Internal Customer Satisfaction and Service Quality Toward Trust and Word of Mouth

Sri Rahayu*

This study is generally aims to analyze the influence of internal customer satisfaction and perceptions of service quality in creating trust and word of mouth in higher education service industry. In the process there is a special purpose to build the constructs/ variables to measure the internal customer satisfaction, so in the future it can be applied to institutions of higher education universally. The results of this study indicate that the internal customer satisfaction can be measured with the variable of service product, service delivery, and service environment, which all of those variables has a significant relation with trust where trust is significance related to word of mouth. On the other side the communication, productivity and responsiveness are significant in measuring the perceptions of service quality. The results also proved that the perception of service quality is significant related toward trust and word of mouth. This study is expected to contribute measurement tools of internal customer satisfaction in higher education. This research is also expected to enrich managerial implication on how to measure the internal customer satisfaction and service quality toward trust and word of mouth in higher education. Thus the higher education can continue to strive to provide educational service in accordance with the expectations of the customers.

Keywords: Internal customer satisfaction, perceptions of service quality, trust, word of mouth, higher education service

Penelitian ini secara umum bertujuan untuk menganalisis pengaruh internal customer satisfaction dan persepsi kualitas pelayanan dalam menciptakan trust dan word of mouth pada industri jasa pendidikan tinggi. Dalam prosesnya terdapat tujuan khusus yaitu membangun konstruk/ variabel ukur dari internal customer satisfaction yang kedepannya dapat diaplikasikan pada institusi pendidikan tinggi secara universal. Hasil dari penelitian ini menunjukkan bahwa internal customer satisfaction dapat diukur dengan variabel service product, service delivery, dan service environment. Hasil penelitian juga menunjukkan bahwa internal customer satisfaction memiliki pengaruh yang signifikan dalam terbentuknya trust, dimana trust memiliki pengaruh yang signifikan dalam pembentukan word of mouth. Penelitian ini juga mengukur persepsi kualitas pelayanan melalui variabel communication, productivity dan responsiveness. Kemudian menganalisis pengaruhnya terhadap trust dan word of mouth. Hasil penelitian membuktikan bahwa communication, productivity dan responsiveness signifikan dalam mengukur persepsi kualitas pelayanan. Hasil penelitian juga terbukti signifikan bahwa persepsi kualitas pelayanan memiliki pengaruh terhadap trust dan word of mouth. Penelitian ini diharapkan dapat memberikan kontribusi sebuah alat ukur internal customer satisfaction in higher education. Selain itu penelitian ini diharapkan dapat memperkaya implikasi manajerial bagi institusi pendidikan tinggi, untuk dapat mengukur internal customer satisfaction dan persepsi kualitas pelayanan terhadap trust dan word of mouth. Dengan demikian institusi pendidikan tinggi dapat terus berupaya untuk memberikan jasa pendidikan sesuai dengan harapan customerinya.

Kata Kunci: Kepuasan internal pelanggan, persepsi kualitas pelayanan, kepercayaan, word of mouth, jasa pendidikan tinggi

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Introduction

Indonesia has 83 state universities and 2,761 private universities in 2007. Thus, the level of competition between universities has been increasing. In the end not only the reputation of the university is a mainstay, aspects of customer value on education services is also a consideration for prospective students in choosing a college. The expected benefits of higher education is not just a degree but also jobs, status, lifestyle, location, safety in his career, comfort environment to study and the obtained network (Kurniatun, 2010).

The concept of customer in higher education is the same as in other businesses (Sax, 2004; Svensson and Wood, 2007). Customer can be defined as a person and / or organizations that make payments directly to the university as a form of exchange in the provision of educational services, either in the form of classroom education and research (Cliff, 1994). But education is not the same services with services in general; there is a process that must be passed to obtain an academic degree as evidence of the acquisition of educational services in a particular institution (Svensson and Wood, 2007).

Based on this, the concept of customer is no longer generalized. In relation to education services, customer concept is divided into two categories: internal customer and external customer. Internal customers are those who have close and direct interaction with universities and those who work to be able to give satisfaction to the external customer; they are academic staff (lecturer), researchers, non-academic staff, and students. On the other side, the External Customers are those who have an indirect relationship with the university. Nevertheless they also obtained the benefit from the service provided by the institution and/or contribute to the operational activities of the university (Marzo, Pedraja and Rivera, 2007).

Definition of customer satisfaction has been debated extensively. Customer satisfaction can be obtained in a variety of situations that have relevance to the goods and services. Satisfaction is also based on the experience gained when the customer interact with the company/ producer (moment of truth), and personal outcomes (Center for the Study of Social Policy, 2007).

According to Bell (1994) all parties must know the expectations in building a good relationship. A hope is a tool to avoid misunderstandings in the building of a relationship in life. Basically the purpose of a business is to create satisfied customers (Schaars, 1998). The customer satisfaction can provide some benefits including; creating more harmonious relationship between customers and companies, re-purchasing behavior, and customer loyalty. Of all reasons the main purpose is to form a word of mouth recommendation which is beneficial for the company (Tjiptono, 1999).

One of the most popular models in measuring customer satisfaction in the service industry is a measurement that is based on the SERVQUAL gap that appears on the form on the customer perception of service quality (Parasuraman et al, 1985, 1988). Therefore, this study attempted to measure satisfaction based on personal contact and interaction between consumers and producers which are divided into three elements; service product, service delivery and service environment (Rust and Oliver, 1994).

Internal customer satisfaction is closely related to the perception that is formed upon the performance of services between units that often interact with the internal customer. The assumption is that positive perceptions of a higher education institution will be aligned with high levels of satisfaction as well. If the obtained value of satisfaction and perceived value are positively significant, then the continued impact that is expected to appear is significant value of trust. The importance of this is based on the premise that education is a form of long-term investment where there is a unique service in the process, the process of delivering services on an ongoing basis within a specified time, whom the future realized or not will have an impact on loyalty and word of mouth to the institution. Based on this situation, the perceptions of service quality in this study will be measured through three variables: communication, productivity and responsiveness (Rabinowitz, 2006).

In the typology used by economists, business community is divided into 3 (three) sectors: the primary, secondary and tertiary sector. The primary sector includes all of the extraction...
industries of mining and agriculture. Secondary sector includes industries to process raw material into finished goods, construction, manufacturing and utilities. The tertiary sector includes all of the form of physical objects (physical services), the human condition (human services) and symbolic objects (information and communication services).

Education belongs to the tertiary sector of industry, because the principal activity is to transform the un-knowledgeable human and the un-skills to be knowledgeable and skilled. Education has 3 (three) main tasks; to preserve, to transfer and to develop science, technology, art and culture. Education is also very vital role in transferring the values and national identity (Prof. Dr. Sofian Effendi, Article Regarding Indonesia, 2007).

In the category of products and services, education is in the category of services. Services are activities or benefits offered by one party to another that is essentially without form and did not produce any ownership. Nature of the services include: Intangible, Heterogeneous, Perishability, and Inseparability. Educational services in the category of actions which the processes are intangible and the delivery is directed at people’s minds (Kotler and Armstrong, 2008, 1998).

There is a dearth of consensus on the definition of customer service to education as a whole, so does the definition of customer in the majority of higher education institutions. Nevertheless Marzo, Pedraja and Rivera (2007) mapped the customer at an institution of higher education as shown in table 1.

<table>
<thead>
<tr>
<th>Process</th>
<th>Internal customers</th>
<th>External customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching</td>
<td>• Teaching staff</td>
<td>Students</td>
</tr>
<tr>
<td></td>
<td>• Administrative and service personnel</td>
<td></td>
</tr>
<tr>
<td>Learning</td>
<td>• Students</td>
<td>Employers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Society</td>
</tr>
<tr>
<td>Research</td>
<td>• Teacing-research staff</td>
<td>Society</td>
</tr>
<tr>
<td></td>
<td>• Grant holders</td>
<td>Public Administration</td>
</tr>
<tr>
<td></td>
<td>• Administrative and service personnel</td>
<td>Non-profit organizations</td>
</tr>
</tbody>
</table>

Source: Marzo, Mercedes, Marta Pedraja, Pilar Rivera., 2007.

In evaluating internal customer satisfaction, this study uses the three-component models concept offered by Rust and Oliver (1994), the concepts are: service product; service delivery and service environment. Service products of higher education institutions are not fully addressed in achieving external customer satisfaction.

It is not easy to state that a student is an internal customer of an institution of higher education, given the nature of all internal things should be either in production systems or inside the structural. Yet supported with some evidential research theory (Table 2.), this study emphasizes the position of the students as an internal customer which their satisfaction and perceptions of service quality can have an impact on trust and word of mouth to a higher education institution.

**Literature Review**

**Internal Customer Satisfaction**

Satisfaction of both internal and external customers based on the concept of service quality. Quality of service is not created through the production process as in the factory but was created during the delivery process of service in the form of interaction between consumers in which there are personnel contact with the service providers (Kurtz and Crow, 1998).

Service quality is a concept of how to implant the quality at every phase of the implementation of services which involving all personnel in the organization (Handriana, 1998). Dimensions of service quality depend on the type of service industry to be assessed. Different types of service industries are likely to have different dimensions of qualities. Table 3 shows some extensive definition / dimensions of service quality according to some experts.
are quality of product engineering services to be conveyed, generally include some specific advantages of the products that can be used in identifying the characteristics or specifications of the product. At an institution of higher education, product services are divided into several categories such: curriculum, competence, reputation, classroom activities, teacher quality, completeness and availability of teaching materials such as books in the library.

*Service delivery* refers to the functional quality of the service script, rules and manual labor, up to the protocol on how the services are delivered. At institutions of higher education, delivery process takes place in layers; institutional delivery to internal stakeholders, deliv-

<table>
<thead>
<tr>
<th>Authors/ references</th>
<th>Criteria</th>
<th>Agents</th>
</tr>
</thead>
</table>
| Downey, Frase and Peters (1994) | • Internal customers  
• External customers  
• Internal customers  
  o Academic customers  
  o Administr. customers | ✓ Personnel and students  
✓ Business, industry and students |
| Lewis and Smith (1994) | • External customers  
  o Direct customers  
  o Indirect customers  
• Internal customers | ✓ Students, professors and programs/ departments  
✓ Students, administration and service personnel, units/ divisions and departments |
| Lindsay (1994) | • Internal customers  
• External customers  
• Resource customers | ✓ Personnel and students  
✓ Society, Public Administration and organizations  
✓ Students and parents |
| Madu, Kuei and Winokur (1994) | • Transformation customers  
• Result customers  
• Internal customers | ✓ University personnel  
✓ Teaching staff and administrative personnel  
✓ Student, employers, and society |
| Dervitsiotis (1995) | • External customers  
• Internal customers | ✓ Teaching staff and administrative personnel  
✓ Student, employers, other education institution and society |
| Spanbauer (1995) | • Internal customers  
• External customers  
• Internal environment | ✓ Students, teachers and non-teaching personnel  
✓ Employers, alumni, families, sponsors, students, government and other centres of higher education |
| Alvarez and Rodriguez (1997) | • External environment  
• Primary customers | ✓ Teachers and students  
✓ Employers, Public Administration and university managers |
| Hewit and Clayton (1999) | • Secondary customers  
• Internal customers | ✓ Employers, industrial sector, Public Administration, society and students  
✓ Student and university personnel |
| Kanji and Tambi (1999) | • External customers  
• Internal customers  
  o Teaching process  
  o Research process  
  o Learning process | ✓ Teaching and research personnel  
✓ Teaching and research personnel  
✓ Students |
| Pereira and da Silva (2003) | • External customer  
  o Teaching process  
  o Research process  
  o Learning process | ✓ Students  
✓ Society and Public Administration  
✓ Employers |

ery lecturer to students, institutions and delivery to students.

Service environment includes a number of dimensions classified into two characteristics:

a. Internal environment; is organizational culture and philosophy which became the basis of educational services. It includes the foundation and substance of academic, academic freedom, and the desire to find new things related to academics.

b. External environment; is the physical environment in which education services are applied. The physical environment includes; infrastructure (parking, building lectures, lab facilities, discussion rooms, library, etc.), Wi-Fi access, cafeteria, bookstore, bank, and all the standard routines complement the market.

According to Rust and Oliver (1994), those three dimensions are represent all dimensions of service quality, why is that? Based on the above explanation and a combination of service quality elements (Table 3), this is the following representation.

### Service Quality

In evaluating perception of service quality, this study uses the concept offered by Rabinowitz (2006), the concept are

a. Communication: the ability to communicate and listen effectively

b. Productivity: the ability to maintain high quality standards of efficiency, reliability, and quality.

c. Responsiveness: the ability to effectively respond to customer needs and requirements.

Variable communication, productivity, and responsiveness are helping the companies in identifying the unit of work with the following classification:

1. Weaknesses: the part where customer considered it as weaknesses of the company.

2. Strength: the part where customer considered it as the most powerful part of the company, which create the highest satisfaction in the eyes of the customer.

3. Area for improvement; to see things that need to be developed, in order to maintain or enhance the perception of service performance in the eyes of consumers, and also to improve service performance.

In this study these variables are expected to measure perceptions of service quality for the performance of an institution of higher education, on how the institution can be accepted by students as its internal customers. Related to the case of this study, the quality of service measured from the representation of each course. This is consistent with exposure to G. Ronald Gilbert (2000), which states that the internal customer perception is not only seen from the university to the students, but also between internal divisions and each of its customers.

### Trust

For nearly two decades, trust has its own role in the marketing world. Along with the transition from product-oriented market model to customer-oriented model, marketing activities are now moving to not just delivering a product/service but to build good relationships with their customers (relationship marketing).

Trust can be defined as, “willingness to accept a little mistake/error/less careful, base on positive expectations as the basis of the values and behaviors that had already formed of a product/service (McEvily, Perrone and Zaheer, 2003). Trust is the economic and the organization theory that is more effective than the current price when dealing with knowledge-based assets (Adler, 2001).

In the context of higher education service; reliability, integrity, credibility is very important to be build in the minds of consumers to-
ward a higher education institution. Due to the fulfillment of the above factors means that higher education institutions must be able to maintain consistency in quality, good product quality, delivery and the environment.

So, in evaluating Trust, this study uses the concept offered by Hyeonjin Soh; Leonard N Reid; Karen Whitehill King (2009), the concept are; Reliability, Usefulness, Affect, and Willingness to Rely on.

WOM

According to Kumar, Petersen, and Leone (2007), valuable customers are the customer that through their word of mouth can bring the most favorable customers; despite on how much they buy for themselves. What is perceived by the customer and what they are prepared to be preached to others about a company/brand can affect both the revenue and profit (Reicheld, 2003).

WOM communication is often gift strong influence on one’s justification for a product or service (Herr, Kardes and Kim, 1991). Any activity involving the WOM will basically related to satisfaction and profit research. Positive WOM Generate more outcomes than the negative. Nevertheless both have a significant impact on potential customer’s behavior toward the company and purchase intentions (Soderlund & Rosengren, 2006).

Implications for higher education, excellent WOM not only impact on improving the financial return but also enhanced its image. Individuals who are satisfied and believe in a higher education institution will be willing to spread positive WOM and can easily give recommendation to others, especially the closest one.

So, in evaluating WOM, this study uses the concept offered by Bambauer-Sachse (2010), the concept is; Willingness to recommend based on Satisfaction and Service Quality.

Methods

Based on the above review of literature, the following model and hypotheses were proposed to be tested in this study.

There are 6 (six) latent variables were identified, that is, service product (SP), service delivery (SD), service environment (SE), communication (C), productivity (P), and responsiveness (R). These variables were hypothesized to influence internal customer satisfaction (ICS) and perception of service quality (SQ). Other latent variables were TRUST and WOM which each of those is measured by observed variables. According to Figure 1, this study has 5 (five) hypotheses to be tested as follows:

H1. ICS has a significant influence to create positive TRUST
H2. SQ has a significant influence to create positive TRUST
H3. ICS has a significant influence to create positive WOM
H4. SQ has a significant influence to create positive WOM
H5. TRUST has a significant influence to create positive WOM

The research was testing out the internal customer satisfaction and service quality percep-
tions of trust and word of mouth on higher education institutions. Therefore, this study took place at the Faculty of Economics Universitas Indonesia (FEUI). FEUI holds the number one position as the best Faculty of Economics in Indonesia, established in 1950 till now, FEUI now has 3 (three) specialty fields of science, namely: Accounting, Economics and Management Science. Of each field of science FEUI have 12 (twelve) courses ranging from undergraduate (S1), graduate (S2) and doctoral level (S3).

This study uses a single cross sectional design, by utilized stratified random sampling technique. It was carried out from February 2011 to July 2011. The data was collected with quantitative methods in the form of a questionnaire survey. The numbers of respondents are 270 students randomly selected from each of study program in a homogeneous group.

Pre-test are performed to test the accuracy of the questionnaire as a measuring tool in the study. Questionnaires will be declared as a good gauge if it meets the test criteria of good reliability and validity. Reliability testing on the pretest is using 30 (thirty) samples. Pretest data processed using SPSS 17.0. Tabel 5 demonstrate the results of reliability test (pretest) and Tabel 6 demonstrate the validity of test results (pretest) of all variables.

All the latent variables which are tested through the construct of the questionnaire showed good results. Thus, all constructs can be continued as a measurement tools in the main study.

This study used Structural Equation Modeling (SEM) to test the results of the research, that concept also known as the Analysis of Moment Structures. Statistical analysis was used to estimate the multiple regressions which are separate but interconnected together (simultaneously). In the analysis of causal relationships there are some of the indicators that should be observed as follow:

a. t-value of the coefficient and parameter;

b. value of coefficient / parameter, and

c. The coefficient of determination (R2)

T-value obtained from the calculation results with the t-table of the normal distribution table. Criteria for acceptance is -1.96 < t-value < 1.96. Value of t-value > 1.96 indicates that the hypothesis is supported by research data.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach's Alpha</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP</td>
<td>0.718</td>
<td>Reliable</td>
</tr>
<tr>
<td>SD</td>
<td>0.839</td>
<td>Reliable</td>
</tr>
<tr>
<td>SE</td>
<td>0.877</td>
<td>Reliable</td>
</tr>
<tr>
<td>C</td>
<td>0.829</td>
<td>Reliable</td>
</tr>
<tr>
<td>P</td>
<td>0.938</td>
<td>Reliable</td>
</tr>
<tr>
<td>R</td>
<td>0.949</td>
<td>Reliable</td>
</tr>
<tr>
<td>TRUST</td>
<td>0.923</td>
<td>Reliable</td>
</tr>
<tr>
<td>WOM</td>
<td>0.857</td>
<td>Reliable</td>
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</table>

<table>
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<tr>
<th>Variable</th>
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<th>Result</th>
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<tbody>
<tr>
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<td>Valid</td>
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<tr>
<td>SD</td>
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<td>Valid</td>
</tr>
<tr>
<td>SE</td>
<td>0.744</td>
<td>Valid</td>
</tr>
<tr>
<td>C</td>
<td>0.663</td>
<td>Valid</td>
</tr>
<tr>
<td>P</td>
<td>0.675</td>
<td>Valid</td>
</tr>
<tr>
<td>R</td>
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<tr>
<td>TRUST</td>
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<td>Valid</td>
</tr>
<tr>
<td>WOM</td>
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<td>Valid</td>
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<table>
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<tr>
<th>Hypothesis</th>
<th>t-value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
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<td>Data support H1</td>
</tr>
<tr>
<td>H2</td>
<td>3.33</td>
<td>Data support H2</td>
</tr>
<tr>
<td>H3</td>
<td>1.33</td>
<td>Data not support H3</td>
</tr>
<tr>
<td>H4</td>
<td>3.58</td>
<td>Data support H4</td>
</tr>
<tr>
<td>H5</td>
<td>7.04</td>
<td>Data support H5</td>
</tr>
</tbody>
</table>

Table 5. Reliability Test (n = 30)

Table 5. Validity Test (n = 30)

Table 6. Result of Hypothesis Testing with SEM (n = 270)
Result and Discussion

Based on the results of testing the measurement model and structural model, it is known the significance of the hypothesis of this research through the t-value of each of the hypotheses set as shown in Table 6.

Based on the t-value obtained from 5 (five) the hypothesis, there is 1 (one) hypothesis is not supported by data. If the test results are set in the conceptual framework, then it will be as shown in Figure 2.

Based on the path diagram and structural model above, there are 4 (four) from 5 (five) hypothesis are significant. The hypotheses are as follow:

a. Hypothesis 1 (one) formed to test a positive relationship between internal customer satisfaction (ICS) toward Trust. Based on calculations of structural models for hypothesis 1, the obtained t-value is 6.09. This value is greater than t-table value (1.96), thus the data in this study support the hypothesis as follow:

H1. ICS has a significant influence to create positive TRUST

b. Hypothesis 2 (two) formed to test a positive relationship between perception of service quality (SQ) toward Trust. Based on calculations of structural models for hypothesis 2, the obtained t-value is 3.33. This value is greater than t-table value (1.96), thus the data in this study support the hypothesis as follow:

H2. SQ has a significant influence to create positive TRUST

c. Hypothesis 4 (four) formed to test a positive relationship between perception of service quality (SQ) toward WOM. Based on calculations of structural models for hypothesis 2, the obtained t-value is 3.58. This value is greater than t-table value (1.96), thus the data in this study support the hypothesis as follow:

H4. SQ has a significant influence to create positive WOM

d. Hypothesis 5 (five) formed to test a positive relationship between perception of Trust toward WOM. Based on calculations of structural models for hypothesis 2, the obtained t-value is 7.04. This value is greater than t-table value (1.96), thus the data in this study support the hypothesis as follow:

H5. TRUST has a significant influence to create positive WOM

Hypothesis 3 (three) is not supported by data; the obtained t-value is 1.33 which is lower than t-table value (1.96) that is make the hypothesis not significant. The in-significant in this hypothesis indicate the theory that says satisfaction can create positive WOM (Soderlund and Rosengren, 2006) should be examined. As-
suming there are other factors referred to satisfaction which proposed by Soderlund that does not exist in this study.

**Conclusion**

Internal customer satisfaction (ICS) has a significant influence on the creation of positive trust. In terms of the theoretical side, this hypothesis is also supported previous studies which broadly state that satisfaction is the antecedent for the formation of trust.

Perceptions of service quality (SQ) have a significant effect toward trust. In terms of the theoretical side, although the quality is one of the factors that influence satisfaction (Parasuraman, et al, 1990) which is the antecedent of trust, perception of service quality may have significant influence to the creation of a positive trust.

Perception of service quality is also significant in its effect toward word of mouth communications. It is stated that there is a correlation between satisfaction, perception of service quality and WOM (Kim et al, 2008).

Trust has a significant effect in creating WOM. In terms of the theoretical side, this finding supports the theory that WOM is also the antecedent of trust (Kim et al, 2008). In terms of applications, it shows that when the customer has believe to the providers of products/services, where trust is based on the satisfaction, and perceptions of service quality, then they will be willing to do a positive communication (positive WOM) toward the products/services. More over recommend it to others in the vicinity.

Suggestion related to the frequent finding in this study is: that the quality of service is one of factor that may affect to the creation of satisfaction (Parasuraman, et al, 1990). Thus, it is suggested that further research examine more to the relationship between perceptions of service quality toward the creation of internal customer satisfaction.

**References**


Effendi, Sofian. 2007. Indonesia Menghadapi Liberalisasi Pendidikan Tinggi. Artikel Seputar Indonesia, edisi 10 Maret.


