

PRODUCT OR SERVICE QUALITY AS AN IMPACT FACTOR ON MARKET DEMAND

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Abstract -- Companies are vital to society, as their success contributes to the economic growth of an area by generating greater sources of employment and, therefore, a better quality of life in the region where they are located. However, the success of companies is largely determined by their sales levels, which depend on market demand.

Due to the importance of market demand, organizations have become interested in understanding the factors that influence market demand in order to design strategies aimed at stimulating sales. As many companies are currently facing a decline in sales, as in the case of companies in the city of Cardel. This makes the present research particularly relevant, as its objective is to determine whether product and/or service quality is a factor that impacts market demand in the city of Cardel, Veracruz.

This research, derived from the project Impact Factors on Market Demand for Business Development, uses a quantitative method, as it studies a phenomenon that can be quantified. It is also considered descriptive, as it seeks to specify important properties, characteristics, and features of any phenomenon under analysis [1]. Likewise, it is correlational, because it examines the relationship between variables, and it is cross-sectional, as it is carried out over a specific period of time and in a specific population. For the study, a survey technique was used, for which a questionnaire was designed as a measurement instrument and administered to a sample of consumers in the study location.

Finally, with the collection, analysis, and interpretation of the data obtained, it was possible to evaluate the quality of the

product and/or service and determine whether it is a factor that impacts market demand.

Keywords: Purchases, income, supply, price.

Abstract -- Companies are vital to society, as their success contributes to the economic growth of an area by generating more sources of employment and, therefore, a better quality of life in the region in which they are located; however, the success of companies is largely determined by their sales levels, which depend on market demand.

Due to the importance of market demand, organizations have been interested in identifying the factors that influence market demand in order to design strategies to stimulate sales, since many companies are currently facing a reduction in their sales, as in the case of companies in Cardel City. This makes this research relevant, whose objective is to determine whether the quality of the product and/or service is a factor that impacts market demand in Cardel City, Veracruz.

This research, derived from the project Impact factors on market demand for business development, has a quantitative method, since it studies a phenomenon susceptible to quantification; it is also considered descriptive, since it seeks to specify properties, characteristics, and important features of any phenomenon that is analyzed (Hernández et al, 2010). Likewise, it is correlational, because it examines the relationship between variables, and it is transversal when carried out in a determined period of time and in a specific population; for the study, the survey technique was used for which a questionnaire directed to a sample of consumers from the place of study was designed as a measuring instrument.

Finally, with the collection, analysis, and interpretation of the data obtained, it was possible to evaluate the quality of the product and/or service and determine whether it is a factor that impacts market demand.

Key words – Shopping, income, offer, price.

INTRODUCTION

The economic development of an area depends considerably on the progress of the companies located there. Therefore, the development of companies is important, which is achieved largely by increasing their sales and, in turn, market demand. For this reason, it is necessary for companies to know what factors influence consumers' purchasing decisions (market demand) in order to boost their sales.

Understanding that in economics, the term demand refers to the relationship between the price of a good or service and the quantity demanded. Demand is represented graphically in what is known as a demand curve and in a table of projections called a demand plan. The quantity demanded refers to a point on the demand curve graph, where the quantity demanded at a specific price is determined [2].

Therefore, market demand represents the sum of all individual demands for a good or service [3].

With this in mind, business development, by implying the growth of the company, leads to the generation of more sources of employment, which favors the economic development of the area where the companies are located. However, many companies see their development limited due to the difficulty they face in achieving good sales levels, making it necessary to identify the factors in the purchase decision that influence market demand and, therefore, sales levels.

In order for companies to increase their sales, it is necessary to start with an analysis of the environment to understand the needs, desires, and behavior of consumers, which will allow organizations to provide goods or services that meet consumer needs, as well as to design strategies that are tailored to consumer behavior.

It is worth mentioning that goods and services are things or activities that people do and value according to the level of satisfaction they generate and how well they meet their needs or desires. In the case of goods, these are tangible objects, such as mobile phone equipment and cars, while services are activities or tasks performed by people, such as

or mobile phone plans and vehicle repairs [2].

Likewise, [4] defines a good as any means capable of satisfying a need, both of individuals and of society as a whole, which can be classified as free and economic goods.

Studying consumer behavior is relevant because it allows us to identify how buyers seek to meet their requirements. This involves a selection process to locate, evaluate, and obtain products and services. Demand represents an intention, while acquisition represents an action.

Market demand provides information about the goods or services that consumers require, according to their needs, desires, interests, or preferences, which are aspects that organizations often consider when determining prices [5].

Therefore, consumer purchasing decisions and, in turn, market demand are influenced by several determinants or factors.

Demand factors have been a topic of interest and analysis for economists seeking to understand the behavior of economic actors and what influences their purchasing choices. Likewise, studying these factors helps determine which ones have the greatest and least impact on purchasing decisions. Therefore, monitoring and analyzing demand factors is essential to understanding market behavior [6].

According to [6], demand factors or determinants can be classified into two groups: The main factors or determinants that drive demand, which are price, tastes, expectations, preference for complementary products, and income. They are also called shifters because of their ability to move the demand graph (curve) to the right or left. These movements are representative of changes in the quantity demanded at a given price. The main factors or determinants that affect demand are income, price, tastes and preferences, the price of related goods or services, and the perception of the good or service. These factors, individually or collectively, can cause the demand curve to shift to the left or right, indicating an increase or decrease in demand.

As the main factors affecting demand mentioned above are frequent, they have become a topic of discussion.

of interest for study, as they can drive or affect demand and, therefore, the sales obtained by

organizations, which sometimes face difficulties in their marketing levels.

Due to the importance of understanding these factors, they have been the subject of interest in various studies, such as the one entitled "Factors influencing purchasing decisions in the end consumer market," which determined that one factor that frequently influences customer purchasing decisions is the attention and quality of service provided by the company. Customer service can make the difference and be a factor that promotes customer loyalty or not [7].

For its part, the study "Factors influencing consumer purchasing decisions in food trucks" indicates that entrepreneurs should study the market to understand the gastronomic requirements demanded by individuals before making the decision to invest and start a business related to this type of activity, as with any other [8].

Also [9], in the work "Factors that determine demand and its usefulness in financial decision-making," it is mentioned that in some companies, the sales forecasting function is often found in the operations department and not in the sales department, in contrast to other companies, where this function is located in the sales department, causing a lack of objectivity in sales estimates because the same area generates the estimates, which may not be as objective.

Likewise, the study "Determining factors in the decision to purchase through virtual media among millennials" determines that the study's greatest contribution is based on planned behavior theory with respect to the identification of the main determining factors in the decision of Millennials in the city of Medellín to purchase through digital or virtual media. By focusing on Millennials' perceptions of the pros and cons of buying through virtual means, based on their experiences, it was determined that the reliability and convenience of being able to make purchases from anywhere, the speed with which they can complete the transaction, and the fact that the price of the product or service is often lower are relevant factors in their decision to buy online. As a result, the intention to buy online and the actual purchase are driven by satisfactory experiences or expectations being met. Therefore, consumers are influenced by the service received and by expectations being met, because combining these factors helps to satisfy the buyer's scarcity or desire [10].

Furthermore, [11] in the study "Determinants of beef demand in Mexico" mentions that it is advisable to perform nonlinear regression analyses

logarithmic models should be designed to describe the relationship between the factors determining demand and to estimate delays in sales, taking into account additional factors that explain demand behavior.

Likewise, in the other study, "Factors that determine supply and demand in the market," it is mentioned that the factors that determine demand are price, production costs, the prices of substitutes in production, market organization, and special factors [12].

Therefore, the importance of studying consumer behavior lies in the fact that it allows us not only to determine their needs and desires, but also to identify the factors that impact their market demand, which in turn impacts the sales volume achieved by organizations, which is sometimes low, becoming a problem for companies, such as those located in the city of Cardel, Veracruz, which face difficulties in achieving sales levels that reflect economic profits that favor their development and that of the region. This makes it advisable to study and identify possible determinants that influence consumers when making their purchasing choices and, ultimately, the local market demand, which generates reference information for the design of improvement strategies.

Therefore, the objectives of this research are: "To evaluate the level of market demand in the city of Cardel, Veracruz" and "To identify the quality level of the products or services offered by companies in the city of Cardel, Veracruz" in order to "Determine whether the quality of the product or service is a factor that impacts market demand in the city of Cardel, Veracruz."

The research objectives were derived from the research question: Is the quality of the product or service offered by companies a factor that impacts market demand in the city of Cardel, municipality of La Antigua, Veracruz? This gave rise to the hypothesis: "The quality of the product or service offered by companies is a factor that impacts market demand in the city of Cardel, municipality of La Antigua, Veracruz."

Finally, the study is expected to generate information that will help determine factors that impact market demand and provide reference information for companies, contributing to the creation of strategies that stimulate sales and promote the growth of companies in the area.

DEVELOPMENT

Methodology

This study, which is part of the project "Factors impacting market demand for business development," is considered quantitative in nature, as it

it analyzes phenomena for which data can be collected, quantified, and used for statistical studies and analysis.

The research began with a documentary investigation, in which information was collected and examined regarding the background of the subject of study, in order to determine the current level of knowledge, relationships, and differences in the subject of research interest [13]. This documentary exploration contributed to determining the state of the art and conceptual framework of the research.

Likewise, the study is considered descriptive in nature because it aims to determine the qualities, characteristics, and relevant aspects of the topic of interest [1], as well as the fact that the research is supported by fieldwork using the survey technique.

[13]; the research was carried out in the city of Cardel, municipality of La Antigua, Veracruz, where a survey was administered using a questionnaire as a data collection tool consisting of multiple-choice questions, rating scale questions, and open-ended questions, aimed at consumers in the city at a specific time, which is why the study is also considered cross-sectional "... at a specific time and in a specific population." [14].

For the study, a survey was administered to consumers in the aforementioned location, for which the data collection instrument designed was validated through a pilot test on a sample of consumers during the month of April 2024, who did not suggest any doubts, observations, or modifications during the application process and at the time of collection and tabulation of the data obtained from it.

With the validation of the instrument, the final application of the survey was carried out during the months of May, June, July, and August 2024, from 10:00 a.m. to 8:00 p.m., for greater ease and availability of time for consumers to respond to the questionnaire.

The questionnaire was administered to a random sample of 278 people living in Cardel. The sample size was defined using the formula for determining samples for finite populations, at a confidence level of 90% and a margin of error of 10%, taking as the size of the population of interest 15,801 inhabitants of Cardel aged 18 and over [15], as these are people with greater purchasing power and greater decision-making power.

The application of the formula determined a sample of 278 local consumers, to whom the survey was applied.

Subsequently, in September and October 2024, the information obtained in the survey was collected and tabulated for subsequent

graphical representation of the information using Excel and Statistica software. The analysis data generated contributed to the achievement of the objectives, answered the study question, and evaluated the hypothesis formulated in this study, as well as generating information, conclusions, and suggestions that serve as a reference for the design of strategies to stimulate sales in the city under study.

Results

The results of the questionnaire applied to consumers in the city of Cardel are as follows:

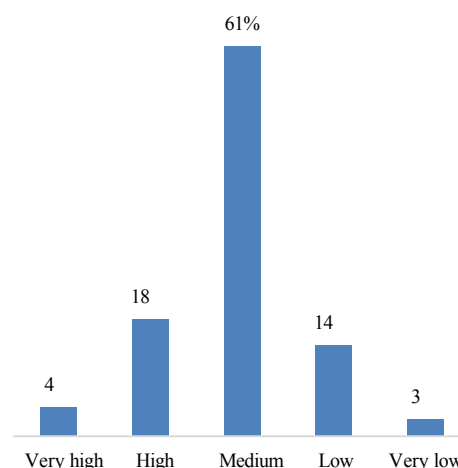


Figure 1. Assessment of the monthly income level of consumers in the city of Cardel, Ver.

Source: Own creation.

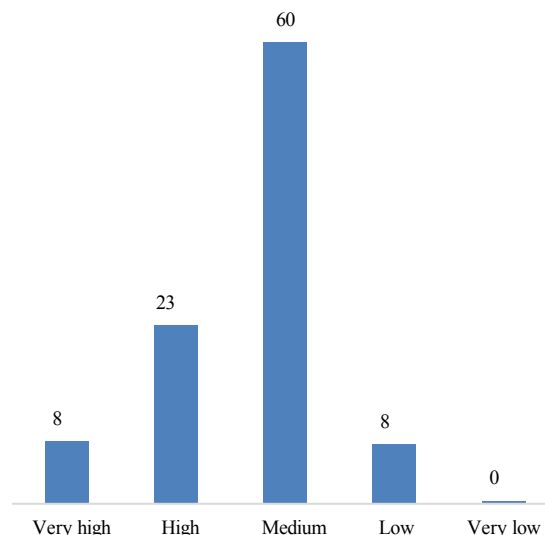


Figure 2. Assessment of market demand in the city of Cardel, Veracruz.

Source: Own creation.

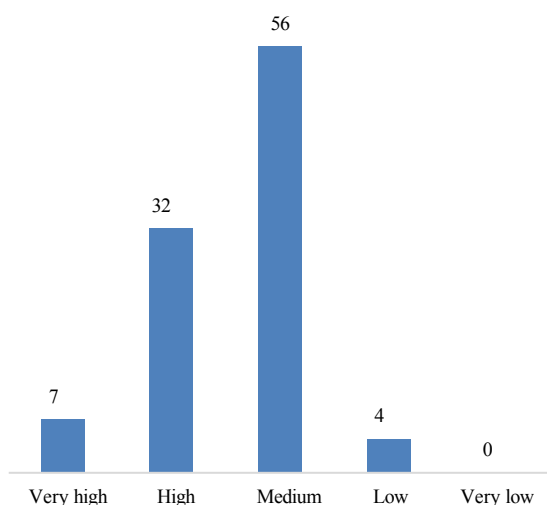


Figure 3. Product or service quality assessment.
Source: Own creation.

Finally, the impact of product or service quality on market demand in the city of Cardel was determined, as represented in the scatter plot in Figure 4:

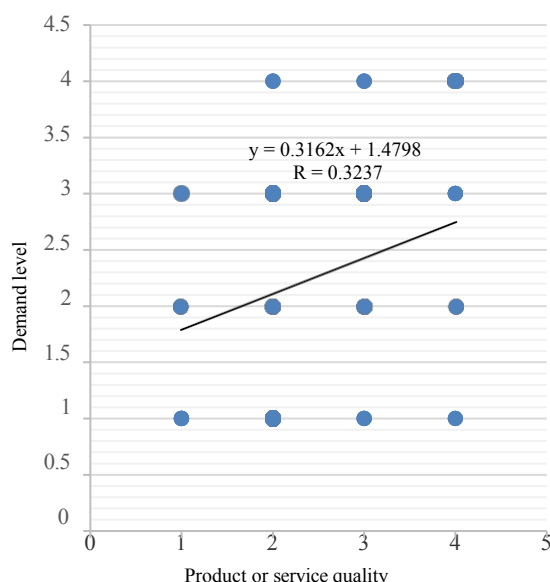


Figure 4. Impact of product or service quality on market demand.
Source: Own creation.

DISCUSSION AND ANALYSIS OF RESULTS

Based on the research, analysis of the results reveals the following observations:

Regarding the identification of consumer income in the city of Cardel, the study shows that 61% of

consumers have a medium income level, followed by 18% who have a high income level, 14% who have a low income level, and a smaller proportion of consumers with very high or very low incomes, as shown in Figure 1.

With regard to market demand in Cardel, 60% of respondents reported having an average level of consumption, 23% reported having a high level, and an equal percentage (8%) reported having a very high or low level, as shown in Figure 2.

Regarding the quality of the product or service offered by local organizations, 56% of consumers rated it as average, followed by 32% who perceived the quality level as high, 7% who considered it very high, and only 4% who rated it as low, as shown in Figure 3.

Likewise, in relation to the impact of product or service quality on market demand in the city, Figure 4 shows a simple positive linear correlation coefficient of 0.3237, which represents a very low positive correlation between the variables indicated in the diagram, showing that market demand depends very little on the quality of the product or service of local organizations. In other words, if the quality of the product or service increases, market demand will also increase slightly, and vice versa, which means that quality does have an impact on market demand and can therefore be considered a determining factor or factor of impact on demand.

However, statistically, since the relationship between the study variables is not significant, it is not advisable to perform a regression analysis that describes the weak relationship between the study variables and the estimation of market demand derived from quality behavior, as shown in Figure 4.

Based on the data and its analysis, we agree with [5] that "Market demand provides information about the goods and services required by a group of people in a given market, which is influenced by interests, needs, and trends. It is one of the main factors used by companies to set the prices of their products," and the quality of the product or service can also be a factor impacting market demand.

Likewise, according to [6], "demand factors or determinants can be classified into two groups: The main factors or determinants that drive demand are price, expectations, tastes and preferences, the prices of related goods and services, and income," since, although it is true that this research aims to determine whether the quality

of products or services is a factor that impacts market demand, and it is shown that if it is, the impact is low, so it cannot be considered among the main factors that have an impact.

With regard to [7], the work "Factors influencing purchasing decisions in the end consumer market" determines that one factor that frequently influences customer purchasing decisions is the attention and quality of service provided by the company. Customer service can make the difference and be a factor that promotes customer loyalty or not. It is agreed that, although it is true that the quality of the product or service is not one of the main factors impacting market demand, it is a determining factor or factor that consumers consider.

Furthermore, we agree with [11] in the study "Determinants of beef demand in Mexico," which mentions that it is advisable to perform nonlinear regression analyses to design logarithmic models that describe the relationship between the determinants of demand and allow for the estimation of sales delays, taking into account more factors that explain demand behavior, based on a previous correlation analysis, such as the one performed and represented in the scatter plot in Figure 4. Impact of product or service quality on market demand, which allows for the visual identification of the existence or absence of a correlation between two variables and their impact, which can be used to correlate each possible factor with market demand and determine the main factors or determinants thereof, followed by regression analysis describing the relationship between each factor and market demand in the city of Cardel.

Finally, we agree with [12] in what is indicated in the other "Factors that determine supply and demand in the market," where it is mentioned that the factors that determine demand are price, production costs, prices of substitutes in production, market organization, and special factors. However, based on the analysis of the data in this research, it is necessary to consider one more factor that impacts market demand: the quality of the product or service, derived from the results obtained.

CONCLUSIONS

The value of analyzing demand is unlimited. The mere fact of knowing which product will be in highest demand or which market will be most attractive for any organization will never cease to be important [16], which is why it is advisable to know the level of demand in organizations, as in the case of those studied in this research.

Based on the results obtained in the study, it can be concluded that the income level of consumers in the city of Cardel is mostly medium to high (79%), as shown in Figure 1, which may be influencing the level of market demand in the area, where demand is mostly medium to high (88%), thus demonstrating the achievement of the research objective "To evaluate the level of market demand in the city of Cardel, Veracruz" (Figure 2).

Furthermore, in relation to the quality of the product or service offered by organizations in the city, the majority of people rate it as medium to high (88%), as shown in Figure 3, which demonstrates the achievement of the objective of "Identifying the level of quality of the products or services offered by companies in the city of Cardel, Veracruz."

Regarding the impact of product or service quality on market demand, the scatter plot in Figure 4 shows a positive linear correlation coefficient of 0.3237, indicating a very low positive correlation between the factors studied. This means that product or service quality does impact market demand, Therefore, the objective of "Determining whether product or service quality is a factor that impacts market demand in the city of Cardel, Veracruz," is considered an impact and evidence factor, as is the research item that responds to and accepts the assumption or hypothesis that "The quality of the product or service offered by companies is an impact factor on market demand in the city of Cardel, municipality of La Antigua, Veracruz."

Therefore, it is determined that product quality reliability significantly influences the competitive advantage of the company ..., but there must be an improvement in product functionality assurance and product authentication [17], as product and/or service quality impacts consumer purchasing decisions and market demand.

Finally, although the hypothesis that product or service quality is a factor or determinant that impacts market demand is accepted, the reaction between the study variables is very low, so statistically it does not warrant a regression analysis describing the low relationship between the variables. and even if quality is determined to be an impact factor, it is suggested that more variables be studied to identify factors with a greater impact, on which companies can design strategies that favor greater stimulation of market demand and, therefore, their sales, contributing to business development in the area.

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