Dominant factors for the marketing of private higher education

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Dominant factors for the marketing of private higher education

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C H R O N I C L E	A B S T R A C T
	Higher education institutions, like any business institution, should satisfy their clients (students) for them to survive in the higher education service business market. As a service business, higher education institutions also need to follow marketing principles in their attempt to attract potential students. We investigated the effect of marketing mix dimension on internal and external marketing in universities. The research used primary data from a questionnaire survey of 526 students in West Java Province, Indonesia, and then drew conclusions by a structural equation model (SEM) analysis. The research findings revealed that place, product, price and promotion have a positive effect on external marketing. Whereas physical evidence, people and processes have positive, significant effects on internal marketing. There was also positive, significant correlation between external marketing and internal marketing. The research findings were hopefully beneficial for higher education management, to be made as guidance in implementing their marketing strategy. Higher education leaders may apply the external marketing policy to attract potential student interest and the internal marketing policy to improve the quality of their service and internal marketing. The study delivered a broader picture of the application of marketing mix model on universities. In addition, the discussion presented the implication of the offered theory and practice, the research limitation, and the direction of future researchers.

1. Introduction

In the current decade, universities in Indonesia have been growing rapidly in number. In 2020, there were 4,593 universities in total. The growing numbers of universities affected the competition between universities. Some universities were eventually closed, being the loser in such competition (source: https://www.cnnindonesia.com). Higher education institutions, like other business institutions, must satisfy their clients (students) to survive in the service business market (Chawla, 2013). According to Durkin and McKenna (2011) universities need to follow marketing principles in their attempt to attract potential students. According to Gajić (2012) the education sector has to change marketing strategy as a consequence of dynamics in competition. If universities want a dynamic change they should concentrate on student expectations and hopes in their marketing (Hall & Witek, 2016). Pain's opinion Stimac and Simic (2012) and Sousa and Magalhães (2019) agree that higher education institutions should develop a marketing strategy to win competition.

Strict competition in student recruitment has created a strong need for higher education institutions. Based on the reference above, it could be concluded that private universities as a higher education service industry need to develop a sound marketing strategy. According to Chawla (2013), Filip (2012) and Ndofirepi et al. (2020). A set of marketing mix variables were recommended to universities for them to choose one in recruiting potential students and in designing their marketing strategy. Marketing mix is a set of marketing instruments a company mixes so as to produce responses the targeted market wants, the dimensions of which

include product, price, promotion, place, process, people, and physical evidence Kotler et al (2016). According to Kavididevi, (2009) who carried out a research into marketing strategy by using marketing mix in Chester, Hunddersfield and Staffordshire University, the aspects whose service quality have to be maintained and improved in order to successfully attain and retain students were: Product (Degree Awarded), Price (Course Fees), Place (Coaching Place, Accommodation Service), Promotion (Advertising, Internet Marketing, Brochures), Process (Administrative Processes, Student Enrolment), People (Face-to-face communication, Personal contact), and Physical Evidence (Brochures, Teaching Material). Another research into marketing mix in higher education was carried out by Lim et al. (2020) at School of Business, Swinburne University of Technology, Sarawak, Malaysia, concluding that prominence, excellence, prospectus, program, price, people, premium, and promotion have positive, direct effect on the selection of program study, but people, quality, and promotion elements have insignificant effect.

The present research was grounded on a perception that the marketing mix model does not completely represent the ways of university marketing. Therefore, it would examine the effects of all dimensions of the marketing mix model (product, price, promotion, place, process, people, and physical evidence) on university marketing. A partial least squares structural equation modelling (PLS-SEM) technique is deployed to examine these relationships. Research communities believe that PLS is superior to other techniques in analyzing small size samples or data with non-normal distribution (Goodhue et al., 2012). The research findings would deepen understanding on supporting factors in university marketing in attracting potential student interest and in retaining students.

Partial least squares (PLS) is an important statistical technique in the empirical analysis method of marketing research and other social sciences (Hair, 2019). In PLS, it is assumed that all variance measures are valuable to explain, because an approach of estimating latent variables is deemed a linear combination of indicators. PLS uses an algorithm iteration consisting of PLS serial considered as an alternative model of covariance based SEM. There are two approaches in SEM, namely, covariance-based SEM and SEM with a variance approach that uses Partial Least Squares (PLS) technique. The present research used PLS which was a type of analysis of component-based SEM with a formative variable nature and serves only as a predictor analysis instrument. The PLS method is also known as prediction-oriented technique. PLS approach is particularly useful in predicting dependent variables by involving some independent variables (Lee, 2011).

2. Literature review

2.1 Theoretical background and hypotheses

The success or failure of an organization in achieving its goals depends on the marketing strategy applied. An instrument usable in developing a marketing strategy is the marketing mix method. McCharthy, in 1964, developed a 4P (product, price, promotion and place) marketing mix model. It was developed for the marketing of products produced by manufacturing industries (Goi, 2009). Over time, it has been used not only by manufacturing industries but also by the service industry. To accommodate service characteristics, Booms and Bitner developed a marketing mix model for the service industry in 1980, by broadening 3P to 7P (product, price, promotion, place, process, people, and physical evidence) (Goi, 2009). The base model to be the reference of the present research was 7P the marketing mix model for service industry, consisting of seven dimensions.

The 7P marketing mix model was relevant in the research because the dimensions used were able to represent service industry characteristics. The marketing mix concept on service companies is grouped into two areas, that is, external and internal marketing (Schulz et al., 2017; Christopher et al., 2013). In the present research we involved the two areas, that is, external marketing and internal marketing. The external marketing focused on the measures of attracting the interest of potential students so that they decide to choose the university. The marketing mix dimensions appropriate to external marketing are place, price, product and promotion (Christopher et al., 2013). The second area, internal marketing, focused on academic and non-academic service quality. Internal marketing needs to be improved because higher education institutions, like any business institution, should satisfy its clients (students) for it to survive in the business/service market (Chawla, 2013). If students perceive that the services they receive are good, from enrollment to post-graduation, then they will most likely recommend others to enroll in the university. The relevant dimensions with internal marketing are process, people, and physical evidence. Combining both internal marketing and external marketing would be the best formulation to developing a marketing strategy, because internal marketing and external marketing go in parallel and complementary in optimizing university marketing.

2.2 Research hypothesis development

Based on the base model above, below was developed some hypotheses to find the answers to the research purpose. Fig. 1 presented an inter-variable hypothesis model. There were 8 hypotheses to test in the next stage. The hypotheses were as follows,

Hypothesis 1: *Place has a positive effect on external marketing.*

Place in the present research was defined as the place where interaction and learning between students, lecturers, and academic staff are taking place. Its measurement indicators are: accessibility of campus location by public vehicles, close to public facilities and campus location, and clean and neat campus location (Christopher et al., 2013; Gordon, 2012).

Hypothesis 2: *Product has a positive effect on external marketing.*

Product means all education services offered to potential students. The measurement indicators of product variables are: awarding of appropriate degrees, diverse study programs, study programs offered to meet market needs, availability of a standard term of finishing study, and gives advice on finishing study on time (Christopher et al., 2013; Isoraite, 2016).

Hypothesis 3 : *Price has a positive effect on external marketing.*

Price is meant the cost paid by students for attending an education program in a university. The measurement indicators of the variable are: inexpensive tuition, less tuition relative to that in other campuses, the payment of tuition that may be paid in installments, easy payment method, and availability of scholarship from internal and external sources (Christopher et al., 2013; Singh, 2012; Gajic, 2012).

Hypothesis 4 : *Promotion has a positive effect on external marketing.*

Promotion is all activities and communication performed to introduce a university to public and potential students. Its measurement indicators are: socialization by printed media (newspaper), electronic media, Internet, brochures, banners, and school visitation (Christopher et al., 2013; Singh, 2012; Gajic, 2012).

Hypothesis 5: *Physical evidence has a positive effect on internal marketing.*

According to Christopher et al. (2013) and Asiegbu et al. (2012) physical evidence is resources and environment where academic services are provided. Its measurement indicators are: availability of textbooks for the courses offered, easy access to scientific journals, clean and comfortable classrooms, and complete and accessible laboratories.

Hypothesis 6: *People has a positive effect on internal marketing.*

By People is meant as those who are directly involved in performing the whole university activities and to be a factor with important roles in their organization (Pardiyono & Indrayani, 2019; Ogunnaike, 2014). Its measurement indicators are: mentoring lecturers are always concerned with the success of their students, department heads always help students in completing their study, campus staff is always attentive and helpful in serving student needs, library staff always helps students, and registration officers are friendly and very helpful to students.

Hypothesis 7: *Process has a positive effect on internal marketing.*

Meant by Process is the measures taken by private universities to perform their activities in a bid to meet their consumers' needs and wants quickly and correctly (Pardiyono & Indrayani, 2019; Ogunnaike, 2014). Its measurement indicators are: course materials match the syllabus, lecturing sessions are always on time, evaluation and final scoring are objective, availability of good learning online, and students are allowed to take examinations for upgrading their score.

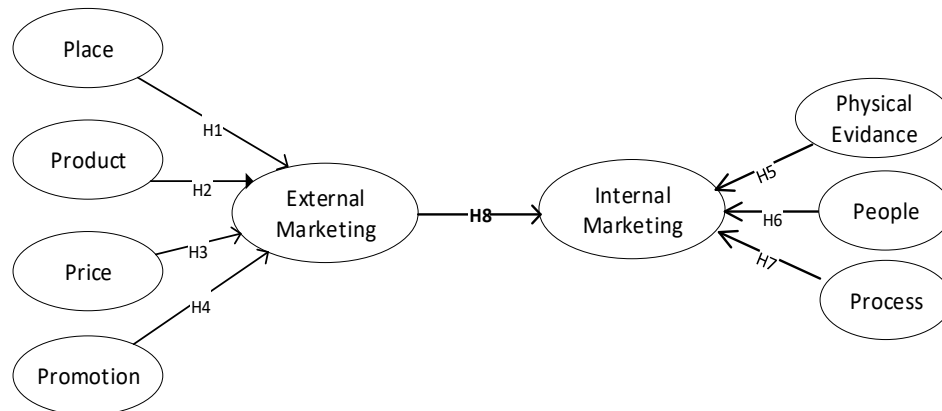**Hypothesis 8:** *External marketing has a positive effect on internal marketing.*

Fig. 1. Hypotheses Model

3. Methodology

3.1 Instrument development

The data collection was conducted by using a questionnaire, in the form of a list of written questions or statements made in accordance with the variables to be investigated (Sekaran & Bougie, 2019). The core of a survey is a questionnaire, which describes samples for conversations between the researcher and respondents. The findings of a survey highly depend on the questionnaire. To minimize errors in responses, a questionnaire has to be made well Singh, (2017), his research questionnaire used a five-point likert scale questionnaire to find the answers to the research purpose, i.e., 1 means strongly disagree, 2 disagree, 3 don't quite agree, 4 agree, and 5 strongly agree.

The research questionnaire used both closed and open questions. Closed questions are ones which restrict the respondents in answering questions, whereas open questions are ones which give freedom to the respondents in answering questions according to what they know (Crhabanski, 2014). The questionnaire content is divided into two parts. Part one contains respondent data, such as email, age, sex, and university of origin. Part two contains assessment of campus marketing and services. Before being used as a data collection instrument, the questionnaire had been validation- and reliability-tested by trying it out to 30 respondents.

3.2 Sampling and Data Collection

The research population was the students of private universities in West Java Province, Indonesia. There were 372 higher education institutions in West Java Province (Source: Statistic Higher Education Republic of Indonesia, 2020) Research sampling used a multi-strata random sample, that is, the population was divided into strata (sub-population). The technique was used for non-homogenous, multi stratum population proportionally (Hirpassa, 2015). The universities are highly diverse, so one thing that can differentiate them is the number of active students of each university. Thus, the population was classified into three groups: group 1 was universities with the number of active students of > 5,000, group 2 from 1,000 to 5,000, and group 3 < 1,000.

The determination of a minimum number of samples used a counting of 5 times the number of manifest variables (Black & Babin, 2019). The variables identified were 32 manifest variables, so the minimal number of samples was 160 respondents. Questionnaire spreading used google form to 600 students of 20 private universities, but the questionnaires returned and completely filled out were 526, consisting of 4 universities with total students above 5000, 7 with students between 1000 and 5000, and 9 with students < 1000. The research data processing used Structural Equation Modeling - Partial Least Square (SEM-PLS), which is a powerful analysis method because it is applicable to all data scales and does need lots of assumptions (Afthanorhan, 2013). Convergent validity was used to measure uniformity between latent variable and manifest variable used according to concepts and theories. The measurement of convergent validity may use the results of PLS algorithm processing, namely outer loading, reliability construct, and average variance extracted (AVE). Outer loading is a measurement which contains the loading factor of the manifest variable that shows the extent of the correlation between manifest variable and latent variable. If the measurement of validity with outer loading can be met, that is, above 0.7 (Nfuka & Rusu, 2011), then further tests can be performed. Measurement of convergent validity was then performed by Construct Reliability test. A good and reliable Construct Reliability has Composite Reliability value greater than 0.7 (Cao et al., 2015; Huang et al., 2013). Convergent validity test was then performed by using average variance extracted (AVE) value, which indicates the average community (variance) for each independent factor in the reflective model. AVE value must be greater than 0.5 (Shau, 2017; Huang et al., 2013).

Structural model is a model which connects independent variables with dependent variables or between one dependent variable with another. Independent variable is one considered as having effect on other variables, but is not affected by other variables in the model. The values used in the structural model are: *a)* R-Square value, explaining to the extent of which the independent variable hypothesized in the equation is able to explain the dependent variable. If R^2 is greater than 0.7 then it is categorized as high, meaning that the model produced has a value with a good uniformity (Huang et al., 2013). *b)* Q-square is computed to evaluate a path model. If Q-square is greater than null then the model has a predictive significance and Q^2 value is found by the following equation: $Q^2 = 1 - (1 - R_1^2)$ (Silaparasetti et al., 2017).

4. Results and discussion

4.1 Respondents' Demography

The demography variables considered in the research were sex, age, and university of origin. The respondents' demographic information was presented on the Fig. 2 below:
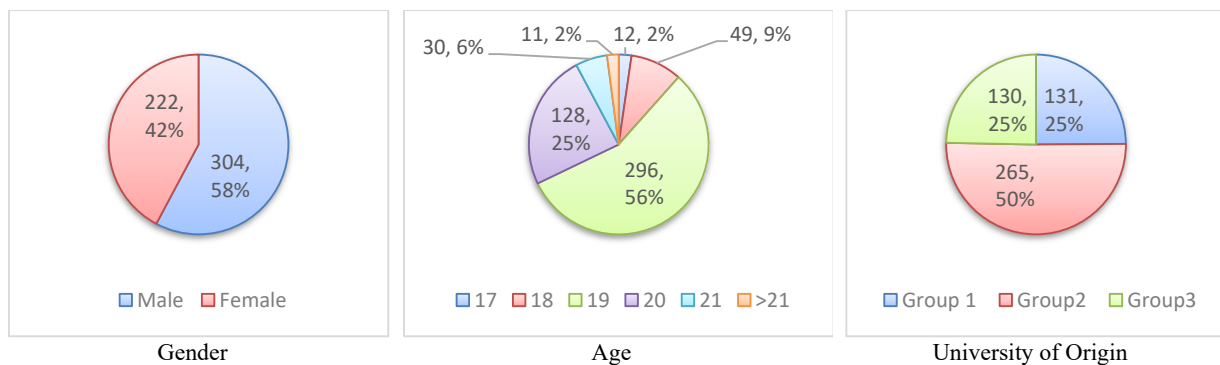

Fig. 2. Personal characteristics of the participants

4.2 Hypotheses testing

Hypothesis testing is a procedure of generating a decision (accepting/rejecting the hypothesis). After having performed an analysis by using a path diagram, next is to run value bootstrapping on a path diagram to find a value to be t-tested for its significance. If the t value of structural equation is ≥ 1.96 then it is concluded that there is a significant effect of the independent variable on its dependent variables (Chen et al., 2014). The outer loading of all dependent variables on external marketing showed values >0.7 except for PM1 variable, that is, campus carried out socialization by newspaper, and PM5 variable, that is, campus carried out socialization by banners/billboard, both being of value <0.7, so the dependent variables should be reduced (Huang et al., 2013). On the outer loading of internal marketing variables there were no variables with value less than 0.7, so the model has been valid, meaning that there has been conformity between the independent variable and the dependent variables. The results of the outer loading values of all internal marketing and external marketing were presented on Table 1.

Table 1
List of item with factor loading

Constructs	Kode	Item description	Loading
Place	Pl1	Campus location is easily accessible to public vehicles	0.853
	Pl2	Campus location is close to public facilities	0.752
	Pl3	Campus location is clean and neat	0.887
Product	Pd1	Campus awards appropriate degrees	0.811
	Pd2	Campus offers diverse study programs	0.745
	Pd3	Study programs offered meet market needs	0.808
	Pd4	Campus set a standard term of finishing study and gives advice on finishing study on time	0.876
Price	Pc1	Inexpensive tuition	0.887
	Pc2	Tuition is inexpensive relative to that in other campuses	0.879
	Pc3	The payment of tuition that may be paid in installments according to student capacity	0.881
	Pc4	Easy payment procedure and method	0.873
	Pc5	Availability of scholarship from internal and external sources	0.846
Promotion	Pm1	The university makes by printed media (newspaper)	0.635
	Pm2	The university makes by electronic media	0.878
	Pm3	The university makes by Internet	0.871
	Pm4	The university makes by brochures and banners	0.630
	Pm5	The university makes by school visitation	0.846
Physical Evidence	PE1	The university makes available textbook for the courses offered	0.769
	PE2	Availability of sufficient learning facilities	0.871
	PE3	Easiness to access scientific journals	0.973
	PE4	Clean and comfortable classroom	0.924
	PE5	Complete and accessible laboratory	0.939
People	Peo1	Mentoring lecturers always concern with their own student success	0.897
	Peo2	Head of Department is always helpful to students in finishing their study	0.845
	Peo3	Campus staff is always attentive and helpful in serving student needs	0.857
	Peo4	Library staff always helps students	0.769
	Peo5	Registration officers are friendly and very helpful to students	0.784
Process	Pro1	Course materials match the syllabus	0.994
	Pro2	Lecturing sessions are always on time	0.914
	Pro3	Evaluation and final scoring are objective	0.877
	Pro4	Availability of good learning online	0.900
	Pro5	Students are allowed to take examination for upgrading their score	0.845

4.3 Convergent validity

Convergent validity is aimed to find the correlation between the indicators and their independent variable performed by construct reliability test. The Construction reliability test used two measurements namely average variance extracted (AVE) with composite reliability. A construct's reliability is good and reliable if the composite reliability value is greater than 0.7 (Cao et al., 2015; Huang et al., 2013). The test result showed that all variables were of composite reliability greater than 0.7, so all the research variables could be used.

Next, the convergent validity test used average variance extracted (AVE) value. This value indicates the average communality (variance) for each independent factor in a reflective model. It was found from the result of the test that the value of AVE > 0.5, meaning that the information contained in the dependent variables could be reflected by the independent variable (Abalala et al., 2021; Alwreikat & Rjoub, 2020; Shau, 2017; Huang et al., 2013). Given that composite reliability >0.7 and AVE value >0.5, the model could be said to be reliable. Presented on the following Table 2 is the summary of composite reliability (CR) and average variance extracted (AVE) values.

Table 2
Convergent validity test

Constructs	CR	AVE
Place (Pl)	0.896903	0.841466
Product (Pd)	0.779912	0.871667
Price (Pc)	0.851194	0.839544
Promotion (Pm)	0.773296	0.870583
Physical Evidence (PE)	0.989677	0.765414
People (Peo)	0.771671	0.870624
Process (Pro)	0.879063	0.83548

4.4 Structural Model (Inner Model) Test

R-Square
R-Square or R^2 values of dependent variables show the extent of effect/conformity of the independent variable in affecting the dependent variables. R^2 value explains to the extent of which the independent variable hypothesized in equation is able to explain the dependent variables.

Table 3
Direct Effect, Indirect Effect, and R-Square

Path	Direct Effect	Indirect Effect	R-Square
External Marketing (X) → Internal Marketing (Y)	0.895		0.801835

The value of direct effect of External Marketing on Internal Marketing was 0.895, meaning that External Marketing has positive effect of 89.5% on Internal Marketing. R^2 value was 0.80, falling into a category of "high". It showed that the value yielded by the model has a good conformity (Huang et al., 2013).

Q-Square Predictive Relevance

The computation of Q^2 value found a value of 0.8, meaning that the research model has a good predictive relevance, because Q^2 value >0, meaning that the independent variable has a predictive level falling into a category of good on the dependent variables.

$$Q^2 = 1 - (1 - R_1^2) = 1 - (1 - 0.80) = 0.8$$

4.5 Hypothesis Testing

Hypothesis testing was performed after the variables with loading value of less than 0.7 had been reduced, namely Pm1 and Pm5 variables. The testing is a procedure of generating a decision (accepting/rejecting the hypothesis). The findings on the effect of place variable on table 5 showed a positive correlation and significant effect on external marketing (β=0.689, p=0.013, t=2.971). It means that hypothesis 1 was accepted. The same result also applied to hypothesis 2, that is, the product variable has a positive correlation and significant effect on external marketing (β=0.794, p=0.000, t=18.578). Price variable (β=0.910, p=0.000, t=13.583) in hypothesis 3 showed a positive, significant correlation with external marketing. Hypothesis 4, promotion variable (β=0.813, p=0.001, t=14.357) has a positive, significant effect on external marketing, was also accepted. The Fig. 3 below also showed that place variable was responsible for 47.5% of external marketing dimension, product variable for 63%, price variable for 83.8% and promotion variable for 83.3%.

The findings on internal marketing showed that physical evidence has β=0.530, p=0.001, and t=5.171; people variable has β=0.675, p=0.006, and t=9.418); and process variable has β=0.579, p=0.031, and t=7.015. It meant that physical evidence, people and process variables have positive, significant effects on internal marketing. Fig. 3 also showed that the physical evidence variable was responsible for 29.1% of the internal marketing dimension, the people variable for 49.9%, and process variable for 78.4%. The value of t-count on the effect of external marketing on internal marketing was 19.9055 > t-table (1.96), so hypothesis 8 was accepted, that is, there was effect of external marketing variable on internal marketing. The effect fell into a category of high and of positive value. It means that the higher the external marketing variable, the higher the internal marketing variable. Factor loadings of the indicators and t-count were presented on Fig. 3 and Fig. 3.
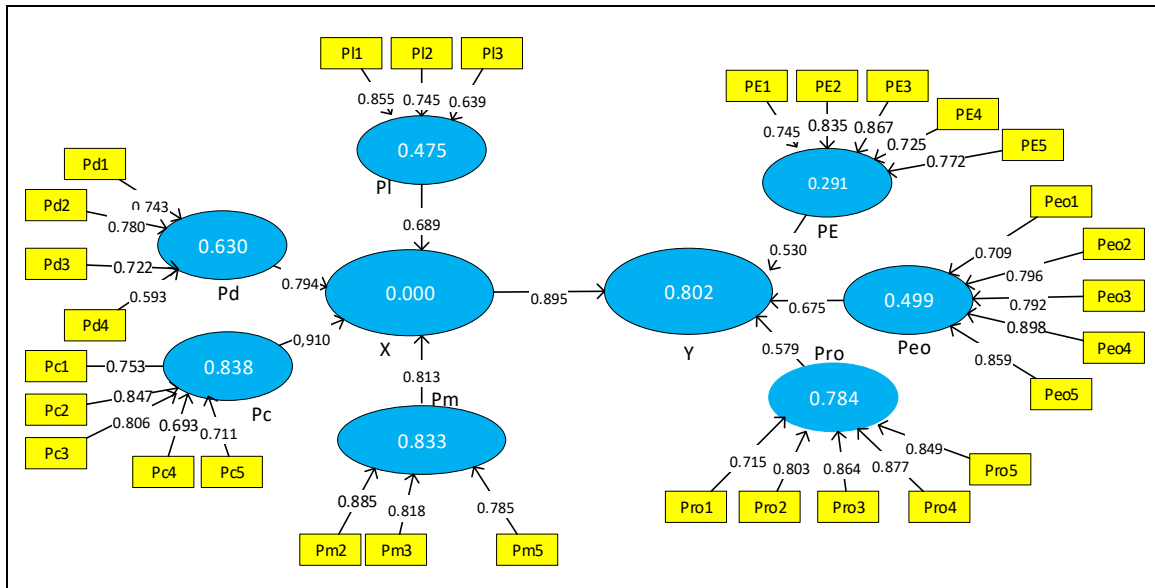
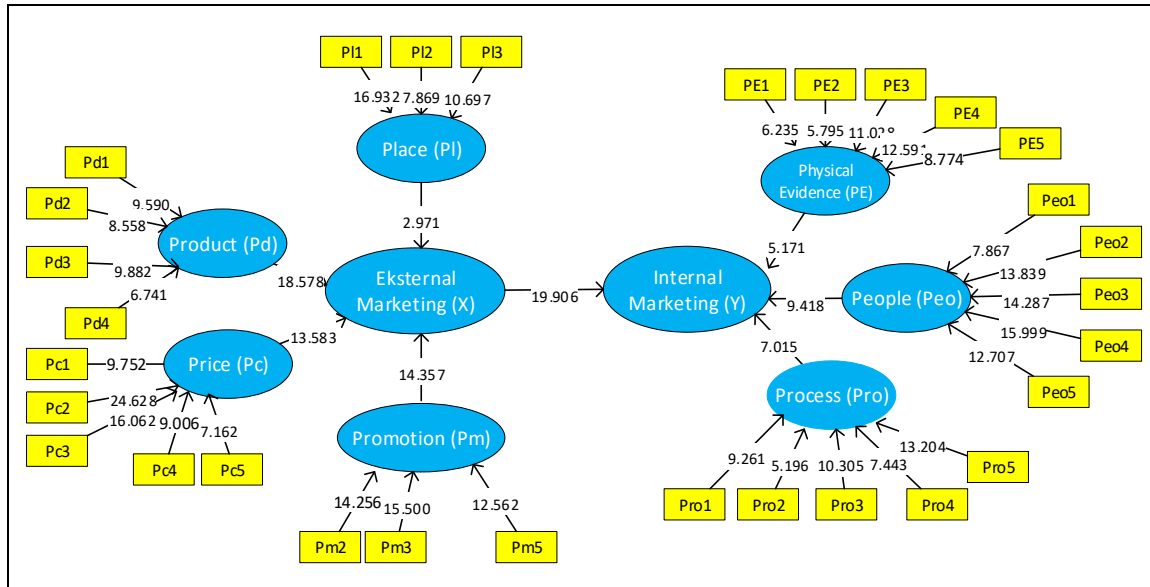**Fig. 3.** Factor loadings of the indicators, beta, and R^2 values

Fig. 4. T-statistics of the indicators and beta coefficients

Table 4
Direct effects

Independent Variable	Dependent Variable	β	t	p	Decision
H1: Place (Pl)	→ External Marketing (X)	0.689	2.971	0.013	Supported
H2: Product (Pd)	→ External Marketing (X)	0.794	18.578	0.000	Supported
H3: Price (Pc)	→ External Marketing (X)	0.910	13.583	0.000	Supported
H4: Promotion (Pm)	→ External Marketing (X)	0.813	14.357	0.001	Supported
H5: Physical Evidence (PE)	→ Internal Marketing (Y)	0.530	5,171	0.012	Supported
H6: People (Peo)	→ Internal Marketing (Y)	0.675	9,418	0.006	Supported
H7: Process (Pro)	→ Internal Marketing (Y)	0.579	7,015	0.031	Supported
H8: External Marketing (X)	→ Internal Marketing (Y)	0.895	19,9055	0.000	Supported

4.6. Discussion

The research was the first in university marketing with the greatest number of respondents in Indonesia. The survey aimed to examine the structural correlation between external marketing and internal marketing, together with their indicators. The findings would hopefully be useful for the development of theories on marketing in universities, like splitting marketing mix into external marketing and internal marketing. The external marketing focused on attracting potential student interest, while the internal marketing focused on services to active students. The findings would generate the best formulation for developing marketing strategy, because the activities of both internal and external marketing go in parallel and complementary to optimize university marketing. The present research examined whether or not place, product, price and promotion have an effect on potential student interest in choosing a university by external marketing activities. We also examined whether physical evidence, people and process affected service quality on active students so that they would "feel at home" and recommend it to other potential students.

First, place was responsible for 47.5% and has a positive effect on external marketing activities. The finding was in agreement with that of Brkanlic et al. (2020), Kavididevi et al. (2009), Chawla (2013) and Ndofirepi et al. (2020). It also validated Christopher et al. (2013) and Gordon, (2012) that the indicator on place variable was the reason for potential students in deciding their campus. Second, we found that the product had a positive effect and was responsible for 63% of external marketing. The finding was in agreement with that of prior researches by Hawkins & Frohoff (2010) and Lim et al. (2020) also validated Christopher et al. (2013) and Isoraite (2016) that the indicator of product variable was the reason for potential students to enroll in a particular university.

Further finding on external marketing was that price has positive correlation with and responsible for 83.8% of external marketing. It was in agreement with that of Brkanlic et al. (2020), Al-Fatah (2010), Lim et al. (2020), and Ndofirepi et al. (2020) also validated Christopher et al. (2013), Singh (2012) and Gajic (2012) that price variable was the reason for potential students in choosing a university. On the other side, though promotion variable has positive, significant correlation in agreement with Brkanlic et al. (2020), Durkin and Mckenna (2011), Lim et al. (2020) and Ndofirepi et al. (2020) but there were variables reduced because their value was <0.7, namely Pm1 (University carried out socialization by printed media (newspaper), and Pm5 (university campus carried out socialization by brochures/banners). The reduction of both PM1 and PM5 variables is understandable given that now a majority of people prefer social media and the internet to printed media. The finding was in agreement with that of Domazet et al., (2017), that is, promotion with the weakest effect was by printed media and brochures. Thus, for promotion, some findings Christopher et al. (2013), Singh (2012) and Gajic (2012) were not validated, only a few findings which were in agreement, that is, universities need to carry out socialization by electronic media, Internet, and school visitation.

On internal marketing it was found that physical evidence has positive, significant correlation. It was in agreement with Ndofirepi et al. (20200, Kavididevi et al. (2009), and Brkanlic et al., (2020). It also validated Christopher et al. (2013) and Asiegbu et al., (2012) that the indicator of physical evidence variable might improve quality service and student satisfaction. Second finding on internal marketing was that people had positive correlation, in agreement with Lim et al., (2020), Brkanlic et al., (2020) and Kavididevi et al. (2009). Some services to enhance for internal marketing strategy were people variable, that is, mentoring lecturers always concern with their student success, head of department is always helpful to students in finishing their study, campus staff is always attentive and helpful in serving student needs, library staff always helps students, and registration officers are friendly and very helpful to students (Ogunnaike, 2014).

The third on internal marketing was that the process has positive, significant correlation with internal marketing, in agreement with Ndofirepi et al. (2020), Kavididevi et al. (2009), and Brkanlic et al. (2020). The finding also validated Ogunnaike, (2014) the indicator of process variable might improve service quality and marketing. Hypothesis tests directly between external marketing variable and internal marketing variable showed positive, strong correlation between the two. It was in agreement with Ahmde & Rafiq (2013), Schulz et al. (2017) and Christopher et al. (2013) that internal marketing was one of the methods of achieving consistent service quality. Application of the concept has been growing not only in the service area but also in facilitating the application of external marketing strategy.

4.7 Implications for theory and practice

The implication of the research findings to all university management was that they can utilize the findings to be made as guidance in implementing their marketing strategy. Higher education leaders may take policies in external marketing to attract potential student interest by implementing the research findings. Based on the findings on external marketing, university management should carry out and improve the place aspect (campus location is easily accessed by public vehicles, close to public facilities, clean and neat). Next was product (appropriate degrees, diverse study programs, study programs offered to meet market needs, and availability of a standard term of finishing study. Next was price (inexpensive tuition, less tuition relative to that in other campuses, may be paid in installments, easy payment method, and availability of scholarship from internal and external sources. The last was promotion (universities should carry out socialization by electronic media, Internet, and school visitation).

Second, university management may adopt the findings on internal marketing to focus on academic and non-academic service quality. If students perceived good services from enrolment to post-graduation then they would most likely recommend that their friends enroll to the campus. Things to do on internal marketing are a) physical evidence (make available internal course textbook, sufficient learning facility, easy access to scientific journals, clean and comfortable classroom, and complete and accessible laboratory). b) People (mentoring lecturers are always concerned with the success of their students, department heads always help students in completing their study, campus staff is always attentive and helpful in serving student needs, library staff always helps students, and registration officers are friendly and very helpful to students). And c) Process (course materials match the syllabus, lecturing sessions are always on time, evaluation and final scoring are objective, availability of good learning online, and students are allowed to take examinations for upgrading their score).

4.8 Limitations and future research directions

There were some limitations of the research that should be admitted. First, we couldn't generalize the findings to all universities in the Republic of Indonesia, because the whole respondents came from only one province West Java. Whereas there were 34 provinces in the Republic of Indonesia. Second, the research findings would then be socialized and implemented, so communication with all stakeholders of universities is needed. Last, we recommended that follow-up studies on the same topic in different province(s) be carried out. They might apply a better method.

5. Conclusion

The research concluded the correlation among one set of marketing mix grouped into 2 areas: internal and external marketing in West Java Province, Indonesia. The research used an appropriate test and method approach so its findings really reflected the actual condition. The findings revealed that, according to students, place, product, price and promotion dimensions were the determinant of the success of failure in implementing external marketing at universities. Moreover, still according to students, physical evidence, people and process dimensions were the indicators of successful internal marketing in increasing student satisfaction and showing a good impression. By the findings, the students would recommend to potential students to enroll at the university. The correlation between external marketing and internal marketing was also positive and significant. University management should make sure that their internal and external marketing activities are going well so that students' and potential students' perception is also good.

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