

USING SERVQUAL MODEL TO MEASURE CITIZEN SATISFACTION WITH LOCAL TAXES SERVICES QUALITY

Laura MINA-RAIU

*Bucharest University of Economic Studies, Piața Romana 6, Bucharest, Romania
laura.minaraiu@amp.ase.ro*

Viorela NEGREANU

*Bucharest University of Economic Studies, Piața Romana 6, Bucharest, Romania
negreanu_viorela@yahoo.com*

Abstract

Public administration services in Romania have serious quality problems, which in order to be properly addressed require a series of investments in quality systems and instruments for improving quality. A good starting point in this respect is the ServQual tool, which measures services quality as a gap between citizens expectations and citizens perceptions, using two alternative questionnaire formats, one for expectations and one for the actual experience with the service.

The paper is an exploratory case-study research aimed at measuring citizens' satisfaction with public administration services using the ServQual instrument, within the Taxes and Fees Department from Roșiorii de Vede municipality, in Romania.

Research findings indicate an overall low level of satisfaction among users, in particular related to the empathy and responsiveness dimensions, combined with citizens reluctance in using online services.

Keywords: quality, public administration, ServQual, citizen perception and expectation, digitalisation

1. INTRODUCTION

Quality is undoubtedly one of the most popular and relevant topics in both public services management research and practice. Despite this global focus, in Romania there seems to be more emphasis on quality in the private sector, where clients orient the whole strategy, vision and objectives of organisations. In the public sector in Romania a quality management culture is still in an early stage of development as public authorities and public managers still do not realise that treating citizens as clients, asking and taking into account their feedback, expectations and perceptions are one of the most reliable pathways to continuous improvement.

The purpose of this paper is to measure citizens' satisfaction with the services provided by the Taxes and Fees Department (TFD) in the city of Roșiorii de Vede from Romania using the ServQual scale. The topic is relevant in the current socio-economic context in which service quality, consumer and client-citizen satisfaction with public services are very important, especially because in the last few years and mainly the last months there have been intense discussions related to public administration reform, especially in relation with digitalisation.

2. THEORETICAL CONSIDERATIONS

Quality has different meanings in the public sector by contrast with the private sector. Thus, quality in the private sector is connected with the idea of attracting new customers to maximize profits, whereas in the public sector, an increase in the number of customers usually results in a higher demand for the provided services keeping the same resources. Therefore improving quality in the public sector is limited to improving the internal operations of the organization. Providing new services in the public sector is mainly related to the society's needs for such services, as well as the degree to which they are provided by the public sector.

As it is already known, public administration emphasizes the way different states are ruled, with the primary aim of meeting the citizen's needs. In other words it can be said that the way in which public administration operates can lead to building healthy public values and increasing citizens' trust in regard of public institutions.

USING SERVQUAL MODEL TO MEASURE CITIZEN SATISFACTION WITH LOCAL TAXES SERVICES QUALITY

According to European Union data, trust in public administration is strongly linked to the service quality provided by the public services. In addition, a proper indicator for good performance in the public sector is the level of public service quality (European Commission, 2017).

There are two perspectives that aim to increase the quality of a service. From an organizational perspective, there is a desire to survive on the market, and from a customer perspective there is a desire for better service quality. Although the quality of services is a topic widely debated in the private sector, the concept is not so easy to implement in the public sector as well. Thus, academic literature abounds in research mostly carried in the private sector, which might explain the problems experienced when trying to transfer quality practices from the private to the public sector (Buckley, 2003).

Businesses and public administration operate in very different environments, which create discrepancies that are difficult to surmount. While most private companies act on a free market and have a decentralised decision-making process, public sector organizations act in spheres that are characterized by increasing financial, material, human constraints, lacking incentives to become more efficient (Agus, Barker and Kandampully, 2007).

Robinson (2003) considers that public services that generate profits and tariffs have more chances to enter on the competition market and therefore have more incentives to be efficient and willing to adopt best practices in order to increase quality and user satisfaction.

A relevant component for measuring public authorities organisational performance is measuring users satisfaction public services. Research carried out in the field of satisfaction reveals a strong correlation between service quality and citizens level of satisfaction, as a variation in the level of service quality brings along variations in the level of satisfaction. In this particular respect, measuring quality and client satisfaction in services is very important. Parasuraman, Zeithaml and Berry (1985) point of view is that the service quality results from the comparison that customers make between their expectations of a particular service and their experiences with the service itself. In addition, there are strong arguments that a precedent of customer satisfaction is the service quality. Citizens' expectations serve as a foundation for evaluating service quality due to the fact that when perceptions exceed expectations quality is considered to be high, and when expectations exceed perceptions quality is considered to be low (Asubonteng et al., 1996).

Over the years ServQual turned out to be one of the most popular instruments for measuring quality. Its purpose is to measure perceptions in regard of a service through five dimensions of service quality identified by Parasuraman et al (1988). In the beginning there were ten important elements that were grouped into five dimensions as follows: "tangible elements" represent physical characteristics, equipment, personnel and public materials; the "reliability" dimension represented by the provision of the service in a correct and safe way, but especially, at the level of the quality that was initially promised; the "assurance" brought by the potential to offer safety and trust to customers, but also the ability of employees to be respectful, competent and honest; the "responsiveness" with which employees come to the aid of customers; the "empathy" offered to each client.

The instrument consists in two sections, each one including 22 affirmations. The first section is meant to determine respondents' expectations of the service, for example, for the first dimension (Tangibility) an affirmation would be „Service X should have modern equipment“. The second section aims to find respondent's perception of the service, the affirmation being „Service X has modern equipment“. To answer these affirmations, respondents are asked to evaluate expectations and perceptions on a scale from 1 to 7, where 1 mean „totally disagree“ and 7 means „totally agree“. The values resulted after applying the tool are used in order to find out the gap between the two sections, their interpretation relying on the final result, which might be negative or positive.

Every category can change its level of importance depending on the service that is being evaluated; importance should be established by experts. In the same time for every category and every element the authors set some questions that can be adapted to the service in question (Blokdyk, 2019).

The procedure for applying this method itself follows several steps:

1. Establishing service quality requirements.

USING SERVQUAL MODEL TO MEASURE CITIZEN SATISFACTION WITH LOCAL TAXES SERVICES QUALITY

2. Collecting data based on questionnaires and interviews.
3. Calculating and establishing service quality indicators.
4. Presentation and interpretation of results.

The first step, establishing service quality requirements it's done by adapting the meaning of the five ServQual dimensions and reformulating their interpretation taking into account the service in question.

For the second step, collecting data based on questionnaires and interviews, it's recommended to have two types of sections, one that focuses on the client's expectations and the second that focuses on the client's perceptions.

Calculating and establishing service quality indicators is done using the collected data, this being systematized in a format that allows quality calculation and determination. More precisely, indicators are calculated as the gap between perceptions and expectations, this being applied for each category of service quality. For calculating the quality, the indicator is represented by the average value of the service quality, without involving the levels of importance.

The results obtained after the process of measurement and evaluation are registered in an evaluation report, and are presented tables and graphs. Depending on the value it has, the result can announce that the service is better than customers would expect or that it is a poor quality service.

Based on testing the instrument in different circumstances Parasuraman et al. argue that ServQual is a safe and valid way of measuring service quality. In addition to this they think that the instrument can be applied to a vast majority of services, although it might need some adjustments to fit in as many contexts as possible.

3. METHODOLOGICAL CONSIDERATIONS

The paper is an exploratory case-study research aimed at measuring citizens' satisfaction with public administration services using the ServQual tool, within the Taxes and Fees Department from Roşiorii de Vede municipality, in Romania. In order to achieve the aim of the paper, we formulated four research hypotheses, as follow:

1. Citizens are not fully satisfied with the services provided by the Taxes and Fees Department;
2. The degree of satisfaction is directly proportional to the age and level of education of the citizens;
3. Citizens are reluctant to use online payment services of taxes and fees;
4. The biggest gap between perceptions and expectations is registered by the dimension "Tangibility".

In order to test these hypotheses, a two-section questionnaire was designed and administered, each section containing 10 aspects that respondents had to evaluate on a scale from 1 to 7. The results of the questionnaire were then analysed and explained in order to find out whether the citizens perceive they benefit of quality services, whether they are satisfied or not with the services they are being provided with, or whether they consider there is need for the TFD to improve several service aspects in order to increase the quality of the provided services and implicitly citizens' satisfaction.

The initial research strategy aimed at applying the questionnaire using a to face to face approach, based on an interview with the citizens exiting the DRF. However, because of the COVID-19 pandemic, public authorities in Romania imposed the state of emergency, which forced us to carry on an online research. Thus questionnaire was administered in April 2020 through social media networks to friends and acquaintances who had benefited from services provided by TFD in the last year. In order to increase the response rate, the questionnaire was also posted on the Facebook groups of the municipality, which are aimed at facilitating citizens' communication with public authorities and to each other, posting announcements, events, news, reporting problems they encountered with certain services etc.

As previously mentioned the questionnaire was adapted after the ServQual model developed by Parasuraman et al (1988), which contains 22 dimensions both for testing the perceptions and the expectations of the clients.

USING SERVQUAL MODEL TO MEASURE CITIZEN SATISFACTION WITH LOCAL TAXES SERVICES QUALITY

However, in order to reduce the time needed to fill in the questionnaire and therefore increase the response rate, the number of aspects was reduced to 10 most relevant dimensions for each section.

The structuring of the questions in the survey followed the ServQual steps (Badulescu, 2008). Thus, the first step involved respondents giving a score from 1 to 7 for the 10 aspects in the section related to their expectations and then in the section related to their personal experience with TFD services (See Table 1 for a comprehensive operationalisation of the 10 most relevant aspect included in the adapted ServQual instrument used in this paper).

TABLE 1 - PERCEPTIONS-EXPECTATIONS MEANS AND GAPS

Dimension	Aspect	Perception Score	Expectation Score	Gap
Tangibility	TN1 Physical facilities are modern	4.933	6.116	-1.183
	TN2 Employees are well trained professionals	5.666	6.633	-0.967
Reliability	RL1 Respect of the work schedule	5.933	6.516	-0.583
	RL2 Respect of the legal framework	6.316	6.533	-1.216
Responsiveness	RP1 Offering help and support for citizens in due time	5.450	6.666	-1.216
	RP2 Citizens are informed about tax reliefs	5.216	6.616	-1.400
Assurance	AS1 The services is trustworthy	5.466	6.350	-0.884
	AS2 Assurance of documents security and personal data security	6.266	6.733	-0.467
Empathy	EM1 Employees are receptive with citizens needs and problems	5.383	6.566	-1.183
	EM2 – Citizens may benefit of services through multiple ways: (e-mail, online platforms, telephone etc.)	4.650	6.00	-1.350
Total Mean		5.527	6.472	-1.045
Gap (Perceptions-Expectations)		5.527-6.472=-0.945		

Source: data resulting after the administered questionnaire was processed, 2020

The second step implied calculating the mean for each dimension in the questionnaire by multiplying the grade given by the respondent with the number of respondents who gave that grade and then dividing by the total number of respondents.

In the third step, the mean for each of the five dimensions of the instrument was calculated by adding the scores obtained in the first step and dividing the sum with the number of statements contained in each dimension.

The fourth step consisted in adding up all the results previously obtained for each of the five dimensions and dividing the result by five. At last, the fifth step identified the gap between the two sections: expectations versus perceptions.

The results of the comparison between citizens expectations and citizens perceptions can be interpreted in three ways (Badulescu, 2008):

- If the final result indicates a positive value (>0), then the satisfaction is above the expectations of the respondents and the service quality is high.
- If the final result indicates a neutral value (=0), then respondents are satisfied with the current service, meaning that expectations do not exceed citizens' perceptions.
- If the final result indicates a negative value (<0), then respondents are not satisfied and the service quality is poor.

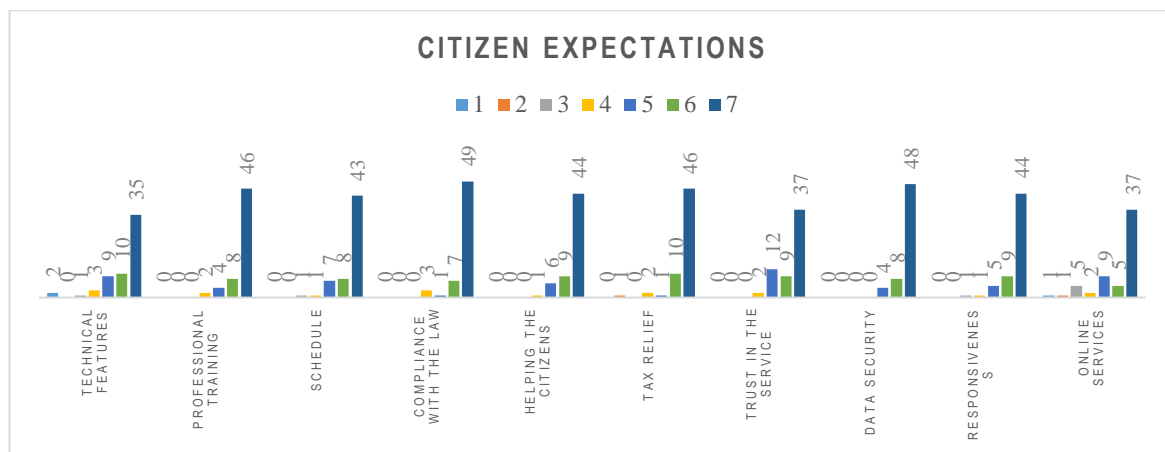
Negative scores point out a lack of quality and the fact that the service received was below expectations and therefore users are not satisfied, the service provided requiring significant improvements to increase the level of citizen satisfaction.

4. CASE STUDY REGARDING THE USE OF THE SERVQUAL MODEL WITHIN THE TAXES AND FEES DEPARTMENT

The research was carried out within the Taxes and Fees Department, which a public institution subordinated to Roşiorii de Vede Municipality. TFD is organised in two offices, one dealing with individual citizens and the other with corporate clients. TFD has 19 employees: 10 employees in the first office, 6 employees in the second office, one director, one secretary and a central cashier. The average number of citizens that use TFD services is 30 people per day, Mondays being the busiest day of the week. TFD responds to various requirements within the legal deadline and resolves complaints.

Survey respondents were divided almost equally in terms of gender, 53.3% women and 46.7% men. In terms of age, 28.3% of respondents fall into the age group 18-24, 25% in the age group 25- 40, in the age group 41-50 20%, and in the age groups 51-65 and over 65 years the percentage was 10% and 16.7% respectively. Almost half of the respondents (48.3%) have undergraduate studies, 25% graduated high school, 15% have post-secondary studies and 11.7% have master studies. 61.7% of the respondents are employees, 16.7% pupils / students, 16.7% are retired and are 5% unemployed.

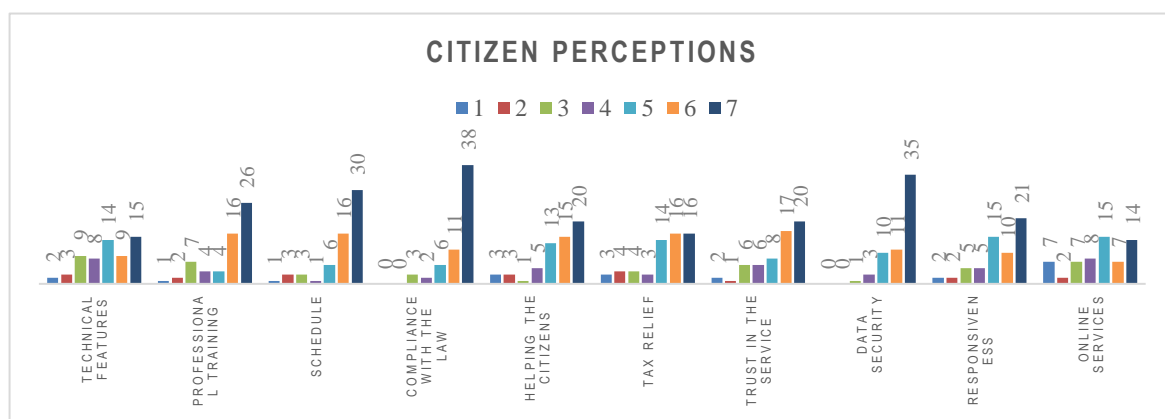
Figure 1 synthesizes both the grades given by the respondents to the aspects related to the expectations they have from the service provided by TFD, as well as the number of scores given by them.



Source: data resulting after the administered questionnaire was processed, 2020

FIGURE 1 SCORES GIVEN BY CITIZENS IN THE EXPECTATIONS SECTION OF THE QUESTIONNAIRE

Figure 2 shows both the scores given by the respondents to the aspects related to the perceptions and experiences they had with the service provided by the TFD, as well as the number of scores.



Source: data resulting after the administered questionnaire was processed, 2020

FIGURE 2 SCORES GIVEN BY CITIZENS IN THE PERCEPTIONS SECTION OF THE QUESTIONNAIRE

USING SERVQUAL MODEL TO MEASURE CITIZEN SATISFACTION WITH LOCAL TAXES SERVICES QUALITY

According to Parasuraman et al (1985), if the result of the gap between Perceptions and Expectations is positive, the quality of service is high and therefore the satisfaction with the service is high. Thus, to see the differences between the two attitudes, the gap between them and the mean of all scores was calculated.

The perception mean is 5.527 and the expectation mean is 6.472. Therefore to find out the gap between the two sections and to determine the level of citizens' satisfaction of the provided service the following operation between the final score of perception and expectations will be made (5.527-6.472). The final result of the gap between the two is -0.945. The gap is not that high, but the result is negative which indicates the fact that the citizens are not that satisfied by the provided services and the quality level is low from their point of view.

Because of the COVID-19 pandemic and the emergency state imposed in Romania starting in March 2020, citizens were encouraged to use online platforms to benefit of several services, including administrative ones. In this specific context, in our survey, citizens were asked two questions to verify the extent to which they use or not online services and the reasons for that choice. Responses registered for the questions „In the last 18 months have you payed your taxes and fees online?” indicate quite a low rate of interest in using TFD online services because only one quarter of the respondents (26.7%) indicated they access online services. Among the reasons for such behaviour were: respondents were not familiar with the existence of Ghişeu.ro website (25%), lack of trust in online services, especially online payments (18.03%), lack of PC and internet literacy needed in order to access websites and activate a user account (16.70%), complicated administrative procedures (13.30%). Only 1.70% of the citizens who answered the questionnaire stated that they do not have the necessary devices to access online services.

Regarding the level of satisfaction with the services provided and the main reasons of dissatisfaction, respondents pointed out the excessive bureaucracy (50%), insufficient staff (21.70%), organization of the office leaves much to be desired (21.70%), low degree of problem understanding (10%). However, 28.30% of the citizens answering the survey stated that they are satisfied with the service provided.

When asked for proposals to improve TFD services, respondents indicated the reduction of bureaucracy (20%), increase in the number of counters (10%) -although the service has four counters where taxes and fees are collected, only two work, which leads to an increase in the number of minutes that a citizen spends sitting in line-, digitalisation (8.33%), communication (5%), increase in the number of staff (5%). Almost 20% of the persons who completed the questionnaire did not propose any solution to improve TFD services. The purpose of the research is to identify the meaning of the cigarette break in the workplace among the employees. To extend the relation between work and smoke this study explores the meaning of cigarettes break for employees (smokers and non-smokers) and the relationship between co-workers during smoke break, trying to grasp whether smoke break has any influence in maintaining good relationships at work and improving communication in organization.

5. CONCLUSIONS AND RESEARCH LIMITATIONS

The data presented in the previous sections of the paper indicate that citizens' expectations exceed perceptions, the final score of the second section showing that citizens have quite high expectations in terms of service (6,472) together with low perceptions after experiencing the services (5,527). Thus, Roşiorii de Vede citizens are not satisfied with the services provided by TFD.

The "Empathy" dimension obtained the lowest score in both sections, ranking last, which means that citizens do not offer such great importance and do not have such high expectations from the service when it comes to this aspect.

The biggest difference between expectations and perceptions was registered by the aspect regarding the information on the tax relief, included in the "Responsiveness" dimension. This indicates that citizens attach more importance to this dimension and especially to this aspect and the service fails to satisfy them. Therefore, the fourth hypothesis "The biggest gap between perceptions and expectations is registered by the dimension "Tangibility", aspect 1 regarding the technical features of the public service" is not verified.

The first hypothesis of the research "Citizens are not fully satisfied with the service provided by the Department" is verified because citizens' expectations are much higher than their own experience with the provided service,

USING SERVQUAL MODEL TO MEASURE CITIZEN SATISFACTION WITH LOCAL TAXES SERVICES QUALITY

resulting in dissatisfaction and low quality of service. Citizens' satisfaction can only be considered high when the gaps between the two concepts are small or when perceptions exceed expectations, which is not the case in our research.

The second hypothesis "Satisfaction is directly proportional to the age and level of education of citizens" is confirmed, citizens aging between 50 and 65 and over 65 were most satisfied with the services provided by TFD and did not have proposals for improvement, considering the service to be of high quality.

The third hypothesis "There is a great reluctance among the citizens of the municipality regarding the online payment of taxes and duties" is also confirmed, because most citizens have never used online services for the payment of taxes and fees, most are not aware of the existence of this facility within TFD and those who knew chose not to use this method for reasons such as distrust in online payments or lack of knowledge, especially in the case of older people.

It can be concluded, from the above, that the level of quality perceived by citizens is not in line with what is desired, citizens are not fully satisfied by the experience with the service and that there is always room for improvement and development of the service.

The present research is subject to a series of limitations mainly related to a low-rate of responses (approximately 30%) and a highly context-dependence of results, given the fact that the survey was administered in one single local public administration institution. Moreover, the ServQual model was synthesized to 10 most relevant aspects out of 22 aspects in total. However, the present research may be a good starting point for a future in-depth research in this field, especially because the social distancing imposed by the COVID-19 pandemic indirectly forces public authorities to become more accessible, transparent and closer to citizens needs and expectations.

REFERENCES

- Agus, A., Barker, S., & Kandampully, J. (2007). An exploratory study of service quality in the Malaysian public service sector. *International Journal of Quality & Reliability Management*, 24(2), 77-190.
- Asubonteng, P., McCleary, K.J., & Swan, J.E. (1996). SERVQUAL revisited: a critical review of service quality". *The Journal of Services Marketing*, 10(6), 62-81.
- Badulescu, R. (2008). *Metode de Evaluare a Calității Serviciilor Publice*. Institutul Național de Cercetare Dezvoltare în Informatica Retrieved from webpage <http://um.ase.ro/no8/5.pdf> accessed 17.03.2020
- Blokdyk, G. (2019). *SERVQUAL: A complete guide*. 5StarCooks, 55-72.
- Buckley, J. (2003). E-service quality and the public sector. *Managing Service Quality*, 13(6), 453-462.
- European Commission. (2017). *Semestrul European - Fișă Tematică Calitatea Administrației Publice*, Retrieved from https://ec.europa.eu/info/sites/info/files/file_import/european-semester_thematic-factsheet_quality-public-administration_ro.pdf
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41-50.
- Parasuraman, A., Zeithaml, V. A. & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality, *Journal of Retailing*, 64(1), 12-40.
- Robinson, L. (2003). Committed to quality: the use of quality schemes in UK public leisure services, *Managing Service Quality*, 13(3), 247-55.