Develop a model for measuring customer satisfaction in chain stores:
Case study of Yas Store
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Abstract
Discovering customer requirements and needs then fulfilling them better and more efficiently than competitors cause customer satisfaction; therefore, it can be one of the requirements of the company’s success recently. The purpose of this paper is to propose and evaluate a model for measuring customer satisfaction in Yas store. This study is a descriptive survey that Yas store’s customers form the sample; 384 customers are selected by using non-random sampling of the kind of judgment method. Questionnaire is the main tool of this research for data collection. The research model was tested using path analysis that results indicate a significant relationship among customer expectations, employees’ behaviors and store indexes with customer satisfaction in Yas shop.

Key words: Measurement, Satisfaction, Customer, Behavior, Expectations and Store

1-Introduction
Although the first time the concept of customer satisfaction was proposed in 1954 by Peter Drucker in the management and marketing literature (Edward & L. James, 2003), the sources of customer satisfaction shows that the serious studies in this area has started since the mid 1970s, mainly in the united states and The bases of this issue have been clarified by incorporating more research since 1980 (Woodruff & Scat, 1991). The main effort in that decade was to find a comprehensive model for explaining customer satisfaction and measurement. The most Influential studies in this decade; edited by Richard Oliver through his model (Edward & L. James, 2003). This model, firstly, the conceptual essence of the model is still valid and stable; secondly, it is the basis for the formulation and development of other models, as a result, it is known the paradigm "expectations - mismatch “.

This paradigm includes the notion that customers (consumers) of the product or service being traded have some expectations and the use of that product or service based on its performance and understand what the harvest (which may not necessarily be the actual performance) are compared with past expectations. If you have different expectations and perceived performance, thus a not-endorsement or mismatch occurs. This mismatch can be positive (waiting> function), negative (expected> performance) and zero (expected = function). Positive mismatch to satisfaction, mismatch negativity to dissatisfaction and a simple zero mismatch (neutral) to a proved one will be lead (Pfaff Martin, 1976).

The main factor in the success of the company and create competitive advantage are increase of perceived value, perceived quality and customer satisfaction (Kuo Y.F, 2009). Since customer satisfaction is very important for all companies, so to meet it, they are required to adopt a customer-oriented philosophy or approach. Putting the customer-oriented approach, inspire commitment and respect the demands and needs of them not only in the all companies' dimensions but also in the minds, every employee's thought and vision. Specifically, wanted to go beyond customer expectations and anticipation the future needs of them can guarantee success. This is a comprehensive strategy to manage, direct, business development companies indicate that all actions and activities should be defined based on customer requests and feedback.

Iran has long been regarded in chain stores and competition among stores’ has been increased for good profitability, reduced costs and customer satisfaction. Cultural markets,
Convenience, Dependability and Citizen of the countries are the biggest chain stores that can be such a serious threat for Yas stores. One way to deal with competitors is to establish long-term relationships, retention and satisfaction of existing customers that Yas stores are not the exception to the rule. Then the theoretical foundations of customer satisfaction, satisfaction patterns and factors affecting it are discussed and identified factors influencing satisfaction with each factor, a measure of the proportion of the population, has been designed and validated, afterwards influence of the factors is identified and explained in the framework of a model.

2-Principles and research background

In the dictionary, multiple meanings for the word value are listed; in the meantime, a lot of what we are talking about refers to the usefulness of the concept. Another concept of value is stated exchange rate in relation to commodity prices. L. Bacon has presented a model to illustrate the concept of value in 2003 that in this model, price and quality (standard) have been introduced as essential components (variables) models.

Values criteria are detailed quality components. Each product has met a set of values. These criteria vary depending on the type of product and market and will be featured over 50 to 100. For example, a value of store is a function of the store’s location, type of product, the service, and staff attitude and of course the price; furthermore, each of these criteria can also turn into more detailed criteria. Obviously, all these measures have a role in the development of customer satisfaction. The main few criteria for diagnosis have contribution to constitute value are important which mark the position of company in the competitive environment (Asgharpour and Ghafarian, 2008). The customer should be able to deduce from the measured value and quality of goods and services to achieve true satisfaction (Riscinto kozub, 2008). Identify the values of customer and try to meet them, will form the basis of market orientation and customer satisfaction.

Market orientation with a focus on customer, competitive direction and coordination among sectors directly affect business performance and the common factor in this relationship is the degrees of customer satisfaction (John C. Narver & Stanley F. Slater, 1990). Most managers agree that at this point which is important to meet customer needs, often this is only a slogan but a philosophy of the company which is the result of two common belief of improper understanding of the customer. Managers think that they know customer requirements. The generalizations to other's tastes are not success. Managers believe that an information gap about the customers will be resolved by asking the customer. Today this method is the most common way to obtain information about customer requirements but according to Charles Effin customer requirements are in three levels:

First level: They are expected to meet the needs of consumers and may even be unknown to them.

Second level: The needs of its customers, which are expressed as the measured quality attributes are taken over.

Third level: Unspoken needs, which may be a reason not to express their customers, but they are expected to meet (evident features).

Companies with assets valued customers know your employees want to do everything they can do to satisfy and retain customers (Parasuraman et al, 1991). Tharp¹ Institute study

¹ - Technical Assistance Research Program
results suggest that each customer before proceeding with the purchase of an enterprise is expected some specific expectations of the company, because of this expectation, in other words, propaganda, history of commitment to the firm and buying other companies in individuals are constituted. After purchase, the customer satisfaction levels are in the range of very satisfied, satisfied, indifferent, dissatisfied, and very dissatisfied. Companies those are willing to go and repeat customers' purchase should examine their customers' satisfaction and pleasures periodically.

3-Models for measuring the customer satisfaction

Most of satisfaction or dissatisfaction research performed on goods and services that consumers can evaluate them according to size (yield) and the hedonic dimension (what gives them the feeling of product consumption). Therefore, consumers do comparison between expectations and actual performance. A positive evaluation will lead to satisfaction and negative evaluation brings about dissatisfaction. In recent decades, several models have been proposed for customer satisfaction in the following has been brief introduction.

Cano (1984) has an interesting interpretation of the determinants of satisfaction (or dissatisfaction) to the client and has introduced a framework for understanding these factors and their effects on the customer satisfaction. This procedure is relatively simple; most of the items are used in total quality management. In this model, with taking the idea of Frederick Herzberg's two-factor theory of determinants, categorized into three basic requirements; they must be requirements, performance needs or one-dimensional requirements, excitement needs or attractive requirements. Basic requirements are minimum required and not being of them can cause severe discomfort. However, there are obviously necessary and it does not satisfy. If any of the performance needs entities exist, they cause satisfaction or dissatisfaction. If the excitement needs (interests) are not, they do not make dissatisfaction, but they make the customer happy (Sauerwein Elmer et al, 1996).

Servqual model is one of the most powerful and widely used service quality evaluation models, which is used in order to measure customer satisfaction in service organizations. Parasurman et al (1980) studied the parameters of service quality and the customer service quality, based on the discussed perceived quality of service. Indicators of the quality of the services including: reliability, responsiveness, competence, access, courtesy, communication, trust, security, customer perception and understanding of the physical and tangible evidence. Later the result of the studies in the 1990's showed the ten indicators of quality (due to high correlation between some parameters) to five indexes decreased, these factors include: physical evidence and tangibles, reliability, responsiveness, assurance and empathy. It is explained that this model, despite its flaws, is a very useful service. For this reason, the different versions of the original design of the model are introduced by others (Erevelles Sunil & Leavitt Clark, 1992).

In model, "The American Customer Satisfaction Index" or «ACSI», expectations, perceived quality, perceived value and customer satisfaction are introduced as influential factors. The first characteristic of overall customer satisfaction is quality or perceived performance, the market valuation is based on the latest consumer experience. The second characteristic of overall customer satisfaction is perceived value or perceived quality of the output equal to the price paid. The third characteristic of overall customer satisfaction is market expectations derived from the consumption experience, non-experimental data available, such as the ability to predict the outcome and recommendations of the language and suppliers to deliver quality that shows in the future. ACSI outcomes are including customer complaints and customer loyalty (Fornell et al, 1996).
ECSI² model or European model of customer satisfaction evaluates the customer satisfaction along with the loyalty. ECSI model is theoretically adjusted values of the ACSI model. In this model, perceived quality is divided into two parts: While hardware component of the means is production quality, software components associated with service, such as given guarantees, after-sales service (Grigoroudis, E., Siskos, Y, 2004). Drivers of customer satisfaction in this model are: 1) The perceived image of the company, 2) Customer expectations, 3) Perceived quality, and 4) Perceived value.

Customer Satisfaction Index or MCSI³ model in which varies in Malaysia consists of six factors to customer satisfaction include: perceived quality, perceived value and customer expectations, as well as factors affecting the loyalty include: Perceived image of the product or service and customer satisfaction have been introduced (Kavousi, Mohammad Reza and Saghaei, Abbas, 2005).

4. Hypotheses development and conceptual model

According to the principles of research literature reviewed, expectations variables, expected value and the behavior of employees, shop agents, product or perceived service quality, impact on customer satisfaction. Due to limitations of data collection, variables, expectations, behavior of employees and shop agents are considered in this study as the factors affecting customer satisfaction of the Yas stores. Underlying the Servqual model, the American Customer Satisfaction Index, European, Malaysian, this research model is presented as follows, in this model, there is a consistent positive relationship between customer expectations and satisfaction with the results of the customer satisfaction index model of American, European and Hirschman's proposed model. A positive relationship between employee attitudes and customer satisfaction is consistent to Servqual model and Hirschman results. Also, there is a positive relationship between customer expectations and satisfaction with the results corresponded Servqual model.

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2 - European Customer Satisfaction Index
3 - Malaysian Customer Satisfaction Index
5-Research hypotheses

First hypothesis: Customer expectations with customer satisfaction have a meaningful relationship in Yas stores.

Second hypothesis: Index store with Yas stores' customer satisfaction have a meaningful relationship.

The third hypothesis: Employee behavior on customer satisfaction has a meaningful relationship in Yas stores.

5-1Research Methodology

This research purpose is applied, the method of data collection is descriptive – survey and the statistical population for this study are all customers of the Yas stores. In this study, the sampling method for selecting a judgmental sample (95% confidence level and error ($\varepsilon = \%5$)) is used. Sample was determined by using Cochran formula, "384 persons" that the numbers of 335 usable questionnaires were diagnosed.

$$n = \frac{Z^2 \times s^2}{D^2} = \frac{(1.96)^2(0.5)^2}{(0.05)^2} \approx 384$$

In this study, questionnaires and interviews were used to collect data; furthermore, to determine the validity of it the experts' guide was used. Reliability was assessed by Cronbach's alpha test. The mean of alpha spectra obtained for all the variables studied, which indicates that about 81 percent of the questionnaire has high validity.

Research findings

Analysis of demographic data indicates that most respondents (55.7 percent) women and in the meantime, more than 70 percent of the clients were married. The age distribution shows that 41 percent of those aged are 21 to 30 years and Samples with the lowest, is dedicated 2.9 percent of the age group over 61 years. In terms of education, according to data obtained from the questionnaires, more than 67 percent of the customers are educated. Most respondents have a bachelor's degree (36.7 percent) and then both diploma and associate degree to account for the highest sample. The effect of accompanying children and friends when purchasing from the stores is %17.8 and %16.9 of that seems to have almost the same level. Customers tend to order on Thursday (21.9 percent), Friday (17.6 percent), Monday (6.3 percent), Saturday (5.3 percent), Wednesday (3/3 percent), Tuesday (3 percent) and Sunday (2.7 percent) and 16 to 22 more hours to go to the store to do their shopping.

In order to assess the causal relationship of these hypotheses, structural equation modeling is used. The path diagram of the structural model and its parameters first must be confirmed that once are a good fit. Secondly, correlation coefficient of the standard (Beta) should be significant. If the correlation coefficient table $sig$, the 05/0 is considered less meaningful regression. And (t) corresponding to each of the attributes, if the 1.96 is more, it is considered significant.

Table 1. Correlation matrix between variables affecting customer satisfaction Yas Store
Results of reliability and fitness for a table are reflected in the indices. These coefficients indicate that customer satisfaction in other words the dependent variable and the independent variables were significantly associated with a 99 percent confidence interval. Increasing the level of each independent variable, customer satisfaction also increased. These findings provide a negative understanding as well. Due to the absolute value of the Pearson correlation coefficient, the intensity of the relationship except employee attitudes and customer satisfaction (with respect to the absolute value of the Pearson correlation coefficient equal to 0.198, so that the intensity of this relationship is low) is in a high level. Thus the first hypothesis, the second and third are confirmed.

6-Path Analysis

Path analysis of multivariate techniques on the one hand considers the direct effects of independent variables on the dependent variables the on the other hand indirect effects and the relationships between variables in accordance with the facts, analyzed then imported. This technique is according to a series of multiple regression analysis based on the assumed relationship between dependent and independent variables (Kalantari, 2008). According to Table (2), the sig expectations and store variables with a significance level are less than 0.05 and expected impact factor (8.621) is more than the variable store, thus expected variable is considered as the dependent variable and the remaining independent variables will be entered into the model. According to Table (3) with respect to the variable sig shop is at a significance level of less than 0.05 so the store variables are considered as dependent variables and the rest as independent variables entered in the model that the only remaining is variable behavior. For obtaining the model of this study "Enter" methods were used. Based on the Beta column, the standardized regression line the equation to compare the effect of independent variables on the dependent is as follows:

\[
\text{Customer Satisfaction} = (E) \times 0.562 + (S) \times 0.270
\]

The above formula (E) = criteria and expectations (S) = indices show store.

Table 2. Analysis of the effects (direct and indirect) of the independent variables on customer satisfaction Yas stores (Source: Results)
### Table 3. Analysis of the effects (direct and indirect) of the independent variables on customer satisfaction Yas stores (Source: Results)

<table>
<thead>
<tr>
<th>Model</th>
<th>Non-standardized regression coefficient</th>
<th>Standardized coefficient</th>
<th>t</th>
<th>Significant level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Standard error</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 The remaining</td>
<td>1.254</td>
<td>0.609</td>
<td>-</td>
<td>2.058</td>
</tr>
<tr>
<td>Behavior</td>
<td>0.032</td>
<td>0.026</td>
<td>0.077</td>
<td>1.265</td>
</tr>
<tr>
<td>Expectations</td>
<td>0.429</td>
<td>0.050</td>
<td>0.562</td>
<td>8.621</td>
</tr>
<tr>
<td>shop</td>
<td>0.031</td>
<td>0.008</td>
<td>0.270</td>
<td>4.009</td>
</tr>
</tbody>
</table>

### Table 4. Analysis of the effects of variables on customer satisfaction Yas stores (Source: Results)

<table>
<thead>
<tr>
<th>Model</th>
<th>Non-standardized regression coefficient</th>
<th>Standardized coefficient</th>
<th>t</th>
<th>Significant level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Standard error</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 The remaining</td>
<td>4.107</td>
<td>1.004</td>
<td>-</td>
<td>4.089</td>
</tr>
<tr>
<td>Behavior</td>
<td>0.054</td>
<td>0.045</td>
<td>0.096</td>
<td>0.181</td>
</tr>
<tr>
<td>shop</td>
<td>0.067</td>
<td>0.012</td>
<td>0.442</td>
<td>5.445</td>
</tr>
</tbody>
</table>

According to the tables presented above the results of independent variables on the dependent variable are calculated:
To calculate the indirect effects, the beta coefficients for each path multiply to each other as long as we get the dependent variable. Since each variable may affect multiple pathways through the dependent variable, to calculate the indirect effects of one variable on another variable, the indirect effects of the two different pathways are assembled together. To obtain the causal effects of direct and indirect, impacts should be collected together. By Beta coefficients calculation through comparing the various pathways, hence an investigator will be able to determine the importance of each pathway (Kalantari, 2008).

Table 5. Impact of independent variables on the dependent variable
(Source: Results)

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>customer satisfaction</th>
<th>Total coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The direct impact</td>
<td>Indirect impact</td>
</tr>
<tr>
<td>Expectations</td>
<td>0.562</td>
<td>-</td>
</tr>
<tr>
<td>shop</td>
<td>0.270</td>
<td>0.248</td>
</tr>
<tr>
<td>Behavior</td>
<td>-</td>
<td>0.176</td>
</tr>
</tbody>
</table>

Also based on all variables in this study $R^2 = .757^2$, and $R^2 = .575$. As illustrated in Table (5) a significant relationship to satisfaction of customer expectations and behavior are linked to store. These factors accounted for nearly 57 percent of the total variance of satisfaction and the remaining 43 percent are influenced by factors outside the study. In this model, the expected range of 0.562 of the direct effect of the highest ranges of the store with 0.518 of the highest combined effects (direct and indirect) and behavioral variables of 0.176 to indirectly accounted; these results confirm the theories and related hypotheses used in research.

7-Discussion and Conclusion

Today’s manufacturing and service organizations consider the customer satisfaction as an important criterion for measuring the quality of their work and this trend is still rising. The importance of customer satisfaction is what refers to compete globally. As Malcolm Baldrige national quality award, about thirty percent of the total score will determine customer satisfaction. (Jafari et al, 2000) The complex and competitive business environment is constantly becoming the customer satisfaction as their main goal and generally, their consent, have an important effect on the profitability of the organizations (Haddadian, A., 2012). In this study, the factors affecting customer satisfaction with a particular view on chain stores and Yas stores were evaluated. Data analysis showed that all parameters of the model are based on customer satisfaction. Hirschman (1970) in SCSB4 model of marketing theory known as “exit-voice theory”, and other European and American customer satisfaction index models were reached similar conclusions with the difference in the current study, the expectations index had the highest direct effect on customer satisfaction. So that, the effect of store indices (physical and tangible evidence, equipment, etc.) and

4 - Swedish Customer Satisfaction Barometer
behavior (politeness and dignity, responsiveness, knowledge, etc.) was also higher. It is proposed to store managers and policy guidelines to increase customer satisfaction by considering the degree of the expectations importance. And constantly needs to identify customers’ needs, wants, preferences and interests. In addition to, other data suggest that the index stores directly and indirectly affects customer satisfaction through the expected impact on customer satisfaction. Parasrman, Zytml, Berry, et al (1980) also found similar results in their study with the exception that there was only a direct effect on store indices (physical and intangible) to the satisfaction of the customers. Hence it is proposed to increase customer satisfaction, quality service and equipment supply stores such as cleanliness, escalators, elevators, interior and exterior, shelving, decorations and parking, etc that must be in directors’ programs and policies. According to results of the third hypothesis, the behavior of store employees has no direct impact on customer satisfaction, but indirectly and by the index store affecting the customer satisfaction. The impact of these findings with SERVQUAL model validity, responsiveness, assurance and empathy employees on customer satisfaction is positively evaluated is consistent, conversely, Hosseini and Heirati (2007), that employee behavior on customer satisfaction have introduced the most preferred, is not fully consistent with. Considering synergy resulting from simultaneous consideration of all three components, it is necessary that the strategic policies and programs in Yas store, all aspects should be considered to strengthen the competitiveness. Also store performance continuously is assessed based on the actual model. And the activities to be done to reduce deviations; therefore this way to increase customer satisfaction and reduce costs, increase market share and revenue ideally Yas stores.

8- Practical proposals

Considering the research findings, practical proposals are presented below:

A: Needs assessment studies to identify the expectations, needs, desires, preferences and interests of customers.
B: The minimum criteria and standards required (according to the different characteristics of the economic, social, cultural and country) to create space for services, products and activities of this store.
C: Increasing the speed of shop customer service staff.
D: Transparency in laws and store policies, so that, respect, service and strive for excellence in the store for customers to be understood.

References


Nagel Hill (2006), measuring customer satisfaction (translated by Mohammad Reza Eskandari, M. Eskandari), published by the Cultural Services Institute, Rasa printing, 1st.


