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Assessing the quality of online services (website) of Tehran University

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Abstract

In this research, we investigate the alignment of e-business models and the quality of services in cyberspace, reviewing the quality of online services (University of Tehran website). This research is a case study and a survey that uses the 'Single-variable hypothesis test on the mean of a statistical population' to test research hypotheses. The sample consists of students from Tehran University. Using the Morgan table, the sample size was calculated to be 90 people. To be sure, 100 questionnaires were distributed. To fully confirm the validity of the questionnaire, the views of professors and experts have been used. The reliability of the research questionnaire was confirmed, too. This research offers one major hypothesis and five sub-hypotheses. The main hypothesis is about the quality of online services and the sub-hypotheses include the efficiency, reliability, accountability, commitment fulfillment and the privacy of online services (website) of the University of Tehran. All hypotheses were confirmed. In this research, according to the SERVQUAL model, five variables of efficiency, reliability, accountability, commitment fulfillment and privacy have been studied. Based on the hypotheses of the research and through the Kolmogorov–Smirnov test, the significance level of the variables was measured. Also, the mean of each of the variables of the research was assessed and measured, which revealed that the least amount was related to accountability and commitment fulfillment and the highest amount was related to the quality of services.

Keywords: Service quality, SERVQUAL model, online services, accountability, commitment.

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1. Introduction

In recent years, we have witnessed significant and substantial growth in internet-based services both in online businesses and in traditional companies that provide some of their services on-line. The main challenge of the internet as a service delivery channel is how companies manage the quality of these services, which is an essential aspect of customer satisfaction.

Based on the nature of website development for online shopping, models developed by Delone and Mclean (1992). Spreng et al. (1996) and McKinney et al. (2002) showed that the quality of website services, which affects customer satisfaction, has two distinct sources:

- A) Website' information quality (IQ)
- B) Website' system quality (SQ)

According to McKinney et al. (2002), website's customer satisfaction can be affected by prior expectations, the inconsistency or mismatch between these expectations and the performance they receive from the website (Fig. 1). This concept is derived from the disconfirmation expectations paradigm, which is a well-known perspective for measuring customer satisfaction in marketing. Based on this paradigm, customer satisfaction has three main requirements:

- Expectations
- Disconfirmation
- Perceived performance

Today, a competition to improve service quality is recognised as a key strategic subject for organisations which operate in the service sector. Organisations that have a higher level of service quality will achieve higher levels of customer satisfaction which in turn leads to sustainable competitive advantage (Guo, Duff & Hair, 2008). Given the growing complexity of the economic, social and cultural systems, this will not happen on itself, rather it requires systematic procedures and methods that transform these concepts into an organisational process. On the other hand, changing customers' needs, desires and expectations is an undeniable fact, so first the companies should identify what the customer wants and then look for the means to satisfy it (Mansouri & Yavari, 2003).

This research attempts to investigate the alignment of e-business and the quality of services in online models with the quality of online services (Tehran University website).

In recent years, organisations have paid a lot of attention to the needs of customers in relation to the level of service quality. High levels of customer service have been used as a device for achieving competitive advantage. This is also important in universities, because customers, or in other words, university students are admitted to the university from all over the country to enter the university, therefore receiving the perfect remote services is a main concern for them. Authorities also work to create the necessary facilities, because unnecessary travels lead to high costs and unnecessary risks. Therefore, the assessment of the efficiency and effectiveness of these services is very essential.

Service Quality: One of the common definitions of service quality is that 'the quality of services is the customer's judgments about the advantage of a service' (Zeithaml, 1988). Gronroos (2001) has divided the quality of services into two categories of technical quality and functional quality. In his view, the services are presented in interactions between the buyer and the seller and its quality is assessed by the customer from both technical and functional aspects. The technical dimension includes the actual outcome of the service and the performance dimension, including the way the service is provided. He believed that what the customer gets after receiving the service is the technical dimension of quality, and how it is received is the functional dimension of quality. As a result, in his view, the quality of services provided to the customer is composed of a set of dimensions, some of which are inherently technical and some others are functional; and understanding how the quality is assessed by the customer requires identifying the factors affecting the dimensions of technical and

functional quality and their influence. Technical quality alone cannot help the organisation to achieve complete service quality, because in addition to the technical skills of employees, interpersonal relationships and human interaction are also important (Ferguson et al., 1999).

Efficiency: Efficiency is in fact the ratio that compares some of the aspects of unit performance with the costs that they incurred. Efficiency means the least amount of time or energy consumed for most work done. The level of efficiency is directly attributed to the managers. Increasing efficiency will increase the productivity and facilities achieving organisational goals.

The organisation's efficiency is the amount of resources used to produce a unit of product and can be calculated in terms of consumption per product. If an organisation can achieve a certain goal with less amount of resources in comparison with another organisations, it is said to be more efficient. In other words, efficiency means the least amount of time or energy consumed for the most work. Or, in fact, the ratio of the amount of work done to the amount of work that should be done. Efficiency which is also used in physics is usually defined as follows:

The energy output, divided by the energy input = efficiency

Cost of performance (in terms of production or service) = Performance

Reliability: When employees, customers and clients trust the organisation, they become loyal to the company which increases profitability and guarantees continuous success (Parhizi Gashti, 2001). Reliability in any period of business history has been one of the underlying concepts for transactions and deals. This concept has gained more importance now with the development of concepts such as communication with business partners, customers and competitors, the information community and service-based economies. Providing a precise definition of reliability is difficult. Oxford English Dictionary defines reliability as 'Firm belief in the reliability, truth or ability of someone or something'. Reliability means: 'Believing that someone's statements are trustable and that they would not violate their obligations in a business relationship' (Rotter, 1967). Reliability means: 'A psychological state involving acceptance of other's harmful risks in a business transaction, with positive expectations' (Rousseau et al., 1998). Donne and Canon (1997) define reliability as a benevolent perception about a goal (Kim, Kim, Kim & Kang, 2008). Morgan and Hunt (1994) define trust as a perception of confidence in a transaction, reliance on partner's reliability and believe that trust is the basis of commitment in a relationship. They assert that when one party truly has faith in another party, reliability is built. Confidence creates a sense of belief that the other party is trustworthy and reliable and it will lead to a strong, honest, fair and useful cooperation. When unexpected problems occur regarding the product, the reliability of a brand is a reliable factor for the customer, in a way that the product or service is sold and advertised. If reliability is achieved, the relationship between the customer and the company has the potential for mutual benefits. Berry (1991) states that relationship marketing is based on reliability. Also, reliability is an important factor in building and improving the quality of the relationship based on the process of promising and fulfilling the promise and commitment (Hewett & Bearden, 2001). The structure of reliability is particularly concerned with creating interest in relationship marketing. Numerous researchers have introduced reliability as the main factor in creating and developing a successful customer relationship and customer loyalty. They argue that the customer needs a sense of security in their relationship with the service provider and believe that their interaction with the service provider is sufficiently reliable to trust the other party.

Accountability: Accountability is a complex concept, achieving an appropriate accountability system is the goal of the majority of the public sector reforms. Each scholar analyses specific aspects of this concept from their perspective, experiences, and understanding. The term 'accountability' refers to responsibilities, their consequences and their implications. Cut and Marie (2002) believed that accountability is the basis for performance measurement, evaluation and reporting, and claim that accountability should be used as a scale for measuring performance, reporting and evaluation in public and nonprofit organisations. Motevaseli (1994) identifies accountability as an immediate response to changes in order to protect profits and preferences over time; this leads to a change in

goals, and in general the discussion of moving targets. Accountability is one of the methods to build public trust (Alwani & Danaeifar, 2001). It is a driving force that pushes key actors to be responsible for their actions and ensure good public service performance (Monavarian, 2000), and finally, Mostafaei (1992) also mentions accountability as one of the popular factors in people's participation in the administrative system.

Regarding the quality of services and its impact on customer satisfaction, due to the importance of the issue, many studies have been conducted by researchers and experts worldwide. In Iran, due to the vital importance and necessity of improving the quality of the services provided to the customer, this issue has been the focus of attention for the researchers of the country. In the next section, some of the researches on this subject are introduced.

1. Sajedifar, Esfidani, Vahdat Zad and Mahmudi Azar (2012) have conducted a research entitled 'Evaluating the impact of the quality of e-services on the trust building of online customers in Tehran's brokerage firms'. This article tries to analyse the impact of the quality of electronic services of Tehran brokerage firms on building trust in customers in light of the importance of building trust in customers regarding the electronic services. The results show that the quality of electronic services in brokerage firms has a positive and significant effect on the trust of customers.
2. Beniaz and Zahedi (2008) have done a research on measuring the quality of electronic services in the company of Raja Passenger Trains. In this article, after examining the literature on measuring the quality of electronic services, the eQual Model is described as the chosen model of research and then, using this model, the quality of electronic services of the Raja Passenger Trains Company is evaluated. The results of the research indicate that customers have high satisfaction in many indexes, but in some indexes, such as 'service interaction' dimensions, customer satisfaction is evaluated at a low level.
3. Beikzade and Molavi (2009) have conducted a study titled Quality of Electronic Services and Customer Satisfaction. Market research has shown that service quality has a significant effect on customer satisfaction, customer loyalty, customer retention and purchasing decisions, as well as financial performance of the company. Therefore, the emphasis and focus on the quality of electronic services in the area of electronic business is important and essential. This article attempts to explain the dimensions of electronic services quality in the banks and its prominent role in customers' satisfaction.
4. Heidarzadeh and Adelpoor (2010) conducted a research on the role of the quality of electronic services, the overall quality of services and customer satisfaction in the customers' decision-making process in online purchases. In this research, the role and effect of some aspects of the quality of electronic services, the overall quality of services and customer satisfaction is investigated on the process of consumers' online purchases in Iran. The results showed that the good appearance of the site was only effective on the overall quality of the services and did not directly correlate with customer satisfaction in online shopping in Iran. Accountability and security/privacy were dimensions that had a positive effect on the overall quality of services and customer satisfaction, but there was no significant relationship between the dimensions of trust, reliability and personalisation with the overall quality of services and customer satisfaction in online shopping in Iran. Also, in this research, it was found that there is a significant relationship between the overall quality of services and customer satisfaction, and a relationship between customer satisfaction and the decision to purchase from an online store.
5. Beikzadeh et al. (2011) conducted a research entitled The Relationship between Quality of Electronic Services with Electronic Satisfaction among Students at Bonab Islamic Azad University. The purpose of this study was to investigate the relationship between the quality of electronic services and the electronic satisfaction of students at Bonab Islamic Azad University. The results indicate that there is a significant relationship between the quality of electronic services and its dimensions with the electronic satisfaction of the students in the university. In assessing the priority of the dimensions of service quality from the viewpoint of students, the reliability dimension gained the highest priorities and dimensions of efficiency, privacy, accountability, procurement,

- compensation, and call had the highest priority, respectively. The findings also showed that the mean quality of electronic services and student e-satisfaction is lower than average.
6. Abtahi (2008) has conducted a research entitled 'A Model for Managing Projects for the Development of Electronic Information Service Quality'. In this article, a development model of e-services is proposed and its conceptual design is described. For designing the development model, the integration of the development model of organisational projects and the software development model, and for designing the quality improvement model of electronic services, the complementary methods of service management and customer service quality and customer satisfaction measurement models considering the dimensions of service quality and the characteristics of electronic services in the Rayasepehr were taken into account.
 7. Tarokh and Zalzadeh (2008) have conducted a research entitled Comparative Study of Evaluating E-Service Quality Models. The main objective of this research is the comparative evaluation of electronic service quality assessment models. This research is based on the question that, according to previous studies, whether the proposed models can be improved or not. Therefore, to achieve this goal, important models of evaluating the quality of electronic services according to online customer's needs were examined through a comparative approach. Examining the customer needs with previous models revealed what needs were not met during the customer interaction with the website, or in other words, there were insufficiencies and deficiencies in the quality of e-services. By doing so, they examined the status quo with a desirable situation, indicating that these models have yet a long way to go and it is still possible to improve and develop them.
 8. Yang et al. (2004) presented six key factors for assessing the service quality provided by online retailers: reliability, accessibility, ease of use, accuracy, security and reliability. In addition, they suggested that if internet retailers want to reach a high level of customer service quality, they should focus on four dimensions: reliability, accuracy, ease of use and accessibility.
- Lee and Wu (2011) studied 360 international travellers from 30 online traveling agencies in Taiwan and discovered that trust and usefulness are factors positively related to the quality of electronic services which positively adjust the relationship between electronic service quality, the perceived value of service and the satisfaction by services.

2. Research methodology

This research is a case study and a survey that uses the 'Single-variable hypothesis test on the mean of a statistical population' to test the research hypotheses. Elsewhere, research is categorised according to purpose, location and method; in case of this research:

The results of this research are used to inform the managers of Tehran University about the quality of online services, its impact on student perceptions, and the identification of the strengths and weaknesses of the university in providing online services, therefore based on the purpose of the study, it is an applied research. The reliability and validity of the research have been verified and confirmed.

Since the theoretical foundations of this research are gathered from library resources and the data gathered to test the hypotheses were collected through the field questionnaire, based on the location, it is a field study.

It can also be said that this research, based on the method, is a descriptive case study that uses a one-variable hypothesis test on the mean of a statistical society.

Two categories of the following resources are considered for collecting data and information:

2.1. Secondary data

In the study of theoretical foundations and research literature, the secondary data which include library sources such as books, articles and dissertations, and online resources were used.

2.2. Primary data

At the field survey stage, the initial data collected through questionnaire were used.

The population of this research includes students (users) who receive services through the website of the University of Tehran all over the country.

The subject matter of this research is to examine students' perceptions of the quality of online services (website) of the University of Tehran. A statistical sample is a set of subjects who display one or more common attributes simultaneously (Mansourifar, 2005). The reference of all hypotheses tests is based on the statistics and characteristics of the statistical sample from the statistical population. In each research, the intention of a researcher is to generalise the results from the statistical sample to the statistical population. The statistical population of this research includes students (users) who receive services through the University of Tehran website from all over the country.

A statistical sample is a member of a statistical population that has the dominant characteristics and features of the members of the population. In fact, the statistical sample represents the statistical population and the results obtained from studying the sample can be generalised to the entire statistical population. In this research, the statistical sample is the students from Tehran University.

In this research, in order to gather data, a closed-ended questionnaire is used as the main instrument for collecting the required data. In the closed-ended questionnaire, a set of options is provided for each of the questions, and the respondent chooses among the options. In this research questionnaire, a Likert scale questionnaire was used.

Because in this research, based on the conceptual model, the quality of online services is divided into five dimensions, so the questions of the questionnaire are divided into five sub-categories, each sub-category represents a different dimension.

Using the Morgan table, the sample size is calculated to be 90 people, which were extended to 100 participants for more accuracy.

Considering that the general framework of the questionnaire is designed based on the E-SERVQUAL quality of service questionnaire by Parasuraman, therefore it has the required level of validity. Also, to reassure the validity of the questionnaire, the views of professors and experts have been asked.

In this research, Cronbach's Alpha method is used to measure reliability.

Descriptive statistics and inferential statistics are used to analyse the data and test the hypotheses. First, the collected data through the questionnaire are summarised in statistical tables, then some of the central indicators and deviations are calculated. After describing the characteristics of the sample (descriptive statistics) and categorising and tabulating the relevant data, the statistics of the selected sample were calculated and then the population parameters were estimated to test the research hypotheses.

Since in this research, the questionnaire has Likert scale questions, so to get the average value of responses, the mean is based on the following formula:

$$\mu x = \sum Xi / n$$

Xi is the value of each of the Likert scale responses (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree),

n is the total number of observations.

In this research, a single-variable hypothesis test is used to test the hypotheses on the mean of a population; and SPSS software is used for inferential analysis (hypothesis testing). The steps are:

2.2.1. Statistical hypotheses

Null hypothesis $H_0: \mu_x \leq 3$

2.2.2. Statistical test

Hypothesis $H_1: \mu_x > 3$

(The test statistic in this research is t Student)

2.2.3. Decision making

To decide on confirmation or rejection of hypotheses, the t -statistic was calculated and compared with the critical value (in this study, 2.575). If the t value is greater than the critical value, H_1 is confirmed and the researcher's claim (research hypothesis) is confirmed at the 5% margin of error; otherwise, if the statistical value is less than the critical value, H_0 which represents the counterclaim of the researcher is confirmed at 95% confidence level.

It is also possible to decide on the confirmation or rejection of the hypotheses by comparing the numerical value of the upper limit and the lower limit.

If the numerical value of the upper limit and the lower limit are both positive, we conclude that the first mean (mean of the statistical population) is greater than the second mean (the comparison value of the Likert scale, i.e., 3). Therefore, H_1 which expresses the researchers' claim is confirmed, otherwise, if the numerical value of the upper limit and the lower limit are both negative, we conclude that the first mean (mean of the statistical population) is smaller than the second mean (the comparison value of the Likert scale, i.e., 3); therefore, H_0 is confirmed (contrary to the claims of the researcher).

2.3. Research steps

In the first stage, the primary data from the literature and the previous research in this field are addressed. In the second stage, the data are collected through a questionnaire. In the third step, using the aforementioned software, data analysis is performed. The final step is to draw a conclusion from data analysis, suggestions for improvement, and future research.

Flowchart of the research process:

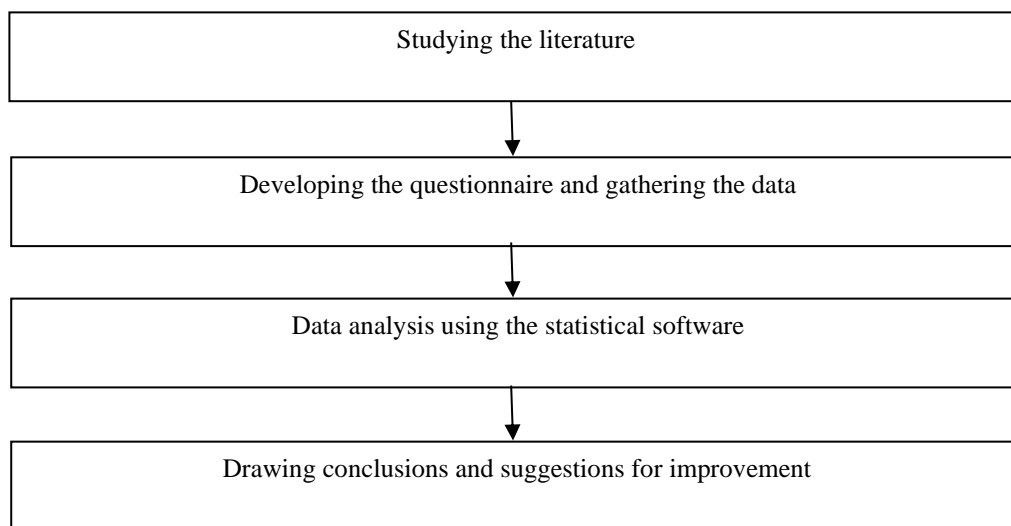


Figure 1. Flowchart of the research process

2.4. Data collection method

Secondary data are collected from library sources, websites and other documents. To collect primary data (direct), the questionnaire is as follows:

In this research, a standard SERVQUAL questionnaire is used. After using the theoretical foundations and consulting with the professors and specialists, some modifications were applied to the questionnaire so it could be used in the university, the final result of which was a questionnaire with 26 components for measuring five indexes (Table 1).

Table 1. Indexes of the questionnaire and the relating items

Items	Service quality dimensions
5–1	Efficiency
10–6	Reliability
15–11	Accountability
20–16	Commitment fulfillment
26–21	Privacy

To measure the quality of services from the student's point of view, they were asked to express their perceptions of the actual status of services received in alignment with the five dimensions of quality. And in the next step, their identities (before entering the university) with respect to the same dimension were measured. To answer questions, the Likert scale was used.

2.5. Content validity

Generally, this kind of validity involves a methodical review of the content of the test to answer the question of whether the test measures the intended behaviour of the sample. One of the most important types of this kind of validity is the face validity. This kind of validity suggests that the appearance of the test questions show that they measure the subject matter that they were designed to measure. Virtually, it depends on the judgment and experience of experts and specialists in the field. Consequently, we sought the opinion of 10 faculty members of Technology Faculty at Tehran University; their suggestions were applied in the questionnaire.

As explained in the previous section, Cronbach's test was used to determine the reliability of the questionnaire. The following results are taken from SPSS software.

To ensure that the intended questions are suitable for measuring the variables introduced in the sample, Cronbach's alpha is calculated for each dimension of the questionnaire individually. Table 2 presents the calculated Cronbach alpha.

Table 2. Cronbach's alpha for the variables in the model

Cronbach's alpha	No. of items	Dimensions
0.823	5	Efficiency
0.760	5	Reliability
0.788	5	Accountability
0.749	5	Commitment fulfillment
0.745	6	Privacy
0.892	26	Total

As it is evident, Cronbach's alpha of all variables is more than 0.7, which indicates they all have the required validity.

3. Findings and conclusions

Kolmogorov–Smirnov test was used to evaluate the normality of the data. The results of the test indicate that data are normal. The significance level of the test for independent and dependent variables is shown in Table 3. Based on the obtained values, the H1 assumption is based on the non-normality of the data of the questionnaire and the H0 assumption is based on the normality of the data. Therefore, in inferential statistics, parametric tests are used.

Table 3. The results of normality of the data

Dimension	Efficiency	Reliability	Accountability	Commitment fulfillment	Privacy
Significance level	0.080	0.080	0.084	0.162	0.156

3.1. First hypothesis

The quality of the online services (website) of the University of Tehran is satisfactory.

According to the obtained mean of 3.9286, it can be concluded that the quality of the online services (website) of the University of Tehran is satisfactory.

3.2. Second hypothesis

The efficiency of the quality of the online services (website) of the University of Tehran is satisfactory.

With regard to the obtained mean of 3.0638, it can be concluded that the efficiency quality of service of the online services (website) of the University of Tehran is satisfactory.

3.3. Third hypothesis

The reliability of the quality of the online services (website) of the University of Tehran is satisfactory.

According to the obtained average of 3.2935, it can be concluded that the reliability of the online service quality (website) of the University of Tehran is satisfactory.

3.4. Fourth hypothesis

The accountability of the quality of the online services (website) of the University of Tehran is satisfactory.

According to the obtained average of 2.2848, it can be concluded that the accountability of the quality of the services provided on the website of the University of Tehran is not satisfactory.

3.5. The fifth hypothesis

The commitment fulfillment of the quality of the online services (website) of the University of Tehran is satisfactory.

According to the obtained mean of 2.83827, it can be concluded that satisfaction of the quality of the services of the online services (website) of the University of Tehran is not satisfactory.

3.6. Sixth hypothesis

The privacy of the quality of the online services (website) of the University of Tehran is satisfactory.

According to the obtained average of 3.3152, it can be concluded that the privacy of the quality of the online service (website) of the University of Tehran is satisfactory.

4. Discussion and conclusion

The present research, titled 'Assessing the Quality of Online Services (Website) of Tehran University', the dimensions of the service quality were reviewed. The most important purpose for choosing this subject was the newness of the concept of quality in providing academic services. Although the issue of quality has been widely considered in industrial and production fields, the researchers have been less concerned with the quality of services due to the intangible nature of services in the service section. But it seems that there are many areas in the service sector that concepts of quality and quality control can be designed and implemented, in order to effectively improve customer service and customer satisfaction. On the other hand, it is of dire importance in the service sectors of the society, and especially the universities since they are the heart of the knowledge of each country, and the centre of knowledge human resources. The lack of competition and people's constant need for this sector leads to overlooking the quality of services in this sector. Therefore, in this research, we sought to examine the current status of the university in terms of the necessary qualifications for the desired implementation of quality management, especially online services, and to compare it with the ideal situation for implementation of comprehensive quality management.

Also, in this study, with the aim of examining the dimensions of the quality of services, hypotheses based on the SERVQUAL model were developed. Then, theoretical foundations and research background were addressed. In addition, the definitions and characteristics of the quality of service were described, and the models and dimensions of quality were explained in this section.

The statistical population of the study consisted of the students of Tehran University (in five categories). Regarding the constraints of the research, a random sample of 240 people from the statistical population was selected at Tehran University and the students were asked directly and face-to-face to fill the questionnaires.

The research has five hypotheses based on the conceptual model of the research. In this research, the required information to develop the hypotheses and to test them were gathered from library resources, the conceptual model of research, the views of professors and university instructors and the research questionnaire. Data analysis was carried out through questionnaires in two levels of descriptive analysis and inferential analysis.

Descriptive analysis includes descriptive analysis of demographic data (age, gender, level of student education and field of study) and descriptive analysis of research data (frequency, frequency percent, mean and standard deviation) and at the level of inferential analysis, statistical tests were used to analyse the data to confirm or reject the research hypotheses.

In this research, according to the SERVQUAL model, five dimensions of efficiency, reliability, accountability, commitment fulfillment and privacy have been investigated. Based on the research hypotheses, Kolmogorov–Smirnov test was used to measure the significance level of the variables. Also, the mean of each of the variables of the research was measured and analysed. The lowest mean belonged to accountability and commitment fulfillment and the highest belonged to the quality of services.

As was indicated, the mean of all each dimension was calculated except for accountability and commitment fulfillment. Accountability and commitment fulfillment was the lowest among dimensions. Consequently, university authorities and administrators should increase staff commitment with appropriate training. To this end, familiarising the staff with the type of their duties towards students and clarification of their efforts for students will improve the relations between staff and students. This can also create mutual trust between staff and students. Building trust is among the factors that will bring significant advantages to any organisation. The quality of services showed

the highest amount of mean among factors. Students' satisfaction with university services can be increased by spending more budget. Managers should note that making students recognise the need to increase their knowledge of cyberspace will increase their understanding of the services provided at the university. In students' view, the availability of facilities for students is the most important factor for better services at Tehran University. Another factor in the performance of online services is the discussion of privacy which has been evaluated as being desirable. As it was previously discussed, recognition and identification of students' needs can play a significant role in helping the students to have a better perception of the quality of university services. In this regard, administrators must step in with making a timetable to identify students' demands for these needs.

Considering that universities are the heart of knowledge in any country, the importance of focusing on this area is revealed. Therefore, in the management of any service activities in this area, thoughtful attention should be paid to continuous follow-up of individual interactions between students and staff at the time of services, as one of the essential requirements for accountability and commitment to obligations in the cyber-system.

As it was revealed in the results of the study, students have evaluated most of the dimensions related to the quality of service, i.e., individual interactions, to be moderate or acceptable. Although this reflects the relative success of the University of Tehran in providing successful interactions in providing services, on the other hand, there is a possibility that negative perceptions form in the students' minds about these services. In this section, based on the results of the research, the authors try to suggest some solutions to improve the quality of services, which would lead to a sustainable and distinct competitive advantage for the university.

In other words, in this section, the researcher's effort is to provide solutions in line with the results obtained from testing the hypotheses in order to better align the quality of service with the needs and expectations of the students. Although the suggested solutions are according to the scientific results of the present research, the authors believe that for more functional solutions, these suggestions should be compared with the experience and opinions of the managers and scholar.

Considering the obtained results regarding the quality of service (confirmation of research hypotheses), as well as considering the data collected through interviewing methods, observation and library studies in order to align more to the needs and expectations of students, the following strategies are recommended:

1. Comprehensive assessment of the quality of online services at the university level.
2. Evaluation of staff performance regarding the services provided by the university in terms of service quality.
3. Comparison of students' perceptions of the quality of offered service at Tehran University to other universities.
4. Examining the quality of online services on an international level.
5. Motivating the employees to make use of the university's website more
6. Holding training courses in order to familiarise the staff with how to establish and maintain a successful relationship with students.

Categorising of the university students from several aspects of the quality of services, based on their perceptions of the quality of service at the university, such a categorising can lead to more customer-orientation by targeting the different sectors more effectively. Since one of the biggest problems is overlooking students and their needs, organising training courses for university administrators and staff can be of great help.

Given the results of the study regarding the commitment to fulfil the needs as promised, as well as considering the information collected through interviewing methods, observation and library studies, the following strategies are also proposed:

1. The use of modern technologies in providing quality services and timely accountability.
2. Analysing and reflecting the views and requests of students in university management levels.
3. Designing a more favourable physical environment in the academic service centres.
4. Equipping the university with computer systems for easier students' access.
5. Training staff to fulfil their duties.
6. Improving communication skills of university staff, such as language skills.
7. Raising students' understanding of employees' performance.

In this section, the suggestion for future research is offered to fellow researchers and those interested in conducting research in the field of quality:

- Investigating the relationship between quality of service and organisation commitment.
- Investigating the relationship between the quality of service and customer and employee satisfaction.
- The level of satisfaction with the service quality dimensions from the perspective of customers and employees and their comparing them.
- Investigating the relationship between online services with customer satisfaction.

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