

so that it is a research gap in measuring and assessing the brand salience of the Universitas Terbuka Statistics Study Program.

The results of research conducted by Lu et al. (2014) show that there is a link between attitude and brand awareness. Sponsor recommendation blog posts, a form of online consumer review, are blog articles written by bloggers who benefit from sponsoring marketers to review and promote products on personal blogs. Because national regulations require marketing sponsors to be disclosed in blog posts, sponsored recommendation posts can no longer conceal their marketing intent. Thus, consumer attitudes towards sponsored recommendation postings are an important issue in assessing ad effectiveness. This study used 2 sponsor type, 2 product type, and 2 brand awareness experimental designs and a total of 613 valid samples to test consumer attitudes towards sponsored recommendation posts and purchase intentions. The results show that when the product recommended in a blog post is a search item or has high brand awareness, consumers have a very positive attitude towards sponsored recommendation posts, which increases purchase intention. The direct-monetary/indirect-monetary benefits received by the blogger do not have a significant effect on the reader's attitude.

Using this feature in blog posts appears to increase the trustworthiness of online readers and the credibility of sponsored recommendation posts, and can thus become an important online marketing tool for marketers.

Research methodology

Type and design of research

If viewed from its use (purpose of study), this research was included as quantitative descriptive research with the aim of obtaining an overview of the effects of antecedents of marketing activities, namely product activity, promotion, placement, and pricing (4P) on consumer perceptions and experiences, brand equity, and brand salience, and the moderating variables that influence them. This research also included developmental research with a causal approach, which is an experimental approach that tries to identify causal relationships (Christensen, 2003).

This study attempted to understand how the causal relationship of marketing activities and their moderating variables influenced the formation of brand salience. This study also aimed to explain the causes and impacts of the relationship (Isikli, 1999). In terms of the type of investigation, this study also aimed to obtain an overview of the positive results of the 4P activities on the brand salience at Universitas Terbuka. Descriptive research is research that aims to describe or explain something. The research design used was a single cross-sectional study, which is a type of research design in the form of collecting data from one respondent in a period of time (Gefen, 2000).

Research design

This study was a development research. The research implementation method used the action research method. Development research is a type of research in which the researcher has a conceptual model obtained from the theories and results of previous research. Then, to obtain the reliability of the model, the conceptual model was developed into an operational model after obtaining validation from several experts. The research used a 4D approach, namely define, design, develop, and disseminate. The

research was preceded by exploring the current conditions of the Statistics Study Program in terms of marketing strategy and management.

Then a salience brand management development model was designed, followed by testing and standardizing the model. After that, dissemination was carried out to the UT Statistics Study Program.

Location The location of this research was conducted via online, which targeted prospective students from various regions in Indonesia.

Data and source of data The data in this study were qualitative data and quantitative data derived from primary data in the form of survey results and secondary data observations from a literature study and documentation. The sources of data were the subjects and respondents from which data could be obtained. To make it easier to identify the data sources, the researchers classified the data sources used in this study into 3 parts: people, namely the competent parties related to the required data; papers, namely literary references and related documents; and places, namely the research location that was online as well as the UT Statistics Study Program.

Data gathering technique Data were collected using survey methods, experiments, and discussions. The qualitative data from these sources were reduced and then made into categories. Then themes were created before interpreting each of the previously compiled themes. The quantitative data were tabulated to suit the research framework.

Participants, informants, and respondents The terms “participants” and “informants” are usually used in collecting qualitative data. The researcher (identification official) and the resource person here have the same position, and the resource person does not just respond to what is asked by the identification official, but the individual can choose the direction and manner in presenting the information one has (Sutopo, 2002: 50). The informants in this identification included the manager of the Statistics Study Program, instructors, and prospective students. The respondents of this research were samples that represented the population of the prospective students.

Research subjects In this research, there were several research subjects (variables) that were explored and described in depth in relation to the application of this brand salience. These subjects included (Table 1):

Data validity criteria According to Lincoln and Guba (in Riyano, 2007), the criteria to ensure the reliability/correctness of the research results include: credibility, dependability, confirmability, and transferability (Fig. 1).

Analysis technique The analysis technique used the goodness of fit model quantitatively by paying attention to the aspects of its application accuracy. A before–after analysis was also used to see the impact of the application of this model both on the university management and performance.

Results and discussion

Descriptive statistical analysis results

The performance of an organization is influenced by many factors. One important factor related to this is buying intention. This aspect has determinants such as the brand of the organization. The brand has something to do with the perceptions, attitudes, and experiences. From the results of the analysis using descriptive statistics, it was found that all the latent variables included in the model such as Attitude, Perception,

Table 1 Variables and operational definitions

Variable	Operational definition	Dimension	Indicator	Source
Consumer attitude	The level of a respondent's ability to identify a brand	Expressive value function Utilitarian function Ego defensive function Knowledge function	Expressive value function Utilitarian function Ego defensive function Knowledge function	Delafrooz et al., (2009); Huang (2005); Solomon et al. (2012)
Consumer perception	The respondent's viewpoint of a product that is seen from the price, quality, and type of service	Price Quality Product/service	Price Quality Product/service	Grunert (2005)
Consumer experience	The respondent's experience related with Universitas Terbuka	Physical environment human Interactions	Lecture model Relationships	Walls (2013)
Brand awareness	The level of the respondent's knowledge, memory, and understanding	Know Familiar Recognition	Know Familiar Recognition	Keller (1993); Malik et al., (2013)
Brand salience	The level of importance of a brand for the respondent	Famous Memorable Recall Top of mind Notice	Famous Memorable Recall Top of mind Notice	Jraisat et al., (2015); Pike et al., (2010); Sutherland and Sylvester (2000)
Buying intention	The intention of the respondent to study at Universitas Terbuka	Positive toward Desire Idea	Positive toward Desire Idea	Lee and Lee (2015)

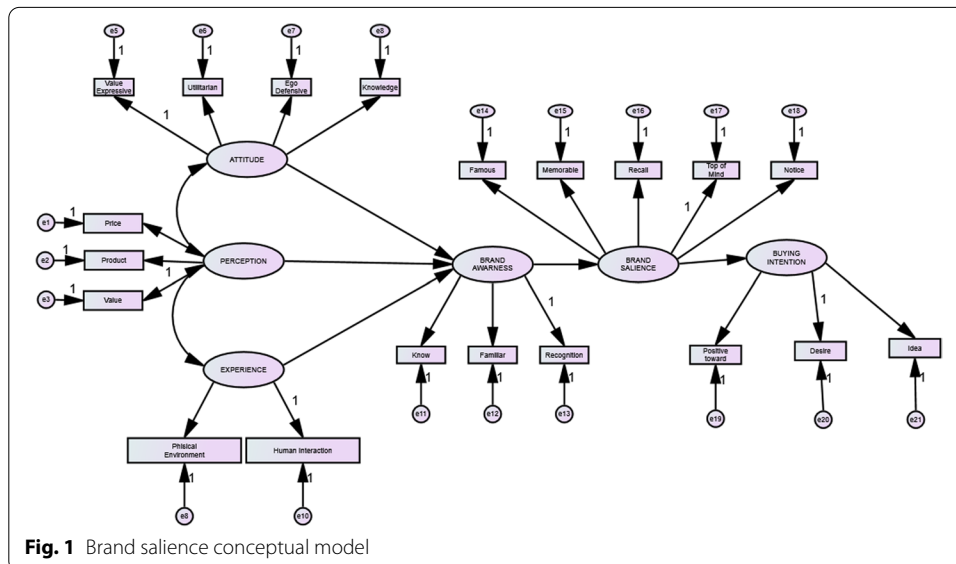


Fig. 1 Brand salience conceptual model

Brand Awareness, Experience, Brand Salience, and Buying Intention were in a moderate category with an average score above 3 and below 4 (Table 2). This means that the public is familiar with the Statistics Study Program, even though it is still not high or

Table 2 Results of the statistical analysis description of the research variables

Construct	Average	Category	Latent variable	Average	Category
Utilitarian	4.11	High	Attitude	3.93	Moderate
Ego defensive	4.00	High			
Value expressive	3.56	Moderate			
Knowledge	4.05	High			
Price	3.39	Moderate	Perception	3.68	Moderate
Quality	4.11	High			
Service	3.53	Moderate			
Know	3.72	Moderate	Brand awareness	3.35	Moderate
Familiar	3.22	Moderate			
Recognition	3.11	Moderate			
Learning model	3.33	Moderate	Experience	3.40	Moderate
Relationship	3.46	Moderate			
Famous	3.67	Moderate	Brand salience	3.38	Moderate
Memorable	3.45	Moderate			
Recall	3.46	Moderate			
Top of mind	3.18	Moderate			
Notice	3.13	Moderate			
Positive toward	3.53	Moderate	Buying intention	3.40	Moderate
Desire	3.25	Moderate			
Idea	3.43	Moderate			

Source: analysis of primary data

still in the moderate category. Current brand recognition is also found in Perception, Attitude, Experience, and Buying Intention in the moderate category.

This condition is also found in almost all latent variable constructs that are in the same category, except for Utilitarian, Ego Defensive, and Knowledge. It is not surprising that all the scores of the latent variables in the model get the moderate category predicate, considering that almost 85 percent of the variable constructs in the model are in the moderate category.

However, there are three construct variables that have high categories such as Utilitarian, Ego Defensive, and Knowledge. This is the performance of the UT Statistics Study Program that can be used to increase the potential of the UT Statistics Study Program. For example, for Knowledge, according to the community, studying in the Statistics Study Program can fulfill the curiosity of its students. This means that the public considers the Statistics Study Program as a learning institution capable to improve community science and technology. This high recognition can be used to increase buying intention by adding certain attributes such as scholarships, networking with high schools, local governments, and other relevant parties so that people will want to study in the UT Statistics Study Program.

Utilitarian is also high. According to the community, studying in the Statistics Study Program can improve self-competence with a score of 4.11 and has a high category. This attitude of the community needs to be maximized with various marketing efforts. If the attitude of the community is like this but the number of students enrolled is still not high, it is necessary to conduct an evaluation to find the root of the problem. According to the community, studying in the Statistics Study Program can improve one's self-image,

with a score of 4.00 in the moderate category. This is something positive for the UT Statistics Study Program, which can be used to increase student intake.

Analysis results by using SEM UT: hypothesis testing

This research examined the public perception model of the Universitas Terbuka (UT) Statistics Study Program. A data analysis was performed using structural equation modeling (SEM) to produce a model that was not fit, in this case an unidentified model. For this reason, a check was made of the variables that caused the problem. From the identification of the problem, it was found that the Experience variable was unidentified or not identified both in relation to the brand awareness variable and to its forming factors. In this connection, it was decided to remove the Experience variable from the model. The modified model diagram can be viewed in Fig. 2.

After the re-analysis process was carried out, the results were fit and identified. The results of the analysis can be seen in the following table.

Perception and brand awareness

Theoretically and from the results of previous research, it indicates that there is a close relationship between Perception and Brand Awareness. In this research, it can be proven that Perception is closely related and affects Brand Awareness in a positive and significant manner at the 1% error level with a determinant coefficient value of 1.14 and a standard error of 0.21. This means that if public perception increases by 1 percent from the previous one, Brand Awareness will increase by 1.14 percent and vice versa; if public perception decreases by 1 percent from the previous one, Brand Awareness will decrease by 1.14 percent.

If we look at the descriptive statistical analysis, the average value of this perception variable is 3.68 with the moderate category, with the average value of the Brand Awareness variable being 3.35 in the moderate category too (Table 2). The highest perception is obtained from the Quality construct variable, while the lowest is the Price variable.

With the achievement of this value, the UT Statistics Study Program needs to increase its public perception, so that its brand awareness can increase. This effort can be done by increasing knowledge related to the price, quality, and services in the UT Statistics Study

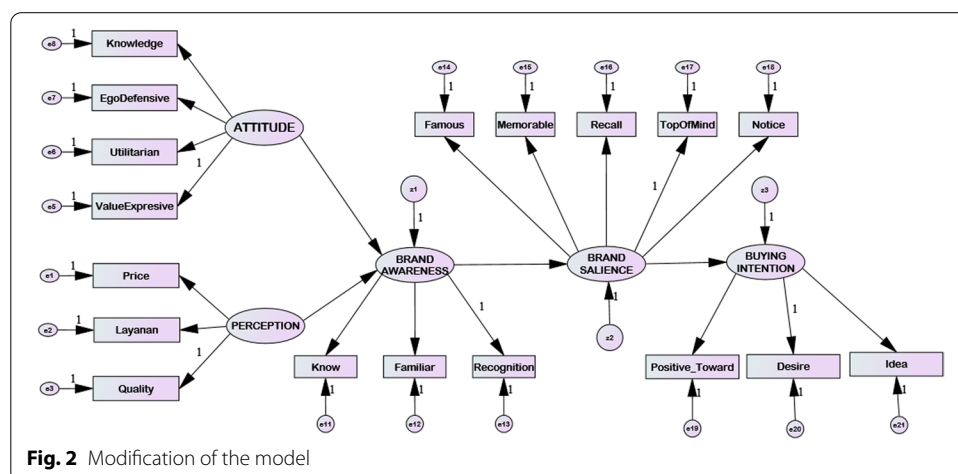


Fig. 2 Modification of the model

Program. Roadshows to high schools/ vocational high schools, promotions through social media and mass media, as well as organizing sports, arts and academic events at high schools/ vocational high schools can be conducted, so that the brand perception and awareness increases towards the UT Statistics Study Program.

When carrying out the introduction or marketing of a study program, this is related to emotional marketing. Emotional marketing can be defined as a unique shift in marketing management that focuses on creating emotional relationships between companies and consumers as the main driving factor for consumer purchasing decisions and exchanges or consumption. This emotional relationship has something to do with the consumer's perception (Khuong & Tram, 2015).

Perception is a procedure for someone selecting, formatting, and interpreting stimuli. These stimuli are separated and are ensured to become one's view of the world. Two people will never experience the same thing even if the same item is displayed in the same environment. Every day, we are shown millions of different kinds of stimuli, smells, sounds, tastes, sights, and textures. But only a few of these stimuli are absorbed and processed by our brains (Khuong & Tram, 2015). Consumer perception depends on how consumers think about a brand and how they imagine the brand, so consumer perception is an important attribute for brand comparison. It has always been at the core of a business. This is important because it can affect consumer loyalty and awareness of a brand which in turn has an impact on changing consumer purchasing decisions for the brand. In terms of sales, finance, advertising, etc., perception, awareness, and consumer loyalty are very important about any brand, including the UT Statistics Study Program (Sultan et al., 2019).

Attitude and brand awareness

From the analysis, it can be found that statistically Brand Awareness and Attitude has a regression coefficient value of 0.355; a standard error of 0.148; and a critical ratio of 2.391 with a probability value of 0.017 or a 95% level of confidence. This means that Brand Awareness is significantly and positively influenced by Attitude. When community members have a positive attitude towards UT and the Statistics Study Program, the brand awareness of UT and Statistics Study Program will increase.

This increase in Brand Awareness is constructed by an introduction to Universitas Terbuka and the Statistics Study Program, familiarity, and knowledge of the existence of UT and the Statistics Study Program. They often hear, see, and relate to UT and the Statistics Study Program either directly or indirectly, through social media or other media, which will increase the UT brand awareness and the Statistics Study Program. When the community is positive and receptive towards an institution, including UT and the Statistics Study Program, the institution's brand awareness will increase. This happens if the institution is already running so that the community is familiar with it. This recognition will form repeated brand awareness, which could be better, or vice versa, depending on what they see, hear, and feel.

For new companies, this model can be started by developing brand awareness first, which will have an impact on the user's brand attitude (Lu et al., 2014). Their results show that when the product recommended in a blog post is a search item or has high brand awareness, consumers have a very positive attitude towards the sponsored

recommendation posts, which increases the purchase intention. Thus, a new company must be known and talked about as often as possible, so that people will become familiar with the company's products, and in the end, they can form a positive and open attitude towards the company's products, which in the end, after considering other aspects, people will buy the products.

Based on the theory of promotion, to increase awareness of the UT brand and the Statistics Study Program, based on the results of this research, it can be done by increasing direct contact with prospective students through various media such as advertising and social media. It can also work with schools. Scholarships can also be offered for prospective students who have academic abilities but are economically disadvantaged or unable. Then cooperation can be made with various companies or institutions to accept graduates of the Statistics Study Program, so that new positive perceptions and attitudes can be formed for prospective students to enter the Statistics Study Program. This needs to be done considering that people who know the Statistics Study Program brand are individuals who have a defensive ego and are adherents of high utilitarianism (Table 2).

One strategy for changing consumer attitudes is to change the basic motivational function of a product or service. Consumer attitudes can be classified into four functions: utilitarian, ego-defensive, value-expressive, and knowledge. By changing the basic motivational function of a product or service, special needs are made to stand out. For example, marketers can direct their campaigns towards a strong stance to protect the ego or self-image from threats, fulfilling the ego-defensive function, as seen above (Jovanoska, 2013; Litvin & MacLaurin, 2001).

Brand awareness, brand salience, and buying intention

The results of hypothesis testing using the SEM method with AMOS software show that Brand Awareness affects Buying Intention with the Brand Salience variable intervening. Brand Awareness positively and significantly affects the Brand Salience variable with an error level of 1%, a determination coefficient of 0.881, and a standard error of 0.067. Meanwhile, Brand Salience affects Buying Intention positively and significantly with an error rate of 1%, a regression coefficient of 0.874, and a standard error of 0.66. This means that if Brand Awareness increases by 1%, Brand Salience will increase by 0.88%. If Brand Salience increases by 1%, Buying Intention will increase by 0.87%. Likewise, the opposite will happen (Tables 3, 4).

It is interesting to observe in this regard. From the results of the analysis using descriptive statistics, it can be explained that the community's Brand Awareness of the UT Statistics Study Program obtained a score of 3.35, which is categorized as moderate. This value is formed from the measured variable Know (a score of 3.72); Familiar (a score of 3.22); and Recognition (a score of 3.11). The community's introduction to the Statistics Study Program is still not high. They are also not familiar with the UT Statistics Study Program. To increase the community's Brand Awareness of the UT Statistics Study Program, it can be done with the segmenting, targeting, and positioning strategies, the 4P generic strategy, and the customer loyalty program (Saputra, 2020). When Brand Awareness increases, Brand Salience increases (Jraisat et al., 2015), so that in the end it increases people's buying intention (Chi & Yeh, 2009) in the community towards the UT Statistics Study Program.

Table 3 Regression weights: (Group No. 1—default model)

			Estimate	S.E	C.R	P	Label
BRAND_AWARENESS	<—	ATTITUDE	0.355	0.148	2.391	0.017	par_3
BRAND_AWARENESS	<—	PERCEPTION	1.140	0.210	5.432	***	par_13
BRAND_SALIENCE	<—	BRAND_AWARENESS	0.881	0.067	13.140	***	par_1
BUYING_INTENTION	<—	BRAND_SALIENCE	0.874	0.066	13.281	***	par_2
TopofMind	<—	BRAND_SALIENCE	1.000				
Recall	<—	BRAND_SALIENCE	0.897	0.065	13.714	***	par_4
Memorable	<—	BRAND_SALIENCE	0.910	0.063	14.520	***	par_5
Famous	<—	BRAND_SALIENCE	0.617	0.058	10.545	***	par_6
Desire	<—	BUYING_INTENTION	1.000				
Positive_Toward	<—	BUYING_INTENTION	0.913	0.058	15.658	***	par_7
Idea	<—	BUYING_INTENTION	0.922	0.053	17.235	***	par_8
ValueExpressive	<—	ATTITUDE	1.000				
Utilitarian	<—	ATTITUDE	1.363	0.178	7.639	***	par_9
EgoDefensive	<—	ATTITUDE	1.461	0.183	7.998	***	par_10
Recognition	<—	BRAND_AWARENESS	1.000				
Familiar	<—	BRAND_AWARENESS	0.838	0.059	14.301	***	par_11
Know	<—	BRAND_AWARENESS	0.871	0.070	12.446	***	par_12
Quality	<—	PERCEPTION	1.000				
Service	<—	PERCEPTION	1.038	0.161	6.431	***	par_14
Price	<—	PERCEPTION	1.372	0.208	6.601	***	par_15
Notice	<—	BRAND_SALIENCE	0.995	0.071	14.001	***	par_16
Knowledge	<—	ATTITUDE	1.050	0.149	7.041	***	par_17

***Significant at level 1%

Table 4 Standardized regression weights: (Group No. 1—default model)

			Estimate
BRAND_AWARENESS	<—	ATTITUDE	0.200
BRAND_AWARENESS	<—	PERCEPTION	0.660
BRAND_SALIENCE	<—	BRAND_AWARENESS	0.924
BUYING_INTENTION	<—	BRAND_SALIENCE	0.860
TopofMind	<—	BRAND_SALIENCE	0.784
Recall	<—	BRAND_SALIENCE	0.767
Memorable	<—	BRAND_SALIENCE	0.821
Famous	<—	BRAND_SALIENCE	0.623
Desire	<—	BUYING_INTENTION	0.865
Positive_Toward	<—	BUYING_INTENTION	0.798
Idea	<—	BUYING_INTENTION	0.851
ValueExpressive	<—	ATTITUDE	0.503
Utilitarian	<—	ATTITUDE	0.846
EgoDefensive	<—	ATTITUDE	0.883
Recognition	<—	BRAND_AWARENESS	0.819
Familiar	<—	BRAND_AWARENESS	0.772
Know	<—	BRAND_AWARENESS	0.700
Quality	<—	PERCEPTION	0.639
Service	<—	PERCEPTION	0.513
Price	<—	PERCEPTION	0.724
Notice	<—	BRAND_SALIENCE	0.777
Knowledge	<—	ATTITUDE	0.670

To achieve high-level consumer purchasing decisions, a company or organization can use emotional marketing with a focus on the symbol of emotional advertising clips; concentrate on emotional advertising images; and create an element of self-identification. This occurs because purchasing decisions are directly influenced by brand recall, brand recognition, and perceived product quality. On the other hand, the factors of media types, meanings, and forms of cultural symbols indirectly influence purchasing decisions (Khuong & Tram, 2015).

Formulation of brand management

After obtaining the research results as mentioned above, the question that then arises is how to formulate brand development for an organization, including the UT Statistics Study Program. To compile and develop a brand, this study used Keller's Customer-Based Brand Equity (CBBE) approach (Keller, 1993), which was modified by considering Logman's brand management model (Logman, 2004).

The first stage that needed to be done was to extensively introduce Universitas Terbuka and the UT Statistics Study Program. However, the Statistics Study Program is closely related to the UT Brand. From the research results, it appears that the UT brand is "weaker" in the public perception of the UT Statistics Study Program. In this process, the introduction of UT is not just as a public university, as this is not effective enough in attracting the public's interest to study at UT. In this regard, UT's identity needs to be renamed to be Universitas Negeri Terbuka (UNT). In this regard, this STATE identity or name will have a strong impression in society regarding its existence. The word NEG-ERI has the connotation of belonging to the state, safe, trustworthy, and its existence is trusted, including related to its pricing.

This effort will increase the public's brand knowledge of UT. This is inseparable from the market target of UT to be achieved, namely the equal distribution of education acquisition that is not limited by time and space. In this broad market, brand knowledge is very important. To increase this, UT including the Statistics Study Program can increase its brand awareness and brand image. The name change will clearly increase the brand awareness and brand image in the community.

After making these efforts, the next step is to increase the brand equity of UT and the Statistics Study Program. One possible approach is Keller's (1993) customer-based brand equity (CBBE) approach. Customer-based brand equity is defined as the differential effect of brand knowledge on consumer responses to brand marketing. Three important concepts are included in the definition: "differential effects", "brand knowledge", and "consumer response to marketing". The differential effects are determined by comparing consumer responses to the marketing of a brand with responses to the same marketing of an unnamed name or version of a product or service. Brand knowledge is defined in terms of brand awareness, and brand image and is conceptualized according to the characteristics and brand association relationships described earlier. Consumer responses to marketing are defined in terms of consumer perceptions, preferences, and behaviors arising from marketing mix activities; for example, brand choice, understanding of copy points from advertisements, reactions to coupon promotions, or evaluations of proposed brand extensions (Keller, 1993).

In this CBBE approach, there are several things that need to be done to carry out brand management. The first one is to choose a brand identity. Then develop supporting marketing programs. Next, leverage secondary associations. An identity that can be developed is a country, affordable for space, time and cost, quality and sustainable.

To realize this identity, the marketing team must do several things such as increase the brand awareness and build profitable, strong, and unique brand associations in the memory, so that consumers buy products or services. Brand awareness is related to brand familiarity, namely the number of product-related experiences that consumers have accumulated through product use, advertising, and repeated exposure to a brand, which will increase the consumer's ability to recognize and remember the brand. Frequent and prominent mentions in advertising and promotional media can increase a consumer's exposure to a brand, as can event or sport sponsorship, publicity, and other activities. Profitable, strong, and unique associations can be created by a marketing program in a variety of appropriate ways.

Customer-based brand equity must be built with the aim of excellence, strength, and uniqueness of brand association, combined with brand awareness, which can generate different consumer responses to the marketing of a brand. However, it is important to consider in more depth how the belief associations about brand attributes and benefits emerge.

One of the ways belief associations are made is based on direct experience with a product or service. The second way is with information about the product or service communicated by the company, other commercial sources, or by word of mouth.

A third important way in which belief associations are made is based on the conclusions of several existing brand associations. That is, many associations are assumed to exist for brands because they are characterized by other associations. The type and power of inference is a function of the correlation perceived by consumers between attributes or benefits. The UT marketing department and the UT Statistics Study Program must sum up the quality of a high-level product or service from a high price, and convey certain attributes or benefits such as prestige and social status as well as a community evaluation of some of the attributes or benefits felt by the existence of UT and the UT Statistics Study Program.

UT and the Statistics Study Program can also improve their brand association through other information in memory that is not directly related to a product or service. Because a brand is identified with these other entities, consumers may conclude that the brand shares an association with that entity, thereby generating an indirect or "secondary" link to that brand. For example, there is "*Orang pintar minum Tolak Angin*". *Orang pintar* (smart people) has its own connotations and status juxtaposed with herbal medicine, which at that time was for the lower classes, in villages and mountainous regions, who had no education.

These secondary associations can lead to the transfer of global associations such as attitude or credibility, expertise, trustworthiness, and attractiveness or attributes and benefits that are more specifically related to the meaning of the product or service. Secondary associations may arise from associations of primary attributes related to (1) the company or UT, (2) distribution channels, (3) celebrity spokespersons or product or service advocates, or (4) events (Keller, 1993).

In addition to the items above, Pinar et al. (2011) emphasized the need to develop a college or university brand ecosystem, which has the potential to guide students to places they do not know yet or that they want to visit. Indeed, this is one of the challenges in managing the ideological divide identified by Ng and Forbes (2008).

However, to the extent that the gap is controlled and students are provided with an extraordinary educational experience, the university or college may have a strong brand differentiator. The promise of the brand ecosystem as a platform to bridge this gap lies in its unifying strategic focus and direction, the level of intent generated, and the role of individual employees centered on the student experience.

Given the intangible characteristics of specific services, complexity, heterogeneity or variability, simultaneous production and consumption, and the nature of the process (Berry, 2000; Ostrom et al., 2005; Zeithaml et al., 2006), creating a great (learning) experience and university brand depends not only on creating core values with academicians, but also on student experiences with all the supportive value creation activities. This is because all value creation networks are dynamically interlinked with each other, where each of these value networks individually and collectively contributes to the student learning experience with the university brand. As a result, student expectations are constantly updated and revised throughout their direct or indirect experiences with the university brand (Ostrom et al., 2005). For example, although academia is a core value-creating vehicle for students, there is no doubt that students' experiences (positive or negative) with libraries, dormitories, food, or even sports can significantly influence their university experiences. In turn, the brand of the university or the nature of the service (university) process, contributes to the complexity of the service encounter experience, where student evaluations of their learning experiences become the accumulation of many factors—some under the control of university employees and some not. This may partly explain the challenges that universities as service producers face in dealing with inbranding strategies.

It is well known that the customer experience with the company is much greater than the company's own communication to the customer (Ostrom et al., 2005). So far, experiences dominate the formation of customer evaluations (e.g., perceptions of quality, satisfaction, value, and loyalty), and expectations for the next service encounter (Berry, 2000). As stated by Ostrom et al. (2005), frontline employees are brands for customers; it is the employees who provide the service and convey the brand to the customers. Berry (2000) and Berry and Bendapudi (2003) suggested that because frontline employees (or contacts) embrace most customer impressions, brand marketing to employees or internal brands, is critical. This shows that all personnel (administrators, faculty, and staff) need to understand their importance in providing the desired student learning experiences. Our proposed brand ecosystem framework demonstrates the dynamic interrelationships among the value-creating elements in developing a university brand. The implication is that in order to create the outstanding multidimensional student learning experiences that universities promise, universities must coordinate all activities of their brand ecosystem value delivery network through internal branding.

The brand ecosystem can be used to develop the university's brand by focusing on creating the core values of academia, as well as all areas of support in providing a superior learning experience for students. The university's complete brand ecosystem (i.e., core

and supporting activities) will also take advantage of the brand ecosystem framework including the alumni, donors, and potential employers. These external constituencies have the potential to add significant value to the brand ecosystem. Certain companies and organizations that recruit on campus are one example. Certainly, having recruiters on campus can be a strong attraction for prospective students, and as such, reflects an important aspect of the university's brand ecosystem. Apart from attracting prospective students, certain recruitment companies can serve as important stimulators for student academic success which can indirectly affect students' university learning experiences significantly. In addition, opportunities arise for these organizations to contribute to other dimensions of the student experience (e.g., guest speakers, student group sponsors, internships, and study tours) that add value to the total educational experience. Another instance of strengthening the university's brand ecosystem is by more fully integrating alumni into the core activities and supporting the value propositions.

It is also essential to keep in mind that parents are an important part of the university's brand ecosystem, especially as influencers and interpreters of the experiences their children have on campus. Potential employers, alumni, donors, and parents are significant contributors to the university experience; therefore, they should be included in the university brand ecosystem as part of a holistic university branding strategy (Pinar et al., 2011).

Conclusion and recommendations

Conclusion

From the results of the analysis using descriptive statistics, it was found that the public perception of the Statistics Study Program at Universitas Terbuka (UT) is still classified as being moderate. This can be reflected in the category score of Brand Awareness and Brand Salience with an average score above 3 and below 4. This means that the public is familiar with the Statistics Study Program even though it is still not high or still in the moderate category. This condition can also be found in the Buying Intention of the Universitas Terbuka Statistics Study Program, with the moderate category.

If analyzed using descriptive statistical tests, it can be concluded that the public's perception of the Statistics Study Program in general and the Statistics Study Program at Universitas Terbuka are in the same category, namely moderate. However, if you pay attention to the score, studying at the Statistics Study Program in general has a higher score, namely 3.82, while studying at the Statistics Study Program at Universitas Terbuka has a lower score, namely 3.33. This means that the UT or Universitas Terbuka label has a weight on people's perceptions. This is a challenge for the Statistics Study Program to build the UT brand apart from building the brand for the study program.

The results of hypothesis testing show that Brand Salience has an intervening relationship between Brand Awareness and Buying Intention. Brand Salience is influenced by Brand Awareness and leads to Buying Intention, in which both are influenced and influence positively and significantly. Brand Salience has a moderate category perception, which is formed from the variables Famous (moderate), Memorable (moderate), Recall (moderate), Top of Mind (moderate), and Notice (moderate).

Regarding branding, the branding needs of the Universitas Terbuka Statistics Study Program can be formulated as follows: increase the brand knowledge by increasing the

brand awareness and brand image. Changing the UT name to UNT is a way to improve this. It can also enhance its brand identity, develop supporting marketing programs, and leverage secondary associations. When brand awareness, brand image, and brand identity increase, it will increase brand salience, brand equity, and ultimately buying intention.

Recommendations

The results of the community's assessment of the UT Statistics Study Program are still not high. This condition has an impact on the buying intention of the Universitas Terbuka Statistics Study Program. Related to this, it is necessary to implement a policy on how to build the UT brand in addition to of course constructing the brand of the study program. This policy not only applies to the university level, but also requires brand reinforcement policies carried out by the government. An aspect that needs to be improved is brand salience because it is an intensification of the relationship between brand awareness and buying intention. In addition, the brand salience score of the Statistics Study Program is not high enough. Increasing the brand salience of the Statistics Study Program needs to be emphasized in terms of the famous, memorable, recall, top of mind, and notice aspects.

The Statistics Study Program and management at Universitas Terbuka need to build an internal brand ecosystem for the study program and university. The components of the ecosystem are the students, lecturers, employees, alumni, parents, founders, collaboration partners for learning, research, service, and workplaces or businesses. Providing excellent service to students is essential for lecturers and employees who have direct and indirect contact with students (Berry & Bendapudi, 2003; Ostrom et al., 2005). The excellent service provided will give a deep impression that will create a positive perception towards the alumni and parents, which in the end can encourage other students to enroll in the university. Just as important is the knowledge and experience related to the founder and the company where the internship and place of work will also provide a positive perception of the university (Ostrom et al., 2005). The involvement of alumni in several university activities is very important in instilling perceptions and persuasion towards current students and prospective students (Pinar et al., 2011).

University administrators need to enrich the university experiences of students and build a strong sub-brand within the university environment. University social augmenters need to play a role as well because they have strong brand equity manifestations and may have the potential to differentiate university brands in an industry dominated by experience and trust (Eldegwy et al., 2018).

Curtis et al. (2009) pointed out the importance of corporate brand management in higher education, and in particular the corporate brand management process. To compete in the market for the best students, qualified faculty and staff, and donors, universities must have a strong corporate brand. Maintaining a harmonious relationship between the corporate identity and corporate image for multiple stakeholders in a multi-campus system can be a challenging task. A clear definition of the university brand combined with strong leadership is one of the important aspects to be successful. Higher education provides many similar "products". Universities with a strong historical and cultural heritage have the advantage of offering a clear foundation for

their corporate branding efforts. The alignment between the company's branding, which comprises the company's identity and perceived company image and reputation, and the organizational culture contributes to awareness among all stakeholders of what the university is and what it stands for. The internal acceptance of the revised brand at all levels plays an essential role in promoting the company's brand to external stakeholders and making the institution have long-term sustainability.

This research has not succeeded in proving the role of customer experience in relation to brand awareness, brand salience, and buying intention due to unidentified issues. For future research, it is necessary to find the causes because theoretically, the customer experience variable has strong support. The conditions of the respondents and the type of data were obtained previously. It also needs to be done by adding measurable variables from customer experience such as experience when choosing a higher education institution, experience in employing UT Statistics Study Program graduates, experience in finding work, and experience in work associated with the UT Statistics Study Program.

This model does not include brand knowledge, brand identity, and brand equity. In future research, it is necessary to include these things in the model. Then it can be tested on UT and non-UT higher education institutions.

The new brand development formula is limited as a conception. It needs to be continued with research on developing prototype models and testing the prototypes in order to obtain a standard model that can be applied in the UT Statistics Study Program, other study programs at UT, and in other universities to increase student intake.

Abbreviations

BWS: Best worst scaling; CBBE: Customer-based brand equity; fMRI: Functional magnetic resonance imaging; SEM: Structural equation modeling; UT: Universitas Terbuka; UNT: Universitas Negeri Terbuka; 4P: Product, promotion, placement, pricing.

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Authors' contributions

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Authors' information

Deddy Ahmad Suhardi, Financial management and statistics, respectively, received his master and bachelor from Persada Indonesia University in Jakarta (Indonesia) in 2007 and Bogor Agricultural University in Bogor (Indonesia) in 1996. Now, he is the lecturer in statistics at Open University of Indonesia. He considers himself as a scholar who is responsible, curious and serious about the field of statistics, management, and distance education, a present teacher, future open and distance teacher, and a lifelong learner. His scholarly interests focus on the sequential analysis in distance learning sustainability. This is interlinked with collaborative action research in total quality management. Email: deddy_as@ecampus.ut.ac.id.

Adhi Susilo, PhD received his doctorate from Simon Fraser University in British Columbia (Canada) in 2013. Now, he is the Deputy Dean of Academic Affairs of Faculty of Science and Technology in Open University of Indonesia. He considers himself as a scholar who is responsible, curious, and serious about the field of distance education, a present teacher, future open and distance teacher, and a lifelong learner. His scholarly interests focus on the emerging technologies acceptance, OER, MOOCs, and more recently, a new educational theory and its implications for a changed curriculum, distance teaching practices, and the institution of the open and distance school. This is interlinked with collaborative action research in online learning contexts. Jalan Cabe Raya, Pondok Cabe, Pamulang, Tangerang Selatan 15418, Banten—Indonesia Email: adhi@ecampus.ut.ac.id.

Sony Heru Priyanto, Professor in Entrepreneurial Management. PhD received his doctorate from Brawijaya University Indonesia. Lecturer in the Entrepreneurship Program, Universitas Podomoro. Central Park Mall Lt 3—Unit 112, Podomoro City, Jl. Let Jend S. Parman Kav 28, Jakarta Barat 11470, Indonesia. Email: sonecid@yahoo.com.

Antonius Surya Abdi, Lecturer in Management. PhD received his doctorate from Lecturer in the Management Program, Satya Wacana Christian University/Jl. Diponegoro 52-60 Salatiga 50711 Email: anthony_bit@yahoo.com.

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Availability of data and materials

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Declarations

Competing interests

The authors declare that they have no conflicting interests.

Author details

¹Statistics Program, Open University of Indonesia, Jakarta, Indonesia. ²Academic Affairs of Faculty of Science and Technology, Open University of Indonesia, Jakarta, Indonesia. ³Entrepreneurship Program, Universitas Agung Podomoro, Central Park Mall Lt 3, Unit 112, Podomoro City, Jl. Let Jend S. Parman Kav 28, Jakarta, Barat 11470, Indonesia. ⁴Management Program, Satya Wacana Christian University, Salatiga, Indonesia.

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