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A model to measure the quality service in a local company of pizza in Los Mochis, Sinaloa

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RESUMEN

El modelo servqual fue rediseñado en relación con el contexto de la empresa local MetroPizza, en Los Mochis, Sinaloa; el principal cambio fue la orientación, de lo visual, que corresponde más con el uso intensivo de la imagen de las franquicias transnacionales, a lo gustativo que representa la ventaja competitiva en las empresas locales que conocen el sabor en la cultura regional. Se analizaron las diferencias entre lo esperado y lo percibido en la calidad del servicio a través de las dimensiones propuestas por Zeithaml y Bitner (2002). Los resultados muestran en lo tangible, que los clientes esperan más el sabor que la imagen.

Palabras clave: modelo servqual, calidad en el servicio, empresa local de pizza

ABSTRACT

The SERVQUAL model was redesigned in relation to the context of the local company MetroPizza, in Los Mochis, Sinaloa; the main change was the orientation of the visual that corresponds to the intensive use of the image of the transnational franchises, to the taste, that represents a competitive advantage in local firms that know the flavor in the culture of regional. The differences between the expected, and perceived quality service were analyzed through the dimensions proposed by Zeithaml & Bitner (2002). The results show in the tangible, that customers expect more flavor than the image.

Keywords: *SERVQUAL model, quality service, local pizza company.*

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1. Introduction

The importance of offering quality goods and services becomes each time more essential in the marketplace. Consumers are more pressing and have a great notion of quality implications, the main reason why quality service has become the most powerful competitive tool possessed by services' enterprises (Berry, 2004). Service is understood as the set of benefits that a client expects, besides the basic product or service, in a tangible or intangible ways, as consequence of price, image and reputation and more related attributes (Lara, 2002). The giving of high levels of quality service constitute an essential strategy for the firm's success and surviving in the current competitive environment (Barquero, Huertas, Barquero Cabrero, & Rodríguez de Llauder, 2007).

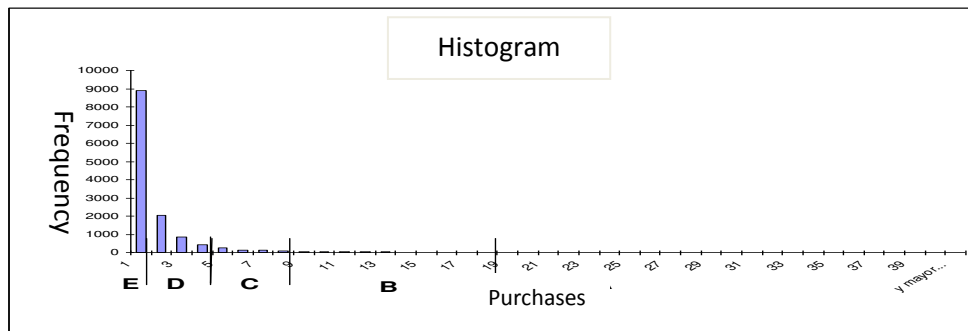
Most definitions of quality service is centered in achieving the client's expectative (Bell, 1982). The research interest resumed in this report was to analyze the differences between the expected service and the perceived service to measure the quality of the firm Metro Pizza, located at Los Mochis, Sinaloa. The methodology followed consisted in dividing and separating the main features of the phenomena proceeding to review orderly each one separately (Hernández, 2006). The utilized techniques were questionnaires which was applied during the period from July to September 2008 according to a stratified random sample design regarding the type of client followed by a statistical data analysis. The questionnaire was developed centered around the construction of our own model based on the general Zeithaml & Bitner (2002) which is described in detail through this paper.

2. The firm Metro pizza

In the State of Sinaloa, the first business of pizza was established in the city of Culiacán in the year 1970, known as the Fábula Pizza. Later, it opened its doors in Los Mochis, Sinaloa in 1980. Since that date began the natural market growth of pizza in the locality. Out of these

businesses, the franchise Domino's Pizza is the leader of the market due to intensive use of image and advertisement.

As regarding Metro Pizza, it is an enterprise which was founded in Los Mochis in the year 2004 and it is considered as the retailer in the food service to take out and to deliver at home's address. In this enterprise, 56% of clients ordered the products since their homes; 20% were junior high school, high school, commercial and technical career and university level's students. 15% were entrepreneurs or clients which required servicing of products since the employment places and the rest ordered over the counter. The distribution of registered clients in the data base from January to June 2008 through the system of the firm Metro Pizza is asymmetric.



Source: Own creation.

Figure 1. Client's distribution according to its purchasing frequency

The great majority had a small purchasing frequency and very few were assiduous clients (Figure 1). In this figure 1 it is also shown that the enterprise used a client classification according to its purchasing frequency. In one extreme it is found the clients type "A" minor frequency which has only bought once at the firm. At the other extreme it is found the clients type "E" which is the one of major frequency. This classification was useful mainly to conduct the technique of stratified random sample design to choose the clients to be questioned.

3. Quality service

The quality concept is multidimensional in a sense that consumer needs are multiple and diverse, also because it includes aspects such as tastes and the ability for the use, design, safety, reliability and respect to environment, among others (Atencio & González, 2007). Although there had been a lot and varied concepts related to what is quality and what is not, the different authors coincide on the fundamental goal of quality is found on the client's satisfaction, understood as the response of client's fullness satiety.

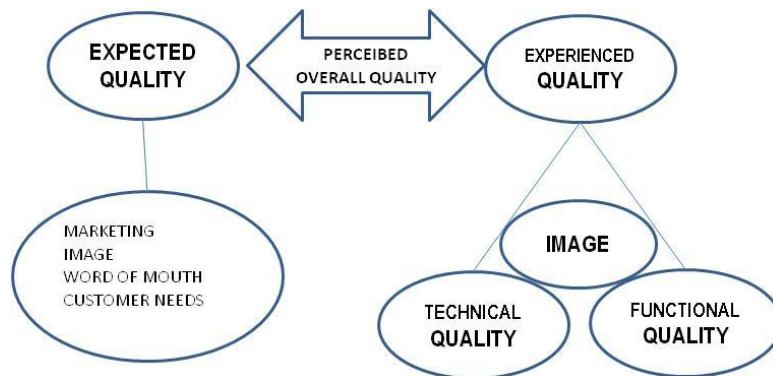
In this way, *consumer satisfaction has been defined as a) in function of associated expectancies to consume or service, b) in function of discrepancies evaluation between expectancy and perceived performance, c) as a judgment or global evaluation determined by affective or cognitive responses related to the use of services and consumption of products, d) in function of comparative purchasing costs and benefits, or use of services and consumption of goods related to anticipating consequences, and e) as a multidimensional, dynamic and complex process which includes cognitive, affective, physiological and behavioral activities* (Peralta, 2006, p. 97). For the actual research it was selected the point b) which corresponds with the model drawn by Zeithaml and Bitner (2002). These authors explain that in order to achieve the satisfaction level of clients it is fundamental to begin the design of service. This design will define the real firm's commitment to grant it, as well as to establish the limitations in such a way they satisfy their clients (McDaniel & Gates, 1999). Zeithaml and Bitner (1992) defend that what is treated about it is to build a global consumer's judgment as the result of the comparison between the expectancies over the service. The quality of the service is received according to the consumer's perceptions in relation to the enterprise's actions (Figure 2).

Huete (1997), in his work on services and benefits recounts the heritage of Zeithaml and Bitner (2002), but with its own lecture. He proposes a model in which the client's satisfaction is composed by two features: Structural and emotional ones. The structural element of customer's satisfaction is referred to the importance of counting on good tangible benefits. The second element,

the emotional one, is related to the enterprise's personality, warm human contact and the way in which clients feel about the firm. To manage satisfaction through the first feature, the enterprise must segment its clients and define the concept of service for each segment.

On the other side, the content of perception is the result of value's judgment achieved from the singularity of the client. Such a perception always appears charged with a strong emotional content. The expression proposed by Huete (1997) is parallel to the definition given by Zeithaml and Bitner (2002). According to this author (Huete, 1997), customer satisfaction comes determined by the following expression: Satisfied customer = Perceptions – Expectations > 0.

From this perspective, the product of one enterprise of services is the same service creation processes. What a customer sees, hears, smells, touch and tastes, the five senses are sources of perception. Each sense can build or destroy the customers' satisfaction. Once that the needs are known, the supplier of services must prove that he is able to meet the needs (Costa, cited by Nuno, 2003).



Source: (Grönroos, cited by Nuno, 2003)

Figure 2. Schema of perceived quality

It is important to well define the requirements in order not to create false expectations. If the expectations are excessively high, above the possibilities, the global satisfaction will be poor. If there are well defined the requirements, which are the translation of customers' expectations, satisfaction is reinforced. The image plays a determinant role in customer's perception and the service quality.

However this product tends to be over evaluated for many enterprises which allocate extraordinary resources. According to Zeithaml and Bitner (1992), people in charge to execute the services marketing know a intuitive level of the customer's expectations, but it is necessary to conduct a more profound search of these expectations aimed to understand, measure and manage them better. The first type of expectation is denominated expected service; it could be defined as *the service that the client expects to obtain; in other words, is a fussion of what can be and what must be. Wanted service expectations reflect the hopes and wishes of customers. If they are not fulfilled, customers will be unsatisfied with the service and securely they will not purchase the service later. Service is understood here as the work, activity and benefit* (Duke, 2005: 64). Services are heterogeneous, this is to say, can be differences in its application, which can have differences among suppliers, the same employees in such a way that customers are conscious and accept these differences between each other.

This variation is denominated tolerance zone. In other words, when the received service is classified below the suitable and adequate service, customers can feel the discomfort and it is affected its level of satisfaction with the enterprise. On the other hand, when the received service surpasses the customer's expectations, these can be satisfied or also astonished. The tolerance zone can be considered as the interval within customers passes on unnoticed the level of service performance. Only when the service surpasses the expectations or not fulfills them is when call the customers' attention, this is to say, each client has a tolerance for the distinctive types of services which utilize (Zeithaml & Bitner, 1992). All the customers have different tolerance zone. It is narrower for some customers than for others. It is here when the service that is going to provide the firm has to be more rigorous and equally some customers have wider tolerance zone. In this types of customers, the service granted have to be less strict that in the diminished tolerance zone. There are some services, depending of firm's type of business, which require more contact between the employees and customers than others, and that a bad experience in any of them can give as a result

a negative evaluation towards the service quality. This is the case fast food firms and more specifically that of pizza, which depend on the relationship between the employee and the customer.

According to Berry (2004), the first contacts are the ones critical, but without resting importance to the rest when it is related to determine satisfaction and loyalty of the customer. When for the first time the customer interacts with the firm, he creates a first impression of the organization, because he does not count with any other base to judge the enterprise. When there are present combinations of positive interactions together with negative interactions, it is generated in the customer feelings of insecurity over the quality service granted by the firm which in turn make it vulnerable before the competence's attractiveness. There are some key interactions which weigh more than the others, the difficulty is to identify which are those that have weight over the customers (Zeithaml & Bitner, 2002).

4. Methods and materials: The Servqual model

On the literature over the quality models, the one that enjoys a larger diffusion is denominated model of differences or Servqual (Zeithaml & Bitner, 2002), which defines service quality as a function of discrepancies between consumer's expectations over the service which are going to receive and their perceptions over the service effectively given by the firm. The authors suggest that reducing or eliminating such a difference depends at once of an efficient management on the part of the firm's services of other deficiencies and discrepancies.

Servqual is a scale of multiple items to measure perceptions that the customer has over the service quality, its instrument is a questionnaire which is composed of two parts. The first part has 22 questions that measure the customers' expectations and other 22 items with similar words to measure customers' perceptions and experiences, which in the survey case use a Likert scale from 1 to 7 to gauge as a totally unconformity in one extreme to total conformity in the other extreme

(Zeithaml & Bitner, 1992). To evaluate the service quality it is necessary to calculate the difference between punctuations that clients assign to the affirmative pairs of expectations and perceptions. As can be appreciated in figure 3, the Serqual model introduce and analyze a serie of gaps which can be perceived by customers (gap 5) or to produce it internally in the supplier's organizations of services (gaps from 1 to 4). This gaps are described in the following way:

- ✓ Gap 1: Indicates the discrepancy between the customer's expectations over a concrete service and the perceptions and beliefs developed by directives over what the consumer expects of that service
- ✓ Gap 2: Measures the difference between directive's perceptions and the specifications or quality norms.
- ✓ Gap 3: Calculates the differences between specifications and quality service's norms and the provision of itself.
- ✓ Gap 4: Measures the discrepancy between the provision of service and external communication.
- ✓ Gap 5: All mentioned deficiencies make that service provided by the organization do not fulfill the expectations that the customers had on it.

Just exactly this is the point that this research has evaluated in the firm Metro Pizza. This is to say, it is the quality in the service which results in gap 5 that measures the difference between the expected service and the perceived service, in function of the measures of gaps 1 to 4. $Gap5 = f(Gap 1, Gap 2, Gap 3, Gap 4)$.

The differences or gaps between perceptions and expectations for each pair of affirmations or points can produce three situations: One that perceptions surpass expectations, which means high levels of quality. Second, that perceptions are inferior that expectations, which means low quality level. Third, perceptions being equal to expectations denote modest quality levels. On the

5. Service dimensions

Service, according to Zeithaml and Bitner (1992), has diverse dimensions: Tangible, safety, empathy, capacity of response and reliability. This was adequate to the to the firm's conditions according to what it is shown in table 1. These authors define the dimensions in the following way:

- ✓ *Tangible* refers to the service tangibility such as the necessary equipment and personnel to provide the service.
- ✓ *Service safety* refers to the ability of a service provider to comply with the promise to provide adequately the service.
- ✓ *Response capability* refers to the good will of service provider to be useful and fast to provide the service. It is the quality which disposes somebody for the good exercise of something.
- ✓ *Reliability* refers to the knowledge and courtesy of service providers also as their ability to inspire on the customers trust and responsibility. It is the probability of good functioning.
- ✓ *Empathy* refers to the customer waiting for individual and humanitarian, affective, attention on the part of the service provider. It is the mental and affective identification of one subject in mood of each other.

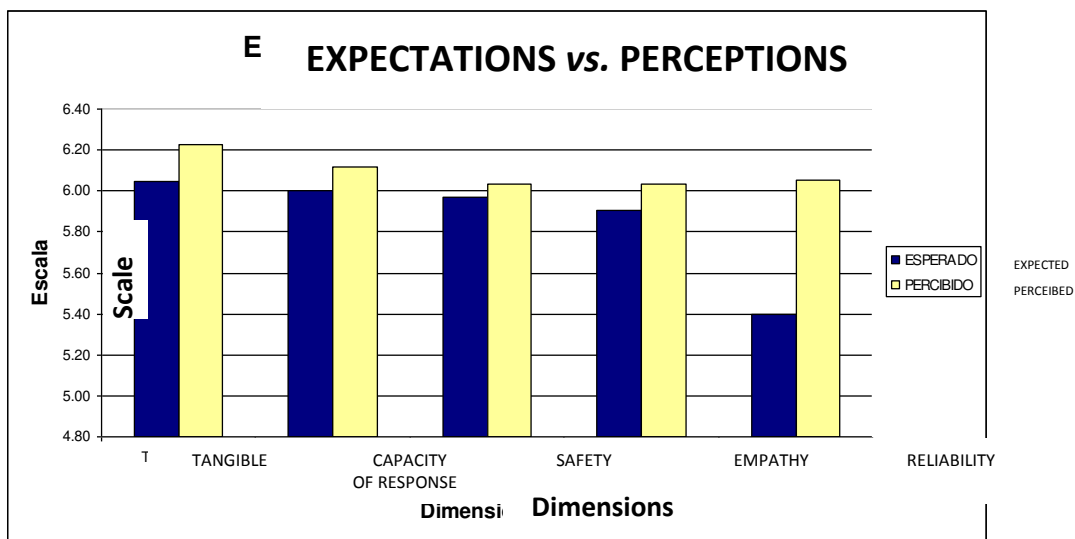
The questionnaire applied to Metro Pizza was divided in two parts for the case of this research: 46 items to measure the customer expectations, and other 46 items with similar concepts to measure customer perceptions. Later on it was deepening over the results that each attribute obtained in the sample utilized related to expectations or the expected service that had the customers of pizza shops in general.

Table 1. Variables and dimensions of quality service

Dependent variable	Dimensions	Independent variables
Service quality	Tangible	Image, hygiene, price, taste, temperature, precision, easiness, comfort
	Reliability	Compliance, functionality, credibility, health and tolerance
	Capacity of response	Flexibility, fast, schedule, disposition and assertiveness in time
	Safety	Guarantee, knowledge, truthfulness, trust in the enterprise
	Empathy	Attention, interest, expression, compression, communication, behavior and courtesy

Source: Created by authors based on Servqual model

For the customers, the dimension that more importance had, in accordance with the collected data for both the expected service as well as the perceived service, it was the dimension of the tangible and the one of least importance was reliability (Figure 4).



Source: Developed by the authors.

Figure 4 – Expectations vs. Perception by dimension

In the following paragraphs it will be analyzed the results of each dimension

5. Results

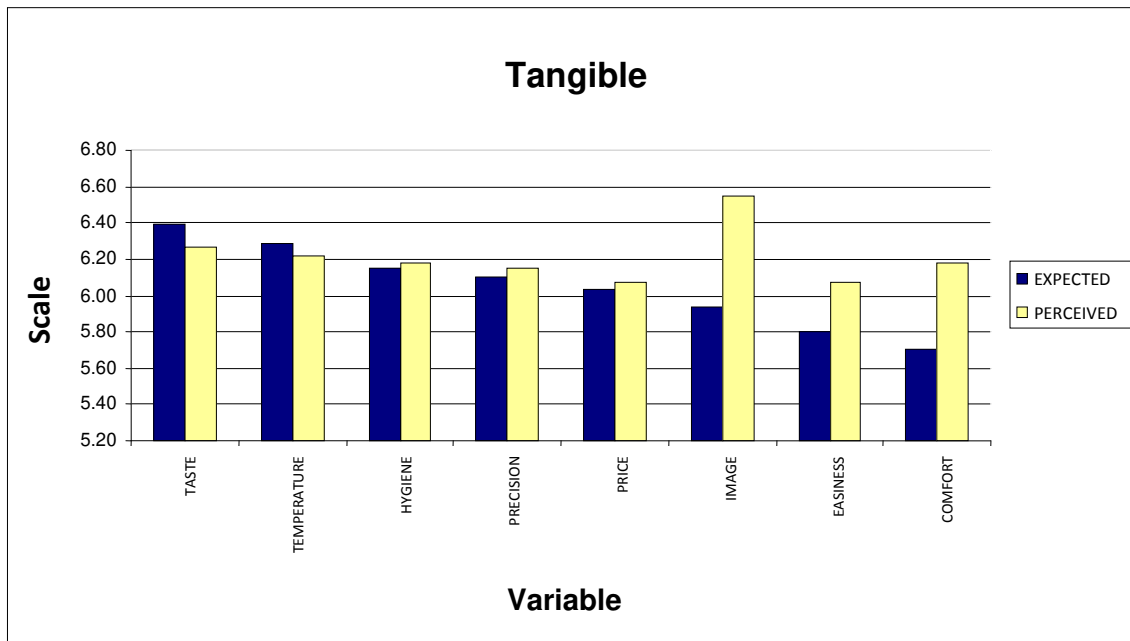
The tangible dimension

In the tangible elements were considered the appearance of physical infrastructure including furnishing, signals, cleanings, motor-vehicles appearance, price, disposition of sausage and dressing, temperature of foods and beverages, among others. For this motive, some questions of this dimension resulted as it is detailed below.

- The firm Metro Pizza communicates me a youthful image.
- In the firm Metro Pizza cares that their vehicles always look clean.
- In the firm Metro Pizza delivers hot pizzas
- I believe that the price I pay at the firm Metro Pizza is fair according to the type of product.
- The firm Metro Pizza has a telephone number easy to remember.

In the analysis of attributes of this dimension (Figure 5) customers had greater expectations according to the importance: Taste, temperature, hygiene, precision, image, easiness and comfort. However, the attribute which was more perceived by the customers is the image. This is because the local business tends to follow the practices of the leader, which in this case is Dominos Pizza, but as this is a franchise, conditions are different. Results showed clearly that the best strategy for local enterprises is through the intensive use of its culture's knowledge, over all of preferred flavors by customers. These last ones, in the side, tend to be less discerning with image at local firms. This is that way due to the town adds its own flavor. *It is a sensation that produces any food and differs according to the gender, class, ethnic group, age, region, etc., which produces and affective relationship with the consumer* (Bruno, 2008, p. 217). Thus, it is observed that the strategy of following a leader made Metro Pizza to tend to be more intensive with image, comfort and easiness, further more the customer expectations while it was forgotten that the flavor was the main

competitive advantage.



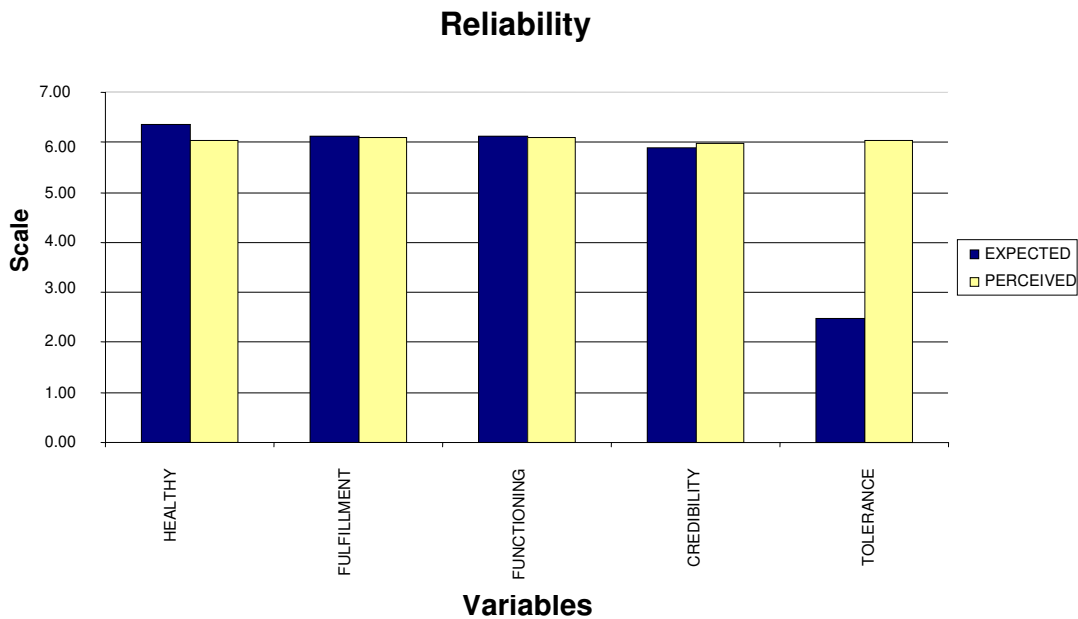
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Figure 5 Expectations and perceptions over tangibility at Metro Pizza.

Reliability dimension

Among the elements of reliability is the tolerance, recommendation to trust in the firm, commitment, trust on the driver of vehicles, accomplishing on time, continuous improvement, and trust on healthy food, among others. Thus, some issues on this dimension resulted as it is detailed below:

- At the firm Metro Pizza I can tolerate that make mistakes 2 or more times.
- I recommend the firm Metro Pizza to my friends
- If somebody at the firm Metro pizza is committed to do something for me, he will fulfill it.
- At the firm Metro Pizza care that vehicles can be driven in safe way.
- At the firm Metro Pizza delivers the pizza according to the offered time.



Source: Own creation.

Figure 6. Expectations and perceptions on reliability and confiability

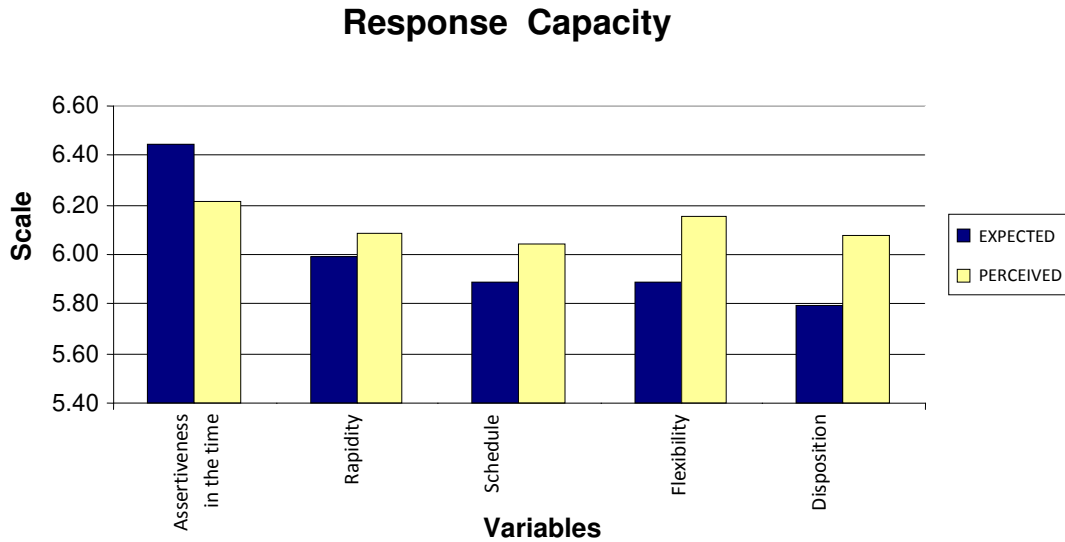
It is observed in this dimension that the most notorious difference was the tolerance, one that the customer expected less than he received (Figure 6). But what most expect customers is the healthy. This complex category not only includes the nutritional values of the pizza, but a series of images that have over the product, patterns of behaviors, beliefs, knowledge, habits to maintain what the persons think the term means, it can signifies from a simple “that not make me damage” to form part of one life style according to any identity image (Arrivillaga, Salazar, & Correa, 2003, p. 186).

Capacity of response dimension

In the elements of capacity of response it is found the necessary and sufficient time, disposition to help, deliveries in promised time, capacity to attend difficulties, among others. Thus, some issues of this dimension resulted as it is detailed below:

- At the firm Metro Pizza it is dedicated the necessary and sufficient time to take the order.

- Employees of Metro Pizza always show disposition to help me.
- In Metro pizza have schedule of convenient opening and closing for you.
- Personnel of Metro Pizza always have disposition to attend me and help me.
- At the firm Metro Pizza deliver me the orders in 30 minutes.



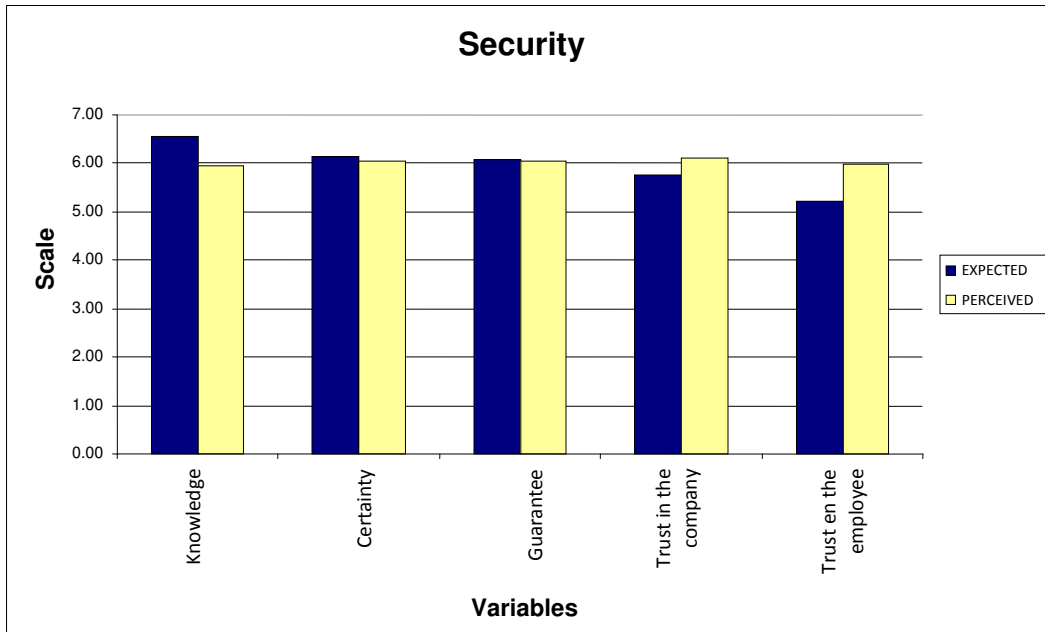
Source: Created by authors

Figure 7 Expectations and perceptions over the capacity of response in Metro Pizza.

In this dimension the more notorious differences are encountered in the disposition and flexibility that surpass the expectations of the customer, while it is observed a deficit in assertiveness on time (figure 7). In this last category, the one of the time has been inherited from the marketing practices employed by the firms of United States pizzas, all a series of cultural aspects which have been developed around this characteristic fact of our era.

Safety dimension

On the safety elements are the trust, order specifications, guarantees, and trust on employees, among others.



Source: Own elaboration

Figure 8 *Expectations and perceptions over safety in Metro Pizza*

Thus, some issues of this dimension results as it is detailed above:

- I trust on the deliverer of Metro Pizza.
- The enterprise Metro Pizza delivers the order with the special indications given by the customer.
- The belief that the employees of Metro Pizza have the sufficient knowledge to make and deliver pizzas.
- The firm Metro Pizza offer guarantees in purchasing its products.
- I feel tranquil and safe that my small children receive products purchased at Metro Pizza.

Regarding safety, it is observed that the customers trust on the employees surpasses the expectations (Figure 8). However, the firm is observed weak regarding the knowledge to make and deliver pizzas. This category presents also a series of complex features. The customer expects to

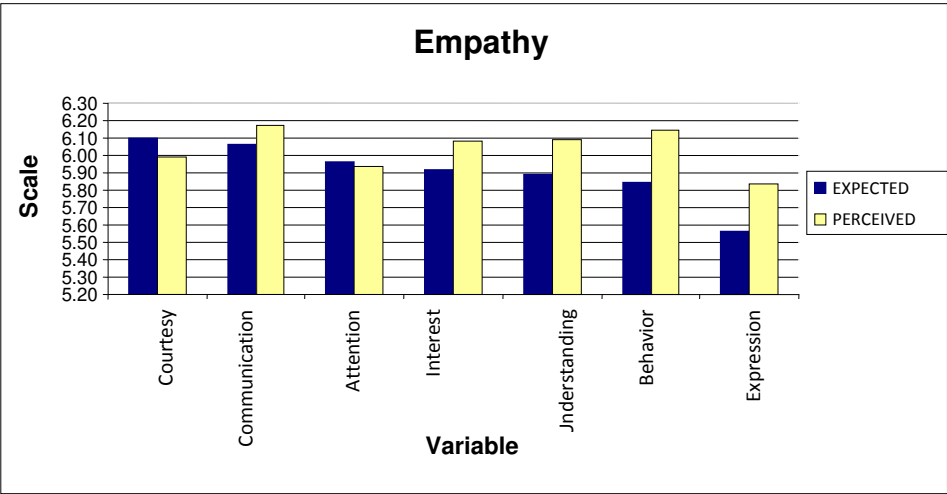
know that production processes and the delivery of pizza are found in expert and trained hands and demand that the firm make him to know.

Empathy dimension

On the features of empathy were considered the good treatment, personal attention, customer’s data, customer’s interest, behavior, communication among others. Some issues of this dimension resulted as it is detailed below:

- The employees of the firm Metro Pizza give good treatment to their customers.
- At the firm Metro Pizza give very personal attention.
- To deliver the order, the deliverers of the firm Metro Pizza smile to the customer.
- In one firm such as Metro Pizza insist in data such as name and address of the customer to meet again when he comes back.

In this dimension, the interest, understanding, behavior and expression have a higher value regarding the expected (Figure, 9), but not the courtesy, *an attribute that the customers appreciate together with the kindness of employees, their manifested responsibility, the level of intelligence and the discretion among others, which are found intimately inter related* (Salvador, 2005, p. 8).



Source: Own creation

Figure 9. Expectations and perceptions over the empathy dimension in Metro Pizza

Conclusions

The Servqual model presents an excellent structure for the analysis of different categories which can integrate the service quality in different contexts. For the case of Metro Pizza, a micro enterprise located in Los Mochis, Sinaloa in the Northeast of Mexico. Its adequacy allows breaking down each one of the elements that are part of the owner's daily preoccupations. But at the same time it allowed to attend the problems around the service quality that have the micro enterprises of the pizza's sector to compete with transnational firms.

The situation described above strengthens survey's results, on which the customers wait in the tangible dimension a mayor focus on flavor and temperature than the image. The enterprises of this sector uneasily can define how much is necessary to invest in resources related to the image. This is due to the leader enterprises are intensive in this dimension, but for the firms of local character, to compete based on image extremely difficult and even dangerous, its main strength is based on flavors, smells and cultural characteristics appropriated to the localities that people seek even with a minimum investment in image. It is observed the tangible in this type of firms, the capacity of response and safety are the dimensions that more expect the customers.

As the underlying values spring out besides different dimensions: what it is healthy, assertiveness in time and courtesy, qualities that have been inherited from the leader' firms. As it was mentioned, the healthy has a strong cultural component, in such a way that even could be a part of the firm's image and the advertising bombarding, people seek and demand, independently of the truth nutritional values that the product has. The assertiveness in time is an outcome of our era, with people living in time constrains or youth which play with fast delivery of the fast food's firms, the services now include or must include a strong temporal content. Rapidity is culturally well valued in pizza's business.

Finally the courtesy which contrasts with cold and impersonal treatment, is to allow systematization and technical processes, but at the same time, to demand over all the human, warmth, friendly, intelligent and kindness. From the above analyzes are detached the strategies that Metro Pizza must had to follow to improve competitiveness both at local and global levels.

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