

UDK: 658.8:005.584

# Utilizing Customer Experience Management Framework to Create a Delightful Service Experience

Ronald Sukwadi

Assistant Professor, Atma Jaya Catholic University of Indonesia, Jalan Jenderal Sudirman 51 Jakarta, Indonesia,  
[ronaldmanutd@yahoo.com](mailto:ronaldmanutd@yahoo.com); [ronald.sukwadi@atmajaya.ac.id](mailto:ronald.sukwadi@atmajaya.ac.id)

Received (11.03.2014.); Revised (28.11.2014.); Accepted (11.02.2015.)

## Abstract

*In a highly competitive service environment, service providers have to provide customers with delightful service experience in order to attract more customers and achieve higher customer satisfaction. Managing service experience is a critical approach for service providers to consider. Although customer experience management (CEM) has been discussed across different research disciplines, there is still no systematical and feasible way to apply CEM into real environments. This study attempts to examine the customer experience by using cluster analysis, cross tabulation test, importance-satisfaction (IS) model, and house of quality (HOQ) method for CEM. We illustrate the process using an empirical case study at a well-known café in Jakarta, Indonesia. This mechanism can help service providers design and deliver delightful service experience to customers.*

**Key words:** *Customer Experience Management; Delightful Service Experience; Customer Satisfaction*

## 1. INTRODUCTION

Services are a growing part of the economy and in many countries a dominant source of employment. The service industry has been key to driving economic growth. Service innovations have contributed to the growth in the number of service firms and to the scale on their operations, which in turn has increased their economic impact [1]. Service providers need to pay attention to customer feedback to better provide service [2, 3] and must rely more on customers' experiences in innovation processes [4]. The providers have to organize around the customer in order to be a successful firm. They are forced to change their activities from a provider's point of view towards a customer's point of view [5]. Customer delight has to be created during the process of service delivery in order to really outperform competitors and win the hearts of customers [6,7, 8, 9].

While a good quality of service has been considered a competitive advantage, many researchers have now pointed out that a quality service aiming to satisfy expectations can no longer win the hearts of customers. How to provide high quality experiences for customers is more critical now. A memorable service experience could improve customer satisfaction, loyalty and reputation of service providers leading to greater profit [3,10,11,12,13,14,15]. The experience the consumer has during a service encounter significantly influences their assessment of the service provider [4,12,16,17,18,19].

Service companies interested in earning their customers' loyalty through delightful customer experiences should focus on delivering a value added solution first before attempting to delight their

customers [7,20]. Parasuraman *et al.* [21] noted that service providers must recognize customer needs in order to fulfill expectations to achieve high customer satisfaction during the service experience. Managing customer experience is an important approach to enable customers to have a satisfactory and delightful experience [3,8,10,22]. Service providers can provide customers with appropriate services according to their expectations. Competent service providers should provide a memorable service experience in order to achieve a customer satisfaction and build a threshold that competitors must achieve to enter the market [21]. Yet despite the recognition of the importance of customer experience by practitioners, the academic marketing literature investigating this topic has been limited. Publications on customer experience are mainly found in many practitioner-oriented journals (e.g. [2, 3, 13,14,16,23,24] or management books (e.g. [10, 22]). Pine and Gilmore [25] argued that creating a distinctive customer experience can provide enormous economic value for firms, and Novak *et al.* [26] investigated the impact of website design in its impact on the customer's experience. More specifically, Gentile *et al.* [27] empirically investigated the specific role of different experiential features in the success achieved by some well-known products or services. And, Frow and Payne [11] derived managerial implications of customer experiences and 'touch points' practices, based on qualitative case studies.

In a highly competitive and saturated café and restaurant industry, attracting customers with high quality food and dedicated service, satisfying or even delighting them and making them into loyal customers is critical for the success of business [23]. Cafés must

be customer oriented using marketing concepts that identify customer needs thus leading to their satisfaction and increased retention [27]. For café customers there are three key attributes—menu, setting (physical environment), and services; and managers need to recognize how satisfied customers are with each of these elements. All three attributes contribute to overall satisfaction with the dining experience, leading to repeat patronage [28, 29, 30].

Furthermore, previous studies have identified that the dining and hang out experience influence customer's emotions and expectations regarding service, menu, and entertainment quality [31, 32]. Usually, a customer first perceives the experience when he or she enters a café, which occurs before any actual services or menus are delivered. Thus, the emotions created by the perception of the experience may affect the customer's reaction to the actual services in café [23, 32,33]. That is, if customers have a high perception of their experience, then customers' expectations for service, menu, and entertainment quality could also be higher. In this situation, merely providing an appropriate level of service may not meet customers' heightened expectations, leading to lower customer satisfaction and lower loyalty behaviors. However, even if café atmospherics are not satisfactory, providing excellent service could induce satisfaction and positive behaviors because it may easily exceed the lowered expectations created by the atmospherics [29].

Understanding situational factors that shape consumer behavior is critical to developing effective service theory and strategy [34]. By creating and implementing a positive customer experience management (CEM), it can complement the business operation with increased customer loyalty, retention, improved service quality and profitability. CEM can strategically manage a customer's entire experience with a product or a company [10,22]. It is an integrated approach of managing customer experience while interacting with your environment, products, services, and employees. Consequently, it becomes necessary to consider aspects that refer to the emotional and irrational side of customer behavior [35] and which, more than the only rational ones, account for the whole experience coming from the set of interactions between a company and its customers. Such experience plays a fundamental role in determining the customers' preferences, which then influence their purchase decisions.

In this perspective, this study sheds some light on the concept of customer experience in café industry, and on how the right quality characteristics for the desired customer experience should be created in such a way as to contribute to the value creation for customers and the company itself. The paper is developed in six sections. In the first section, we review the contribution of CEM to customer satisfaction based on related previous research. Next, we examine the literature on the CEM [22], service quality (SERVQUAL) [36], importance-satisfaction (IS) model [37], and quality function deployment (QFD) [38] that can provide valuable insights into service experience design issues and framework development. In the third section, we describe an integrated methodology of CEM,

SERVQUAL, IS model, and QFD in order to delight the customers. This is followed by an empirical case study of a café in Jakarta, Indonesia. Then, we provide a series of implications in discussion section. Finally, we conclude the role of CEM in managing the service design and opportunities for future research.

## 2. LITERATURE REVIEW

This section aims to identify the theoretical composition that is considered as the objective of this study. Before the development of the customer experience management (CEM) model, we first discuss the critical methods, which are the essentials of the model.

### 2.1 Customer experience management (CEM)

Service management historically has not considered customer experience as a separate construct. Instead researchers have focused on measuring customer satisfaction and service quality (e.g. [32, 36]). However, it is not that customer experience has never been considered. Researchers in service marketing have recently considered customer satisfaction from the viewpoint of what and how they experienced the service encounter resulting in the concept of customer experience management [12,16,24]. Most notably, Holbrook and Hirschmann [35] theorized that consumption has experiential aspects. Schmitt [22,39] has explored how companies create experiential marketing by having customers sense, feel, think, act and relate to a company and its brands. And, Berry *et al.* [2] suggest that in order for organizations to compete by providing customers with satisfactory experience they must orchestrate all the "clues" that people detect in the buying process.

Building from these insights, recent definitions of customer experience include that "The customer experience originates from a set of interactions between a customer and a product, a company, or part of its organization, which provoke a reaction. This experience is strictly personal and implies the customer's involvement at different levels (rational, emotional, sensorial, physical, and spiritual)" [27]. A second and related definition is that "Customer experience is the internal and subjective response customers have to any direct or indirect contact with a company. Direct contact generally occurs in the course of purchase, use, and service and is usually initiated by the customer. Indirect contact most often involves unplanned encounters with representatives of a company's products, service or brands and takes the form of word-of-mouth recommendations or criticisms, advertising, news reports, reviews and so forth" [3].

The concept of customer experience was firstly conceived in the mid-1980s when, along with the mainstream literature in consumer behavior that deemed customers as rational decision makers, a new experiential approach offered an original view to consumer behavior [35]. According to Schmitt [22], the term "customer experience management" represents the discipline, methodology and/or process used to comprehensively manage a customer's cross-channel

exposure, interaction and transaction with a company, product, brand or service.” Customer experience management provides strategies, process models, and information technology to design, manage and optimize the end-to-end customer experience process [11,27, 39].

From the point of view of the development of the CEM by companies, Schmitt [22] presents a five-steps of the CEM framework. The following shows the five steps needed in order to carry out the CEM:

1. *Analyzing the experiential world of the customer.* This first step is to analyze the experiential world of the customers that provides customer insight. It is important to analyze what customers want, what customers need, their lifestyles and their socio-cultural context. Companies need to know how the world is from the customer’s point of view, because they have to offer products according to the appeal, features, etc, that the customers want and need.
2. *Building the experiential platform.* This experiential platform helps a company to develop a positioning strategy. This platform also communicates what a company, its brand or its products symbolize, and what value they provide to customers.
3. *Designing the brand experience.* In the third step, the theme of the experiential platform must be used, in order to design the brand experience, which consists of the static elements: logo, signage, brochures, product itself, design, decoration, etc, since they also interact with customers.
4. *Structuring the customer interface.* This interface refers to all types of dynamic exchange of information and service that occurs between the customer and a company-in person.
5. *Engaging in continuous innovation.* This final step consists of being focused on a continuous innovation in order to improve the customer experience and continue in the same level as competition. This innovation can be in marketing, such as innovative campaigns, or launch new products, new brands, etc.

## 2.2 Service quality (SERVQUAL)

As one of the most critical factors influencing customer satisfaction and future behaviors, service quality has been extensively researched within the service marketing field. Service quality is often viewed from two perspectives: the customer’s cognitive evaluation of the service provided and a multidimensional construct created by an evaluation of attribute performance [36]. Service quality is usually defined as the customer’s judgment of the overall excellence or superiority of the service [40]. Thus, it is the customer’s subjective evaluation formed by comparing expectations and perceived performance [36,41].

The SERVQUAL method developed by Parasuraman *et al.* [41] is a best-known service quality measurement model. They developed a service quality conceptual model between consumers and companies in some industries, and proposed five gaps in which the fifth is defined as “the quality that a consumer perceives in a service is a function of the magnitude and direction of the gap between expected service and perceived

service”. In their model, expected service describes consumers’ expectations about what service a company should provide and perceived service reveals consumers’ feelings about what service delivery consumers actually received from a company. Parasuraman *et al.* [36] developed SERVQUAL as an instrument to measure service quality. SERVQUAL consists of five dimensions:

1. *Tangibles:* appearance of physical facilities, equipment, personnel, and communication materials
2. *Reliability:* ability to perform the promised service dependably and accurately
3. *Responsiveness:* willingness to help customers and provide prompt service.
4. *Assurance:* knowledge and courtesy of service providers and their ability to convey trust and confidence
5. *Empathy:* the firm provides care and individualized attention to its customers.

Moreover, since perceived levels of service quality in cafés are based on the relationship between customers and service providers [42, 43], customer’s perceptions and evaluation of service quality may be highly dependent upon the service provider’s performance during service delivery. Reliable, prompt, and assured service can be considered intangible cues that influence satisfaction and post-consumption behaviors [44]. Thus, in this context, service quality refers to the level of service provided by café management.

## 2.3 Importance-satisfaction (IS) model

Importance-performance analysis (IPA), first introduced by Martilla and James [37], identifies which product or service attributes a firm should focus on to enhance customer satisfaction. IPA is an effective means of evaluating a firm’s service attributes offered to the customers, identifying improvement opportunities, and guiding strategic planning efforts [37, 45, 46]. The IPA emphasizes the external customers’ satisfaction and uses the sample mean to rate the importance and performance [46]. Typically, data from customer satisfaction surveys or service quality surveys (using SERVQUAL model [41]) with pre-consuming measurement of customer attribute importance are utilized to construct a two-dimensioned matrix. In this matrix, the x-axis presents attribute importance and the y-axis presents attribute performance.

Similar with the importance-performance analysis (IPA), the importance-satisfaction (IS) model uses a quadrant map to identify potential areas for improvement by comparing the satisfaction level and importance degree of the various attributes [47]. As shown in Figure 1, the model features the satisfaction level of various quality attributes on its vertical axis and the degree of importance of those attributes on its horizontal axis. These values are obtained from surveys of customers. The mean (or median) values on each axis are used to divide the satisfaction and importance measures into a ‘high’ range (above the mean (or median)) and a ‘low’ range (below the mean (median)). Four quadrants are thus formed (see Figure 1).

Based on cell location, customer satisfaction or service quality attributes are deemed as major or minor

strengths and weaknesses. Attributes located in Quadrant I (both importance and satisfaction are high) indicate opportunities for achieving or maintaining competitive advantage and are major strengths. A service provider should maintain or enhance the performance of these service attributes. The management scheme for this quadrant is “excellent.”

Attributes located in Quadrant II (importance is high and satisfaction is low) require immediate attention for improvement and are major weaknesses. The management scheme for this quadrant is “to-be-improved.” The inability to identify these attributes can threaten a firm’s place in the market and typically results in low consumer satisfaction.

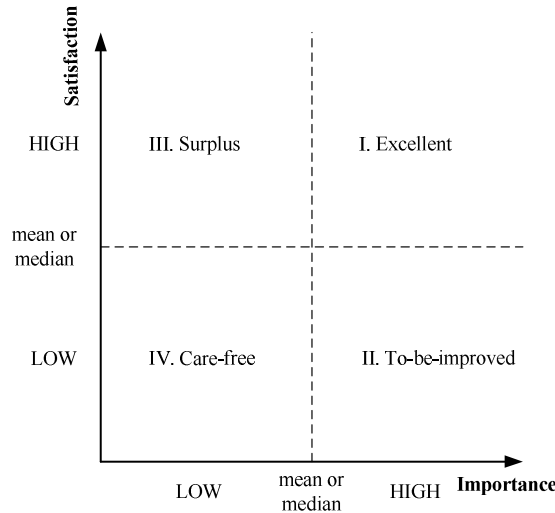


Figure 1. Importance-satisfaction (IS) model

Attributes located in Quadrant III (importance is low and satisfaction is high) indicate that business resources committed to these attributes would be overkill and should be deployed elsewhere. These attributes are minor strengths. The service provider can reduce the offering level for the consideration of cost reduction. The management scheme for this quadrant is “surplus.” Attributes in Quadrant IV (both importance and satisfaction are low) are minor weaknesses and do not require additional effort. Service providers do not need to pay any more attention to these items because customers are not concerned about them. The management scheme for this quadrant is “care-free.”

**2.4 Quality function deployment (QFD)**

Quality function deployment (QFD) has been widely used for numerous years. It was originated in Japan in 1970s and became increasingly popular in the western world in the 1980s [38]. After the concept of QFD was introduced in the US through auto manufacturers and parts suppliers, many US firms, such as Procter & Gamble, Raychem, Digital Equipment, Hewlett-Packard, AT&T, GM, and Ford, applied QFD to improving communication, product development, and measurement of processes and systems [48]. It has been successfully applied in many organizations to improve processes and build competitive advantages by translating customer needs into product technical requirements of new products and services [49]. QFD method has been used in quality management for years. It is one of the very effective quality systems tools to fulfill customer requirements and improve customer satisfaction for products or services by translating customer requirements into product or service features [49,50,51]. Being one of the quality tools, QFD has been defined as “a method for

developing a design quality aimed at satisfying the customer and then translating the customer’s demands into design targets and major quality assurance points to be used throughout the production phase” [38]. QFD can be defined as an overall concept that provides a means of translating the needs of customers through the various stages of product planning, engineering and manufacturing into a final product [52].

QFD was developed as a tool that enables to state customers’ needs and design product or service’s parameters in order to fulfill these needs as well as it is possible [38]. Traditionally, the method was considered only in the field of quality management. Nowadays, a strong competition causes the necessity to apply modern management tools that help to create a perfect service. It is possible to improve the service process of designing by means of QFD method [53]. The overall process of QFD is based on its core matrix framework, called the house of quality, which is used to intertwine customer needs, service design/management requirements, target design goals, and competitive product/service evaluations.

QFD aims to translate customer requirements into engineering characteristics, process specifications, and service requirements in sequence. This translation requires a series of matrices or houses as given in Figure 2. Its basic concept is to use a series of houses to transform qualitative requirements into quantitative specifications. The house of quality consists of several components and each component needs to be built into the house in an orderly manner. Figure 2 illustrates the procedure of building the house of quality by the numerical order, which consists of the following six steps [54]:

1. Customer needs must be first identified and placed

on the left side of the house. Customer requirements (WHATs) organized into proper classifications is one of the most significant contributions that QFD can make to the successful development of a product or production process.

2. Next, these customer needs are quantified and ranked in order of importance. Step 2 also includes conducting comparative analyses of key competitors based on the customer needs identified in step 1.
3. In the third step, management needs to specify service design and management requirements (HOWs) across all relevant functional units of the organization from an organizational perspective.
4. Management then has to determine intuitively the degree of contribution made by each of the service design/management requirements in meeting specified customer needs. Relationship matrix indicates the extent to which each HOW affects the satisfaction of each WHAT.
5. The fifth step determines the relative weight of each service design/ management requirement based upon customer needs.
6. Finally, the construction of the house of quality is completed by examining the pair wise correlations between the service design/management requirements themselves and by placing the correlations in the roof area.

Further descriptions of each component as well as the working methods of building a house of quality are given in Figure 2.

### 3. RESEARCH FRAMEWORK

In this paper, we demonstrate how customer experience management (CEM), a widely used approach in the service marketing field, can be adapted to describe a service experience process of the customers so that the quality of service can be improved. To address these challenges, a CEM methodology is developed to provide a traceable flow-down from analyzing the experiential world of the customers to engaging in continuous innovation. Subsequently, the SERVQUAL [36], IS model [37], and quality function deployment (QFD) [38] model are integrated to a CEM framework [22] to allow the validity of the result. The SERVQUAL methods are used to assess customer's perception of the experience and determine the customer needs by using 5 dimensions. The IS model is used to identify potential areas for improvement by comparing the satisfaction level and importance degree of the various service attributes. The QFD model is a systematic structured approach to designing new or renovating extant services with a focus on both external customer needs and internal service management requirements. Integrating the SERVQUAL, IS model, and QFD model with the CEM framework, a structure with five basic steps will be proposed for determining appropriate strategies. Figure 3 provides the conceptual framework of an integrated CEM model with SERVQUAL, IS, and QFD model.

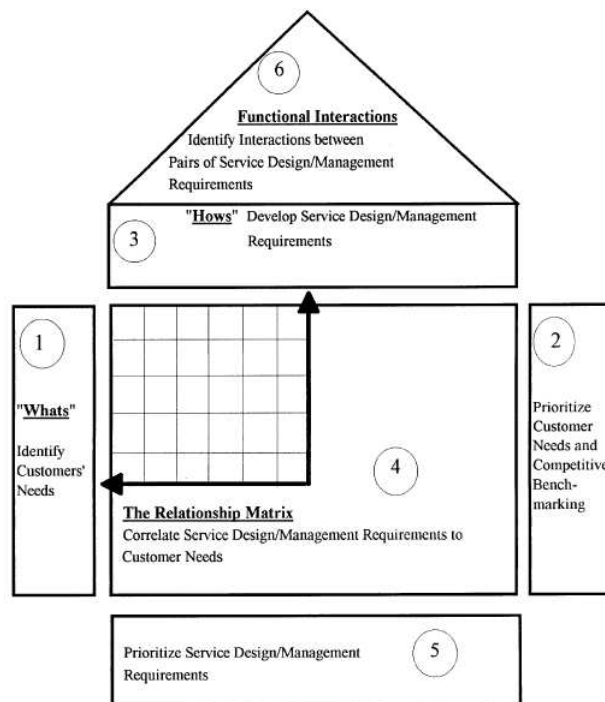


Figure 2. House of quality

### 4. AN EMPIRICAL CASE STUDY

The present study had conducted a survey for the café industry in Jakarta, the capital of Indonesia. In Jakarta, there are many high-class cafés to hang out and meet cool people such as X Café, Y Café, and Z Café. The survey for this industry usually covered the quality of various offered services. In this research, X Café will be used for further discussion in order to illustrate the implementation of the CEM model.

Firstly, the nominal group technique was used to conduct a panel discussion. The participants included X Café manager and Indonesian Café and Restaurants Association (Apkrindo) representatives. At the same time, a total of 20 customers were randomly interviewed. The interview and discussion material were derived from five SERVQUAL dimensions of service quality suggested by Parasuraman *et al.* [36], to measure service quality in café industry. The purpose of customer interviews and a panel discussion was to determine the service attributes to be listed in the questionnaire. As a result, 12 service attributes were considered in this study. The survey instrument (questionnaires) consisted of three sections: (1) demographic data about respondents, (2) the satisfaction of service attributes in X Café and its close competitors (Y and Z Café), and (3) the importance of service attributes. The questions about service attributes used a Likert 5-point scale.

A pilot study of a sample size of 50 was conducted to ensure the user-friendliness of the designed questionnaires. All the customers responding to the questionnaires commented on its readability and ease of understanding. As a result, no amendment in terms of rewording of items was made. All data were collected over a period of two months. Purposive sampling scheme was used. Respondents were selected because of some characteristics such as they've ever

hang out at all of the café (X Café, Y Café, and Z Café) and the visiting frequency was at least once a month. A total of 150 samples were obtained. Forty-eight of the responses were found unusable and the remaining 102 responses collected were then processed for further analysis. Data from these questionnaires were used in organizing the results of the study. An overview of five CEM basic steps has been provided before (Figure 3). This section will illustrate each individual step in what follows.

#### 4.1 Analyzing the experiential world of the customer & building the experiential platform

The first step of the CEM framework provides original insight into the customer's world. This step focuses on developing a multidimensional understanding of customers. This understanding includes their experiential needs and wants, as well as their lifestyles. A X Café manager needs to know how the world is from the customer's point of view, because he/she has to offer service experiences that the customers want and need. Customer needs are identified through survey research, nominal group discussion, or personal interview. The key question to be asked here is "what" the customers need (or want or expect) from the café. Customer needs can be expressed on detailed service attributes; these attributes can be grouped either by their characteristics. This study adopted and modified some service attributes and their relative dimensions from five SERVQUAL dimensions of service quality suggested by Parasuraman *et al.* [36]. For example, customer needs can be expressed along the reliability dimension, which can be measured with multiple attributes including a great place to relax, an entertaining place, a stylish place to chat, and delicious food & beverage. All of customer needs of the café industry developed for this study are set out in Table 1.

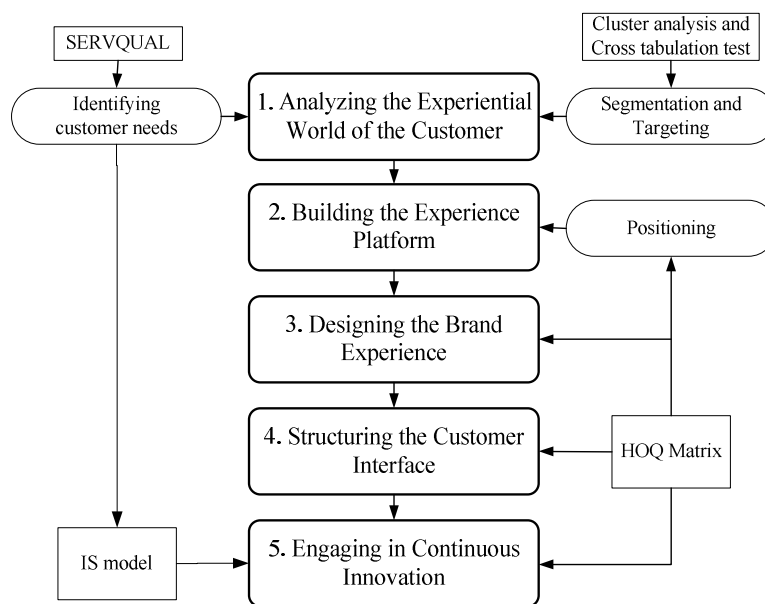


Figure 3. The conceptual framework

The understanding of customers also informs customer segmentation and guides the prioritization of key segments. Customer segmentation process uses a statistical technique called cluster analysis to combine attitudinal and demographic data to develop segments that are easier to target [55]. By dividing the market into relatively homogenous subgroups or target markets, both strategy formulation and tactical decision making can be more effective. This analysis is proactively benchmarked against X Café capability to meet customer needs.

Firstly, we perform a discriminant analysis to determine the number of clusters (segments). This analysis predicts cluster membership based on a linear combination of the interval variables. The grouping with highest accuracy degree will be chosen as the number

of clusters. Based on the result, three clusters with accuracy degree 99% is used for further analysis. The computation of three clusters is shown in Table 2. ANOVA is used to test whether the means among two or more clusters are equal, under the assumption that the sampled populations are normally distributed. The F tests result indices for all of the Sig. value are smaller than 0.05 (see Table 3). It means there are differences among customer needs in different clusters. The F tests are conducted only for descriptive purposes because the clusters have been chosen to maximize the differences among customer needs in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted that the cluster means are equal.

**Table 1.** The customer needs of the café industry

SERVQUAL Dimensions	Customer Needs (WHATs in QFD)
Reliability	A great place to relax (x1)
	An entertaining place (x2)
	A stylish place to chat (x3)
	Delicious food & beverage (x4)
Responsiveness	Prompt services (x5)
	Complaint handling (x6)
Tangible	Visual appearance (x7)
	Strategic location (x8)
	Easy parking (x9)
Others	Internet access (x10)
	Meeting function (x11)
	The availability of information about café (x12)

**Table 2.** Final cluster centers

	Cluster		
	1	2	3
x1	3.00	4.44	3.73
x2	3.44	4.46	4.24
x3	3.00	4.13	3.29
x4	2.00	4.31	3.95
x5	3.78	4.75	4.41
x10	2.44	3.31	1.66
x11	2.89	3.62	2.05
x8	2.56	4.27	3.80
x9	2.11	4.52	4.54
x12	3.00	4.08	4.20
x6	3.78	4.58	4.44
x7	3.11	4.37	4.37

**Table 3.** ANOVA analysis

	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
x1	11.018	2	.595	99	18.527	.000
x2	4.024	2	.714	99	5.635	.005
x3	10.516	2	.995	99	10.565	.000
x4	20.432	2	.555	99	36.791	.000
x5	4.077	2	.336	99	12.138	.000
x10	31.250	2	.793	99	39.402	.000
x11	28.137	2	.839	99	33.521	.000
x8	11.814	2	.716	99	16.498	.000
x9	23.948	2	.465	99	51.468	.000
x12	5.390	2	.486	99	11.087	.000
x6	2.455	2	.327	99	7.513	.001
x7	6.457	2	.712	99	9.072	.000

By using twelve variables (customer needs) that can distinguish the cluster characteristic, the customer behavior of each cluster can be analyzed (see Table 4).

- Cluster 1: there are 9 respondents who think that no variables are important because all of the values in this cluster are smaller than 4;
- Cluster 2: there are 52 respondents in this cluster. Based on their perception, most of the variables are important because most of the values are greater than 4, except 'internet access (x10)' and 'meeting function (x11)';
- Cluster 3: in this cluster, 41 respondents assume that an entertaining place (x2), prompt services (x5), easy parking (x9), information (x12), complaint handling (x6), and visual appearance (x7) are more important than other variables.

To obtain the characteristics of each cluster, we firstly perform a cross tabulation test to determine whether there is a relationship between characteristics of the respondents to the clusters. If the value of Asymp. Sig. (2-sided) is smaller than 0.05, we can conclude that there is a relationship between those variables. The result of cross tabulation test is provided in Table 5.

The characteristics of each cluster follow four characteristics that have a relationship to the clusters. The result shows that 'education' and 'status' are not associated with clusters. It means that both characteristics do not affect the customers' desire going to the café. Table 6 shows the characteristics of each cluster.

Columns of customer assessment in Table 7 indicate the rank order of the café based on the satisfaction level of the customers. In this way, the X Café is directly compared to its competitors. Both current performance and ability to perform can be measured again on a 5-point "1 = poor to 5 = excellent" scale. In the present example, a great place to relax of X Café ( $\Delta$ ) was rated better than Y Café ( $\circ$ ) and Z Café ( $\square$ ).

After analyzing the experiential world of the customers and building the experiential platform, service design/management requirements are developed. Service design/management requirements are specified on the basis of the company's operational or managerial resource allocation plans in order to satisfy the customers. The key question to ask in this step is "how" the X Café delivers services. These requirements can be easily grouped by such quality characteristics as the menu (food and beverage), services, entertainment, physical appearance, and others. Management can also develop and arrange the requirements in a way to meet the customer needs, depending upon the organizational characteristics. The QFD based on its core matrix framework, called the house of quality (HOQ) is used to develop service design/management requirements, target design goals, and competitive product/service evaluations (see the Appendix). The results of this service design are used to designing

brand experience, structuring the customer interface and engaging in continuous innovation.

## 4.2 Designing the brand experience

After management has decided on the experiential platform, it must be implemented in the brand experience. The design of the brand experience can be applied to the operation of X Café services. Based on the positioning results of X Café, the strategy of brand experience can be created by providing a brand experience to consumers through the static elements faced by consumers. Based on the HOQ result (see the Appendix), it can be seen that the existing quality characteristics provided by X Café still has some weaknesses. The quality characteristics associated with designing the brand experience are menu, entertainment, physical appearances, and others. Related with menu, the X Café should make the variation of menu. The entertainment provided by X Café is the best compared with the other competitors. Regarding with physical appearance, interior design and comfortable seating should be improved. Compared with other close competitors, the customer assessment about the X Café's location is relatively low. Consequently, the promotion activities of the café should be increased to attract more customers. The further discussion will be explained in discussion section.

## 4.3 Structuring the customer interface

After designing the brand experience, the experiential platform must also be implemented in the customer interface. Whereas the brand experience is largely static (once designed, it remains much the same for some time), the customer interface is dynamic and interactive. This step includes all sorts of dynamic exchanges and contact points with the customer face-to-face in the café, during customers visit in the café or as part of services on their visits. Based on the HOQ result (see the Appendix), information delivery to customers and employee competency should be improved to build the customer interface. It is important to restructure the content of these quality characteristics to give the customer the desired information and service. The detailed explanation on how to restructure the customer interface of those quality characteristics will be provided in discussion section.

## 4.4 Engaging in continuous innovation

The last step of "engaging in continuous innovation" refers to innovation not only with the services but also with the entire customer experience. The innovations must be planned, properly managed, and marketed to improve customer experience. The innovations are needed when the competitors are equally strong or stronger than our company. Some new ideas and concepts are generated in order to build a competitive advantage. In this case, the innovations are created based on the customers' assessment to WHATs (see the Appendix).



**Table 4.** The number of respondent in each cluster

Cluster	1	9.000
	2	52.000
	3	41.000
Valid		102.000
Missing		.000

**Table 5.** The result of cross tabulation test

There is a <u>relationship</u> between characteristics of the respondents to the clusters		There is <u>no relationship</u> between characteristics of the respondents to the clusters	
Respondents' Characteristics	Asymp. Sig. (2-sided)	Respondents' Characteristics	Asymp. Sig. (2-sided)
Age	0.013	Education	0.551
Gender	0.030	Status	0.839
Occupation	0.001		
Information media	0.016		

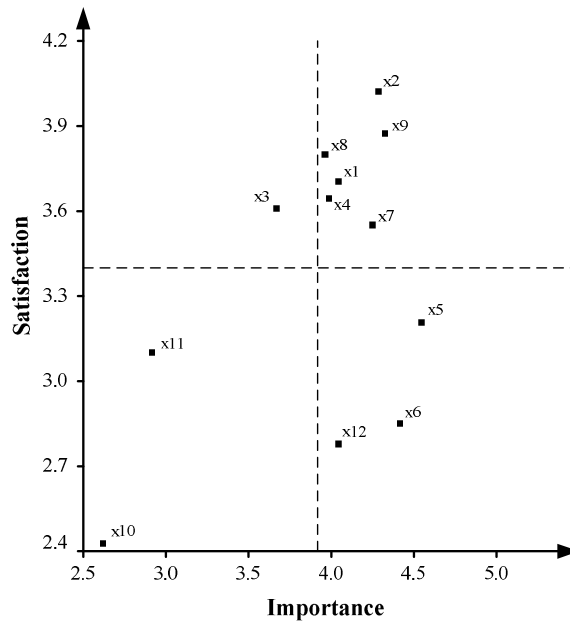
**Table 6.** The characteristics of each cluster

		Cluster			Total
		1	2	3	
Age	15-25 years old		21.2%	14.6%	16.7%
	26-35 years old	11.1%	32.7%	43.9%	35.3%
	36-45 years old	77.8%	34.6%	17.1%	31.4%
	> 45 years old	11.1%	11.5%	24.4%	16.7%
	Total	100.0%	100.0%	100.0%	100.0%
Gender	male	22.2%	63.5%	43.9%	52.0%
	female	77.8%	36.5%	56.1%	48.0%
	Total	100.0%	100.0%	100.0%	100.0%
Occupation	student	11.1%	19.2%	22.0%	19.6%
	employee	33.3%	25.0%	53.7%	37.3%
	entrepreneur/businessman	33.3%	53.8%	22.0%	39.2%
	housewife	-	1.9%	-	1.0%
	professional	22.2%	-	2.4%	2.9%
	Total	100.0%	100.0%	100.0%	100.0%
Information media	radio	22.2%	13.5%	24.4%	18.6%
	television	11.1%	30.8%	17.1%	23.5%
	internet	11.1%	13.5%	36.6%	22.5%
	newspaper/magazine	22.2%	32.7%	9.8%	22.5%
	friends	33.3%	9.6%	12.2%	12.7%
	Total	100.0%	100.0%	100.0%	100.0%

**Table 7.** The positioning of X Café and its competitors to WHATs

Customer Needs (WHATs)	Customer assessment				
	1	2	3	4	5
A great place to relax				○□△	
An entertaining place				□○△	
A stylist place to chat			○	□△	
Delicious food and beverage				○△□	
Prompt services			△	○□	
Internet access		△	□○		
Meeting function			○△	□	
Strategic location				△○□	
Easy parking			○□	△	
Information about café			△□	○	
Complaint handling			△□	○	
Visual appearance				△□○	

△ = X Café    ○ = Y Café    □ = Z Café



Notes:

- |                                |  |
|--------------------------------|--|
| x1 : A great place to relax    | x7 : Visual appearance                           |
| x2 : An entertaining place     | x8 : Strategic location                          |
| x3 : A stylish place to chat   | x9 : Easy parking                                |
| x4 : Delicious food & beverage | x10 : Internet access                            |
| x5 : Prompt services           | x11 : Meeting function                           |
| x6 : Complaint handling        | x12 : The availability of information about café |

Figure 4. The locations of 12 service items in IS model

In this step, IS model was also applied to recommend which service attributes need proper allocation of resources for first improvements. The mean scores of the perceived importance of the 12 service quality attributes and the satisfaction of service experiences in News Café were calculated. The results were plotted in the IS analysis model (in Figure 4). The grand means for importance and satisfaction were used for the placement of the axes on the model. As shown in Figure 4, six attributes were identified in the 'Excellent' quadrant, 3 in the 'To-be-improved' quadrant, 1 in the 'Surplus' quadrant, and 2 in the 'Care-free' quadrant.

5. DISCUSSION

The first step of the framework looks at “analyzing the experiential world of the customer”. When examining its own services, it is imperative that X Café tries to provide and understand “original insight into the customer’s world”. More specifically, X Café must not only be aware but also need to become more responsive to customers and incorporate customer insight into its strategies and implementations. Understanding the customers and seeing the world from their point of view are critical at this stage. This first step can easily be applied to the operation of X Café. Finding out exactly what prospective and/or current customer needs from the X Café and/or determining what they want as a result of getting into their “experiential world”, is a critical first step. Market research, surveys as well as conducting a panel discussion involved as necessary stakeholders can be one method in determining the “experiential world of the

customer”. Twelve customer needs are identified based on SERVQUAL dimensions (see Table 1). In addition, the segmentation and targeting should be determined to understand who our customers are. The most important objective, at this stage, is to create a desired and uniquely service experience for the targeted customers. Once the experiential world of the customer is determined, the second step in this framework is “building the experiential platform”. Simply stated, this platform “effectively communicates internally and externally what value X Café offers to customers”. Similar to a value proposition of an organization or product, the “experiential platform” not only focuses on features and benefits that the product or service offers but also on the overall customer experience in obtaining and utilizing the product. Establishing an experiential platform can certainly be applied to X Café. What is the entire experiential value proposition that X Café offers? X Café management, when attracting customers, must be comfortable in discussing the “service customer experience—which is a service experience that is intentional, consistent, differentiated, and valuable”. In addition to the X Café’s strength and dynamic customers, the management must develop an “experiential platform” beyond the offered quality characteristics (menu, services, entertainment, physical appearance, and others) as prospective customers desire a specific and differentiated service experience. Therefore, all actions in terms of executing services must utilize the experiential platform as a foundation and meet the customer needs, depending upon the organizational characteristics.

The third step of the process is “designing the brand experience”. This step follows the “building the experiential platform” phase as once the platform and theme are developed, one can move on the design of the brand experience which includes “the service, the look and feel surrounding it, and experiential communications.” This step can be applied to the services of X Café. More specifically, an experiential campaign can certainly be implemented for X Café that does not necessarily communicate the services features and benefits but rather a powerful experiential message. For example, X Café is suggested to add variation of the menu by combining the suitable materials of food and beverages. For instance, we can combine the ‘soft drinks’, the most favorite drinks with the ‘ice tea’ that can give carbonated tea sensation as “Sparkling Tea Sensation”. For the meals, the most favorite foods ‘fried rice’ and ‘spicy lamb chop with basil risotto’ can be combined as “X Special Fried Rice”. Hopefully, the addition of variations of the menu can provide an enjoyable experience and increase customer satisfaction.

In addition, the brand experience for X Café can also be designed with the visual identity elements including the look and feel of the interior design. The X Café is suggested to utilize the blank wall in the dining area by providing a flat-screen television. X Café can provide soft chairs or sofas that can fulfill the needs of the customers to relax while enjoying the news or music. The color selection needs to consider the suitability with the interior design. Actually, the X Café’s location at Kemang is quite strategic because it is a well-known area for Jakarta people to spend their spare time. The low satisfaction level of X Café location is caused by the traffic jam in that area.

During this time, the X Café used radio as promotion media and cooperated with a private radio station in Jakarta. The most effective media, which is communication channel, to reach the target market depends on characteristics of the target market as well as the purpose of communication. Based on segmentation result, printed publications such as newspapers and magazines are likely to be more effective. The schedule of X Café activities (i.e. live music performances) can be advertised in local newspapers or magazines. The X Café is also suggested to publish its own monthly magazine and free distributed to every X Café’s customers. These suggestions are expected to strengthen the customer’s brand experience at the X Café and furthermore the customer satisfaction can be increased

According to Schmitt [22], “structuring the customer interface” is the most difficult step to effectively implement as it involves cooperation and action from the entire personnel of an organization. The communication that results from this step, for all employees, must be consistent during all customer interfaces. The implementation of this step within the services of X Café requires determination and diligence. To improve the customer interface, the X Café should provide product/service knowledge training to each employee. It encompasses the training about menu information and other services offered by X Café. The X

Café is also suggested to provide the image of some favorite menus that can help customers to choose their food and or their beverage. The supervisor of each shift is needed to make sure that the customers are serviced well. The bottom line is whatever the implementation theme is, structuring the customer interface is a non-stop process that must always be evaluated and reevaluated. It is a step that, if done correctly, can certainly create delightful services for customers.

Based on IS model results, the management of X Café should focus on the service attributes which are located in “to-be-improved” area (quadrant II). The application of the “continuous innovation” step within X Café can be seen by providing critic and suggestion cards that are put on every table. After filling out the questionnaires, the customers can get a souvenir from the X Café. This action is necessary because it is related with the customer complaint handling in X Café (x6) that has high importance degree and located in quadrant II. It can also be seen with a special discount for all menus in its birthday, some menu packages with special prices and collaboration with some banks in order to provide ease of payment and special discount. In addition, it can be applied to the website that attractively introduces all of its offered products/services (related with the availability of information (x12)). Besides providing news channels, X Café is also recommended to provide other entertaining channels such as music, fashion, sports, movies, etc. as well as offering the hot spot (Wi-Fi) internet access over a wireless local area network in X Café. Regarding with the prompt services (x5), the X Café should make a time commitment to the consumers, for example telling the customer that the order will be ready within certain time. With this commitment, the chefs and waiters can work together in serving the orders on time.

## 6. CONCLUSION

Creating superior customer experience seems to be one of the central objectives in today’s service industries environments. With an ever-increasing competition for marketing dominance, many service providers have utilized the customer experience management (CEM) system in developing service quality for customer satisfaction, retaining existing customers, and also coming to the front for winning over new customers. The goal of CEM is to move customers from satisfied to loyal and then from loyal to advocate. CEM can help reverse that slide by providing efficient business tools that make the interactions between companies and customers more rewarding for both parties.

Creating a superior customer experience has been gaining increasing attention from service industries included café industries. Memorable customer experiences are critical to the success of service providers with X Café being no exception. Managing each customer interface scenario strategically will be difficult but can potentially enhance the overall customer experience and satisfaction. Successful implementation of such a strategy can also potentially

build “delightful service experience” which can act as a form of marketing for the X Café.

Further study in this area is required as to determine the impact of such frameworks on X Café and how it can elevate the brand and its momentum in the marketplace. For the other future research, the CEM metrics can be integrated to provide the feedback information at the front line and to manage the customer experience at a more individual and personal level. These feedback loops can be built into the organization’s metrics systems (i.e., its business balanced scorecard and individual service standards).

## 7. REFERENCES

- [1] Matthing, J., Sandén, B. and Edvardsson, B. (2004), “*New service development: Learning from and with customers*”, International Journal of Service Industry Management, Vol. 15, No. 5, pp. 479-498.
- [2] Berry, L.L., Carbone, L.P. and Haeckel, S.H. (2002), “*Managing the total customer experience*”, Sloan Management Review, Vol. 43, Spring, pp. 85-89.
- [3] Meyer, C. and Schwager, A. (2007), “*Understanding customer experience*”, Harvard Business Review, February, pp. 117-126.
- [4] Orcik, A., Tekic, Z. and Anišić, Z. (2013), “*Customer co-creation throughout the product life cycle*”, International Journal of Industrial Engineering and Management (IJEM), Vol. 4, No 1, pp. 43-49.
- [5] Fürstner, I. and Anišić, Z. (2010), “*Methodology concept of customer profile definition*”, International Journal of Industrial Engineering and Management (IJEM), Vol.1 No 3, pp. 121-128.
- [6] Leung, J.W.K. and Kwong, K.K. (2009), “*A structured approach to describing service for creating a delightful experience*”, Computers & Industrial Engineering, Vol. 57, pp. 563-570.
- [7] Ma, J., Gao, J., Scott, N. and Ding, P. (2013), “*Customer delight from theme park experiences: The antecedents of delight based on Cognitive Appraisal Theory*”, Annals of Tourism Research, Vol. 42, pp. 359-381
- [8] Torres, E.N., Fu, X. and Lehto, X. (2014), “*Examining key drivers of customer delight in a hotel experience: A cross-cultural perspective*”, International Journal of Hospitality Management, Vol. 36, pp. 255-262.
- [9] Barnes, D.C., Ponder, N. and Hopkins, C.D. (2015), “*The impact of perceived customer delight on the frontline employee*”, Journal of Business Research, Vol. 68, No. 2, pp. 433-441.
- [10] Shaw, C. and Ivens, J. (2005), *Building Great Customer Experiences*, Prentice-Hall, London.
- [11] Frow, P. and Payne, S.A. (2007), “*Towards the ‘perfect’ customer experience*”, Journal of Brand Management, Vol. 15, No. 2, pp. 89-101.
- [12] Frank, B., Torrico, B.H., Enkawa, T. and Schvaneveldt, S.J. (2014), “*Affect versus cognition in the chain from perceived quality to customer loyalty: The roles of product beliefs and experience*”, Journal of Retailing, Vol. 90, No. 4, pp. 567-586.
- [13] Srivastava, M. and Kaul, D. (2014), “*Social interaction, convenience and customer satisfaction: The mediating effect of customer experience*”, Journal of Retailing and Consumer Services, Vol. 21, No. 6, pp.1028 -1037.
- [14] Laming, C. and Mason, K. (2014), “*Customer experience — An analysis of the concept and its performance in airline brands*”, Research in Transportation Business & Management, Vol. 10, pp.15 -25.
- [15] Manhas, P.S. and Tukamushaba, E.K. (2015), “*Understanding service experience and its impact on brand image in hospitality sector*”, International Journal of Hospitality Management, Vol. 45, pp. 77-87.
- [16] Wong, I.A. (2013), “*Exploring customer equity and the role of service experience in the casino service encounter*”, International Journal of Hospitality Management, Vol. 32, pp. 91-101.
- [17] Solomon, M.R., Surprenant, C., Czepiel, J.A. and Gutman, E.G. (1985), “*A role theory perspective on dyadic interactions: The service encounter*”, Journal of Marketing, Vol. 49, pp. 99-111.
- [18] Lewis, B. and Entwistle, T. (1990), “*Managing the service encounter: A focus on the employee*”, International Journal of Service Industry Management, Vol. 1, No. 3, pp. 41-52.
- [19] Svensson, G. (2006), “*New aspects of research into service encounters and service quality*”, International Journal of Service Industry Management, Vol. 17, No. 3, pp. 245-257.
- [20] Yeung, C.W.M. and Wyer, R.S.Jr. (2004), “*Affect, appraisal, and consumer judgment*”, Journal of Consumer Research, Vol. 31, No. 2, pp. 412-424.
- [21] Parasuraman, A., Berry, L. L. and Zeithaml, V. A. (1991), “*Understanding customer expectations of service*”, Sloan Management Review, Vol. 32, No. 3, pp. 39-48.
- [22] Schmitt, B.H. (2003), *Customer Experience Management: A Revolutionary Approach to Connecting with Your Customers*, John Wiley & Sons, New Jersey.
- [23] Han, J. and Jeong, C. (2013), “*Multi-dimensions of patrons’ emotional experiences in upscale restaurants and their role in loyalty formation: Emotion scale improvement*”, International Journal of Hospitality Management, Vol. 32, pp. 59-70.
- [24] Nasution, R.A., Sembada, A.Y., Miliani, L., Resti, N.D. and Prawono, D.A. (2014), “*The customer experience framework as baseline for strategy and implementation in services marketing*”, Procedia-Social and Behavioral Sciences, Vol. 148, 254-261.
- [25] Pine, J.B. and Gilmore, J.B. (1999), *The Experience Economy*, Harvard Business School Press, Boston.
- [26] Novak, T.P., Hofmann, D.L. and Yung, Y.F. (2000), “*Measuring the customer experience in online environments: A structural modeling approach*”, Marketing Science, Vol.19, No. 1, pp. 22-24.
- [27] Gentile, C., Spiller, N. and Noci, G. (2007), “*How to sustain the customer experience: An overview of experience components that cocreate value with the customer*”, European Management Journal, Vol. 25, No. 5, pp. 395-410.
- [28] Kwong, L.Y.K. (2005), “*The application of menu engineering and design in Asian restaurants*”, Hospitality Management, Vol. 24, pp. 91-106.
- [29] Kim, W. and Ok, C. (2010), “*Customer orientation of service employees and rapport: Influences on service-outcome variables in full-service restaurants*”, Journal of Hospitality & Tourism Research, Vol. 34, No. 1, pp. 34-55.
- [30] Oyewole, P. (2013), “*The role of frequency of patronage and service quality of all-you-can-eat buffet restaurant: A perspective of socio-economic and demographic characteristics of African American consumers*”, International Journal of Hospitality Management, Vol. 34, pp. 202-213.
- [31] Reimer, A. and Kuehn, R. (2005), “*The impact of servicescape on quality perception*”, European Journal of Marketing, Vol. 39, No.7/8, pp. 785-808.
- [32] Wall, E.A. and Berry, L.L. (2007), “*The combined effects of the physical environment and employee behavior on customer perception of restaurant service quality*”, Cornell Hotel and Restaurant Administration Quarterly, Vol. 48, No. 1, pp. 59-69.
- [33] Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1993), “*The nature and determinants of customer expectations of service*”, Journal of the Academy of Marketing Science, Vol. 21, pp. 1-12.
- [34] De Canniere M.H., De Pelsmacker, P. and Geuens, M. (2009), “*Relationship quality and the theory of planned behavior models of behavioral intentions and purchase behavior*”, Journal of Business Research, Vol. 62, pp. 82-92.
- [35] Holbrook, M.B. and Hirschman, E.C. (1982), “*The experiential aspects of consumption: consumer fantasy, feelings and fun*”, Journal of Consumer Research, Vol. 9, No. 2, pp. 132-140.

- [36] Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988), "SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality", *Journal of Retailing*, Vol. 64, Spring, pp. 12-37.
- [37] Martilla, J. A. and James, J.C. (1977), "Importance-performance analysis", *Journal of Marketing*, Vol. 41, No. 1, pp. 77-79.
- [38] Akao, Y. (1990), *Quality Function Deployment: Integrating Customer Requirements into Product Design*, The Productivity Press, Cambridge, MA.
- [39] Schmitt, B.H. (1999), "Experiential marketing", *Journal of Marketing Management*, Vol. 15, No. 1-3, pp. 53-67.
- [40] Zeithaml, V. A. (1988), "Consumer Perceptions of price, quality and value: A means end model and synthesis of evidence", *Journal of Marketing*, Vol. 52, July, pp. 2-22.
- [41] Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1985), "A conceptual model of service quality and its implications for future research", *Journal of Marketing*, Vol. 49, Fall, pp. 41-50.
- [42] Nikolich, M. A. and Sparks, B. A. (1995), "The hospitality service encounter: The role of communication", *Journal of Hospitality and Tourism Research*, Vol. 19, No. 2, pp. 43-56.
- [43] Lee, W. and Lambert, C.U. (2000), "Impact of waiting time on evaluation of service quality and customer satisfaction in food service operations", *Food Service Research International*, Vol. 12, pp. 241-254.
- [44] Brady, M.K. and Robertson, C.J. (2001), "Searching for a consensus on the antecedent role of service quality and satisfaction: An exploratory cross-national study", *Journal of Business Research*, Vol. 51, pp. 53-60.
- [45] Myers, J.H. (1999), *Measuring Customer Satisfaction: Hot Buttons and Other Measurement Issues*, American Marketing Association, Chicago.
- [46] Yu, K.T. and Shen, C.Y. (2011), "Service quality management by expanded traditional importance-performance analysis", *Journal of the Chinese Institute of Industrial Engineers*, Vol. 28, No. 2, pp. 46-154.
- [47] Yang, C.C. (2003), "Improvement actions based on the customers' satisfaction survey", *Total Quality Management & Business Excellence*, Vol. 14, No. 8, pp. 919-930.
- [48] Hauser, J.R. and Clausing, D. (1988), "The house of quality", *Harvard Business Review*, May/June, pp. 63-73.
- [49] Chan, L.K. and Wu, M.L. (2002), "Quality function deployment: A literature review", *European Journal of Operational Research*, Vol. 143, pp. 463-497.
- [50] Al-Mashari, M., Zairi, M. and Ginn, D. (2005), "Key enablers for the effective implementation of QFD: A critical analysis", *Industrial Management Data System*, Vol.105, No. 9, pp. 1245-1260.
- [51] Wu, H.H. and Shieh, J.I. (2008), "Applying a markov chain model in quality function deployment", *Quality & Quantity*, Vol. 42, No. 5, pp. 665-678.
- [52] Sharma, J.R., Rawani, A.M. and Barahate, M. (2008), "Quality function deployment: A comprehensive literature review", *International Journal of Data Analysis Techniques and Strategies*, Vol. 1, No. 1, pp. 78-103.
- [53] Wolniak, E.R. and Sędek, A. (2009), "Using QFD method for the ecological designing of products and services", *Quality & Quantity*, Vol. 43, No.4, pp. 695-701.
- [54] Jeong, M. and Oh, H. (1998), "Quality function deployment: An extended framework for service quality and customer satisfaction in the hospitality industry", *Hospitality Management*, Vol. 17, pp. 375-390.
- [55] Kotler, P. and Keller, K.L. (2011), *Marketing Management*, 14th edition, Prentice Hall, New Jersey.

## Korišćenje menadžmenta iskustva potrošača radi stvaranja veličanstvenog uslužnog iskustva

Ronald Sukwadi

Primljen (11.03.2014.); Recenziran (28.11.2014.); Prihvaćen (11.02.2015.)

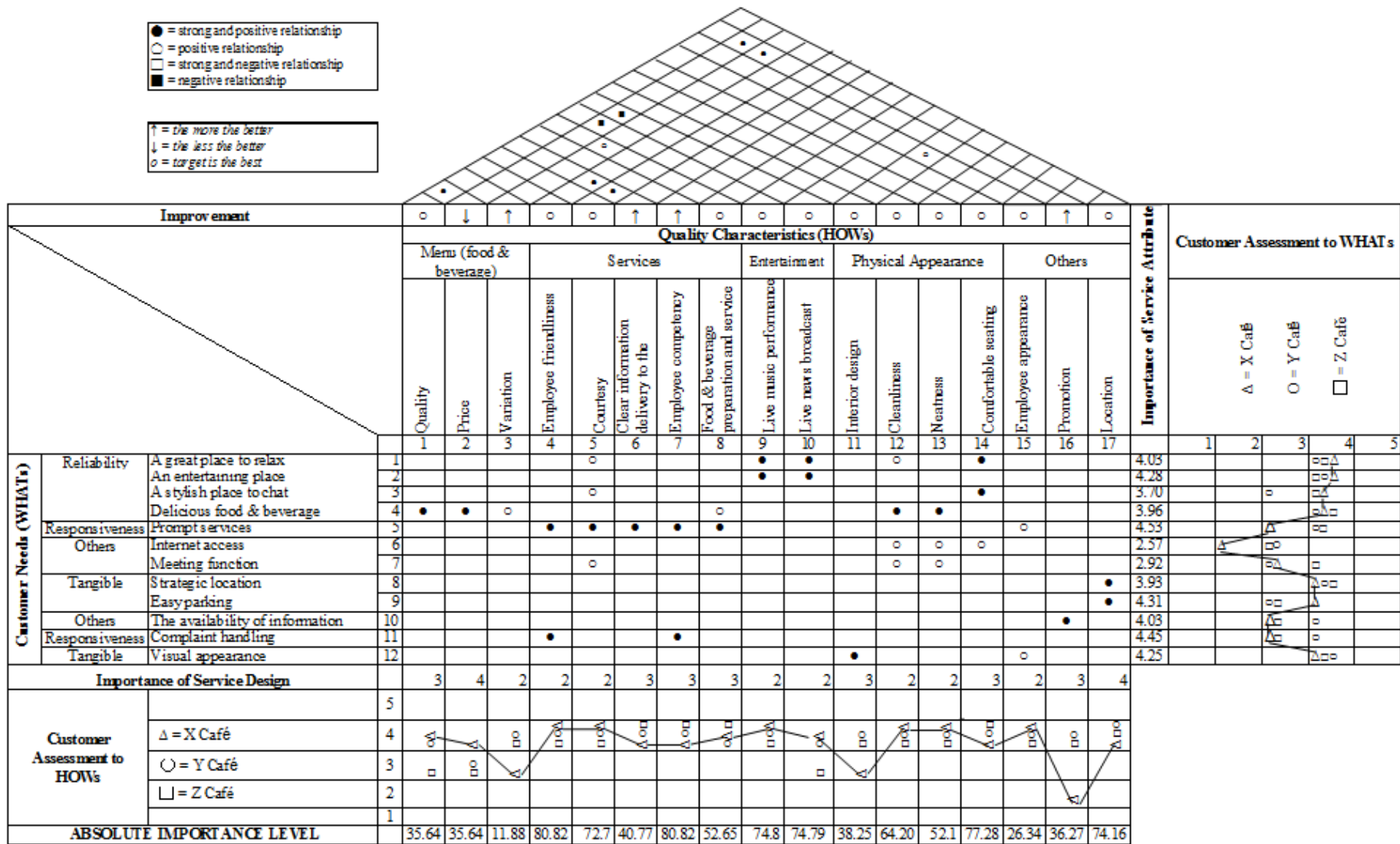
### Rezime

*U veoma takmičarskom okruženju uslužnih delatnosti, pružaoci usluga treba da obezbede potrošačima izvanredno iskustvo usluge kako bi privukli više potrošača i postigli bolje zadovoljstvo potrošača. Upravljanje iskustvom usluge je kritički pristup koji pružaoci usluga treba da razmotre. Iako se o menadžmentu iskustva potrošača (CEM) pisalo u različitim istraživačkim disciplinama, i dalje ne postoji sistematski i isplativ način da se CEM primeni u stvarnom okruženju. Ova studija pokušava da istraži iskustvo potrošača koristeći analizu klastera, statistički kros-tab test, model značaj-zadovoljstvo i metod kuće kvaliteta (HOQ) za CEM. Ilustruje se proces pomoću empirijske studije slučaja u veoma poznatom kafiću u Džakarti, Indonezija. Ovaj mehanizam može da pomogne pružaocima usluga da osmisle i pruže veličanstveno uslužno iskustvo potrošačima.*

**Ključne reči:** *menadžment iskustva potrošača, veličanstveno uslužno iskustvo, zadovoljstvo potrošača*

● = strong and positive relationship  
 ○ = positive relationship  
 □ = strong and negative relationship  
 ■ = negative relationship

↑ = the more the better  
 ↓ = the less the better  
 ○ = target is the best



● Strong = 9      ○ medium = 3      ▲ weak = 1