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EXAMINING EMPLOYEE SATISFACTION BY MEANS OF THE IMPORTANCE-PERFORMANCE AND THE SERVQUAL SCALES

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Abstract

Satisfaction of workers employed in a Local Government Units (LGU) has the influence on the image of the office as an organisational unit that provides services to the public. There is a relation between the employee and the customer satisfaction. The aim of the article is to present the application of the importance-performance and the SERVQUAL scales in the evaluation of the employee satisfaction. Presented research results are a part of the project carried out in the West Pomeranian province.

Keywords: local government, job satisfaction, marketing, scales.

JEL classification: H70, J28, M31, C49.

Introduction

The quality of services can be tested by means of the analysis of external and internal customer's satisfaction. Greater employee satisfaction (internal customer) can result in higher quality of their services, thus in more favourable customers' opinions. *The handbook of Customer Satisfaction Management* says: "Governments have to be more responsive to society's needs and demands. Public-sector organisations are being reformed in order to provide better, faster and more services. The citizen/customer has a prominent place in these reforms"[1]. The customer satisfaction and its dimensions are the subject of discussions in such European institutions as the EUPAN (*European Union Public Administration Network*), which is an informal network of Directors General responsible for public administration in member states of the European Union, in aspiring and candidate countries and in the European Commission. EUPAN consists of various working groups. One of them is the Innovative Public Service Group (IPSG) dealing with the importance and role the customers play in improving public administration.

Currently a project titled "Implementing Management Improvements in LGU in the West Pomeranian Province" is being realised[2]. Its author is a member of a team conducting research under Task 5 "Implementing Improvements in Measuring Customer and Office Workers' Satisfaction". Satisfaction survey covers 16 Local Government Units that joined the project. At the first stage of the research the level of LGU workers' satisfaction will be evaluated and the results will be presented to individual units in order to define the areas of activity where changes to enhance service quality are most desired.

The aim of the article is to present the opportunity to apply the importance-performance and the SERVQUAL scales in examining employee satisfaction.

1. The importance of the service quality elements

This article presents the results of the collective analysis of 405 employees of 10 LGUs where survey was conducted. It seems that both the satisfaction level of all the employees as well as of groups representing individual job positions (internal benchmarking) are interesting. There are four types of job positions in the LGUs. The structure of the examined employees is presented in Table 1. The majority of them work on the elementary level and deal with customers directly, while the least numerous is the managing staff.

Table 1. The structure of the examined LGU employees

Employees	Number	Percentage
Elementary level, direct service	194	47.90
Elementary level, backoffice	91	22.47
Medium level	77	19.01
The highest level	36	8.89
No answer	7	1.73
Total	405	100.00

Source: own study.

The employee satisfaction is the effect of meeting their needs in a technical sense (well equipped place of work, established procedures) and in a social sense (relationship with other employees and customers). There are five crucial elements of a good service to be offered by public administration: reliability (office workers cooperate effectively to deal with customers' matters punctually and reliably), responsibility (the office workers are willing and cooperative while attending to customers' matters), certainty (competence, politeness, the sense of secure employment), empathy (understanding the customer's needs, efficient information circulation among the employees) and tangibility (working conditions, motivating system). The importance of these elements were evaluated by the workers in the first part of the survey. The final score, expressed as percentage, was always equal 100%. The results are shown in Figure 1.

The obtained results indicate that for the examined employees the most important aspects of a good job are: reliability, certainty and responsibility (valued more than 20% each).
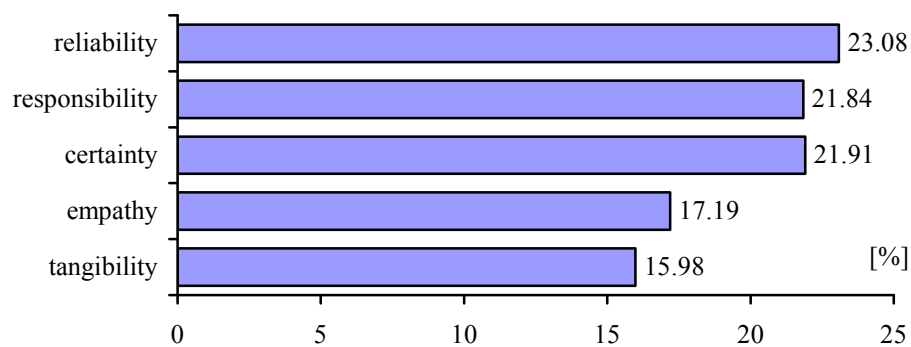

Fig. 1. The evaluation of the importance of quality dimensions in the opinion of the LGU employees
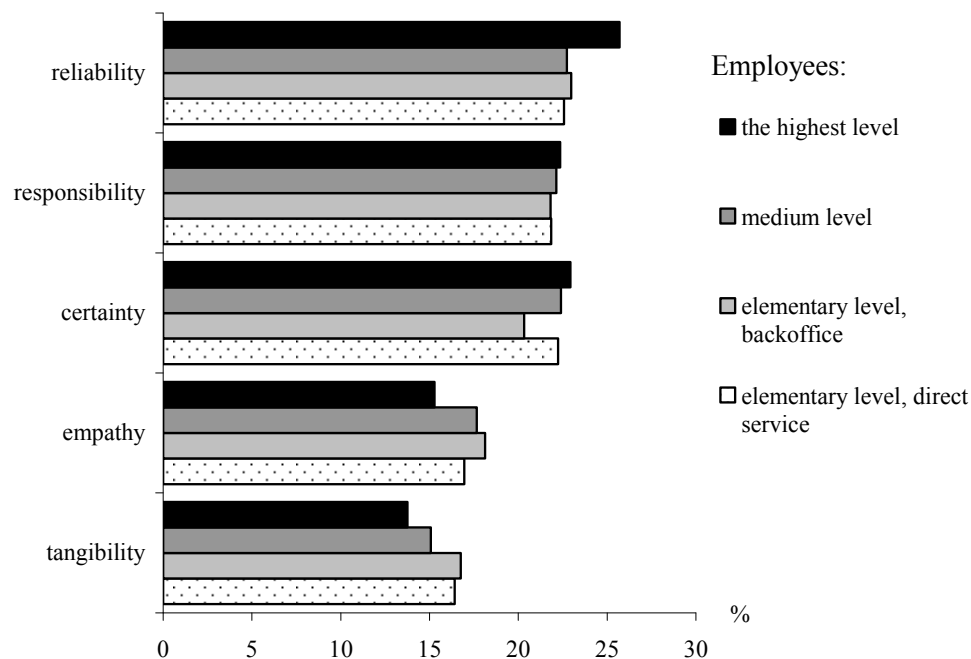Source: own study.

Fig. 2. The evaluation of the importance of quality dimensions in the opinion of the LGU employees according to their job position
Source: own study.

The survey also tested how important the quality dimensions are for the office workers on individual career levels. As Figure 2 shows, there are certain differences. It was reliability that the employees of the highest level valuated most (25.69%). It is the highest score among all the analysed elements (empathy was chosen by 15.28% and tangibility – by 13.75%) and among the workers of all the levels. Thus the employees responsible for the office management make sure that matters among co-workers are dealt with in due time and reliably.

2. Importance-performance scale

The importance-performance scale is based on the importance evaluation (the first part of the survey – the percentage scale of constant total of 100%) and on the evaluation of the offered services (the second part of the survey – a scale of 1 (very low) to 5 (very high)). Basing on mean results of the importance and the employee satisfaction from the five quality dimensions we can build a map of the employee satisfaction. The map in Figure 3 was divided into squares by intersecting both axes in the points of a mean value of satisfaction and importance. The isolated squares can be used to make decisions to undertake activities enhancing
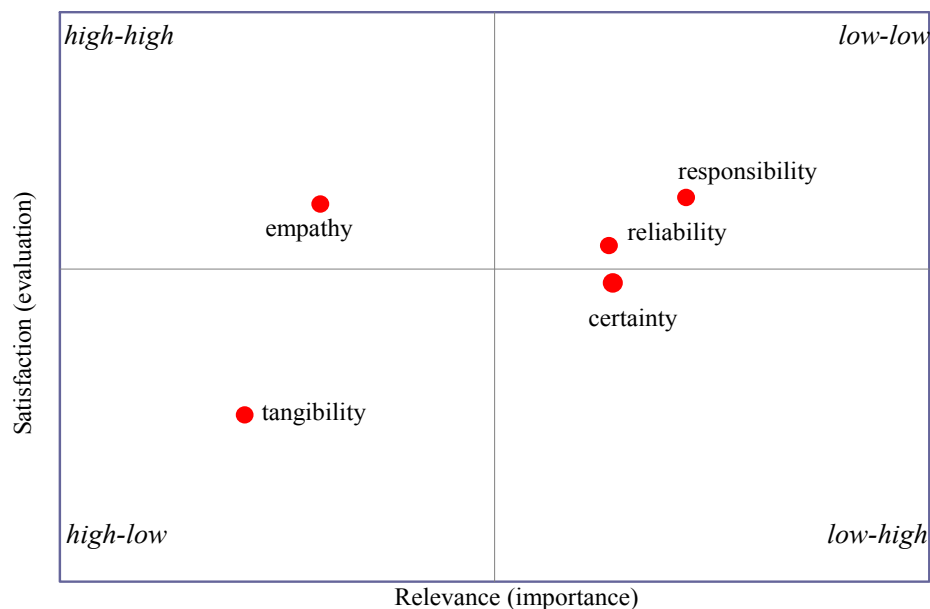
the employee satisfaction. Satisfaction dimensions are properly located if they fit into the squares:

- "high-high" – high values of satisfaction and importance (dimensions that should be kept on a high level), and
- "low-low" - low values of satisfaction and importance (dimensions to be corrected as the last ones).

The remaining two squares are more problematic:

- "low-high" – low satisfaction and high importance (dimensions to be firstly corrected); these are the dimensions greatly affecting the satisfaction level due to highly evaluated importance,
- "high-low" – high satisfaction and low importance (the dimensions are highly evaluated although their importance is little); these are dimensions of little influence to the satisfaction level because of their little relevance.

The presented above map of the employee satisfaction shows that the element to be improved in the examined Local Government Units is certainty (the "low-high" square, Figure 3). This dimension includes the following aspects: confidentiality, expertise and skills adequate to the occupied position, mutual respect and understanding among employees, the security of employment. The above aspects concern relationships among the office workers.

Intersection of the axis in the following points: medium importance 20.00 (%); medium satisfaction 3.2942

Fig. 3. The employee satisfaction map – satisfaction vs. importance of quality dimensions
Source: own study.

The above mentioned map of satisfaction can be drawn for employees working on in-dividual levels of employment in the office (see Figure 4). It has been found out that certainty is located in the square of low satisfaction and high relevance built for the workers both deal-ing with customers directly and in the backoffice. For the workers of the medium level that particular square is empty, and the highest level workers put reliability there. So it is the punc-tuality and reliability in attending matters among office workers that require improvements.

Employees elementary level, direct service   Employees elementary level, backoffice

Employees medium level   Employees the highest level

Intersection of the axis in the following points: medium importance 20.00 (%); medium satisfaction 3.2942
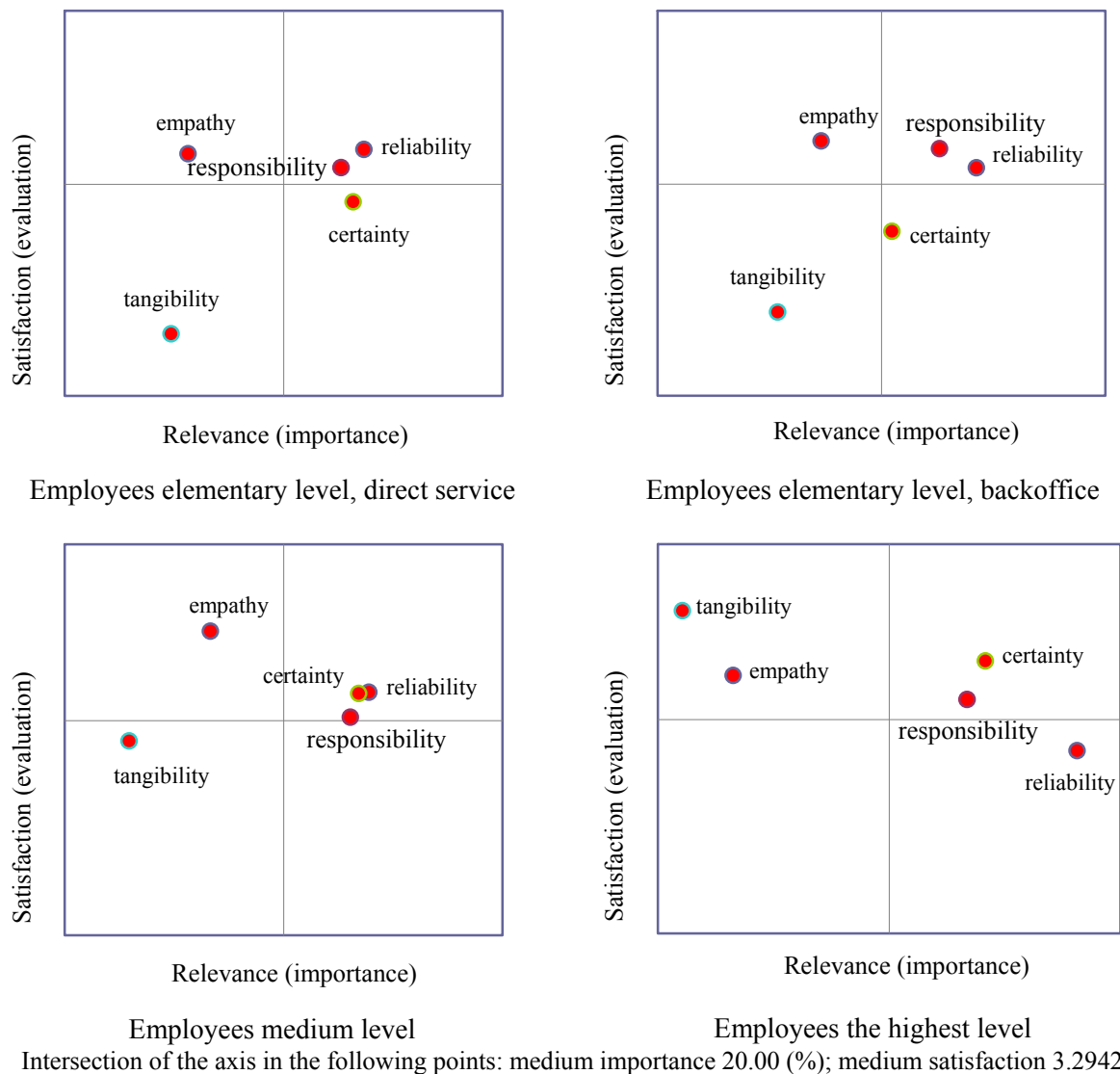
Fig. 4. Maps of employee satisfaction according to job positions – satisfaction vs. importance
   of the quality elements
Source: own study.

Another way to build the employee satisfaction map is based on a medium value and standard deviation of satisfaction. The map for all the employees is presented in Figure 5. It

shows newly defined squares. If satisfaction or dissatisfaction is homogenous, it means that all the workers assess a given dimension in a similar way. If the evaluation is heterogenic (scattered), it can depend on a worker's trait, e.g. their job position. The most heterogenic dimension is tangibility, i.e. interior office design, functional workplace, accessible office facilities, financial and non-financial incentives, training and career opportunities. These elements were evaluated heterogeneously but low. As Figure 6 shows, this heterogeneity of opinions depends on the employment level. The most scattered and the lowest tangibility scores were given by the lowest level workers (Na1 and Na2). The medium level workers' opinions are less differentiated and slightly higher (although still low), while the highest level workers opinions are the highest and homogenous (Na4). It has turned out that all the quality dimensions are perceived homogenously by the workers of the highest level (N4, O4, P4, E4, Na4).
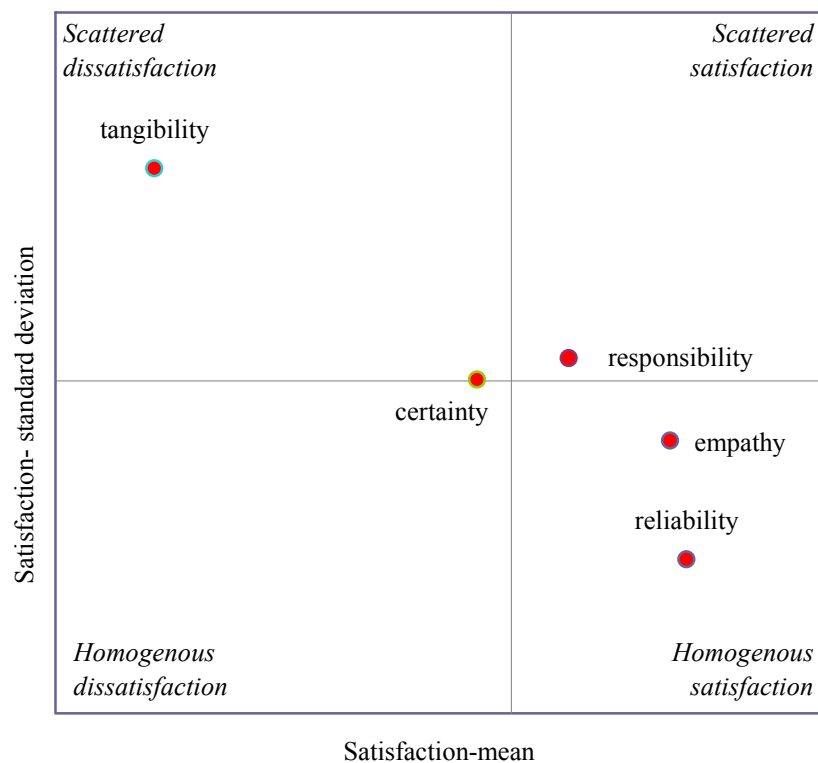
Intersection of the axis in the following points: satisfaction-mean 3.2942; satisfaction-standard deviation 0.8370

Fig. 5. The employee satisfaction map – satisfaction-mean value and standard deviation
Source: own study.
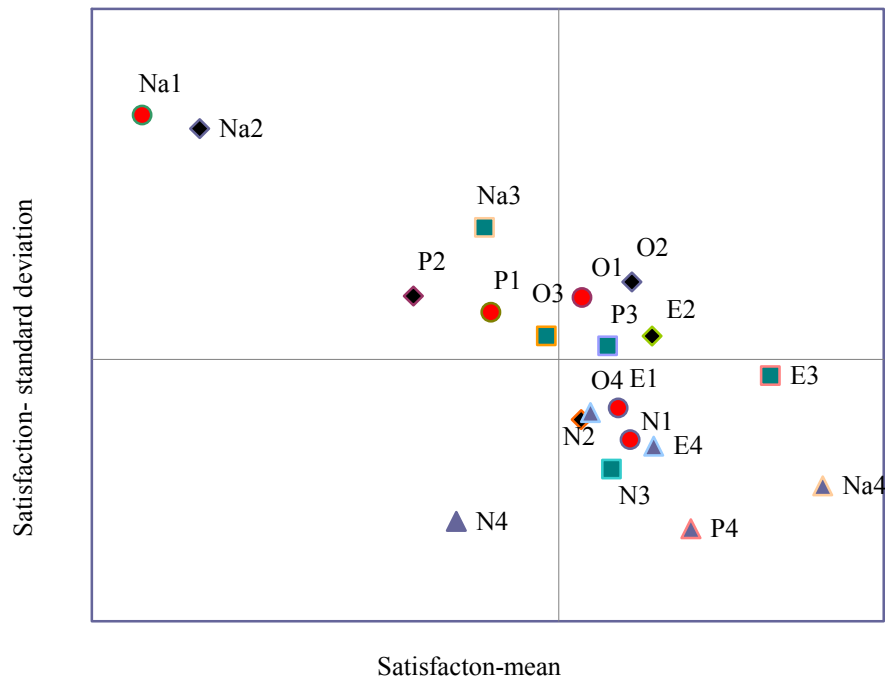
Intersection of the axis in the following points: satisfaction-mean 3.3128; satisfaction- standard deviation 0.8139
N - reliability, O – responsibility, P – certainty, E – empathy, Na – tangibility, 1 – employees elementary level, direct service, 2 – employees elementary level, backoffice, 3 - employees medium level, 4 - employees the highest level

Fig. 6. The employee satisfaction map according to a job position: satisfaction-mean value and standard deviation
Source: own study.

The importance-performance scale, as one of the relative satisfaction scales[3], makes it possible to define the level of the employee satisfaction as a function of weighted service quality dimension values. The Employee Satisfaction Index (ESI) is defined by a formula:

$$ESI = \sum_{i=1}^{k} w_{wi} c_i ,$$ (1)

where:

w_{wi} – relative importance of a quality dimension i, for $i = 1, \ldots, k$ (the scale of a constant total of 1),

c_i – mean value of a quality dimension i.

Since the employees evaluated their satisfaction on the scale of 1 (very low) to 5 (very high), the satisfaction expressed as percentage is denoted as a quotient of ESI value and the maximum score, i.e. 5. The satisfaction of the workers in general and the workers employed on particular levels is presented in Table 2.

Table 2. The Employee Satisfaction Index and the satisfaction (in %) of the workers in general and the workers employed on particular levels

Job position	ESI	Satisfaction [%]
General	3.3043	66.09
Elementary level, direct service	3.2667	65.33
Elementary level, backoffice	3.2670	65.34
Medium level	3.3539	67.08
The highest level	3.3674	67.35

Source: own study.

As Table 2 shows, the higher the employee's job position in the office is, the more satisfied they are.

3. SERVQUAL scale

SERVQUAL scale[4] is a scale of Likert[5] type composed of 22 positions characterising 5 dimensions of service quality. It is used in measuring the gap between perception (evaluation) and preferences (expectations). The analysis is based on the results of the second (the evaluation of expectations) and the third (the evaluation of the present state) parts of the survey.

The overall SERVQUAL (Service Quality) index is determined according to the following formula:

$$SQ = \frac{1}{k}\sum_{i=1}^{k} SQ_i , \qquad (2)$$

where:

SQ_i – SERVQUAL index for dimension i, where $i = 1, \ldots, k$, denoted as:

$$SQ_i = \frac{1}{n}\sum_{j=1}^{n} SQ_{ij} , \qquad (3)$$

SQ_{ij} – SERVQUAL index for dimension i, where $i = 1, \ldots, k$, and for an employee j, where $j = 1, \ldots, n$.

SQ_{ij} is a mean difference between the employee's evaluation and expectations concerning the elements of a given service quality dimension. Both the evaluation and the expectations were expressed on the scale of 1 (very low) to 5 (very high).

The SERVQUAL method was developed by Parasuraman, Zeithaml and Berry in 1983-1985[6]. In their opinion a service is perceived individually (subjectively) so its quality cannot be evaluated objectively. Therefore we can say that service quality is perceived. The authors

of the method pointed out that there many gaps between the perceived and expected service quality. The SERVQUAL method makes it possible to determine those measures where quality significantly diverges from expectations.

The survey among the LGU workers aimed at defining potential areas where employee satisfaction enhancing initiatives were necessary to be launched, which would lead to improving the quality of services offered by the office. The advantage of the expected situation over the actual one shows that the way services are provided does not meet the office workers' expectations, which in consequence makes them dissatisfied with the service quality ($SQ < 0$). When the way the service is provided exceeds the expectations, the workers are positively surprised and highly evaluate the service quality ($SQ > 0$). There is also an option that the quality of service is the same as the workers' expectations ($SQ = 0$).

Figure 7 shows the values of SERVQUAL index (SQ) that illustrate the gap between the workers' expectations and perception in relation to the five quality dimensions. In each case (individual dimensions and all of them in general) SQ is negative, which means that there is an advantage of preferences over perception. In case of two dimensions the SQ_i index has a smaller value than for the overall SQ. Thus the widest gap between the workers' expectations and the reality is observed in such dimensions as:

- certainty (competence, the workers' politeness and security of employment),
- tangibility (working conditions and the motivation system).

It should be noted that according to some of the employees certainty is very important (see Figure 1) and most expected (mean score of 4.38 on a scale of 1-5).
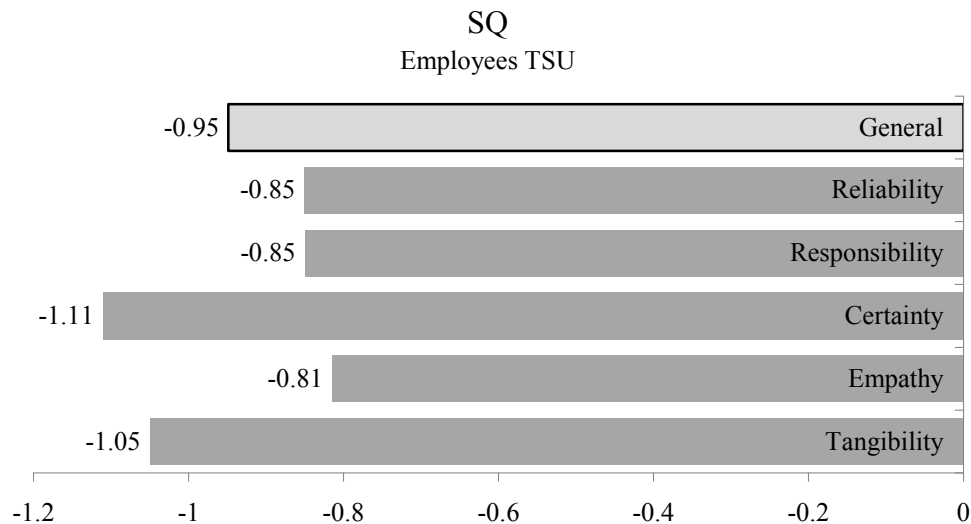
SQ
Employees TSU

Fig. 7. The SERVQUAL index in general and for individual service quality dimensions cal-
culated for the LGU employees
Source: own study.

Tangibility, however, is the dimension to which the office workers attribute the least importance (see Figure 1). They are also the least satisfied with it (the mean of 3.06) and their expectations towards it are the lowest (the mean of 4.11). Therefore it seems that the results of the analysis covering all the surveyed office workers indicate certainty as the dimension that needs to be focused on when undertaking efforts to raise the employee satisfaction. The SERVQUAL (SQ and SQ_i) indices were also determined for the workers on different levels of office employment structure (see Figure 8). The widest gap in general is perceived by the office workers of the lowest level who have direct contact with customers (-1.03), while the most narrow one by the highest level officials (-0.75). The former group, due to their contact with customers, is able to assess their reactions to the way their matters are attended to by the office. As far as services are concerned the customer satisfaction level can translate to the employee satisfaction level.

The employees on individual levels see gaps in service quality in the following dimensions ($SQ_i < SQ$):

– elementary level workers, direct customer service ($SQ = -1.03$) – tangibility ($SQ_i = -1.23$), certainty ($SQ_i = -1.17$),

– elementary level workers, backoffice ($SQ = -0,88$) – tangibility ($SQ_i = -1.08$), certainty ($SQ_i = -1.05$),

– medium level workers ($SQ = -0.88$) – certainty ($SQ_i = -1.12$), reliability ($SQ_i = -1.03$),

– the highest level workers (SQ = -0.75) – reliability (SQ_i = -1.13), responsibility (SQ_i = -0.94), certainty (SQ_i = -0.91).
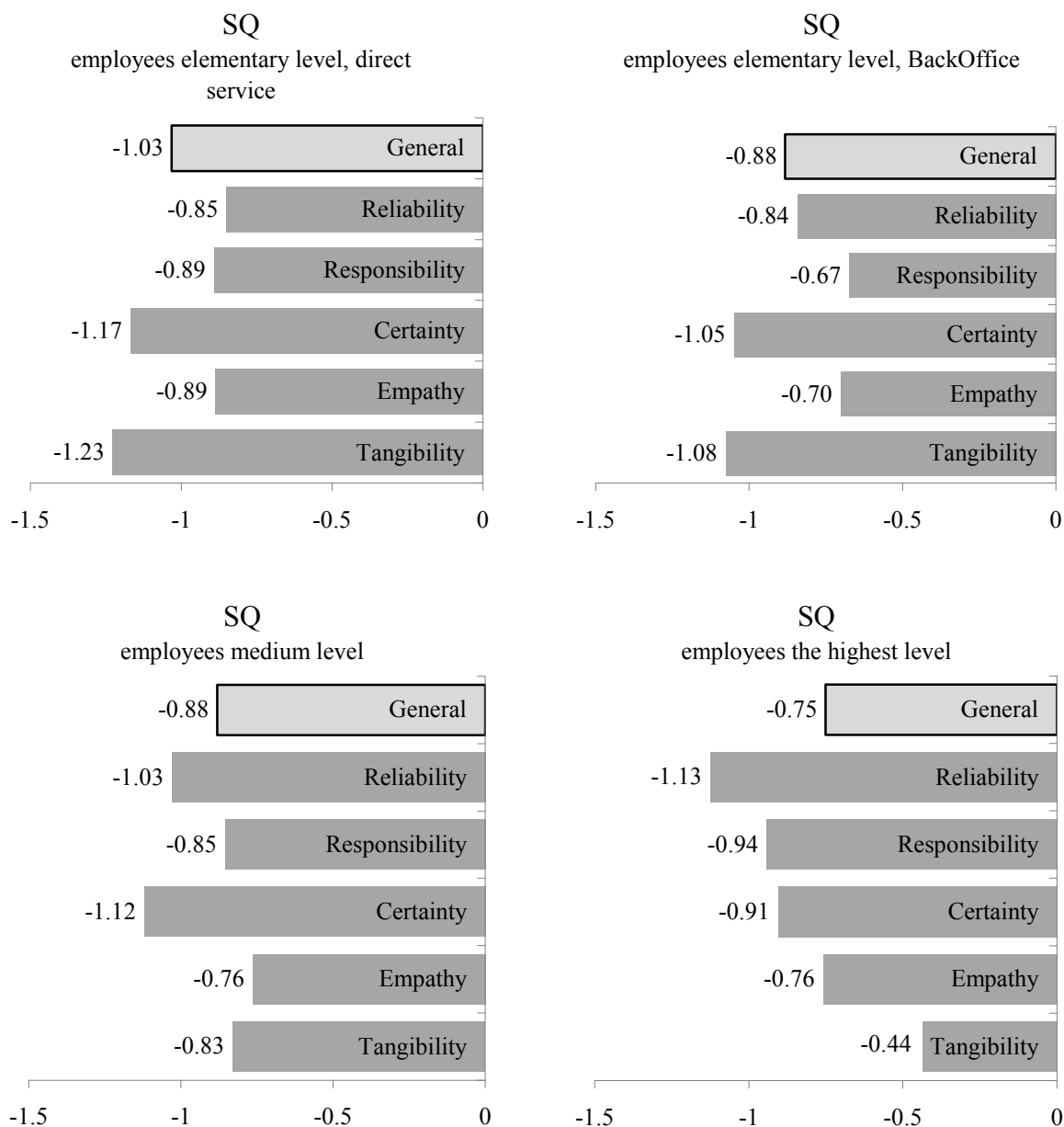

Fig. 8. The SERVQUAL index in general and for individual service quality dimensions cal-
       culated for the TSU workers according to a job position
Source: own study.

Certainty is the dimension in case of which the gap between perception and prefer-
ences is vast in all groups of workers. Thus it is necessary to improve relationships among the
employees concerning the confidentiality of customers' matters, adjusting the level of compe-
tence and skills to the occupied job position, mutual respect and understanding in the office,

the sense of employment security. According to the elementary level workers, both those dealing directly with customers and those working in the backoffice, the widest discrepancy in service quality concerns tangibility, i.e. interior office design, functional workplace, availability of office facilities, financial and non-financial incentives, training and career opportunities. These are the elements that can improve service and, consequently, add to employee satisfaction. According to the highest level employees the improvements should primarily be focused on reliability, i.e. attending matters among office workers reliably and on time. Reliability is for them the most important service quality dimension (see Figure 2). Their expectations concerning this aspect are the highest (the mean of 4.35), while their opinion about it is the lowest (the mean of 3.22) among all the dimensions.

Conclusions

Satisfaction of the employees of the Local Government Units affects the image of the office as an organisational unit that deals with public services. There is a connection between employee's and customer's satisfaction. Their level depends on the quality of provided services. The aim of the article was to present the opportunity to apply importance-realisation and SERVQUAL scales while examining the employee satisfaction. The analysis was based on the survey questionnaire consisting of (apart from basic information) three parts concerning the evaluation of the importance of five quality dimensions (the scale of constant total of 100%), the evaluation of perception (the scale of 1 to 5) and preferences (the scale of 1 to 5). The evaluation of the employee satisfaction was made as the comparison of importance and perception (the importance-performance scale) as well as perception and expectations (the SERVQUAL scale).

Notes

[1] Kancelaria Prezesa Rady Ministrów (2008), p.10.

[2] Project implemented by Uniwersytet Szczeciński and Global Erisson Consulting under the Human Capital Operational Programme – Priority V "Good governance", Measure 5.2 "Strengthening potential of local government administration", Sub-measure 5.2.1 "Modernisation of management in local administration", co-financed with the European Union funds under the European Social Fund. Project lasts from 1 March 2009 to 28 February 2011.

[3] See: Sagan (2004).

[4] Sagan (2003).

[5] Walesiak (1996).

[6] Find more: Parasuraman, Berry, Zeithaml (1988), pp.35-48 and Parasuraman, Berry, Zeithaml (1988), pp.12-40.

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