Service Quality and Education Cost Implication the Decision to Stay Active Re-Study Mediated by Student Satisfaction – A Study at Private University in West Java

Yenny Maya Dora

Faculty of Business and Management Universitas Widyatama Bandung Indonesia

Abstract

This study aims to analyze the implication of service quality variables and education costs in relation to student satisfaction variables as well as variables of Student Decision to Stay Active Re-study at Private University in West Java. This research was conducted by survey method, the data obtained by the distribution of student questionnaires. The population of this research is private university student in West Java. Data were analyzed using Structural Equation Modeling (SEM) with AMOS 18. From the results of this study can be concluded that the decision of students to Stay Active Re-study is implication the variable Services Quality and Education Cost through student satisfaction variable.

Keywords: Quality of Service, Cost of Education, Student Satisfaction, Student Decision

Introduction

Education is a necessity for every young generation as the nation successors, so the young generation must strive to achieve the highest education as a provision to compete in seizing the opportunity to work in the workplace. Private Universities present to accommodate students who cannot be accommodated by State Universities. Private Universities are growing and developing like the service industry in general. Of whom students are one of the customers of Private Universities.

The quality of a Private University is determined by the service quality that is provided, in which the service quality can be identified through customer satisfaction in this case is the students. For Private Universities, service satisfaction is more oriented towards the students because they are the primary customers of the universities. Private universities as service industry should continue to think more maturely about the importance of service to students, it is now increasingly perceived that Quality of Service and Customer Satisfaction is a vital aspect in order to survive in the service business and win the competition (Tjiptono, 2004). Student satisfaction will be achieved if there is a match between services that are provided to students with what is expected by them. As it is expressed by Wadhwa and Radja (2006) that student satisfaction to the services that are received is seen from the match between the expectation and the service performance that is received. This is in accordance with the statement of Lupiyoadi (2001), that Cost is a factor which influences the level of customer satisfaction.

Currently there are 58 private universities in West Java. Source: http://dikti.go.id, 2017. The number of many universities when it is viewed from the university perspective results in a fairly tight competition in obtaining prospective students. The potentials and advantages of each private university will be deployed as much as possible and become a positive selling point, but otherwise the Private Universities which are unable and unrivaled competitiveness will feel the impact of this competition in the form of the lack of student number.

On the other hand, the growth of private universities make the prospective students have many alternatives in choosing a university. This causes the distribution to be very lame between one particular Private University with other although with relatively similar characteristics of Private University eg study programs which are managed, facilities and infrastructure which are owned for example permanent lecture, laboratory, education cost, etc. There are certain private universities that are in great demand, on the other hand some are less desirable. The following data is the the number of Active students at Private Universities in West Java which can be seen in table 1.1 below:

Tabel 1. The number of Active students at Private Universities in West Java

No.	Nama Universitas	Jumlah Mahasiswa Aktif
1	Universitas Ibn Khaldun	4.518
2	Universitas Islam Bandung	8.513
3	Universitas Islam Nusantara	5.329
4	Universitas Pakuan	12.578
5	Universitas Islam Syekh Yusuf	3.992
6	Universitas Katolik Parahyangan	8.203
7	Universitas Kristen Maranatha	8.114
8	Universitas Pasundan	17.295
9	Universitas Swadaya Gunung Djati	9.987
10	Universitas 17 Agustus 1945 Cirebon	2.108
11	Universitas Advent Indonesia	1.635
12	Universitas Wiralodra	3.561
13	Universitas Langlang Buana	2.828
14	Universitas Bandung Raya	1.597
15	Universitas Islam 45	7.303
16	Universitas Djuanda	3.402
17	Universitas Nusa Bangsa	695
18	Universitas Jenderal Achmad Yani	8.356
19	Universitas Winaya Mukti	167
20	Universitas Galuh Ciamis	6.979
21	Universitas Garut	3.511
22	Universitas Nurtanio	2.093
23	Universitas Swiss German	1.323
24	Universitas Komputer Indonesia	8.973
25	Universitas Muhammadiyah Cirebon	2.609
26	Universitas Suryakancana	2.877
27	Universitas Nasional Pasim	1.781
28	Universitas Mathla ul Anwar	2.856
29	Universitas Pamulang	35.261
30	Universitas Widyatama	6.466
31	Universitas Putra Indonesia	370
32	Universitas Kebangsaan	313
33	Universitas Al-ghifari	833
34	Universitas Kuningan	3.936
35	Universitas Pramita Indonesia	2.166
36	Universitas Muhammadiyah Sukabumi	2.578
37	Universitas Presiden	220
38	Universitas Subang	2.695
39	Universitas Majalengka	2.095
40	Universitas Sangga Buana	304
41	Universitas Informatika Dan Bisnis Indonesia	706
42	Universitas Wanita Internasional	754
43	Universitas Bale Bandung	111
44	Universitas Serang Raya	6.471
45	Universitas Teknologi Nusantara Cilegon	451
46	Universitas Muhammadiyah Tangerang	11.912
47	Universitas BSI	1.714

48	Universitas Pembangunan Jaya Tangerang	472
49	Universitas Nahdlatul Ulama Cirebon	1.704
50	Universitas Banten Jaya	1.058
51	Universitas Surya Bogor	980
52	Universitas Telkom	13.982
53	Universitas Buddi Dharma	2.691
54	Universitas Muhammadiyah Tasikmalaya	853
Jumlah		244.597

Source : http://dikti.go.id, 2017

From the data in table 1.1, it can be seen that the number of student distribution which is unequal between Private Universities in West Java. Therefore, in an effort to maintain ... maintaining students who have entered the university then the decision-making process of students in deciding to remain studying at a particular Private University is very important to be known by its managers.

Literature Review

Service Quality

Quality for students can be defined as the overall assessment of students about experience in study, (Zeithamel, 1988). Most of the dimensions of service quality are based on student perspective so students become the determinants to measure the service quality, and it is not the decision makers in Universities. Service quality is grouped into several dimensions: Tangibles, Competence, Content, Delivery, Reliability, (Parasuraman, et al., 1991) thereby generating trust to Universities for fulfilling best promises and acts for students (Gronroos, 2008). Whereas, the reliability of Universities in delivering the services that have been promised in a timely and accurate manner will be satisfactory, (Ghobadian, et al., 1994).

Education Cost

Competition between Private Universities forces them to be careful in setting prices or so-called tuition fees so as not to get caught up in the increasingly fierce competition in the education world. In creating student satisfaction, the factor of service quality itself is not enough because students always involve the relation between tuition fees and benefits that are provided by the university (Lee and Cunningham, 1996). In fact, tuition fees not only as a component in value creation but also a decisive factor in measuring customer satisfaction. The lower the tuition fee is in accordance with perceived by the student, the more satisfied the student will be for the tuition fees which are set by the university (Clemes, 2008). Tuition fees can be assumed as compensation for benefits that are received. Tuition fees are defined as student perceptions of what is sacrificed to obtain university services (Zeithaml, 1998; Lien and Yu, 2001). Tuition is a sum of money which is exchanged by students with the services and reputation that are provided by Universities (Monroe, 2003; Kotler and Armstrong, 2010; Hanif, et al., 2010).

The education cost of Private Universities according to Lupioyadi (2001) argues that the term of price in university services business can be found with the term *SPP* (tuition), including 1). Registration fee/re-registration at the beginning of each semester, 2). Tuition fees that include fees for the education administration and are also related to the development and founding of curricular and extra-curricular activities such as book money, equipment, etc. For per semester; 3) Cost per credit/*SKS*; 4) Building donation money; 5) Exam money and others.

Student Satisfaction

The rapid growth of the number of universities significantly increases the cost of conducting education so as to encourage universities to think differently about the role of student satisfaction in influencing its sustainability (Kotler and Fox, 1995). The value which is created by universities through the service quality that is offered, the reputation of universities and the fairness of the set price will influence student satisfaction.

Kotler and Keller (2008: 177) express satisfaction is the feeling of pleasure or disappointment of someone that emerge after comparing the perception/impression to the performance or the outcome of a product and expectations. Satisfaction is a function of perception/impression of performance and expectation. According to Jurkowitsch, et al (2006), "Student satisfaction is defined as the student's fulfillment response." This means that student satisfaction is defined as the response to the needs fulfillment of the students. Wijaya (2012) argues that "Customer satisfaction of education service is one of the

ISSN 2411-9571 (Print)
ISSN 2411-4073 (online)

European Journal of Economics
and Business Studies

Jan. Apr. 2018
Vol. 10, Nr. 1

determinants on educational competition success." Satisfaction is a positive emotional state that is resulted from student and university interaction over time (Li-wei and Tsung-chi, 2007).

The Decision in Remaining Active to Study

According to Peter and Olson (2013) define purchasing decision making as follow: The core process in consumer decision making is the integration process which is used to combine knowledge to evaluate two or more alternative behaviors and choose one of them.

Schiffman and Kanuk (2007) argue that decision-making process as important process that is influenced by the external environment that consists of marketing mix (product, promotion, price, distribution) and socio-cultural environment (family, informational source, non-commercial sources, social class, culture and sub-cultures). Then, the internal environment (psychological factors) consists of motivation, personality, learning, perception, and attitude. Similarly, as it is proposed by James F. Engel, Rogerd D. Blackwell, Paul W. Miniard, (1992) who state that consumer decisions in choosing a product/service is influenced by three things: 1) Environmental/external influences that consist of cultural factors, social class, personal influence, family, and situation; 2) The Influence of Individual/Internal Differences that consist of Consumer Resources (time, money, attention), motivation and involvement, knowledge, attitude, personality, lifestyle, and demography 3) Psychological influences that consist of processing, information, learning, changing attitudes and behavior.

2.5 Research Framework and Hypotheses

2.5.1 Research Framework

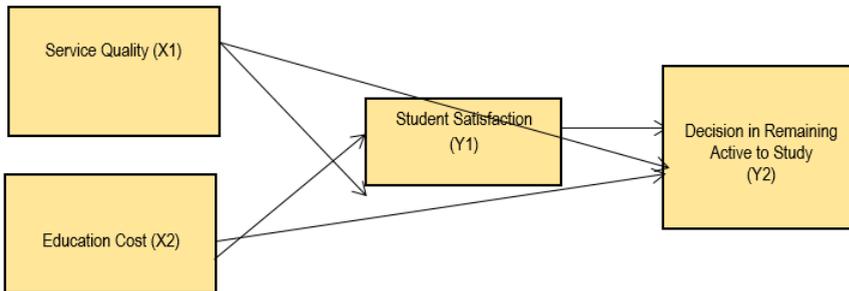The following is the research framework which can be seen in Figure 1 below:

Figure 1. Research Framework (Source: Processed Data, 2018)

Based on the framework in Figure 1, the research hypothesis is as follows:

1. H_1: There is an influence between Service Quality to Student Satisfaction.
2. H_2: There is an influence between Education Cost to Student Satisfaction.
3. H_3: There is an influence between Student Satisfaction to Decision in Remaining Active To Study.
4. H_4: There is an influence between Service Quality to Active and Decisions in Remaining Active to Study which is mediated by Satisfaction.
5. H_5: There is an influence between Education Cost to to Active and Decisions in Remaining Active to Study which is mediated by Satisfaction.

Research Methods

Research Design

This study is done by using Crosssectional development method. Cross-sectional research is a study whose data collection is done at a certain point in time.

Data Analysis Method

The method which is used to analyze the data of this study is using structural equation model (SEM). According to Ferdinand (2014), Measurement model is intended to confirm a dimension or factor based on its empirical indicators. Structural models are models of relation structures that form or explain causality between factors.

Research Variables

The research variables can be grouped into two: first, exogenous variable (free) is Service Quality (X_1), and Education Cost (X_2). Second, endogenous variable consists of Satisfaction (Y_1) and Decision in Remaining Active to Study (Y_2) (dependent variables).

Population and Sample

In this study, the population is the students in Faculty of Business and Management at Private Universities in West Java which are still active in 2016/2017 Academic Year which are 244,597 students. Of the population of 244,597 students, researchers only take some of the population as research subjects (Sekaran, 2006). While the sample size in the study is the appropriate sample size in a research, it is 30 to 500. Furthermore, the guidelines for sample size depend on the parameters that are estimated. The guidelines are 5 to 10 times of the variables that are estimated. The number of variables in this study are 5 variables, then based on Maximum likelihood (ML) estimation technique estimate on SEM with percentage of uncertainty clearance which is used in research by 5%. Then the number of samples in this study is 350 students.

Sampling method with certain criteria (purposive sampling), i.e. the sampling which is done by taking the selected people according to the specific characteristics that are possessed by the sample. Researchers use purposive samples because researchers use students with certain criteria to be sampled. The criteria are the minimum students who are in the ≥ 3rd semester, and the students are still active studying.

Research Results and Discussion

Analisis Structural Equation Modeling (SEM)

The result of data analysis with structural equation modeling method or SEM, with the help of AMOS program 18 version can be made the measurement table of Goodness Of Fit research model as follows: presented in table 2.

Table 2. Feasibility Test Results of Structural Equation Model (SEM) Model

Criteria	Cut-Off-Value	Analysis Results	Evaluation Model
2 (Chi-Square)	Expected small	389.988	Fit
Probability	≥ 0.05	0.266	Fit
RMSEA	≤ 0.083	0.018	Fit
CMIN/DF	≥ 2.00	1.047	Fit
GFI	≥ 0.90	0.916	Fit
AGFI	≥ 0.90	0.876	Marginal
TLI	≥ 0.96	0.997	Fit
CFI	≥ 0.95	0.988	Fit

Source: Processed Data, 2018

These results indicate that the model which is used is acceptable. Measurement indexes TLI, CFI, CMIN/DF and RMSEA are within the expected value range even though AGFI is received marginally. Thus the feasibility test of the SEM model has met the acceptance requirement.

Hypothesis Testing

After all assumptions can be met, then hypothesis will be tested as it is proposed in the previous chapter. To test the hypothesis which is proposed, it is done by analyzing the regression weights for each of its exogenous constructs against its endogenous constructs. By looking at the C.R value which is identical with t-count, on the processing result compared with the critical value is ± 1.96 at the 0.05 significance level (5%). The results of hypothesis testing are presented in table 3.

Tabel 3. Regression Weight Structural Equational Model

Relation between variables	Estimate	S.E.	C.R.	P-val
KM ← KP	0.493	0.106	3.929	0.002
KM ← BP	0.398	0.101	2.887	0.000
KTAK ← KP	0.491	0.090	3.495	0.000
KTAK ← KM	0.478	0.113	3.897	0.001
KTAK ← BP	0.465	0.108	2.874	0.000

Source: Processed data, 2018

ISSN 2411-9571 (Print)
ISSN 2411-4073 (online)

European Journal of Economics
and Business Studies

Jan. Apr. 2018
Vol. 10, Nr. 1

From the testing results in table 3, it is found that all CR values are above 1.96 or with probabilities which is smaller than 0.05. Thus all hypotheses are accepted.

Discussion of Hypothesis Test Results

1. Hypothesis Test 1: Service Quality influences Satisfaction.

The test result to the estimation parameter coefficient for the influence testing which is the relation between two variables that are hypothesized (learning with satisfaction) shows the value of estimation parameter coefficient of 0.493 and CR value of 3.929 with probability of 0.002. This means there is a positive influence of Service Quality to Satisfaction. This suggests that the increase in service quality will have an impact on the increase in Satisfaction. So the results of this study in accordance with the research of Alma, Buchari (2007), Andini (2010), and Nahan (2013) which indicates that service quality influences on satisfaction.

2. Hypothesis Test 2: Education Cost influences Satisfaction.

The test result to the estimation parameter coefficient for the influence testing which is the relation between two variables that are hypothesized (education facility with satisfaction) shows the value of estimated parameter coefficient of 0.398 and the C.R. value of 2,887 with probability of 0.000. This means there is a positive influence of Education Cost on Satisfaction. The increase in education cost will increase student satisfaction. The results of this study are in accordance with the research of Tuan (2012) which shows that Education Cost influences Satisfaction.

3. Hypothesis Test 3: Satisfaction influences Decision in Remaining Active to Study.

The test results to the estimation parameter coefficient for the influence testing which is the relation between two variables that are hypothesized (Satisfaction with Decision in Remaining Active to Study) shows the value of estimated parameter coefficient of 0.491 and CR value of 3.495 with probability of 0.000. This means there is a positive influence of learning methods on satisfaction. The increase in Student satisfaction will make students decide to remain active studying in university. The results of this study are in accordance with the research of Guolla which proves that Satisfaction is strongly related to Decision in Remaining Active to Study (Owusu, 2013).

4. Hypothesis Test 4: Service Quality influences Decision in Remaining Active to Study.

The test result to the estimation parameter coefficient for the influence testing which is the relation between two variables that are hypothesized (Service Quality with Decision in Remaining Active to Study) shows the value of estimated parameter coefficient of 0.478 and CR value of 3.897 with probability of 0.000. This means there is a positive influence of Service Quality to Decision in Remaining Active to Study. This means the increase in Service Quality will support students deciding to remain active studying. The results of this study reinforce the research of (Sylviana, A., 2006). which states the Service Quality of Customer has the greatest influence on the Decision in Remaining Active to study for students.

5. Hypothesis Test 5: Education Cost influences on Decision in Remaining Active to Study

The test result of the estimation parameter coefficient for the influence testing which is the relation between two variables that are hypothesized (Education Cost with Decision in Remaining Active to Study) shows the value of estimated parameter coefficient of 0,494 and CR value of 2,874 with probability of 0.000. This means that there is a positive influence of Education Cost to Decision in Remaining Active to Study. Compatibility of Education Costs with benefits will make students decide to stay active studying.

Conclusions

Service Quality has a positive and significant influence on Student Satisfaction, it means that Hypothesis 1 is accepted and answers the first research problem of this study.

Education cost has a positive and significant influence on Student Satisfaction, it means that Hypothesis 2 is accepted and answers the second research problem of this study.

Student Satisfaction has a positive and significant influence on decision in remaining active to study, it means that Hypothesis 3 is accepted and answers the third research problem of this study.

Service Quality has a positive and significant influence on Decision in Remaining Active to Study. And the indirect influence of Service Quality to student satisfaction which is mediated by Student Satisfaction variable is significant, it means that Hypotersis 4 is accepted and answers the fourth research problem of this study.

Direct Influence of Education Costs to Decisions in Remaining Active to Study, And indirect influence of Service Quality to Decision in Remaining Active to Study which is mediated by Student Satisfaction variable is significant, it means that Hypotersis 5 is accepted and answers the fifth problem research of this study.

Bibliography

[1] Alma, Buchari.2007. *Pemasaran Stratejik Jasa Pendidikan*/Strategic Marketing of Education Services, Second Edition, Bandung, Alfabeta.

[2] Cardona, M.Melchor., Bravo, J.Jose., 2012. "Service Quality perceptions in higher education institutions: the case of a colombian university". *Journal research high education*, 28:23-29.

[3] Chang, Hsin Hsin and Hsin-Wei Wang. 2011. The Moderating Effect of Customer Perceived Value on Online Shopping Behaviour. Online Information Review. Vol. 35 No. 3. pp. 333-359.

[4] Chang, Kuo-Chien, Mu-Chen Chen, Chia-Lin Hsu, Nien-Te Kuo. 2010. The Effect of Service Convenience on PostPurchasing Behaviours. Industrial Management & Data System. Vol. 110 No. 9.

[5] Ciernes, M.D. (2008). An Empirical Analysis of Customer Satisfaction in International Air Travel. Innovative Marketing 4(2), 50-62.

[6] Dimitriades, Zoe S. 2006. Customer Satisfaction, Loyalty and Commitment in Service Organizations. 2006. Management Research News. Vol. 29. No. 12.

[7] Engel, James F, Blackwell, Rogre D and Miniard, Paul W, (1994), *Perilaku Konsumen*/Consumer Behavior, Volume-1, Binaputra Aksara, Jakarta

[8] Ghobadian,A., S. Speller, dan M. Jores. (1994). Service Quality: Concepts and Models. International Journal of Quality and Reliability Management 11 (9).

[9] Gronroos. 2008. Service Logic Revisited: Who Creates Value? And Co-Creates?,European Business Review 20 (4).

[10] Gronross, C., dan A. Ravald. (2010). Service as Business Logic: Implication for Value Creation and Marketing. Journal of Service Management 22 (1), 5-22.

[11] Hanif, M., Hafeez, S., Riaz, A. (2010). Factor Affecting Customer Satisfaction.International Research Journal of Finance and Economics 60.

[12] Hassan, Masoodul, Saad Hassan, Muhammad Saqib Nawaz and Ibrahim Aksel. 2013. Measuring Customer Satisfaction and Loyalty Through Service Fairness, Service Quality and Price Fairness Perception: An Empirical Study Of Pakistan Mobile Telecommunication Sector. *Sci.Int.(Lahore),* 25 (4).

[13] Hellier, Phillip K; Gus M Geursen, Rodney A. Carr, John A. Rickard. 2003. Customer Repurchase Intention A General Structural Equation Model. European Journal of Marketing. Vol. 37. No. 11/12.

[14] Hermann et al. 2007. "The Influence of Price Fairness on Customer Satisfaction: An Empirical Test in The Context of Automobile Purchases". Journal of Product & Brand Management. Vol.16, No.1

[15] Huang, Chun-Chun., 2014."The Relationship Among Brand Equity, Customer Satisfaction, And Brand Resonance ToRepurchase Intention Of Cultural And Creative Industries In Taiwan".*International journal of organization innovation*,6:106-120

[16] Kassim, Norizan, Nor Asiah Abdullah. 2010. The Effect of Perceived Service Quality Dimensions on Customer Satisfaction, Trust, and Loyalty in E-Commerce Setting A Cross Cultural Analysis. Asia Pacific Journal of Marketing and Logistics. Vol. 22 No. 3.

[17] Kotler, P., dan Armstrong, G. (2010). Principles of Marketing. Eight Edition. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

[18] Kotler, Philip dan Kevin Lane Keller, 2008. *Manajemen Pemasaran*/Management of Marketing (Thirteen Edition), Jakarta: PT. Indeks.

[19] Lee, M., dan Cunningham, L.F. (1996). Customer Loyalty in the Air Industry. Transportation Quarterly 50 (2).

[20] Lien, T.B., dan Yu, C. C. (2001). An Integrated Model for the Effects of Perceived Product, Perceived Service Quality, and Perceived Price Fairness on Customer Satisfaction and Loyalty. Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior 14.

[21] Lupiyoadi, Rambat, 2001, *Manajemen Pemasaran Jasa: Teori dan Praktek* / Management of Service Marketing: Theory and Practice, Salemba Empat, Jakarta.

[22] Monroe, Kent B. (2003). Pricing: Making Profitable Decisions 3rd edition. New York: McGraw-Hill.

[23] Owusu Alfred, 2013 . Influences of Price And Quality On Consumer Purchase Of Mobile Phone In The Kumasi Metropolis In Ghana A Comparative Study, European Journal of Business and Management , Vol.5, No.1.

[24] Parasuraman, A., Zeithaml, V. A., & Berry, L. 1988. SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. Journal of Retailing, Vol.64 No. 1.

[25] Parasuraman, A., Zeithaml, V. A., dan L.L Berry. (1991). Five Imperatives for Improving Service Quality. Sloan Management Review, 29-38.

[26] Peter, J. Paul dan Olson, Jerry C. 2013. *Perilaku Konsumen dan Strategi Pemasaran*/Consumer Behavior and Marketing Strategy. Volume 9. Book 1. Salemba Empat : Jakarta.

[27] Polyorat, Kawpong and Suvernus Sophansiri. 2010. The Influence of Service Quality Dimensions on Customer Satisfaction and Customer Loyalty in The Chain Restaurant Context: A Thai Case. Journal of Global Business and Technology, Vol. 6. pp. 64-76

[28] Shiffman, Leon G and Kanuk, Leslie, Laser, 2007, *Perilaku Konsumen*/Consumer Behavior, Seventh Edition, Indeks, Jakarta.

[29] Sylviana, A., 2006. ”*Pengaruh Kualitas Pelayanan Dan Kepuasan Mahasiswa Terhadap Intensi Meregistrasi Ulang Mahasiswa*/ The Influence of Service Quality and Student Satisfaction of Intention to Re-Register Student”.*Jurnal Organisasi dan Manajemen*/Journal of Organization and Management 2:60-78

[30] Tjiptono, Fandy. 2004. *Manajemen Jasa*/Management of Service. Yogyakarta: Andi Offset. Tjiptono, Fandy. 1997. *Strategi Pemasaran*/Marketing Strategy. Yogyakarta: Andi Offset

[31] Tuan, Nguyen. Minh.,2012. “Effects of Quality Service and Price Fairness on Student Satisfaction, *International Journal of Business and Social Science*,3.

[32] Wadhwa, Raja. 2006. School Organization. Journal Of Education. Vol 72. JURKOWITSCH, S ET AL. (2006). “Student Satisfaction Model for Austrian Higher Education Providers Considering Aspects Of Marketing Communications”. Special Edition on Consumer Satisfaction -Global Perspective. Volume 2, Issue 3, 9-22

[33] Wijaya, D. 2012. *Pemasaran Jasa Pendidikan*/Education Service Marketing. Jakarta: Salemba Empat.

[34] Zeithaml, V.A. (1988). Consumer Perceptions of Price, Quality, Value: A Means-end Model and Synthesis of Evidence. Journal of Marketing 52.