

# Analysis and Quality Assessment on the Service Customer Case: University Insurgents

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**ABSTRACT**— *Today's "quality" is applicable to various areas, quality education, quality in the industry, and therefore, cannot fail to mention the quality of service, the latter being the basis for any business and important indicator of success or failure in organizations. The objective was to evaluate the quality of service provided by the University Insurgentes Campus Tláhuac through the SERVQUAL methodology (quality of service) the results obtained show an overall percentage of 84.55% satisfaction with Quality Level Indicator of 16.85, although the overall service meets customer satisfaction (students), the specific analysis of each dimension (reliability, tangibility, empathy, safety and responsibility) will be the guideline for improvement actions in each work area that increase the level of service quality.*

**Keywords**— SERVQUAL, Service Quality, Scale SERVQUAL, Customer Service.

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## 1. INTRODUCTION

Throughout its career, University Insurgentes has implemented a series of strategies and procedures in each of the areas that have allowed it to move towards an organization and systematization of educational work for continuous quality improvement. Consistent with its philosophy and mission, and immersed in a dynamic of continuous improvement, takes countless challenges have translated into work and dedication and at the same time, achievement and satisfaction.

Competitive advantage in the provision of educational services is achieved from the ability of organizations to meet the needs of its customers, a situation that must face the difficulty of the intangibility of services. A service is defined as an activity or a set of intangible activities that are performed by the interaction between the client and the employee and / or physical facilities of the service, in order to satisfy a want or need.

In the Introduction section, present clearly and briefly the problem investigated, with relevant references. The main results should be enunciated. The ISO 9000:2000 standard defines customer satisfaction as its perception about the extent

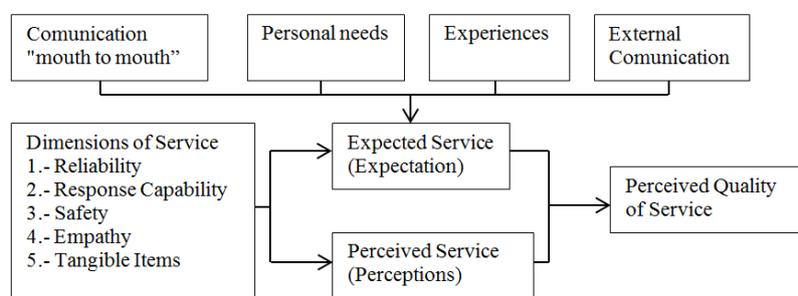
to which they have met their requirements. Therefore, the excellent companies should measure their performance by establishing what the customer perceives regarding their service.

Quality service is not just "meet spec" but rather meet customer expectations. Aware of the national and international situation that prevails in all areas of human endeavor, the University Insurgentes knows that his main priority is the total satisfaction of its students through the evaluation of their educational services that set the standard for new horizons to the success and continuous improvement of the institution.

To carry out the evaluation of services, Parasuman, and Berry Zeithmal authors have made a fundamental contribution to create a methodology that defined as "a summary of multi-scale instrument with a high level of reliability and validity that companies can use to better understand the expectations and perceptions of customers regarding a service."

This method consists of a questionnaire with standardized questions developed in the United States with the support of Science Marketing Institute, which has been called "SERVQUAL Scale." This instrument was first constructed in order to identify the elements that create value for the customer based on this information and review processes with the aim of introducing areas for improvement. The design of the SERVQUAL scale includes 5 dimensions, divided into 22 items, which the authors define the perception of service quality. Figure1.

Therefore this research is based on this tool to evaluate the quality of service provided by the University Insurgentes.



**Figure 1:** Model evaluation on the quality of customer service.

## 2. GENERAL OBJECTIVE

Evaluating quality in educational service of the University Insurgentes through the SERVQUAL tool applied to students in Higher Education.

### 2.1 SPECIFIC OBJECTIVES

- Determine the level of satisfaction of students in Higher Education belonging to the University Insurgentes Campus Tláhuac.
- Calculate the index of service quality and locate areas for improvement in the University Insurgentes Campus Tláhuac.

### 2.2 JUSTIFICATION

Today the concept of quality has been an important part of any organization and the people within it. The objective focused on achieving perfection in service quality and commitment to continuous improvement is concentrated on a single target "total customer satisfaction" as the latter element is representative of the future of the company.

The education of the new century incessantly seeks new answers to the challenges that lie ahead. The rapid change in society today, makes education services the private sector and seeks strategies which lead them to be more competitive.

SERVQUAL is currently the most widely used research model to measure the quality of services in different companies and environments ranging from media companies, banking sector and educational institutions to dental clinics or insurance brokers.

The University Insurgentes, recognized for the quality of its teaching and academic programs, with ongoing processes of institutional evaluation and academic accreditation, focuses on its commitment to the student, this is the major client. The assumption of this research is that the build quality of services and has higher education and opportunity development areas that can be improved through the study of the expectations and perceptions of students, in order to continue to maintain the level of innovation that characterizes the University.

Given the certainty that higher satisfaction among students increased their demand and will consequently have a high competitive level thus meeting the proposed goal of being recognized not only nationally but internationally.

### 3. METHODOLOGY

To evaluate the quality of service the SERVQUAL methodology was established, which allowed us to know the expectations and perceptions of students in Higher Education at the University Insurgentes.

#### 3.1 MATERIAL

- Assessment survey quality expectations in the service of an excellent company 22-item questionnaire containing questions regarding the service expected of a company provides excellent service.
- Evaluation survey of perceptions of service quality of the Universidad Insurgentes: 22-item questionnaire in which clients express their perceptions of the service provided by the company under study.
- Survey assessment of the prevalence of the dimensions of service quality: 5-item questionnaire in which clients express the relative importance to them each of the dimensions of service.

#### 3.2 DETERMINATION OF SAMPLE SIZE

$$n = \frac{z^2 pq}{d} = \frac{(1.96)^2(0.9)(0.1)}{(0.1)} = \frac{0.3457}{0.1} = 3.4574$$

z = value of standard deviation to the corresponding 95% confidence interval = (1.96)

p = Probability of success story.

q = Probability of worst case.

d = maximum permissible error prediction set low (5% or 10% depending on the case).

$$k = \frac{N}{n} = \frac{352}{3.4574} = 101.8106$$

k = Constant of systematic sampling

N = Total population

n = sample size

#### 3.3 IMPLEMENTATION OF THE SURVEY

Of a total population of 352 students from the Bachelor of Law, Marketing, Management, TIC'S, Accountancy, Education, Psychology, 102 surveys were conducted using the SERVQUAL methodology. The application of the questionnaires was conducted based on the number of students by degree, shifts (morning, evening and night) and current quarter.

### 4. INTERPRETATION OF RESULTS

Formalizing the quality measurement by comparing the expectations with perceptions is done through SERVQUAL scale conceptualizing the difference as a multidimensional variable. The scale determines the quality of service by the difference between expectations and perceptions valuing both through a questionnaire of 22 items, divided into five dimensions (reliability, responsibility, assurance, empathy and tangible goods).

Each of the items is measured by a numerical scale ranging from a score of 1 to a perception or expectation very low until a grade of 7 for high.

After gathering the information, the arithmetic mean and standard deviation of each of the 22 items is obtained, later to make the association of the SERVQUAL Model Gaps Model (Expectation-Perception), with the goal of providing the methodological support to the study and proceed to the calculation of the gaps (discrepancies) relative and absolute for each of the dimensions. The results are expressed in percentage of service satisfaction with reference to Likert scale adjusting to the actual values obtained from the arithmetic mean of the expectations parameter. The following table shows the performance in terms of percentage employed.

**Table 1:** Terms of percentage used

Interpretation	Range in percentage of customer satisfaction
Fully satisfied	95-100
Satisfied	80-94
Neither satisfied nor dissatisfied	60-79
Dissatisfied	20-59
Extremely dissatisfied	0-19

The tools used previously allowed to know the indicator level Quality of Service (INCS), the quality of service and overall dimension, to identify areas for continuous improvement.

## 5. RESULTS AND DISCUSSION

Of a total population of 352 students from the Bachelor of Law, Marketing, Management, TIC'S, Accountancy, Education, Psychology, 102 surveys were conducted using the SERVQUAL methodology; the following tables show the score and the gap dimension.

Table 2 shows the scores and divide individually for each item comprising the reliability dimension, noting that in the calculation of the gaps (expectation-perception) values are greater than 0.5 for each case, assuming that the average expectation for the dimension reliability is a score of 5.27, the percentage of satisfaction for this dimension corresponds to 79.32%, interpreted with this dimension, the client is neither satisfied nor dissatisfied with the service, which is an area of opportunity and improvement to improve the quality of service.

**Table 2:** Expectation and perception average for reliability, item score and gap dimension.

EXPECTED	SCORE	PERCEPTION	SCORE	GAP
<b>Average expectation for reliability</b>	5,27	<b>Perception average for reliability</b>	4,18	1,09
When an excellent organization promises to do something in a certain time it meets	5,14	When the University promises to do something in a certain time it meets	4,20	0,94
When a customer has a problem excellent organization shows sincere interest in solving it	5,17	When a student has a problem University shows sincere interest in solving it	4,34	0,83
Excellent organization performs the service correctly the first time	5,16	The University performs the service correctly the first time	4,06	1,10
Excellent organization provides services in the opportunity that promises to do	5,39	The University provides its services at the time that promises to do	4,07	1,32
Excellent organization keeps customers informed about when you are going to perform the services.	5,50	The University keeps customers informed about when you are going to perform the services.	4,25	1,25

While the scale of responsibility shows that the scores obtained for each item is less than 0.5, but not for the item related to keeping track of their errors in which the gap has a value of 1.52, however, the interpretation the dimension of responsibility has a percentage of 88.24%, reflecting the overall customer satisfied with the service, because the goal is to maintain and / or increase customer satisfaction, it being necessary to start the analysis of item where he earned a greater discrepancy (Table 3).

**Table 3:** Expectation and perception to the average dimension responsibility score and divide by item.

EXPECTED	SCORE	PERCEPTION	SCORE	GAP
<b>Average expectation for responsibility</b>	5,36	<b>Average perception to responsibility</b>	4,73	0,63
The employees of an organization providing excellent service to their customers promptly	5,36	University professors provide prompt service to students	5	0,36
Employees of an excellent organization always willing to help customers	5,35	University professors willing to help students	5,17	0,18
Employees of an excellent organization are never too busy to serve a customer	5,24	University teachers are never too busy to attend a student	4,78	0,46
Excellent organization insists on keeping track of your mistakes	5,48	The University insists on keeping track of your mistakes	3,96	1,52

As relates to the third, the security dimension (table 4) has a percentage of 89.82% satisfaction which indicates satisfaction in the service provided, it being necessary to start the analysis of item related to the safe conduct of transactions, for example, payment tuition, among others.

**Table 4:** Average expectation and perception for safety dimension scores and divide by item.

EXPECTED	SCORE	PERCEPTION	SCORE	GAP
<b>Average expectation for safety</b>	5,7	<b>Perception average for safety</b>	5,12	0,58
The behavior of employees of an excellent organization inspires confidence	5,70	The behavior of the professors of the University inspires confidence	5,20	0,5
To transact the organization with excellent customer should feel safe	5,84	When performing transactions with the University students feel safe	4,70	1,14
Employees of an excellent organization always treat customers with courtesy	5,59	University teachers treat students with courtesy always	5,31	0,28
Employees of an excellent organization have the knowledge to answer customer questions	5,67	University teachers have the knowledge to answer queries of students	5,28	0,39

In the dimension of empathy (table 5), the percentage was 85.81%, indicating customer satisfaction, however not to seek improvement alternatives, you may fall in dissatisfaction, because the discrepancies for each item are greater than 0.5.

**Table 5:** Expectation and perception to the average empathy score and divide by item dimension.

EXPECTED	SCORE	PERCEPTION	SCORE	GAP
<b>Average expectation for empathy</b>	5,64	<b>Average perception to empathy</b>	4,84	0,8
Excellent organization gives individual attention	5,65	The University provides individual attention to students	4,87	0,78
Excellent organization has employees who give your personal attention	5,66	The University has teachers that give personal attention	5,12	0,54
Excellent organization cares look after the interests of its customers	5,63	The University is concerned to protect the interests of their students	4,71	0,92
Employees of an excellent organization understand their specific needs	5,36	University teachers understand specific needs of their students	4,66	0,7

**Table 6:** Expectation and perception to the average tangibility dimension score and divide by item.

EXPECTED	SCORE	PERCEPTION	SCORE	GAP
<b>Average expectation for tangibility</b>	5,54	<b>Perception average for tangibility</b>	4,37	1,17
The appearance of an excellent organization equipment is modern	5,40	The appearance of the equipment is modern University	3,84	1,56
The physical facilities of an excellent organization are visually appealing	5,42	The physical facilities of the University are visually appealing	3,67	1,75
The introduction of the employees of an excellent organization is neat	5,51	The presentation of the professors of the University is neat	5,01	0,5
Materials associated with the service (brochures, leaflets, catalogs) for an excellent organization are visually appealing	5,66	Materials associated with the service (brochures, leaflets, catalogs) at the University are visually appealing	4,25	1,41
Activity schedules are a convenient excellent organization	5,72	The schedule of activities of the University are convenient	5,09	0,63

Regarding the dimension of tangible goods (table 6) an average gap of 1.17 and a percentage of 78.88% satisfaction in general are presented, with this dimension that affects greater service and in which the institution must perform an analysis to increase quality. So, the undersigned considered personal opinion that while sometimes the facilities are not involved in the quality of education at present are considered a key factor in quality of service, taking into account that are the letter presentation of the same institution. Results for each dimension and the overall evaluation of the service are shown in Table 2, considering the weight of the same research that provides greater methodological reliability.

Results for each dimension and the overall evaluation of the service are presented in this last table, considering the weight of the same research that provides greater methodological reliability.

This means that after specific analysis of each dimension is observed to be working in the dimensions of reliability, empathy and tangibility latter being the most important, no change can be maintained in the other dimensions such as reliability and safety.

In conclusion of the respective analysis, overall satisfaction in the service of a score of 4.65, which is 84.55% compared to the ideal index of 5.5, considering the real expectations of the surveyed sample, placing the University Insurgentes with a quality service that meets the overall needs of their customers (students) with a quality service in 16.85.

**Table 7:** Results weighted dimension and indicator level Quality of Service

<b>Dimensions SERVQUAL</b>	<b>Weighing</b>	<b>Scores</b>			<b>Weighted Scores</b>		
<i>Dimension</i>	<i>Weight</i>	<i>Expectations</i>	<i>Perceptions</i>	<i>Gap</i>	<i>Expectations</i>	<i>Perceptions</i>	<i>Gap</i>
Reliability	21,63	5,27	4,18	1,09	113,99	90,41	23,58
Responsibility	19,11	5,36	4,73	0,63	102,43	90,39	12,04
Security	25,16	5,7	5,12	0,58	143,41	128,82	14,59
Empathy	15,79	5,64	4,84	0,8	89,06	76,42	12,63
Tangibility	18,31	5,54	4,37	1,17	101,44	80,01	21,42
	<b>Average</b>	5,50	4,65		<b>Level Indicator Quality of Service</b>		16,85

## 6. CONCLUSIONS

The quality of service from the University Insurgentes Campus Tláhuac was evaluated by the method proposed by SERVQUAL give an overall percentage of 84.55% satisfaction with an indicator of quality of 16.85, which was obtained from the direct analysis of each observed dimension than the dimension of reliability (79.32%) and tangibility (78.88%) are areas of opportunity and continuous improvement as red dots located as they are determining factors for the quality perceived by the students, while the dimensions of empathy, responsibility and security must be worked in that order, although the service meets customer satisfaction is paramount in addressing areas of opportunity given to remain a competitive private institution.

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