## EXPERIENTIAL STATE AND EFFECT OF FACTORS ON THE DIMENSIONS OF OFFER IN A SERVICE COMPANY

Using Confirmatory Factor Analysis: A Five Factor Model

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Abstract:

In recent years, experience is one of the major topics regarding the business world, which involves even more the research in management and engineering. Customer experience is conceptualized in management as the unforgettable event where the customer, the product and/or service, and the environment interact, and where customers respond in a sensorial, affective, intellectual, behavioral and social fashion to stimuli provoked by companies or brands. Experience Engineering identifies these stimuli as clues about experience and centralizes on the proposal of humanistic y mechanical contexts, having as sources: the product, the service, and the environment. Among the research it is possible to identify, through a scientific study using Confirmatory Factor Analysis, the experiential state of the San Antonio Bakery, and the effect of generated factors on the dimensions of an experientially conceptualized offer. It is found that humanistic contexts influence considerably on affective, intellectual and behavioral experiences of customers, and that mechanical contexts influences considerably on sensorial and affective experiences.

#### 1 INTRODUCTION

Experience is a concept defined from the point-ofview of the individual or the consumer. Pine and Gilmore (1999) indicate that experience is a reaction that presents as a consequence of stimulus. Thus, companies have been changing their traditional marketing focus, from providing functional benefits in their products, to an experiential marketing focus of providing experiences in their products or services. Reasons for this change include the omnipresence of information technologies, and supremacy of brands ubiquity communications (Schmitt, 1999). Studies conducted by Schmitt (1999) reveal that lived experiences can be identified in 5 modules: sensorial, affective, intelectual, behavioral and social, which are produced by stimuli through media, visual and verbal identification, product presence, etc.

In order to face this new way the consumer perceives value, companies need to modify their operations strategy. In such way, Carbone and Haeckel (1994) make use of the principles of Experiential Engineering for the design of

experiences related to the product, service and environment, which are centralized in humanistic and mechanical contexts.

For this paper the "San Antonio" Bakery was chosen, which manages a network of stores in four representative districts of Lima, Peru, and whose service offer is well-recognized by customers who have bought from there at least once. Therefore, is it possible for "San Antonio" to offer high levels of perceived experience by customers? What are the most recognized dimensions by customers? What types of experiences do customers live in every offered context?

The goal of this paper is to carry out a scientific study regarding the concept of experience, using the measurement scale of consumption experience proposed by Schmitt (1999) and proved by Chang and Chieng (2006). Also to test and validate the concept of consumption experience and to identify factors those have an impact on the dimension of experience, by using the Structural Equation Model (Confirmatory factor analysis and Structural regression).

## 2 THEORETICAL FRAMEWORK

## 2.1 Experience

Experience occurs inside of individuals, as it is simply the reaction to external events (Pine and Gilmore, 1999). These reactions range from sensorial, affective, intellectual, to behavioral and social (Schmitt, 1999). Brakus et al. (2009) in their studies show that the concept of experience can be defined in three basic aspects:

- Experience of Products or Services: it occurs when the consumer looks for the product and examines it, this experience can be direct, through physical contact or indirect through advertisement or virtually. What is sought in the consumer is to identify purchasing behavior and purchase intentions.
- Purchasing Experience: it occurs when consumers interact with the store's physical environment, staff and policies. What is sought here is how the relation with salespeople and environment influences the customers' feelings, attitudes towards brands and satisfaction.
- Consumption Experience: it occurs when the product or service is consumed. Consumption experiences are multidimensional and include hedonic dimensions, such as feelings, fantasies and fun (Holbrook and Hirschman, 1982). This type of experience happens in many environments, especially when consumption of the products is carried out during or after the purchase.

These stimuli constitute a source of subjective information about consumers called "Consumption experience" evoking responses from consumers, that can be internal (sensorial, affective, intellectual) and external (behavioral and social).

Intensities exist in consumption experience, some can be positive while others negative. Also, some experiences occur spontaneously and without much thought, while others are lived in a more conscious manner.

# 2.2 Dimensions of Consumption Experience

Schmitt (1999) mentions that the achievement of defining the dimensions of experience is the result of conjoint work between philosophers, cognitive scientists and management experts, and is explained below:

- Sensorial: It's the module that appeals to the senses in order to create sensorial experiences through sight, hearing, touch, taste and smell. Marketing of the senses has the potential to differentiate companies and brands, motivating customers and adding value to products through esthetics and emotion.
- Affective: It refers to creating emotions inside consumers, which range from slightly positive mood to strong emotions like pride or joy linked to brands. Companies need to identify which stimuli triggers specific feelings, and consequently captivate consumer empathy.
- Intellectual: It refers to identifying the knowledge of individuals or consumers with the purpose of creating memorable experiences. Thoughts appeal to the attraction of convergent and divergent thought from consumers, via the surprise or intrigue.
- Behavioral: It refers to awakening of bodily experiences, lifestyles and interactions. It offers the customers diverse ways of doing things, inspiration, emotion and behavioral changes.
- Social: It refers to evoking sensorial, emotional, intellectual and behavioral responses, not limited to an individual level but also related to the individual's environment or reference group.

Schmitt (1999) indicates that marketing strategies are carried out through providers of factors of experience to create sensorial, emotional, intellectual, behavioral and social stimuli (Schmitt, 1999). In the factors of the experience:

- Communication factors: advertisement, magazines, catalogs, etc.
- Product presence factors: these are related to physical products design, packing, and who represents them (brand character).
- Environmental space factors: These seek to awaken the senses and emotions by the design of an experiential environment.
- Working staff factors: These are factors that greatly influence the consumers' experience since they're in touch with the employees.

### 2.3 Experience Engineering

A product or service is always associated with an experience; these can be achieved through development of "clues" which consist of resources that impress the rational and emotional parts of the consumer (Carbone and Haeckel, 1994). The authors reveal that consumers must be "bombed"

highlighting the features of products and/or services and the context through design and organization of pictoric signals respectively, afterwards a Blueprint analysis must be held for constructing contextual clues (mechanical and humanic) creating finally customer preference.

One of the principles of Experience Engineering according to Carbone and Haeckel (1994) is the existence of two types of contextual clues: "Mechanical" which relate to sight, smell, taste, color, sound, texture of things; and "Humanic" which emanate from people. These two types have also been defined for designing the desired behavior of employees who meet the customer.

Experience Engineering considers the design of contextual clues related to the product, service, environment and performance of products or services, where both types must be related.

### 3 METHODOLOGY

#### 3.1 Data Collection

A questionnaire containing two parts has been prepared. The first part corresponds to 15 questions from the measurement scale of consumption experience about long-proved psychometric properties (Schmitt, 1999; Chang and Chieng, 2006), this scale has been established in abundant previous research.

The second part of the questionnaire is focused on factors that generate experience. Items have been constructed based on experience clues (Carbone, 1994). Factors that influence experience are also indicated ('Name of product, shape of product or packing, decorative style of products, tastes (elements associated to the product that stimulate the lived experience)', 'Staff who interacts with the customer' (courtesy, kindness)', 'Availability of the menu, napkin styles, forks, spoons, etc (objects that had contact with the customer)', 'Individuals from the bakery environment (working staff that didn't interact with the customer)', 'Objects from the bakery environment (pictures, chairs, tables, decoration, etc.).

Every item is measured using a 7-point Likert scale. Diverse means of data collection were employed: field, on site, by telephone and mail. The questionnaire was carried out in Lima, Peru during the month of July, 2011.

The simple consists of clients from both genders where 48% are male and 52% are female with an average age between 26 and 34 years old.

### 3.2 Data Analysis

Analysis of this study has been carried out using SPSS and AMOS which imply two main statistical procedures: (1) Confirmatory Factor Analysis in order to validate the psychometric properties of the dimensions of consumption experience; and (2) Structural Regressions in order to identify the impact of factors on consumption experience.

Specifically, Confirmatory Factor Analysis (CFA) is a statistical procedure that allows proving whether the measures of a construction are consistent with the understanding of the researcher about the nature of the construction. CFA is a derivate of the Structural Equations Model (SEM) used to validate the quantity of factors or dimensions of a concept under study. By building the measurements model the researcher uses two different types of variables, called exogenous and endogenous.

Parting from the collection of data, lambda coefficients are calculated, where the value of their T-test (CR) must be greater than 1,96 in order to be significant. Good fitting of the measurement model corresponds to knowing whether an approximation from the observed value to the calculated value exists. This calculated value is determined by the maximum verisimilitude. The index that better shows the fitting of the model is that of RMSEA, which must be smaller than 0,1.

For the internal validity of the measurement scale, a Joreskog coefficient is used. Also, in order to demonstrate the effect of a certain variable over another one, Structural Regressions will be employed, where this will be demonstrated based on the effect of a latent variable over another one.

#### 4 RESULTS AND DISCUSSION

# 4.1 Experiential Value of Consumption in the "San Antonio" Bakery

The experience lived by the consumers of "San Antonio" bakery is relatively intense (5,15). The results indicate that the sample, consisting of 157 consumers, gives similar results for all dimensions of lived experience, with slight prominence of the affective and social dimensions (Sensorial (4,49), Affective (4,63), Intellectual (4,14), Behavorial (4,14), Social (4,65); FacProMec (5,05), FacSerMec (5,26), FacSerHum (5,19), FacEnyMec (5,12), FacEnvHum (4,94)). Factors that have generated intense experiences have significant value as stimuli

that will allow the consumer to live memorable moments or events.

## **4.2** Psychometric Quality Test of Measurement Instruments

Remaining values are analyzed, and then they are replaced with the average of the other values inside each variable. Immediately a Confirmatory Factor Analysis is carried out for the data since we based the study on an already proven scale. We used the method from the Structural Equation Model in order to perform analysis of the data. The test was carried out using the 5 dimensions of the 157 consumer's sample. The results of analysis show that the 5dimensional model is acceptable (RMSEA = 0,087 < 0,01). Different fitting indexes are satisfactory (Chi 2 Normalized = 2,17 < 3). Structural coefficients are all significant and standardized coefficients show robust. In the end, the model retains every item of the measurement scale proposed by B. Schmitt (1999). Non-standardized structural coefficients are all significantly different from zero.

The conclusion is that, in the end, we retain this 5-dimensional model for further analysis of psychometric quality and factorial structure.

# **4.3** Test of Effect of Factors on Consumption Experience

Factors that influence significantly the dimensions of consumption experience are the humanic and mechanical factors of the environment. Specifically, the humanic factor of the environment influences significantly the affective, intellectual and behavioral experiences, and in the same fashion the mechanical factor of the environment influences significantly on the sensorial and affective experiences.

#### 5 CONCLUSIONS

It has been demonstrated that the experiential state of the "San Antonio" Bakery shows a positive nature according to average consumer perception.

It is also demonstrated that the 5-dimensional model proposed by B. Schmitt (1999) is completely valid for the study.

The humanic factor influences significantly over affective (t = 2,166 > 1,96; p = 0,3), intellectual (t = 2,612; p = 0,09) and behavioral (t = 2,599; p = 0,009) experiences; and the Mechanical Factor influences over sensorial (t = 2,140; p = 0,32) and

affective (t = 2,317; p = 0,21) experiences, since the value of P is smaller than 0.05, rejecting the null hypothesis. With these results the company might carry out improvements in the offering of its service and boost its service in accordance to the type of experience lived by a specific segment of customers.

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