

**APPLICATION OF THE SERVQUAL METHOD  
IN STUDIES ON THE QUALITY OF SERVICES  
PROVIDED BY THE AGRICULTURAL SOCIAL  
INSURANCE FUND**

***Justyna Witkowska***

Chair of Social Policy and Insurance  
University of Warmia and Mazury in Olsztyn

**Key words:** Servqual method, service quality, customer service quality, Agricultural Social Insurance Fund – KRUS.

**A b s t r a c t**

This paper presents the application of the Servqual method in studies on the quality of services provided among the clients of the Agricultural Social Insurance Fund (KRUS). The clients evaluated five dimensions of the service provided in three aspects: the expected quality, the actual quality and the minimum quality. Thanks to the studies conducted, identification of gaps that emerged in the service provision process was possible. The respondents rated the quality of service provided by the KRUS as representing a relatively high level.

**ZASTOSOWANIE METODY SERVQUAL W BADANIACH POZIOMU JAKOŚCI USŁUG  
ŚWIADCZONYCH PRZEZ KASĘ ROLNICZEGO UBEZPIECZENIA SPOŁECZNEGO**

***Justyna Witkowska***

Katedra Polityki Społecznej i Ubezpieczeń  
Uniwersytet Warmińsko-Mazurski w Olsztynie

**Słowa kluczowe:** metoda Servqual, jakość usług, jakość obsługi klienta, Kasa Rolniczego Ubezpieczenia Społecznego – KRUS.

**A b s t r a c t**

W artykule przedstawiono zastosowanie metody Servqual w badaniach poziomu jakości usług świadczonych klientom Kasy Rolniczego Ubezpieczenia Społecznego. Klienci ocenili pięć wymiarów świadczonej usługi w trzech płaszczyznach: jakość oczekiwana, jakość aktualna, jakość minimalna. Dzięki przeprowadzonym badaniom możliwe było wychwycenie luk, które pojawiają się w procesie świadczenia usług. Respondenci ocenili jakość usługi świadczonej przez KRUS na dość wysokim poziomie.

## Introduction

Businesses are attaching increasing value to the quality of services provided and customer service quality. This is because clients now have wider access to products and services as well as information and have become resistant to manipulation by businesses. Service quality and related customer service allow companies to diversify in the market (DEMBIŃSKA-CYRAN et al., p. 38).

Customer service is defined very widely (DEMBIŃSKA-CYRAN et al., p. 36) as the:

- concept for development of relations with the customer,
- system of contacts with the customer,
- part of the distribution system,
- defined functions and activities of the enterprise,
- system of products, capital and information stream flows to the customer,
- set of various decisions related to the utility of place and time of product,
- combined marketing and logistical processes.

Consequently, customer service quality represents a holistic approach to the process of providing products and services to the customer. It also represents establishing long-term bonds with the customer based on mutual relations which plays an important role in the case of providing services.

The Servqual method allows service quality evaluation using five dimensions: tangibles, reliability, responsiveness, professionalism and empathy. It was elaborated by A. Parasurman, L. Berry and V. Zeithaml during the late 1980s. The method allows surveying the quality of services from two perspectives: the first from the customer's decision-making process and the second from the perspective of the service organisations interpreting service quality as the gap between the perception and expectations. The method can be used in surveying the customers, direct contact personnel and enterprise management and serves the segmentation of company clients. In-depth analysis allows defining the actions necessary for improvement of the company image (WITKOWSKA 2007, p. 33).

In the Servqual method, customers evaluate the actual quality, the expected quality and the additional area of minimum quality by means of a questionnaire. In the last part, the surveyed customer is asked to allocate 100 points according to his/her discretion to the five components of quality identified in the questionnaire.

Determination of the perceived quality of services is done through computation of the difference between the quality experiences and the ideal (demanded, expected) quality. This allows determination of the gap between the

expectations and the perception of services. Additionally, the gap between the experienced quality and the minimum quality that the customer is able to accept, although it does not satisfy his/her level of expectations is determined.

The Agricultural Social Insurance Fund is a financial institution. During times of difficult economic situations, confidence in institutions of this type represent an important element of the assumed policy of such an institution. Confidence increases thanks to the quality of the services provided. The most recent *Social Diagnosis 2011* survey shows that the confidence in the Social Insurance Institution (ZUS) (the surveys did not cover the KRUS) decreased from year to year. In 2007, 39% of the respondents still had confidence in the ZUS, while in 2011 that ratio was 33%. The ZUS enjoys greater confidence among women, the elderly, residents of smaller towns and people with lower education (*Diagnoza społeczna... 2011*).

The Agricultural Social Insurance Fund deals with the social insurance related to the operation of agricultural farming activity. In Poland it serves ca. 2.9 million people (*KRUS w liczbach... 2011*). Farmers are offered two types of insurance: pension and disability pension insurance and accident, disease and maternity insurance. This institution consists of a headquarters, 16 regional branches, 220 local offices and other organisational units (5 Rehabilitation Centres and 2 Farmers' Rehabilitation Centres).

### **Analysis of the KRUS clients surveyed**

The survey was conducted at one of the KRUS local offices in north-eastern Poland during the period of May and June 2011 on a group of 100 people, of which 63% were women and 37% men. The age range of the respondents was very wide, from people under 20 years of age to people over 66 years of age. Among the surveyed KRUS customers, the people from the 36–44 years age group dominated, representing 44% of the sample. The group of people under 20 years of age was the smallest, representing 1% of the sample. The other data concerning the age and education are presented in Table 1. People with secondary education represented the largest group surveyed, representing 44% of the sample, while those with elementary education, representing 6% of the sample, formed the smallest group of respondents. Among 100 respondents, 19 had vocational education and 31 tertiary education.

People visiting the KRUS are mainly residents in rural areas (62%). The detailed data concerning the place of residence and the net monthly income of the respondents are presented in Table 2. In the population surveyed, 7% of the respondents marked the net per capita monthly income of up to PLN 500 while 30% of the respondents marked the income range of PLN 501 to 1,000.

Table 1

## Age and education of the survey participants

Age group	Share [%]	Education	Share [%]
Up to 20 yeats	1.0	elementary	6.0
21 to 35 years	16.0	vocational	19.0
36 to 50 years	44.0	secondary	44.0
51 to 65 years	7.0	tertiary	31.0
Over 66 years	32.0	total	100.0
Total	100.0		

Source: own work based on the survey conducted.

The largest group – 45% – generated a monthly income ranging from PLN 1,001 to PLN 2,000 while 14% of the respondents reported an income ranging between PLN 2,001 and PLN 5,000. Only 4% of the respondents generated a per capita income in the family exceeding PLN 5,000 per month.

Table 2

## Place of residence and net monthly income of the respondents

Place of residence of the respondents	Share [%]	Net monthly per capita income of the respondents	Share [%]
Rural area	62.0	up to PLN 500	7.0
Town up to 10,000 residents	1.0	PLN 501 to 1,000	30.0
10,000 to 50,000	34.0	PLN 1,001 to 2,000	45.0
50,000 to 100,000	2.0	PLN 2,001 to 5,000	14.0
100,000 to 200,000	1.0	over PLN 5,001	4.0
Over 200,000	–	total	100.0
Total	100.0		

Source: own work based on the survey conducted.

## Results presentation and discussion

The non-weighted (straight) arithmetic average was applied to more precisely determine what quality of service is offered by the KRUS office to its customers. It represents the sum of the values from all observations for the population surveyed divided by the number of population members. The obtained results will help to improve the work of the KRUS, because the provided service level represents a very important issue from the perspective of the KRUS employees as well as the customers contacting the office on various matters.

The **tangibles** dimension encompassed evaluation of the use of modern equipment, software, employee appearance as well as legibility and transparency of the forms and printed materials.

In the aspect of the use of equipment and software by the KRUS employees, the expected service quality was rated at the level of 6.1. The actual service quality in that aspect was rated at the level of 4.9 while the minimum quality was 4.2. The appearance of the employees was rated by those surveyed at 6.1 as concerns the expected service quality, 6.0 as the actual service quality and 5.1 as the minimum service quality. Legibility and transparency of forms and printed materials was rated at 6.1 as concerns the expected quality while the actual and minimum service qualities were rated at 5.1 and 4.7, respectively.

The survey indicates that the average actual service quality for the tangibles area was rated by the respondents at the level of 5.3 while the expected service quality was 6.1. It should be concluded that the tangibles dimension satisfies the expectations as the minimum service quality was expressed at the lower level of 4.7.

The average rating of the quality level of services provided in the tangibles dimension by women differed significantly from that rating by men in the category of expected service quality. The women rated that category at the level of 6.3 while men at 5.7. The men rated the actual quality (5.5) higher than women 5.3, while both men and women rated the minimum quality at the same level of 4.6.

**Reliability** was the second area evaluated. It covers KRUS employees meeting the defined timelines and promises made, solving customer problems and appropriate delivery of the first-time service.

As concerns keeping the defined timeline and promises made by the KRUS employees, the expected service quality was rated 6.2, the actual service quality 6.0 and the minimum service quality 5.0. In the category of solving customer problems, the ratings of service quality were as follows: expected 6.1, actual 5.6 and minimum 5.9. Appropriate delivery of every service the first time by the KRUS employees was rated at 6.0 in the expected service quality category while the actual quality was rated at 5.5 and the minimum quality at 4.7.

Comparing the data collected for the tangibles area and the reliability area, it was determined that the distribution of responses was very similar. For both the tangibles and the reliability the expected service quality rating was the same at 6.1. The actual service quality for the tangibles was 5.3 while for reliability 5.7, which means that the respondents rated the quality of service provided in the dimension of reliability higher.

In the case of both women and men, the ratings of the reliability dimension were similar. Women rated the expected service quality at 6.1 while the men rated it at 6.0. Similar ratings were also obtained in the case of the actual

service quality where the average for the women was 5.8 and for the men 5.6. On the other hand, women rated the minimum service level lower (4.8) than the men (5.0).

The survey questionnaire contained questions concerning **responsiveness (reaction to the customer expectations)**. They concerned the KRUS employees providing honest information on the service delivery time, providing services efficiently and in a timely manner, willingness to provide help and solve problems as well as the time and reaction of the KRUS employee to customer requests.

The expected service quality as concerns providing honest information to the customer by the KRUS employee was 6.2. The actual service quality was rated at 6.1 according to the scale from 1 to 7 while the minimum service quality was rated at the level of 4.9.

The actual and minimum service quality as concerns efficient and timely provision of services were 6.0 and 5.0 respectively. The expected service quality was rated at the level of 6.2.

For the following question of whether the KRUS employee is always willing to help and solve customer problems, the respondents rated the expected service quality at 6.2. The actual service quality was rated at the high level of 6.0 while the minimum service quality was rated at the level of 5.0. The time that the KRUS employee has for the customer, as well as the reaction to customer requests, were rated at 6.1 in the expected service quality category with the actual service quality rated at 5.8 and the minimum quality at 5.0.

The average for the presented categories was 6.2 for the expected service quality, 6.0 for the actual and 5.0 for the minimum service quality.

Recapitulating the data collected on the third dimension, it should be highlighted that the respondents highly rated both the expected and the actual customer service quality.

Women rated the dimension of the reaction to customer expectations as high concerning the actual service quality (6.0) while men's ratings were lower at 5.8. The expected service quality was 6.3 in case of the women and 6.0 in case of the men. It can be concluded that the evaluation of the responsiveness area by the women was very high as the level of actual service quality is very close to the expected service quality level.

In the dimension of **professionalism**, the following aspects were included in the evaluation of KRUS employees: customer confidence, customer feeling of safety, kindness to customers, knowledge allowing answers to customer questions and skills of passing the knowledge to every customer.

All the above-identified aspects were rated highly as concerns the expected service quality (at the level of 6.0) (Fig. 1). The lowest level of the actual service quality was recorded in the responses concerning the customer feeling of safety

(5.7) while the remaining categories were rated within the range of from 5.9 to 6.3.

The average level of expected satisfaction was 6.6 while the actual level was 6.0 and the minimum was 5.1. It is worth noting that the respondents rated the KRUS employees' professionalism as very high.

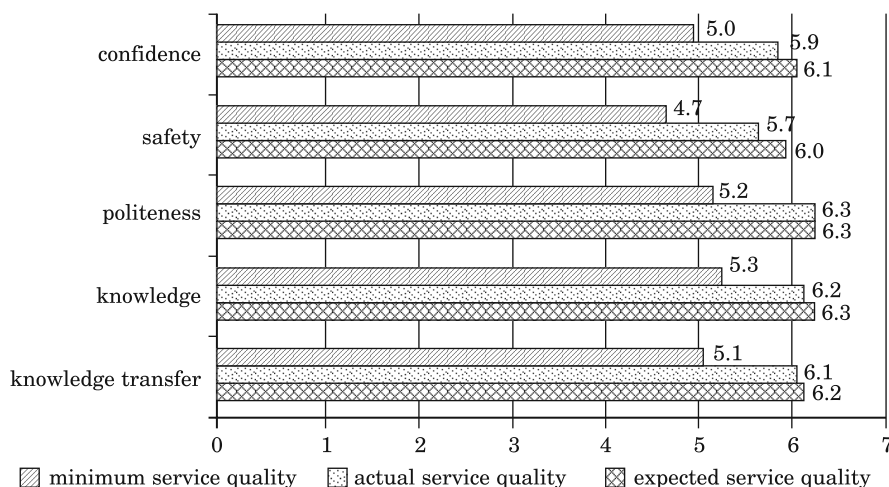


Fig. 1. Evaluation of service quality in the professionalism dimension

Source: own work based on the survey conducted.

The women and the men rated the dimension of professionalism in an almost identical way and only minor differences were recorded. The women rated the expected, actual and the minimum service quality at 6.2, 6.0 and 5.0 respectively. The men rated those categories at 6.0, 6.0 and 5.1 respectively. It can be concluded that both the women and the men rated the dimension of professionalism as very high.

The survey respondents also evaluated the dimension of **empathy** (Fig. 2), within which five categories were covered: the individual approach to every customer, work hours of the KRUS office, empathy and kindness of employees, understanding of the specific needs of the customers and the best satisfaction of the customers' needs.

The average results indicate that the respondents rated the expected service quality within that dimension the highest of all the categories (6.2) while the actual service quality was rated at a comparably high level (6.0).

The respondents rated both the expected and the actual service quality the highest in the category of the KRUS employee being nice, kind and friendly. The lowest level was recorded in the category that the KRUS employee

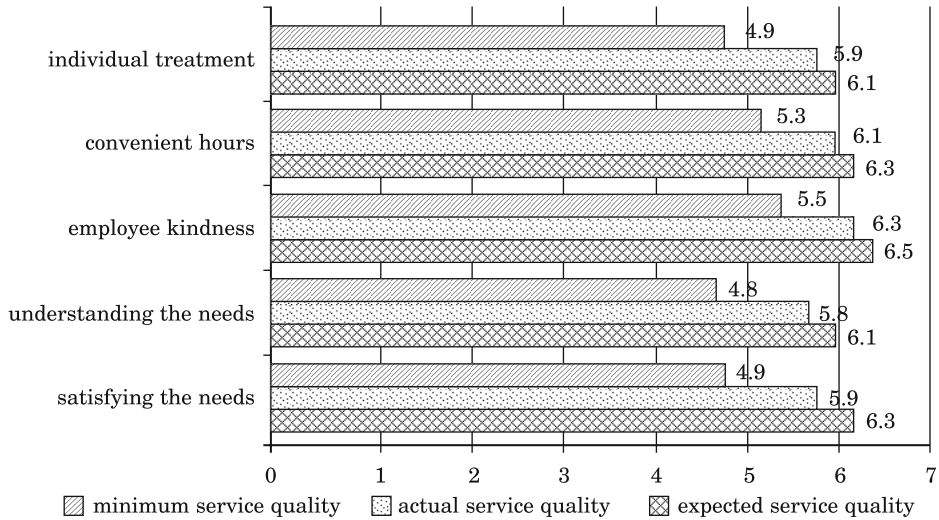


Fig. 2. Evaluation of service quality in the empathy dimension

Source: own work based on the survey conducted.

understands the specific needs of his customers in both the expected and the actual service quality rating.

The rating of the empathy dimension was high. Women rate that dimension as concerns the expected and the actual service quality at the level of 6.3 and 6.0. Men rated that category at 6.1 and 5.9 respectively. The ratings by the women and the men concerning the minimum service quality were the same at 5.1.

The following table presents the ratings for the individual dimensions of services for the expected, actual and minimum service quality (Fig. 3).

Customers rated the dimension of empathy very high as concerns the expected service quality. It was rated at 6.3 in the scale of from 1 to 7, giving it a high position. The respondents rated the dimensions of professionalism and responsiveness slightly lower. The results obtained in those dimensions were at the same level (6.2). The material and reliability dimensions were rated the lowest (6.1). It should be highlighted that despite the diversity of the dimensions rated, all of them were rated at the level exceeding 6.0.

The survey indicated the lowest satisfaction level in the tangibles dimension. It was rated at the level slightly exceeding 5. It was followed by reliability that was rated significantly above 5 (5.7). The conducted survey showed that both the responsiveness to customer expectations and professionalism, as well as empathy, all scored high on the actual service quality, reaching the level of 6.0.



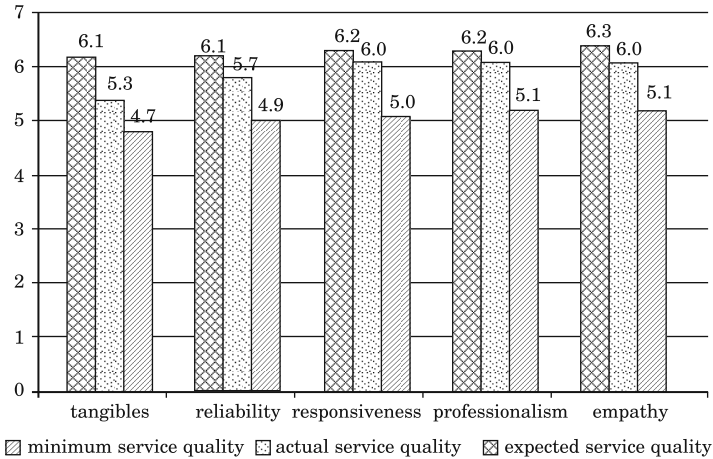


Fig. 3. Expected, actual and minimum service quality

Source: own work based on the survey conducted.

This means that the survey participants classified the individual components of the highest scoring dimensions positively, meaning that the respondents were satisfied in the dimension of responsiveness, with the KRUS employee providing honest information on the service delivery time, providing services efficiently and in the timely manner, willingness to provide help and solve problems as well as the time devoted to the customer. In the dimension of professionalism, according to the respondents, the behaviour of KRUS employees builds confidence, a feeling of security, the personnel are kind, possess knowledge to provide necessary information and transfer that knowledge skilfully.

In the dimension of empathy, the respondents appreciated an individual approach to the customer, convenient work hours of the office, kindness of the KRUS employees and the skills of understanding the specific needs of the customer.

The minimum service quality means the level of service provision that the customer is able to accept. The tangibles dimension scored the lowest in that aspect. This indicates low requirements of the customers concerning the tangible assets of the institution surveyed. The data analysis indicates that customers had higher expectations concerning the other four dimensions. This can be indicated by the results obtained in those dimensions as concerns the expected and the actual service quality.

In the last part of the questionnaire, the respondents were to allocate 100 points to the individual dimensions, which enabled determining the level of their importance.

The dimension of professionalism proved the most important for the respondents, who allocated as many as 30 points to it, which might indicate its high importance. The responsiveness to the customer expectations dimension ranked second, scoring 21 out of 100 points. Reliability ranked slightly lower, scoring 20 points and it was followed by empathy and tangibles, scoring 16 and 13 points respectively (Fig. 4).

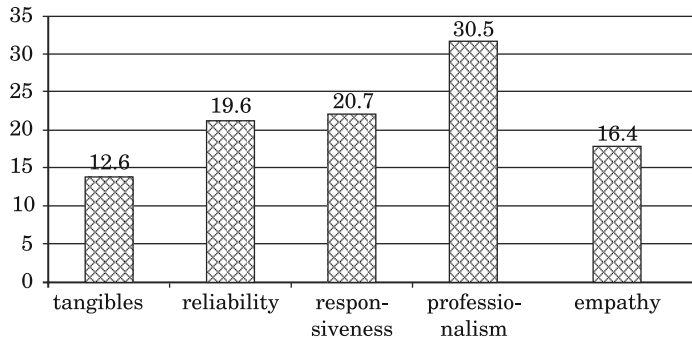


Fig. 4. Importance of service dimensions

Source: own work based on the survey conducted.

The quality gaps model presents the differences between the customers' expectations and the level of service received. The total service quality gap may consist of several partial gaps.

The highest difference between the expected and the actual value (Fig. 5) was observed in the tangibles dimension (0.8).

It should be concluded then that the dimension is within the "tolerance zone" because the minimum value is set at the level of 4.7, which means that according to the customers it is already satisfactory.

In the next dimension of services – reliability – the gap between the actual service quality and the expected service quality is lower by a half, reaching the value of 0.4. The result indicates that the KRUS customers rated the actual service quality relatively high (5.7) while their expectations were at the level of 6.1. The tolerance zone starts at 4.9, which means that the minimum service quality in the reliability dimension was set at that level.

The smallest gaps were found in the dimensions of responsiveness to customer expectations and professionalism (0.2). In both of those service quality dimensions the expected and the actual service quality were set at the same levels (6.0 and 6.2 respectively) which indicates that the respondents ranked professionalism and responsiveness to their needs at an equal level.

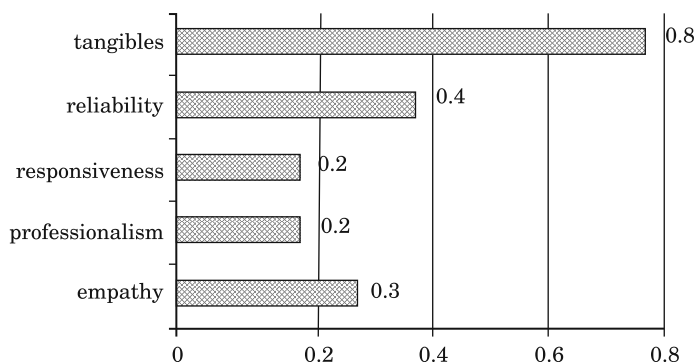


Fig. 5. Gap size in the individual service dimensions

Source: own work based on the survey conducted.

In the case of empathy, the difference between the actual service quality and the expected service quality was 0.3. The size of that gap rates the KRUS employees relatively highly because both the actual and the expected service quality are at almost the same level of 6.0 while the tolerance zone starts at 5.1.

## Conclusion

The gap size is the most important factor. A larger customer satisfaction increase is usually obtained by closing the larger gap and made smaller by closing a smaller gap. The studies indicate that the largest gap existed in the tangibles dimension (0.8). Reduction of that gap, however, is not dependent on KRUS employees. Closing a smaller gap which concerns a high customer priority, may result in larger satisfaction increase than dealing with the issue of a larger gap but concerning an area of lesser importance. According to that theory, closing the gaps in the dimensions of professionalism and responsiveness to customer expectations (0.2) would increase satisfaction more than closing the gap in the tangibles dimension (0.8) as the professionalism dimension is a high priority for the KRUS customer, while the tangibles dimension is not.

### References

- DEMBIŃSKA-CYRAN I., HOŁUB-IWAN J., PERENC J. 2004. *Zarządzanie relacjami z klientem*. Difin. Warszawa 2004.
- Diagnoza społeczna 2011. Warunki i jakość życia Polaków*, p. 188–195, <http://www.we.vizja.pl/en/download-pdf/id/214> (5.12.2011).
- Krus w liczbach*. <http://www.krus.gov.pl/krus/krus-w-liczbach/zestawienie-liczby-swadczeniobiorcow-krus-i-osob-objetych-ubezpieczeniem-spoiecznym-rolnikow-w-latach-1991-2010/1> (18.10.2011).
- WITKOWSKA J. 2007. *Zastosowanie metody Servqual w badaniach poziomu satysfakcji klientów z kanałów dystrybucji usług ubezpieczeniowych*. *Problemy Jakości*, 10: 33–38.