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# Quality of Service in Small and Medium Enterprises

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**Abstract.** No matter the segment, enterprises are adding value to their final product through services. A service of quality can make the difference in the market. The purpose of this study is to determine whether the dimensions of SERVQUAL are adequate to the characteristics of the small business tourism segment in Brazil, whose customers are small and medium enterprises (SMEs). The research used a descriptive approach with a quantitative procedure, and the data was collected in two groups of customers. The conclusion was that the SERVQUAL questionnaire is an appropriate tool for the characteristics of SMEs and assesses the punctual quality of service. Besides, the inclusion of three questions of the SERVPERF questionnaire helped to identify whether the quality of service was converted into customer satisfaction or not. Additional research was suggested to identify why the service was considered of quality.

**Keywords:** Small and Medium Enterprises, · Service ·Quality, SERVQUAL

## 1 Introduction

Small and medium enterprises (SMEs) represent about 99% of the active companies in the world and are the main source of employment. Also, it is appropriate to highlight the European Union with 66.7% of the formal employment, and Brazil with 51.6% of jobs generated in the private sector. Among the Brazilian SMEs, the service sector is the second with the major number of companies, representing 33% of the market, second only to commerce. On the other hand, the tourism sector stands out representing in total contribution, considering direct and indirect activities, 9.3% of Brazil's GDP [1, 2, 3, 4, 5]. The tourism sector includes a variety of companies, such as lodging and food services, transportation companies and travel agencies, among others. This article deals with the quality of service of small travel agencies.

Service is an activity in which the end result is not a physical product; it is directed to meet consumer needs. Some features of services stand out, such as: intangibility, simultaneity, heterogeneity and perishability [6]. Given these characteristics, a different quality measurement tool used for the assessment of product quality is required.

The quality of service is directly related to the customer's expectation. It is a combination of what the client expected, what he found during the provision of the service

and how much he was satisfied after the execution of the activity. If the initial expectation was exceeded, the service is considered of a good quality [7].

However, understanding how the customer assesses the quality of service demands specific techniques. Several tools can be presented, such as Grönroos Model, SERVQUAL Model, Perception-Expectancy Model, Evaluation of Service and Value Model, SERVPERF Model, Ideal Performance Model, among others [8].

Among the hitherto models presented, SERVQUAL arises as a widespread questionnaire in the academic work, because of its ease application and diagnosis ability [9]. This questionnaire aims to measure the customer's expectations and perceptions, and should be adapted according to the main business attributes and activities.

Given the importance that the SMEs have on the economy in general, and in the tourism sector in Brazil, this article is justified by the need to developing tools to evaluate the service quality of small companies. Due to the difficulty of empirical research in small service companies in Brazil, it draws attention the low number of articles on the subject, opening, therefore, a gap for studies.

The main objective of this work is to verify whether the dimensions of the SERVQUAL tool are adequate or enough to evaluate the quality of service of a small size enterprise, that belongs to the tourism segment, whose main customers are other small and medium enterprises (SMEs).

## **2 Literature Review**

### **2.1 Service Quality**

To understand the quality formation of service is crucial for an enterprise to achieve competitive advantage. Thus, a service provided with quality makes the customers more satisfied, resulting in loyalty to the company, positive divulgation for other costumers, new orders and consolidation in the market [10, 11, 12].

The improving of the service quality is linked to the enterprise's ability to evaluate intangible results, i.e., the customers' subjective judgment about the service. In this case, subjective means that the evaluation is influenced by prior experiences and personal needs. Specifically in the tourism sector, quality refers to the attributes of the service provided by a travel agent [13].

Indicators, such as quality level, are essential for the planning and control of internal processes of the enterprises. A clear reading of the indicators allows organizations to develop strategies and identify issues that will directly impact on their results [14]. For that reason, many scholars focus their efforts on developing tools that would allow measuring the quality of services provided. It is noteworthy that the SERVQUAL model, despite some criticism about its efficiency, is used as a basis for the development of other models [8].

The SERVQUAL questionnaire measures customers' expectation and perception of the service in 5 quality dimensions, Reliability, Promptness, Safety, Empathy and Tangible Aspects [12], [15], [16]. The same questionnaire captures the managers'

vision of the quality dimensions, acknowledging the gap between managers' and clients' vision.

There are some critics of SERVQUAL model and Cronin and Taylor developed an alternative model, SERVPERF. This model considers the customer's satisfaction a better metric to forecast the desire for a new purchase, improving then the SERVQUAL questionnaire to measure the customer's satisfaction [17].

For this setting, the authors used the SERVQUAL questionnaire and three additional questions designed to evaluate the feelings toward the services provider: customer's satisfaction, total quality of services and the repurchase intention.

The SERVQUAL has become one of the most used models to measure service quality, and it has been adapted to the various application sectors, such as: retail companies, airlines, restaurants, hotels, online education, hospitals, internet services, banks, supply chain, public service, among others [12], [18].

Despite being widely used, including the tourism sector, in the literature for this study no articles with the application of the SERVQUAL in travel agencies were found, which opens a gap that this study aims to investigate.

### **3 Methodology**

This study aims to identify the existence of correlations among variables within a population, analyzing a given phenomenon and trying to relate it to another. Fernandes and Gomes define that the descriptive research mode aims to "describe, analyze or verify relationships between facts and phenomena. That is, be aware of what, with whom, how and what is the intensity of the phenomenon under study" [19].

Data collection was performed at a specific moment, so the search is considered a cross-section in time and uses structured questionnaires with closed questions, in order to identify the quality of service purchased by a particular group of SMEs.

#### **3.1 Population and sample**

The survey was conducted with SMEs who participated in International Missions carried out by a small travel agency, located in São Paulo and specialized in International Business Tourism for SMEs. We interviewed 29 entrepreneurs, being: 10 small and medium printing industries, from the Federal District, capital of Brazil, who participated in an International Mission to SHANGHAI / DUBAI, and 19 small and medium enterprises from different economic sectors and from different regions of Brazil who participated in an International Mission to USA / Panama.

#### **3.2 Data collection**

We adapted the SERVQUAL questionnaire and tested it with one of the travel agency owners. Some questions were revised to reflect the reality of the tourism sector and, in order to enlarge the possibilities of analysis, three additional questions of the SERVPERF were included.

## 4 Results

The average notes of the expectation and the average notes of the performance by each evaluated dimension were calculated. The differences between expectation and performance generated the column of GAPS presented in three tables, one for each traveling group, and one consolidating the results of both groups. The event's profile of the enterprises that participated was used to analyze the results.

The first result shown in Table 1 refers to the first group of entrepreneurs. This group, composed of small and medium enterprises, attended the world's largest retail trade fair, the National Retail Federation - NRF, which features lectures discussing trends in retail market, and went to technical visits to the local market. In Panama the participants visited the Colon Zone, place directed to make imports in small quantities and a great mix. The group's goal was to meet the trends of the retail market.

**Table 1.** Results of the search of the group USA / Panama (Source: Author).

EXPECTANCY BEFORE THE TRIP	Avg.	PERFORMANCE AFTER THE TRIP	Avg.	GAP
The staff must be well-dressed.	6.31	The staff was well-dressed.	6.63	0.32
The enterprise has to be reliable.	6.89	The enterprise was reliable.	7	0.11
The enterprise has to generate business opportunities.	6.47	The enterprise generated business opportunities.	6.63	0.16
The enterprise has to fulfill the activities and schedules promised in the travel program.	6.53	The enterprise fulfilled the activities and schedules promised in the travel program.	6.95	0.42
The enterprise must inform to the customers the details of the activities that will be performed in the travel program.	6.74	The enterprise informed to the customers the details of the activities that were performed in the travel program.	6.89	0.15
The staff must always be available to help customers.	6.63	The staff was always available to help customers.	6.74	0.11
The customer has to feel safe to travel with the staff.	6.68	The customer felt safe to travel with the staff.	6.95	0.27
The staff has to be polite.	6.68	The staff was polite.	6.84	0.16
The enterprise will give individual attention to the customers.	6.15	The enterprise gave individual attention to the customers.	6.73	0.58
The staff will give personal attention to the customers	6.16	The staff gave personal attention to the customers.	6.68	0.52
It was expected that the staff knew what the customer's needs were.	6.0	The staff knew what the customer's needs were.	5.95	-0.05
In the coming years my use of the enterprise will be:				6.21
The service of the enterprise is:				6.58
My feelings about the enterprise's services can best be described as:				6.58

Analyzing the results of this group, the highlights are: (a) the highest average expectation column (6.89) was in the topic "The enterprise has to be reliable"; (b) the lowest average expectation column (6.0) was in the topic "It was expected that the staff knew what the customer's needs were; (c) "the largest GAP (0.58) was between the topics" The enterprise will give individual attention to the customers" and "The enterprise gave individual attention to the customers "; (d) the lowest GAP (-0.05 ) was between the topics "It was expected that the enterprise's staff knew what the

customer's needs were" and "The staff knew what the customer's needs were". The last three questions in the questionnaire evaluating the enterprise overall showed a very positive evaluation (6.21, 6.58 and 6.58), even having a dimension with a negative GAP.

The second result, shown in Table 2, refers to entrepreneurs who participated in the International Mission Shanghai / Dubai. This group was composed of small and medium enterprises of the printing sector, which participated in a specific fair of the graphic sector in Shanghai, and went to technical visits to specialized factories in printing equipment. In Dubai technical visits to the local market and to the embassy were made to understand the opportunities for the sector in this country.

**Table 2.** Results of the research of the group Shanghai/Dubai (Source: Autor).

EXPECTANCY BEFORE THE TRIP	Avg.	PERFORMANCE AFTER THE TRIP	Avg.	GAP
The staff must be well-dressed.	4.8	The staff was well-dressed.	6.3	1.5
The enterprise has to be reliable.	6.2	The enterprise was reliable.	6.5	0.3
The enterprise has to generate business opportunities.	5.2	The enterprise generated business opportunities.	5.5	0.3
The enterprise has to fulfill the activities and schedules promised in the travel program.	5.9	The enterprise fulfilled the activities and schedules promised in the travel program.	6.5	0.6
The enterprise must inform to the customers the details of the activities that will be performed in the travel program.	6.1	The enterprise informed to the customers the details of the activities that were performed in the travel program.	6.5	0.4
The staff must always be available to help the customers.	5.6	The staff was always available to help the customers.	6.1	0.5
The customer has to feel safe to travel with the staff.	6.1	The customer felt safe to travel with the staff.	6.4	0.3
The staff has to be polite.	6.5	The staff was polite.	6.7	0.2
The enterprise will give individual attention to the customers.	5.1	The enterprise gave individual attention to the customers.	6.0	0.9
The staff will give personal attention to the customers.	5.4	The staff gave personal attention to the customers.	6.2	0.8
It was expected that the staff knew what the customer's needs were.	3.9	The staff knew what the customer's needs were.	4.8	0.9
In the coming years my use of the enterprise will be:			6.1	
The service of the enterprise is:			6.4	
My feelings about the enterprise's services can best be described as:			6.3	

The main results of this group were: (a) the highest average expectation column (6.5) was in the topic "The staff has to be polite"; (b) the lowest average expectation column (3.9) was in the topic "It was expected that the staff knew what the customer's needs were"; (c) the largest GAP with an average of 1.5 was in the topic "The staff must be well dressed" and "The staff was well dressed "; (d) the lowest GAP with an average of 0.02 was in the topics "The staff has to be polite" and "The staff was polite". The last three questions in the questionnaire evaluating the enterprise overall showed a very positive evaluation (6.1, 6.4 and 6.3).

The two groups were consolidated in Table 3, for general analysis.

**Table 3.** Results of the two research group consolidated (Source: Author).

EXPECTANCY BEFORE THE TRIP	Avg.	PERFORMANCE AFTER THE TRIP	Avg.	GAP
The staff must be well-dressed.	5.79	The staff was well-dressed.	6.52	0.73
The enterprise has to be reliable.	6.65	The enterprise was reliable.	6.83	0.18
The enterprise has to generate business opportunities.	6.03	The enterprise generated business opportunities.	6.24	0.21
The enterprise has to fulfill the activities and schedules promised in the travel program.	6.31	The enterprise fulfilled the activities and schedules promised in the travel program.	6.79	0.48
The enterprise must inform to the customers details of the activities that will be performed in the travel program.	6.52	The enterprise informed to the customers the details of the activities that were performed in the travel program.	6.76	0.24
The staff must always be available to help customers.	6.27	The staff was always available to help customers.	6.52	0.25
The customer has to feel safe to travel with the staff.	6.52	The customer felt safe to travel with the staff.	6.76	0.24
The staff has to be polite.	6.62	The staff was polite.	6.79	0.17
The enterprise will give individual attention to the customers.	5.79	The enterprise gave individual attention to the customers.	6.48	0.69
The staff will give personal attention to the customers.	5.9	The staff gave personal attention to the customers.	6.52	0.62
It was expected that the staff knew what the customer's needs were.	5.27	The staff knew what the customer's needs were.	5.55	0.28
In the coming years my use of the enterprise will be:			6.17	
The service of the enterprise is:			6.52	
My feelings about the enterprise's services can best be described as:			6.48	

The main results of the consolidated groups in Table 3 were: (a) the highest average expectation was in the column (6.65) in the topic "The enterprise has to be reliable"; (b) the lowest average expectation was in the column (5.27) in the topic "It was expected that the staff knew what the customer's needs were"; (c) the biggest GAP at an average of 0.73 was in the topics "The staff must be well-dressed" and "The staff was well-dressed "; (d) the lowest GAP at an average of 0, 17 was in the topic "The staff has to be polite" and "The staff was polite". The last three questions in the questionnaire evaluating the company overall showed a very positive evaluation (6.17, 6.52 and 6.48).

The topic with the greatest positive GAP was about the enterprise's staff way of dressing. It demonstrates the impact of the formalization in attendance, as in the agency all the staff works with suit and tie, which is not common in SMEs in Brazil.

The highest average expectation was placed on "confidence". It can be explained by the characteristic of SMEs in Brazil, in which the owners often centralize decisions and have difficulty to deliver a new project in other company's hands. These two issues arise a question about the understanding of what SMEs value in the service, since the organization emphasizes tangibles and customers seem to want confidence.

Open interviews with the partners of the company and with the business customers were made. The partners said that the most important topics were about (1) "the staff knowing what the customer's needs were" and (2) "the enterprise generating business opportunities". From the two topics, the first stands out as the topic with lower avera-

ge expectation among the SMEs, which is an antagonistic result than expected; and the second topic did not have an average or relevant GAP. The clients acknowledged they had low expectations about the ability of a supplier to understand their problems.

The individual analysis per group has some specific features that are hidden in the consolidated analysis. This observation is made clear in the topic about "the staff knowing what the customer's needs were", in which the two groups evaluated the service in different ways.

Another topic that drew attention was the positive evaluation in the general context of the services quality provided, 6.52 in 7.0 points. Despite some quality flaws, the entrepreneurs were satisfied with the services provided.

## **5 Conclusion**

According to the data analysis, some results will be used as the main connecting thread of this research in order to draw the conclusions of this study.

- The individual analysis of the results brings specific characteristics of the groups, which is lost when doing a consolidated analysis of all customers entrepreneurs;
- \* Some characteristics of the SMEs in Brazil, such as trust, can be observed in the results
- Considering that the travel agency specialized in developing missions to internationalize SME's; the specific topics on business should have a relevant positive evaluation, which did not happen, but the result of the three last questions that assess the general quality of the service offered had a very positive result.

Thus, conclude that the SERVQUAL questionnaire was of value to determine characteristics of SMEs and the punctual quality of the service provided. The inclusion of the three questions of the SERVPERF questionnaire identified in general, whether the punctual quality of the service was converted or not in customers' satisfaction.

Analyzing the results, one can identify the necessity of a variable in the tool that shows the main reason that allowed the service of being considered of good quality, and the variable that best suits this purpose is related to "learning". This variable explains why business man were satisfied, even without closing deals, the essential objective of the trip, and would like to travel with the agency again. This conclusion was taken based on three topics: 1. The main purpose of the trips was to develop the internationalization of the enterprise; 2. The SMEs did not mark as relevant the expectation in topics related to business; 3. The participating enterprises of the missions had no experience with the process of internationalization.

This conclusion makes it clear that small and medium enterprises that would like to internationalize need more than the final result, import/export, they also have the necessity of filling out deficiencies of new knowledge, which opens a gap in the study focused on SME.

## **References**

1. SEBRAE/DIEESE. Anuário do trabalho na micro e pequena empresa. Sebrae/Dieese, 5th. edition, Brasília-DF (2012)



2. Hoof, Bart Van; Lyon, Thomar P. Cleaner production in small firms taking part in Mexico's sustainable supplier program. *Journal of Cleaner Production*, vol. 41, pp. 270-282 (2013)
3. Sadaba, Sara Marcelino; Ezcurdia, Amaya Perez; Lazcano, Angel M. Echeverria; Villanueva, Pedro. Project risk management methodology for small firms. *International Journal of Project Management*, vol. 32, pp. 327-340 (2014)
4. SEBRAE. Boletim estudos e pesquisas. Sebrae/UGE, n. 6 (Jan./Feb., 2014)
5. MINISTERIO DO TURISMO. Retrieved from [http://www.turismo.gov.br/turismo/noticias/todas\\_noticias/20140417-1.html](http://www.turismo.gov.br/turismo/noticias/todas_noticias/20140417-1.html). Access: 26 Dec. 2014 (2014)
6. Almeida, Leandro; Miguel, Paulo Couchick; Silva, Marcia Terra. Uma revisão da literatura sobre "servitização": bases para a proposição de um modelo conceitual de decisão. *Exacta*, São Paulo, vol. 9, nr. 3, pp. 339-354 (2011)
7. Heckert, Cristiano Rocha; Silva, Márcia Terra. Qualidade de serviços nas organizações do terceiro setor. *Produção*, vol. 18, nr. 2, pp. 319-330 (2008)
8. Miguel, Paulo Augusto Couchick; Salomi, Gilberto Eid. Uma revisão dos modelos para medição da qualidade em serviços. *Revista Produção*, vol. 14, nr. 1 (2004)
9. Berry, Leonardo L.; Parasuraman, A.; Zeithaml, Valarie A. Um modelo conceitual de qualidade de serviços e suas implicações para a pesquisa no future. *RAE – Revista de Administração de Empresas*. vol. 46, nr. 4, , pp. 96-107 (Oct./Dec., 2006)
10. Carvalho, Jose Ribamar Marques; Sa, Ana Karina Braga. Avaliando indicadores de desempenho não-financeiro no setor de serviço sob a perspectiva do cliente: o caso de uma agencia bancaria. *Qualit@s Revista Eletrônica*, vol.1, nr.1, (2011)
11. Souza, C.H.M. Uma ferramenta para avaliação da qualidade em serviços – a janela do cliente. *Perspectivas*, vol.5, nr.1, pp. 65-79 (2008)
12. Kirchner; Joana Benetti; Boaro, Vinicius; Souza, Adriano Mendonça. Avaliação da qualidade de serviços de uma empresa agrícola. *G&DR – Revista Brasileira de Gestão e Desenvolvimento Regional*, vol. 8, nr.1, pp. 109-124 (Jan./Apr., 2012)
13. Lee, Jin-Soo; Lee, Choong-Ki; Park, Chang-Kyu. Developing and validating a multidimensional quality scale for mega-events. *International Journal of Hospitality Management*, vol. 43, pp. 121-131 (2014)
14. Hora, Henrique Rego Monteiro; Monteiro, Gina Torres Rego; Arica, Jose. Confiabilidade em questionários para qualidade: Um estudo com o coeficiente alfa de Cronbach. *Produto & Produção*, vol.11, nr.2, pp. 85-103 (Jun., 2010)
15. Emmendoerfer, M.L.; Silva, L.C.A. Terceirização e Parceirização de Serviços em Saneamento em Minas Gerais: Um Estudo Teórico - Empírico. *Revista Brasileira de Gestão e Desenvolvimento Regional*, vol.5, nr.2, pp.139-162 (2009)
16. Parasuraman, A.; Zeithaml V. A.; Berry, L. L. Servqual: A multiple- item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, vol. 64, nr. 1, pp. 12-40, (1988)
17. Cronin, J.; Taylor, S. Measuring service quality: A reexamination and extension. *Journal of Marketing*, vol. 56, nr. 3, pp. 55-68 (1992)
18. Liu, Ru; Cui, Lixin; Zeng, Guangfeng; WU, Hongyan; Wang, Chengjie; Yan, Shan; Yan, Bingyan. Applying the fuzzy SERVQUAL method to measure the service quality in certification & inspection industry. *Applied Soft Computing*, (2014).
19. Fernandes, Luciane Alves; Gomes, Jose Mario Matsumura Gomes. Relatórios de pesquisa nas ciências sociais: características e modalidades de investigação. *ConTexto*, Porto Alegre, vol. 3, nr. 4, 2003.