The Influence of Marketing Mix on Brand Image, Motivation and Students Decision to Choose Graduate Studies of IPB University

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Abstract

Competition in the recruitment of graduate students is increasingly tight, with a large number of tertiary institutions offering graduate education programs. Universities must develop more competitive marketing strategies to win the competition in the student recruitment market. The 7Ps marketing mix is one of the marketing concepts that universities can develop to inform the excellence of graduate education that consumers want. This study aims to analyze the effect of the marketing mix on brand-image, motivation, and student decisions in choosing a graduate education at the IPB University as the place to pursue graduate study. This study used a causality approach with survey techniques to explain the causal relationship between marketing mix variables, brand image, motivation, and student decisions. The data of this study were collected using a questionnaire from 255 master program students of IPB. Structural Equation Modeling (SEM) is used to analyze the causal relationship between marketing mix with brand-image, motivation, and student decisions. The results showed that products, promotions, people, and physical evidence significantly influence brand- image. Product, place, process, people, physical evidence, and brand image have a significant influence on motivation. The product, promotion, process, people, brand image, and motivation influence the student's decision. Policy-makers at IPB can consider the findings of this study, while developing a graduate education marketing plan, to increase the number of new students.

Keywords: brand image, marketing mix, motivation, SEM-PLS, students' decision

Abstrak

Persaingan dalam perekrutan mahasiswa pendidikan pascasarjana semakin ketat dengan banyaknya perguruan tinggi yang menawarkan program pendidikan pascasarjana. Perguruan tinggi harus mengembangkan strategi pemasaran yang lebih kompetitif untuk memenangkan persaingan dalam pasar perekrutan mahasiswa. Bauran pemasaran 7Ps merupakan salah satu konsep pemasaran yang dapat dikembangkan oleh perguruan tinggi untuk dapat menginformasikan keunggulan pendidikan pascasarjana yang diinginkan konsumen. Penelitian ini bertujuan untuk menganalisis pengaruh bauran

pemasaran terhadap brand image, motivasi dan keputusan mahasiswa dalam memilih pendidikan pascasarjana Institut Pertanian Bogor (IPB) sebagai tempat untuk melanjutkan pendidikan pascasarjana. Penelitian ini menggunakan pendekatan kausalitas dengan teknik survei untuk menjelaskan hubungan kausalitas antara variabel bauran pemasaran, brand image, motivasi dan keputusan mahasiswa. Data penelitian ini dikumpulkan dengan menggunakan kuesioner dari 255 orang mahasiswa program magister IPB. Structural Equation Modeling (SEM) digunakan untuk menganalisis hubungan kausalitas antara bauran pemasaran jasa dengan brand image, motivasi dan keputusan mahasiswa. Hasil penelitian menunjukkan bahwa produk, promosi, people, dan bukti fisik berpengaruh secara signifikan terhadap brand image. Variabel produk, tempat, proses, people, bukti fisik, dan brand image memiliki pengaruh signifikan terhadap motivasi. Variabel produk, promosi, proses dan people, brand image, dan motivasi berpengaruh secara signifikan terhadap keputusan mahasiswa. Pembuat kebijakan di IPB dapat mempertimbangkan hasil dari penelitian ini, ketika menyusun rencana pemasaran pendidikan pascasarjana, untuk meningkatkan jumlah mahasiswa baru.

Kata kunci: bauran pemasaran, *brand image*, keputusan mahasiswa, motivasi, SEM

Introduction

Globalization is a process of formation of a new world order that requires mutual adjustment and also results in the creation of competitive circumstances, which is increasing in various areas, including in higher education services. Globalization causes the higher education market to become borderless. Universities face competition, not only with domestic higher education but also with foreign universities in recruiting students.

Table 1 The number of study programs in higher education in Indonesia

Field	Diploma		S-1		S-2		S-3	
	Public	Private	Public	Private	Public	Private	Public	Private
Religion	-	-	109	369	29	121	11	38
Humaniora	53	85	196	211	48	11	14	2
Social	169	360	609	1528	270	243	84	29
Sains	40	98	259	191	87	7	38	1
Art	40	55	71	123	12	6	4	-
Health	462	1265	111	543	79	26	22	-
Technique	553	1099	396	1864	126	86	56	5
Agriculture	158	39	350	637	172	27	65	-
Economy	138	106	271	1.495	133	231	48	16
Education	-	429	1.135	2.438	327	187	79	8
All	1.613	3.536	3.507	9.399	1.283	945	421	99

Source: Ditjen DIKTI, 2014 in Kompas Daily Monday 19 January 2015

The graduate education program is one of the educational services offered by universities. Universities that organize graduate education have become one of the centers of education, which are important, given that the market's need for graduate education graduates is getting dynamic lately, in line with the demand for competent workforces from both national and multinational enterprises. Graduate qualifications

become mandatory in most positions of the level of enterprise and directors in large companies (Subramaniam, Yusoff, & Arumugam, 2014).

The increasing need for graduate education in Indonesia is the opportunity for higher education institutions to develop graduate education. In the last two decades, universities that hold graduate education programs are increasing throughout the world, including in Indonesia. Table 1 shows the number of major courses for the master's degree program in 2014 as many as 2.228 and the number of major courses for the doctoral degree program in 2014 as many as 520. The number of departments organized by higher education institutions automatically leads to unavoidable and very tight competition.

Competition is getting tougher, given that foreign universities are doing direct promotion to attract students and professionals in Indonesia to attend graduate school at their universities. In 2016 LPDP Edufair conducted by the Institute of Education Fund Management (LPDP), nearly 50 foreign universities offered their graduate education programs. The increasing number of overseas scholarships available to support those who wish to pursue graduate programs abroad, such as scholarships LPDP.

The graduate education programs offered by foreign and tertiary institutions provide many options for students to pursue graduate education. Higher education institutions must put in place strategies that can provide clear information about the graduate education offered to consumers. Through understanding consumers' behaviors and perceptions, higher education management can develop appropriate strategies and programs to take advantage of existing opportunities. Understanding consumer behavior and getting to know customers is an important task for marketers whose aim is to achieve a purchasing decision, in this case, the decision of prospective students to choose a college.

One factor that can influence consumer decisions is the marketing strategy developed by a company. Ming (2010) states that universities must look for more competitive marketing strategies to win the competition in the student recruitment market. One of the marketing concepts that offer solutions and a tool to achieve goals in a market with competition and different perceptions of service and quality is the marketing mix (Constantin, 2011). Furthermore, Constantin (2011) stated that by using templates of 7 Ps (product, price, place, promotion, process, people, and physical evidence), the university would be able to make a coherent marketing mix, will be capable of overcoming the goal. Through a marketing mix developed and directed at the target market, universities can inform the advantages of graduate education that consumers want. Based on this information, prospective students can determine their future by continuing graduate education at the tertiary institution.

In addition to the marketing mix, universities can also utilize campus brand image to influence consumer decisions. Brand image is related to consumer satisfaction with product quality in providing satisfaction to consumers. Brand image is one of the things that become the basis for consumers to choose products, both goods, and services, to meet their needs. Likewise in the selection of higher education institutions, Subramaniam, Yusoff, and Othman (2014) showed a significant differences between the knowledge of university brands and the decision to improve education at the university.

The decision to continue education at certain universities is not a coincidence, but through a buying decision process. Consumer motivation is a determining variable in the direction of purchasing behavior for a product. Every company wants any product offered in the market so that it can be accepted, bought, and consumed. Tereza (2013)

showed that differences in motivation that underlie students to pursue higher education had a positive effect on the choice of universities to continue their studies. Skatova and Ferguson (2014) showed that students' motivation to pursue different undergraduate education influences the choice of bachelor's degree.

A study on consumer behavior, especially about the choice and student decision-making process, helps the higher educations have a clear understanding of the student recruitment market (Maringe, 2006). Previous research studies provided an understanding of the effect of the marketing mix on students' decisions in choosing educational services, either directly or through intervening variables, which are found by researchers in various countries. Several studies have examined the effect of marketing mix on decision making (Sefnedhi, 2013; Kurniawati, 2013; Irawan & Faisal, 2014; Yenida, Sumiarti, & Sarmiadi, 2015; Sukendar, 2015; Podungge, Bachri & Zahara, 2016; Samani, Hashemi, Shahbazi, & Sarhadi, 2017; Armeilia, Simanjuntak, & Amanah, 2019; Simanjuntak, Sumarwan & Situmorang, 2020; Arthur, Asmara, & Simanjuntak, 2019). Meanwhile, Rahardjo and Firdaus (2016) examined the effect of the marketing mix on the decision to choose through motivation as an intervening variable. Sunariani (2017) and Winarti (2014) examined the effect of marketing mix on the decision to choose through the brand image as an intervening variable. Another study by Sawaji, Hamzah, and Taba (2010), examined the effect of price and marketing communication and reference groups on decision making through the brand image, attitude, and motivation as intervening variables. This study differs from previous studies regarding the effect of the marketing mix on the decision to choose educational services. This study looks at the effect of all marketing mix variables on student decisions and through brand image and motivation as intervening.

The tight competition in the purchase of educational service gives effect to the IPB University to recruit new students. IPB is holding graduate education programs. Seeing the number of development data of student candidates who apply and the number of students accepted in table 2, there was a decrease in the enrollment period of 2014/2015 and 2016/2017, after having increased previously. This condition needs to be considered by all stakeholders in IPB to prevent the decreasing.

Table 2 The progress of applicants and new student Graduate School of IPB

Faculties	2012-2013		2013-2014		2014-2015		2015-2016		2016-2017	
	Apply	Accept	Apply	Accept	Apply	Accept	Apply	Accept	Apply	Accept
Faperta	205	173	322	264	196	164	286	280	220	214
FKH	55	45	98	70	55	49	110	110	70	69
FPIK	197	171	259	215	237	196	255	250	218	212
Fapet	63	55	83	72	73	56	89	88	68	68
Fahutan	93	79	96	89	104	88	142	146	88	86
Fateta	135	110	178	158	149	106	258	235	175	167
FMIPA	313	230	504	393	439	269	547	445	351	295
FEM	186	140	228	181	183	131	338	295	200	182
FEM	123	102	122	87	130	84	230	188	159	133
Multi	70	58	137	107	91	61	172	161	121	115
All	1440	1163	2027	1636	1657	1204	2427	2198	1670	1541

Source: PPMB SPS IPB (2012-2016)

To win the fierce competition, IPB must have a marketing strategy that provides a competitive advantage. By understanding the factors influencing the decision to

choose graduate education, IPB can create a marketing strategy policy that fits the target

market to increase the number of students accepted.

Based on the description above, this study aims to analyze the factors that influence the marketing mix that affects the brand image, motivation, and decision of students in choosing graduate education of IPB and its implications for the development of marketing strategies of the graduate program of IPB to increase the number of new student admissions.

Methods

The study was conducted at the IPB University in December 2016 to January 2017. The sample of the study was the graduate education of IPB, and the population of this study was students of graduate education of IPB in the academic year of 2016-2017. Sampling was conducted using stratified random sampling. Samples were grouped into three groups based on the average number of new students accepted. The sample size required to estimate using SEM-PLS was ten times the largest amount of structural path directed at a particular construct in structural models (Ghozali, 2008). In this study, the structural path formed was 24 lines, so the number of samples taken a minimum of 240 respondents. The number of samples taken in this study was 255 respondents.

The variables in this study consisted of the dependent variable (endogenous) and the independent variable (exogenous). Endogenous variables include brand image (Y1), student motivation (Y2), and student decisions (Y3). Exogenous variables include the product (X1), price (X2), place (X3), promotion (X4), process (X5), people (X6), and physical evidence (X7). Table 3 shows the operational definitions of the variables and their indicators.

Table 3 The Variable and indicators

Variable	Operational Definition	Indicators	Symbol
Product (X1)	The graduate education program offered to students	Study programme	PRODUCT1
		Accreditation	PRODUCT2
		Curriculum	PRODUCT3
		Cooperation in education	PRODUCT4
		Research	PRODUCT5
Price (X2)	Everything related to the cost of graduate education	Relative education cost	PRICE1
		Availability of scholarships	PRICE2
Place (X3)	The location and the university environment	Strategic location	PLACE1
		Reachable by public transportation	PLACE2
		Near to the center of government and business	PLACE3
Promotion (X4)	All of the activities to communicate the graduate education to the public	Mass media	PROMOTION1
		Print media (banners, leaflets, etc.)	PROMOTION2
		Graduate education fairs	PROMOTION3
		Websites	PROMOTION4
		Social media	PROMOTION5
Process (X5)	The activity in delivering graduate education services	process of registration of new students	PROCESS1
		the learning process	PROCESS2
		guardianship of thesis	PROCESS3

Table 3 The Variable and indicators (*cont..*)

Variable	Operational Definition	Indicators	Symbol
		the process of administrative services	PROCESS4
People	a variable that describes	lecturer's quality and competence	PEOPLE1
(X6)	people who are directly involved in the process of graduate education services	lecturer's capability and professionalism in guiding thesis	PEOPLE2
		abilities of employees in providing administrative services	PEOPLE3
Physical evidence	The facilities and infrastructure to support the	a comfortable and conducive environment	PHYS.EVID1
(X7)	provision of graduate education services	academic facilities	PHYS.EVID2
		support facilities	PHYS.EVID3
		internet access	PHYS.EVID4
Brand image (Y1)	an overview of graduate education of IPB in student's point of view	the reputation of graduate education	BR.IMAGE1
		the quality and development research	BR.IMAGE2
		competitive graduates	BR.IMAGE3
		complete facilities & conducive environment	BR.IMAGE4
Student motivation (Y2)	what encourages students to choose graduate education of IPB	desiring of studying at a renowned university	MOTIVATION1
		increasing knowledge in the wake of career competition	MOTIVATION2
		Getting accepted in department desired and personal pride	MOTIVATION3
		Social status	MOTIVATION4
Student decisions (Y3)	The decision-making process to choose graduate education of IPB	Registering the process as the student	STU.DECISION1
		Being a student	STU.DECISION2
		Recommending to others	STU.DECISION3

Data was collected using a set of questionnaire. The form of questions in the questionnaire is semi-open and closed. The answer to the question is made on a Likert scale consisting of strongly disagree (1), disagree (2), indifferent (3), agree (4), and strongly agree (5). The distribution of questionnaires was done in two ways, namely online and offline, either directly to respondents or through study program staff from the respondents. The data obtained is then processed by the process of input, editing, coding, cleaning, and data analysis. Applications used in data processing and analysis are Microsoft Excel 2013 and Smart PLS 3.0. Quantitative descriptive analysis is used to describe the characteristics of master students (S2) respondents. Causality analysis is done to analyze the relationship and influence of marketing mix variables with the brand image, motivation, and decision to choose graduate education.

Findings

Characteristics of Respondents

Table 4 shows the description of respondent characteristics in this study. The proportion of male and female respondents was 43.92% and 56.08%. The majority of respondents' age when getting accepted at SPS of IPB was 20-25 years (70.20%). Then respondents aged 26-30 years (14.12%), aged 31-35 (10.98%), aged 36-40 (3.92%) and aged over 40 as much as 0.78%.

Most respondents are from Java, Bali, and Nusa Tenggara (30.20%). The next most respondents were from the Jabodetabek-Banten (25.88%), Maluku and Papua (15.29%), Sulawesi (14.12%), Sumatera (11.37%) and lastly Kalimantan as much as 3.14%. The proportion of the number of respondents based on students' undergraduate university was from not-IPB 68.24% and IPB 31.76%. The proportion based on finance sources was non-scholarship (63.92%) and scholarships (36.08%). Based on working status when registering at SPS of IPB, the proportion of respondents was unemployed (50.59%) and employed (49.41%).

Table 4 Characteristics of Respondents

Characteristics of Respondents		Frequency	%
Gender	Male	112	43.92
	Female	143	56.08
Age (year)	20 – 25	179	70.20
	26 – 30	36	14.12
	31 – 35	28	10.98
	36 – 40	10	3.92
	> 40	2	0.78
Origin	Sumatera	29	11.37
	Jabodetabek Banten	66	25.88
	Jawa, Bali dan Nusa Tenggara	77	30.20
	Kalimantan	8	3.14
	Sulawesi	36	14.12
	Maluku dan Papua	39	15.29
University	IPB	81	31.76
	Not IPB	174	68.24
Sources of Financing	Not Scholarships	163	63.92
	Scholarships	92	36.08
Employment Status	Not Working	129	50.59
	Working	126	49.41

Analysis of Structural Equation Modeling (SEM).

Structural Equation Modelling (SEM) with the method of Partial Least Square

(PLS) was used to test the model and hypotheses about the relationship between the constructs in this study. PLS model was built and evaluated based on two fundamental tests, which were the measurement model (outside the model) and the evaluation of the structural model (inner model). The measurement of the evaluation model was conducted to test the validity and reliability of the models. The evaluation of the structural model (inner model) was to predict the causal relationship between the latent variables, both exogenous and endogenous.

Evaluation of Measurement Model (Outer Model).
Convergent validity of the measurement model with reflective indicators was evaluated by the loading factor parameter (the correlation between the indicators and their latent constructs) and the AVE value (measuring the number of variances that can be captured by the constructs compared to the variance caused by the measurement error). The result of the measurement model showed the indicator obtained load factor> 0.5, and the variable of promotion (PROMOTION2) had AVE value <0.5. AVE value <0.5 indicated that the model had not fulfilled convergent validity so that it needs respecification. The re-specification model was done by releasing indicators at the variable of promotion (PROMOTION2) with the lowest value of the loading factor. The result of re-specification indicated that indicators had fulfilled convergent validity with the value of the loading factor from each indicator more than 0.50 (Figure 1) and the AVE value of each variable more than 0.50 (Table 5).

Table 5 The result of the validity and reliability

Variables	AVE	Cronbachs Alpha	Composite Reliability
Brand Image	0.686	0.845	0.897
Price	0.710	0.613	0.829
Stu.Decision	0.777	0.848	0.898
Phys.Evid	0.630	0.805	0.872
Place	0.627	0.704	0.834
Motivation	0.655	0.821	0.883
Product	0.643	0.860	0.900
Promotion	0.541	0.737	0.822
Process	0.561	0.739	0.836
People	0.687	0.772	0.868

Furthermore, testing for discriminant validity is carried out on the principle that the constructors' manifesters of different constructs should not be highly correlated (Ghozali, 2008). The comparison of AVE root values and correlation coefficients between variables can indicate that the model meets the discriminant validity requirements. This is caused by the overall correlation value between constructs less than the root value AVE. The discriminant validity of the model can also be evaluated based on the criteria of cross-loading. The cross-loading criterion shows the value of each indicator in the latent variable is different from the other indicator variables, which is indicated by the loading value of the indicator in a block of the construct in question is greater than the loading value in other constructs. Based on these two parameters, the model had fulfilled the discriminant validity criteria.

Composite Reliability indicates that the indicators have high consistency in measuring the latent constructs. In this study, the reliability test was performed with parameters of Cronbach alpha and composite reliability. A latent variable is said to be reliable if its value of Cronbach alpha and composite reliability more than 0.60 and AVE value more than 0.5 (Ghozali, 2008). The model showed all latent constructs had good reliability, accuracy, and consistency because it had fulfilled the criteria by the value of reliability and Cronbach alpha at each latent construct more than 0.6 and the AVE value
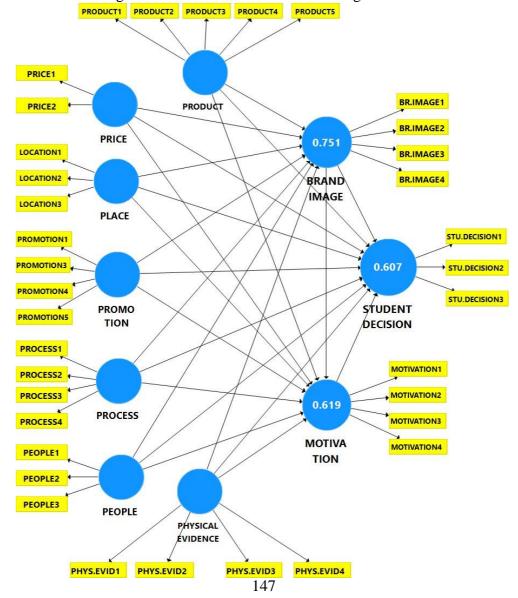
greater than 0.5 (Table 5). The output of the evaluation of the measurement model is presented in Figure 1.

Evaluation of Structural Model (Inner Model)

The structural model in PLS-SEM was evaluated with R-square and path coefficient estimation. The R-square of endogenous latent variables is endogenous construct variability that can be explained by the variability of exogenous constructs. Path coefficient estimation is the evaluation of the value of the coefficient, including real influence through bootstrapping and the value of the coefficient.

From the analysis of the structural model (inner model), based on the results of data processing (Figure 1), the result of the R-square value of the brand image was 0.751 indicating the model had a good criterion to describe the brand image variable. The R-square value of the motivation variable (0.619) and the decision to choose (0.607) had a value of less than 0.67 and more than 0.33. According to Ghozali (2008), the model had a moderate criterion to explain the Motivation variable and decision to choose.

The value of path coefficients showed a significant level of hypothesis testing. The value of path coefficients shown by t-statistic must be above 1.96 for the two-tailed hypothesis for the confidence level of 95 percent (alpha 5 percent). If the value of t-statistics is higher than the t-table, it means that the hypothesis is supported. The Path coefficient of the bootstrapping procedure results in the Smart PLS 3, as shown in table 6 was to look at the significance of the effect of each exogenous latent variable toward

endogenous latent variable by looking at the value of the coefficient parameter (original sample).

Figure 1. SEM model

Based on Table 6, the product variable, promotion, people, and physical evidence had a significant positive influence on the variable of brand image. This was indicated by the value of the t-statistic greater than the t-table (significance at t-table 5% = 1.96). The result also showed that the price, place, and process had no significant effect on brand image. The variable that had the greatest positive influence was the product by 0.368. Another variable that had a significant positive influence was the product (0.324), physical evidence (0.218), and promotion (0.100).

The product variable, place, process, and brand image had a significant influence on motivation. In comparison, variable of people and the physical environment had a significant direct influence on motivation through brand image. The result also showed that the price and promotion had no significant effect on motivation, either directly or indirectly. The variable that had the greatest positive influence was the product by 0.365. Another variable that had a significant positive influence was the brand image (0.258), process (0.154), and location (0.108).

The result indicated that promotion and motivation had a significant influence on student's decisions because they had a greater t-statistic than the t-table. The price, place and physical environment did not influence the student's decisions. While variable of product, process, and brand image had indirectly significant influence. The interesting thing was shown by the people variable. The study showed that people had no direct or indirect influence on the student's decision, but had a significant total influence on the student's decision. The variable that had the most direct influence on a student's decision was the motivation variable by the value of path coefficients of 0.410. Variable of promotion with the value of path coefficients of 0.130 had a direct positive influence the second only variable of motivation.

Discussion

The result of the study showed that the graduate education program had a significant influence on the brand image of graduate education. This result indicates the product of graduate education is one component of the marketing mix that is very influential in the brand image of the graduate education of IPB. The indicator that contributed the greatest to a product variable was department curriculum that was oriented to the development of science and the needs of the workforce. Different research results found in the research of Kurniatun and Rosalin (2018), namely product has a significant effect on brand image.

The results showed that the program significantly affected students' motivation to choose postgraduate education. This indicated that the graduate education program offered by IPB is an answer to the respondents in the effort to satisfy their need for graduate education. Motivation appears because of the need perceived by consumers that appear because the consumers feel discomfort (Sumarwan, 2015). These respondents felt that their needs will be fulfilled by continuing to study at the graduate education of IPB. This research was supported by research by Wandy and Dharmayanti (2014), which stated that the product had a significant effect on consumer motivation for Mie Lopo Timor products. Sarianti and Atris (2013) showed different results where the product had no significant effect on consumer purchasing motivation.

The program had no significant direct influence on the student's decision to choose

the graduate education but had a significant indirect influence. This may be implied that the graduate education program offered was not the determining factor that directly influenced the student's decision. However, the variable of the program had an indirect influence on a student's decision through brand image and motivation. The explanation for this is the student's decision to choose the graduate education of IPB was affected by high student motivation. The increasing motivation of these students was due to the high trust of the brand image of IPB and the student's perceptions of the quality of graduate education programs of IPB. The results of research showing that products influence student choices are found in the research of Kurniawati (2013), Sefnedi (2013), and Zain, Jan, and Ibrahim (2013).

Table 6 Path Coefficient

	Direct Effects		Indirect Effects		Total	
	Original Sample	T- Sta-tistics	Original Sample	T- Sta-tistics	Original Sample	T- Sta-tistics
Product ->Brand Image	0.324	5.129*			0.324	5.129*
Price ->Br.Image	0.062	1.608			0.062	1.608
Place ->Br.Image	-0.060	1.530			-0.060	1.530
Promotion ->Br.Image	0.100	2.210*			0.100	2.210*
Process ->Br.Image	0.048	0.869			0.048	0.869
People ->Br.Image	0.368	6.292*			0.368	6.292*
Phys.Evid ->Br.Image	0.218	4.580*			0.218	4.580*
Product ->Motivation	0.365	4.846*	0.084	2.797*	0.449	6.740*
Price -> Motivation	-0.015	0.290	0.016	1.387	0.001	0.023
Place ->Motivation	0.108	2.524*	-0.015	1.432	0.093	2.174*
Promotion ->Motivation	0.070	1.449	0.026	1.591	0.096	1.951
Process ->Motivation	0.154	2.387*	0.012	0.751	0.166	2.533*
People ->Motivation	0.027	0.337	0.095	2.452*	0.122	1.710
Phys. Evid ->Motivation	-0.007	0.118	0.056	2.425*	0.050	0.923
Br.Image ->Motivation	0.258	2.763*			0.258	2.763*
Product ->Stu.Decision	0.108	1.360	0.193	4.047*	0.301	4.349*
Price ->Stu.Decision	0.045	0.925	0.002	0.090	0.047	0.981
Place ->Stu.Decision	0.044	1.018	0.036	1.795	0.080	1.720
Promotion ->Stu.Decision	0.130	2.350*	0.042	1.642	0.172	3.133*
Process ->Stu.Decision	0.124	1.785	0.070	2.131*	0.193	2.646*
People ->Stu.Decision	0.090	1.130	0.060	1.214	0.150	2.087*
Phys.Evid ->Stu.Decision	-0.003	0.060	0.026	0.868	0.023	0.368
Br.Image ->Stu.Decision	0.027	0.264	0.106	2.291*	0.132	1.176
Motivation ->Stu.Decision	0.410	5.266*			0.410	5.266*
Product -> Br.Image	0.324	5.129*			0.324	5.129*
Price ->Br.Image	0.062	1.608			0.062	1.608
Place ->Br.Image	-0.060	1.530			-0.060	1.530
Promotion ->Br.Image	0.100	2.210*			0.100	2.210*

* significant if t-statistic > t-table α = 5% (1.96)

The study showed that the price had not significantly influenced the brand image. Brand image is what is perceived by the customers. The policy of tuition fees for graduate education led to a poor perception of students. The students felt the tuition fee of graduate education of IPB was relatively more expensive compared to other state universities. This can be explained that the students felt the rising cost of graduate education, with the implementation of the single tuition fee (UKT) in 2015, was not followed by the quality of services given. Different research results found in the research of Sawaji et al. (2010) and Wibisono (2014), namely price has a significant effect on brand image. According to Filip (2010), the pricing policy will have an impact on the brand image of the university as some consumers perceive the more expensive services, the more substance value.

The price variable had no significant effect on the student's motivation to choose graduate education. This result indicated that the price was not one of the boosters of

students in choosing the graduate education of IPB. The tuition fee policy change did not affect the student's motivation to choose graduate education of IPB. The results of this study differ from the results of the study of Sawaji et al. (2010), and Wandy and Dharmayanti (2014), which shows that price has a significant influence on motivation. The result showed the price variable did not significantly influence the student's decision to choose an education graduate. In making decisions, the students did not consider price as an important factor. This can be positively interpreted as students did not choose to attend graduate school for a relatively affordable price or availability of scholarships, but because of other factors such as their high motivation. The results of this study are in accordance with the study by Sefnedi (2013), Kurniawati (2013), and Yenida et al. (2015). Research conducted by Ming (2010), Sawaji et al. (2010), Irawan and Faisal (2014), Dao and Thorpe (2015), and Sukendar (2015) showed different results, namely price significantly affected students' decisions.

The location of graduate education did not significantly affect the brand image of graduate education. The location, which is strategic, reachable by public transport and located near the center of government and business, had less contribution in shaping the brand image of the education degree of IPB. The university location was less considered as important in deciding to choose the education graduate of IPB. The study by Kurniatun and Rosalin (2018) showed a different result the location had a significant effect on the University's image.

The location of graduate education had a significant effect on the student's motivation. This meant that the respondents perceived the location of graduate education quite well, thus increasing the motivation to choose IPB. Putlia and Ihalau (2017) stated that strategic location would increase the influence of prospective motivation in making service choices of higher education. Wandy and Dharmayanti (2014) stated that the product had a significant effect on consumer motivation.

The results also showed that the university location did not significantly influence the student's decision to choose graduate education. The result showed that the respondents did not consider university location in deciding to choose. However, a study by Irawan and Faisal (2014), Hariyani and Sartana (2014), Sukendar (2015), Yenida et al. (2015), and Podungge et al. (2016) showed a different result that was the place variable significantly influenced the decision to choose.

The study result stated that the promotion variable had a significant effect on brand image. These results indicate that graduate education promotion activities have an important role in shaping the graduate education brand image. Sawaji et al. (2010) stated that marketing communication significantly influences the image of private universities. A study conducted by Hermanda, Sumarwan, and Tinaprilla (2019) showed that social media influencers had a positive and significant relationship to brand image.

The promotion of graduate education did not significantly influence the student's motivation. This can be interpreted that the promotion conducted by IPB had not been able to increase the motivation of student candidates to study in IPB. Effective promotion can be developed by trying to understand the needs and desires of students related to graduate education. This result was in line with the research conducted by Sawaji et al. (2010), stating that marketing communication had no significant influence on motivation. Other studies showed different results, namely the promotion variable had a significant influence on motivation (Sarianti & Atris, 2013; Aji, Djawahir, & Rofiq, 2019; Wandy and Dharmayanti, 2014)

The result showed that the promotion of graduate education had a significant influence on a student's decision to choose graduate education. This may imply that the

promotional activities of graduate education influenced the decision-making process of students. Information obtained from promotional activities was one of the important elements to be considered by students in making decisions. The study result was in accordance with a study by Sawaji et al. (2010), Sefnedi (2013), and Zain et al. (2013), who found that the promotion variable significantly influenced the student's decision.

The brand image of graduate education had no significant relationship with the process of graduate education. This showed that students took less consideration of the educational process of graduate education in deciding to choose. A study by Wibisono (2014) showed a different result the process had a significant effect on university image. The result showed that the process of education degree had a significant impact on the student's motivation. This showed that the better the students' perceptions of the graduate education process, the more improving the student's motivation to study at the graduate education of IPB. The study results are in line with the research results of Rahardjo and Firdaus (2016), which stated that there is an influence of process variables on student motivation.

The student's decision to choose an education graduate had not been directly signed by the process of graduate education. However, the educational process had an indirect influence positively and significantly to the student's decision. The result of this study indicated that the process of graduate education was not an important factor that determined the student's decision to choose. The educational process was one that encourages students to consider IPB as one of the places to continue graduate education. It was supported by the result of a study by Yenida et al. (2015), which stated the variable of the process did not significantly influence the student's decision. In another study, it was shown a different result, in which the process variable significantly influenced the student's decision (Kurniawati, 2013; Sefnedi, 2013; Irawan & Faisal, 2014; Sukendar, 2015).

The people variable had a significant influence on the brand image of graduate education. The increase in students' perceptions of graduate education people made the brand image of graduate education of IPB stronger. Indicators of people that contribute most to people variable were qualifications and competence of lecturers. Different results were found in a study by Wibisono (2014) that people had a significant influence on university image. The result showed that people had a significant influence, but not directly on the student's motivation. The people had a significantly positive and indirect impact on the student's motivation. This result can be interpreted that the students took less consideration of the human resources in choosing graduate education. Rahardjo and Firdaus (2016) stated that there was an influence of the variable of people on student motivation.

The result also showed that the human resources of graduate education had a positive but not significant relationship to the student's decision, both directly and indirectly. However, based on the result of the study, it was shown that people had a positive influence and a significant influence on student's decisions. This may imply that people influenced students in making the decision. This result was in accordance with a study Sefnedi (2013), Irawan and Faisal (2014), Sukendar (2015), and Podungge et al. (2016). In other studies, it was shown different results, that people variable did not significantly influence the decision to choose (Yenida et al., 2015).

The result showed that the physical evidence had a positive and significant relationship with the brand image of graduate education. This indicated that the physical evidence had a significant influence on the formation of a brand image. Students had a

good perception of the physical evidence to form attitudes that reinforce brand image in the minds of students. The same result was found by Wibisono (2014) and Kurniatun and Rosalin (2018) that physical evidence had a significant influence on the university image.

The result showed that the physical evidence had a direct effect on the student's motivation, which was not significant, but it had a significant indirect effect on the student's motivation through brand image. This can be explained that the students were a lack of information about the physical environment of IPB, so it did not affect the student's motivation. However, respondents had a good perception of the brand image of graduate education. This perception contributed to the increasing student's motivation. Rahardjo and Firdaus (2016) stated that there was an effect of physical appearance variables on student motivation.

This study showed that the physical evidence did not significantly influence the student's decision. This showed that the respondents did not consider the physical evidence of the graduate education of IPB in the process of making decisions. Respondents felt that the physical evidence was not an important criterion to be considered in making a decision, but there were other factors more important, like motivation and promotion. The same research results were found in the research of Sefnedi (2013). The study by Kurniawati (2013), Hariyani and Sartana (2014), and Zain et al. (2015) found a different result that educational facilities had a significant influence on the decision of prospective students.

The brand image of graduate education was the belief formulated by someone about the products and services of graduate education. The result showed that the brand image had a significant influence on the student's motivation. Respondents had a strong perception of the brand image of graduate education of IPB that encouraged the respondents' motivation to attend graduate school at IPB. The results of this study that the university image affects student motivation in line with research Sawaji et al. (2010) and Solikhah et al. (2016).

The result showed that the brand image had no significant direct effect on the student's decision, but had a significant indirect effect on the student's decision through motivation. This indicated that the brand image was not an important factor for students to be considered when making decisions. However, the brand image had a strong influence on the increase of motivation of the graduate students of IPB. This strong motivation implied to the increasingly strong tendency of students to decide to choose the study in the graduate education of IPB. Winarti (2014) shown that the university image did not significantly influence the decision to choose the university. Research conducted by Sawaji (2019), Solikhah et al. (2016), and Sunariani (2017) show different results, namely the university's image influences students in choosing universities.

The study result indicated that the student's motivation continued the study at the graduate school had a significant effect on the student's decision to continue the study at graduate education. The result also showed that student's motivation was the most influential factor in the student's decision to choose the graduate education of IPB. The indicator that provides the greatest contribution to the motivation variable is studying in the best study program of interest.

A study by Tereza (2013) showed that the difference in the underlying motivation of students to pursue higher education had a positive influence on university choice to continue the study. The results of Skatova and Ferguson's research (2014) show that differences in student motivation to pursue undergraduate education affect

university degree choices. The results of research that show that student motivation influences student choices are also found in the research of Sawaji (2019) and Solikhah et al. (2016).

This study has several limitations. the sample used was active students of the master's program, so most of the samples knew the application of the graduate education marketing mix. This can lead to this research being unable to fully explain what marketing mix variables are considered by students when making decisions. This research is limited to the marketing mix, brand image, and student motivation variables so that this research has not been able to fully describe all the factors that influence student decisions.

Conclusion and Recommendation

Conclusion

The brand image was directly influenced significantly by the product, promotion, human resources, and physical environment. Variable of motivation was directly influenced significantly by product, promotion, location, and brand image, as well as indirectly influenced significantly by the variables of human resources and physical environments through brand image. Variables of promotion and motivation had a significant direct effect on the decision to choose, while product, processes and brand image had a significant indirect effect on the decision to choose through brand image and/or motivation.

Managerial implications in this study are determined by interpreting the results of the influence analysis. Variables of the marketing mix that have a significant total effect on the decision to vote are variables that are prioritized for use in developing strategies, namely products, promotions, processes, and people.

Recommendation

Based on the study , managerial implications that can be considered by IPB University in compiling graduate education marketing strategies as an effort to improve brand image, motivation and decision to choose IPB graduate education are as follows: (1) Product strategy, namely all graduate study programs include curriculum development that supports the development knowledge and needs of the world of work and combining theory and its application, increasing or maintaining accreditation status, and increasing the quantity and quality of research; (2) People's strategy (human resources), which is making programs to improve and develop lecturers' qualifications and competencies in the application of science and technology, as well as the ability and professionalism of lecturers in guiding research; (3) Promotion strategy which is making a graduate education promotion program through internet and social media, both in terms of appearance, ease of access, and quality of information about IPB graduate education and can be accounted for; and (4) Process Strategy, which is developing learning standards and procedures, and a thesis research process that is clear, planned and running well.

Based on the study, further research is expected to complement this research, among others by using a sample of prospective students who have registered or are new. This can better illustrate the conditions when students make decisions in choosing higher education services. In addition, further research can use other variables deemed

appropriate to make higher education service choices or deepen variables that use other indicators.

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