



Personal interaction and its effect on the purchase decision

La interacción personal y su efecto en la decisión de compra

Raúl Álvarez Guale

Universidad Politécnica Salesiana. Ecuador
ralvarezg@ups.edu.ec
orcid.org/0000-0002-3173-4926

Fabián Villacrés Beltrán

Universidad Politécnica Salesiana. Ecuador
fvillacres@ups.edu.ec
orcid.org/0000-0003-4779-5608

Abstract

This research attempts to answer the question about the level of relationship between personal interaction, based on the quality of service, and the purchase decision of consumers in supermarkets in the city of Guayaquil, raising overall objective determination of the relation of both variables. In addition other objectives that seek to determine the influence of this personal interaction with the process and buying behavior of consumers arise. By applying a 30-question survey and a correlational-explanatory analysis, we obtain Kendall's Tau b coefficients in the variables and study dimensions analyzed in the 4 most important comisariat chains by volume of sales in the city of Guayaquil (Ecuador), those are: Almacenes TIA, Mi Comisariato, Aki y Gran AKI, and the supermarket chains Supermaxi-Megamaxi. Important influences that describe a relationship between personal interaction with the purchase decision are shown and in the context of the process and buying behavior of consumers. The most relevant conclusions found in this study refer to the acceptance of the hypotheses, since in each of the cases studied, the p values of bilateral significance are less than 5%.

Resumen

La presente investigación trata de responder el cuestionamiento acerca del nivel de relación que existe entre la interacción personal, basada en la calidad del servicio, y la decisión de compra de los consumidores en los supermercados de la ciudad de Guayaquil, planteándose como objetivo general la determinación de la relación de ambas variables. Además se plantean otros objetivos que buscan determinar la influencia de esta interacción personal con el proceso y comportamiento de compra de los consumidores. Mediante la aplicación de una encuesta de 30 preguntas y de un análisis correlacional-explicativo se obtienen coeficientes de Tau b de Kendall en las variables y dimensiones de estudio analizados en las 4 cadenas de comisariatos más importantes por volumen de ventas de la ciudad de Guayaquil (Ecuador), siendo éstas: Almacenes TIA, Mi Comisariato, Aki y Gran AKI, y las cadenas de Supermaxi-Megamaxi. Se muestran influencias importantes que describen una relación entre la interacción personal con la decisión de compra y en el contexto del proceso y comportamiento de compra de los consumidores. Las conclusiones más relevantes encontradas en este estudio hacen referencia en la aceptación de las hipótesis planteadas, ya que en cada uno de los casos estudiados, los valores p de la significancia bilateral son inferiores al 5%.

Keywords | Palabras clave

Services, consumers, behavior, consumer behavior, quality, interaction.

Servicios, consumidor, comportamiento, comportamiento del consumidor, calidad, interacción.

Introduction

According to the 2010 Economic census, realized and presented by the Ecuadorian Institute of Statistics and Census in the year 2011, the commerce of wholesale and retail economic activity; repair of motor vehicles and motorcycles was one of the activities with major incidence of participation in the market with 29.7% of occupied staff, 16.1% in expense for remuneration, 20.9% to obtain financing, 30.31% on Internet usage, 18.89% in electricity costs and a 41.35% in total incomes. This activity is followed by the economic activity of Manufacturing industries with an incidence of participation in the market of 12.9% on occupied staff, 11.5% in expense for remuneration, 14.9% to obtain financing, 9.7% on Internet usage, 46.7% in electricity costs and a 27.7% in total incomes. Both activities are correlated with the incomes and expenses of energy, as well as eliminating every existing fake correlation (Álvarez-Guale, 2011).

In the Salesian Polytechnic University of Ecuador, several studies have been carried out focused on the elaboration of Models to evaluate the quality of the service in several economic activities. In the work "Creation and application of a model of evaluation of the service quality oriented to the repair of motor vehicles and motorcycles in the city of Guayaquil, applied to 6 vulcanizers of the Ximena Parish" (Alvarado-Contreras & Arteaga-Mendoza, 2013), the result presents a two-dimensional model where 42 cross-queries are performed.

This proposed model reduces from 119 initial questions to 42, representing the 98.8% of the total initial questions, namely, that the 42 questions represent significantly the 98.8% of the 119 questions. With the application of the model of the 42 questions, the economic activity had a value of the service quality of 6.33 out of 10 points.

Another proposal based on the same parameters, to determine the quality of the distribution service and sale of fuels, as it corresponds to the economic activity retailing of fuels for motor vehicles in the city of Guayaquil is that of Campoverde-Guerra & Pérez Beltrán (2013), in which proposes a model to evaluate the quality by performing 35 cross-queries being representative in a 90.8% from the total of questions, and resulting in the appraisal of the quality of the service in 6.17 points out of 10.

Another model analyzed gives way in how to evaluate the quality of the service in the economic activity of distribution of water and sewage, and in the same it is proposed to evaluate the mentioned activity by realizing 35 questions to the users with representativeness of the total of 91.6

of 119. In the same way this study is initiated with the same parameters from the preview ones and in its realized application it is obtained that the quality service value was of 7.36 out of 10 (Molina-Manzaba & Wolke-Varas, 2013).

On the other hand, to evaluate the quality of service in the economic activity of food services an evaluation model consisting of 24 questions is proposed. In the application of the proposed model, 399 customer surveys were obtained whom used the service and gave a value of 7.19 out of 10 points. The representation corresponded to the 95.3% of the total questions (Cedeño-Tomalá & Sánchez-Manzaba). Likewise, on the economic activity of teaching a model is also proposed to evaluate the service quality (Peña-Santamaría, 2013). This model constitutes the accomplishment of a survey of 45 questions to the students, obtaining a value of the service quality equal to 7.45 out of 10 points. It is worth to say that the 45 questions represent the 97.8% of the total of the 119 original questions.

Another field is also discussed on the economic activity of transport. The evaluation of service quality was 6.36 points out of a total of 10 out of 400 realized surveys (Sánchez-Alvarado & Arteaga-Chica, 2013). Likewise, in the economic activity corresponding to social assistance were also carried out studies as those of Jaramillo-Morales & Cruz-Pineda (2013). In the application of this model a value of the service quality of 8.84 was obtained over 10 points. In a similar way 400 surveys were done to obtain this result. A value of 7.9 out of 10 points was obtained from a survey model of 42 questions that represent the 90.5% of the total questions of the initial model (Pluas-Merchan & Navarro-Oyarvide, 2013).

Over the financial sector about 560 surveys were carried out from a survey model of 28 questions, which, when applied, obtained a total value of service quality of 8.73 (Alvarez-Guale, 2012).

All of these studies had as columns variables of 7 from the 8 P's of Service Marketing, namely, they adjusted to the initial model, describing the variables: Product, Price, Place, Promotion, People, Physical Environment and Process. When performing a correlational study based on the variables of ranks: Credibility, Security, Access, Communication, Customer understanding, tangibles, reliability, Response, Skill, Courtesy, Commitment and Leadership, Improvement Planning, Information and Analysis, Human Resources, Administration Processes, Customer and Market Focus, and Business Results, it is noticeable that there are existing common vari-

ables between each economic activity., and in each one of them a personal interaction is described as a key to the good performance of services.

Supermarkets, also known as self-services, are defined as societies, corporations or establishments that offer services and products with the purpose of covering several consumption needs such as food, clothing, household supplies, stationery, and are usually acquired daily by its clients. These establishments direct all their advertising efforts using tools such as marketing to attract customers' attention and to lead their installments and market segments, on which there is a growing competition for the highlighting of niches (López-Jiménez & Monroy-Antón, 2013).

In this sense, companies seek for new ways to capture the customer's attention by using different study tools such as Neuromarketing (Monge-Benito & Fernandez-Guerra, 2011). In countries with a high rate of development several studies have been carried out to understand consumer awareness and to somehow establish a way to prevail within the subconscious of consumers. Some of these studies indicate that there is a very reluctant influence of the perceived quality that consumers' attitudes change (Calvo-Porrall, Martínez-Fernández, & Juanatey-Boga, 2014).

In Ecuador exist several supermarket chains with large market share and positioned in the mind of consumers among them are: Megamaxi-Supermaxi, Mi Comisariato, Almacenes TIA and Akí-GranAki. Each one of them with marketing strategies directed to the different market segments and that generate a strong level of competition to get the most customers.

One of the few companies dedicated to the qualification of brands and quality, is made by the corporation Ekos (EKOS, 2013), showing a National Index of Customer Satisfaction (INSC/NICS) by modality of service hiring, name that was changed to Index EKOS of Customer Satisfaction (IESC/IECS) in 2014 (EKOS, 2014).

Materials and method

The general objective of the present investigation is to determine the effect that the personal interaction based on the quality of the service in correlation with the decision of purchase by the consumerist prospective of the supermarkets of the city of Guayaquil. In this way, the following specific objectives are proposed: (i) To show the relationship between personal interaction based on the service quality followed by the consumer purchasing process of the warehouse clubs of the city of Guayaquil; and (ii) to identify the relationship between the personal interaction based on

the quality of the service and the buying behavior in the consumers of the warehouse clubs of the city of Guayaquil.

Based on this context, as a starting hypothesis (Hg) it is argued that personal interaction based on the quality of service influences the buying decision from the supermarkets' consumers from the city of Guayaquil, from which two specific hypotheses come up: (H1) there is a relationship between the personal interaction based on the quality of the service and the purchase process of the consumers of the warehouse clubs of the city of Guayaquil; and (H2) personal interaction based on service quality influences consumer buying behavior in Guayaquil city's warehouse clubs.

A correlation-explanatory analysis was applied to accomplish with the objectives indicated above *ut supra*, because it is presumed to be a link between the study variables (Carrasco Díaz, 2013) and will lead to determine the existence and degree of positive or negative relationship between the personal interaction based on the quality of service and the decision to purchase from the consumers of the supermarkets in the city of Guayaquil.

The data collection instrument was based on the questionnaire technique, where each of the thirty questions are valued on a Likert scale from 1 to 5, where 1 evaluates the respondent's perception as "totally disagree", while the valuation of 5 is specified as "totally agree". For the validation of the questionnaire and the questions answered by the clients the Cronbach's alpha coefficient was used for the reliability analysis (Carrasco Díaz, 2013). All the questions that were asked were made according to the juxtaposition of the variables "Personal interaction" and "purchase decision", as detailed in Chart 1.

Chart 1. Matrix of operationalization of the study variables

Variable	Dimension	Indicators
<i>Personal Interaction based as service quality component</i>	Supermarkets' employees answer's capacity	-Supermarkets' colaborators' disponibilidad
	Establishment's and employee's security	-Confidence transmission
		-Ability to help

Variable	Dimension	Indicators
<i>Consumers' Purchase decision</i>	From the consumers: Analysis of the Purchasing Process	-Recognition of need
		-Product search complexity
		-Evaluation of the product making the purchase
		-Post-purchase analysis
	From the consumers: Purchasing behaviour	Complex
		Dissonance
		Variety
		Common purchases

Source: Own elaboration

For its part, the population of the study is made up of all those customers of the different supermarkets of the city of Guayaquil, chosen from the four most important chains according to sales volume. In this sense, up to January 2017 there were counted 55 known self-services.

To these groups that act as sampling objects the instrument of data collection will be applied to the consumers who have made some purchase of products in the aforementioned establishments immediately after having made the purchase. In the city of Guayaquil there is a universe of 1 252 550 economically active people as current and potential buyers who choose or could choose some of these centers of product collection. To determine the size of the sample, it will refer to the following formula:

$$n = \frac{Z_{\alpha/2}^2 NPQ}{e^2(N-1) + Z_{\alpha/2}^2 PQ} \quad (1)$$

Where the value of n is denoted as the size of the sample, which is the value to be obtained. In order to determine the probability or portion of objects or individuals with the study characteristics the variable P, and for this investigation will be used the value of P = 0.5, since it is the maximum value of variance for ignorance and not having done a Preliminary exploratory study. For its part Q refers to the probability or proportion of objects or individuals that do not have the characteristics of study, which would be for this study equal to 0.5.

Continuing with the explanation of obtaining the sample, it refers to the allowed error for the results, which in this investigation will allow margin of +/- 3%. α is the value of significance or the complement of the confidence level, which in the case study is raised in 5%, while $z\alpha / 2 = 1.96$ for the 95% confidence level, according to the normal distribution Chart.

In the city of Guayaquil, which is the city with the largest commercial and population movement in Ecuador, there are 55 supermarkets until January 2017, data considered as the total population or universe as objects of study, from (1), with $N = 55$:

$$n_s = \frac{(1.96)^2(55)(0.5)(.5)}{(0.03)^2(55 - 1) + (1.96)^2(0.5)(0.5)} = 52.35 \cong 53$$

Where n_s is the number of supermarkets that will be space samples, being equal to 53. As has been pointed out *ut supra*, there are a total of 1'252,550 economically active people in the city of Guayaquil, and all of them, who are buyers and possibly maybe potential buyers of the supermarkets, so it is necessary to obtain the total number of clients to be surveyed, from (1) and with $N = 1'252,550$, n_c would be:

$$n_c = \frac{(1.96)^2(1'252,550)(0.5)(0.5)}{(0.03)^2(1'252.550) + (1.96)^2(0.5)(0.5)} = 1066.26 \cong 1067$$

Thus, the effective sample size is determined by $n_c = 1067$ clients.

All the hypotheses raised in this research are proposed by the researchers and the existence of the relationship between variables and dimensions proposed in the matrix of operationalization of variables is assumed, so that the null hypothesis gives rise to the absence of correlation between these variables and dimensions. Each and every one of the hypotheses will be checked by the following rule: The null hypothesis is accepted if p-value of the bilateral significance is > that the level of significance α , which for this study is equal to 5% (Walpole, Raymond, Myers, & Keying, 2012). The p-value is calculated immediately with the statistical software Statistical Package for the Social Sciences, better known as IBM-SPSS. In addition, the Kendall Correlation Coefficient Tau_b will be calculated, since it is necessary to use a correlation coefficient that measures the relation existing in variables of ordinal character. The Kendall correlation coefficient is

pertinent to use for this type of research valued on the Likert scale (Badii, Guillen, Lugo Serrato, & Aguilar Garnica, 2014).

Results

In order to have reliable information on the questions answered by the customers who made a purchase in the supermarkets, it is necessary to carry out the reliability analysis of the information collection instrument in the first instance. For this research, Cronbach's alpha coefficient was used, in order to measure the reliability of the questionnaire. Through the SPSS statistical tool, the reliability analysis of the 30 questions was performed, resulting in a coefficient of 0.878, which demonstrates the reliability of the instrument.

Regarding the general objective of determining the effect of the personal interaction based on the service quality towards the purchase decision by the consumers of the supermarkets of the city of Guayaquil, the hypotheses of departure (H_0) that the Personal interaction based on the quality of service does not influence the decision of consumers to buy supermarkets in the city of Guayaquil.

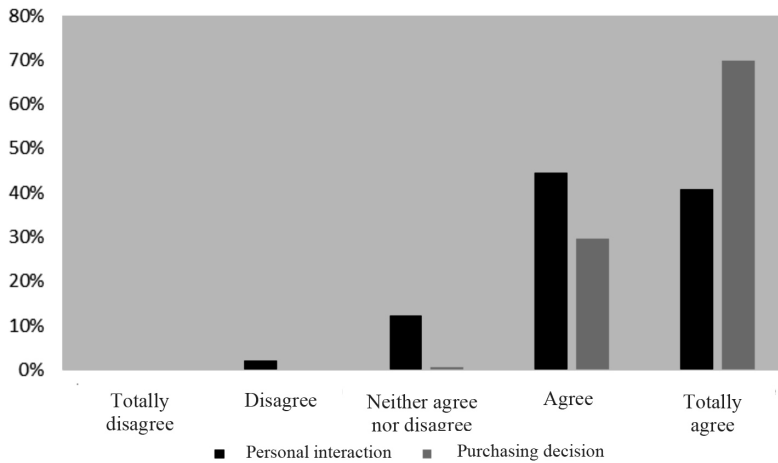
For this reason, the following hypothesis test (H_g) must be contrasted. Personal interaction based on quality of service influences consumers' purchasing decisions in supermarkets in the city of Guayaquil. The null hypothesis is the absence of any relation, denoted as: $\rho = 0$, and the research hypothesis where the relation between the personal interaction and the purchase decision, expressed as $\rho \neq 0$, is expressed. Simplyfing, the hypothesis tests would be:

$$H_0: \rho=0$$

$$H_1: \rho\neq 0$$

To contrast the hypothesis raised, it is necessary to have a descriptive idea of the percentage behavior of the data, reviewing figure 1 it can be observed that the percentages of the personal interaction have to increase, except for the last descriptor. If we analyze the purchase decision, the data has a rising trend. This might have some data match between these two variables.

Figure 1. Perception of personal interaction and purchase decision



Source: Own elaboration

Once the data behavior has been analyzed, it is necessary to check in the correlation Chart of Kendall's Tau b of the general hypothesis described in Chart 2. It is necessary to observe that the value of the coefficient of correlation is of 0.409, reason why it is possible to speculate on an average ratio between the correlation between personal interaction based on the quality of service component and consumers' purchasing decision. For the contracting of hypotheses it is necessary to refer to the methodology proposed in this research. From what is shown in Chart 3, the value p-value of the bilateral significance is equal to zero, therefore less than the value of significance $\alpha = 0.05$, and against this context, the null hypothesis is rejected, namely, that the personal interaction based on the quality of the service that is perceived in the chains of the warehouse clubs in the city of Guayaquil influences the decision of purchase of its consumers.

Chart 2. Kendall's general Tau b Correlation hypothesis

		Purchase decision
Personal Interaction	Correlation coefficient	0.409**
	p-value of bilateral significance	0
**. The correlation is significant in the level 0.01 (bilateral I).		

Source: Own elaboration

From the specific objective designed in the present investigation, which tries to evidence the relationship or the effect existing between the personal interaction of the employees based on the quality of the service with the process of purchase of the customers of the supermarkets, the following hypothesis of research was designed: H_0 : There is no relationship between the personal interaction based on the quality of the service and the process of buying consumers from the warehouse clubs of the city of Guayaquil. H_1 : There is a relationship between the personal interaction based on the quality of the service and the purchase process of the consumers of the warehouse clubs of the city of Guayaquil

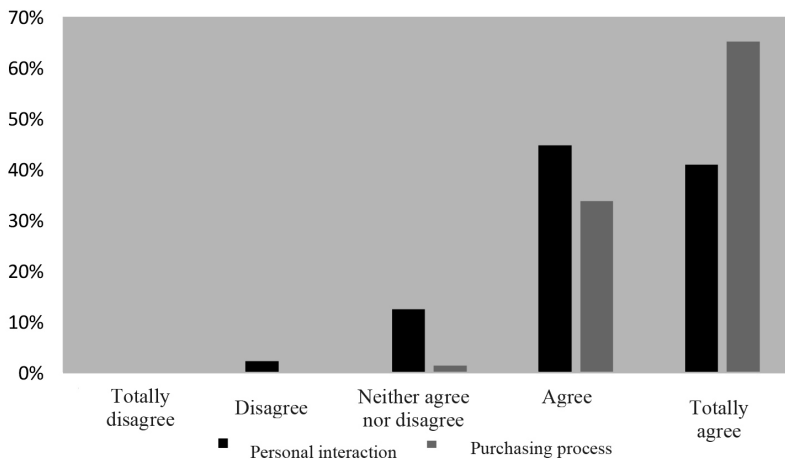
Similarly, the null hypothesis assures the absence of any relation, denoted as: $\rho = 0$ for the approach of this hypothesis, and the research hypothesis states that the relationship between the personal interaction and the purchasing process of the consumers of supermarkets, shown as $\rho \neq 0$. Clarifying in a summarized way:

$$H_0: \rho=0$$

$$H_1: \rho \neq 0$$

The drawn data in figure 2 describe on a percentage basis that the buying process also tends to increase with personal interaction. This would indicate a possible relation of both variables.

Figure 2. Perception of personal interaction and the buying process



Source: Own elaboration

Chart 3 shows that the correlation coefficient is 0.364, which would be understood that exist in a low correlation between personal interaction by employees and customers with the consumer buying process. Analyzing the value of bilateral significance, we can verify that this value is less than 5%, so we must reject the null hypothesis, that is to say there is a relationship between the personal interactions that clients perceive based on the service quality with the purchasing process of those same warehouse clubs.

Chart 3. Correlation of Tau b of Kendall specific hypothesis 1

		Purchasing Process
Personal Interaction	Correlation coefficient	0.364**
	p-value of bilateral significance	0
**. The correlation is significant in the level 0.01 (bilateral).		

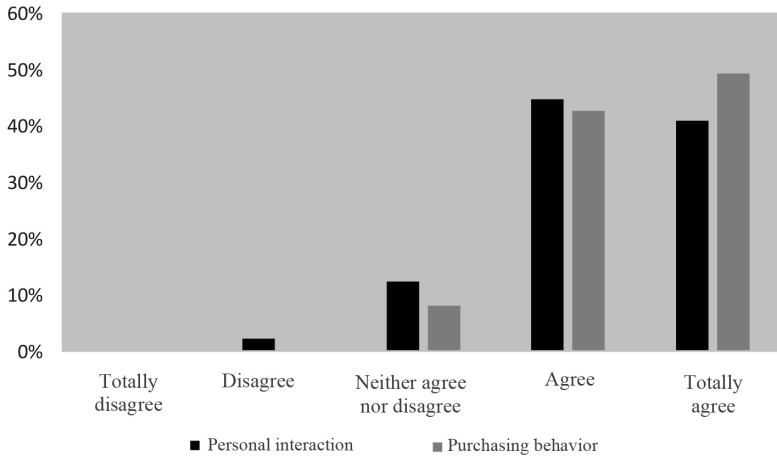
Source: Own elaboration

This research also aims to identify the relationship between the personal interactions based on the quality of the service perceived by the customers of the supermarkets of the city of Guayaquil, with their behavior of buying those same consumers. In a similar way and analyzed in the hypothesis testing, the following are considered: H_0 : Personal interaction based on service quality does not influence consumer buying behavior in Guayaquil city's warehouse clubs. H_2 : The personal interaction based on the quality of the service influences the buying behavior in the consumers of the warehouse clubs of the city of Guayaquil. Summarizing the hypothesis is contrasted:

$$H_0: \rho=0$$

$$H_1: \rho \neq 0$$

Observing Figure 3 it can be seen that personal interaction and buying behavior tend to increase in percentage according to the perception rating assessed by the customers surveyed.

Figure 3. Perception of personal interaction and buying behavior

Source: Own elaboration

To test the hypothesis, it was determined that the value of bilateral significance was less than 0.05, so that the null hypothesis should not be approved, namely, personal interaction based on service quality influences the buying behavior in the consumers of the warehouse clubs of the city of Guayaquil, with a correlation coefficient of Kendall's Tau b of 0.379.

Discussion and conclusions

In determining the effect that the personal interaction has based on the quality of the service towards the purchase decision by the consumers of the supermarkets of the city of Guayaquil by means of a hypothesis test contrasted by the correlation coefficient of Kendall's Tau b, concludes with a significance level of 5% that the relationship is positive and average, because the value of bilateral significance was less than 0.05 and the correlation coefficient equal to 0.409. This result is the most relevant of the research because it is statistically demonstrated that the interaction between employees and consumers can influence the purchasing decision of customers, and even studies have shown that consumer behavior is involved in the process shopping. (Rivas & Ildefonso-Grande, 2013).

The relationship between the personal interaction based on the quality of the service and the consumer buying process of the warehouse clubs

of the city of Guayaquil was also verified, as well as through a hypothesis test verified by the correlation coefficient of Kendall's Tau b, said coefficient was equal to 0.364. The hypothesis was contrasted with a p value of significance lower than 0.05. The existence of a positive and low relationship between personal interaction and the purchasing process is noted. The process of buying consumers based on the recognition of the need, the type of product search, the evaluation of purchase and the post purchase made by the customers show a complex process when making the purchase (Kotler, 2002). This process also involves the effect on varied complex behavior focused on several factors (Manero & Caraballo, 2009).

The relationship between the personal interaction based on the quality of the service and the buying behavior in the consumers of the warehouse clubs in the city of Guayaquil was justified throughout a hypothesis test contrasted by using the correlation coefficient of Kendall's Tau b it was observed a level of significance which was less than 5%, and with a correlation coefficient of 0.379. For this reason it can be inferred that its influence is positive and low. It can be suggested that personal interaction currently influences consumer purchasing behavior in a low way, which is even very different from consumers who do it without having a personal interaction with employees, (Arce-Urriza & Cebollada-Calvo, 2011), and purchase varies with the sensation experienced (Bernat-López & Pinto-Ruiz, 2001).

Since personal interaction is one of several components of service quality, research on other factors involved such as physical evidence, reliability and quality policies should be carried out to determine some type of diagram or structural equation that can visualize the effect that it has the components of the service quality in the decision of purchase of the consumers. Comparative models can be made with other economic activities based on services.

References

- Alvarado-Contreras, M. A., & Arteaga-Mendoza, G. M. (2013). Creación y aplicación de un modelo de evaluación de la calidad del servicio orientado a la reparación de vehículos automotores y motocicletas en la ciudad de Guayaquil, aplicada a 6 vulcanizadoras de la Parroquia Ximena. Guayaquil. (Tesis de Grado, Universidad Politécnica Salesiana). (<https://goo.gl/5HqXDI>) (2017-03-13).
- Álvarez-Guale, R. J. (2011). Estudio de correlación de las variables significativas analizadas en el censo económico 2010. *Retos*, 1(2), 19-37.

- JÁlvarez-Guale, R. J. (2012). Modelo de evaluación de la calidad para instituciones financieras obtenidas por medio de un análisis de correspondencia y de clúster. *Retos*, 2(3), 69-94.
- Arce-Urriza, M., & Cebollada-Calvo, J. J. (2011). A comparison of consumer behavior in online and offline channels: Price sensitivity, brand loyalty, and product characteristics effect. *CEDE*, 102-111.
- Badii, M. H., Guillen, A., Lugo Serrato, O. P., & Aguilar Garnica, J. J. (2014). Correlación No-Paramétrica y su aplicación en la investigaciones científca. *Daena*, 2(9), 31-40.
- Bernat-López, & Pinto-Ruiz . (2001). *La esencia del marketing*. Barcelona: Ediciones UPC.
- Calvo Porral, C., Martínez Fernández, V. A., & Juanatey Boga, O. (2014). Credibilidad de los medios de comunicación: análisis de la prensa diaria desde el comportamiento del consumidor. *Profesional de la Informacion*, 23(3), 300-310.
- Campoverde-Guerra, K. A., & Pérez-Beltrán, K. I. (2013). Creación y aplicación de un modelo de evaluación de la calidad del servicio de distribución y venta de combustibles en tres gasolineras de la parroquia Tarqui, según corresponda a la actividad económica 'venta al por menor de combustibles para automotores. (Tesis de Grado, Universidad Politécnica Salesiana). (<https://goo.gl/Hhm-BNp>) (2017-03-12).
- Carrasco-Díaz, S. (2013). *Metodología de la Investigación científica*. Lima: San Marcos.
- Cedeño-Tomalá, M. M., & Sánchez-Manzaba, M. T. (s.f.). Creación y Aplicación de un modelo de evaluación de la calidad del servicio orientado a 3 centros comerciales según correspondan a la actividad económica 'servicios de comida' en la ciudad de Guayaquil. (Tesis de Grado, Universidad Politécnica Salesiana). (<https://goo.gl/U2552u>) (2017-03-12).
- EKOS (2013). Obtenido de <http://www.ekosnegocios.com>
- _____ (02 de Enero de 2014). Recuperado el 14 de Enero de 2014, <http://www.ekosnegocios.com>
- Jaramillo-Morales, E. G., & Cruz-Pineda, S. P. (2013). Creación y aplicación de un modelo de evaluación de la calidad del servicio orientado a 5 instituciones privadas según correspondan a la actividad económica 'Asistencia social' en la ciudad de Guayaquil. (Tesis de Grado, Universidad Politécnica Salesiana). (<https://goo.gl/cCLCRf>) (2017-03-13).
- Kotler , P. (2002). *Dirección de Marketing*. México: Pearson Educación de México S.A.
- López-Jiménez, D., & Monroy-Antón, A. (2013). Quality e-commerce: Business commitments assumed for the consumer's benefit. *Innovar*, 23(47), 41-52.
- Manero, C. B., & Caraballo, N. M. (2009). Determining Factors of Consumer Varied Behaviour in the Store Set of Purchase. *Revista Europea de Dirección y Economía de la Empresa*, 18(3) 99-114.

- Molina-Manzaba, J. D., & Wolke-Varas, C. A. (2013). Creación y aplicación de un modelo de evaluación de la calidad del servicio orientado a la parroquia Tarqui según corresponda a la actividad económica Distribución de agua y alcantarillado en la ciudad de Guayaquil. (Tesis de Grado, Universidad Politécnica Salesiana). (<https://goo.gl/MUF93x>) (2017-03-13).
- Monge-Benito, S., & Fernández-Guerra, V. (2011). Neuromarketing: Tecnologías, Mercado y Retos. *Pensar la publicidad*, 5(2), 19-42.
- Peña-Santamaría, M. S. (2013). Creación y aplicación de un modelo de evaluación de la calidad del servicio orientado a 5 colegios privados según corresponda la actividad económica 'enseñanza, en la ciudad de Guayaquil. (Tesis de Grado, Universidad Politécnica Salesiana). (<https://goo.gl/YLWD4m>) (2017-03-13).
- Pluas-Merchan, I. S., & Navarro-Oyarvide, S. L. (2013). Creación y aplicación de un modelo de evaluación de la calidad del servicio orientado a 5 instituciones públicas según corresponda a la actividad económica: 'actividades de atención humana' en la ciudad de Guayaquil. (Tesis de Grado, Universidad Politécnica Salesiana). (<https://goo.gl/7CLoJG>) (2017-03-12).
- Rivas, X. A., & Ildefonso-Grande, E. (2013). *Comportamiento del consumidor*. Madrid: ESIC.
- Sánchez-Alvarado, O. A., & Arteaga-Chica, H. V. (2013). Creación y aplicación de un modelo de evaluación de la calidad del servicio orientado al transporte ambulatorio privado según correspondan a la actividad económica 'transporte' aplicada a los taxis que operan en la parroquia Ximena de la ciudad de Guayaquil. (Tesis de Grado, Universidad Politécnica Salesiana). (<https://goo.gl/VJ7wlj>) (2017-03-12).
- Walpole, R., Raymond, M., Myers, S., & Keying, Y. (2012). *Probabilidad y Estadística para Ingeniería y Ciencias*. México: Pearson.