An Empirical Study of Library Customer Satisfaction (LcS)
Model at Malaysian University Libraries

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Abstract: The concept of Library Customer Satisfaction (LcS) has attracted many researchers in recent years. Organizations such as university libraries are still trying to analyze this concept begins with an understanding of the various models of customer satisfaction. This paper evaluates the customer satisfaction model available for analyzing and measuring the factors/variables, the relationship of customer satisfaction on the use of libraries, particularly in academic libraries. In addition, this paper does not use SERVQUAL or LIBQUAL as commonly used by many researchers to assess the customer satisfaction. A Structural Equation Modeling approach (SEM) will be used in this study to evaluate the significant relationship between factors/variables selected. However, literature related to customer satisfaction is limited especially in Malaysia context. Therefore, only relevant material on the selected model will be discussed to measure Library Customer Satisfaction (LcS). It is hoped that this proposed model could be part of a new model that can be contributed to new knowledge.

Key words: Customer Satisfaction Model · Library Customer Satisfaction (LcS) · SERVQUAL · LIBQUAL · Structural Equation Modeling (SEM)

INTRODUCTION

Much has been written in the past few years on Customer Satisfaction measurement models in order to study the relationship especially in terms of customer satisfaction Index (CSI) [1]. Satisfaction defined as a state felt by a person who has experience performance or an outcome that fulfill his or her expectation. Satisfaction is a function of relative level of expectations and perceives performance. It also related to a state of mind, an attitude [2,3]. There are numerous ways a person or individual can satisfy their information need, including visiting a library, calling someone on the phone, or searching digital resources. In existence, research conceptualizes that customer satisfaction as a cumulative construct that is affected both by service expectations and performance perceptions as well as in the prior or current time period [4]. Satisfaction plays a particularly important role in competitive environments such as in academic libraries because of its impact on customer loyalty. Therefore, satisfaction is the single most heavily weighted component on organization. After the importance of satisfaction was recognized, they began trying to define it, measure it and determine what causes it [5].

Many studies related overall customer satisfaction related to some library products or services. Therefore, this study tries to focus on the conceptual framework exists and related to propose a new Library Customer Satisfaction (LcS) within Malaysia context. Others scholarly literature will be taken as a supported material. Malthouse et al. stated that customers may explain their satisfaction with a product or service in terms of specific aspects such as the product attributes, process, customer service, or a combination of these various features [6]. In 1984, Kano has made a distinction between three types of product requirements which influence customer satisfaction in different ways [7] as depicted in Figure 1.

The three types of product requirements are listed below:
Fig. 1: Kano's model of customer satisfaction

Fig. 2: The CSI Model.

**Must-be Requirements:** With regards to these requirements are not fulfilled, the customer will be extremely dissatisfied. As the customer takes these requirements for granted, their fulfillment will not increase their satisfaction. The must-be requirements are prerequisites criteria of a product. Therefore, fulfilling the must-be requirements will only lead to a state of "not dissatisfied".

**One-Dimensional Requirements:** With regard to these requirements, customer satisfaction is proportional to the level of fulfillment - the higher the level of fulfillment, the higher the customer’s satisfaction and vice versa. One-dimensional requirements are usually explicitly demanded by the customer.

**Attractive Requirements:** These requirements are the product criteria which have the greatest influence on how satisfied a customer will be with a given product. Attractive requirements are neither explicitly expressed nor expected by the customer. Fulfilling these requirements leads to more than proportional satisfaction. If they are not met, however, there is no feeling of dissatisfaction.

However, Kano’s model is not suitable to apply in Library Customer Satisfaction (LcS) because Kano’s model focus on product quality to satisfied their customer rather than service quality in marketing areas. Therefore, the service quality factor must be included in order to establish customer satisfaction. Perhaps, the linkage of overall service satisfaction, encounter satisfaction and perceived service quality could support the conceptualization of perceived quality [3, 8].

Hence, knowing what customers value most in a company especially in library products or services helps to optimize resource utilization in areas for continuous improvement based on their needs and wants [9]. However, The American Customer Satisfaction Index (CSI) model in Figure 2 has been used to measure and construct customer expectation in the ACSI, which has less impact [10,11]. Therefore, this CSI model meets to be adopted in Library Customer Satisfaction (LcS).

Nevertheless, corporate image is not giving a significant impact or significant relationship for students when they visit the library. The library’s image does matter, but how students perceived it and satisfied when using the library. It is difference in business, which corporate image is crucial to ensure a sale of products or services found a place in the hearts of customers. Tyler and Hasting supports that student need one factor, which is most is perceived quality to influence their satisfaction when dealing with library services [12].

Other researcher said that customer satisfaction model is a complete path model [13], which can be depicted in a path diagram to analyze a set of relationships between variables. It also measures the quality of the goods and services as experienced by the customers that consume them [14]. The European Customer Satisfaction Index (ECS) model, which is an economic indicator, was illustrated in Figure 3.

Zhang, et al. stated that, in the ACSI model and ECSI model, the embedded hypothesis in the routes such as customer expectation, perception quality, customer expectation, perception value and customer expectation,
customer satisfaction is that the customer expectation influences customers’ perceptions to the qualities of product and service and the degree of customer expectation influences customers’ value judgments to the product and service and accordingly influences customer satisfaction [15]. The premise of this hypothesis is the qualities of the product and service in the manufacturing and general service industry are decided by providers (enterprises). The customers are only consumers who passively accept product and service. 

But, in the implementation process of higher education especially in library, students are not only consumers to accept the higher education services, but they are the cooperative producers of education implementation. Therefore, this ECS model was improved from previous CSI model with added factor of Customer expectation. 

This customer expectation is important rather than loyalty factor. Customer expectation somehow could classify using lead users methods who are more or less satisfied with library collections and services [16]. But, loyalty factor in Library Customer Satisfaction (LcS) is not important because most of the students already offered to enter the university. Hence, an ECS model could be considered to adopt and apply Library Customer Satisfaction (LcS) model towards student satisfaction in academic libraries. Another model was proposed by McDougall and Levesque [17] indicates that one model to test a more comprehensive model of customer satisfaction in a service setting, which incorporates with perceived value. The model indicates that perceived quality and perceived value have influence satisfaction, which in turn, influences future intentions as depicted in Figure 4. 

Customer satisfaction is viewed as the overall assessment of the service provider while future intentions are the stated likelihood of returning to the service provider. However, switching intentions and loyalty intentions factor in this model was not suitable to be adopted. It is also argued by Parasuraman, et al. that users' satisfaction influences the student’s intentions to stay or leave the institution. It is known that satisfaction level is determined by the difference between the service performance as perceived by the customer and what the customer expects [18]. Kara’s agreed that student satisfaction and intentions to stay or leave the college or university especially to perceived library by analyzing a number of factors especially could give a significant impact. Thus, it is hard for student switching intentions when they are entered the university [19].

Other researcher attempts to evaluate overall library performance from the patrons’ perspective focusing directly on measuring service quality rather than satisfaction [5]. This is the gap which has to explore why service quality is more important rather than customer satisfaction. A study of library literacy of undergraduate students at the University of Northern Colorado (UNC) found that students’ confidence levels increased with increased exposure to the library and its services, although tested overall proficiency did not increase significantly [20]. To fill this gap, the researcher develops and tests a student satisfaction model in the Austrian university environment. The lead user was taken from the primary customers of the universities which is from students communities [21,22].

According to the author, the need for a student satisfaction model is based on the following reasons which are:

- The student is a special customer in a special service environment;
- The student is part of the product development;
- The student satisfaction rate is always varying over the student time and beyond;
- The student is the one who transports the “picture” of the universities worldwide;
- No student satisfaction model could be found after researching the existing literature, only alumni or employee satisfaction models were available; and
- The students are mostly not part of this development but those are the customers who can influence potential students and society.

Regarding to these reasons, a holistic concept for measuring student satisfaction would help to set new steps and activities [22]. Therefore, the model in Figure 5 was developed based on an exchange framework.

From Library Customer Satisfaction (LcS) perspective, these investigations of dimensions service quality have assisted library’s’ managers in identifying the importance of ensuring that efforts are made to “get the service right the first time” and to “meet or exceed
Fig. 5: Pre-conceptualized model

Fig. 6: Structural model

customer expectations in the delivery of the service”. Recently, much researcher has been conducted Structural Equation Modeling (SEM) on customer satisfaction [23, 24, 13, 25, 26]. Ward stated that Structural Equation Modeling (SEM) is an analytical technique that utilizes a number of well-known statistical tools (factor analysis, path analysis and regression modeling). The focus of this technique is on the measurement of latent variables or ‘dimensions’ [26]. As such, SEM has the ability to highlight the interactions between latent variables, thus allowing analysts to make causal inferences. The Library Customer Satisfaction model depicted in Figure 6 was adopted the core concept and frame of overall satisfaction.

MATERIALS AND METHODS

Whilst, to support these factors, the Matrix of Customer Satisfaction indicates that there are significant different between existing models. The matrix clearly shows that previous researchers enhanced their model through customer needs and satisfaction. As a whole, the customer satisfaction model could be combined namely as Library Customer Satisfaction (LcS) Model, which includes Quality, Expectation, Value, Compliant and Perception. It is selected based on the lead factor on each model draw in Table 1.

RESULTS

The proposed of Library Customer Satisfaction (LcS) model provides a baseline or fundamental theoretical approach for determining whether library customers are becoming more or less satisfied with the quality of product or services provided by university libraries [13]. Arambewala and Hall stressed that it is very important for university libraries to manage student perceptions of service performance in order to improve their attitudes [27]. Marchionini et al. pointed that The Library of Congress, in categorising its users as library staff, hobbyists, scholars, researchers, object seekers, rummagers, surfers, teachers and students, found a significant difference in expectations between the groups. This evidence indicates significant advances in improving customer satisfaction [28]. Bawden and Vilar also stressed that there is some evidence, albeit limited because of the relatively few studies performed, that expectations differ between different types of user [29]. In spite of that, information technology (IT) such as computers, multimedia and CD-ROMs are bringing unprecedented abilities to libraries in providing services and resources to the university community to fulfill student satisfaction [30, 31]. In order to verify limited types of user, the Lead User Method [32,33,34] could be used to verify and cluster to have a very small sample size of student.
CONCLUSIONS

In conclusion, there is a significant impact on student satisfaction, where many factors/variables that are important to be studied and understood. This study explored and focused the factors/variables associated with student satisfaction in the university libraries. The proposed of Library Customer Satisfaction (LcS) model in this study expected to have strong association and improved student satisfaction gap. It was argued that the existing of strong evidence to suggest that various instruments currently used to measure student satisfaction suffer from problems with construct validity. Therefore, a Structural Equation Model (SEM) outlined in this paper hoped could provide student satisfaction survey designers with a theoretical. In so doing, it has begun to close a significant gap, thus provides some guidelines for improving the quality of student satisfaction perspectives, which in turn will improve significant impact of the strategies designed to improve student satisfaction. Thorough and collective scrutiny of such factors could contribute to higher user satisfaction. However, further research is required to prove that the proposed model has a correlation value and significant impact of high interest to the customer satisfaction, especially students who often use the academic library.

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REFERENCES


