

## **THE IMPACT OF INSTITUTION IMAGE AND STUDENT SATISFACTION TO WORD OF MOUTH**

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### *Abstract*

In the recent years a tremendous growth has been observed in the Indonesia higher education institutions (HEI). The growth in the number of HEI in year 2009 – 2013 increased from 1.382 to 3.151. The increase in the number of HEI in Indonesia has resulted in the industry becoming very competitive. The situation call for HEIs to focus on establishing a strong institution image and providing student satisfaction to secure their positive word of mouth. A conceptual framework is proposed that investigates the impact of institution image and student satisfaction on word of mouth (WOM). Survey was employed and respondents were from the students of Indonesian Open University (Universitas Terbuka = UT). There were 155 usable questionnaires to analyze descriptive statistics, realibility, validity and structural equation modeling (SEM). The research found that institution image and student satisfaction significantly affects WOM and that image exerts a stronger influence on WOM than satisfaction. Therefore, UT as a service firm has to focus on these factors in order to built a long-term and mutally profitability relationship with a student and create positive WOM as competitive advantage.

Keywords: Institution image, Satisfaction, Word of mouth

### *Abstrak*

Dalam beberapa tahun terakhir pertumbuhan yang luar biasa telah diamati di lembaga pendidikan tinggi Indonesia (HEI). Pertumbuhan jumlah HEI pada tahun 2009 - 2013 meningkat 1,382-3,151. Peningkatan jumlah HEI di Indonesia telah mengakibatkan industri menjadi sangat kompetitif. Situasi panggilan untuk HEIs untuk fokus pada membangun citra lembaga yang kuat dan memberikan kepuasan siswa untuk mengamankan kata positif mereka dari mulut ke mulut. Sebuah kerangka konseptual diusulkan yang menyelidiki dampak citra institusi dan kepuasan mahasiswa dari mulut ke mulut (WOM). Survei dipekerjakan dan responden dari mahasiswa Universitas Terbuka Indonesia (Universitas Terbuka = UT). Ada 155 kuesioner yang dapat digunakan untuk menganalisis statistik deskriptif, realibility, validitas dan pemodelan persamaan struktural (SEM). Penelitian ini menemukan bahwa gambar institusi dan kepuasan siswa secara signifikan mempengaruhi WOM dan gambar yang memberikan pengaruh kuat pada WOM dari kepuasan. Oleh karena itu, UT sebagai perusahaan jasa harus fokus pada faktor-faktor ini dalam rangka untuk membangun sebuah jangka panjang dan mutally hubungan profitabilitas dengan siswa dan menciptakan WOM positif sebagai keunggulan kompetitif.

Kata kunci: Image lembaga, Kepuasan, Dari mulut ke mulut

JEL Classifications: M31

### **1. Research Background**

A tremendous growth has been observed in the Indonesia higher education institutions (HEI). Especially the growth in the number of private HEI is reflected by the increase in the numbers of institutions established from year 2009 to 2013. Based on Direktori Perguruan Tinggi Direktorat Pendidikan Tinggi that in 2009 there were 1.382 universities and in 2013 the

number of university increased to 3.151, more than 97% is private university. The entrance of new players into the industry created competitive situation. 85 and private universities increased to more than 3.000. It can be seen that there is a remarkable growth in the number of private HEI within the period compared to public HEI. The entrance of new players into the industry created competitive situation as contended by Michael Porter (Wheelen and Hunger, 2008). The competitive situation within the industry is fuelled by the existence of foreign universities in the country, through either the setting up of branch campuses or the offering of franchising programmes to local private universities. Thus, Indonesian students could earn degrees from foreign universities without going abroad and it costs less compared to studying abroad.

The growth provides more opportunities for potential candidate to continue their studies at higher levels. Students have more choices to make in terms of which HEI to pursue their studies and creating a situation where they have more bargaining power. According to Porter's Competitive Forces (Wheelen and Hunger, 2008), the consumer's bargaining position is one of the forces that lead the industry more competitive because the consumer can demand quality and better service.

UT as the only public university that uses distance education system can not be separated from the competitive situation. Various ways have been made to increase the value of its competitive advantage. In quality, UT has been certified in distance education from the International Council for Distance Education (ICDE) in 2005 (Renstra, 2010-2021). Additionally, the entire course at UT has received accreditation from the Badan Akreditasi Nasional Perguruan Tinggi (BAN-PT). Although the improvement of quality has been carried out continuously, but it does not automatically establish a positive image in the community. Until now there is still a view that studied at UT just to get a diploma (Kompas, September 4, 2011). Therefore, in accordance with the Renstra 2010-2021, UT intends to improve the institution image of distance education.

In education, institution image has been used widely as an instrument positioning to influence the preferences of prospective students choose a college (Weissman, 1990 in Nguyen and LeBlanc, 2001). Institution image significantly positively associated with loyalty (Dick and Basu, 1994 in Nguyen and LeBlanc, 2001), better attitude (word of mouth, repeat purchase intention, or a recommendation) or behavior (or re-purchase the same brand choice within a certain period). Positive relationship between image and word of mouth is also supported by research Bigne *et al.*, (2005) in the field of tourism. Besides to word of mouth, image affect to customer satisfaction (Amin *et al.*, 2013; Bigne *et al.*, 2005; Bloemer and de Ruyter, 1998). Bitner (1990) and Swan & Oliver (1989) in Brunner *et al.*, (2008) stated that customer satisfaction has positive influence on word of mouth. According to research student exit survey in 2013, more than 75% of students stated first information about UT obtained from friends, family and associates (Mulyana, 2013). This means that word of mouth is very large role as a source of information compared with other media such as newspapers, radio, television, or educational exhibits.

Based on the interrelation between the above variables, the study aims to examine the relations between the institution's image, customer satisfaction and word of mouth to take the setting of the Open University as a higher education provider of long distance services.

## **1.1 Literature Review**

### **1.1.1 Image, Satisfaction, and Word of Mouth**

Word of mouth has been extensively analysed in relation to customer satisfaction; however, image has received much less attention. In the literature, brand image has been defined as a perception of quality associated with the brand name (Aaker and Keller, 1990). On the company level, image has been defined as perception of an organization reflected in the associations held in consumer memory (Keller, 1993). Selnes (1993) suggested that image

should be incorporated into a model of loyalty together with satisfaction; he found that both variables, image and satisfaction, were associated with WOM.

Corporate image is described as the overall impression made on the minds of the public about a firm (Kotler and Barich, 1991). Nguyen and Leblanc (2001) claim that corporate image is related to physical and behavioural attributes of the firm, such as business name, architecture, variety of products / services, and to the impression of quality communicated by each person interacting with the firm's clients.

Corporate image is the result of a process (McInnis and Price, 1987 in Aydin and Ozer, 2005). The process stems from ideas, feelings and consumption experiences with a firm that are retrieved from memory and transformed into mental images (Yuille and Catchpole, 1977 in Aydin and Ozer, 2005). Therefore, corporate image is the result of an evaluation process. Although a customer may not have enough information about a firm, information obtained from different sources such as advertisements and word of mouth will influence the process of forming corporate image.

Fishbein and Ajzen (1975) in Aydin and Ozer (2005) argue that attitudes are functionally related to behavioural intention, which predict behaviour. Consequently, corporate image as an attitude must affect behavioural intention such as customer loyalty (Johnson *et al.*, 1995). Nguyen and Leblanc (2001) demonstrate that corporate image relates positively with customer loyalty in three sectors (telecommunication, retailing, and education).

Satisfaction can be separated into two approaches either as a transaction-specific satisfaction (Olsen and Johnson 2003) or as a cumulative satisfaction / post-consumption satisfaction (Oliver 1997). After 1990s, many researchers view satisfaction as customers' cumulative, after purchase, and overall judgment about purchasing behaviour (Johnson *et al.*, 1995). According to Oliver (1997), satisfaction is defined from the mixture of both affection (emotion) and cognition approach as "the consumer's fulfilment response". It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfilment, including levels of under or over fulfilment (Oliver, 1997).

Customer satisfaction is viewed as influencing repurchase intentions and behaviour, which, in turn, leads to an organization's future revenue and profits. However, Bowen and Shoemaker (2003) stated that satisfied customers may not return to the firm and spread positive word of mouth communications to others. One of the reasons is that the firm does not deliver what customers need or want (Roig *et al.*, 2006). Woodruff (1997) further identified that customer satisfaction measurement without fulfilment of customer perceived value cannot really meet the customer's expectation. Therefore, other variables should exist to further explain the relationship between satisfaction and customer loyalty.

Word of Mouth (WOM) is one of the best ways to sell products and services. In common life, customers have been exposed to various kinds of massive promotion. However, the effect of promotional messages on customer opinion about a product or service is not as strong as the effect of WOM (Sweeney *et al.*, 2008). Therefore, it is important to note that a person who gives a positive WOM has no material interest so that WOM is very credible promotion techniques.

Word of mouth is an important parameter attitudinal loyalty (Rauyruen and Miller, 2007). This is evident from the willingness of the customer gives a good impression of the products or services by encouraging friends and relatives using existing products or services. Together with the intention of repurchasing, WOM represents an important component of customer behavioral intentions (Hsu *et al.*, 2010). WOM communication appears not only from the customer attachment to a brand, but also from the will give a recommendation. Research Yun and Good (2007) showed that the image of the store is an important predictor of behavioral intentions.

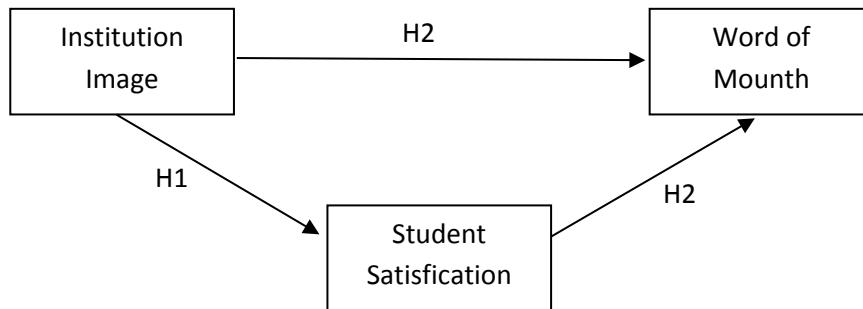
### 1.1.2 Hypotheses and Structural Model

Based on the results of earlier studies discussed in the previous section, we formulated the hypotheses detailed below. Figure 1 presents a proposed model, representing all of the hypotheses. Arrow in figure 1 indicate causal direction.

H1 : There will be a positive relationship between institution image and student satisfaction

H2 : There will be a positive relationship between institution image and word of mouth

H3 : There will be a positive student satisfaction and word of mouth



**Figure 1. The Proposed Model**

## 2. Research Methods

### 2.1 Research Context and Procedure

This research investigates the relationship between image, satisfaction, and WOM at the undergraduate's level using an electronically distributed survey. In order to assess WOM, quantitative research is selected. The measurement items were related to three constructs: image, satisfaction, and WOM. These constructs were measured to test the hypotheses. This research used items that have measured these constructs based on their high level of reliability and validity in previous research. All these constructs were operationalized using multi-item measures. All questions were based on a five-point likert-type scale from "1 = strongly disagree" to "5 = strongly agree". The proposed questionnaire (items for measurement), which has been derived, integrated, and enhanced from Nguyen and LeBlanc (2001), Bettencourt (1997), Athiyaman (1997) and Harrison – Walker (2001). The population for this research was all students enrolled in study program Management in UT for 2014.1.

### 2.2 Survey Instrument and Measurements

For the purpose of this research, a draft was prepared utilizing and combining four questionnaires. The draft was enhanced based on Nguyen and LeBlanc (2001), Bettencourt (1997), Athiyaman (1997), and Harrison – Walker (2001) surveys. Since all the indicators applied in this study have been used by many other researchers, the instruments was not pretested further.

To measures institution image, the five-item scale developed by Nguyen and Leblanc (2001) was adapted to UT. Satisfaction was assessed by six items adapted from Athiyaman (1997) and Bettencourt (1997). Regarding the measure of WOM, a five-item scale was developed by Harrison – Walker (2001) 3 items was adapted.

### 2.3 Samples

Hair *et al.*, (1998) stated that, for any research that using maximum likelihood estimation, the sample size obtained should be at least five times as many as the items to be analysed. However, the authors suggest that it is highly acceptable and most preferred if the study can obtain a sample based on a ten-to-one ratio. In other words, if the study could obtain a number of sample ten times the number of measuring items in the questionnaires. This study has 14 items which consisted of 5 image items, 6 satisfaction items, and 3 WOM items. Hence, it is highly preferable and adequate if the study could obtain  $10 \times 14 = 140$  samples. In order to play safe

due, to unanswered or unreturned questionnaires, the study decided to distribute questionnaires to 200 undergraduate students. The number of questionnaires returned was 170, but only 155 can be processed. This figure exceeds the required sample size of 140 as stated by Hair *et al.*, (1998).

A six-item socio-demographic section was included in the main survey instrument. The respondents were asked about their gender, age, marital status, occupation, education, and frequently visit UT operational branch (UPBJJ) to explore the several characteristics of respondents.

### 3. Research and Discussion

#### 3.1 Respondents Characteristics

Based on the results of questionnaires to students UT online, collected 155 questionnaires that can be processed into research data with characteristics of 43% male and 57% are women. While based on age, 62% aged less than 25 years. As for the remaining 38% over the age of 25 years. Life characteristics closely related to employment status, of which about 72% has been working. Likewise, with the latest educational UT students are about 59% of high school graduates. This happens because most of the UT student is younger employees who want to advance her career through education

#### 3.2 Validity and Reliability

In the first stage, the measurement model analysis performed on each measurement model or construct separately through the evaluation of the validity and reliability of the measurement model. Both of these evaluations are t - value (loading factor) is greater than the critical value ( $\geq 1.96$ ) and standard factor loading (standardized factor loadings)  $\geq 0,50$  (Igbaria *et al.*, 1997 in Wijanto, 2008).

All variables were observed to have good validity because it has the value t – value  $> 1.96$  and the value of the standardized loading factor (SLF) is greater than 0.50. In addition, estimates of solution can be obtained standardize test reliability or consistency of a measurement. Reliability of institution image, satisfaction and word of mouth are expressed in CR  $> 0.7$  and VE  $> 0.5$  which shows good reliability.

**Table 1. Validity and Reliability**

<b>Observeb Variable</b>	<b>SLF <math>\geq 0.50</math></b>	<b>t- value <math>\geq 1.96</math></b>	<b>CR <math>\geq 0.70</math></b>	<b>VE <math>\geq 0.50</math></b>
Institution Image			0.78	0.49
IMAG1	0.73	12.22		
IMAG2	0.6	10.12		
IMAG3	0.88	14.62		
Satisfaction			0.92	0.66
SAT1	0.79	16.02		
SAT2	0.8	16.52		
SAT3	0.88	19		
SAT4	0.93	20.8		
SAT5	0.87	18.72		
SAT6	0.55	9.96		
Word of Mouth			0.82	0.61
WOM1	0.83	15.15		
WOM2	0.88	16.18		
WOM3	0.60	10.61		

Source: SEM analysis

#### 3.3 Structural Model Analysis

After the test the suitability of the overall model of SEM, the next step is to analyze the structural model. Figure 2 shows the significance of the effect between the constructs. The

relationship between the three constructs 3 latent variables, all showed a significant effect. Significance effect of the t - value above 1.96. Constructs institution image has a positive and significant impact on satisfaction and word of mouth with t - value 11.15 and 4.97. Then satisfaction positive and significant effect on WOM by 3.58.

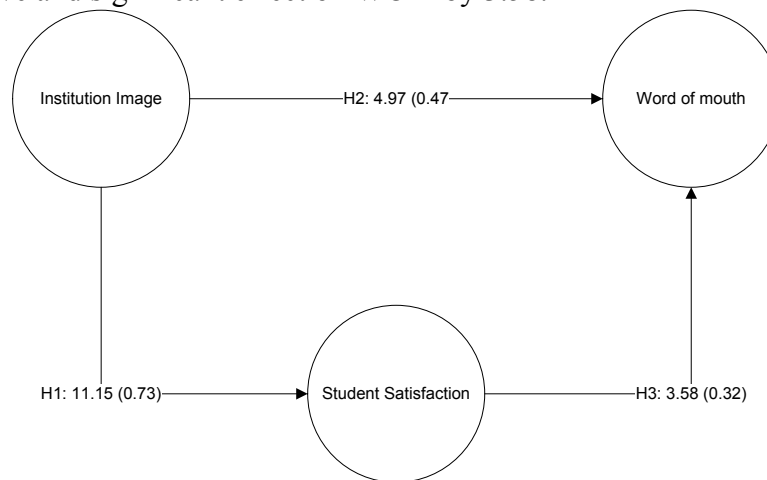


Figure 2. SEM

Among the three-significant influence, possessed the greatest influence on satisfaction to institution image by 0.73. Followed influence on the institution image and satisfaction to WOM 0.47 and 0.32. In addition to the direct effect on the image of the institution and the satisfaction to WOM, image indirect effect on WOM through satisfaction. The total effect image to WOM was 0.70.

Tabel 2. Tests of Hypotheses

Hypotheses	Paht	t - value	Estimation	Conclusion
1	Image →satisfaction	11.15	0.73	Significant (supported)
2	Image → word of mouth	4.97	0.47	Significant (supported)
3	Satisfaction → word of mouth	3.58	0.32	Significant (supported)

The magnitude of the observed variable contribution to the formation of each construct can be seen from the structural model estimates. In relation to the institutional image of satisfaction and WOM, the largest contribution donated by UT students' beliefs have a better image than other universities followed by UT impression and a positive image in the minds of students.

#### 4. Conclusion

Based on the results of SEM analysis, the image of the institution and a significant positive effect on satisfaction (H1) and word of mouth (H2). Effect institution image to satisfaction is greater than the effect of the institution image on word of mouth. The results obtained in the first hypothesis is consistent and in line with previous research conducted Prayag and Ryan (2011), Mohamad and Awang (2009), and Bigne *et al.*,

(2005). While the hypothesis 2 supports research Bigne *et al.*, (2005) against tourists in Spain. The third hypothesis is in line with research Prayag and Ryan (2011) and Bigne *et al.*, (2005). In total institution image effect on word of mouth through satisfaction. Positive and significant influence of the H1 and H2 showed that the increase in the institution's image will not necessarily improve satisfaction and WOM. Then satisfaction will encourage students give positive WOM. Therefore, UT as a provider of higher education need to constantly upgrade and improve the image of the institution. A positive image of the institution would be beneficial to

the improvement of impact and satisfaction and WOM. Based on the Exit Survey (Mulyana, 2013), word of mouth in the form of information and recommendation of friends, relationships, and family is the main source UT introduction for prospective students.

Hypothesis testing showed that the entire hypothesis proved to be acceptable. From the test results, it was concluded that in order to establish the word of mouth is affected directly or indirectly by the institution image and student satisfaction. Positive image of the institution will increase student satisfaction and encourage positive word of mouth. Word of mouth is the main source of information about UT students. Therefore, UT needs to continue to improve and enhance the image of the institution as a credible provider of educational services and trustworthy.

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