Analysis of Environmental Friendly Library Based on the Satisfaction and Service Quality: study at Library "X"

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Abstract: One of the factor that influenced the development of science is the existence of the library, which in this case is the college libraries. Library, which is located in the college environment, aims to supply collections of literatures to support research activities as well as educational for students of the college. Conceptually, every library now starts to practice environmental principles. For example, "X" library as a central library claims to be an environmental friendly library for practicing environmental friendly management, but the X library has not inserted the satisfaction and service aspect to the users, including whether it is true that environmental friendly process is perceived by library users. Satisfaction can be seen from the comparison between expectations and reality of library users. This paper analyzes the level of library user satisfaction with library services in the campus area and the gap between expectations and reality felt by the library users. The result of the research shows that there is a disparity between the hope of library management, which is sustainable and environmentally friendly with the reality in the management of the library, so that it has not given satisfaction to the users yet. The gap value of satisfaction that has the biggest difference is in the library collection with the value of 1.57; while for the smallest gap value is in the same service to all students with a value of 0.67.

Keywords: user satisfaction, service quality, library, environmentally friendly, library.

1. Introduction

Library has an essential role in the development of science, technology and information. One of them is the University Library that plays an important role in the development of education, especially the fulfillment of the desire for reading materials, literature and other information in high educational relationships. University libraries are libraries contained in higher education institutions, subordinate agencies and institutions as well, which are affiliated with universities, with the primary goal of helping universities achieve their goals [1]. The general purpose of library services is to get library user satisfaction. Consumer's satisfaction is the level of someone's feelings after comparing the performance or outcomes that he feels compared to his expectations [2]. The purpose of a college library is: 1) As a provider of referral library materials at all academic levels, 2) Fulfilling the information needs of community colleges, such as faculty and students, including college administration personnel, 3) Providing an active information services not only limited to college environments but also local industry institutions. 4) Supplying reading

and learning space in the library, 5) Allocating the appropriate lending services for various types of users, and libraries can support the existence of universities, because the library, as a place to manage sources of scientific information, is needed by universities [3] .

To be able to give the information services in order to achieve these objectives, the library should strive to provide various sources of information or library materials, which are necessary to be able to carry out programs of higher education activities in the field of education, teaching, research and community service. Library services can be strengthened by empowering librarians in facilitating customer reference services [4].

The library, which is discussed in this study, is a centralized of X library service. The X Library has several types of physical and digital collections. The physical collection is in the form of a book, while the digital collection is owned by X library. Digital services include desktop, online database, e-publishing, e-journal, e-book, web-portal, etc. [5].

In carrying out its functions, qualified human resources are extremely needed by the library. Central X Library has done its function in the process of library services and processing, but the need for the library remains unfulfilled, such as lack of facilities and infrastructure in the library. These deficiencies include inadequate room, lack of attention from the central leadership of the institute for the development of quality human resources, as well as limited funds to make library-based information technology.

Library is considered in a good shape if it can provide services that are able to derive satisfaction to library users, either in the field of information services or other services. Service quality can be defined as the levels of discrepancy between the user's expectations, desires and their perception[7]. Quality of service is a comparison between the expected service and received service. Thus, service quality is the outcome of a comparison between expectations and reality.

2. Theoretical Review

The Library is a collection of books that are organized in such a way as to be used for readers, consultation, and study purposes[8]. The college library is a technical implementation unit (UPT) of higher education, which is together with other units participating in implementing the " Tri Dharma of College Concept ", which is education, observation, and dedication to the society, by choosing, collecting, processing, taking care and serving information resources to its main institution in particular and academic community in general [9]. The library has functions as the education, information, research, recreation, publication, deposit, and interpretation function [10]. The purpose of the library is to build and maintain collections which is appropriate to read purpose and user information [11].

The library X is a library that already implemented an environmental friendly concept of the library including a green building that significantly designed to reduce the requirement of energy and water usage, highly efficient lightning and air ventilating system, also provide an efficient resource and service to its user. And in this research, is to valuate whether the concept was implemented as what they claimed to be by the perception of the library user.

Quality typically represents the direct characteristics of a product, such as performance, reliability, ease of use, esthetics, etc. [12]. Quality of service as a measure of how good the level of service provided can be in accordance with user expectations [13],

until the quality of services can be realized through the fulfillment of customer needs and expectation along with an accurate delivery to compensate for user expectations [14].

Satisfaction is a kind of stepping away from an experience and evaluating it. One could have a pleasurable experience that can be said as dissatisfaction. Even though pleasurable, it was not as pleasurable as it was supposed or expected to be. So satisfaction and dissatisfaction is not an emotion, it is the evaluation of emotion [15].
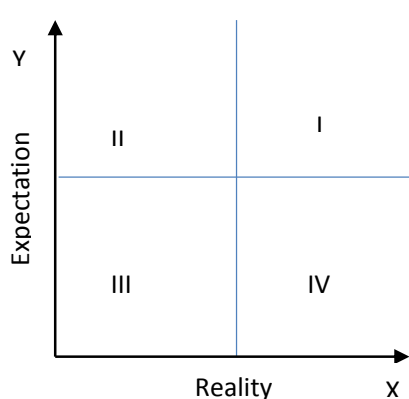
The User's perception towards service can be categorized into five (5) [16], which are:

1. The discrepancy between customer expectations and service quality specifications established by the service provider's management
2. The discrepancy between quality and service quality specifications
3. The discrepancy between service quality and service quality specifications
4. The discrepancy between the service provided and the external communication to the customer
5. The discrepancy between the qualities of service expected and perceived.
6.

3. Methodology

This research using the quantitative approach to see how big the differences between the expectations and the reality of the library users to the quality of the central X library, which claims to be environmental friendly. The method used in this research is the Gap Analysis Method that using a simple mathematical approach formulated in four Cartesian quadrants. The population of this study is all of the postgraduate students of "Y" department whom regularly used X library.

The data was collected using questionnaires with Likert scale. The instrument validity test was performed by using Pearson Product Moment and Reliability Test that refers to Cronbach Alpha formula. Data analysis is performed using a Cartesian diagram to illustrate the degree of satisfaction, by comparison between the level of expectations and reality in the four quadrants.

The quadrant I attribute is considered as important by the user with high expectations and so the fact is, thus the library must maintain it .

Quadrant II attribute is considered as important by user, but in reality it has not been done, so that it needs to be improved.

Quadrant III attribute is considered as unimportant and in fact the library does not implement them either.

Quadrant IV attribute is considered as unimportant, but the library executes it to the maximum.

Figure 1. Cartesian diagram

4. Results and discussions

Reliability test is a measure of a stability and consistency of respondents in answering the related matters with the question, the collision question, which is the dimension of a variable and compiled in a questionnaire form. The test of reliability can be carried out

jointly against all the questions. The results show that the questionnaire answers, either the expectation or reality, is declared as reliable because the alpha value for the expectation question is 0.959 > 0.6. Likewise with the results obtained for the question of reality alpha count is 0.965 > 0.6. Validity test is used to determine the eligibility of the items in a list of questions in defining a variable. Validity test is done for all items of question either to expectation or reality. The result counts every item of all question is declared valid because it is bigger than table with sample 12 df = 10 that is 0,497.

The quality of X library services is known from the comparison between expectations and reality. The expectation average of library users 4.32; while the average reality that is in the field is 3.18.
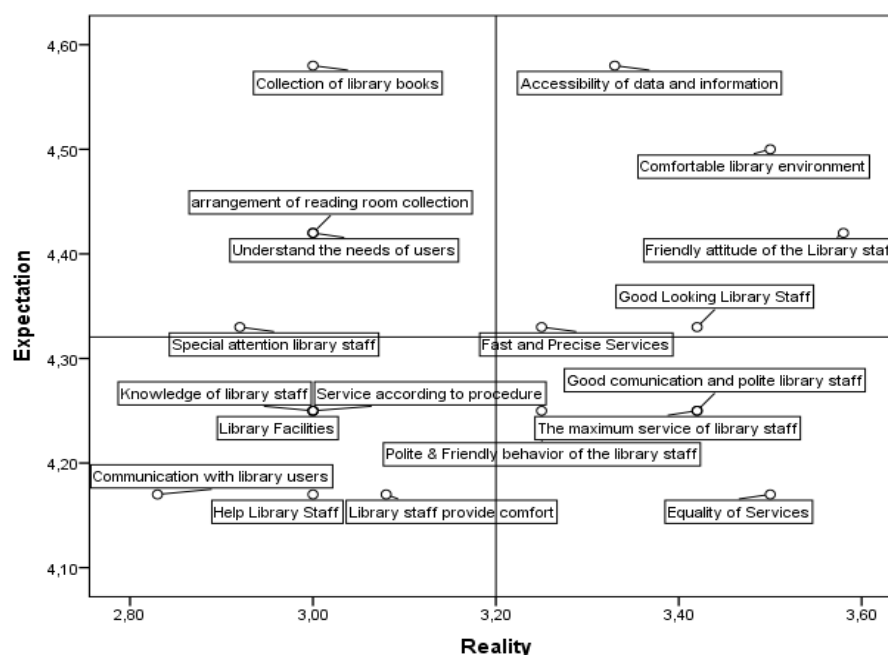

Figure 1. Expectations and realities on the quality of X center library services on Cartesian diagram.

In Figure 1, it can be seen that in quadrant 1, there is as easy access and information of library product, the comfortable environment of library, good performance of library staff, friendly attitude of library staff, and quick and proper service of library staff have high enough expectation value, moreover in reality also, it has been implemented by the library and must be maintained by the library.

Quadrant II states Collection of books, arrangement of reading room, library staff who understand the desires of the librarian and the special attention of library staff have a high expectation value above the average expectation, but in reality, it has not been implemented by the library, or the implementation is not maximal, this needs to be improved.

Quadrant III states that library facilities, service according to procedure, knowledge of library staff, communication with user, library staff's assistance and comfort given by library staff are not the main hopes of the users and in fact, readers have not been done maximally by the library yet.

Quadrant IV expresses that communication is good and polite by the library staff, polite and friendly attitude of the library staff, equality of service for library visitors is not a hope by the librarian, but in reality it has been implemented maximally by the library.
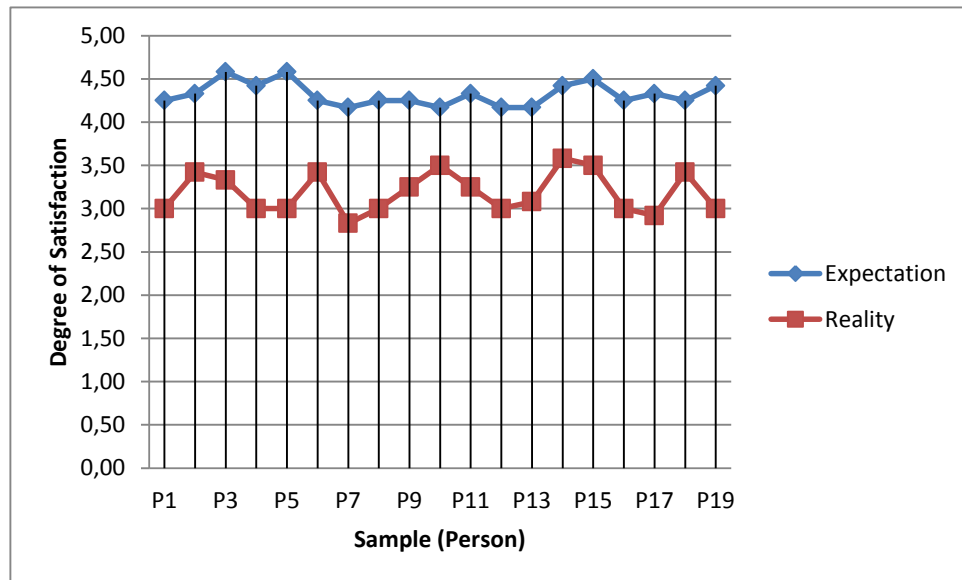

Figure 2. The discrepancy between expectations and the reality of the quality of the central X library service.

In Figure 2, it is clearly seen that there is a gap or a discrepancy among the expectations of the users of the quality of X library services center. This issue has occurred because the expectation of the user is not always directly proportional to the central X library service. In the aspect of the collection of Central X Library (on P5) it is seen that a hope towards the collection in the library Center X does not match the reality expected. The expectation, which is owned about the collection of central X libraries have averaged 4.58 and the average reality has a value of 3.00. There is a difference of 1.58.

In Figure 2, it is shown that P10 has the smallest discrepancy value. P10 is the value of equal service to all students. The average value in the expectations of the reader is 4.17 with a reality value of 3.50. The discrepancy is 0.67. The quality of X library's librarians center is good and in accordance with the readers' expectation.

5. Conclusion

The expectation of the library user for an environmental friendly library varies to high and average ones, whereas the high expectation including a quick access and information for library products, comfortable ambience, good management of the library staff, quick and precise service of the library staff and the average expectation including the collection of books, the arrangement of reading room, the library staff who understands the willingness of the users and the special attention of the library staff. In reality, most of the first point has been implemented in the Library X, but in the second point, it has not been implemented by the library or the implementation has not been maximal yet. Library facilities, service according to procedure, knowledge of library staff, communication with librarian, library

staff assistance and comfort given by library staff are not the main hope of the readers and in fact, are also perceived by the librarian has not been fully implemented by the library. Good communication and polite library staff, polite and friendly attitude of the library staff, the equality of service for library visitors is not a hope by the librarian but in reality carried out maximally by the library. Then it can be inferred that the library X, that claimed had already implemented the environmental friendly system did not calculate the perspective aspect from its users.

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