CUSTOMER GUIDED SERVICES QUALITY ASSURANCE MODEL FOR RURAL EXTENSION SERVICES

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Annotation
Knowledge and timely information access are significant preconditions for the management of a farm regardless of its size. Rural extension centres have an important role in the rural and agricultural development, as they facilitate profitability and competitiveness of the farms reducing farmers’ dependence on different support payments in scope of the national support policy.

In the present situation, when the effectiveness of the national budget subsidies’ use is especially activated, it is important to search for possibilities how to make reasonable use of rural advisory centres’ resources.

The article describes theoretical models for the evaluation of services and presents authors’ adopted composite model for the assurance of customer guided services’ quality.

Keywords: extension services, quality evaluation, expectations.

Introduction
Increasing food production, stimulating economic growth, increasing the welfare of farm families and rural people, reducing poverty and social inequalities, sustainable use of natural resources, and participatory development, as summarized in the Millennium Development Goals (http://www.un.org/milleniumgoals), are all governmental goals to which agricultural extension policies and activities can make a significant contribution. So extension and its role and function must be seen in relation to a country’s overall socio-economic situation, the situation of different population groups, and the government policies adopted by a country for rural development and agriculture (Hoffmann, Gerster-Bentaya, Christinck, Lemma, 2009).

The Regulation No.1783/2003 of Council of Europe defines that all the EU member states, including Latvia, have to establish their household advisory services’ system. This is necessary to help the farmers to meet modern and high quality agricultural standards related to environment and animal protection, plant protection and food harmlessness, animal well-being and good agricultural and environment conditions (Regulation No.1783/2003 of Council of Europe). According to this Regulation Latvian Rural Advisory and Training Centre (LRATC) is administrating the rural and agricultural advisory system in Latvia. LRATC nowadays has become the largest provider of rural extension services with a dense network of offices in all Latvia territory, which provide significant assistance to farmers and rural entrepreneurs, favouring their competitiveness and reducing their dependency on support payments. The education of rural population can help rural inhabitants to regain self-confidence, motivate them to look for alternatives to make living and reduce dependency on social payments, as well as facilitates rational and effective use of natural resources. Another important task of LRATC is to provide explanatory work on topical agricultural and rural development policy issues.

In the present economic situation, when the effectiveness of the national budget subsidies’ use is especially activated in Latvia, it is important for LRATC, as an enterprise, which is subordinated to the Ministry of Agriculture of the Republic of Latvia, to search for possibilities how to make reasonable use of its material and human resources to ensure the services more efficient, accessible and in adequate quality. For this reason it is necessary to create a systematic approach for the evaluation of services’ quality in LRATC. In order to provide such a rural and agricultural extension system, which is customer-guided, it is necessary to elaborate a model, which systematically helps to evaluate and increase the present quality of services, as well as can assist the service provider in decision taking regarding the further quality management strategies.

The aim of the research was to adapt a customer-guided extension services’ provision theoretical model in LRATC. The research tasks were:
1. Characterize the problems of service quality evaluation;
2. Investigate the service quality evaluation theoretical models;
3. Adopt the quality evaluation models for LRATC services’ quality evaluation and perfection.
**Theoretical framework of the research**

The study of the scientific literature on service management and marketing reveals the complicated nature of a service product. The basic attributes that make it different from a good are services’ intangible character, inconsistent performance, the fact that services are more a chain of activities but not goods, the fact that services in most of cases are produced and consumed simultaneously and at last the fact that a service product value is created in the process of seller’s and buyer’s interaction (Grönross, 1990). See figure 1.

![Fig. 1. Characteristics of a service product](image)

Source: Logical construction created by the authors

The mentioned attributes of the service product cause problems for its quality evaluation and maintenance, as the product is inconsistent, exposed to external uncontrollable impact of a service buyer, which results in inability to forecast a consistent outcome of a product (Sampson, 1998). Regarding this problem, service quality researchers group, represented by Zeithaml (1988) have aggregated all service product contents in so called five service quality dimensions: tangibles, reliability, responsiveness, assurance and empathy. Each of the dimensions includes 4-5 criteria; consequently a service product is composed of 22 criterions from five dimensions (Zeithaml, Parasuraman, Berry, 1988). The service product five quality dimensions are illustrated in a figure 2.

![Fig. 2. Service product dimensions](image)

Source: Authors’ logical construction after Zeithaml, Parasuraman, Berry, 1988
Given the complex nature of services quality, it is not surprising that there have been divergent views about the best way to conceptualize and measure it (Palmer, 2007). According to Palmer (2007) there are three basic approaches to measure service quality: performance-only measures (hereinafter SERVPERF), disconfirmation models (hereinafter SERVQUAL) and importance-performance approach (hereinafter IPA).

SERVPERF is a performance measurement tool, which is a survey, consisting of 22 questions about the performance of the five quality dimensions. Usually for the evaluation of a service quality a Likert scale from 1 (strongly agree) to 7 (strongly disagree) is used.

It is the simplest approach to measuring service quality asking, customers to rate the performance of a service. The approach, which is revealed in the formula below, developed by Cronin and Taylor in 1992, illustrates the way how it is accomplished in practice.

\[
SQ_i = \sum_{j=1}^{k} P_{ij}
\]

\(SQ_i\) – person’s ‘i’ perceived service quality
\(k\) = service criterions/units
\(P_{ij}\) = person’s ‘i’ perception regarding the service criterion ‘j’ performance

Another approach is SERVQUAL. By this approach a service is deemed to be of high quality when customers’ expectations are confirmed by subsequent service delivery. Because of the emphasis on differences between expectations and perceptions, this model is often referred to as disconfirmation model. The same survey questions as in SERVPERF are asked, only in this approach there are two survey parts: Part A – expectations regarding a service product quality and Part B – real performance of a service product quality. Measures of service quality can be derived quite simply by subtracting expectation scores from perception scores (Palmer, 2007). This approach, which has been developed by Zeithaml, Berry and Parasuraman in 1988, is illustrated in the formula below.

\[
SQ = \sum_{j=1}^{k} (P_{ij} - E_{ij})
\]

\(SQ\) – person’s ‘i’ perceived service quality
\(k\) = service criterions/units
\(P_{ij}\) = person’s ‘i’ perception regarding the service criterion ‘j’ performance
\(E_{ij}\) = person’s ‘i’ expectations regarding ‘j’ criterion of service quality

A weakness of disconfirmation approaches to service quality is their failure to explicitly recognize, which items are particularly important to consumers. So although an individual item of the SERVQUAL scale may show a high level of disconfirmation, a manager does not have a clear idea whether this failing represents a particularly important aspect of a service offer. It is difficult to detect whether the manager should concentrate on rectifying an item which is showing a high level of dissatisfaction, but which may be quite unimportant to the customer or on rectifying an item which shows only marginal level of dissatisfaction but may be absolutely crucial to the customer.

IPA is a simple way to use approach that compares the performance of elements of a service with the importance of each of these elements to consumer. It is possible to use scale items which are very similar to those used in SERVQUAL study. The difference occurs though with the treatment of scores. Instead of calculating perceptions minus expectations score, IPA analysis calculates a performance minus importance score. High performance of a relatively important aspect of the service could indicate that the management is over-delivering on this aspect of service quality. On the other hand, poor performance of an important item indicates a priority area for management action. IPA analysis allows customers’ rankings of importance and performance of service attributes to be plotted on a grid, from which it is easy to identify management priorities. The top-left hand quadrant shows priority areas for improvement, while in the bottom-right quadrant management may be over-delivering and could even save costs by reducing levels of quality (Palmer, 2007). The figure 3 demonstrates the IPA grid.
**Research methodology**

For testing the application of the theoretical service quality evaluation models on LRATC extension services, the SERVPERF, SERVQUAL surveys were performed, but for detecting service product criterion importance in IPA, the authors used analytical hierarchy process. The survey was performed in the four regions of Latvia – Zemgale, Kurzeme, Latgale and Vidzeme, where five LRATC regional offices were selected and altogether 94 respondents were reached. First of all, the authors adopted SERVPERF tool and conducted a survey. The survey results are illustrated in the figure 4.

SERVPERF survey results indicate that at LRATC customers have assigned the lowest evaluation to an empathy dimension, which indicates that customers are less satisfied with LRATC extension services product access, as well there might be some communication problems with the service provider and also customer understanding is a problem issue. The best score has been assigned to reliability, which means that LRATC, however, provides accurate performance of their services. But in general results obtained by this method may be interpreted as both satisfactory and insufficient, depending of the management’s situation. Consequently, this model cannot precisely detect, what are the priority actions to be taken to improve the present quality level.

Next model that was adapted was SERVQUAL. The survey results are revealed in the figure 5.
Fig. 5. SERVQUAL model results

*Source:* Authors’ research data

The score differences between customers’ expected and perceived quality regarding LRATC extension service product dimensions indicate that the customers have been most of all disappointed in tangible benefits, especially in the second and the first, which reveal the evaluation of “comfort at the working place” and “study room appearance”. According to this model, these are problem areas, where customers have had higher expectations for the criterions than they were in reality. However, according to these results, it is also possible to detect those criterions, which are over delivered in the service product. In this case, customers did not expect to receive so high quality of the 21rst and 22nd criterion, which express “staff willingness to help” and “readiness to satisfy customers’ specific needs”. Consequently, customers after all would have been enough satisfied with lower performance of these criterions and these are the areas, where LRATC could economy their costs to allocate them for more urgent needs.

Finally, the IPA was implemented. In order to perform this analysis, it was necessary to detect the importance level of each quality dimension and together with performance scores plot in the grid. The results of IPA are illustrated in the figure 6.

Fig. 6. Importance-performance analysis results

*Source:* Authors’ research data, Palmer, 2007
According to this model approach, LRATC extension services quality dimensions’ importance scores coincide with performance scores, which means that the present quality level is optimal and should further be retained on the same level like before. Consequently, the authors concluded that this model helps to detect service quality gaps in cases when quality is extremely high or low, but otherwise it is problematic to detect customers’ dissatisfaction.

Considering the all previously mentioned advantages and disadvantages of the theoretical service quality evaluation models, the authors admit that service industry enterprises can gain from all three models, however the most precise evaluation of quality can be obtained from a composite quality evaluation model. After assessment of specific peculiarities of extension services, which are provided at LRATC, the authors have specially elaborated a model, which gradually helps both to evaluate service quality and duly prevent shortcoming of quality criterions. The authors’ elaborated composite quality evaluation and perfection model is illustrated in the figure 7.

![Diagram](image-url)

Fig.7. Model for detecting customers’ satisfaction with extension service and its quality perfection

Source: Grīnberga, 2010
The authors recommend applying the composite model for evaluation of services’ quality at LRATC, which combines both detection of customers’ expectations before receiving the service and real performance of the service quality after receiving the service. After several experiments with LRATC customers, the authors have concluded that in reality it is possible to detect customers’ expectations regarding the service quality. This can be done in the period before the service is launched when customers actively apply for the service by telephone, internet or in person arrive at LRATC offices. All the accumulated information during the application for a service period should be carefully examined and compared with LRATC particular office potentialities. Those under deliverable issues, which are of high priority for customers, are to be ensured; otherwise the service should be postponed until the detected disparities are eliminated. After finishing a routine extension service, all three indicators – customers’ expectations, importance and perceived performance of the service quality should be compared and plotted in IPA grid, which helps to take decision about the further maintenance of the service quality.

**Conclusions**

1. Quality management methods, which are widely applied for commodities’ quality evaluation, are practically inapplicable for services’ quality control.
2. SERVPERF model reveals only retrospective customers’ evaluation of the service quality in the five quality dimensions, which, depending on the management position can at the same time be interpreted as satisfactory, unsatisfactory, sufficient or insufficient.
3. IPA model helps to identify customers’ priorities regarding service quality; however it does not provide enough information about the gaps in the present service quality, as this method helps to detect them only in cases if it is extremely high or low.
4. After approbation process of the three service quality evaluation models, the authors have concluded that SERVQUAL model reveals the most precise information about the present quality condition in the five service quality dimensions. However, SERVQUAL does not indicate what aspects exactly have not satisfied customers. These aspects can be detected in individual discussions with customers.
5. The authors’ presented composite quality evaluation and perfection model is easily adaptable for evaluation of extension services and helps to perfect the service provider’s implemented quality management strategies, which systematically facilitates the perfection of the customer-guided services’ quality.

**List of references**

5. Regulation No.1783/2003 of Council of Europe.
Латвии и повышать конкурентоспособность жителей латвийского села в Евросоюзе.

В нынешней экономической ситуации, когда особое внимание направлено на целесообразное использование субсидий национального бюджета, важно искать новые возможности, как более эффективно пользоваться материальными и интеллектуальными ресурсами в центрах сельских консультаций и образования.

Целью статьи является разработка клиенто-ориентированной модели для обеспечения качества услуг образования и ее апробация в центрах сельских консультаций в Латвии.

Для достижения цели в статье решались задачи: выявить теоретические аспекты предоставления услуг; проанализировать методы измерения качества; расследовать специфику предоставления услуг Латвийского центра сельских консультаций и образования; создать модель измерения качества для обеспечения качества услуг образования в центрах сельских консультаций.

Авторы статьи исследовали три теоретические модели (SERVPERF, SERVQUAL, IPA) для оценки уровня качества услуг в Латвийском центре сельских консультаций и образования. В результате теоретических и практических исследований авторы создали комбинированную модель, которая способствует созданию системы для регулярной оценки и совершенствования качества услуг в центрах сельских консультаций и образования. В процессе апробаций участвовали 94 респондента, которые являются клиентами Латвийского центра сельских консультаций и образования, а также опытные работники этой организации. В заключительной части статьи указаны главные выводы работы.