

MENDELU Working Papers in Business and Economics 20/2012

Possible Complex Approaches towards Evaluating the Quality of a Destination in the Context of Tourism

Kateřina Ryglová, Ida Vajčnerová

# **MENDELU Working Papers in Business and Economics**

Research Centre
Faculty of Business and Economics
Mendel University in Brno
Zemědělská 1, 613 00 Brno
Czech Republic
http://vyzc.pef.mendelu.cz/en
+420 545 132 605

### Citation

Ryglová, K. and Vajčnerová, I. (2012). Possible Complex Approaches towards Evaluating the Quality of a Destination in the Context of Tourism. *MENDELU Working Papers in Business and Economics* 20/2012. Mendel University in Brno. Cited from: http://ideas.repec.org/s/men/wpaper.html

### **Abstract**

Kateřina Ryglová, Ida Vajčnerová: Possible Complex Approaches Towards Evaluating the Quality of a Destination in the Context of Tourism

The paper deals with the issues concerning evaluating the quality of a destination in the context of tourism. A destination has to be looked on as a complex product of tourism consisting of products, services, natural resources, artificially created attractions and information being connected. The paper shows possible approaches towards the complex evaluation of destination quality. The first model is based on the ECSI methodology (European Consumer Satisfaction Index) and modifies it for evaluating the satisfaction of a visitor to a destination; the second model is based on the integrated approach towards quality management.

# **Key words**

quality management, customer satisfaction, destination, tourism

JEL: M

### **Contacts**

Kateřina Ryglová, Department of Marketing and Trade, Mendel University in Brno, Zemedelska 1, 613 00 Brno, Czech Republic, e-mail: katerina.ryglova@mendelu.cz

Ida Vajčnerová, Department of Marketing and Trade, Mendel University in Brno, Zemedelska 1, 613 00 Brno, Czech Republic, e-mail: ida.vajcnerova@mendelu.cz

#### Introduction

The area of tourism has been significantly expanding in recent years, which is beneficial for economic and political as well as social spheres of every country. Tourism employs more and more people and becomes an inseparable part of social and modern lives for most inhabitants. Due to the increasing level of tourism the competition between individual cities, regions and mainly countries is raising as well, so for sustaining competitiveness it is inevitable to pay close attention to offered quality. With regard to the specific character of services, especially their tangibility, transience and variability, it is rather difficult to measure this quality and in practice we can meet different approaches and understanding destination quality. It is also convenient to approach quality in a complex way, so to understand quality not only as a reflection of localization or realization factors (for instance the number of natural or cultural attractions or according to the cleanness of the air). Quality is closely connected with customer satisfaction; it is an immediate reflection of a customer's satisfaction so it can be successfully evaluated just according to the level of his or her satisfaction.

The paper aims to shows possible approaches towards the complex evaluation of destination quality in the context of tourism. The suggestion of models concerning a possible evaluation of destination quality is also a part of the paper. The first model is based on the ECSI methodology (European Consumer Satisfaction Index) and modifies it for evaluating the satisfaction of a visitor to a destination; the second model is based on the integrated approach towards quality management.

# Approaches towards evaluating quality

The World Tourism Organization UNWTO defines quality as a result of a process that leads to meeting all legitimate needs, requirements and expectations of a customer concerning a service product, all this for an acceptable price in compliance with mutually accepted contract conditions and determining qualitative determinants, such as security, hygiene, availability of tourist services, transparency, authenticity and harmony of tourist activities with human and natural environment. According to Gronsroos (1984) there are two basic components of quality: technical quality (which concerns measurable elements that are results of the provided services, for instance physical state, appearance, the cleanness of clothes and so on) and functional quality (which concerns the way of providing the service, perceiving this component is more subjective, it can for example be influenced by the environment of the provided services, staff behaviour, the length of waiting time and so on). From what was mentioned above it follows that the quality of a service is a feature of an operation that can be performed on a certain level. However, requirements for this level are set by customers, so it is inevitable to define the term of quality relatively, too from the point of subjective view according to customer satisfaction. Zeithaml, Bitner, Gremler (2006) claim that service quality is a component of

customer satisfaction (other components are product quality and price). Satisfaction is generally perceived as a broad concept while service quality focuses mainly on service dimensions. Many experts have dealt with setting relevant service quality dimensions (e.g. Bruhn, 1996; Berry, 1986; Parasuraman, Zeithaml, 1985) and on the basis of empiric data five main dimensions were defined: the influence of environment on a customer (tangibles), the reliability of services, the sensitiveness of the approach towards a customer (responsiveness), staff qualifications (assurance), empathy.

Tourist destination is defined as "a target area in a given region for which a significant offer of attractions and infrastructure of tourism are typical. In a broader sense these are countries, regions, human settlements and other areas that are typical with their high concentration of tourists, developed services and other tourist infrastructure, the result of which is a great long-term concentration of visitors". (Pásková, Zelenka, 2002); it is a place with suitable attractions in connection with tourist facilities and services which a tourism participant has chosen to visit" (The World Tourism Organization UNWT). The development of a destination is directed by a tourist organization that realizes marketing management. According to Buhalis (2003) a tourist destination is characterized by six components marked as "6 As". It is a primary offer of tourist attractions – natural and cultural-historical potential (Attraction); a secondary offer – accommodation, hostelry, sports-recreational, cultural-social and other facilities (Amenities), a general infrastructure primarily created for local inhabitants' needs (Ancillary services), Accessibility, product packets (Available packets) and the possibility of using sports, cultural and other experience activities (Activities). Middleton and Clarke (2001) claim that a destination as a product of tourism is created by five components, three of which agree with Buhalis (Attraction, Amenities, Accessibility) and the other two are the image and perception of a destination and the price.

According to Palatková and Tittelbachová (2011) it is not easy to define the term of destination quality. The first reason is a high subjectivity of the destination visitors' perception and the complexity of a destination as a social-economic system. The second reason is the respect towards residents whose quality perception does not have to be in compliance with the way how visitors or management of a destination perceive it. According to Müller (1995) it is suitable to apply total quality management system (TQM) in a destination as it takes into account overall satisfaction of all involved parties, such as consumers, service providers as well as local inhabitants. Quality has to be defined, it is necessary to follow its development in case of competitors, check it at critical points, utilize information, experience and results of inspections in further development and in continuous adaptation of quality to new requirements. One of the methods of total quality management suitable for destinations is the European system of integrated quality management (IQM) that is based on the model of exceptionality EFQM. Its creation was initiated by the European Commission on the basis of published studies that provided the results of the best quality management practice in selected European destinations.

Integrated quality management joins four key elements of a destination in its approach – these are visitors' satisfaction, service providers' satisfaction, the quality of local inhabitants' lives and the quality of the environment.

The tool for measuring the qualitative performance of a destination that is grounded in the European system of integrated quality management (IQM) and is based on the model of exceptionality EFQM is called Qualitest<sup>1</sup>. It is formed by a complex of 16 themes divided into two groups. The first group provides information on basic factors of a destination, the second one on the quality of a tourism product itself. Each theme is evaluated by three indicators (QPCI: Quality Perception Condition Indicators, so called state indicators; QMI: Quality Management Indicators; QPI: Quality Performance Indicators) that are connected and reflect the integrated approach of quality management that is crucial for a tourist destination (Vajčnerová, 2009).

On the basis of measuring, recording and comparing the values of the three indicators (QPCI, QMI, QPI) for each quality index<sup>2</sup> it enables to compare the ways of reaching similar partial objectives in various destinations in the process of benchmarking, to use good experience and to reveal weaknesses. By keeping the records and comparing the results from previous years a destination can follow a positive or negative development of individual indicators. The practical application of Qualitest is rather demanding as to the extent of required information which the management of a destination does not always have to have at its disposal. Regarding the present level of destination management in the Czech Republic, when in some areas there are no functional destination management organizations yet, Qualitest can only be used in selected destinations provided that it is modified according to the potentials of individual destinations (Vajčnerová, 2009).

In tourism practice we can often meet various attempts to find out about a customer's or a client's – or possibly a visitor's – satisfaction that are usually not very systematic, of a low level of complexity and with no following feedback. In the world we can notice attempts to quantify the level of customer satisfaction when the models enabling quantification of satisfaction by indexes are usually used. These approaches can be understood as complex as they try to detect various factors having an influence on the overall satisfaction of a customer. One of them is also the European model of customer satisfaction (ECSI – European Customer Satisfaction Index) that is perceived as a set of hypothetical variables: a customer's expectations, perceived quality, perceived value, satisfaction, image, loyalty and a customer's complaints (Mateides, Ďaďo, 2002). Each hypothetical variable is determined by a certain

\_

<sup>&</sup>lt;sup>1</sup> The document was published by the European Commission in 2003 as "Qualitest - A Manual for Evaluating the Quality Performance of Tourist Destinations and Services" (<a href="www.ec.europa.eu">www.ec.europa.eu</a>).

<sup>&</sup>lt;sup>2</sup> 16 quality indexes altogether, e.g. the vitality of tourist industry in a destination, marketing and promotion, accessibility, transportation etc.

number of measurable variables. The number and exact determination of measurable variables to individual hypothetical variables are not constant. Measurable variables of customer satisfaction index are selected and compiled for every branch, area or business sphere independently. The ECSI model is based on the presumption that for gaining primary input data (point evaluation) we use a questionnaire survey among the clients of observed companies, institutions or destinations, where the questions are constructed according to the type of multistage Likert scale. 3-7 questions are usually used for modelling each hypothetical variable. It is also inevitable to determine the importance of individual satisfaction features. The hypothetical variables of the ECSI model are calculated as a weighted arithmetic mean.

Other possible approaches towards evaluating quality by means of quantifying customer satisfaction are either so called Gap model or the model of customer satisfaction created by professor Kano. Gap model counts among methods that are based on the formulation of "a perfect service" attributes; it understands quality as a reflection of a customer's satisfaction and is grounded in the presumption that the satisfaction of a customer reflects the difference between his or her expectations and perception of the obtained service level. The model created by professor Kano offers an outlook on the attributes (features) of products that are perceived as important by a customer, it focuses on various features of a product that a customer primarily turns his or her attention to. It also utilizes questionnaire surveys to obtain topical data. Kano (2001) differs six categories of quality features the first three of which (basic, satisfying, efficient) effect a customer's satisfaction. Meeting basic factors is also the minimum for entering the market. The other three attributes mentioned by Kano do not have any influence on satisfaction.

The problems of analysing customer satisfaction also by using quantification with the help of indexes are rather extensively solved by authors Hill, Brierley, MacDougall (2003). During the analysis of satisfaction PFI (Priorities for Improvement) the authors base on the identification of a customer's requirements and wishes, the analysis of their importance from the point of a customer's view (importance score), the analysis of his or her satisfaction (satisfaction score) and the following GAP analysis (importance score vs. satisfaction score - the larger the gap is the bigger problem occurs).

#### Two complex approaches towards evaluating the quality of a tourist destination

Four-dimensional model of destination quality

The quality of a destination is dependent on many different factors grounded in the basic definition of a tourist destination and its key attributes. The main dimensions of service quality (the influence of the environment, reliability, responsiveness, staff qualification and empathy) were modified for the needs of a destination where the criteria are slightly different; they come out of the basis of a destination as a product and of the principles of integrated quality management that respects the satisfaction of

tourists, tourist services providers, the quality of local inhabitants' lives and the responsible approach to the environment. The quality of a destination is measured by the satisfaction of customers with the complete experience; the complete experience depends on the cooperation of all participating components and sustainable development. For the evaluation of destination quality twenty factors (measurable variables) were set which were formulated on the basis of previous researches and that were assigned importance. These factors are mentioned below.

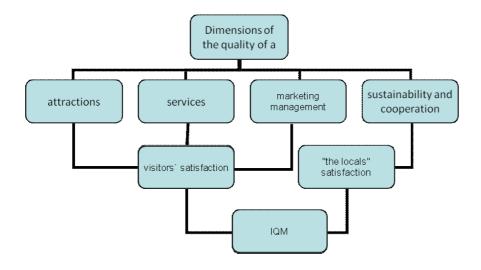
The suggested model (Figure 1) for evaluating destination quality is based on analysing the importance of individual factors (variables) of destination quality. The importance of the factors was set by relevant responders in the questionnaire survey. The multidimensional statistic method of principal components analysis was used to reduce the original number of twenty dependant variables. On the basis of similarities in evaluations this method supported clusters of factors - relative dimensions of destination quality. Then the methodology for evaluating destination quality was formulated according to the four newly-defined dimensions of quality: Attractions, Services, Marketing management, Cooperation and sustainability.

The principal components analysis supported dividing the variables according to the evaluation of their importance into 4 clusters that are the bases for formulating the relative dimension of destination quality:

- Attractions (the influence of the environment on a customer primary offer): Natural attractions; Cultural-social attractions.
- Services (the comfort and security secondary offer): Accommodation; Boarding; Experience activities; Transport accessibility; Local transportation; The sense of security.
- Marketing management: The availability and quality of information; Pre-coming communication;
   The quality of welcoming; The image of a destination; The uniqueness of a destination.
- The sustainability and cooperation: Products, packets; Active destination management;
   Private-Public-Partnership; Respecting sustainability; Entrepreneurs' satisfaction with activities;
   Local inhabitants' satisfaction with activities; The value of money.

The original 20 factors of a destination quality were replaced by four dimensions of quality with minimal loss of information. On the basis of these dimensions the quality of a destination can be evaluated. The elements of integrated quality management (visitors' satisfaction, service providers' satisfaction, the quality of local inhabitants' lives and the quality of the environment) are applied by force of evaluating the satisfaction in case of relevant groups of responders (visitors and so called locals).

Figure 1: The model of evaluating the quality of a tourist destination



Source: Vajčnerová, I., Šácha, J., Ryglová, K. (2012)

The analysis of principal components supported the creation of clusters that laid the foundations for the dimensions of quality. The expert evaluation shows that the dimensions of Attractions, Services and Marketing management are created by sets of factors that can be evaluated by visitors to a destination on the basis of their experience. The dimension of Sustainability and cooperation consist of seven factors, five of which (16-20) are unable to be evaluated by a visitor. Only so called "locals" can express the experience and so the level of satisfaction with them. So, visitors evaluate the first three dimensions, "the locals" the last fourth one. On this level a qualitative research will come into question, the mentioned dimension can also by evaluated on the basis of a depth interview.

For practical usage a simplified questionnaire can also be formulated where responders will evaluate only 4 dimensions of quality instead of twenty factors – Attractions, Services, Marketing management, Sustainability and cooperation. Within the frame of benchmarking competitive destinations can be compared when at the same time the evaluation is based on the principle of integrated quality management. This universal method is applicable to all types of destinations, it will primarily help identify the strengths and weaknesses of destination quality and at the same time by quantifying original variables it enables the analysis of necessary dimensions into concrete factors that have to be improved. For the comparison or possibly benchmarking of the quality of random destinations it is inevitable to define the evaluated destination and to conduct a primary research of visitors' as well as so called "locals'" satisfaction.

The verification of the above mentioned methodology concerning evaluating the quality of a destination for concrete destinations is an issue of further research.

ECSI modification for evaluating destination quality

The ECSI methodology was modified for the specific environment of a destination visitor, individual measurable variables were determined for hypothetical variables of the ECSI model. Weight evaluation of their importance was set by force of the statistical method of covariance. The tested destination was the city of Brno that is the second largest city in the Czech Republic after Prague. The primary input data in the form of point evaluation enabling the quantification of a Brno visitor's satisfaction by means of the suggested ECSI model were obtained by field research with the help of face to face questioning in case of domestic (140 responders) as well as foreign visitors (140 responders) of the selected destination of Brno using random sampling. For this purpose the measurable variables of relevant hypothetical variables of the ECSI model were transformed into the form of scale questionnaire questions. Consequently the indexes of customer/visitor satisfaction for the Czech as well as foreign visitors to the destination of Brno were calculated.

The following Figure 2 shows the obtained values of indexes concerning the satisfaction of a visitor to a destination in case of Czech and foreign tourists that participated in tourism in Brno in the spring season 2007.

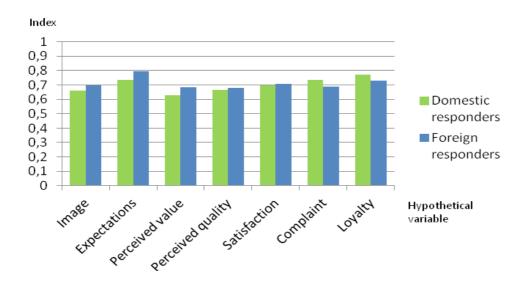


Figure 2: The comparison of ECSI indexes for domestic and foreign visitors

Source: Ryglová (2009)

In spite of not a very large extent of the selective set the results suggest that tourists to the Brno destination are generally satisfied (the values of the total ECSI indexes are approximately 70% in case of domestic as well as foreign visitors) but there are still large reserves indicating the necessity to increase the level of tourism in this area. From the indexes of individual hypothetical variables (image, expectations, perceived value, perceived quality, satisfaction, complaints, loyalty) it is evident that in general foreign tourists are those who are more satisfied in Brno. The highest value of the index (79,5%)

was reached by the variable of expectations and the lowest value (67,8%) was reached by the index of perceived quality, which indicates high expectations of foreign tourists before their visit to Brno and their lower satisfaction with the quality of provided services in this destination. Czech tourists are generally less satisfied, which can possibly be ascribed to the typical Czech "always dissatisfied" character. This statement can also be confirmed by the fact that despite the general dissatisfaction of Czech tourists their expectations before visiting Brno are not by far as high as in case of foreign responders. The lowest value of the index was reached by the hypothetical variable of perceived value (62, 9%), which points out the fact that domestic tourists are the least satisfied with the offer of services, the accessibility of information and the promotion of this tourist region.

As it has already been mentioned, the obtained results can be analysed in more details, specific partial values of individual measurable variables can be examined. For instance, in case of the hypothetical variable of loyalty, the total values of which counted among the highest for both sets (foreign visitors 73%, domestic visitors 77,3%), it is important to know the values of individual measurable variables when for example the lower index of the variable expressing the probability of repeating the visit does not necessarily have to mean dissatisfaction with the destination, but only different preferences of a visitor who for example is not in the habit of visiting the same place repeatedly despite the fact that he or she was satisfied in the destination. Similarly, the total result of the variable of complaints can be misleading without being aware of the results of partial variables as a Czech client is not yet used to making complaints of services to such extent as it is usual for example in case of German or Austrian clients. We ought to consider the fact that a customer, even in case of very high satisfaction, does not give the highest possible 100% evaluation.

If this ECSI methodology is used for a broader research, it would be possible to gain interesting results with a higher revelatory value that might become an important basis for strategic decision-making in the area of tourism development in the observed area. However, the objective of the authors was not to analyse the obtained indexes of customer satisfaction in detail and then to evaluate impacts, but to present the possibility of the practical application of ECSI and the utilization of this tool within destination management, as a concrete ECSI application related to the area of tourism has not been conducted yet.

The relative exactingness of the practical ECSI application is connected with the complexity of the methodology, especially with regard to primary data collecting. The existence of seven hypothetical variables and consequently demanding and exact definition of concrete measurable variables often results in a questionnaire that is too long and difficult for an end customer, client or tourist, in consequence of which primary data can be distorted or obtained in a complicated way. The mentioned complexity of the ECSI methodology calculation might be overcome by the approach of Hill, Brierley and

MacDougall (2003), i.e. by using GAP analysis and calculating a simplified index of customer satisfaction based only on evaluating no more than twenty most significant characteristics of satisfaction from the position of a customer. This methodology enables quite a fast and not very complex analysis of customer satisfaction, reveals present weaknesses in satisfaction and provides instructions and advice which problems have to be solved in priority within managing customer satisfaction. Unfortunately, it does not give answers (unlike ECSI) for example to the questions of loyalty or complaints that are directly connected with satisfaction.

#### Conclusion

The paper deals with the possibilities concerning the complex evaluation of destination quality in the context of tourism. A destination has to be understood as a complex product of tourism consisting of the connection of products, services, natural resources, artificially created attractions and information. The satisfaction of visitors with a destination is dependent on the quality of their overall experience that is created on the basis of cooperation of all participants on tourism in the given area – these are local inhabitants, service providers, public administration workers and destination management workers. The paper shows the suggestions of two models of possible destination quality evaluation. The first model is based on the ECSI methodology (European Consumer Satisfaction Index) and modifies it for evaluating a destination visitor's satisfaction; the example of practical application in a selected destination is presented as well. The second model – so called Four-dimensional model of destination quality - is grounded in the integrated approach to quality management whose verification in practice for concrete destinations is a subject of further research.

#### References

BERRY, L. L., PARASURAMAN, A. (1991). *Marketing Services: Competing Through Quality*. 1st edition. New York: Free Press, 212 p. ISBN 0-02-903079-X.

BRUHN, M. (1996). *Qualitätsmanagement für Dienstleistungen. Grundlagen, Konzepte, Methoden*. Gabler Verlag: Berlin.

BUHALIS, D., COSTA, C. (2006). *Tourism business frontiers: consumers, products and industry.* 1st ed. Oxford: Elsevier, 273 p. ISBN 0-7506-6377-4.

DENOVE, Ch., POWER, J. D. (2006). *Satisfaction: How Every Great Company Listens to the Voice of the Customer*. 1st edition. USA: Portfolio, 266 p. ISBN 1-59184-109-7.

EKLOF, J., WESTLUND, A. (1998). Customer Satisfaction Index and its Role in Quality Management. *Total Quality Management*. V. 9, N. 4/5, p. 80–85. ISSN 1754-2731.

FORNELL, C. A. (1992). National Customer Satisfaction Barometer: The Swedish experience. *Journal of Marketing*. V. 56, N. 1, p. 6-21. ISSN 0022-2429.

GRÖNROOS, C. (2007). Service Management and Marketing: Customer Management in Service Competition. 3rd rev.edition. New York: John Wiley & Sons, 496 p. ISBN 0470-02862-9

HILL, N., BRIERLEY, J., MacDOUGALL, R. (2003). *How to Measure Customer Satisfaction*. 2.ed. USA: Gower, 151 p. ISBN 0-566-08595-X.

KANO, N. (2001). Guide to TQM in Service Industries. Tokio: Asian Productivity, 260 p. ISBN 9283311302.

Manual for Evaluating the Quality Performance of Tourist Destinations and Services. Enterprise DG Publication. Denmark: RAMBØLL Water & Environment, 2003). 52 p. Available from:<a href="http://ec.europa.eu/enterprise/tourism/docs/studies/evaluating\_quality\_pe">http://ec.europa.eu/enterprise/tourism/docs/studies/evaluating\_quality\_pe</a> rformance /qualitest manual en.pdf>.

MATEIDES, A., ĎAĎO, J. (2002). Služby. Bratislava: Epos, 750 p. ISBN 80-8057-452-9.

MIDDLETON, V. T. C., CLARKE, J. R. (2001). *Marketing in Travel and Tourism*. 3rd ed. Oxford: Butterworth Heinemann, 487 p. ISBN 0750644710.

MÜLLER, H. (1995). Q" FOR YOU – eine Qualitätsoffensive in Feruenirteb. *In Jahrbuch der Schweizwrischen Tourismuswirtschaft 1994/95*, Institut für Tourismus und Verkehrwirtschaft an der Hochschule St. Gallen.

PALATKOVÁ, M., TITTELBACHOVÁ, Š. (2011). Analýza systému řízení kvality v sektoru turistických informačních center v České republice. In *Sborník recenzovaných příspěvků z mezinárodní vědecké konference Hotelnictví, turismus a vzdělávání*. Prague: Vysoká škola hotelová v Praze 8, spol. s r. o.,. p. 205-217. ISBN 978-80-87411-15-5.

PÁSKOVÁ, M., ZELENKA, J. (2002). Výkladový slovník cestovního ruchu. Prague: MMR,. 448 p. ISBN 80-239-0152-4.

RYGLOVÁ, K. (2007). Teoretická východiska pro audit spokojenosti zákazníka. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis.* V. LIV, N. 6, p. 159-169. ISSN 1211-8516.

RYGLOVÁ, K. (2009). Specifické možnosti aplikace marketingových nástrojů při podnikání v cestovním ruchu. Habilitační práce. Brno: MZLU v Brně, 139 p.

VAJČNEROVÁ, I. (2009). Kvalita destinace cestovního ruchu – integrovaný management kvality. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*. V. LVII, N. 6. ISSN 1211-8516.

VAJČNEROVÁ, I. (2011). IQM of a tourism destination as a tool of competitiveness. *In Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis.*, volume LIX, nr. 2, MZLU in Brno, p. 407-412. ISSN 1211-8516.

VAJČNEROVÁ, I., ŠÁCHA, J., RYGLOVÁ, K. (2012). Using the principal component analysis for evaluating the quality of a tourist destination. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*. 2012. ISSN 1211-8516.

ZEITHAML, V. A., BITNER, M. J., GREMLER, D. D. (2006). *Services Marketing: Integrating Customer Focus Across the Firm.* 4th ed. Boston: McGraw-Hill,. ISBN 007-124496-4.

ZEITHAML, V. A., PARASURAMAN, A., BERRY, L. (1990). *Delivering Quality Service*. New York: The Free Press, 226 p. ISBN 0029357012.