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Influence of Service Quality, University Image, and Student Satisfaction toward WOM Intention: A Case Study on Universitas Pelita Harapan Surabaya

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Abstract

There are several problems occurred in Pelita Harapan University Surabaya (UPHS), which are dissatisfaction among students towards its service quality (SERVQUAL), and then it raised the negative perception and the low level of recommendation from its students. This is a case study that aimed to identify the influence of SERVQUAL to WOM Intention mediated by student satisfaction and university image. To see the relationship between the variables simultaneously, the researchers use Structural Equation Model with first order Confirmatory Factor Analysis. The questionnaires were distributed to 140 students by using purposive sampling technique which aimed to see the accurate results from qualified students. The results indicated that SERVQUAL had a positive impact to the student satisfaction and university image, and then it impacted to the positive WOM Intention. However, WOM Intention was influenced negatively by SERVQUAL and student satisfaction. This study contributed to UPHS and other private universities to increase the SERVQUAL, which are tangibility, reliability, responsiveness, assurance, and empathy to increase student WOM Intention which regards to sustainability in higher education sector.

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1. Introduction

As the youngest private university in Surabaya, Pelita Harapan University (UPHS) implemented holistic education among its internal and external side (www.uphsurabaya.ac.id). It is the expansion from the Pelita Harapan University Karawaci (UPH Jakarta). UPH Jakarta is located in Lippo Village Karawaci which provides the international curriculum, has luxurious facilities such as Sport Center, NBA Basketball Hall, Swimming Pool, Food Junction Square, Department Store and also Siloam Hospital.
Hence, UPH Karawaci is including in expensive campus and many students want to enroll it (www.uph.edu).

Unfortunately, unlike UPH Jakarta, UPHS had some problems during their performance as a new university in Surabaya. The researchers found out that among some students in business school, dissatisfaction occurred toward the facilities provided (Tseng 2010). The students thought that UPHS has the same quality as UPH Jakarta and also has such a high technology in education media; high speed internet access, compatible computer laboratory, audio system in class, the amount of lifts etc. That’s why according to pre interviewed, these students also have the bad perception about UPHS. Ajzen (2006) argued that behavioural intentions will effected by perceived control or in other words perception itself. This means to caused negative behavioural intention is perception. Regarding to these problems of dissatisfaction and negative perception, it will have negative impact to the institution including spreading word-of-mouth criticism, switching patronage to another company, complaining to internal and external agencies, and reducing purchases from the institution (Zeithaml et al., 1996). That’s why; consequently, to UPHS itself, faced the fact that the students will have the low level of recommendation or bad Word of Mouth Intention (WOM Intention). WOM represents the client’s willingness to recommend the product and service to others in the near future (Dabholkar et al., 1995).

One of the problems is students’ dissatisfaction which is related to customer satisfaction. Several empirical studies reported that service quality was an antecedent of customer satisfaction (Naik et. al. 2010; Spreng and Mackoy, 1996). Hence, Naik et. al. (2010), stated that behavioral intention will effected by SERVQUAL but also mediated by customer satisfaction. In other words, when institution performed outstanding SERVQUAL, the customers will tend to make good behavior in the future and also caused satisfactions. Another empirical problem is negative perception among students which is related to the university’s image. It is another important factor in the overall evaluation of service quality (Aydin and Ozer, 2005). University’s image thus impacts a customer’s evaluation of service quality, satisfaction and loyalty (Andreassen and Lindestad, 1998; Zins, 2001). According to Reynolds and Beatty (1999), satisfaction with a salesperson translates into positive WOM about the salesperson and the company, and long-time customers increase their WOM.

This case study conducted using university’s service quality, satisfaction and university’s image that will impact the WOM intention. Ruyter et. al (1997) and Zins (2001) argue that those concepts will positively impacts on WOM intention. Based on the theories and the results of previous studies above, there are contradiction between theory and empirical issue that happened in UPHS. Hence, the researchers want to examine from the student’s perspective whether the theories can be applied to the UPHS to better understanding in general about the dissatisfaction, negative perception and low level of recommendation among students. This study also tried to explain whether the students of UPHS will represent the positive WOM intention about the university.

2. Literature Review and Hypothesis

The model put forth in this study attempts to integrate the knowledge gained from research on service quality, student satisfaction, university image, and WOM intention

2.1. Service Quality

Using focus group studies, Parasuraman, et. al. (1985) identified five detailed dimensions of service quality: First are tangibles, which are appearance of physical facilities, equipment, personnel, and communication materials. Second is reliability, which is the ability to perform the promised service
dependably and accurately. Third is responsiveness, which is willingness to help customers and provide prompt service. Fourth is assurance, which is knowledge and courtesy of employees and their ability to convey trust and confidence (competence, courtesy, credibility and security of the service). The last is empathy, which is caring, individualized attention the firm provides its customers (Access to organization’s representatives, communication and understanding the customer. To this extent, universities have become increasingly involved in defining service quality and measuring customer satisfaction in ways that are familiar to service marketing specialists (Gronroos, 1984), who was developing measures of service quality from the 1980s.

Many researchers are certain that the service quality for the universities positively impacted student (consumer) satisfaction (e.g. Naik et. al., 2010 ; Spreng and Mackoy, 1996; Sureshchandar et al., 2002; Lewicka, 2011). It concluded that when the customers made a good perception about its service, the tendency to satisfy will higher. Furthermore, service quality will also impacted behavioral intention (Naik et.al., 2010). In other words, when students got positive perception toward the service, it will positively impact to WOM intention. Besides, service quality will also impact to another concept such as university image. Aydin and Ozer (2005) claim that a university's image emerges from a customer’s net consumption experiences; hence, perceptions of service quality. Furthermore, Brown and Dacin (1997) claim university's image derives from customers’ perceptions of capability and social responsibility. According to those explanations, the theories, the result of previous studies and the logical thinking, the researchers then purpose hypothesizes as follows:

**H1: Service quality has a positive impact on students satisfaction**

**H2: Service quality has a positive impact on WOM intention**

**H3: Service quality has a positive impact on university image**

### 2.2. Student Satisfaction and University Image

In this study, student satisfaction and university played role as intervening variables that mediated to increase WOM intention that combined previous studies’ results. University image is the representative of students’ perception and commonly rare concepts to be implemented in higher education sector (Sung and Yang, 2008). Nicolescu (2009) also stated that the concept of university image should be considered rather than differentiation. Thus, image could be defined as a set of attitudes or beliefs that a person or audience holds about an institution Sevier , 1994). It means that university image refers to a set of attitudes or beliefs towards a university. Futhermore, the second concept to be determined is Student satisfaction which is closelys related to customer satisfaction. according to Naik et.al. (2010), it is mediated effect from service quality to behavioral intention. Hence, in this study, the researchers want to see the impact once again in higher education sectors. Satisfaction concept is vast explanation which is stated that the comparison between expectation and what is gained by the customers (Schiffman and Kanuk, 2010).

### 2.3. WOM intention

This research will focuses on the understanding the antecedents of WOM intention. It would rare concept to be determined in higher education sector. WOM intention is derived from two famous concept such as word of mouth (WOM) and behavioral intention. According to Arndt (1967) whom one of the earliest researchers into the influence of WOM on consumer behavior, characterized WOM as oral, person-to-person communication between a receiver and a communicator whom the receiver perceives as
non-commercial, regarding a brand, product or service (Arndt, 1967). WOM represents the client’s willingness to recommend the product and service to others in the near future (Dabholkar et al., 1995). WOM is very important factor when facing complex situations and experiencing risks by consumers (File, Cermak, and Prince, 1994).

Naik et. al. (2010) thus stated that behavioral intention and WOM intention are two similar and related concepts. It was happened because in behavioral intention, WOM intention played role as a dimension. That’s why it would be concluded that WOM intention will determine strongly recommend tendency about institutions to colleagues and family members. Naik et. al. (2010) also concluded that the antecedents of behavioral intentions such as service quality, and mediated by customer satisfaction (H1 and H2). Besides, brand or corporate or institutional or university image will positively impacted to behavioral intention (e.g. Chung et. al., 2009; Lin & Lin, 2007; O’class & Lim, 2010; Rajagopal, 2010). It could be concluded that when the students got positive image toward the university, they will tend give positive recommendations or spread positive WOM. According to those explanations, the theories, the result of previous studies and the logical thinking, the researchers then purpose hypothesizes as follows:

**H4: Student satisfaction has a positive impact on WOM intention**
**H5: University Image has a positive impact on WOM intention**

| Variable Indicators          | Standardized Loading Factor | Communalities | Results | Variable Indicators          | Standardized Loading Factor | Communalities | Results |
|------------------------------|-----------------------------|---------------|---------|------------------------------|-----------------------------|---------------|---------|
| SERVQUAL (Service Quality)   | X1 0.533                    | 0.94          | valid   | Student Satisfaction         | Y1 0.789                    | 0.835         | valid   |
|                              | X2 0.624                    |               |         | Y2 0.44                      |                             |               |         |
|                              | X3 0.639                    |               |         | Y3 0.675                     |                             |               |         |
|                              | X4 0.757                    |               |         | Y4 0.83                      |                             |               |         |
|                              | X5 0.758                    |               |         | Y5 0.638                     |                             |               |         |
|                              | X6 0.614                    |               |         | Y6 0.682                     |                             |               |         |
|                              | X7 0.84                     |               |         | University Image Y7 0.897    | 0.88            | valid   |
|                              | X8 0.892                    |               |         | Y8 0.871                     |                             |               |         |
|                              | X9 0.835                    |               |         | Y9 0.761                     |                             |               |         |
|                              | X10 0.86                   |               |         | Y10 0.718                    |                             |               |         |
|                              | X11 0.729                   |               |         | WOM Intention Y11 0.926      | 0.964          | valid   |
|                              | X12 0.788                   |               |         | Y12 0.987                    |                             |               |         |
|                              | X13 0.562                   |               |         | Y13 0.932                    |                             |               |         |
|                              | X14 0.538                   |               |         |                             |                             |               |         |
|                              | X15 0.77                    |               |         |                             |                             |               |         |

| Hypothesis               | Estimate | S.E. | C.R. | P       | Result    |
|--------------------------|----------|------|------|---------|-----------|
| university image <=> SERVQUAL | .520     | .085 | 6.081 | ***     | Supported |
| student_satisfaction <=> SERVQUAL | .645     | .065 | 9.927 | ***     | Supported |
| WOM intention <=> SERVQUAL | -.040    | .196 | -.202 | .840   | Not supported |
| WOM intention <=> student_satisfaction | .559     | .296 | 1.890 | .059   | Not supported |
| WOM intention <=> university image | .426     | .094 | 4.511 | ***    | Supported |
3. Research Method

To test the hypothesizes proposes, this study conducted a cross-sectional survey study. Questionnaires were designed using a 6-point Likert Scale from the previous studies. The questionnaires were also for each single construct by considering the indicators from previous study.

160 questionnaires using purposive techniques were distributed to UPHS students across faculties and 140 questionnaires were returned. This study showed 87.5% response rate from qualifies students which mean those who had high intensity in campus to better understanding the objective assessment about UPHS. this study contains good validity and reliability items so the researchers didn’t eliminate any items. This study used Structural Equation Model and AMOS 16 to identify validity or CFA (Confirmatory Factor Analysis) and latent variable relationship simultaneously that could answer the questions of research (the purpose of this study that explained earlier). Besides, SPSS 16 also used to measure reliability with Cronbach Alpha analysis. Most of the samples were coming from the Business School with the highest percentage (97.18%).

4. Findings

Structural Equation Model using AMOS contains the analysis of CFA and latent variable relationships (Ferdinand, 2002). This study may include two parts of analysis – validity reliability Measurement and latent variable relationships to test the hypothesis.

Validity and Reliability Measurement

The validity test is confirmed by standardized loading factor > 0.4 (Hair et al, 2010), and reliability test by cronbach alpha > 0.6 (Malhotra, 2004). This study showed that all the questionnaires items were valid and reliable. It would be seen on table 1, that all of the indicators contains good and fit measure based on the requirements of statistical condition. The validity that measuring standardized loading factor also means that this study meet the standard of CFA in SEM.

Latent Variable Relationships

Results of data processing for SEM analysis of the full model are used to test the hypothesis that has been described previously. Full SEM model can be viewed through the figure 1 which can be concluded some the regression coefficients of each path analysis were conducted. Hypothesis testing is done by analyzing the value of CR (Critical Ratio) and the value of P (Probability) on the result of data Regression weights, compared with the required statistical limits, ie the value of CR (Critical Ratio)> 2.00, and the value of P (Probability) that is equal to <0.05 (Ferdinand, 2002). If the results show the value that qualify, then the hypothesis of the proposed research can be said supported the data.

All of these results are contained in table 2 and figure 1. This study concluded that H2 and H4 were not supported by data. It means that student satisfaction and service quality were negatively impact on WOM intention. This results related to previous research about intention of recommend the hotel (word of mouth intention) and customer satisfaction, the result indicated that customers are easily spread recommendation if supported with high level of customer satisfaction (Salazar et. al, 2004). It could be concluded that the students of UPHS is not satisfied enough to themselves to make the intention of good recommendations. Service quality that impacts negative on WOM contradict with the results of previous study by Naik et. al (2010). It could concluded that when the perception is negative, then the behavioral intention will be lower. In this case, UPHS’s students had a negative perception towards its SERVQUAL. These results could be related to the stimulus generalization. According to Schiffman and Kanuk (2010), stimulus generalization is the inability to perceive differences between slightly dissimilar stimuli. So,
many students would thought that UPHS is similar to UPH Karawaci which ranked in the top ten of private university in Indonesia. (www.ubaya.ac.id).

Besides the negative results, this study contains of positive results, such as H1, H3, and H5. UPHS service quality has brought a good reputation in university’s image. Thus, it would make the WOM intention positive. These results also correlate with stimulus generalization explained before.

5. Discussion

This study concludes that the SERVQUAL will positively impact on student satisfaction, university image; thus it would impact on WOM intention. In contradictory, SERQUAL negatively impact on WOM intention, thus student satisfaction negatively impact on WOM intention. Based on research problems, it would be stated that SERVQUAL in UPHS isn’t bad perfectly, because it would impact positively on student satisfaction and its university image. However, that satisfaction is not enough for students to recommend UPHS as a good university. It also stated that good perception about UPHS’ service is not
good enough to build positive WOM intention. Furthermore, to discuss it deeply, the researchers identified theoretical implications, managerial implications, and limitations for future research.

**Theoretical Implications**
The theory of service quality, satisfaction, and image on its influence in word of mouth intention is often studied and applied in the universities. The results of this study are associated with earlier studies such as Hasan et al., (2008); Hanief et al., (2010); Yunus et al., (2010) that show the service quality has a positive significant effect on student’s satisfaction. However, in this case study, it showed different results from the earlier study. As stated earlier student satisfaction is not enough to build WOM intention and good perception wouldn’t directly impact to WOM intention. Those theories were contradicted with Naik et al., (2010).

**Managerial Implications**
This study presents the practical implication to increase service which is offered by UPHS and other private university. It would happen because the negative impact on the perception about UPHS’ service and make negative behavioral intention for example that the students wouldn’t recommend UPHS as a recommended university. If the service is relatively high, then the student will also satisfied and recommend his or her friends about UPHS. It should be a consideration of other private university to build a positive student satisfaction, university image, thus the WOM intention will positively occurred.

**Limitations and Future Research**
This study consists of several limitations. First of all, this is a case study, that the theory identified were not easily to generalize. Another limitations such as this study consist of unperfected goodness of fit which is chi square with the 28 degree of freedom is not meet the criteria of statistical condition.

Future research should include larger samples to better understanding the students’ behavior especially in higher education sector. Another research could add some variables such as trust and students flow which were rarely identified in higher education sectors.

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