THE ANALYSIS IMPACT OF SERVICE QUALITY IN NON EDUCATIONAL SECTOR TOWARDS STUDENT’S SATISFACTION (A CASE STUDY OF EXTENSION PROGRAM PRESIDENT UNIVERSITY)

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A Thesis presented to the
Faculty Of Economics President University
in partial fulfilment of the requirements for
Bachelor Degree in Economics Major in Management

May 2013
THESIS ADVISER
RECOMMENDATION LETTER

This thesis entitled “The Analysis Impact Of Service Quality In Non Educational Sector Towards Student’s Satisfaction (A Case Study Of Extension Program President University)” prepared and submitted by Diovani Harera in partial fulfillment of the requirements for the degree of Bachelor in the Faculty of Economics has been reviewed and found to have satisfied the requirements for a thesis fit to be examined. I therefore recommend this thesis for Oral Defense.

Cikarang, Indonesia, May 30th 2013

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DECLARATION OF ORIGINALITY

I declare that this thesis, entitled “The Analysis Impact Of Service Quality In Non Educational Sector Towards Student’s Satisfaction (A Case Study Of Extension Program President University)” is, to the best of my knowledge and belief, an original piece of work that has not been submitted, either in whole or in part, to another university to obtain a degree.

Cikarang, Indonesia, 30 May 2013

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ABSTRACT

The research aims to identify impact of service quality towards students’s satisfaction and to know the most influence variable of service quality. The researcher used five variables of SERVQUAL: reliability, responsiveness, assurance, empathy, and tangible.

This research using quantitative analysis. Data were gathered from 103 respondents from 298 extension class students, batch 2011. The respondent is taken from all major as representative.

From the regression calculation is known that the coefficient determination obtained for 0.338. It means that 33.8% student’s satisfaction can be influenced by realiability, responsiveness, assurance, empathy, and tangible. Otherwise, 66.2% can be influenced by other variables.

After compile the data, the researcher get the result: from five variables, indicates only reliability variable has significant influence to student’s satisfaction. However, responsiveness, assurance, empathy, and tangible have no significant impact toward student’s satisfaction.

Keywords: Reliability, Responsiveness, Assurance, Empathy, Tangible, and Satisfaction
ACKNOWLEDGEMENT

I would like to express my gratitude to all of the people who already support me to accomplish Bachelor Degree for Faculty of Economics in President University.

First of all, my big thanks to Alloh SWT, for the bless so I still alive and I can finish my thesis.

I would like to say special thanks to Mr. Purwanto for the guidance, instruction, and knowledge transfer in analysis and interpretation of the research.

I would like to say my gratitude for both my parents, who fully support me, pray me for the best, so I can finish my thesis well.

I would like to thanks to academic staff in President University to access the data. My friends, Rima, Tedy and all my friends for the joys, laugh, and all knowledge sharing in order to finish this thesin.

Cikarang, 30 May 2013
The Researcher

Diovani Harera
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CHAPTER 1
INTRODUCTION

1.1 Background of Study

In general, customers estimate the value of each choice they have, and select the alternative that will deliver the most value. The student select the school that will provide the best educational experience and/or career outcomes, the faculty or staffmember select the job offer that provides the blend income, location, and work situation preferred, and the donor considers the impact of a donation. From the standpoint of the institution, the resource used in delivering the satisfaction its constituent desire is a cost. From the customer’s standpoint, acquiring the desired satisfaction has a price, which includes money spent plus time, effort, and opportunity cost – other things the customer could have done with the same time and/or money.

The value received is a matter customer perception and judgment, not the monetary price paid or the monetary cost. A recent study concludes: Today’s consumer is looking for a strong return on educational investment. The question being asked is, “With my academic background, my financial means and personal goals, where can I get the education that will be best for me?”

This is a somewhat narrow definition of value. The quality of the educational experience, the opportunities for personal development and leadership, and other aspects of college life cannot be measured before matriculation nor, with much precision even after graduation. Besides, each student approaches college with somewhat different set of needs, abilities, and expectations.

The Institute for Research in Higher Education found that “you get what you pay for” does not apply directly in higher education. They compared institutional ratings on reputation and student quality and outcomes. Considering annual tuition and result, they found two distinct horizontal bands of school, yet each
“band” ranges from ordinary to very good/excellent result. The institution may charge same sticker price for very different performance. The institutions closer to the upper left hand corner charge dearly for what they produce, while the outlier tending towards the lower right corner would be the smart choice of full paying student seeking the best results for their money.

Since value is the relationship between price and quality, the institution can increase value in two ways: reduce price (across the board or through financial aid for certain students) and/or increase quality. Forward-looking educational institutions are trying to enhance value in both ways. While few are actually lowering current tuition, most are looking for ways to slow the rate of increase in tuition to the rate of inflation. Slowing tuition increases requires reducing costs in the school’s operations by becoming more efficient in using current resources. Various forms of financial aid—including grants, work, and loans—are being used more effectively. Schools also look for ways to save their customers time and effort by, for example streamlining time consuming registration procedures. Schools also attempt to enhance quality by improving career services, residence life, and academic programs.

Quality enhancement and cost reduction efforts need to be guided by the institution’s mission and by consideration of what the institution’s customers and publics value most, followed by a search for better ways to deliver the desired satisfactions in the most cost effective manner.

1.2 Company Profile

1.2.1 History
According to President University’s founder, Mr. Setyono Djuandi Darmono, President University was built for two reasons; to become a research and development center and to set a new benchmark in Indonesian higher education.

The founders of President University laid down the foundation and ground work to ensure that President University will develop into a great institution of learning
where students from all parts of the world can acquire knowledge and develop into useful, responsible citizens and future leaders.

President University is located in Jababeka Education Park in Kota Jababeka. It is surrounded by the Jababeka Industrial Estate with more than 1,500 national as well as multinational companies from 30 nations, such as Mulia, Unilever, Samsung, Mattel, ICI Paint, Kraft and others.

As an international standard university, not only are the classes conducted in English, but President University is equipped with an international standard curriculum which was made and developed by world-class academics. All courses, including the state mandatory courses, are conducted in English. Students will speak, write, learn and think in English, the Global Language of today.

The conceptual plan of President University was first formulated in September 1997 by Mr. S. D. Darmono, the President Director of PT Jababeka Tbk. and Prof. Donald W. Watts, who was the President of Bond University, Queensland and Vice Chancellor of Curtin University, Western Australia. The goal of their proposed University was to create an institution of learning which would prepare future leaders of industry and society by giving them the skills and experience necessary to excel upon graduation.

The university officially began in 2001, offering a Bachelor of Engineering degree. At that time, the institution was called the School of Engineering based in Cikarang, Bekasi. On 16 April 2004, the Ministry of Education granted President University official status as a full fledged university.

Although still a young University, President University (PresUniv) is growing at a tremendous rate every year. There are now around 3,500 students attending President University from Indonesia as well as many other countries. 
President University has a vision: “To be a world class university that produces leaders in their fields and communities”. And its mission: “To educate future generations through the transfer of skills and knowledge in order to build character and wisdom.”

1.2.2 Extension Program

There are two program of class: regular program which held in the morning, and extension program which held in the evening. For extension program itself start in July/August 2006. Came from Prof. Dr. Mulaiwati G. Siswanto as a rector at that time, President University diserve to give opportunity specially for employee around Jababeka to deolvelop their skill, knowledge, and career. Besides, President University want to have feedback from the student which mostly are employees, about the real work world.

At the beginning, President University open three majors: Industrial Engineering (IE), PR (Public Relation), and IS (Information System). In 2008, President Universty open two majors, they are MGT (Management) and ACC (Accounting), and in 2010, there is new major: Mechanical Engineering, but because it was not favourite major, in 2012 major Mechanical Engineering was delisted. In 2013, extension program will open Electrican Engineering and Mechanical Engineering major.
1.2.3 Organization Structure

Below is the name in organizational structure of President University which updated in 2013

Rector : Dr. Drs. Chandra Setiawan, MM, Ph.D
Vice Rector 1 : Vincensius Winarto, Ph. D
Vice Rector 2 : Drs. Matias Zakaria, M. Si, Ak
Vice Rector 3 : T. Manivasugen, MBA

Head of Faculty

Economic : Mishabul Munir, Ak, MBA
Communication : Vincensius Winarto, Ph. D
Computing : DR. Rila Mandala
Engineering : Dr, -Ing. Erwin Parasian Sitompul, M. Sc
Law : Vincensius Winarto, Ph. D

Business and Internationa Rel: Prof. Anak Agung Banyu Perwita, Ph. D

Head of Study Program

1. Management : Vincensius Jajat K., SE, MM, MBA
2. Accounting : Dr. Sumarno Zain, SE, Ak, MBA
3. Business Administration : A.B.M Witono, MSBA, Ph. D
4. International Relation : Prof. Anak Agung Banyu Perwita, Ph. D
5. Information Technology : Nur Hadikusuma, M. Sc
6. Information System : Rikip Ginanjar, M.Sc
7. Industrial Engineering : Herwan Yusmira, BSC, MET, M Tech
8. Electrical Engineering : Dr, -Ing. Erwin Parasian Sitompul, M. Sc
9. Communication : M. Raudhy Gathmyr, S. Sos, M. Si
10. Law : Myrna Asnawati Safitri, SH., M. Si., Ph. D

1.3 Problems Identification

President University as its vision is to be a world class university that produces leaders in their fields and communities must give the best services to its student as the prior customers. Year by year the student of extension class of President University is increased.
By this research, the researcher wants to know how the relation between service performance and perceived satisfaction of extension class batch 2011 at President University.

![Amount of Executive Class Student President University](image)

**Figure 1.1 Amount of Student Extension Class’s President University**
(Source: President University Academic Department)

From the figure above, year by year the number of student is increased. President University want to keep those amount, even want to more increase every next year. To keep and increase the student, President University must to perform the best service what the students want.
1.4 Statement of Problem
In this research, can be answered these questions as below:

1. How reliability, responsiveness, assurance, empathy, and tangible are affected the student’s satisfaction of extension class at President University partially?
2. How reliability, responsiveness, assurance, empathy, and tangible are affected the the student’s satisfaction of extension class at President University simultaneously?

1.5 Research Objectives
The aims of this research as following:

1. To know the influence reliability, responsiveness, assurance, empathy, and tangible towards student’s satisfaction
2. To know the most influence variables of service quality

1.6 Significance of Study

1. Company
   This research could be an evaluation for President University about service quality. Besides it can evaluate strength and weakness of each factor to find strategy to achieve student satisfaction..

2. Academic
   Because it is the first research as extension program as an object, the researcher expect it can be one of the reference for next research.

3. Researcher
   The researcher has experience in conducting a research. Moreover, the researcher has more understanding about service quality and its variables.
1.7 Theoretical Framework

Based on differences in nature of service act (tangible/intangible) and who or what is direct recipient of service (people/possessions), President University as an educational institution is included in mental stimulus processing which directed meet the customers, then performance of service is important.

In delivering service quality to the customer, there are five dimensions of service quality which define customer satisfaction: reliability, responsiveness, assurance, empathy, and tangible. Those five dimensions become independent variables, and base of theoretical framework in this research and can be drawn as below:

![Diagram](source.png)

**Figure 1.2  Reliability, Responsiveness, Assurance, Empathy, and Tangible Influence on Satisfaction**

(Source: Framework created by researcher)

Reliability is the ability to perform the promised service dependably and accurately. Responsiveness is the willingness to help customers and so provide prompt service. Assurance is the knowledge and courtesy of the employees and their ability to convey trust and confidence. Empathy is the provision of caring, individualized attention to customers. And tangible is the appearance of physical equipment, personnel, and communications materials.
1.8 Scope and Limitation of Study
This research is planned to know how reliability, responsiveness, assurance, empathy, and tangible (non lecturer) influence on student’s perceived satisfaction which provided by President University. The student’s satisfaction itself will focus on the servqual measure.

The population is taken for this research is only student of extension class in President University batch 2011. The researcher prefer batch 2011 since they expected more experience in President University. Perhaps batch 2011 is not represent the whole perception of the students, but it can be the next challenge for next research.

1.9 Hypothesis
From the theoretical framework above, it can conclude hypothesis as follows:
1. There is a relationship between reliability with student’s satisfaction.
2. There is a relationship between responsiveness with student’s satisfaction.
3. There is a relationship between assurances with student’s satisfaction.
4. There is a relationship empathy with student’s satisfaction.
5. There is a relationship between tangible with student’s satisfaction.
6. There is a relationship between reliability, responsiveness, assurance, empathy, and tangible with student’s satisfaction.

1.10 Definition of Term
1. Service: an economic activity offered by one party to another, typically without transfer of ownership, creating value of rental of, to access to goods, labor, professional sills, facilities, network, or system, singly or in combination (Lovelock, 2005).
2. Quality: conformance to requirements (requirements meaning both the product and the customer’s requirements (Crosby, 1979)
3. Service quality: a customer’s judgment about the overall superiority of a product or service (Zeithaml, 1988)
4. Customer satisfaction: The extent to which a product's perceived performance matches a buyer's expectations. If the product's performance falls short, of expectations, the buyer is dissatisfied. If performance matches or exceeds expectations the buyer is satisfied, delighted. (Kottler, 2010)

5. SERVQUAL: is an instrument for measuring service quality, in terms of discrepancy of the service received. (Parasuraman, et al, 1985)

1.11 Systematic Writing

This research will be written in systematic manners which consist five chapters:

CHAPTER I INTRODUCTION

This chapter is consist of background of the study, company profile, problems identification, problems statement, research objectives, significance of the study, theoretical framework, scope and limitation of the study, hypothesis, definition of terms, and systematic writings.

CHAPTER II LITERATURE REVIEW

In chapter two is focus on literature review, definition or theory about service, quality, service quality, satisfaction.

CHAPTER III METHODOLOGY

Chapter three is consist of the research methodology, research time and place, research design, research instrument, sampling design, data analysis and hypothesis test.

CHAPTER IV ANALYSIS OF DATA AND INTERPRETATION OF RESULT

Chapter four is consist of the characteristic of respondents, descriptive analysis, validity and reliability test, model evaluation, regression model, and hypothesis test.

CHAPTER V CONCLUSIONS AND RECOMMENDATION

Chapter five is consist of the conclusion and recommendation from the researcher.
CHAPTER II
LITERATURE REVIEW

2.1 Service

(Kottler) Service is any activity or benefit that one party can offer to another which is essentially intangible and does not result in ownership of anything. Kurtz and Boone (2006) define services as intangible tasks that satisfy the needs and consumers and business. Palmer (2005) is of the opinion that services entail the production of an intangible benefit which, either in its own right or as a significant element of a tangible product, satisfies an identified need.

Gronroos (2001) offer a comprehensive definition of service where service is an activities or series of activities of a more or less intangible nature than normal, but nor necessarily, take place in the interaction between the customer and service employees and/or physical resources or goods and/or system of the service provider, which are provided as solutions to customer problems.

2.1.1 Service Characteristic

There are four characteristic of service: Intangibility, Inseparability, Variability and Perishability.

a. (Kotler and Keller, 2007) Intangibility means that cannot be seen, tasted, felt, heard or smelled before they are bought thus the customer cannot evaluate it. This causes increase in the uncertainty level and to reduce this factor, customers look for signals of service quality. Customers draw the conclusion of the service from the marketing mix. So it is very important for the service provider to tangibles the service in order for the service marketers to suggest the quality of their intangible service. (Kotler et al., 2005) Santos (2002) argued that even though intangibility is an important characteristic of service, tangibility has more important role in the service sector.
b. Inseparability character of service refers to the fact that services are produced and consumed at the same time and that they cannot be separated from their providers, whether the providers are people or machine. (Kottler et al., 2005) Inseparability is one of the characters that differentiate services with products because of the simultaneous production and consumption.

c. Services are variable and difficult to control. This is because they greatly depend on who provides the service as well as when, where and how they are provided - Variability. (Kottler et al., 2005) So the quality control becomes critical and to achieve that, service sector have to hire the right people, standardize the service and monitor the customer satisfaction. The service sector should be very careful while recruiting the service employee. After that, service firm should invest and provide training for the newly hired staff in order for staff to provide good service to their customers. Training helps staffs to develop skills necessary to do their job well in particular service area. Especially the front line staff who comes in direct contact with the customers.

d. One of the other major characteristics of service is that they cannot be stored for later use or sale - Perishability. When the demand is steady, then service Perishability is not a problem but the service sector face a huge problem when the demand fluctuates.

2.1.2 Four Board Categories of Services

Based on differences in nature of service act (tangible/intangible) and who or what is direct recipient of service (people/possessions), there are four categories of services:

a. People processing
b. Possession processing
c. Mental stimulus processing
d. Information processing
Figure 2.1 Four Board Categories of Services

Source: Lovelock, Wirtz, Hean, and Xiongwen, 2005

**People Processing**

Customers must physically enter the service factory co-operate actively with the service operation. Managers should think about process and output from customer’s perspective to identify benefits created and non-financial costs: time, mental, physical effort.

**Possession Processing**

Customers are less physically involved compared to people processing services. Involvement is limited. Production and consumption are separable.

**Mental Stimulus Processing**

Ethical standards required when customers who depend on such services can potentially be manipulated by suppliers. Physical presence of recipients not required. Core content of services is information-based. It is can be ‘inventoried’.

**Information Processing**

Information is the most intangible form of service output, but may be transformed into enduring forms of service output. Line between information processing and mental stimulus processing may be blurred.
2.2 Service Quality

Zeithaml (1988) stated service quality is a consumer’s judgment about the overall superiority of a product or services. Service quality is an essential strategy for success and survival of any business organization (Hill, 1995), as it can influence customer purchase behavior and organization performance (Zeithaml et al, 1996).

Considering the importance of service quality for any business, a great deal of service quality research in recent decades has been devoted to examine this construct across industries. Owing to the intangible of services, customers are always sensitive to finding quality indicators to evaluate a service. Due to heterogeneity of services, each service delivery can reflect different quality performance standards (Bruhn & Georgi, 2006).

Who defines what quality means? The ultimate judge is the customer, the person who decides which services to buy and which services to avoid. Customer define quality is determined by expectation and perceived performance. Judgment about quality often reflects one or more of these following four views:

1. Conformance to standards or specification: performing the service according to the stated guidelines
2. Consistency: the service always performed exactly the same way every time. Consistency by itself it is not enough. Consistent service quality could translate into “depend ably mediocre” or “always outstanding” services
3. Outcome quality: the service result in the client receiving was desired. Services must be designed to provide the outcomes customers value
4. Process quality: the process quality must describe how the service was delivered. The service delivered in a manner that was appropriate and positive for the customers.

Each of these perspectives on quality has merit. Those responsible for quality improvement should seek out what customers value most and then apply the approach (es) most relevant to particular situation.
2.3 Create a Quality – Delivery System in the Institution

Improving quality and increasing customer satisfaction are continuous process, not discrete events. Consider the self study and other documents schools prepare before periodic accreditation reviews. After the review and implementation of the required changes, these documents can be filed for the next five to ten years until the next accreditation visit. This treats quality as a check point, deserving of attention only when required by external evaluators. Institutions pursuing quality improvement need to adopt a system and process to define customer needs, collect performance-relevant information, refine or revise procedure, implement new initiatives, and review progress and improvements on a continuous basis.

Institutions new to total quality management often begin by educating a core group about quality principles and the initiating a few pilot projects, often in administrative services. For example, the first project might be involve identifying causes and process improvement to shorten the time reply to information requests, to reduce the average duration remodeling jobs, or to reduce errors in billing. These are often easiest to implement because they are frequently repeated process, amenable to the application of manufacturing-based TQM methods. Total quality for an educational institution includes but goes beyond administrative services. In the United Kingdom, institutional quality assurance is a required part of government inspection procedures for every institution of further education. The government’s 1993 Charter for Further Education sets out the rights of those who attend further education colleges, and requires these colleges to survey customer satisfaction at least annually.

2.4 Measuring Service Quality

It is important to measure service quality to identify quality related problem, to allow for comparison before and after a service change and to establish standards of service delivery (Brysland & Curry, 2001). Besides, there is a need for service quality models to enable management to identify high quality and to determine where problems exist and it has been argued that attempts to improve quality
management are being prevented because of the lack of instrument designed to measure quality (Farell et al., 1991).

The most popular widely cited and best researched method of assessing service quality is SERVQUAL (Asubonteng et al., 1996: Robinson, 1999) developed by Parasuraman et al, (1985, 1988, 1991). Parasuraman et al., (1985) have original identified ten determinants of service quality generic to service industry. These determinants were tangibles, reliability, responsiveness, competence, courtesy, credibility, security, access, communication and understanding. At the later stage, Parasuraman et al., (1988) developed 22 items instrument, recognized as SERVQUAL which has become widely used as generic instrument for measuring service quality. The instrument items represent by Parasuraman et al., (1988, 1991) the five dimensions as follows:

1. Reliability

   It refers to how the company are performing and completing their promised service, quality and accuracy within the given set requirements between the company and the customer. Reliability is just as important as a goof first hand impression, because every customer want to know if their supplier is reliable and fulfill the set requirements with satisfaction. Reliability is referring to goods that are error-free in a specified time or a promised service is executing dependably, whereas, in terms of service in educational institution it is defined as the level of the knowledge and information learnt are accurate (Yong, 2000; Garvin, 1987). The reliability dimension of service quality is defined to which extent the correct, accurate and up-to-date knowledge and information are fulfilling and also perform the services promised to students. By keeping the ability to execute the promised service dependably and accurately will encourage the knowledge being communicated. If the knowledge learnt from the lecturers is incorrect, inaccurate and not up-to-date, the sharing of knowledge among students will give a negative result.

   (Berry and Parasuraman, 1991) Service reliability – performing the service dependably ans accurately – is the heart of services marketing excellence.
When a company performs a service carelessly, when it makes avoidable mistakes, when it fails to deliver on alluring promises made to attract customers, it shakes the customer’s confidence in its capabilities and undermines its chances of earning a reputation for service excellence. From the customer’s perspective, the proof of the service is its flawless performance.

Common sense underscores the importance of reliability in delivering quality service. To be sure, reliability is not the sole determinant of customer’s service-quality evaluation. Performing the services right the first time contribute significantly to a company’s profit by simultaneously improving marketing effectiveness and operating efficiency.

In previous study (Berry and Parasuraman, 1991), customers perceive to be more deficient in reliability than any other dimension. Given the prevalence of service errors and broken service promises, consistent reliability gives a company the opportunity to compete effectively and build a reputation for service.

2. Responsiveness

It refers to the willingness of the company to help its customers in providing them with a good, quality and fast service. This is also a very important dimension, because every customer feels more valued if they get the best possible quality in the service.

Mechanistic service responsiveness includes:

a. Employee response: service personnel must know everything necessarily and professional ability is just a basis to solve the problems. Moreover, service personnel must have sufficient responsibility, flexibility and willingness to help customers. Parasuraman et al. (1998) indicated that, employee service behavior can enhance and maintain service quality, which is important in implementing organizational service strategy.

b. Response time: companies set specific rules regarding response time, provide what the customer wants and handle their requirement instantly. Lockamy (1994) considered the performance measure
system perspective to indicate that, timely control and rapid product delivery significantly influences customer responsiveness.

c. Response speed: it refers to the ability of a firm’s systems to respond to heterogeneous customers’ needs instantly and in real-time. Katz and Kahn (1978) argued that, organizations must control internal resources to rapidly respond to threats and environmental changes.

d. Information integration: it represents the degree to which the firm offers excellent service information system to receive, analyze, record and track customers’ needs. Reid et al. (2005) indicated that, the basis for enhancing organizational responsiveness is to design an integration marketing communication model from outside to inside (from customer side to organization side) (Duncan and Moriarty, 1998). In this model, the relationships among customers, departments and organization can link with each other and shape positive organizational responsiveness (Pickton and Hartley, 1998).

e. Procedural response: it indicates a standard operational procedure to connect, deliver and record and a different process to cope with varying needs. Anderson et al. (1994) defined process management as, “the set of methodological and behavioral practices emphasizing the management of process, or means of actions, rather than the results”.

Then, and organic service responsiveness includes:

a. Organizational culture support: it reflects the ability of a firm’s systems to provides business members with clear service vision; willingness to invest in training expenses; constructive attitude towards failure and positive service attitude when serving unstable customers’ needs.

b. Team work cohesion: means teamwork attitude and cooperation in cross-departments and acceptance of different opinions. When Homburg et al. (2007) observed culture and emotion in the service and manufacturing business, they discovered that service system can influence employee response behavior in internal business environments and is also the key determinant of organizational
responsiveness (White et al., 2003). For instance, the support of service responsiveness in internal environment and team work can enhance employee cohesion and thus, promote customer service (Deeter-Schmelz and Kennedy, 2003).

3. Assurance

It refers to the company's employees. Are the employees skilled workers which are able to gain the trust and confidence of the customers? If the customers are not comfortable with the employees, there are a rather large chance that the customers will not return to do further business with the company.

Assurance is known as the level of the service delivered to customers that is believable and can be trusted (Parasuraman et al., 1988). The assurance dimension of service quality refers to the ability of lecturers and administrative staff to provide trust and confidence to students. It is seen as highly dependent as it gives an idea in connection with the interpersonal communication to which achieving the level of knowledge sharing. In addition, it is also expected that the ability to show credibility and courtesy play an important role in the process of knowledge sharing among lecturers, administrative staff and students.

4. Empathy

It refers to how the company cares and gives individualized attention to their customers, to make the customers feeling extra valued and special. The fifth dimension are actually combined to a higher level, even though the really cannot be compared as individuals. If the customers feel they get individualized and quality attention there is a very big chance that they will return to the company and do business there again.

Empathy is defined as the ability of the organization to provide personal attention and care to customers (Parasuraman et al., 1985; 1988; Yong, 2000). The empathy dimension of service quality is defined as showing care and provides individualized attention to students. A good academic environment in a higher learning institution is not only to establish a good
teaching and learning culture for sharing of knowledge but also to be able
to involve in the student’s personal development as well as academic
matters by giving care and advice.
Empathy and trust are a platform for effective understanding,
communication and relationships. Empathy and trust are essential to
develop solutions, win and retain business, and avoiding or diffusing
conflict. Empathy and trust are essential for handling complaints and
retaining customers. These days we need to be more effective
communicators to be successful in business - and in life. The 'steps of the
sale', persuasion, closing techniques, features and benefits do not build
rapport or relationships - empathy, trust, understanding and sympathetic
communications do. One-sided persuasion is not sustainable and is often
insulting, especially when handling complaints. Trust and empathy are far
more important in achieving and sustaining successful personal and
business relationships.
A certain legacy of the days of the hard-sell is that many consumers and
business people are more reluctant to expose themselves to situations
where they may be asked to make a decision. This places extra pressure on
the process of arriving at a deal, and very special skills are now needed to
manage the situations in which business is done.
Most modern gurus in the areas of communications, management and self-
development refer in one way or another to the importance of empathy -
really understanding the other person's position and feelings. Being able to
'step back', and achieve a detachment from our own emotions, is essential
for effective, constructive relationships.

A part of empathy is listening. There are some levels of listening:

a. passive/not listening: Noise in the background, not concentrating
on the sounds at all and nothing is registering with you. Ignoring
would be another way to describe this type of listening. There is
nothing wrong with passive listening if it's truly not important, but
passive listening - which we might more aptly call Not Listening -
is obviously daft and can be downright dangerous if the communications are important.

b. pretend listening: not concentrating and will not remember anything because actually daydreaming or being distracted by something else even though will occasionally nod or agree using 'stock' safe replies. This is a common type of listening that grown-ups do with children. This level of listening is called Responsive Listening in some other models, although Pretend Listening is arguably a more apt term, since the word 'responsive' suggests a much higher level of care in the listener, and Pretend Listening reflects that there is an element of deceit on the part of the listener towards the speaker. You will generally know when you are Pretend Listening because the speaker will see that glazed look in your eyes and say firmly

c. biased/projective listening: listening and taking in a certain amount of information, but because you already have such firm opposing or different views, or a resistance to the speaker, you are not allowing anything that is said or any noises made to influence your attitude and level of knowledge and understanding. You are projecting your position onto the speaker and the words. You would do this typically because you are under pressure or very defensive. You would normally be aware that you are doing this, which is a big difference between the next level and this one. This third level of listening is also called Selective Listening in some other models.

d. misunderstood listening: You have an interest and perhaps some flexibility in respect of the words spoken and your reactions to them, but because you are not thinking objectively and purely you are putting your own interpretation on what you are hearing - making the words fit what you expect or want them to fit. This is a type of projective listening like level three above, but you will not normally be aware that you are doing it until it is pointed out to
you. This is a type of listening that is prone to big risks because if you are not made aware of your failings you will leave the discussion under a very wrong impression of the facts and the feelings of the other person. It's a deluded form of listening. Arrogant people like politicians and company directors who surround themselves with agreeable accomplices can fall into seriously ingrained habits of Misunderstood Listening.

e. attentive listening: You listen only to the content, and fail to receive all the non-verbal sounds and signals, such as tone of voice, facial expression, reaction of speaker to your own listening and reactions. This is fine when the purpose of the communication is merely to gain/convey cold facts and figures, but it is very inadequate for other communications requiring an assessment of feelings and motives, and the circumstances underneath the superficial words or sounds. Attentive Listening is a higher level of listening than Misunderstood Listening because it can gather reliable facts, but it fails to gather and suitably respond to emotions and feelings, and the situation of the other person, which is especially risky if the other person's position is potentially troublesome. This is a common form of listening among 'push and persuade' sales people. Attentive Data-Only Listening is typically driven by a strong personal results motive. It can be highly manipulative and forceful.

f. active listening - listening to words, intonation, and observing body language and facial expressions, and giving feedback - but critically this type of listening is empty of two-way emotional involvement, or empathy. There is no transmitted sympathy or identification with the other persons feelings and emotional needs. This listening gathers facts and to a limited extent feelings too, but importantly the listener does not incorporate the feelings into reactions. This can be due to the listener being limited by policy or rules, or by personal insecurity, selfishness, or emotional
immaturity. Active listening often includes a manipulative motive or tactics, which are certainly not present in the empathic level next and higher, and which is a simple way to differentiate between Active and Empathic listening.

g. empathic listening - understanding and checking facts and feelings, usually to listener's personal agenda

h. facilitative listening - listening, understanding fully, and helping, with the other person's needs uppermost

5. Tangible

It refers to the appearance of the physical surroundings and facilities, equipment, personnel and the way of communication. In other words, the tangible dimension is about creating first hand impressions. A company should want all their customers to get a unique positive and never forgetting first hand impression, this would make them more likely to return in the future. Appearance of physical facilities, equipment, personnel, printed and visual materials are examples.

Tangibles refer to the appearance of the visible facilities and equipment that are serving in good condition to customers (Parasuraman et al., 1985; 1988; Yong, 2000). The tangibles dimension of service quality refers to the tangible condition and facilities in higher learning institutions. It is important for setting up a clear transmission of knowledge in the learning and teaching process with the presence of equipment and facilities like well-equipped laboratories; adequate stocked library with textbooks, reference books and etc; updated computer facilities; comprehensive information system and also the support facilities like sports and recreation centres. If the equipment and facilities are insufficient and unavailable, the transmission of knowledge will be more challenging.

Student satisfaction with community college should be measured at a global (overall) level as well as at an “attribute level” (conceivably, the service encounter level). Taylor (1996) specifies an initial set of attributes consider for a four year college. For the community college domain, we might de-emphasize on-campus living attributes and focus more upon
attributes like commute/parking, job services (career counseling, placement, etc), and class scheduling.

Physical environment quality concerns with the physical and social setting in which the university operates such as buildings, grounds, cleanliness, welcoming, and also customers’ personal space. Ambient conditions, the design and social factors are the sub variable fall under physical environment quality.

According to physical environment is important to customers because every service occurs in an environment, where customer is present as a whole and parts of the service process. While dealing with the organization, customers are seeking special treatment in design, production and delivery. Other than this, interior and exterior aspects are also very important to the customers because it creates a positive or negative experience to them.

The importance of good physical environment quality is where students express a preferred for several aspects of upgraded classrooms, including tiered seating, lighting, and classroom noise control. A study conducted by indicate that students view the new facilities favorably and as having a positive impact on student learning and satisfaction. Results of the study by suggest that college students do perceive differences in classrooms. They are particularly affected by classroom seating and overall classroom comfort the students enjoyed coming to class more in the upgraded room and had a stronger sense of satisfaction in the upgraded room.

Both of the original version of SERVQUAL (Zeithaml, Parasuraman & Berry, 1988) and its revised version (Zeithaml, Parasuraman & Berry, 1991, 1994) contain five dimensions: tangible, reliability responsiveness, assurance, and empathy. SERVQUAL uses a scale to rate service expectations and performance by asking customer a set of questions on attributes that reflect the five dimension of quality. Parasuraman et al. (1988, p.30) stated that SERVQUAL had been designed to be “applicable across a broad spectrum of services” and the formal could be adapted to fit specific needs and that it would be most valuable when
used to track service quality trends periodically. The SERVQUAL report is useful starting point for investigating service quality and state that SERVQUAL can usefully be supplemented with additional research to uncover problems causing gap scores.

The measurement of expectation, like satisfaction, is characterized by diversity in approach in terms of definition, content, and measurement (Douglas & Conner, 2003; Staniszewska & Ahmed 1999). SERVQUAL measures the difference between what is expected from service encounter and the perception of the actual service encounter (Parasuraman et al., 1988), or it can formulized as follow:

\[
\text{Service Quality (Q)} = \text{Perception (P)} - \text{Expectation (E)}
\]

Service quality in higher education is defined as a measurement of differences between perceptions and expectations of the students related to the five dimensions of service quality (tangible, responsiveness, assurance, reliability, and empathy) (Thitivit, 2007).

Educational institutions offer a range of services, not just one. The core services is usually instruction, but the other services of a college often include residential, dining, counseling, advising, career planning, tutoring, library, computer, and other services. Even non residential schools include many of these additional services.

2.5 Satisfaction

Most educational institutions want to be more effective, but they are not sure how to proceed. Focusing on enhancing customer satisfaction and customer value is a good place to begin. According to Daniel Seymour: Developing a lot of happy, satisfied customers – whether they are students, parents of students, alumni, professors, or industry employers – should be a primary goal of causing quality in higher education.

What determine whether the customer is highly satisfied, somewhat satisfied, somewhat dissatisfied, or highly dissatisfied with a decision, such as the decision to attend particular school or college? The satisfaction level is determined by the
difference between the service performance as perceived by the customer and what the customer expected: perceived performance and expectations.

A person could experience one of three broad levels of satisfaction. If the institution’s performance falls short of expectations, the person is dissatisfied. For example, if a college fails to perform as the student was led to expect, the student will revise his or her attitude toward the college and may drop out, transfer, or stay but bad-mouth college. On the other hand, if the college meets the expectations, the student will tend to be satisfied and stay. If the institution’s performance exceeds the person’s expectations, the person is highly satisfied, pleased, or even delighted.

Of course, various publics and customers of the institution may have differing expectations and perceptions of the school’s performance. Parents may focus on the school’s academic outcomes and consider a school excellent in every respect, while their children may consider the class coring or school policies too restrictive. Donors may judge the school by one set of criteria while faculty may use another.

Ilias, Hasan, Rahman, & Yasoa (2008) identified that the main factors that could affect the level’s student’s satisfaction were: student’s perception on learning such as (libraries, computer, and lab facilities), learning environment (rooms of lectures, laboratories, social space, and university building), and support facilities (health facilities, refectories, student accommodation, student service), and external aspects of being a student (such as finance, transportation). With all these capabilities, an institution will be able to meet student expectation and being a competitive education institution.
3.1 Research Method

There are two kinds of research method. They are qualitative or quantitative. Qualitative research is a naturalistic, interpretative approach concerned with understanding the meanings of certain observed phenomena or actions. It examines, analyzes and interprets observations for the purpose of discovering underlying meanings and patterns of relationships in a manner that does not involve mathematical models. Qualitative research also provides explanation of reasons and associations between social variables. The data in this type of analysis is not in the form of numbers (Ritchie and Lewis, 2003; Royse, 1999). Examples of qualitative research are ethnographic studies, case studies, action research. Some examples of data collection methods are through focus group discussions, interviews, field observations, diaries, and memoirs, letters, reports, etc.

Quantitative research on the other hand uses numbers to prove or disprove a notion or hypothesis. The process of measurement is central to quantitative research because it provides the fundamental connection between empirical observation and mathematical expression of quantitative relationships. Quantitative research uses data that are structured in the form of numbers or that can be immediately transported into numbers (Ross, 1999). It is a very controlled, exact approach to research. For example it uses statistical tools, e.g. mean ratings, correlations, regression, etc. to analyze data.

The researcher use quantitative method to know the students’ perceived satisfaction in service quality of President University, extension class, batch 2011. The data is number and constructed by questionnaire to meet the objective of study.
3.2 Research Time and Place

This research was conducted in October 2012 at President University, which located at Jl. Ki Hadjar Dewantara, Jababeka, Cikarang Baru, Bekasi, Indonesia.

3.3 Research Framework

In conducting the research, researcher has created research framework which are step by step are done by researcher before analys the result. The research framework are:

![Research Framework Diagram]

Source: Adjusted by researcher
This research is came from a problem. From the problem, the researcher tried to find some literature or theory which appropriate with the problem. By the theory and previous research, it can be reference of this research.

After find the suitable theory, the researcher made a (pre)questionnaire. The statement or questions in the questionnaire are based on the theory. The prequestionnaire given to the twenty respondents as sampling. If it is done, the researcher has to compile the data check validity and reliability of the statement or questions inside. The research can continue if each statements are valid and reliable, if not, the research must restart to give the (pre)questionnaire.

If all statements are valid and reliable, it can go to give the questionnaire. The respondents may larger, depend on the population (by using Slovin formula). Then, the data is compiled by using SPSS and Excel. Because the data is ordinal scale, it must transform to interval scale by using Excel.

The result from SPSS and Excel must be translate to common words, so everybody can read the result. And finally, all the result can made conclusion and recommendation.

3.4 Population and Sample

3.4.1 Population
Population consists of all the items or individuals about which you want to reach conclusions (Berensen, Levine, & Timothy, 2012). Therefore, the target of this research are the student of President University who join in extension program batch 2011, for all majors.

3.4.2 Sample
Selecting a sampling technique involves several decisions of a broader nature. The researcher must decide whether to use a Bayesian or traditional sampling approach, to sample with or without replacement, and to use non-probability or probability sampling. (Malhotra & Birks, 2007).
This research use non probability sampling. Nonprobability sampling is any sampling method where some elements of the population have no chance of selection (these are sometimes referred to as 'out of coverage'/undercovered'), or where the probability of selection can't be accurately determined. It involves the selection of elements based on assumptions regarding the population of interest, which forms the criteria for selection. This research include quota sampling which defined sample randomly from population what the researcher want.

3.4.2.1 Sample size

The researcher took 20 respondents to fill pre questionnaire, taken from extension class, with random batch. The result of this sample is batch 2011 and 2012. This sampling is to check validity and reliability test. If the result valid and reliable, the researcher can go through the real questionnaire. For the real survey, the samples become larger.

Margin error is percentage allowance for two non-precision or error because the uses of sample instead the population. Margin error that usually used for research is 1% (0.01) or 5% (0.05). The researcher use 10% (0.10) margin of error, meaning the error level is 10% and the research has 90% confidence level. The researcher uses 10% margin error because of big population in extension class (batch 2011).

By using Slovin calculation with 10% error margin, the researcher for actual sample size will give minimum questionnaire to 74 respondents of 298 students in total. After give the questionnaire, the researcher got 103 respondents and all the data is used for this research.

Umar (2005) stated that in order to determine the minimum sample required if the population size is known, it can be used Slovin formula as follows:
\[ n = \frac{N}{1 + N(e)^2} \] ...................................(1)

\[ n = \frac{289}{1 + 289(0.1)^2} \]

\[ n = 74.29306 \]

Where:
\[ n \quad = \quad \text{Sample size} \]
\[ N \quad = \quad \text{Population size} \]
\[ e \quad = \quad \text{Margin of errors desired} \]

### 3.5 Research Instrument

#### 3.5.1 Data Collection Technique

Data collection can be divided into two types: secondary and primary. The secondary data is data that available before, the primary data is new data collected by researcher (Malhotra & Birks, 2007).

#### 3.5.1.1 Primary Data

Primary data are originated by a researcher for the specific purpose of addressing the problem at hand. They are individually tailored for the decision makers of organization that pay for well focus and exclusive support. Compare with readily available data from a variety of sources, this tailoring means higher cost and a longer time frame in collecting and analyzing the data (Malhotra & Birks, 2007).

Likert scale, developed by Rensis Likert, is the most frequently used variation of the summated rating scale. Consist of statement that express either a favourable or an unfavourable attitude toward the object of interest. The participant is asked to agree or disagree with each statement. Each response is given a numerical score to reflect its degree of attitudinal favourableness, and scores may summed to measure the participants overall attitude (Cooper & Schindler, 2006).
This research uses Likert scale. Typically, each scale item has five response categories, ranging from ‘strongly disagree’ to ‘strongly agree’. The research translates the rank as follows:

**Table 3.1 Likert Score**

<table>
<thead>
<tr>
<th>Score</th>
<th>Relative Grading Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>2</td>
<td>Disagree</td>
</tr>
<tr>
<td>3</td>
<td>Neutral</td>
</tr>
<tr>
<td>4</td>
<td>Agree</td>
</tr>
<tr>
<td>5</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

Source: adjusted from Likert theory

3.5.1.1.1 Variable Characteristic

Based on literature review in chapter 2, the researcher will describe the characteristic of each variable for that will later be used to construct the questionnaire.

**Table 3.2 Variable Indicators**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability (X1)</td>
<td>Able to handle customer’s problem</td>
</tr>
<tr>
<td></td>
<td>Commit to service delivery time</td>
</tr>
<tr>
<td></td>
<td>Perform service at the right first time</td>
</tr>
<tr>
<td></td>
<td>Flawless in data recording (documentary)</td>
</tr>
<tr>
<td>Responsive (X2)</td>
<td>Inform time certainty to customer</td>
</tr>
<tr>
<td></td>
<td>Immediate service for customer</td>
</tr>
<tr>
<td></td>
<td>Willingness to help</td>
</tr>
<tr>
<td>Component</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Readiness (X3)</td>
<td>Generate trust to customer</td>
</tr>
<tr>
<td></td>
<td>Make customer comfortable in transaction</td>
</tr>
<tr>
<td></td>
<td>Consistent in politeness</td>
</tr>
<tr>
<td></td>
<td>Able to answer customer’s questions</td>
</tr>
<tr>
<td>Empathy (X4)</td>
<td>Pay individual attention</td>
</tr>
<tr>
<td></td>
<td>Put interest to customer</td>
</tr>
<tr>
<td></td>
<td>Understand customer’s need</td>
</tr>
<tr>
<td></td>
<td>Comfortable operating time</td>
</tr>
<tr>
<td>Tangible (X5)</td>
<td>Modern equipment</td>
</tr>
<tr>
<td></td>
<td>Facilities have visual appeal</td>
</tr>
<tr>
<td></td>
<td>Neat and professional look</td>
</tr>
<tr>
<td></td>
<td>Material related to service has visual appeal</td>
</tr>
<tr>
<td>Satisfaction (Y)</td>
<td>Service given meet the customer’s expectation</td>
</tr>
<tr>
<td></td>
<td>Customer satisfy of whole service performance</td>
</tr>
<tr>
<td></td>
<td>Additional service to customers</td>
</tr>
</tbody>
</table>

Source: adjusted from SERVQUAL theory
Therefore, from the variable indicators above, the researcher wrote it down to construct questionnaire. Below is the questionnaire that given to the students:

**Table 3.3 List of questions and scale used**

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Reliability</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>The employee of President University is able to handle student’s problem (academic)</td>
<td>Likert</td>
</tr>
<tr>
<td>2</td>
<td>The employee of President University serves the students in time</td>
<td>Likert</td>
</tr>
<tr>
<td>3</td>
<td>The employee of President University perform good service at the right first time</td>
<td>Likert</td>
</tr>
<tr>
<td>4</td>
<td>The employee of President University has good data recording</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td><strong>Responsive</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>The employee of President University give time certainty to solve student’s queries</td>
<td>Likert</td>
</tr>
<tr>
<td>2</td>
<td>The employee of President University serve immediately</td>
<td>Likert</td>
</tr>
<tr>
<td>3</td>
<td>The employee of President University has willingness to assist the student</td>
<td>Likert</td>
</tr>
<tr>
<td>4</td>
<td>The employee of President University ready to student’s queries</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td><strong>Assurance</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>The employee of President University has generate trust to students</td>
<td>Likert</td>
</tr>
<tr>
<td>2</td>
<td>The employee of President University makes students comfortable in transaction</td>
<td>Likert</td>
</tr>
<tr>
<td>3</td>
<td>The employee of President University consistent in politeness</td>
<td>Likert</td>
</tr>
<tr>
<td>4</td>
<td>The employee of President University able to answer student’s questions</td>
<td>Likert</td>
</tr>
<tr>
<td></td>
<td><strong>Empathy</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>The employee of President University make student trust</td>
<td>Likert</td>
</tr>
<tr>
<td>2</td>
<td>The employee of President University make student comfortable in interaction</td>
<td>Likert</td>
</tr>
<tr>
<td>3</td>
<td>The employee of President University are polite</td>
<td>Likert</td>
</tr>
<tr>
<td>4</td>
<td>The employee of President University is able to answer the academic question from the student</td>
<td>Likert</td>
</tr>
</tbody>
</table>
Empathy

<table>
<thead>
<tr>
<th>Likert</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The employee of President University pay individual attention to students</td>
</tr>
<tr>
<td>2</td>
<td>The employee of President University put interest to students</td>
</tr>
<tr>
<td>3</td>
<td>The employee of President University understand customer’s need</td>
</tr>
<tr>
<td>4</td>
<td>President University has comfortable operating time</td>
</tr>
</tbody>
</table>

Tangible

<table>
<thead>
<tr>
<th>Likert</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>President University has modern IT devices</td>
</tr>
<tr>
<td>2</td>
<td>Facilities at President Universities have visual appeal</td>
</tr>
<tr>
<td>3</td>
<td>The employee and lecturer’s President University have neat and professional look</td>
</tr>
<tr>
<td>4</td>
<td>Information announcement (on banner or LCD TV) has visual appeal</td>
</tr>
</tbody>
</table>

Satisfaction

<table>
<thead>
<tr>
<th>Likert</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Service performance is meet my expectation</td>
</tr>
<tr>
<td>2</td>
<td>I satisfy of whole service performance</td>
</tr>
<tr>
<td>3</td>
<td>I satisfy the additional service performance</td>
</tr>
</tbody>
</table>

3.5.1.1.2 Successive Interval Method (SIM)

By using Likert scale measurement of questionnaire, the data that researcher gathered is in ordinal data where it is a type of qualitative data, not numeric, the form of words or phrases, such as strongly agree, disagree, and agree, if the question directed to the approval of an event. Since the statistica parametric regression analysis need data in interval data scale measurement so, the researcher should convert it to be interval data using successive interval method (SIM).

Interval data is quantitative data, numeric form, not made up of word and sentences. However if the data where obtained by measuring ordinal scale, from words, sentence, statement, pre-processed should be given a numeric code or numeric symbol in each answer.

The number 1, 2, 3, 4, and 5 in Likert scale measurement do not give any meaning to the object, being measured where those number only show attitude about agree and disagree. There are no different level that can state 4 is better than 2 because
there are no interval data. By using successive interval method researcher will raise the level of measurement scale from ordinal to interval which aims to change the order the normal distribution requirement can be met when using parametric statistic. For this research, researcher converted the data using the software of MSI in Microsoft Excel program 2007. Therefore before computation with SPSS the ordinal data have been converted in to interval data using software in Micrsosoft Excel.

3.5.1.2 Secondary Data
Secondary data are data that have already been collected for purposes other than the problem at hand. This research use both primary and secondary data. Primary data is taken from questionnaire, then secondary data is taken from academic bureau (data the number of extension program students).

3.5.1.3 Processing Data Method
Statistical Package for Social Science (SPSS) is comprehensive system for analyzing data. The program is available for both personal and mainframe (or multi user) computers. SPSS package consist of set of software tools for data entry and data management, statistical analysis and presentation. SPSS integrates complex data and file management, statistical analysis and reporting function. SPSS can take data from almost any type of file and use them to generate tabulated reports, charts, and plots of distributions and trends, descriptive, statistics and complex statistical analysis (Jaggi & Batra P, 2013).

3.6 Validity Test
Validity as a stages where measurement has achieve its goal where those measurement is used. Validity shows how much the measurement tools capable to perform its function precisely as the researcher expected. A measurement scale is valid the measurement do the exact thing it should do and measure thing should be measured. If the measurement scale is not valid then it is useless for the researcher.

Validity testing conducted to determine the level of validity of an instrument measurement, the higher the level, the more validity to show what should be
measured. The test is performed with the 20 samples the respondents outside the main sample respondents. Validity test is done by comparing the value of $r$ count with $r$ table. If the value is greater than $r$ count $r$ table and is positive, the instrument is said to be valid.

$$r = \frac{n(\sum XY) - (\sum X)(\sum Y)}{\sqrt{n(\sum X^2 - (\sum X)^2} - \sqrt{n(\sum Y^2 - (\sum Y)^2}}$$

(2)

Where:

$N$ = number of paired observation

$\sum X$ = $X$ variable summed

$\sum Y$ = $Y$ variable summed

$(\sum X^2) = $ $X$ variable squared and the squares summed

$(\sum Y^2) = $ $X$ variable squared and the squares summed

$(\sum XY) = $ sum of the products of $X$ and $Y$

To check the validity test, the researcher used SPSS version 17.0. Based on the calculation using SPSS 17.0, the result for the pre-test questionnaire, as shown below:

<table>
<thead>
<tr>
<th>No</th>
<th>Indicator</th>
<th>$r$ table</th>
<th>$r$ count</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reliability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indicator 1</td>
<td>0.444</td>
<td>0.847</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Indicator 2</td>
<td>0.444</td>
<td>0.881</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Indicator 3</td>
<td>0.444</td>
<td>0.633</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Indicator 4</td>
<td>0.444</td>
<td>0.742</td>
<td>Valid</td>
</tr>
<tr>
<td>2</td>
<td>Responsiveness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indicator 1</td>
<td>0.444</td>
<td>0.764</td>
<td>Valid</td>
</tr>
<tr>
<td>Source: SPSS 17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Indicator 2</strong></td>
<td>0.444</td>
<td>0.769</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td><strong>Indicator 3</strong></td>
<td>0.444</td>
<td>0.740</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td><strong>Indicator 4</strong></td>
<td>0.444</td>
<td>0.629</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Assurance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Indicator 1</strong></td>
<td>0.444</td>
<td>0.712</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td><strong>Indicator 2</strong></td>
<td>0.444</td>
<td>0.766</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td><strong>Indicator 3</strong></td>
<td>0.444</td>
<td>0.817</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td><strong>Indicator 4</strong></td>
<td>0.444</td>
<td>0.794</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Empathy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Indicator 1</strong></td>
<td>0.444</td>
<td>0.774</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td><strong>Indicator 2</strong></td>
<td>0.444</td>
<td>0.853</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td><strong>Indicator 3</strong></td>
<td>0.444</td>
<td>0.800</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td><strong>Indicator 4</strong></td>
<td>0.444</td>
<td>0.820</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Tangible</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Indicator 1</strong></td>
<td>0.444</td>
<td>0.771</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td><strong>Indicator 2</strong></td>
<td>0.444</td>
<td>0.739</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td><strong>Indicator 3</strong></td>
<td>0.444</td>
<td>0.708</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td><strong>Indicator 4</strong></td>
<td>0.444</td>
<td>0.812</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Indicator 1</strong></td>
<td>0.444</td>
<td>0.783</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td><strong>Indicator 2</strong></td>
<td>0.444</td>
<td>0.803</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td><strong>Indicator 3</strong></td>
<td>0.444</td>
<td>0.686</td>
<td>Valid</td>
<td></td>
</tr>
</tbody>
</table>
According to the theory above, this test will comparing the result between r computation and r table where the result can be said valid if the r computing is bigger than r table. The result of r computing can be known by using SPSS. The r table can be seen on list r table: total respondents is 20, so 20-1=19, and with degree of freedom with significance 5%, the result from r table is 0.433. If the r computing is below the r table, it means that the indicator is invalid, and the invalid indicator must take out to the next questionnaire. From the table above, it can be seen that all the statement in the questionnaire is valid.

3.7 Reliability

According to Malhotra & Birks (2007), reliability is the extent to which a measurement reproduces consistent results if the process of measurement were to be repeated. Reliability may considered as a stability of measurement value every time a measurement is applied to the same subject, therefore reliability is mainly focus in accuracy and its results.

A questionnaire said reliable or reliable if someone answers to questions are consistent or stable over time. Testing reliability of the instrument in this study conducted and analyzed by the technique Cronbach Alpha (α). A variable is said to be reliable if the work for entire variable has a value above 0.60 or Cronbach Alpha> 0.60 (Ghozali, 2005).

\[ \alpha = \frac{r}{1+(k-1)r} \] ............................. (3)

Where:

\( \alpha \) = instrument reliability’s coefficient

r = mean correlation coefficient between variables

k = number of questions
These are the indicator to evaluate the result of Cronbach Alpha:

1. If $\alpha > 0.9$, means the level of reliability is excellence
2. If $\alpha$ between 0.7-0.9, means the level of reliability is high
3. If $\alpha$ between 0.7-0.5, means the level of reliability is average
4. If $\alpha < 0.5$, means the level of reliability is low

By using SPSS, the researcher get the the number of Cronbach Alpha to see whether the variable is reliable or not.

**Table 3.5: Reliability Test of Variables**

<table>
<thead>
<tr>
<th>No.</th>
<th>Variable</th>
<th>Cronbach Alpha</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Reliability (X1)</td>
<td>0.873</td>
<td>Reliable</td>
</tr>
<tr>
<td>2.</td>
<td>Responsiveness (X2)</td>
<td>0.856</td>
<td>Reliable</td>
</tr>
<tr>
<td>3.</td>
<td>Assurance (X3)</td>
<td>0.888</td>
<td>Reliable</td>
</tr>
<tr>
<td>4.</td>
<td>Empathy (X4)</td>
<td>0.946</td>
<td>Reliable</td>
</tr>
<tr>
<td>5.</td>
<td>Tangible (X5)</td>
<td>0.816</td>
<td>Reliable</td>
</tr>
<tr>
<td>6.</td>
<td>Student’s satisfaction (Y)</td>
<td>0.798</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

Source: SPSS 17

According to theory above, the standard of reliability is $> 0.60$ (Ghozali) or $> 0.5$. The result after computing using SPPS, all the variables are reliable. If the result is below the standard, it variable must take out to the next questionnaire. Validity and reliability test must be passed in a research.

**3.8 Method of Data Analysis**

**3.8.1 Descriptive**

The researcher use descriptive statistics in order to give description of each variable that is used in this research. Those variables will be related with collecting and summarizing data and with the presentation of data.
3.8.2 Classical Assumption Analysis

a. Normality test
A good regression model can be determined by using the graphical histogram, which can be seen when the data have a normal distribution or a close Normal. According to Santoso (2012) if the data distributed towards a bell form curve the regression model may considered as normal.

Another way is to look at the spread of the data (dots) on an axis diagonal of the graph normal probability plots (PP plots). If the data spread around the diagonal line and follow the direction of the diagonal line, the regression model meets the assumptions of normality (Sarwono, 2012).

b. Multicollinearity Test
Multicollinearity test is done by looking at the value of the variance inflation factor (VIF). This test aims to test whether the regression model found a correlation between the independent variables (Ghozali, 2005). Multicollinearity test does it to see the value of tolerance and the value of inflation factor (VIF). On the basis of the criteria, all VIF values should be around 1 and tolerance value towards 1 (Santoso, 2012). On the basis of the criteria, all VIF values should be less than 5.0.

c. Heteroscedasticity Test
Heteroscedasticity test aims to test whether the regression model variance of the residual inequality occurs one other observation to observation (Ghozali, 2005). If the residual variance from one observation to observation others are still, it is called homoscedasticity, and if different is called heteroscedasticity (Sarwono, 2012). Regression model is claimed to be feasible if the model is free of heteroscedasticity. In this study, researchers used a scatterplot chart to test the heteroscedasticity.
3.9 Hypothesis Test

To analyze a linear relationship between independent variables with dependent variable, a statistical test has been taken. The null hypothesis will state there are linear relationship between the two variables ($\beta = 0$) and the alternate hypothesis is that there is a linear relationship ($\beta \neq 0$). If the null hypothesis can be rejected, then the linear relationship does not exist. In this research, the hypothesis as follows:

$H_{01}$: There is no relationship between reliability towards student’s satisfaction in President University

$H_{a1}$: There is relationship between reliability towards student’s satisfaction in President University

$H_{02}$: There is no relationship between responsiveness towards student’s satisfaction in President University

$H_{a2}$: There is relationship between responsiveness towards student’s satisfaction in President University

$H_{03}$: There is no relationship between assurance towards student’s satisfaction in President University

$H_{a3}$: There is relationship between assurance towards student’s satisfaction in President University

$H_{04}$: There is no relationship between empathy towards student’s satisfaction in President University

$H_{a4}$: There is relationship between empathy towards student’s satisfaction in President University

$H_{05}$: There is no relationship between tangible towards student’s satisfaction in President University
Hₐ 5: There is relationship between tangible towards student’s satisfaction in President University

H₀6: There is no relationship between reliability, responsiveness, assurance, empathy, and tangible towards student’s satisfaction in President University

Hₐ 6: There is relationship between reliability, responsiveness, assurance, empathy, and tangible towards student’s satisfaction in President University

3.10 Multiple Linear Regression Coefficient Test

3.10.1 F-test (Simultan)

F statistic test shows whether all the independent variables included in the model have an influence together on the dependent variable (Ghozali, 2005). This test is done by comparing the value of F calculated with the value of F table using a significant level of 5%. If the count value of F is greater than F table then simultaneously all the independent variables affect the dependent variable. In addition, the value of probability is also reviewable. If the probability value of less than 0.05 (for a significance level = 5%), the independent variables simultaneously influence the dependent variable. Meanwhile, if the probability is greater than 0.05 then the independent variables simultaneously has no effect on the dependent variable.

H₀=β₁= β₂= β₃=0 or significance F > α accept Ho

Hₐ: at least there is one β₁≠0 , if significant F< α , reject Ho

3.10.2 T-test (Partial)

This test shows how much influence the individual independent variables in explaining the dependent variable (Ghozali, 2005). The hypothesis used is:

a. or if significant > a, reject .

(Reliability has no relationship towards student’s satisfaction)
\( H_a: \beta_1 \neq 0 \) or if significant < a, accept \( H_0 \).

(Reliability has relationship towards student’s satisfaction)

b. or if significant > a, reject .

(Responsiveness has no relationship towards student’s satisfaction)

\( H_a: \beta_2 \neq 0 \) or if significant < a, accept \( H_0 \).

(Responsiveness has relationship towards student’s satisfaction)

c. or if significant > a, reject .

(Assurance has no relationship towards student’s satisfaction)

\( H_a: \beta_3 \neq 0 \) or if significant < a, accept \( H_0 \).

(Assurance has relationship towards student’s satisfaction)

d. or if significant > a, reject .

(Empathy has no relationship towards student’s satisfaction)

\( H_a: \beta_4 \neq 0 \) or if significant < a, accept \( H_0 \).

(Empathy has relationship towards student’s satisfaction)

e. or if significant > a, reject .

(Tangible has no relationship towards student’s satisfaction)

\( H_a: \beta_5 \neq 0 \) or if significant < a, accept \( H_0 \).

(Tangible has relationship towards student’s satisfaction)

f. or if significant > a, reject .

(Reliability, Responsiveness, Assurance, Empathy, and Tangible has no relationship towards student’s satisfaction)

\( H_a: \beta_5 \neq 0 \) or if significant < a, accept \( H_0 \).
(Reliability, Responsiveness, Assurance, Empathy, and Tangible has relationship towards student’s satisfaction)

T statistical test is conducted by comparing the t value with the value of t table using a significance level of 5%. If the t value is greater than t table then individually independent variables would affect the dependent variable. The test can also be done by reviewing the value of probability. If the probability value is less than 0.05 (for a significance level = 5%), then the individual independent variables affect the dependent variable. Meanwhile, if the probability is greater than 0.05, meaning the independent variables as individually had no effect on the dependent variable.

3.10.3 Multiple Regression Analysis
Regression analysis is basically the study of the dependence of the dependent variable (tied) with one or more independent variables (free) in order to estimate and / or predict the population mean or average value of the dependent variable based on the value of the independent variable unknown (Santoso, 2012).

Regression analysis aim to measuring the strength of the relationship between two or more variables, in addition regression analysis also shows the relationship direction between the dependent variable with the independent variable. For regression model which have independent variable consisting of two or more, is called multiple regression.

Multiple regression analysis in this study aims to determine the influence of the independent variables which are: reliability, responsiveness, assurance, empathy, and tangible on the dependent variable which is satisfaction. The general form of a multiple regression equation used in this study is as follows:

\[ Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + e \]  \hspace{1cm} (4)

Where:
\[ Y \] = Student’s satisfaction
\[ X_1 \] = Reliability
\[ X_2 \] = Responsiveness
\[ X_3 \] = Assurance
X4  = Empathy
X5  = Tangible
B1, B2, B3… = The regression coefficients of each variable
B0  = constant
e   = error

3.10.4 Coefficient of Determination (R²)

Coefficient of determination (R²) is used to measure how far the model's ability to explain variation in the dependent variable (Ghozali, 2005). R² value that closer to 1, means the independent variables provide almost all the information needed to predict the variation in the independent variable or it means correlation among variables are strong (Sarwono. 2012).

The R² value can range from a low 0 to a high 1 (0<R²<1)

1. If R² = 0, it indicates that X as independent variables explains 0 % of the variability in Y, or in other words X has weak correlations with Y
2. If R² = 1, it indicates that every point in the sample were on the regression line have all errors are 0. Moreover, it stated that X has strong correlations with Y by using the regression.
CHAPTER IV
ANALYSIS OF DATA AND INTERPRETATION OF RESULTS

4.1 Characteristics of Respondents

4.1.1 Gender

![Gender Pie Chart]

Figure 4.1: Gender

(Source: Primary data gathered by Researcher)

From figure 4.1, it shows 49% is female and 51% is male. This research was conducted at President University and the students of extension class as the sample. Total respondents are 103 students; the data was gathered in November 2012. The respondents are only the students from batch 2011.
The researcher was assisted by the advisor when give the questionnaires to the respondents. The researcher came from one class to another class of extension class batch 2011. The researcher asked the lecturer to take few minutes because it will disturb the studying process. By the permission from the lecturer, the researcher gives the questionnaires to the respondents to be answered.

4.1.2 Major
From the 103 student’s extension class batch 2011 President University who are the respondents, it divides from some major, 29% from industrial engineering, 25% respondents are accounting class, 17% came from major public relation, 16% respondents are management students, and the rest 13% are majoring in information system.

![Figure 4.2: Major](Source: Primary data gathered by Researcher)
4.2 Classic Assumption Test

4.2.1 Normality Test

Graphical histogram is used to determined regression model. According to Santoso (2012) to fulfill the requirements of normality in histogram analysis, the data should distribute towards a bell form.

Based on Figure 4.18 the data is distributed in a shape of a bell which is shown by the curve. Therefore based on graphical histogram normality test this model has a normal distribution.
Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Y

Expected Cum Prob

Observed Cum Prob

Figure 4.4: Normal Probability Plot

(Source: Primary Data processed with SPSS 17)

Normality plot is a plot of observation data which put in order based on the sample against percentage dots correlate from standard distribution. If the data spread around the diagonal line and follow the direction of the diagonal line, the regression model meets the assumptions of normality (Sarwono, 2012). Figure 4.8 shows that the data is spread around the diagonal line and follow along the diagonal line, therefore based on normal probability plot the data is normally distributed.
4.2.2 Multicollinearity Test
Multicollinearity test is done by looking at the value of the variance inflation factor (VIF). This test aims to test whether the regression model found a correlation between the independent variables. Multicollinearity test does it to see the value of tolerance and the value of inflation factor (VIF). On the basis of the criteria, all VIF values should be around 1 and tolerance value towards 1 (Santoso, 2012). On the basis of the criteria, all VIF values should be less than 5.0 (Snee, 1973).

**Table 4.1: Multicollinearity Test**

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1</td>
<td>X1</td>
</tr>
<tr>
<td></td>
<td>X2</td>
</tr>
<tr>
<td></td>
<td>X3</td>
</tr>
<tr>
<td></td>
<td>X4</td>
</tr>
<tr>
<td></td>
<td>X5</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y

(Source: Primary Data processed with SPSS 17)

Based on the table 4.1 each item has a VIF (variance inflation factor) is not close to 1, but the VIF values are under 5.0 which still fulfill the requirements of multicollinearity test. Thereby it can be concluded that this model of regression has no multicollinearity problem.
4.2.3 Heteroscedasticity Test

Heteroscedasticity test aims to test whether the regression model variance of the residual inequality occurs one other observation to observation (Ghozali, 2005). If the residual variance from one observation to observation others are still, it is called homoscedasticity, and if different is called heteroscedasticity (Sarwono, 2012). Regression model is claimed to be feasible if the model is free of heteroscedasticity. In this study, researchers used a scatterplot chart to test the heteroscedasticity.

**Scatterplot**

![Scatterplot](source: Primary data processed with SPSS 17)

**Figure 4.5: Scatterplot**

Based on the figure above the data was distributed randomly without any pattern above and below 0 on Y axis. Therefore it may concluded that heteroscedasticity
does not occurred in this model hence this regression model is eligible to be used to predict decision based on the independent variables.

4.4 Hypothesis Testing

4.4.1 F-Test

Table 4.4: F-test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>235.855</td>
<td>5</td>
<td>47.171</td>
<td>11.401</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>401.322</td>
<td>97</td>
<td>4.137</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>637.177</td>
<td>102</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), X5, X1, X4, X3, X2
b. Dependent Variable: Y

(Source: Primary data processed with SPSS 17)

F statistic test shows whether all the independent variables included in the model have an influence together on the dependent variable (Ghozali, 2005). This test is done by comparing the value of F calculated by the value of F table using a significant level of 5%. If the count value of F is greater than F table then simultaneously all the independent variables affect the dependent variable.

In addition, F statistic test can be also reviewed from the value of probability. If the probability value of less than 0.05 (for a significance level = 5%), the independent variables simultaneously influence the dependent variable. Meanwhile, if the probability is greater than 0.05 then the independent variables simultaneously has no effect on the dependent variable.

From the calculation using the SPSS statistical count obtained F = 11.401 it means that the F-value is above the F table which is 2.31, along with a significance level
of 0.000 (significance level less than 0.05). This means that reliability, responsiveness, assurance, empathy, and tangible have significant influence to student’s satisfaction.

4.4.2 T-Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>3.170</td>
<td>1.114</td>
<td>2.847</td>
</tr>
<tr>
<td></td>
<td>X1</td>
<td>.347</td>
<td>.095</td>
<td>.406</td>
</tr>
<tr>
<td></td>
<td>X2</td>
<td>.233</td>
<td>.141</td>
<td>.235</td>
</tr>
<tr>
<td></td>
<td>X3</td>
<td>.016</td>
<td>.121</td>
<td>.018</td>
</tr>
<tr>
<td></td>
<td>X4</td>
<td>.033</td>
<td>.112</td>
<td>.035</td>
</tr>
<tr>
<td></td>
<td>X5</td>
<td>-.030</td>
<td>.102</td>
<td>-.036</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y

To test the significance of regression models for each variable can be partially achieved by using the t test. The following will explain each variable testing partially.

1. Reliability

H₀: β₁ = 0: Reliability variable (X₁) has no significant effect student’s satisfaction (Y).

Hₐ: β₁ ≠ 0: Reliability variable (X₁) has significant effect on student’s satisfaction (Y).

The test results obtained with SPSS for variable X₁ (reliability) obtained t value = 3.632 above the t table = 1.66071, which means that Ho is rejected and Ha is accepted. The positive result (0.406) on regression coefficient means that
The reliability variable has a significant positive influence on student’s satisfaction. In other words, it can be concluded that the better reliability (X1), the better student’s satisfaction (Y) on President University.

2. Responsiveness

H₀: β₂ = 0: Responsiveness variable (X2) has no significant effect student’s satisfaction (Y).

Hₐ: β₂ ≠ 0: Responsiveness variable (X2) has significant effect student’s satisfaction (Y).

The test results obtained with SPSS for variable X2 (responsiveness variable) obtained t value = 1.652 above the t table = 1.66071, which means that Ho is rejected and Ha accepted. The positive result (0.235) on regression coefficient means that operation variable has a significant positive influence on student’s satisfaction. In other words, it can be concluded that the better responsiveness(X2), the better student’s satisfaction (Y) on President University.

3. Assurance

H₀: β₃ = 0: Assurance (X3) has no significant effect on student’s satisfaction (Y).

Hₐ: β₃ ≠ 0: Assurance (X3) has significant effect on student’s satisfaction (Y).

The test results obtained with SPSS for variable X3 (assurance) obtained t value = 0.135 below the t table = 1.66071, which means that Ho is accepted and Ha rejected. The positive result (0.018) on regression coefficient means that assurance has a significant positive influence on student’s satisfaction. In other words, it can be concluded that the better assurance performance (X3) the better student’s satisfaction (Y) on President University.

4. Empathy

H₀: β₄ = 0: Empathy (X4) has no significant effect on student’s satisfaction (Y).
Hₐ: β₄ ≠ 0: Empathy (X₄) has significant effect on student’s satisfaction (Y).

The test results obtained with SPSS for variable X₄ (empathy) obtained t value = 0.291 below the t table = 1.66071 which means that Ho is accepted and Ha rejected. The positive result (0.035) on regression coefficient means that empathy has a significant positive influence on student’s satisfaction. In other words, it can be concluded that the better empathy (X₄) the better student’s satisfaction (Y) on President University.

5. Tangible

H₀: β₅ = 0: Tangible (X₅) has no significant effect on student’s satisfaction (Y).

Hₐ: β₅ ≠ 0 Tangible (X₅) has significant effect on student’s satisfaction (Y).

The test results obtained with SPSS for variable X₅ (Tangible) obtained t value = -0.293 below the t table = 1.66071, which means that Ho is accepted and Ha rejected. The negative result (-0.036) on regression coefficient means that tangible has no significant influence on student’s satisfaction.

4.4 Regression Model Result

Multiple linear regression analysis used to determine the influence of independent variables on the dependent variable. Statistical calculations in a multiple linear regression analysis were used in this research by using the computer program SPSS for Windows version 17.0. Summary of the results of processing the data using SPSS program are as follows:

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant) 3.170</td>
<td>1.114</td>
<td>2.847</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>X1</td>
<td>.347</td>
<td>.095</td>
<td>.406</td>
</tr>
</tbody>
</table>

Table 4.2: Multiple Linear Regression
Based on the data, the regression model is:

\[ Y = 0.406X1 \]

Regression model can be described as follows:

X1 or in this case is reliability, the coefficient is 0.406 and has positive coefficient. This means if the reliability dimension is improved (X1), the higher increase of student’s satisfaction (Y).

### 4.5 Coefficient of Determination (R²)

**Table 4.3: Coefficient of Determination (R²)**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.608a</td>
<td>.370</td>
<td>.338</td>
<td>2.03405</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), X5, X1, X4, X3, X2

According to Sarwono (2006), correlation value (R) is used to describe the correlation between the dependent variable and the independent variable. The R value on the table 4.3 is 0.608 which means that the correlation between service quality and the five independent variables have strong strength of correlation category which is in the range of 0.5 – 0.75.

Coefficient of determination (R²) is used to measure how far the model's ability to explain variation in the dependent variable (Ghozali, 2005). Coefficient of
determination value used in this research is the adjusted R square, since the number of variable is more than two. If the table showed adjusted R square value closer to 1 means that the independent variables provide almost all the information needed to predict the variation in the independent variable. From the results of calculations using the SPSS program coefficient of determination (Adjusted R Square) obtained 0.338.

This means that 33.8% of service quality can be explained by the variable reliability, responsiveness, assurance, empathy, and tangible while the rest of the 66.2% of student satisfaction can be explained by other variables not examined in this study.

4.6 Interpretation Result

1. Reliability has significant relationship towards student’s satisfaction. It can be showed from the significance value of reliability. Reliability also has positive relationship toward student’s satisfaction, it means that if the reliability is increased, the student’s satisfaction increase also. Reliability is important to make the customers impress, and to know that supplier is reliable to fulfill customer’s requirements.

2. Responsiveness has no significant relationship towards student’s satisfaction. It can be showed from the significance value of responsiveness. Responsiveness also has positive relationship toward student’s satisfaction, it means, if the responsiveness is increased, the student’s satisfaction increase. Willingness to help the customers and give fast response will make the customers more valued because they get the best quality in service.

3. Assurance has no significant relationship towards student’s satisfaction. It can be showed from the significance value of assurance. Assurance also has positive relationship toward student’s satisfaction, it means if the assurance is increased, the student’s satisfaction increase also. Make the customers feel comfortable and confidence by employee’s skills, it can form satisfaction of customers.

4. Empathy has no significant relationship towards student’s satisfaction and also has positive relationship toward student’s satisfaction means, if the empathy is
increased, the student’s satisfaction increase also. The customers feel happy if they can get individual attention by remember the student name, than knowing the student’s need, and appropriate operating.

5. Tangible has no significant relationship towards student’s satisfaction. It can be showed from the significance value of tangible. Tangible has negative relationship toward student’s satisfaction means. if the responsiveness is increased, the student’s satisfaction is decrease. The researcher can not mention that it was have negative relationship. Tangible is also important, as a part of culture of an organization, or it can show the image of an organization.

The big questions for universities are whether - and how fast - it will drive up quality as the competition for students heats up. Putting a price tag on each year at university pushed up expectations of value for money, whether that be the amount of time they have with tutors, access to IT, library or sports facilities, scope of the careers advice, and the wider reputation of the university.

The higher education sector will face challenges around the attraction and retention of students for at least the next five years. Some are already examining how to improve their services to students and in turn the University’s metrics for student satisfaction. Student satisfaction will become a more prominent measure, and will see Universities compete on quality, added value and employability.
CHAPTER V
CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Regression model is all causes and effect from independent variables toward dependent variable. According statement of problem in chapter I, here they are the conclusion from this research:

1. Reliability has significant relationship towards student’s satisfaction. It can be showed from the significance value of reliability. Reliability also has positive relationship toward student’s satisfaction, it means if the reliability is increased, the student’s satisfaction increase also. What can make students satisfy, can be seen on indicators that capture in the questionnaire: able to handle student’s problem, serving the customer in time giving the information at the right first time, and has good data recording. Customers perceive to be more deficient in reliability. Given the the prevalence of service errors and broke services promises, consistent reliability gives a company the opportunity to compete effectively and build a reputation for a service.

2. Responsiveness has no significant relationship towards student’s satisfaction. It can be showed from the significance value of responsivenss. Responsiveness also has positive relationship toward student’s satisfaction, it means if the responsiveness is increased, the student’s satisfaction increase also. By giving time certainty to solve student’s quiries, serving immediately, and willingness to help the students will give positive experience to the students, eventhough it has no relationship toward their satisfaction. It can be
a plus value to support the reliability dimension. Not only effective service, but also fast to solve any student’s queries.

3. Assurance has no significant relationship towards student’s satisfaction. It can be showed from the significance value of assurance. Assurance also has positive relationship toward student’s satisfaction, it means if the assurance is increased, the student’s satisfaction increase also. President University have to make students secure being there, make student trust to the university, consistent in politeness when serve the student, and can answer to student’s questions, can make student satisfy.

4. Empathy has no significant relationship towards student’s satisfaction. It can be showed from the significance value of empathy. Empathy also has positive relationship toward student’s satisfaction, it means, if the empathy is increased, the student’s satisfaction increase also. Pay individual attention by remember the name of student, put interest to student, understand what student need, and appropriate operating time, are the ways to increase student’s satisfaction in empathy dimension. Student feels more respect and comfortable if the employee do the empathy.

5. Tangible has no significant relationship towards student’s satisfaction. It can be showed from the significance value of tangible. Tangible has negative relationship toward student’s satisfaction, means if the responsiveness is increased, the student’s satisfaction is decrease. Physical appereance such as building, modern IT device, profesional and neat look of the employee, and the visual appeal do not become concern to make student satisfy with the service performance, but it can reflect an image of a university, because people have first impression when they look from the outside.

6. Reliability, responsiveness, assurance, empathy, and tangible are involved 33.8% of students satisfaction. And the rest is effected by another variables. It can be showed by coefficient determination.
5.2 Recommendation
From the result on previous chapter, the researcher can give some recommendation, as follows:

1. President University
   Reliability variable which most influence extension class student’s at President University have to keep it well and improve it also without ignore other variables: responsiveness, assurance, empathy, and tangible. Eventhough those four variables do not have strong influence, but President University must to improve in perform its service to the students.

2. Next research
   For next research, the other researchers may concern to use another variables besides reliability, responsiveness, assurance, and empathy to know student’s satisfaction, like curriculum, tuition fee, and 4P. Moreover, the next research can take more respondents from all batches in extension class, perhaps it can represent the real condition and to know how satisfy the student in President University.
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**JOURNALS**


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http://extension.president.ac.id/
http://www.president.ac.id/about-us/#history

CATION/Electronic-Book/Module%201/6SPSS-overview.pdf

APPENDICES

Quetionnaire

No.: …..

Kepada Yth. Responden

Perkenalkan, saya Diovanl Harera, Jurusan Management 2009 yang saat ini sedang melakukan penelitian untuk thesis dengan topik Kepuasan Mahasiswa President University Program Ekstensi. Pernyataan dan data responden hanya akan digunakan untuk keperluan penelitian dan kerahasiannya akan sangat dijaga.

Terima kasih atas bantuan dan kerja samanya

I. Data Responden

Berilah tanda checklist (v) sesuai data pribadi Anda

Jurusan: Gender:
II. Opini Anda

Beri tanda (V) mengenai penilaian Anda terhadap masing-masing pernyataan berikut dengan penjelasan sbb:

1 = Sangat Tidak Setuju (STS)
2 = Tidak Setuju (TS)
3 = Netral (N)
4 = Setuju (S)
5 = Sangat Setuju (SS)

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<th>N (3)</th>
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**Satisfaction**

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*** Terima Kasih ***