

# Methodology for assessing and improving the quality of services based on a process approach. Assessment and improvement of the process of customer service in a restaurant

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## Abstract

The aim of this article is to present the methodology for assessing and improving the quality of service in a process approach, using the method of the process description and assessment typical of service organizations: Service Blueprinting and Walk Through Audit and demonstrating its practical application on the example of the service process of a real service organization – the customer service process in one of Wrocław's restaurants.

The procedure and the advantages, and limitations of the methodology were demonstrated. Compared with other methods of assessing the quality of services, its advantages are related to the examination of the entire service process and quality assessment of each of its stages. The main disadvantages result from the limitations and drawbacks of surveys used in this methodology.

Practical application of the methodology of assessing the quality of service was shown on the example of the assessment process of customer service in the restaurant (located in the centre of Wrocław). A literature review of methods of assessing the quality of services and data collected among customers and employees of the analysed organizations was used.

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It was found that it helps to identify the stages in the process of customer service in which the expectations of customers are not met and to determine the extent of improvement actions.

**Paper type:** conceptual article/case study

**Keywords:** quality, service, method of assessing quality of services, assessment of services, process, process improvement

## Introduction

Quality of service is a key factor determining the position of the organization in the modern world. Increased competition in many areas of the service results in the fact that only organizations with the highest level of quality can remain on the market and grow their business. The quality of service should be understood as meeting the needs and expectations of customers. In order to achieve the expected level of quality, organizations must know their customers and their requirements, plan the service process, and continuously monitor and evaluate the implementation of this process. So far many methods have been developed for assessing the quality of services. The ones most commonly used in business practice focus on the evaluation of the result of the process (e.g. SERVQUAL, SERVPERF, CSI). Few methods try to assess the quality of all stages of the service from the point of view of the process in which the customer is directly involved. Those few include Mystery Shopping (Douglas, 2015), Walk Through Audit (WTA) (Fitzsimmons & Fitzsimmons, 2008), Critical Incident Technique (CIT) (Gremler, 2004) and its varieties, such as, Sequential Incident Technique (SIT) (Stauss & Weinlich, 1997).

The aim of this article is to present the methodology for assessing the quality of service in a process approach, using the method of the process description and assessment typical of service organizations: Service Blueprinting and Walk Through Audit. It was decided to show its practical application in the evaluation of the service process of a service organization – the customer service process of one of Wrocław's restaurant.

### 1. The proposed methodology of evaluation and improvement of quality of service

The proposed methodology for assessing the quality of services has been developed based on the general methodology of assessment of services used in many organizations and the existing methods of description and assessment of the service process. There are six steps that are characterized in Table 1.

Table 1 *Characteristics of individual stages of the proposed methodology for assessing the quality of services*

Stage	Characteristics of stage
Description of service process	Determining activities and resources in the process of customer service and resources involved in the process (technical aspect of the service) according to the Service Blueprinting method.
Establishing criteria for assessing the quality of each stage of the process	The assessment criteria established for each stage of the process, in which the customer is directly involved based on the information included in the Service Blueprinting diagram. One should take into account the elements belonging to the service package: <ul style="list-style-type: none"> <li>– materiality of service,</li> <li>– materials used as part of service,</li> <li>– information (reliability, timeliness, availability, accuracy),</li> <li>– explicit part of the service associated with the obtained results of the actions taken in the process,</li> <li>– implicit part of the service associated with subjective feelings (i.e. behavioural characteristics).</li> </ul>
Preparation of the questionnaire for surveys	The questionnaire includes questions for each stage of the service process (assessment of the service package on the five-point Likert scale).
Preparation and conduction of survey	Surveys among customers and employees who directly serve them. Measurement in the direct form, by phone or e-mail.
Description and analysis of test results and formulating conclusions	Data obtained from customers and staff serving them are analysed and compared. Critical quality attributes are analysed in terms of causes and effects, and conclusions relating to the improvement of the service process are formulated.
Development of a new project of a service process.	Conclusions from the analysis are the basis for formulating suggestions for the implementation of changes (improvements) in the process. In the case of changes in the structure, a newly designed service process can be represented using the Service Blueprinting diagram.

The presented methodology uses two methods: Service Blueprinting and Walk Through Audit. Service Blueprinting is a graphical method used for service process visualization (Shostack, 1984). The method involves the presentation of all the activities in the service process taking into account the division into actions visible and invisible to the customer (but affecting the quality of the activities visible to the customer).

Another method used in the presented methodology – Walk Through Audit – aims at the assessment of customer satisfaction with the implementation of individual stages of the service in which the customer participates directly. Its objective is to carry out a systematic evaluation of the customer experience regarding the whole process from beginning to end by measuring the customer perception regarding the efficiency of each stage of delivering the service (Lai-Ping Leong Koljonen & Reid, 2000, p. 35). The method is based on the assumption that the system

of measuring the quality of services should allow for evaluating customer expectations, and ideas about customer service are shaped during its performance (service process). Therefore, a meticulous audit of the service process from the customer's perspective is necessary.

The method procedure includes five steps (Lai-Ping Leong Koljonen & Reid, 2000; Fitzsimmons & Fitzsimmons, 2008; Dobrowolska & Skowrońska-Szmer, 2012):

- describing the process from the point of view of the customer (visible actions),
- preparation of the survey questionnaire,
- conducting surveys,
- analysis,
- a summary of the survey results.

## 2. Advantages and limitations of the proposed assessment and improvement methodology of the quality of services

The proposed methodology for examining the quality of service is different in many ways from other traditional methods of assessing the quality of services (e.g. CSI, Servqual). The differences are presented in Table 2.

The basic advantages of the proposed methodology are associated with the use of the description tool highlighting customer service activities in which they are directly involved. Quality assessment applies to the entire service process, and measurement refers to the perception of the effectiveness of each stage of the process. The assessment of quality characteristics associated with both the service (explicit and implicit part of the service) and goods supplied within the service (technical customer service). The requirement to conduct the study also among the personnel directly involved in the service can provide additional information allowing for a more complete assessment of the differences in the perception of this service.

Restrictions on the use of the method are associated with the fact that it cannot be used to assess services, such as, self-service which is carried out without the participation of employees of the service provider. Furthermore, achieving unreliable results may be related to poor preparation of the questionnaire survey or poor selection of the test sample.

Table 2 *Key differences between traditional methods of customer satisfaction examination and the proposed methodology*

Methodology Criterion	Traditional methods of examining customer satisfaction	The proposed research methodology
The essential purpose of research	Determination of overall customer satisfaction with the quality of service	Evaluating customer experience with the whole service process from beginning to end
Main attitude	Measuring customer attitudes and opinions on the service and perception of quality of service (quality characteristics)	Measuring the perception of the effectiveness of each stage of the service process
Procedure	The structure of the questionnaire allows for measuring the perception of customers	The procedure requires the description of the process from the point of view of the customer. The structure of the questionnaire involves the measurement by customers, staff and benchmark customers
Survey questionnaire	The questionnaire can be completed by the customer at any time after the service has been performed	The questionnaire can be completed by the customer during or immediately after the service process
Survey scope	Quality characteristics associated with the service itself (availability, timeliness, reliability, convenience, professionalism)	Evaluation of quality characteristics associated with both the service (explicit and implicit part of the service), and goods supplied within the service
Survey conduction	Often conducted by the marketing staff long after the service has been performed	Typically, by the personnel performing the process immediately after the service has been provided

Source: based on Lai-Ping Leong Koljonen & Reid, 2000, p. 35.

### 3. An example of the application of the proposed methodology for assessing service quality in a restaurant

#### Introduction

The presented methodology for assessing the quality of the service was used to evaluate the customer service process in a restaurant located in the centre of Wrocław, serving vegan meals for individual customers. Surveys (among customers) and interviews with restaurant staff, in accordance with the adopted methodology, was conducted in the spring of 2015.

## Process description

In the restaurant examined the customer service process has never been defined before. There was no official description of this process, or a customer service manual for staff. The interview with employees had to be conducted in order to determine the structure of this process. On its basis it was established that the customer service process begins with the arrival of the customer to the restaurant and ends when the customer leaves the restaurant. According to the adopted methodology the whole process was presented with the use of the Service Blueprinting (Figure 1) diagram which states that the customer is involved in eight operations which can be divided into three stages:

- arrival of the customer to the restaurant – including three steps: arrival of the customer/greeting, getting familiar with the menu, placing an order,
- consumption – including: the choice of the table, waiting for the order, consumption of meals and/or beverages,
- leaving the restaurant – including: paying the bill and saying goodbye to the customer by the bartender and the customer leaving the restaurant.

## Establishing evaluation criteria

In order to develop a survey form, the authors established quality criteria for each stage of the process and the general performance of the service which were the basis of survey questions. Quality criteria were formulated based on the analysis of diagram Service Blueprinting regarding the activities and the technical aspect of the service and based on an interview with the employee directly supporting customers (bartender) regarding his observation of the most common complaints formulated by customers.

To increase the likelihood of a high survey return rate, the smallest possible number of questions for each stage was prepared. The accepted criteria for assessing the quality of customer service in the restaurant examined are shown in Table 3.

## Preparation of the questionnaire

The questionnaire for survey research among restaurant customers consisted of two main parts: questions evaluating the quality of customer service and personal details.

The first part consisted of questions formulated for each quality evaluation criterion and five additional questions regarding the overall assessment of the service:

- overall quality of customer service,
- general ambience of the restaurant,
- overall degree of cleanliness of the restaurant,
- general attitude and behaviour of staff,
- overall flexibility towards the customer and taking into account individual needs.

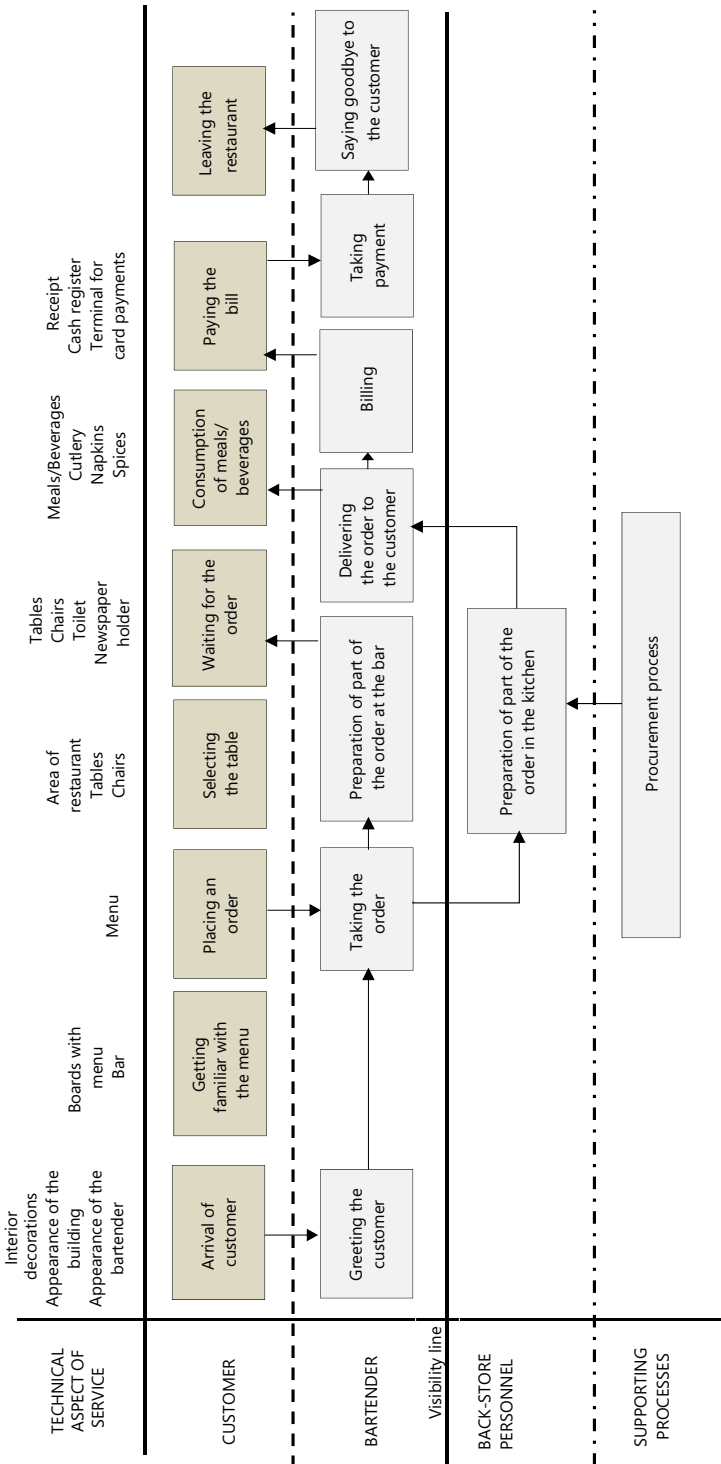


Figure 1. Service Blueprinting for the process of customer service in the organization examined.

Source: Ossowska, 2015, p. 74.

Table 3 *Criteria for assessing the quality of customer service in the restaurant examined*

Process stage	Actions taken by the customer	Technical aspect of the service	The criterion for assessing quality
The arrival of the customer at the restaurant	The arrival of the customer/greeting	Appearance of the building Interior decorations Appearance of the bartender	1. Availability of the restaurant (location, opening hours) 2. Politeness in greeting the customer 3. Appearance of the restaurant 4. Neatness of dress and appearance of bartender
	Getting familiar with the menu	Boards with the menu Bar	5. Availability and readability of the menu 6. Number and diversity of the offer in the menu
	Placing an order	Menu	7. Kindness of bartender 8. The bartender's familiarity with the menu 9. Speed of taking the order
Consumption	Table selection	Area of restaurant Tables Chairs	10. Availability of tables 11. Convenience of tables and chairs
	Waiting for the order	Tables Chairs Toilet Newspaper holder	12. Speed of order delivery 13. Equipment and cleanliness of toilets
	Consumption of meals/beverages	Meals/Beverages Cutlery Napkins Spices	14. Aesthetics of meals/beverages 15. Freshness of meals/beverages 16. Taste of meals/beverages 17. Temperature of meals/ beverages 18. Availability of additives, such as, spices, napkins during the meal
	Paying the bill	Receipt Cash register Terminal for card payments	19. Speed and accuracy of bill settlement
Leaving the restaurant	The bartender says goodbye to the customer who then leaves the restaurant		20. Politeness of saying goodbye to the customer

Source: based on Ossowska, 2015, pp. 74–75.



Fragments of the questionnaire containing questions about the arrival of the customer to the restaurant and the overall assessment of the quality of services in the surveyed restaurant were presented in Figures 2 and 3.

How do you assess the availability of the restaurant (location, opening hours)?	High availability				Low availability
	5	4	3	2	1
Did the bartender greet you politely?	He didn't not greet me at all				
	Very politely				Or very impolitely
	5	4	3	2	1
How do you assess the appearance of the restaurant?	I like it very much			I don't like it at all	
	5	4	3	2	1
How do you assess the neatness of dress and appearance of the bartender?	Very positively			Very negatively	
	5	4	3	2	1

Figure 2. *Fragment of a survey questionnaire including questions about the stage of the arrival of the customer to the restaurant.*

Assess the overall quality of customer service	Very good				Very bad
	5	4	3	2	1
Assess the general ambience of the restaurant	Very good				Very bad
	5	4	3	2	1
Assess the overall cleanliness of the restaurant	Very clean				Dirty
	5	4	3	2	1
Assess your general feelings about the attitude and behaviour of staff	Very positive				Very negative
	5	4	3	2	1
Assess the general consideration of individual customer requests by staff	Very high				Very low
	5	4	3	2	1
What is the probability that you will visit the restaurant in the future?	Very high				None
	5	4	3	2	1
Do you have any additional comments regarding the quality of service in the restaurant?					
.....					
.....					

Figure 3. *Fragment of the survey questionnaire includes additional questions regarding the overall assessment of the quality of customer service in the examined restaurant.*

For the needs of the study, the authors prepared a brief survey of personal details consisting of six questions relating to sex, age, frequency of visits, education, economic activity and the average monthly net income per household member.

## Implementation of research and processing of data

The pilot studies were conducted over three consecutive days (spring 2015) on a sample of fifty randomly selected restaurant customers and two employees who served customers during the study period.

Processing of the data was based on the summary of:

- averaged results for each day,
- averaged results from the examined sample of respondents and employees,
- determining the overall indicator of customer satisfaction with the various stages of the process,
- calculating the standard deviation between the answers given by customers and restaurant staff.

It summarizes the results of the research groups of respondents according to the criteria taken from personal details. The collected answers to open questions regarding the quality of service in the restaurant were grouped according to the similarity into four main categories: appearance and cleanliness of the restaurant, toilets, order delivery and other opinions.

## Results

For the analysis of the results of surveys, classic and new techniques to improve quality were used: The Pareto-Lorenz analysis, Diagram of dependences, the Ishikawa Diagram and Diagram of similarities (KJ). The FMEA methodology was also used in the analysis of the causes and effects of mistakes in the process of customer service. What proved to be useful in the interpretation of the results was the information obtained from open questions most of which explained the negative assessment of one criterion.

The analysis of the results allowed for formulating a general conclusion regarding the quality of services: that a low assessment of quality attributes by customers is the result of: problems with the technical aspect of the service (e.g. low assessment of the appearance of the restaurant), mistakes in the process of customer service caused by employees – inappropriate process management (e.g. too cold soups), mistakes in business and employee management (e.g. lack of work standardization). These three main problems have determined three directions of improvement of the organization.

## Draft of changes

Conclusions from the analysis were used to formulate 43 improvement activities related mainly to the improvement of the technical aspect of the service (the appearance and cleanliness of the restaurant, changing the menu card) and employee management systems (e.g. introduction of standardization of work and positions, setting individual goals for employees, introduction of incentive and control systems for employees). Their analysis showed that most of them are easy and fast to implement.

## Conclusions

The article presents the methodology for evaluating the quality of services using known but relatively rarely used techniques: Service Blueprinting and WTA. Its advantage which distinguishes it from other methods of assessing the quality of service is the fact that it allows not only the overall assessment of the quality of services, but also customer satisfaction with each stage of the service process, and can be the basis for a decision to change the structure of the process, or resources used in each step of the process (e.g. human, material).

Basic disadvantages of the methodology result from the applied research tool, that is, the questionnaire. Mistakes made in the course of its construction, for example, disregarding the inherent quality characteristic can affect the final result of research.

Its practical application presented in the article to evaluate and improve the quality of customer service in Wrocław restaurant confirmed its advantages and disadvantages.

It should be emphasized that the proposed methodology can be applied only to traditional services, implemented without the use of technology (e.g. computers).

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