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**HOSPITALITY, TOURISM AND EDUCATION**

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doc. Ing. Jan Hán, Ph.D.

Ing. Barbora Komínková

Ing. Radka Balakovská

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## **INTRODUCTION**

**“If you cannot measure it, you cannot manage it.”**

**Peter Drucker**

These words briefly describe the eleventh year of the conference at the Institute of Hospitality Management, which focuses on approaches and performance indicators in tourism. The conference is focused on tourism destination as well as on institutions providing accommodation services. Participants of the 11th International Conference on Hospitality, Tourism and Education 2019 and also other readers of this proceeding, have the opportunity to find answers to questions related to the very thematic issue in the field of tourism and hospitality - performance measurement.

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# SUSTAINABILITY OF TOURISM IN NATIONAL PARKS OF THE CZECH REPUBLIC

Pavel Attl, Jan Mastný

***Abstract:** National parks of the Czech Republic represent a significant part of the state publicly accessible natural wealth as coherent territorial units with special degree of nature protection. Their visitor potential as places to relax, visits in the nature and resources of knowledge are irreplaceable in the overall context. To achieve the maximum possible quality of visitor's experience and at the same time respect the needs of the residents as well as the restrictions given by the local natural ecosystem, it is necessary to move around this territory with the utmost possible consideration. Only this way is it real within sustainable tourism to keep this national wealth in an unchanged form for the next generation as well.*

***Key words:** National Parks, Nature Protection, Sustainability, Tourism, Visit Rate*

***JEL Classification:** Q260*

## Introduction

There are four territories with the status of national park of the Czech Republic in the Czech Republic. It is the highest level of territorial nature protection, where the first level consists of a system of national natural reservations (NPR) and national natural landmarks (NPP). The second level consists of a system of 24 protected landscape areas (CHKO). The whole system is then methodically covered and cared for by the Nature and landscape conservation agency of the Czech Republic (AOPK, ČR) that reports directly to the Ministry of the Environment (MŽP).<sup>1</sup> The individual national parks (NPs) are established by the relevant law, which among other things, through MŽP establishes and defines ensuring the destination management in each national park the state contributory organization called the National park administration. The main task of each individual NP

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<sup>1</sup> Source: Promotional materials AOPK, ČR

administration is the nature protection on the NP territory. For this purpose, the administrations perform a lot of diverse activities that have the main long-term objective to preserve or gradually recover the natural ecosystems including the ensuring of uninterrupted course of natural phenomena in their natural dynamics. At the same time along with this main purpose the individual NPs administrations implement measures on a given territory for its sustainable development, education, upbringing, research and the last but not least ensure the gentle tourism.

## **Materials and Methods**

A part of the collection of the underlying materials was the own territorial survey that was carried out in the years 2017 to 2019 not only in the main season, but during the whole year. In some cases, the discussions with interested people as directors, deputies and press agents of NPs and AOPK, ČR were parts of the visits. The secondary data sets from pass-through sensors measuring the visit rate of specific locations in individual NPs were used, mostly because of the long-term measurements (2009–2019). In addition to this, during the territory survey the photo documentation mapping the up-to-date situation in the researched NPs was taken. The information, statistical data and data concerning the researched solved problematic collection covered a whole number of sources. The data was gained partly from the statistics of the Czech Statistical Office (ČSÚ), as well as from the materials provided by the concerned administrations of NPs and AOPK, ČR, data of relevant municipalities, commercial companies and non-profit organizations.

The objective of the research was to analyse the current status of NP from the point of view of sustainable tourism problematic and limiting parameters of its future development. Methods used in the paper are the descriptive analysis of the statistical data, general analysis and synthesis and comparison.

## **Results**

*The characteristics of tourism in national parks of the Czech Republic*



As we can see in the Table 1, the interest in natural wealth of the Czech Republic concentrated in national parks territories keeps increasing year-on-year and the number of tourists in the individual NPs is constantly rising. This is happening in the segment of individual as well as organized tourism. The effects of this phenomenon can be according to Pásková (2008) divided to desirable (Pásková, 2008, p. 61) and undesirable (Pásková, 2008, p. 62). In accordance with Pásková, divides Sharma (2019, p. 17–23) the individual effects of tourism to impacts on natural, social and economic environment.

**Table 1: The visit rate to the national parks of the Czech Republic**

Year	National Park [mill. of tourists]				Total
	Krkonošský	Šumava	České Švýcarsko	Podyjí	
2014	5–6	1,5–2,5	0,66	0,16–0,18	7,36–9,41
2015	5–6	1,5–2,5	0,68	0,16–0,18	7,38–9,43
2016	5–6	1,5–2,5	0,76	0,17–0,19	7,46–9,51
2017	5–6	1,5–2,5	0,78	0,17–0,20	7,98–9,53

Source: The data provided by the NPs' administrations in the internal materials

Without doubt, tourism has several desired effects on the concerned territory in the national parks (Pröbstl, 2010, p. 132). Among those are primarily the increased interest from the state and regional authorities in what is happening in the NPs, connected with a higher level of willingness to invest into the necessary infrastructure, rising living standard of municipalities in the national parks (e.g. five out of ten municipalities with the highest incomes per inhabitant lie in NPs, or on its edge<sup>2</sup>), the trend turning point towards depopulation of villages in favour of urban agglomerations, more possibilities of local people involving in realization of services or products related to tourism etc.

Among undesirable impacts there are except for commonly monitored items (e.g. Pásková, 2008, p. 62) in the regions of NPs far more serious impacts on local ecosystems. The desire of visitors for exceptional experiences and spotting rare animal or plant species make them often pass the border of marked hiking trails, resulting in the unwilling devastation of natural processes in the given ecosystems (Newsome, 2013, p. 97–103). In NP

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<sup>2</sup> Source: Horká, P.: *Socio-economic aspects of nature protection impacts in national parks on residents*, Faculty of Science, Charles University, Prague, 2017

Czech Switzerland e.g. in 2019 there was out of seven confirmed nesting in the Czech Republic of the rare Peregrine Falcon only one successful breeding nest, where in two cases demonstrably and in other very likely, the nesting calm of the predators was disrupted by the visitors and consequently the nests were deserted.<sup>3</sup> The situation and affinity towards tourism in the individual NPs is so different also in respect to the various impacts of seasonality or intensity of loading the individual areas of NPs by tourism.

In the following text, the individual NPs are presented with emphasis on the main factors that restrict the future development of tourism on their territory together with proposals of how to mitigate the negative impacts of tourism and of possible measures of their maximal elimination.

### *Krkonoše national park*

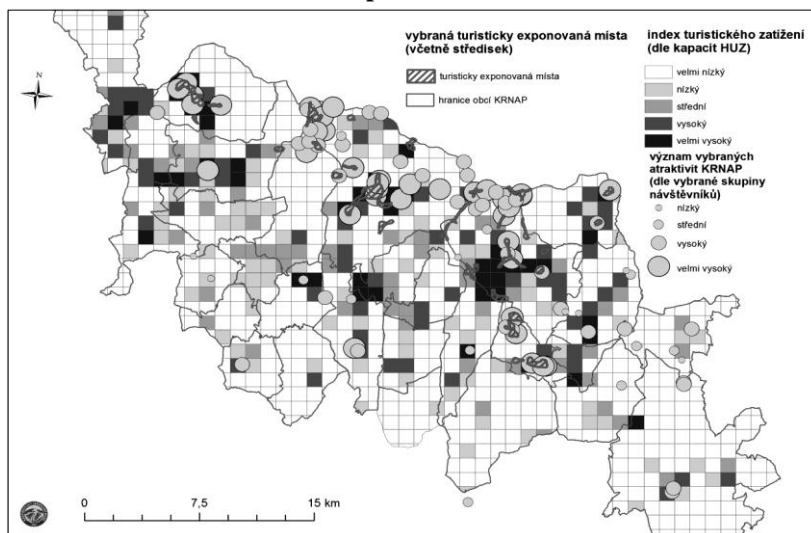
The oldest national park in the Czech Republic, declared in 1963<sup>4</sup>, by the government directive No. 41/1963 Sb., on an area of 370 km<sup>2</sup>. It is located on the Polish border in north-east Bohemia and is made up of mountain ecosystems on the slopes of the Krkonoše Mountains. Due to the very high attractiveness of the mountain relief in summer and winter it is used for tourism all year round. It is not a subject to the seasonal problems, the main problem from the point of view of sustainable tourism is a great tourist exposition of specific locations in the NP, compared to rest parts of the NP (see Chart 1).

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<sup>3</sup> Source: Tomáš Salov, press agent of NP Czech Switzerland, during the expert interview 6. 9. 2019

<sup>4</sup> Source: <https://www.krnep.cz>, 5. 9. 2019

**Chart 1: Partial aspects of tourism in KRNAP**



Source: Data ČSÚ, elaborated by M. Erlebach, administration of KRNAP (2017–2018)

Whereas in the dark-underlined focuses of tourist interest the intensity of visit rate reaches the limits of traffic, the light-underlined places on the greater part of the monitored area of the NP show lower, or in extreme cases even zero visitor interest. The reason for this is particularly the uneven destination marketing, where only the specific, usually traditional places of the NP are publicly presented, instead of the protected area being presented all together. Therefore, the NP in fact does not act as a presentation of an integrated territorial system of nature protection, but as several narrowly defined tourist attractions associated under one name.

The consequence of this imbalance are considerable problems e.g. with the transport services of some congested areas in the winter. Also, the indiscipline of many visitors longing for being in virgin nature during the winter season (Arlettaz et al., 2015, p. 1197–1212) greatly affects the local wintering population of the black grouse that loses in the confrontation and dies consequently.

### *National park Šumava*

The largest national park in the Czech Republic, declared in 1991<sup>5</sup>, by the government directive No. 163/1991 Sb., on an area of 683 km<sup>2</sup>. It is situated in the south and south-west Bohemia in the area of the mountains with the same name. It has the same mountain profile as NPK, therefore there are also similar main problems in sustainable tourism. Its total area is approx. 2x larger and the given number of visitors per year is 3–4x smaller than in NPK (see Table 1), So it could seem like the intensity of visitor number is spread out on a larger area. Though this NP is expected to encounter a great increase of tourist interest in the nearest future. In relation to the introduction of the new so-called rest area measures more than 3,000 ha of up to now inaccessible territory is opening here for the needs of tourism.<sup>6</sup> The all year round tourist interest in the given territory, as well as a great imbalance of visitor interest in specific location of the NP territory apply here without exception as in NPK.

### *National park Podyjí<sup>7</sup>*

The smallest what the area concerns, but not less important national park, declared in 1991<sup>8</sup>, by the government directive No. 164/1991 Sb., on an area of 63 km<sup>2</sup>. It is in the south-east of the Czech Republic, in the proximity of Znojmo town. Its relief is formed by the border of the Bohemian-Moravian Highlands and the Dyje-Svratka ravine. The main tourist attraction in the NP is the canyon Dyje forming a unique phenomenon of meandering river. Because of the lower height profile, it is quite calm here in winter, however in summer experiences the NPP greater interest. Similarly as with the previous NP a great problem is the uneven load of the NP area during the tourist season related to the traffic service problems in the particular focuses of tourist interest due to irresponsibly parking individual as well as organized visitors and the absence of their basic knowledge of stay in nature (Chen & Prebensen, 2017, p. 5). There is a specific problematic within this NP and that is the cycling tourism. Thanks to the favourable territory profile the cycling is desired on the marked cycle paths, but undesired in the open nature and walking trail or out of them.

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<sup>5</sup> Source: <http://www.npsumava.cz/cz/1261/sekce/zakladni-udaje/>, 5. 9. 2019

<sup>6</sup> See more.: <http://www.npsumava.cz/cz/5896/sekce/>, 5. 9. 2019

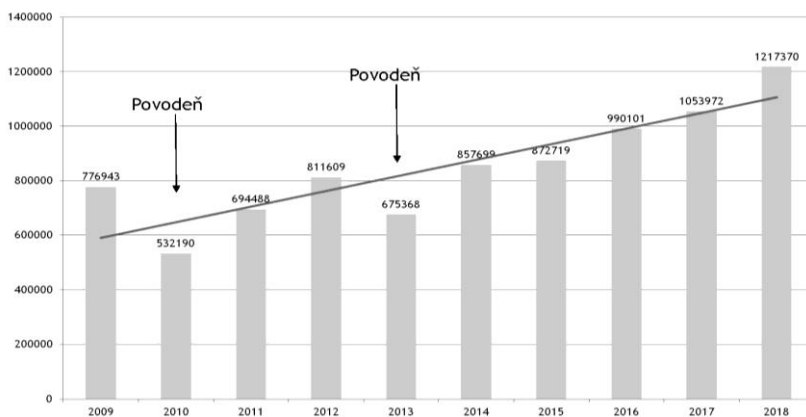
<sup>7</sup> Source: expert interview with Tomáš Rothrock, director of Podyjí NP administration, 3. 9. 2019

<sup>8</sup> Source: <https://www.nppodyji.cz/pece-o-uzemi>, 5. 9. 2019

### *National park Czech Switzerland*

The youngest NP Czech Switzerland, declared in 1999, by the law No. 161/1999 Sb., previously functioning in the statute of the organizational unit of the state. It was established as a contributory organization 1. 1. 2018 act No. 23/17 MŽP<sup>9</sup>, on an area of 79.3 km<sup>2</sup>. It is in the north of Bohemia and in the European dimension it is a unique sandstone area considerably forested and minimally populated.

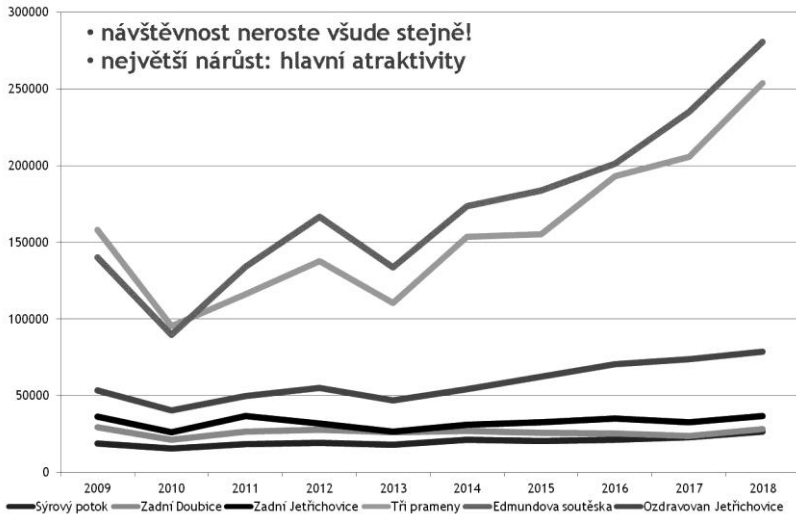
**Chart 2: Visit rate trend of NP Czech Switzerland in 2009–2018**



Source: Administration archive NPCČŠ

<sup>9</sup> Source: <http://www.npcs.cz/zakony-vyhlasky>, 5. 9. 2019

**Chart 3: Visit rate trend of the individual measured locations of NPČŠ in 2009–2018**



Source: Administration archive NPČŠ

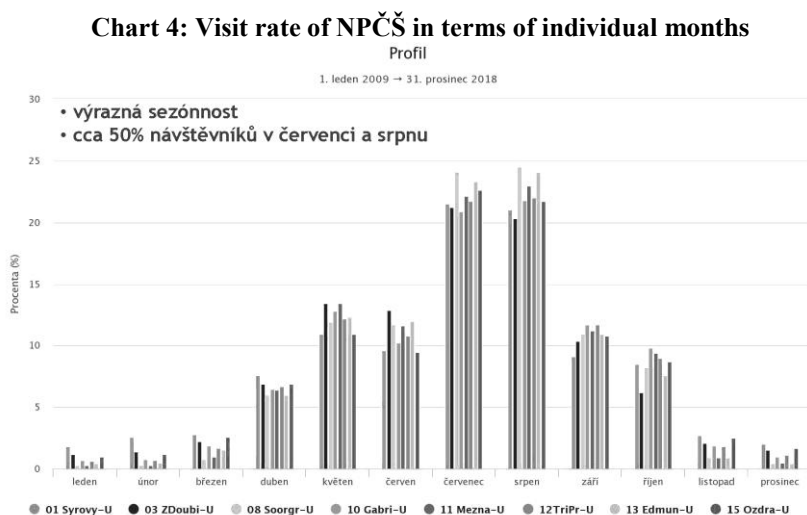
This NP deals especially with problems of uneven increase of visit rate in the individual focuses of tourist interest, see comparison of Charts 2 and 3, where in terms of total visit rate of NPČŠ the situation seems to be positive (the trend is slightly increasing year by year), however in terms of individual attractions in NPČŠ there is a great differentiation of tourist interest.

While in Chart 3, based on data of visit rate sensors of individual attractions, at first sight, there is a clear dynamics of visitor rate increase of Pravičská Gate and Edmund Gorge (the two upper curves in Chart 3), the remaining sensors show only very slightly rising values between 2009–2018. However, the summation chart does not reflect these findings for all sensors, as the dynamic of individual curves equal one another. Under the surface of seemingly ideal potential growth of the whole NPČŠ territory, there is a considerable visitor burden of the mentioned localities.

With respect to the low intensity of habitation in the vicinity of given burden focuses, the clashes with interests of local residents do not occur, also socio-cultural or psychological impacts recede into background (see more Pásková, 2008 p. 181–227). However, we can see here all the more

increase of environmental burden, i.e. excessive amount of waste (biological one as well) damages made by inappropriate activities of visitors (drawings, inscriptions, engravings, recently very popular so called stone pyramids), increased incidence of fires in the NP and last but not least erosion of soil and vegetation cover of natural paths.

Another serious problem from the point of view of tourism sustainability is a great seasonal disproportion. Even if NPČŠ can offer comparable experiences in winter, paradoxically extended to purely winter phenomena (e.g. Brtnické ledopády), the public interest is almost exclusively concentrated on the summer season (see Chart 4), when NPČŠ experiences a considerable rush of tourists.



Source: Administration archive NPČŠ

As follows from the previous text, national parks in the Czech Republic, despite their diversity, are facing similar problems that are considerable tourism imbalance of individual areas and also seasonal disproportion of their usage for tourism. Regarding their main functions as protection of biodiversity of managed territory administration, the NPs do not have enough infrastructure to implement the efficient destination marketing. In practice, they rather adapt to the trends and try to respond flexibly to problems of such a situation. It is overall necessary to make the public

understand the national parks not as a territory around the main attractions but as integrated territories with special level of protection offering wide range of possibilities of tourism and recreation associated with learning the natural wealth of the Czech Republic.

In connection with the previous text, there comes a question how to improve the destination management for the needs of national parks to ensure sustainable tourism in given areas. The decisive factor according to the authors is the clear communication and cooperation of NPs' administrations with the state contributory organization ČCCR-CzechTourism ensuring proper and effective marketing communication in the Czech Republic. The ČCCR-CzechTourism agency has been very successful in the field of destination marketing, which is clear from the submitted data. The interest in tourism in national parks of the Czech Republic keeps rising steadily, which is undoubtedly its merit as well. At the same time the results show the necessity of abandoning the promotion of individual symbols of national parks towards promotion of national parks as a whole territory. In the target groups, this can lead to greater interest in natural environment and change in understanding the national park territory as a single natural environment, instead of an obstacle that must be overcome on the way to an attractive object. Pravičská Gate (NPČŠ) is the symbol of the national park, but it is a part of an integrated sandstone phenomenon that is unique in Europe and that is how it must be understood. Fewer tourists know that in its immediate proximity there is the Pravičský Cone, and even fewer know that a bit further there is the Small Pravičská Gate.

## **Conclusion**

National parks of the Czech Republic as integrated territories with unique natural and cultural wealth, having great potential in the field of tourism. In terms of tourism sustainability in NPs of the Czech Republic it is necessary to term the problems that the national parks encounter at the present time in the field of tourism increase and interest in them and present solutions that might bring decrease in negative impacts of tourism on these territories and in the final consequence be beneficial for tourist experience increase of individual visitors and for the regions in terms of tourism sustainability as well. It is necessary to remark that in the final consequence, this is not a local problematic of the Czech national parks and that similar questions are solved in national parks all over the world, as follows from the presented



literature. The authors hope to have succeeded at least partially and that this contribution will initiate the necessary discussion on this topic.

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**Contact information**

Ing. Pavel Attl, Ph.D.  
Department of Travel and Tourism Studies  
The Institute of Hospitality Management in Prague  
Svídnická 506  
181 00 Prague 8  
Czech Republic  
T: (+420) 283 101 190  
E: attl@vsh.cz

**Description of the author**

Ing. Pavel Attl, Ph.D. is the Head of Department of Travel and Tourism Studies at the Institute of Hospitality Management in Prague. He graduated from the University of Economics, Prague, where he also completed the doctoral studies in the field of International Economic Relations. His profession is oriented on spa and spa tourism and further on spatial planning and sustainable development of tourism.

Ing. Jan Mastný  
Department of Marketing  
The Institute of Hospitality Management in Prague  
Svídnická 506  
181 00 Prague 8  
Czech Republic  
T: (+420) 283 101 113  
E: mastny@vsh.cz

**Description of the author**

Ing. Jan Mastný is the Assistant Professor at the Department of Marketing, he publishes in graphics, advertisement, virtual reality, nature and landscape protection, sustainable tourism, destination marketing. He realizes the graphic outputs for the Ministry of the Environment, AOPK, ČR, national parks of the Czech Republic and protected landscape areas of the Czech Republic. He creates the graphic and internet design of the magazine Nature Protection and Nature, issued by AOPK, ČR.

# **SOCIALLY RESPONSIBLE ACTIVITIES IN THE HORECA SECTOR**

Marie Dohnalová

**Abstract:** *Corporate Social Responsibility (CSR) is a concept that is reflected in economic, social, environmental, employee and management activities. The paper presents first survey results of activities according to the methodology recommended for the Czech environment as well as for the HORECA sector. The paper based on qualitative survey among thirty entities in the HORECA sector conducted during 2016–2017. The outputs form a basis for a wider use of the methodology among hotels, restaurants and companies interested in further development of CSR.*

**Key words:** *Corporate Social Responsibility, Sustainable Development*

**JEL Classification:** *M14, O15, O35*

## **Introduction**

Corporate Social Responsibility represents a new and up-to-date topic in the last few years. Many commercial companies perceive they should return something to the society or care for their surroundings or community. CSR combines these feelings with business activities. The phenomenon is also visible in the HORECA sector, not only in large hotels that are often part of international hotel chains. It also involves small hotels and restaurants with where hotel owners pursue strong personal values, family tradition or desire to do something beneficial for the nature or society. Authors Anheier and Toepler (2010) report that CSR was initially synonymous with donations. Charities and donation companies behaved socially responsible and were perceived as "a good corporate citizen". At present, socially responsible behaviour is associated with sustainable development with tree responsibilities. So called triple bottom line is described as a principle according to the company's activities and is based on three pillars: economic (Profit), environmental (Planet) and social (People). The Business For Social Responsibility international organization has adopted a definition stating that "CSR means managing business activities in a way that fulfils or

exceeds ethical, legal, commercial and social expectation from businesses. " (Kotler, Lee in Kunz, 2012, p. 15).

Corporate Social Responsibility is positively perceived not only by companies (hotels, restaurants, etc.) themselves, but also by customers or potential employees. According to foreign surveys, customers are more willing to buy products or clients are more willing to use services from CSR companies (Zeitouni, Sadeh, 2014). Social responsibility is becoming an important factor in the choice of employment, especially for Y-generation employees (Legnerova, 2016).

According to the latest study of UN Global Compact and Accenture (2016), directors are primarily accountable for the responsible behaviour agenda. Virtually all top managers (95 %) feel personally responsible for making sure that their companies play social role as well, more than two thirds (69 %) of managers involved in the survey stated that sustainability has become part of discussions held at top management level. Based on the above, a methodology for development of a non-financial CRS report is currently being verified and it will be certified by the Ministry of Industry and Trade of the Czech Republic (CSR Reporting, 2017).

## **Materials and Methods**

### *Main objective of the survey:*

Analysis of socially responsible activities of selected entities in the HORECA sector.

### *Survey sample and time:*

The survey was conducted in 2016 and 2017 among thirty HORECA entities: a targeted selection of twenty hotels and ten restaurants was carried out.

### *Survey approach:*

The survey was conducted by a combined form of questionnaire survey and documents content analysis. First part of the survey was carried out in the form of e-mail communication sent to companies, using a structured questionnaire with 33 questions. Of the 30 respondents, 21 responses were returned, representing 70 %. Results were supplemented for entities that submitted completed questionnaire by information published on their website.

## Results

Socially responsible activities were analysed in the following areas: economic, employee, social, environmental and CSR management.

The first four areas represent a stable part of corporate social responsibility according to foreign approach (Pless, Maak, 2012). The Czech methodology additionally includes an area of CSR management in order to assess management of socially responsible activities in companies.

The most frequent activities at hotels and restaurants are listed in the table below. The CSR management area was not included in the overview, as management of these activities was mentioned only rarely.

**Table 1: The most frequent socially responsible activities at hotels (over 50 %)**

<i>Economic Area</i>	<i>Employee Area</i>	<i>Social Area</i>	<i>Environmental Area</i>
Procedures established in the field of occupational safety and health protection	Care for professional growth of employees	Implementation of the Code of Ethics	Waste sorting & reduction
Providing high quality services	Determining employee satisfaction	Financial or other support of non-profit organizations	Using environmental friendly technology and materials

Source: Own survey

**Table 2: The most frequent socially responsible activities at restaurants (over 50 %)**

<i>Economic Area</i>	<i>Employee Area</i>	<i>Social Area</i>	<i>Environmental Area</i>
10	Determining employee satisfaction	Observance of ethical behavioral principles	Waste sorting & reduction

Source: Own survey

An environmental area was reported as the most frequent activity by all entities – waste sorting and trends towards waste reduction, willingness to use environmentally friendly technologies, recycled materials or to buy products from local producers. These are the first steps to promote a preventive approach to environmental protection in the HORECA sector, with hotels and restaurants systematically assessing a level of risk of non-compliance with environmental, health and safety standards. Development of environmental principles, monitoring their compliance and implementation of environmental policy at all levels would represent a challenge. Further CSR activities identified in the survey were focused internally – a need to care for employees and their satisfaction or professional growth possibilities through recommendation of different training or mediation of courses or seminars, regarding hotels. Some hotels pursue corporate philanthropy, primarily by granting donations and gifts to non-profit organizations. The support was usually aimed at helping disabled and socially disadvantaged people and primarily foundations (regarding non-profit organizations), often associated with a well-known personality, with a mission to help disadvantaged social groups.

## **Discussion**

The survey was conducted for a sample of twenty-one selected entities. Although results cannot be generalized to the entire HORECA sector, they show positive trends. Preventive approach to environmental protection in the HORECA sector and the support of employ of disabled and socially disadvantaged people including foreigners is very important. The survey will continue with an aim to increase number of respondents; number of hotels and restaurants will increase. The data obtained is associated with overcoming selected obstacles. Companies, for example, do not want to register in the on-line methodology available on the website ([csr-reporting.cz](http://csr-reporting.cz)) prior to knowing an exact wording of questions. We may assume that for instance hotels intend to keep selected internal data confidential. However, statistics on employment of disadvantaged people, corporate philanthropy are public, and environmental principles are will monitoring in the HORECA sector soon.

## Conclusion

Survey results of selected sample of entities illustrate that a concept of social responsibility is new both for the Czech environment and for the HORECA sector as well. Most entities are involved in environmental issues and we can deduce that they are interested in sustainable development. In the context of CSR, a need to pay more attention to employees is emphasized. Compared to foreign practice, there is a great opportunity to co-operate with local communities, to participate in social life in regions where entities are headquartered leading to increased visibility in local conditions. Hotels may promote their reputation among customers and also their reputation as employers among current employees and potential job seekers. Hotels and restaurants expect innovations related to entire environmental area. Idea of a socially responsible approach is not associated only with economically advanced countries, it is a global phenomenon. Nowadays, people may find all information about business on the Internet and they monitor under which conditions services are provided or how products are produced, whether they bring added value and other aspects that have not been of great importance to customers in the past. Philip Kotler emphasized that companies must not ignore social responsibility because customers and clients exchange information on impact of economic activities on the environment, on the health and well-being of people, families and communities on Internet today. People are interested not only in the quality offered but also in the social initiatives of the companies (Kotler, 2013).

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### **Contact information**

Doc. Ing. Marie Dohnalová, CSc.

Department of Marketing

The Institute of Hospitality Management in Prague

Svídnická 506

181 00 Prague 8

Czech Republic

T: (+420) 725 907 529

E: [marie.dohnalova@gmail.com](mailto:marie.dohnalova@gmail.com)

### **Description of the author**

Marie Dohnalová focuses on social economy topics and she is one of the Czech experts on corporate social responsibility, social economy and social entrepreneurship.



# THE DESIGN OF THE HOTEL SIMULATOR FROM THE PROCESS MANAGEMENT POINT OF VIEW

Jan Hán

**Abstract:** *Web based simulation brings the challenge to develop the virtual “world” very suitable for new skills training, new knowledge creation and existing experiences sharing. In the hospitality industry it allows to share experiences on the multinational level by the application of the simulator in the network of schools, universities and consulting companies all over the world. The paper describes some properties, algorithm and limitations of the web based process simulator developing in the frame of the Czech national research project.*

**Key words:** *Hotel Management, Revenue Management, Simulation, Training*

**JEL Classification:** *C63, O31, L83*

## Introduction

One of the main results of the Czech national research project called “Innovation of Tourism Management Systems Using the Process Management Tools“ (TL01000191) is the hotel processes simulator. The project started in March 2018 and it is financed by the Technology Agency of the Czech Republic. The consortium of 4 universities and 2 practical subjects is responsible for the project results.

The hotel business processes simulator allows its users to simulate the behaviour of accommodation subjects on the markets of accommodation and related services.

The main goal of the hotel processes simulator is to offer the possibility to understand the consequences of specific business strategies and business processes setting within specific conditions. The simulator enables its users

both to select and to set up specific hotel processes and to monitor its results in the specific conditions of the hotel and markets too.

There are two main target groups of the simulator:

1. Hotel managers,
2. Students of hotel management study programmes.

The simulator helps them to verify the suitability of specific business strategies in the specific business conditions and to understand the consequences of specific business decisions.

The main emphasis within the hotel processes simulation is put on the processes directly influencing the performance of a hotel on a market. Following processes are included especially:

1. Marketing and sales processes, Revenue management processes primarily,
2. Processes providing the volume and the quality level of offered services, accommodation and F&B services primarily,
3. Hotel performance evaluation processes.

The model of a simulated hotel complies with 4 stars hotel properties in a general point of view.

Simulated hotel/-s is acting on several virtual markets. It allows to interact with four market segments:

1. Individual leisure clients,
2. Group leisure clients,
3. Individual business clients,
4. Group business clients.

## **Materials and Methods**

On the field of business processes management and optimisation play the simulation very important role in the last 50 years. It is relatively old method very popular especially in logistics and manufacturing. As Jankowski-Guzy and González mentioned the business process management is a topic very suitable for the area of industrial enterprises, the most common is its application in logistics processes. (Jankowski-Guzy et al., 2018; González, et al., 2018)

In the last decade some applications of business processes management methods and tools appeared in the service industry, especially in the hospitality industry. Ramesh mentioned, the simulation, historically first used in manufacturing industries, has steadily and deservedly expanded its reach into helping service businesses evaluate and implement solutions to problems such as slow service, overutilized or underutilized resources, suboptimal scheduling, and inefficient workflow. Such service industries have included banks, retail stores, hospitals and clinics, hotels, call centres, and credit unions. (Ramesh et al., 2018) Sivaramakrishnan mentioned, historically, simulation first proved its worth, and was most extensively used, in the analysis and improvement of manufacturing operations. More recently, the use of simulation has expanded vigorously and broadly to include warehousing operations, the delivery of health care (hospitals and clinics), transportation services (airlines, railroads, and bus lines), and the hospitality industry (amusement parks, hotels, restaurants, and cruise ships). (Sivaramakrishnan et al., 2016)

As Poulouva mentioned the simulation is a method used not only for innovation and for optimization of business processes but has proven itself in education and human resource development. (Poulouva et al., 2019) In last decade it started to play the important role also in the hospitality management education and training. Pratt and Hahn mentioned, hospitality courses must be relevant to industry, and relevance is increasingly achieved through innovative learning methods. Computer-based simulations have been found to bridge the gap between didactically presented information and experiential learning. (Pratt and Hahn, 2016)

Some hospitality training topics can be more convenient for simulation methods application than others. One of the topics seems to be very suitable for simulation methods and tools application in the training point of view is Revenue management. As Cox mentioned, simulations have been advocated as a solution to deliver holistic revenue management education. (Cox, 2018)

Simulation experiments can provide sufficient answers to the question “What happens, if ...?” (Han et al., 2015) Web based simulation brings the challenge to develop the virtual “world” very suitable for new skills training, new knowledge creation and existing experiences sharing. In the hospitality industry it allows to share experiences on the multinational level by the application of the simulator in the network of schools, universities and consulting companies all over the world.

## Results

In this chapter basic properties and algorithms of the designed hotel simulator are described both to present the main ideas of the simulator solution and to create the sufficient base for the discussion needed to the next project development phase.

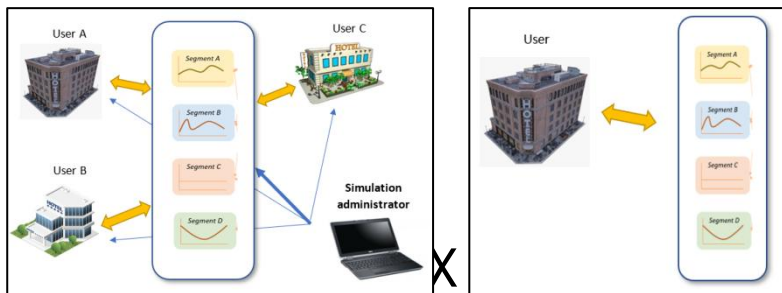
### *The modes*

There are two basic operating modes of the processes simulation, on-line and off-line modes.

The on-line mode of the simulator allows the existence of several virtual hotels acting on prepared markets. All simulated hotels compete on markets both to attract and to receive relevant clients. The users/managers of simulated hotels make independent decisions in the frame of competition, to make more real strategies of hotel management than in the case of exclusive position on relevant markets. This mode requires the implementation of the simulator in the frame of computer network.

The off-line mode allows the existence of just one virtual hotel acting on prepared markets. The simulated hotel is not competing on virtual markets with another hotels.

**Picture 1: On-line versus off-line mode of the simulator**



### *The basic algorithm*

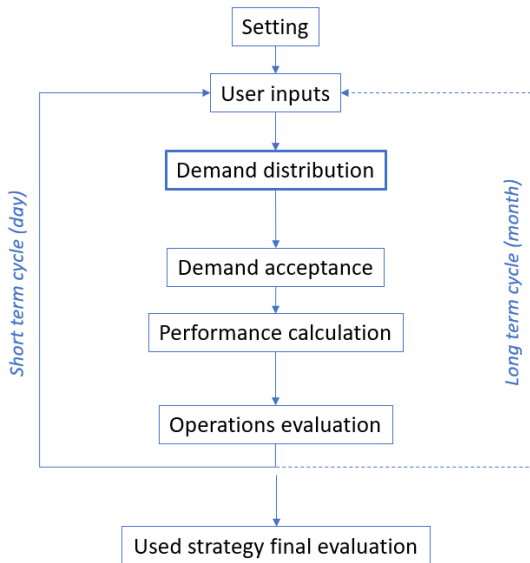
A simulation itself is divided to several long and short simulation cycles. After the simulation set up by the administrator users input data of long

term cycle. The long term simulation cycle represents commonly the one month time period. As examples of the long term inputs can be referred e.g. the number and the quality of employees, the level of investment etc. The long term cycle includes several short term cycles representing commonly a simulation day. One long term cycle includes commonly 30 short term cycles. At the beginning of each short term cycle a user inputs data of offered rooms, e.g. the capacity, prices, third parties provisions etc.

After the short term data input the algorithm of demanded rooms distribution on the particular markets is done. The demand is distributed to particular virtual hotels on the base of its properties and the key values of particular virtual hotels parameters (e.g. the portfolio and the quality of offered services, the offer attractiveness, the offer accessibility etc.). After the demand distribution is done it can be accepted/refused by particular users (hotels). At the end of each short cycle the simulator calculates the performance indicators related to done operations. These indicators values are one of information sources used to new inputs decisions.

The moment all set cycles are done the used business strategies are evaluated.

**Picture 2: The basic algorithm of the hotel simulator**



### *Inputs and outputs*

There is the set of user inputs influencing the success of particular virtual hotel on particular markets. These inputs represent the business strategy of the user and they determine the success of the hotel in the performance point of view. Among these inputs and outputs belong e.g. following:

**Table 1: The basic inputs and outputs of the hotel simulator**

<b>Inputs:</b>	<b>Outputs:</b>
- Services portfolio	- OCR (Occupancy Rate),
- Number of employees	- ADR (Average Daily
- Qualification of employees	Rate),
- Quality of materials	- RevPAR (Revenue per
- Quality of equipment	Available Room),
- Investments to equipment	- TRevPAR (Total
- Offered rooms capacity	Revenue per Available
- Rooms prices	Room)
- Promotion expenses	
- Used distribution channels	
- Third parties' provisions etc.	

## **Discussion**

There are several factors influencing the validity, the usability and the success of the simulation in the case of users training.

### *Initial setting of the simulation*

Initial setting of the simulation is done on the base of its goals/training assignments. Specific markets (demand curves) are set to match training needs, specific costs are set to match the actual situation in the country, the set of available services is created etc. By this setting done by an administrator the high level of variability and applicability of simulation is ensured.

On the other hand, the imprecision of initial setting can cause simulation mistakes and invalidity of specific outputs. It can cause the unreality of created virtual reality. The goals of the training can be missed. The initial setting is very important from this point of view.

### *Inaccuracy and generalisation of the model*

The model of the simulated hotel is represented by the set of formulas defining the relationships between specific variables and indicators representing the state of specific hotel subsystems and elements. Values of these variables commonly indicate the level of performance and the state of specific business processes.

Applied formulas are created with the certain level of similarity with the real system. The level of similarity is done especially by the level of system recognition and the level of generalisation due to the wide spectrum of different processes instances.

### *Limitation of simulated processes*

Reflecting the wide spectrum of hotel business processes in the real hotel, some of them couldn't be included/accepted due to their minimal influence on simulation goals and outputs. The simulator is limited especially to the processes mentioned in the paper introduction. In some cases, there can be the reason to discuss the absence of any process. The role of a simulator administrator is important in this case.

### *Evaluation of simulation results*

Analysis and evaluation of simulation results is done on three levels. First level is provided by the set of hotel performance indicators calculated by the simulator and the presentation of their progress. The second level is done by the reflection of specific users on their done decisions and related impacts. Third level can be done by the simulator administrator/trainer who can comment specific issues as the results of done business strategies/steps.

## **Conclusion**

The development of the simulator has started in the second half of 2018. Till the end of June 2019 the simulator specification was created and postponed to the software development team to implement it. Actually, the software programming is in progress and the partial results are gradually

commented by the team of the model designers (hotel business processes experts). Simultaneously evaluation and presentation modules are specified. After the whole model is transformed to the software form, several tests will be done to ensure correctness of behaviour and the validity of simulation results. Then it can be used by pilot users to detect possible errors and mistakes, user friendliness etc.

Simultaneously with the simulator another output of the project called “Innovation of Tourism Management Systems Using the Process Management Tools“ (TL01000191) is developed. It is the interactive library of hotels and tourism business processes models. The models developed by the ARIS methodology will be accessible for hotels and other tourism subjects to innovate their management systems and the performance of their processes.

On the base of several requests from another universities focusing on hospitality and tourism management study programmes the simulator will be developed in multilingual user interface to be applied in the international environment. It allows the join training of user groups from several countries enabling the mutual exchange of country-based experiences and business strategies.

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### **Contact information**

Doc. Ing. Jan HÁN, Ph.D.

Department of Hotel Management

The Institute of Hospitality Management in Prague

Svídnická 506

181 00 Prague 8

Czech Republic

T: (+420) 283 101 143

E: han@vsh.cz

### **Description of the author**

Jan HÁN is the Vice-Rector for research and partnership at the institute. His field of interest is mainly modelling and simulation of business processes. Complementarily he focuses on modern marketing tools and methods in hospitality.

# OVERVIEW OF BOLIVIA'S TOURISM, ITS COMPETITIVENESS AND COOPERATION PROSPECTS WITH THE CZECH REPUBLIC

Shirley Consuelo Honajzrová Banús

***Abstract:** Although the tourism sector is currently considered one of the strategic economic activities for Bolivia, it occupies a position far behind many of its direct competitors: other countries in the South American region. This is a clear indicator of the wide margin of improvement that exists in this sector. Bolivia's tourism offers mainly rely on its rich natural assets, making it the sector's diamond in the rough.*

***Key words:** Bolivia, Destination, Inbound Tourism, Tourism Management, Tourism Segmentation, Travel & Tourism Competitiveness Index*

***JEL Classification:** L83, F02*

## Introduction

Among the projects identified as potential cooperation between the Czech Republic and the "Plurinational State of Bolivia" is the tourism sector. (Honajzrová, 2012) Bolivia, classified as a developing country, needs international cooperation to develop better practices in its different economic sectors. In the past, the Czech Republic has cooperated in the education sector: granting scholarships to Bolivian students, providing training for the improvement of practices in the agricultural sector, and the facilitating technology. In the area of tourism, the flow of tourists between both countries has not been relevant for both markets; however, there is a potential for cooperation with the strengths and experiences that the Czech Republic has in its tourism sector.

Referring to the 2019 UNWTO publication, the Americas have the 3<sup>rd</sup> largest number of international tourist arrivals, with a 15% share of the world market. The sub-region of South America holds the 2<sup>nd</sup> position of importance within this region (only after North America with 142 million), accounting for 2.6 % of the world's total market share corresponding to

37.0 million international tourist arrivals in 2018. The countries of South America with the most significant participation in the world market share in the number of tourist arrivals in 2018 were: Argentina (3.2 %), Brazil (3.1 %), Chile (2.7 %), Peru (2.0 %), Colombia (1.8 %), and Uruguay (1.6 %). Based on data from the National Tourism Plan, under the Ministry of Culture and Tourism, in 2018, the growth of Bolivia's tourist flow grew by 4 % compared to 2017, when 1.4 million foreign visitors arrived in the country (25 % bound for the city of Santa Cruz) and the arrival of 1.8 million is foreseen for 2019. If we calculate based on this information, Bolivia has less than 1% participation, putting it in ninth position in South America, being an unprivileged place in the number of tourist visits in the region.

The development of the Bolivian inbound tourism is increasing, with rapid growth that exceeds 80 % from 2008 to 2018. Likewise, the evolution of Bolivia's total inbound tourism revenues has grown in the last decade, around 125 %, from 347 million dollars in 2008 to 781 million dollars in 2017. (INE, 2019) Tourism currently occupies about 295,000 people directly or indirectly, which represents 6.1 % of employment of the country, and the total contribution of the activity to the GDP of 2018 was 6.9 %. (WTTC, 2019)

Bolivia has been recognized by the World Travel Awards (WTA), the tourism "OSCAR" as "South America's Leading Cultural Destination in 2017", surpassing Peru and Argentina for the first time. On July 13, 2019, Bolivia won four awards at the level of South America: among them "South America's Leading Natural Tourist Attraction 2019" for *Salar de Uyuni*. *The city of La Paz*, the seat of government, was crowned as "South America's Leading Emerging Tourism Destination 2019". The country also won "South America's Leading Green Destination 2019" for *Madidi Pampa*; and "South America's Leading Youth Travel Destination 2019". Thanks to these prizes, Bolivia has received global exposure, which contributes to tourism growth.

The country has several tourist attractions that provide unique offers for travel intermediaries. However, most companies in the sector offer very similar services amongst them, which results in price competition between bidding companies and prevents the development of tourism beyond the "backpacker".

## Materials and Methods

The main objective of this research is to identify potential areas of international cooperation between the Czech Republic and Bolivia in the tourism sector. First, a diagnosis of the tourism market in Bolivia will be made and then analyze the results with the help of the Travel & Tourism Competitiveness Index (TTCI) Report (2019). Finally, the current inbound market between both countries is compared and contrasted to find the mainstream in their tourism sectors. The research is based on related literature, specialized web portals, relevant websites, and correspondence via email with organizations such as CzechTourism and relevant private organizations in Bolivia for up-to-date information on the subject of interest. The methods used in this paper also include analysis and study of documents, both primary and secondary data.

## Results

Article 337 of Bolivia's Political Constitution establishes that "*tourism is a strategic economic activity that must be carried out sustainably so that it will take into account the richness of cultures and respect for the environment.*" Within the public sector, the largest representative is the "Vice Ministry of Tourism," and in the private sector, there are business groups that operate within this activity. Another interesting fact is that the government created a state travel agency called *Boliviana de Turismo* "BOLTUR," which seeks to develop, strengthen and promote the tourism culture of the internal market, through different packages that satisfy the customer, emphasizing *community-based and social tourism*, promoting innovative and non-traditional tourist places throughout the country.

The tourist offers in the country do not have a fully developed structure or any specialization towards luxury or great comforts. There is a full offer adapted to the demands of *adventure tourism* that seeks direct contact with nature at a low cost. Along these lines, *community and sustainable tourism*, which offers self-managed tourism services by communities, is becoming very important. The rest of the tourism modalities are classified in the following categories: *cultural, natural, rural, adventure, health, gastronomic, and spiritual.*

Hotel offers have been increasing, with 1,453 establishments and 50,421 beds by 2017 (INE, 2019), which represents a growth of almost 41 % compared to 2008. Many of the leading international hotel chains are not yet wholly installed in this Andean country, except for some that have recently been established in Santa Cruz where the city focuses on MICE (Meetings, Incentives, Conferences, and Exhibition) tourism with hotels such as Marriott, Hilton, Accor, Radisson, and Sheraton. At a national level, the Camino Real chain stands out, aimed at medium-high standing tourism. Outside the main cities, the predominant offers are hostels with necessary facilities. Yet, investment in hotels continues to grow (thanks to the incentive that the government granted companies in the tourism sector to benefit from productive investment credit and tax advantages) as the majority of tourists in Bolivia still prefers staying in this type of lodging. Nonetheless, the number of short-term rentals available online like Airbnb experienced a nationwide boom in 2017 and 2018, in the younger segment of the population, as internet pervasiveness increases in the country.

The transportation infrastructure is poorly developed and, although it involves an increase in a trip's budget, many times, the safest and fastest way to move from one place to another within the country is by plane. Along these lines, the flight connections and rates to reach Bolivia are also not budget-friendly in comparison to Mexico, Brazil, and Colombia.



Almost 96 % of foreign tourists organize their trips independently. (Quesada, 2018) The main reason that leads them to visit Bolivia is leisure or vacation. On the other hand, they spend most of their money in the country on food and drink. (IBCE, 2019) Although there is not much seasonality in this market, there is a more significant influx of travelers in the second half of the year – the average trip of foreign tourists lasts 19 days. (Quesada, 2018)

The contracting of tourist services directly from Bolivia is cheaper than from Europe, the United States, or the surrounding economies. Bargaining is also a fairly frequent practice that allows some savings for tourists. Several EU operators organize tourist circuits to travel through Bolivia (trip to Bolivia is combined with other countries in South America) and two groups could be clearly identified for Bolivia: the younger market segment (20–40 years old); and the main market segment (40–70 years old) with the largest group being between the ages of 45 and 60. (CBI, 2015)

As for the mechanisms used by travelers in acquiring tourist services, it is worth mentioning the rapid growth experienced in the internet reservation channel in the region. Although the use of the internet in this Andean country is above the world average, the physical means is still the primary method for booking trips. In order to develop tourism and secure investments, Bolivia launched a new country brand, "Corazon del Sur" ("Heart of the South"), in 2018.

In Table 1, a comparison of the inbound market between CR and Bolivia is presented. Among the most important findings: Bolivia has a high concentration from its neighboring countries of Argentina and Peru. The Czech and Bolivian mainstream for their tourism sector have a different approach because of their different richness.

**Table 1: Inbound market comparison between the CR and Bolivia**

<i>Criteria</i>	<i>Czech Republic</i>	<i>Bolivia</i>
Brand positioning:		
Mainstream	<p>According to the long-term marketing plan presented by CzechTourism, the following tourist products will be advertised:</p> <p>Year 2019, Main Product: Regional Cities and Prague. Complementary products: Biking; Medical spa, and wellness. Urban life, nightlife and architecture • Preserved centers, and UNESCO monuments • City atmosphere, local gastronomy and quality cultural or sporting events.</p> <p>Year 2020, Main Product: Castles • Complementary Products: Skiing; Luxury</p> <p>Year 2021, Main product: Traditions, intangible heritage, and regional products.</p>	<p>According to the national tourism plan (PLANTUR): Community-Based Tourism (CBT) Bolivia's diverse ethnic culture could be better capitalized in order to diversify the tourism experience and to make sure tourism benefits reach more extensive sections of the community.</p> <p>There are regions such as the city of Santa Cruz de la Sierra that are interested in attracting business tourists. (MICE sector)</p>

Inbound tourists by country (CZ-Year 2018) (BO-Year 2017)	Germany (27.70 %), Poland (9.58 %), Russia (7.42 %), Slovakia (7.35 %), Austria (7.13 %)	Argentina (33.9 %), Peru (19.03 %), Chile (7.73 %), Brasil (7.10 %), United States (4.29 %), Spain (2.78 %), France (2.55 %), Germany (2.18 %)
Travel organization (Inbound tourism) (CZ-Year 2018) (BO- exact data not available)	Individual (74 %), Travel Agency (17 %), Business travel (6 %), other (3 %)	Independent and single travelers dominate: the vast majority are between 20 and 39 years old, and a good portion choose this tourist destination because of its low costs. Tours operators (around 4 %).
Activities during visit (CZ-Year 2018)	Cultural sites (60 %) Gastronomy (32 %) Social life and entertainment (30 %)	The Salar de Uyuni, nature, and culture. Activity preferences: hiking/trekking, being active and close to nature and culture, visiting local markets, and meeting with local people to learn about culture and traditions.
Goals	Quantitative: Increasing tourism revenues, increasing the number of arrivals and visits to regions, increasing daily expenses, maintaining the length of stay, increasing the number of repeated visits, increasing the number of overnight stays. Qualitative: Building a single destination brand, strengthening competitiveness and sustainability.	The Vice Ministry of Tourism expects that by 2025 the number of foreign visitors will reach three million through the implementation of the <i>community-based tourism</i> development model that will give Bolivia international and national recognition in the context for having a sustainable, comprehensive, innovative, and authentic tourist offer.

Source: Author's creation based on data from CzechTourism and the Viceministerio de Turismo from Bolivia

### *Travel & Tourism Competitiveness Index (TTCI) Report (2019)*

According to the data from the TTCI report 2019, for the third time, Spain remains the global leader, ranking first of 140 countries, followed by France and Germany. The Czech Republic improved its position to 38 (1 point), and Bolivia is the most improved country in the Americas region, moving up nine places to rank 90<sup>th</sup> globally.

South America scored highest (increasing from previous years) in the index related to *openness* and *price competitiveness*. It scores lowest for the *business environment*, deterring T&T investment, and has poor *safety conditions*. Brazil retains both the region's largest and most competitive T&T industry and environment, thanks to exceptional *natural* and *cultural resources*. Venezuela experienced the world's most significant deterioration in T&T competitiveness, moving into the last place in South America.

Bolivia had the second-fastest overall growth on *T&T policy and enabling conditions* in the region. Bolivia most improved in the indexes of strong growth in *price competitiveness* (due to lowering ticket taxes and airport charges) and *international openness* (which is due to a reduction in visa requirements). The country's unfavorable *business environment* and *labor market* stifle foreign and domestic investment in its T&T industry. Despite any gains, the country still ranks low on *safety and security* and *health and hygiene*, making potential travelers concerned about their well-being. (TTCI, 2019)

**Table 2: Key indicators comparison in the Travel and Tourism industry**

<i>Key Indicators</i>	<i>Spain</i> (overall score 5.4)	<i>CR</i> (overall score 4.3)	<i>Bolivia</i> (overall score 3.5)
International tourist arrivals (Year 2017)	81,868,500	13,665,000	1,134,000
International tourism inbound receipts (Year 2017)	US \$68,114.1 million	US \$6,932.0 million	US \$781.6 million
Average receipts per arrival (Year 2017)	US \$832.0	US \$541.2	US \$689.2
T&T industry GDP (Year 2018)	US \$78,464.0 million (% of total 5.4 %)	US \$6,544.4 million (% of total 2.7 %)	US \$1,115.1 million (% of total 2.7 %)
T&T industry employment (Year 2018)	958,100 jobs (% of total 5.0 %)	218,200 jobs (% of total 4.2 %)	114,900 jobs (% of total 2.4 %)

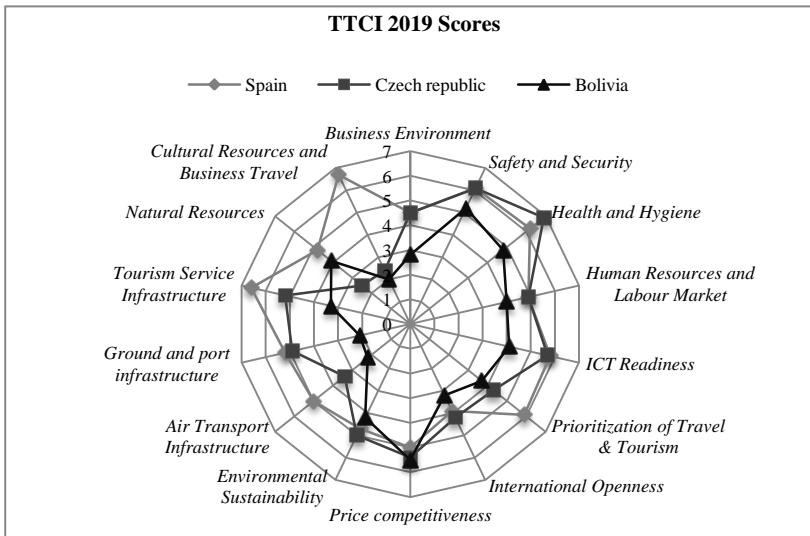
Source: Own elaboration base on Travel & Tourism Competitiveness Index (TTCI) Report (2019)

Based on the information observed in Table 2, it is verified that Bolivia has low participation in international tourist arrivals and only 2.7 % of its GDP



corresponds to the T&T industry according to data from the TTCI report. This same trend can be seen in other South American countries that have a relatively small T&T economy, defined by disproportionately low international tourist arrivals, which helps to explain the subregion's dependence on domestic T&T markets. One of the reasons could be South America's underdeveloped air and ground transport infrastructure – which undermines accessibility – with ground infrastructure being the subregion's most considerable disadvantage relative to the global average.

**Graph 1: Travel & Tourism Competitiveness Index 2019**



Note: Score 1-7 (best)

Source: Own creation based on data of the TTCI report, 2019

If we look at Graph 1, the Czech Republic stands out in most of the pillars analyzed in the TTCI report. If we compare it with Bolivia, however, it falls behind in the *natural resources* pillar (Bolivia has increased the expansion of protected land, combined with extensive wildlife), the only pillar besides *price competitiveness* that scores above the global average. However, while these improvements make Bolivia a more accessible, less expensive and more alluring place to visit, their impact is significantly held back by other factors like overall underdeveloped infrastructure making it difficult to travel to and around the country. Minimal *information and communications technology* (ICT) use for business, and consumer services also reduce

Bolivia's potential for T&T in an increasingly digital world (scores low on natural and cultural digital demand), situations that can be an opportunity for Czech entrepreneurs to cooperate with Bolivia.

## Discussion

To become truly competitive, Bolivia will need to leverage its natural assets while making significant gains along all TTCI pillars, especially the *business environment*, and those in the *infrastructure* subindex. (TTCI, 2019)

What does the private sector think about the situation of the tourism sector in Bolivia? Does it agree with the conclusion addressed by the TTCI report? Through the national press, the following comments were found:

1. Improvement in tourism administration, at the public level, compared to other countries. You cannot leave everything in the hands of the private. Strategies: businesspeople in the sector are weaving networks to pick up tourism, but they see that a commitment from the government side and other operators must be articulated.
2. Tourism-related statistics are old, partial, or not applicable because they do not measure pertinent data.
3. Political problems in the country (i.e., protests) influence the decision of visits.
4. Lack of flexibility, openness to the demands of foreign tourists. Many people come to Bolivia and ask for individualized itineraries, but they find only pre-packaged tours.
5. Organize high-level tourism for Bolivia, outside the backpacker, change the image that Bolivia is a backward country for tourism that does not have a tourism infrastructure, and that does not have a defined product that is the star and has an effect on attracting mass tourism.
6. Low quality of the products (hygienic standards, experiences offered), and lack of social and environmental standards (waste management), accessibility (not located within reach of traditional tourism itineraries, for example).
7. A mismatch between the tourism buyers and local initiatives, regarding the expectations in terms of product, commercial relations, and handling of business (communication, reservation, payment), is also observed. There is a lack of interaction and

understanding between the world of business and the (representatives of) local communities.

8. Few employees in the sector are able to communicate with tourists in other languages, and the improvement of webpage quality for tourism is needed.

## Conclusion

The research is focused on the potential opportunities for cooperation between Bolivia and the Czech Republic in the tourism sector based on the strengths and weaknesses of both countries. According to information obtained in the diagnosis of the tourism market, TTCI report 2019, and data of the business sector of Bolivia, the areas in which they could cooperate were detected. It is recommended that Czech's great experience in the field of *tourism service infrastructure, ICT, environmental sustainability, ground infrastructure* be transferred either in the form of cooperation or arousing the interest of its investors. In the area of international scientific cooperation, there may be an exchange of knowledge and experiences between the universities as well as the tourism industry.

The differences in the tourist offer of Czech Republic (history, architecture, monuments, and art) and Bolivia (nature and its diverse ethnic culture), complement each other to enhance the visits of tourists between both countries. It would be interesting for future researchers to analyze strategies for increasing the number of visitors between these two countries.

The lack of official representations (embassies) in both countries diminishes the opportunity to develop these potential projects.

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### Contact information

Shirley Consuelo Honajzrová Banús, Ph.D.  
 Department of Economy and Economics  
 The Institute of Hospitality Management in Prague  
 Svidnická 506  
 181 00 Prague 8  
 Czech Republic  
 T: (+420) 283 101 139  
 E: honajzrova@vsh.cz

### Description of the author

The author is originally from Santa Cruz de la Sierra, Bolivia. She completed her doctorate program in the Faculty of International Relations at the University of Economics in Prague. Her studies focus on Ibero-American tourism; tourism taxation and economic integration are her research topics of interest.

# MEASURING THE DESTINATION PERFORMANCE OF THE MORAVIAN-SILESIA REGION THROUGH THE STRENGTH OF TOURISM ACTIVITY

Miroslava Kostková, Pavlína Pellešová, Patrik Kajzar

***Abstract:** Destination performance is currently a topic of interest. Destination companies and institutions use a number of methods and tools to do this. One of them is to investigate the intensity of tourist activity through the Defert function  $T(f)$ . The article deals with the research activity of the Moravian-Silesian Region in the period 2014–2018 and its districts using the Defert function. This region is not one of the major tourist destinations in the Czech Republic, but the number of visitors and tourist activity has changed positively in recent years.*

***Key words:** Destination, Tourist Activity, Tourist Attendance*

***JEL Classification:** M31, Z32*

## Introduction

Tourism is an important area of the economy. By its size and progressive growth, it generates a high volume of production and job opportunities (Pellešová, Kajzar, 2017). Tourism contributes to economic growth and employment. In order to strengthen, improve and ensure competitiveness, it is necessary to identify the possibilities and limits of resources in its development and to support the development of tourism. By measuring performance, the tourism industry can secure its position in a resource-constrained economy.

## Measure and Methods

Coordination in a destination enables the achievement of goals that individual actors cannot achieve individually, creating synergies in the

destination, eliminating duplication and increasing the effectiveness of destination management (Holešinská, 2007). Pásková and Zelenka (2012) define destination management as “a set of techniques, tools and measures used in coordinated planning, organization, communication, decision-making and tourism regulation at a given destination”. Cooperation is a necessary condition of destination management (Nejdl, 2011). Bornhorst, Ritchie and Sheehan (2010), Petříčková et. al. (2012) and Croes (2010) says that tourism studies suggest that being a competitive destination means being able to increase the tourism sector and the quality of life of the population. According to Ritchie and Crouch (2003), the most important and determining destination resources are physical geography and climate, culture and history, market ties, mix of activities, special events, entertainment and superstructure - enable activities that create or add value to the visitors' experiences. Crouch (2011), Díaz and Rodríguez (2007), Caber, Albayrak and Matzler (2012) or Dwyer and Kim (2003) focus their attention on the measurement of destination performance. Croes (2010) states, that the measuring the performance of a destination is essential in order to provide timely and high-quality information to create and evaluate goals, improve learning and improve organizational and management performance. Enright and Newton (2005) write that the significance of different measured destination performance factors varies across destinations and therefore it is not possible to compare destinations universally by the same factors. Crouch (2011) argues that the impact of competitiveness factors on destination relative performance is both a function of factor significance and the extent to which the destination differs from others in that factor.

The higher the daily spend of visitors, the higher the effectiveness of the tourist destination in terms of creating value in the tourism sector. The average length of stay of tourists in number of nights is one of the most important indicators for businesses in the accommodation sector. In 2013, the European Commission developed the European Tourism Indicator System for Sustainable Destination Management. Economic value indicators help to monitor the contribution of tourism to economic sustainability within a destination. It monitors tourist flows (volume and value) in the destination, from which the basic indicators (number of tourist nights per month, daily spending per tourist - accommodation, food, other services, average length of stay of tourists - number of nights, occupancy of commercial accommodation month and its average per year, direct employment in tourism as a percentage of total employment) and optional indicators such as the relative contribution of tourism to the destination

economy (in % of GDP), number of overnight visitors in and outside high season, daily spending per day visitor, average room price in the destination, etc.

Transport and material-technical prerequisites, accommodation, catering, sports, entertainment and other facilities are important for realizing the demands of tourism participants (Jurigová, 2016). In order to determine the intensity of the tourist activity of the destination is constructed as a ratio of the size of visitors and residents. By Zelenka and Pásková (2012) tourist function indicators are shown in relation to the time period and tourism destination/place, by using the comparative method. They define the Defert's index  $T(f)$ , that measures the intensity of tourism on the basis of the following formula:

$$T(f) = N \times 100/P \quad (1)$$

where  $N$  is the number of beds,  $P$  is the number of local residents.

The higher the value of the function  $T(f)$ , the area can be considered as an area with higher tourist activity.

Accordingly, tourist function indicators were used also as a tourist accommodation density, by a Defert Baretje's index improved by French author Rene Baretje and in this form, is often termed as Defert-Baretje's index (Dumbrovská, Fialová, 2014). The index is presented with the following formula:

$$DTFI = T(f) = \frac{N \times 100}{P \times S} \quad (2)$$

where  $DTFI = T(f)$  represents Defert-Baretje's tourist function index or Baretje-Defert's indicator,  $N$  is the number of beds,  $P$  is the number of local residents, and  $S$  is the surface of researched area, represented in  $\text{km}^2$ .

Measurement of the intensity of tourism development could also be established by using the Schneider's index, which reflects the intensity of tourist saturation, which refers to the establishment of a balance between the tourist and general spatial planning for the needs of the local community or by using the Charvat's index (Gomezelj, Mihalič, 2008), that calculates with the number of overnights and number of local residents. For the

purpose of this article to measure the intensity of the Moravian-Silesian region's tourist activity was used the method measurement the index of the tourist function according to Defert.

The Moravian-Silesian Region (MSR) is defined by districts Bruntál, Frýdek-Místek, Karviná, Nový Jičín, Opava and Ostrava-City. The population is the third most populous in the Czech Republic. Since the 19<sup>th</sup> century the region is one of the most important industrial regions of Central Europe. His focus economic activity - the sectoral structure today poses considerable problems, related to the restructuring of the region, to social solutions problems, especially related to the level of unemployment and depopulation. A specific feature of the region are the conditions for industrial tourism, water sports and spa. Options development of tourism are predetermined and at the same time limited by capacity the possibilities of accommodation in collective accommodation establishments (CAE). Basic indicators of tourism in the MSR in 2019 builds on the positive results of last years, the number of guests of CAE in the region is increasing, a similar trend can be observed in the number of overnight stays - the average number overnight stay (2.9 nights) ranks the MSR on the 5<sup>th</sup> place in the Czech Republic. Attendance intensity of the region, resulting from the intensity of overnight stays in CAE are almost two thirds below nationwide level. Seasonal tourist attendance of the region shows rather a low.

## Results and Discussion

The index of the tourist function  $T(f)$  of individual districts, based on the number of permanent beds and the number of inhabitants of individual districts, characterizing the tourist load of the area and its tourist attractiveness are given in Table 1 (the basic data are statistical data of the Czech Statistical Bureau and Statistical Yearbooks of the MSR from period 2014–2019).

**Table 1: Index of the tourist function  $T(f)$  of the MSR**

<i>Districts of the MSR</i>	$T(f)$ 2014	$T(f)$ 2015	$T(f)$ 2016	$T(f)$ 2017	$T(f)$ 2018
<i>The whole MSR</i>	2.4190	2.467	2.476	2.466	2.557
<i>Karviná</i>	0.8563	0.867	0.872	0.868	0.938
<i>Bruntál</i>	6.6851	6.838	7.176	6.839	7.359



<i>Opava</i>	1.7598	1.781	1.755	1.782	1.726
<i>Frýdek-Místek</i>	4.2240	4.235	4.211	4.235	4.181
<i>Nový Jičín</i>	2.3785	2.689	2.485	2.689	2.541
<i>Ostrava-City</i>	1.5930	1.557	1.627	1.558	1.814

Source: Own processing

According to the Defert's function, the tourist function of the MSR  $T(f) = 2.557$  is insignificant, even though it has been increasing over time 4–10 with little tourist activity.  $T(f) = 0-4$  is almost no tourist activity is reported in the districts: Karviná, Opava, Nový Jičín and Ostrava-City. According to the index of tourist function  $T(f)$ , the most visited tourist district of the MSR is the district of Bruntál and Frýdek-Místek, because of their cultural and historical wealth, conditions for spa development and water sports and proximity to mountains. The Districts of Nový Jičín, Opava and Ostrava-City follow. The index of tourist function  $T(f)$  of the Karviná District is the lowest in comparison with other districts of the MSR, due to the depopulation, which is the most significant in the region (index of change in the number of residents 2014/2015 is 98.6 %).

***The share of hotels and boarding houses in the structure of CAE in the region is increasing, but it is still among the lowest in the region.*** The average capacity utilization in MSR in 2018 is 32 %. Since 2014, the number of permanent beds in the region has increased sixfold, the most in the district Bruntál, and least in the Karviná district (Table 2).

**Table 2: Description of the relationship between the population and the number of permanent beds CAE in the MSR during the period 2014–2018**

<i>District</i>	<i>Relationship between the population and the number of permanent beds</i>
<i>The whole MSR</i>	decrease in population by 10 thousand / in 2016 a sixfold rapid increase in the number of permanent beds
<i>Bruntál</i>	slight decrease in population / slight increase in the number of permanent beds
<i>Karviná</i>	noticeable decrease in population. 10 thousand / number of permanent beds is relatively constant
<i>Nový Jičín</i>	the same number of inhabitants / small decrease in the number of permanent beds
<i>Opava</i>	relatively stable number of inhabitants / number of permanent beds is relatively constant

<i>Ostrava-City</i>	the slight decrease in the number of inhabitants / number of permanent beds is relatively constant
<i>Frýdek-Místek</i>	slight increase in population / slight decrease in the number of permanent beds

Source: Own processing

Fewer accommodation capacities are in the Ostrava-City district, but of higher quality. These are related to investments in new accommodation capacities and reconstruction of existing ones.

Dependence of the number of population and permanent beds in accommodation establishments changes the T(f). With regard to the creation of new job opportunities, the districts of Frýdek-Místek, Opava and Nový Jičín were the most effective in depopulating.

The tourist index of the districts of the MSR has changed over time, compared to 2014 increased to the Ostrava-City District, but this year 2019 is also expected to increase due to increased attendance of cultural and sports events such as Zlatá Třeťra, Beats for Love - the biggest festival of electronic music in Central Europe, or Colors of Ostrava, which is growing in popularity among visitors.

T(f) of the Moravian-Silesian Region is below average for T(f) the Czech Republic, T(f) MSK 2019 is 2.557, T(f) the whole Czechia is 5.015, which also results in identified eco-socio-demographic characteristics - worsened environmental conditions, depopulation, high unemployment rate, low pensions, higher aging population, lower level of education, good potential for tourism development.

## Conclusion

The tourist function of the MSR is not one of the most significant in the Czech Republic and in the near future, it is not expected that it will change significantly. Increasing the intensity of tourist visits to the MSR is the goal of a number of strategic documents. The region and its districts have sufficient accommodation capacities (Botliková et.al. 2012). Occupancy in collective accommodation establishments is increasing and the length of stay of guests is on average slightly higher than the national one. Arrivals of visitors, especially from nearby countries, significantly strengthen, which influences the active promotion campaign. The prestige of the territory is

increasing, better promoted, the interest of tourists is growing and thus the tourist visit rate of the region increases. It creates a synergistic effect for regions disadvantaged because of their remoteness or restructuring.

As part of the evaluation of the effects of these events, the socio-demographic structure of the visitors to the events, the length of their stay and the type of accommodation, data on expenditures related to the stay, satisfaction with the program visited are ascertained.

For the whole of 2018 the MSR reported a record number of arrivals and overnight stays. Nearly one million guests stayed in the region and spent over two and three quarters of a million nights in collective accommodation establishments. The number of visitors to the region increased by 5 % last year, which is above the national average. The region's management invests in the long-term development of tourism through the building of the necessary infrastructure, by providing subsidies to entities operating in the tourism industry so that operators can invest in improving the quality of services provided and improving their products. The contribution of tourism to the region is undeniable and the prospects for future periods are positive.

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### **Contact information**

Doc. Ing. Pavlína Pellešová, Ph.D.  
Department of Tourism and Leisure Activities  
Silesian University in Opava  
School of Business Administration in Karvina  
Univerzitní náměstí 1934/3  
733 40 Karviná  
Czech Republic  
T: (+420) 596 398 313  
E: pellesova@opf.slu.cz

### **Description of the author**

Doc. Ing. Pavlína Pellešová, Ph.D. he is the Head of the Department of Tourism and Leisure Activities of SU OPF. Together with his colleagues he is also involved in tourism and hotel business.

Ing. Miroslava Kostková, Ph.D.  
Department of Tourism and Leisure Activities  
Silesian University in Opava  
School of Business Administration in Karvina  
Univerzitní náměstí 1934/3  
733 40 Karviná  
Czech Republic  
T: (+420) 596 398 512  
E: kostkova@opf.slu.cz

**Description of the author**

Ing. Miroslava Kostková, Ph.D. works as a lecturer at SU OPF Department of Tourism and Leisure Activities. She focuses on the management and marketing of tourism, hotel and gastronomy.

Ing. Patrik Kajzar, Ph.D.  
Department of Tourism and Leisure Activities  
Silesian University in Opava  
School of Business Administration in Karvina  
Univerzitní náměstí 1934/3  
733 40 Karviná  
Czech Republic  
T: (+420) 596 398 509  
E: kajzar@opf.slu.cz

**Description of the author**

Ing. Patrik Kajzar, Ph.D. works as a lecturer at SU OPF Department of Tourism and Leisure Activities. He focuses on tourism, hotels and human resources management in tourism.

# PRODUCTIVE WORK OF HOTEL ACTIVITIES TO THE PERFORMANCE OF A HOTEL

Věra Levičková, Eva Mičková

**Abstract:** *The most powerful, stable and maximally competitive hotel is the wish of every owner. Performance measurement is crucial for strategic management with a long-term development perspective. It is an integrated management system from the management position. Performance measurement indicates how the company achieves its objectives, that have been the motive of establishing the company. Performance can be perceived as a set of heterogenous indicators in service enterprises. For the purposes of this contribution, we will focus particularly on the productivity of the hotel operations and selected financial indicators.*

**Key words:** *Labor Productivity, Performance, Performance Indicator*

**JEL Classification:** *M1, M21, M41*

## Introduction

In a hierarchically controlled company where hotel businesses can be classified, people perform what they are evaluated for. For the functioning of the system, it is therefore necessary to establish performance indicators to evaluate the contribution of activities to the strategic objective. Indicators can be quantifiable, but they can also be based on the evaluation of qualitative changes, which can help to make the performance. The reason for performance monitoring using performance indicators (Key performance indicators) is to identify what is important to the company, to focus on results, in particular through financial analysis, to reward workers according to the objectives achieved.

## Materials and Methods

From a general perspective, the company's performance is understood as its ability to achieve the goal. The favorable situation of not only the domestic economy, but also the Euro-zone, global growth is reflected in the intensity

of tourism in the Czech Republic. The growing trend of attendance continues and, consequently, the occupancy of hotel facilities. Companies pursuing their positions and measuring progress toward target values. Through performance indicators, it is possible to know what is important to the company, it is impossible to measure results, not only financially. The outputs obtained can be used to pay workers according to the results achieved. Performance indicators (KPIs) reflect the values that are important in the company, with which we can support areas that are essential for long-term development. They act as a strategic control tool from top to bottom, and the process results are passed from bottom to top. Using appropriately selected indicators, it is possible to control and improve management performance, are an instrument of opportunities and initiatives. The reasons for performance measurement are many, Marra (2006) has defined three basic areas – reporting, directing managers' and employees' behavior, strategic decision making, and learning within the organization. Epstein and Manzoni (1997) in their approach to the performance measurement system stressed that firms must build such performance measurement systems that support the strategy should also include non-financial criteria that will support financial, especially in the customer area. This approach is particularly important for services where hotel businesses belong. They emphasized that measuring the performance of a company must include a set of sub-benchmarks that will be applied at lower levels of control, departments that can then be better controlled when transforming targets. When designing a system of scales, it is necessary to respect the basic sense of the benefit of the chosen benchmark to increase performance. The hotel companies offer services that do not work without the workforce, qualified staff is an elementary prerequisite for the successful operation of the hotel and therefore also a prerequisite of the executive company. The contribution will demonstrate this fact on the basis of performance measurements in a medium-sized hotel facility using selected indicators. For the purposes of this Service area where the hotel businesses belong. They emphasized that measuring the performance of a company must include a set of sub-benchmarks that will be applied at lower levels of control, departments that can then be better controlled when transforming targets. When designing a system of scales, it is necessary to respect the basic sense of the benefit of the chosen benchmark to increase performance. The hotel companies offer services that do not work without the workforce, quality staff is an elementary prerequisite for the successful operation of the hotel and therefore also a prerequisite of the executive company. The contribution will demonstrate this fact on the basis of performance measurements in a medium-sized hotel facility using selected



indicators. For the purpose of this contribution, the methods of observation, statistical and mathematical have been used. The contribution was based on internal research carried out at the college.

## Results

Performance can be perceived as a set of activities that are intended to fulfill a goal. A company that wants to understand and control its performance must seek opportunities for improvement. The identified causes of the wrong position can lead to correction. Areas of improvement can be summarized in the following categories, listed in the following overview.

**Table 1: Performance of measurement criteria**

1.	Time	Product Phase Length Length of the new project phase
2.	Costs	Comparison with competitive prices Number of items in the system Number of products
3.	Quality	Quality audit Changes
4.	Customer service	Order Assumption Use of standard variants Customer expectation
5.	Growth	Market share Growth
6.	Finance	Amount of net profit Revenue growth Investment yield

Source: Performance measurement, own elaboration

Three groups of objective criteria have stabled to measure the performance of accommodation facilities. Productivity is measured as occupancy of rooms, in relation to average price and growth of sales per room, efficiency measured by profitability and profit margins and adaptability measured by the number of new services and the extent of sales attributable to newly established services. Subjective criteria present satisfaction of final customers, development and growth, commercial power, ability to generate profit in the case of geopolitical crisis. One of the common used financial indicators for measuring the performance of the hotel is the ARD indicator

– Average daily rate. We get information on how the hotel stands before its competitors. It is preferable to combine this indicator with the indication of the occupation of RevPAR (Revenue per available room), the sales of the available room. It is the most important indicator of the performance measurement of accommodation, which is measured by the number of available rooms for sale in the same period.

The productivity of hotel activities reflects the functioning of services that are conditioned by a human factor both on the customer's side and on the employee's side. This indicator is mainly influenced by class and categories of accommodation, locality, season, structure of services provided, occupation and length of stay. Measuring productivity is so much more complicated because of the impact of many factors. It is the result of operating conditions, such as equipment technical means, organization of work by management or executives, qualification, motivation, frequency of hotel guests. In general, productivity can be understood as the ratio of inputs to outputs that can be defined varied (Beranek, Kotek, 2003). Productivity can be understood as the ratio of inputs to capacities (the cost of room preparation to the total number of rooms), or as the ratio of inputs to outputs (the cost of preparing rooms for the room sold, i.e. sales). The property's productivity indicators used by default are the occupancy of the hotel (occupancy, OCC in %). This is the ratio between the total number of occupied rooms in the season to the available capacity of the rooms for the same period. The role of the average length of stay, the standard number of rooms for maid cleaning. In the following text, we will focus on Three-star labour productivity assessments. For strategic reasons, the exact designation will not be indicated. The capacity is 33 rooms with 70 beds. The period was divided into a season, a midseason, an off-seasons, when on the basis of observations and statistical data we will consider 90, 50 and 30 percent occupancy. The number of staff (input) is a fixed 12 persons employed at various hotel positions. The following overview shows the productivity of employees in each season.

**Table 2: Labor productivity of the OCC hotel**

<i>Period</i>	<i>Occupancy</i>	<i>Output per day</i>	<i>Input</i>	<i>OCC productivity</i>
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Season	90 %	63 guests	12	5 guests
Midseason	50 %	35 guests	12	3 guests
Midseason	30 %	21 guests	12	2 guests

Source: Internal observation, own elaboration

Not all positions are equally involved in the creation and implementation of services, but it can be noted that low-season productivity is very poor. The way to remedy is either by reducing the number of employees or more effective would be to increase occupancy. This is the subject of a more efficient reservation department activity

An important criterion for measuring the performance of workers can be the fact that working hours are actually used. The receptionist, who works with reservations, handles phone calls, e-mails, enters data into the system, provides check-in, check-out, also focuses on activities that do not lead to revenue generation and subsequently profit. The following overview shows the use of a 12-hour shift L reception. The result is the identification of individual labour productivity (IPP). The data are collected by observation.

$$IPP = \frac{\text{Total productive time}}{\text{shift length} - \text{total non-productive time}} \text{ (in \%)}$$

**Table 3: Individual work productivity of the receptionist**

<i>Productivity activity</i>	<i>Number</i>	<i>Time in minutes</i>	<i>Total time in minutes</i>
Telephone calls	22	5	110
E-mail processing	7	10	70
Processing of electronic bookings	5	10	50
Booking creating	3	15	45
Sale of ancillary services	4	15	60
<i>Total productivity activity</i>			335
<i>Non-productive activity</i>			
Training	1	30	30
Meeting	2	15	30
Processing of guest demands	10	15	150
Check-out	2	10	20
Total non-productive time			230
Total shift length			720
Time used			565
<i>IPP</i> <i>[335/(720-230)x100%]</i>			68,37 %

Source: Internal observation, own elaboration

The individual productivity of the reception in the monitored equipment is 68.37, 0 %. It follows from the above calculation that during its working hours, unused 155 minutes of time are wasted. This period does not contribute to value creation, i.e. A new reservation as a potential source of output, income. Taking into account the time necessary for the social needs, the toilet, the time for a break (lunch 30 min), there is still a time of about 90 minutes, which should be used effectively. There is directly a breakdown of the receptionist's activities and the reservation activity, which ensures the hotel's workload. Blending activities appear to be non-productive, especially if the reception staff still participated in the provision of refreshments, breakfast preparation. This condition has just been observed in the rated hotel and has resulted in low labor productivity. In view of the experience in the field, it can be concluded that this condition also applies to other devices of the same character. Another negative phenomenon is the low quality of the services provided, as it is not possible to concentrate on the services provided, in many cases some activities are perceived as distractions from basic activities. The opposite state can occur if a worker exhibits an IPP of around 90 to 100 percent. In this case, there is no room for rest, it acts negatively on physical and psychological burdens, which causes dissatisfaction in the work Process and ultimately leads to error, lack of interest in solving the problem and in the final for hotel facilities to the loss of the guest. Leaving an employee increases the cost of acquiring and training a new worker.

Performance reviews can be performed by measuring overall productivity. We are again relying on data that has been obtained by statistical investigation and observation. We assume the same value of occupancy in each season. The Hotel has 33 rooms and we consider that occupancy by two people is calculated by a coefficient of 1.6. The value of the usable rooms per month is 1,023 rooms ( $31 \times 33 = 1,023$ ). The price of accommodation varies from 1,000 CZK to 2,000 CZK per room according to the season. The following overview shows the calculated hotel productivity values using standard indicators.

**Table 4: Total productivity of accommodation area**

<i>Percentage of occupancy</i>	<i>30 %</i>	<i>50 %</i>	<i>90 %</i>
Sold rooms	$1,023 \times 0.3 = 306$	$1,023 \times 0.5 = 512$	$1,023 \times 0.9 = 921$
Number of guests	$1.6 \times 306 = 490$	$1.6 \times 512 = 819$	$1.6 \times 921 = 1,474$
Total revenues	324,500	696,250	1,436,900
Average ADR price	1,060	1,360	1,560
RevPAR	<i>317 CZK</i>	<i>681 CZK</i>	<i>1,405 CZK</i>

Source: Internal observation, own elaboration

It is natural that both the average price and the market for the available room (RevPAR) are growing with the occupation. Thus, the key decision-making point of management is to increase occupancy outside the peak season. At the time of digitisation of activities, it is necessary to use new technologies to acquire clients and thus increase hotel performance. Revenues will be further increased by the value of the offered breakfast, which is not included in the price of the accommodation, for other additional services that can be offered. Costs are important for the overall performance of the hotel. The center of gravity is in labor costs, on energy, maintenance, but mainly on marketing to enhance the competitiveness of the ability. The overall result of the management is then the result of all the above quantities. Payroll productivity can be calculated based on the collected payroll cost data. Revenues represent the total value for all services during the reference period.

**Table 5: Wage productivity**

<i>OCC occupancy</i>	<i>30 %</i>	<i>50 %</i>	<i>90 %</i>
Wage costs	275,000	275,000	275,000
Total revenues	643,000	1,173,100	2,395,000
Number of employees	12	12	12
Wage cost/revenues	42.8 %	23.4 %	11.5 %
Wage productivity	2.3	4.3	8.7
Productivity of work from sales	53,583 CZK	97,758 CZK	199,583 CZK

Source: Internal observation, own elaboration

This report does not imply anything different, the higher occupancy rate and the increased productivity of human labor. We are based on a steady wage level and a steady number of employees. Wage productivity shows how much revenue accounts for NA1 crown of wage costs. Direct dependence on occupancy is evident from each sub-calculation, according to which we measured the contribution of human labor to the overall performance of the hotel facility. This should help choose a strategy where occupancy levels are long-term and sustained to a higher value. To choose a strategy where occupancy levels are long-term and sustained to a higher value.

## **Discussion**

Financial indicators are more often used by the performance measurement tool. Financial accounting is the basis for obtaining them. A higher explanatory value has managerial accounting along with controlling, with their outputs are very satisfied companies. A smaller measure shows e.g. benchmarking. Almost 70 % of businesses are based on data from the accounting system. This fact can be evidenced by research data (GAČR project) carried out using a questionnaire aimed at measuring and managing the performance of enterprises, through which the main reasons for the introduction of a system of risk measurement and management were identified. They were strategic planning, motivation and remuneration, but the obligations laid down by law are among the less important reasons. In terms of areas, the performance measurement is crucial, but the customer area is also very important. For hotel businesses, this is the target area. No less important is employee. The satisfaction of employees depends on the maintenance and acquisition of new customers. The most frequently used indicators are capital profitability (ROI), followed by profitability related to sales, cost, earnings per share, net profit, pre-tax profit. Only 13 % of the companies contacted according to research data indicated that they did not use financial analysis instruments.

## **Conclusion**

A stable business with positive economic results is the goal of every entrepreneur. Performance measurements are inherent in the activities that form the backbone of financial management in enterprises. The owners demand an appreciation of their injected capital and the executive

management must implement this goal through strategic planning. Without relevant data, this is not possible to reach the goal successfully. The tools by which the company will measure performance are in its competence, it can choose from a varied offer that meets its requirements and intentions.

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### Contact information

Ing. Věra Levičková, Ph.D.  
Department of Economy and Economics  
The Institute of Hospitality Management in Prague  
Svídnická 506  
181 00 Prague 8  
Czech Republic  
T: (+420) 283 101 127  
E: levickova@vsh.cz

**Description of the author**

Ing. Věra Levičková, Ph.D. has been working for the IHM Department of Economy and Economics for a long time. She teaches financial and managerial accountancy. In her research activities she deals with problems of financial health of companies.

Mgr. Eva Mičková

Department of Languages

The Institute of Hospitality Management in Prague

Svídnická 506

181 00 Prague 8

Czech Republic

T: (+420) 283 101 170

E: mickova@vsh.cz

**Description of the author**

External IHM teacher.



# PERSPECTIVES AND BENEFITS OF FOREST PEDAGOGICS IN THE CONTEXT OF RURAL TOURISM DEVELOPMENT

Karolina Macháčková, Martin Pop

***Abstract:** This paper is based on research conducted by the author in the summer of 2018 at 42 Jugendwaldheims in Germany. This field research has shown that forest pedagogics with its rich programs for a wide target group is stimulating and fun way of spending summer vacations. During July and August 2019 holiday activities took place in the research area of St. George's Forest in the Central Bohemian Region in the Czech Republic using methods of Forest Pedagogics such as Escape Game in Nature, Doctor Forest, Outdoor Cooking School, teambuilding events for enterprises. The events were designed for children, youth, adults and seniors. A questionnaire survey was carried out with 472 respondents, whose unambiguous output was the finding that people would like to go to the forest more often if various interesting activities took place and another finding was that the methods of forest pedagogy are evaluated as entertaining yet informative.*

***Key words:** Forest Pedagogics, Regional Disparity, Social Tourism, Sustainability*

***JEL Classification:** Q59, R00, Z32*

## Introduction

The development of tourism is generally considered as a means to potentially increase the overall maturity of a particular region. Natural conditions are of great importance for tourism in particular rural areas. The natural potential is often a decisive factor for recreational activities. The forest is an adventure and recreational area - with its diverse landscape, forestry infrastructure, and numerous cultural objects, it is a source of tourist attractions for different groups of users.

Rural areas benefit from those who are seeking relaxation, thereby strengthening rural infrastructure and counteract the loss of jobs. The current rural development programs focus mainly on agricultural programs, protection of the cultural landscape and biodiversity, support for regional food, hospitality services, and the wine industry.

Forest Pedagogics is special platform that combines environmentally friendly tourism, recreational potential of forests and sustainable development. Moreover, it represents a modern trend in education, with its orientation on nature, outdoor teaching, and experiential learning. Forest Pedagogics is very beneficial way of developing the tourism of rural forest areas, because:

- emphasizes a considerate relationship to nature and the environment,
- supports individual activities of visitors and tourists in the countryside,
- assumes a stay in the forest and rural environment,
- links forestry and tourism services in an original way for a wide target audience,
- builds on the modern trend of "travel for experience" and "travel and learning".

The trigger mechanism for targeted forest education is the massive death of forests in the 1980s, which increased interest in the forest as a recreational and adventure space. Janu & Kvapil (2010) define Forest Pedagogics as one of the forestry methods and environmental education, dealing with giving true information about the forest and managing it in an entertaining way by means of forest educator. The term "Forest Pedagogy" was first used in 1986 (BOLAY & REICHLER, 2007). The term "forestry education" used today was created in the 1980s and refers to a wide range of educational activities related to forests, such as the classic forest forester, forest school homes, forest nurseries, forest educational and nature trails and forest exhibits (CORNELL, 2006).

## **Materials and Methods**

Methods of induction, deduction, synthesis, and analysis as methods of scientific work were used during the preparation of this paper. In the case of the analysis, specifically analytical-synthetic, positive-normative analysis and descriptive-comparative analysis were used. (Krč, M. & kol. 2005).

### *The first field research in Germany in summer 2018*

The first field research was conducted from 1. 7. to 31. 8. 2018 in all 42 Jugendwaldheims in Germany. German "Jugendwaldheims" are modern institutions of environmental education in forest or otherwise naturally interesting areas. They are used by primary and nursery schools for out-of-school education. The theme is chosen individually according to the requirements of the school. The team is led by a forester who is available to pupils and teachers as a competent contact person during their stay.

Comparison of these German Jugendwaldheime with forest pedagogics centers in the Czech Republic revealed considerable differences, which are shown in Table 1.

**Table 1: Comparison of selected parameters of forest centers in Germany and the Czech Republic**

	<i>Germany</i>	<i>Czech Republic</i>
Number of centers of forest pedagogy	42	5
Accommodation options	✓	X
Catering available	✓	X
Multi-day stays	✓	X
7 days stays	✓	X
Whole weekend events	✓	X
Weekend events with accommodation and boarding	✓	X
Outdoor equipment	✓	Only some
Location in nature	✓	Very limited
Location	Mostly in forest	Mostly in town
Year-round operation	✓	✓
Programs for schools	✓	✓
Programs for seniors	Very limited	X
Teambuilding events	6	X
Non-educational action for public	12	X

Source: Own processing, 2019

In addition to the considerable disproportion in the number of forest centers, forest centers in the Czech Republic are not located in nature, but in the city and offer neither weekend or longer stays, nor the possibility of catering.

Field research in Germany in the summer of 2018 showed that Forest Pedagogics with its rich programs for wide target groups is an interesting attraction way of spending summer vacations.

### *Fieldwork in Czech Republic – St. George Forest*

Therefore, a year later, in the period 1. 7.–31. 8. 2019 fieldwork took place in the Czech Republic. The area of St. George Forest in the Central Bohemian Region was chosen for the research area.

The name "St. George's Forest" is ancient and denotes an area named after extensive forest complexes in the northern part of the Nymburk Elbe region around Loučen in the northeastern part of the Central Bohemian Region. The name of this area was taken over by the Local Action Group (LAG). It is an association that was founded in April 2006 and currently has 44 members who joined to better implement projects from various grant sources. The area of the St. George Forest LAG is delimited by 32 municipalities with a total area of less than 320 km<sup>2</sup>. The region offers museums, galleries, castles, zoo, lookout tower, protected landscape areas, a forestry area and exceptional natural sites.

The region offers museums, galleries, castles, zoo, lookout tower, protected landscape areas, a forestry area and exceptional natural sites. In period from July 1 to August 31, 2019, the following activities were carried out in the St. George Forest:

- Escape game in nature graduated according to the age of participants to ages 7–12, 13–18 and 18+ (2x in July and 2x in August),
- Outdoor cooking school (6 times every weekend),
- Special two-day event for enterprises – Survival strategy and models of cooperation: nature and business, searching for parallels with the ecosystem (1x in July and 1x in August),
- Doctor Forest – meditation and spirit (Mondays, Wednesdays and Fridays),
- Doctor Forest – collection of herbs and other medicinal products from the forest (Tuesdays and Thursdays).

All these activities contained specific methods of Forest Pedagogics such as simulation and explorative games, free forms of work, situational learning and experimentation, meditative methods, adventure in the woods, the use of films and photos, nature shooting, research (discovering new), use of

natural resources, sport in the forest, listening to forest sounds, carrying out forestry work were used.

A questionnaire survey was conducted with participants of all ages, 472 persons were surveyed (n = 472), of which 168 were children aged 5 to 18 years.

## Results

The questionnaire survey resulted in four main outputs:

1. 14 % of respondents visit the forest at least once a week,
2. 68 % of respondents want to visit the forest more often (twice a month) during the whole calendar year,
3. in order to increase motivation and interest in going to the forest more often, there should be interesting events,
4. 92 % of respondents stated that learning about nature with all the senses, non-violent form of learning and environmental education in one is very pleasant and beneficial at the same time.

The way how to promote rural tourism, return people back to nature, provide them useful information could be the Forest Experience Centre establishment. Forest Experience Centre could be an accommodation facility in nature, equipped with rooms, a bathroom, workroom or clubroom and kitchen. These centers may have the form of a forest log cabin, cottage or even larger mobile home with a capacity of 20–60 people. According to the level of amenities, the Forest Center can offer to clients the opportunity to prepare meals on site or to attend catering facilities in the vicinity. Accommodation can be realized directly in the building of the forest home, or it can be designed as a combination of the main building and cabins or a log cabin with accommodation and catering in the vicinity. Furthermore, the forest center could be equipped with table tennis, a playground, a swimming pool, a grill, an outdoor oven, swings, a forest educational garden.

The activities of the forest center would be proposed for practically all target groups: nursery, primary, secondary schools, families with children, corporate team building events, seniors.

The Forest Experience Centre can serve as an all-year-round facility with weekly, weekend and one-day activities such as:

- schools in nature,

- children's summer camps,
- children's summer and holiday mini-universities in nature,
- suburban camps,
- weekends and individual days for families with children,
- children's birthday parties,
- corporate team building events,
- adventure events for all,
- programs for the elderly.

### *Weekend themed events for families with children*

SPRING: awakening of nature, Easter workshop, forest yoga and meditation, insect living, edible wild berries and plants, Night of the Philippians, vicious forest, forest carving, Mother's day gift shop.

SUMMER: Qi gong, how to survive in the forest, forest pharmacy, fighting games, Tarzan Day, evening forest and animals at night, as the robbers lived, time travel.

AUTUMN-WINTER: mushrooms and colorful forest, work in workshop with chestnuts and autumn crafts, autumn and Christmas workshops, advent crafts.

## **Discussion**

### *Financing*

For a financial contribution to the activities of Forest Pedagogics (non-investment purpose subsidies), the organizations of urban forests may ask their founder or the region where the forest pedagogue has its headquarters, respectively where these activities will take place. Co-financing can in some cases also be ensured by involving the organization in the National Rural Network or by cooperating and partnering on joint forest pedagogy projects with the Association of Owners of Municipal and Private Forests in the Czech Republic, or with other non-profit entities that may apply for national or regional non-investment subsidies environmental education. Furthermore, European Structural funds can be used.

Forest Pedagogics represents support for the traveling of seniors, families (even those with low incomes), children and young people, and thus enables socially disadvantaged groups to access to natural heritage, supports education and supports the creation and building of social tourism facilities while respecting sustainable development conditions. In doing so, it fulfills

the characteristics of social tourism, which is supported by the European Union and some European states through financial instruments from the CALYPSO program.

The other sources of income are charges and admission fees for the events.

### *Realisation*

Forest Experience Centre establishment proposal can be realized in cooperation with the municipal office, local elementary and nursery schools, regional tourism organization and the relevant forestry organizations.

The Forestur project is very interesting and beneficial aid for the development of rural tourism. This is a pilot project co-funded by the European Union through the Leonardo da Vinci program, which aims to increase the skills of tourism professionals in rural areas by providing lifelong learning services online. The main objective of the project is to provide rural tourism professionals with continuous, specific and high-quality training tailored to their needs. People who work in rural areas are often the only reliable way to ensure proper training. It thus becomes an ideal tool for reaching rural tourism employees.

Forestur also offers a wider range of advertising activities to simplify administrative work. To make the most of IT training, Forestur identified the specific needs of rural tourism and developed a training methodology based on the use of asynchronous communication and social integration. Asynchronous communication means that the teacher and the student do not connect in real-time as online chat or phone calls. It is provided at a different time, so there is blank space between the question and the answer. Forestur promotes the human capital of rural tourism, knowing the industry's natural interest in protecting the environment. The project is intended primarily for tourism professionals (employees and managers) who develop their work in rural areas. Potential users are: local development agencies and policymakers, tourism associations and rural service companies; continuing education professionals (teachers and guidelines) and those responsible for developing policies in local and regional tourism. More information is available at [www.forestur.net](http://www.forestur.net).

## Conclusion

Forest Pedagogics is scientific discipline, that uses methods of simulation and explorative games, free forms of work, situational learning and experimentation, meditative methods, adventure in the woods, the use of films and photos, nature shooting, research (discovering new), use of natural resources, sport in the forest, listening to forest sounds, carrying out forestry work. Therefore, it can be introduced to the general public and offered as a fun and attractive leisure activity in nature that can be operated year-round.

It reaches target groups of a nursery, primary, secondary schools, families with children, corporate team building events, seniors.

The other positive effect is the fact that thanks to rural tourism development, regional disparities, or differences between economic indicators of individual regions, affecting the living standards of the local population will be reduced. Establishing forest experience centers with all year round operation can increase the region's competitiveness, local income and Gross Domestic Product, increased interest in accommodation and catering services in the area, new jobs -these are the main advantages for the region. All the above mentioned can be achieved by applying the principles of destination management in a particular territory.

Since forest pedagogy meets the characteristics of social tourism, it is possible to apply for funding from the CALYPSO project under the National Tourism Program, which is based on the fact that young people are keen to travel but need affordable and secure accommodation. Older people have different demands and needs than ordinary tourists. For example, building a barrier-free approach and classroom equipment for outdoor schools can be supported by this program. Entrepreneurs who do business in the categories of accommodation, catering, and hospitality, the activities of travel agencies, offices, etc. can apply for financial support. Last but not least, admission fees and charges for outdoor recreation and children's camps.

Forest Pedagogics has considerable potential for the development and stabilization of rural areas. The operation of adventure tourism has undoubtedly also economic advantages, both for the enterprises that decide to introduce its technical or technological monuments to the public and for the given location, which will increase the income from tourism. Companies



that choose to run the experiential tourism will not only receive money from the selected entry fees and other complementary activities but will also increase the credibility of their "brand" in the eyes of the public. The municipal budget can then count on higher incomes due to the fact that tourists like to stay longer in the place that has a lot to offer them, and overall the tourist season will be extended.

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### Contact information

Ing. Karolina Macháčková, Ing. Martin Pop, Ph.D.  
Department of Economy and Economics  
The Institute of Hospitality Management in Prague  
Svídnická 506  
181 00 Prague 8  
Czech Republic  
T: (+420) 283 101 140  
E: machackova@vsh.cz, pop@vsh.cz

### Description of the authors

The authors deal with forest pedagogy in terms of education, but also with economic implications and benefits for tourism in doctoral and postdoctoral studies.

# HUMAN RESOURCES AND THEIR INFLUENCE ON HOTEL PERFORMANCE IN THE CZECH REPUBLIC

Michal Motyčka

**Abstract:** *Work performance management is a continuous process comprising goal setting, feedback and evaluation with consequent rewarding based on performance. Therefore, it can be perceived as a system of mutually interconnected activities and processes that are approached as a single whole. A questionnaire survey was carried out in 2012 to find out whether and to what extent the process of work performance management is used in the hotel industry in the Czech Republic, how the employees view the process and what possible modifications they would appreciate. The results have revealed that most hotels in the Czech Republic do not use work performance management as a continuous process. They usually evaluate their employees, nevertheless, they very often do not set goals for the next period and goal achievement does not have impact on remuneration of employees. Most employees would appreciate revenue participation, sales-motivation competitions and up-selling opportunities as a part of reward. These instruments are quite easy to implement and they are most efficient. Furthermore, together with a sophisticated system of benefits, they could ensure satisfied employees.*

**Key words:** *Motivation, Revenue Participation, Reward, Up-selling, Work Performance Management*

**JEL Classification:** *E24, J31*

## Introduction

The basic goal of each company is to realise profit and, in the long terms, to increase the market value of the company. The same is true of the hotel industry. Many hoteliers declare that their main goal is maximum guest satisfaction. However, this is not the case. The goal is always the same and that is to achieve the highest possible profit. However, a satisfied guest is the main means of achieving this goal. The hotel sector falls within the service segment whose main attributes are indivisibility, non-storability,

transience and, in particular, the fact that service consumption is associated with a given service provider. Thus with a man. Therefore, human resources are a primary and vital factor in the hotel and gastronomy industry. This is especially important nowadays since there has been a terrible labour shortage within the entire national economy recently. It is necessary to take care of the staff, take care of their development and, thanks to quality and effective methods, manage the growth of work performance. An ideal approach to human resources has been defined by Koubek: *“A modern manager is not a coachman who by means of reins, whips and commands directs the team of his subordinates. A modern manager is a leader who like a medieval king leads his knights into a fight and impresses them by his own example. He is the first among the equals.”* This definition can be transformed into a clear thesis that the primary task is to harmonise the needs, interests, plans and ideas of individuals and teams with those of a company so that the set strategic goals can be achieved.

## **Materials and Methods**

### *Human Resources Management in the Hotel Industry in the Czech Republic*

From a cybernetic perspective, the hotel industry can be perceived as one of the elements in the tourism system. Its main business intention is to provide services, especially catering, accommodation, congress, additional, etc. The primary task of hotel industry management is to ensure the quantity and quality of services provided. This represents the performance of the hotel industry. Due to the fact that services are connected with a man, work performance management is the best tool for ensuring the above-mentioned factors in hotel services.

In 2018, the domestic market comprised 9,426 accommodation facilities competing with each other, out of them there were 2,653 hotels. These offer 102,256 rooms that can accommodate 229,136 guests ([www.vdb.czso.cz](http://www.vdb.czso.cz), 2019, online). This number also represents the number of beds for which fees are paid to municipalities. Naturally, the largest share of accommodation capacity takes Prague with approximately 72,614 beds (it was only 32,000 in 2003). Such a competitive environment that exists here cannot be found in any other European city. It is enough to mention the number of luxury hotels of the highest, i.e. five-star category – there are 42 of them in Prague.

In terms of employment, according to CZSO statistics, employees in hotels and restaurants accounted for 3.3 % of the total number of all people employed in the national economy (172,600 persons out of 5,221,600) in 2018.

The quality of management in a hotel leads to a higher and better performance and therefore to the satisfaction of guests. This is ensured, in particular, by the value system activated by a stimulus that afterwards converts into a motive and that, thanks to qualifications (skills, abilities), subsequently leads to activity and desired goals, which means satisfied clients. Furthermore, due to quality management, the employees themselves are more satisfied as well. The quality of management plays a very important role in this process. It is a connecting element and ensures coherence between client and employee satisfaction. Finally yet importantly, it ensures the satisfaction of other interested groups (management, owners, suppliers). This is analogous to the theory of Jack Welch, who led the company General Electric for many years. In this case, however, financial flows were the connecting factor between a client and employee satisfaction.

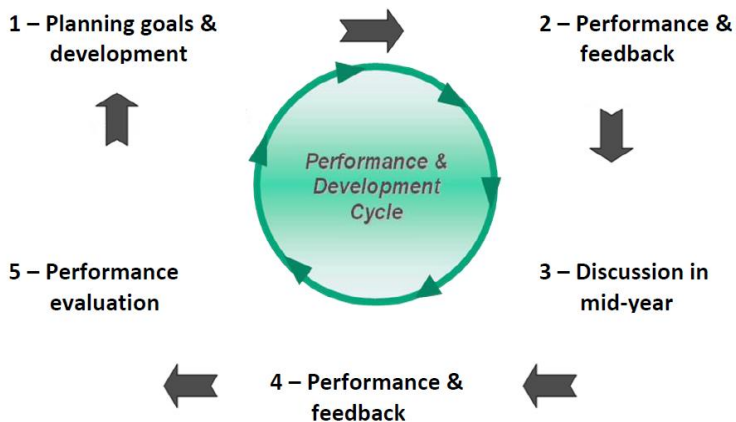
### *Work Performance Management*

*“If the construction of the bridge does not enrich the consciousness of those working on it, then the bridge should not be built.”* Franz Fanon

In order to achieve the above-mentioned objectives, human resources need to be managed effectively. That means to ensure a steady growth of their performance through motivation and stimulation. During the last century, the approach to employees was evaluated, i.e. how to talk to them, what to expect from them, where to direct their activities, etc. In the beginning, it was mainly within the framework of performance evaluation of individual soldiers. Afterwards, experiments were carried out with methods of evaluation in the 1960s and 1970s, such as behaviourally anchored rating scales, so-called BARS. Prior that, in 1955, goal-based management had been first used by Peter Drucker. He argued that what businesses needed was a concept of management that would provide scope for employment of strengths and responsibility of individuals and at the same time would give an idea of the overall direction of the vision and of the efforts to fulfil it, and would enforce teamwork and harmonise individual goals with the common benefit. However, it was only the performance management that brought the expected human resources management system.

Work performance management is a process designed to achieve agreement and common understanding regarding issues related to setting the core objectives, i.e. what is to be achieved and how it should be achieved. It is also an approach leading to the development of people and to the increase of their performance. Performance management can be characterised as a continuous and self-renewing cycle:

**Picture 1: Performance & Development Cycle**



Source: Own processing

Performance management is a very complicated, constantly changing and complex process. It is necessary to evaluate it always with respect to the current situation in a given company and to respect the sector to which a company belongs.

The hotel industry is a very specific area the development of which could started in a more significant way after 1989 only. Until then, most businesses in the then Czechoslovakia were operated by people with insufficient skills and competences. The gap between the quality of accommodation in our and other countries, especially in Western Europe, was enormous. That is why it was not possible to apply modern management methods that would enable tourism company operators to better manage their human resources, achieve competitive advantages, increase their profitability and ensure market growth.

According to world statistics, tourism occupies one of the top places in terms of the rate of growth and development. According to the OECD data regarding 2011, tourism accounted for approximately 6.5 % of the world gross domestic product (GDP). Some countries, such as Austria, even depend on tourism, and 80 % of the income of all its residents is somehow connected with this sector. That is why tourism and gastronomy are so important and strict demands are placed on them.

Although work performance management is implemented in many areas, tourism or more precisely hotel industry sector unfortunately lags behind. Based on these facts, a qualitative as well as quantitative research was carried out that was focused on the implementation of the elements of the process of work performance management in the hotel industry in the Czech Republic.

### *Research File*

The aim of the questionnaire survey was to find out whether and to what extent the process of employee performance management is used in the hotel industry in the Czech Republic as well as how the employees view this process and what possible changes of it they would appreciate.

The basic file consisted of 4,612 hotels, i.e. the total number of all hotels in the Czech Republic in 2012 (according to CZSO data). The sample file included 776 hotels that were selected randomly so that their number corresponded to their position within the classification composition in the basic file (for example the number of three-star hotels within the sample file fully corresponded to their percentage in the basic file, etc.). Finally 253 questionnaires were filled in. The research itself was carried out between the 1 May and 30 November 2012.

## **Results and Theoretical Background**

Several semi-standardised interviews were carried out with executives within the research, especially with the executives in the area of human resources management, hypotheses, or more precisely premises were determined that should have been confirmed or refuted. Based on the results, it was possible to come to the following conclusions.

*The performance management system is not implemented as a complex, continuous and repeated process.* The conducted qualitative and quantitative research revealed that although the performance management

system is usually a repeated process (almost 70 % of employees undergo an annual performance evaluation), it lacks complexity (does not include all significant performance management elements) and the continuity of the process logically converges to zero.

*Employees do not receive the feedback regarding the fulfilment of assigned tasks and personal development plan during a given period.* Only half of the respondents receive feedback on their tasks performance within performance evaluation. A possible failure to meet the plan or objectives is usually not rectified or does not result in sanctions of a given employee.

*The evaluation of an employee is not directly related to his/her cash reward.* Only 35 % of employees receive financial or non-financial remuneration based on their performance evaluation results. The results achieved based on a periodic evaluation of work performance does not influence the remuneration of the rest.

The questionnaire survey within the framework of quantitative research revealed that most employees undergo evaluation of their performance at least once a year. One-fourth of employees undergoes the evaluation on a quarterly basis, one-tenth of employees every month.

A vast majority of employees is classified by means of an assessment interview. Frequent evaluation tools in the hotel industry include also mystery shopping, goal management and 360° feedback.

A plan on further personal development and goals to be achieved in a given evaluation period is set with one half of employees who undergo work performance evaluation. Only one half of employees provides their supervisors with feedback on the fulfilment of assigned tasks and personal development during the mentioned period.

Although most employees undergo assessment interviews, at least half of them lack further continuity of this process and consider it a mere statement of situation and evaluation of the past period without further possibility of progression.

Almost half of employees perceive the remuneration system and salary policy in their hotel as fair and motivating, nevertheless, only 35 % are remunerated based on their performance. That is the reason why nearly two-thirds of hotel employees would appreciate the possibility of remuneration in the form of revenue share. Almost 75 % of employees would appreciate

the introduction of other forms of remuneration – most often annual remuneration (thirteenth salary), loyalty pay, bonus or holiday allowance.

Based on the above-mentioned findings, it can be concluded that the situation in the Czech hotel industry cannot be considered as completely dismal or neglected in terms of the application of work performance management. On the other hand, significant shortcomings and process errors cannot be ignored.

### *Implementation of Motivation Instruments*

Based on the obtained results, suggestions have originated to implement new solutions and restructure the processes of work performance management in the hotel industry in the Czech Republic. These solutions can be logically divided into two preference groups, i.e. material and financial incentives and benefits.

**Table 1: Overview of remuneration tools in the hotel industry**

<i>MATERIAL AND FINANCIAL INCENTIVES</i>
<i>PARTICIPATION ON REVENUE</i>
This is a very strong financial stimulus. The entire remuneration, or its part, is derived (usually as a percentage) from the achieved performance of a company or department, in the case of the hotel industry from the amount of sales. It is a highly effective tool, especially in the sales-related departments. Its implementation is more demanding and, as far as employees are considered, it creates a certain distrust in the beginning.
<i>UPSELLING</i>
This is a financial or material stimulus. An employee receives it when the determined average guest spending is exceeded, or when selling selected or preferred items from the hotel or restaurant offer. It is possible to reward in a financial way or in the form of benefits and material rewards. It is an efficient tool for employers as well as employees.
<i>SALES-INCENTIVE REMUNERATION</i>
This is a material stimulus. Based on his/her sales of a certain quantity of preferred products or goods, an employee receives remuneration in the form of these products or goods. These are sometimes assigned point values and the points can then be used to purchase directly from the supplier. This system is based on a bilateral agreement between employees and suppliers and involves no financial participation of employers. However, the reward effect may not be immediate.
<i>QUARTERLY REWARDS</i>
This is a financial stimulus. The reward depends on the fulfilment of



financial and quality objectives. These are the two basic pillars of hotel efficiency and they are mutually dependent. However, it is essential to introduce individual goals as well. They should be different for each company, department or division. They are determined by the manager of a given section and can be influenced directly by its employees. The stimulating effect comes after a longer period but the use of individual elements increases the efficiency of this tool. It is more favourable for employers in terms of cash flow. There is no larger pay out in one moment.

#### *ANNUAL BONUS*

This is a financial stimulus. It is known as the thirteenth salary in our country. The remuneration usually depends on the fulfilment of the budget or financial objectives in a given calendar year as well as on the duration of the employment contract throughout the budget period. It is financially demanding for employers from the point of view of cash flow. Twelve months is a long period due to the high turnover of hotel employees, hence the incentive effect is not very strong. On the other hand, it increases the loyalty of employees.

#### *LOYALTY PAY*

This is a financial stimulus. It is usually paid after a certain period of time, either in the form of a one-time bonus or in the form of an extra pay together with the regular month salary. This bonus/extra pay has a high impact on the loyalty of employees and their stay in a company. Labour costs may be higher with a larger number of long-term employees.

#### *HOLIDAY ALLOWANCE*

This is a financial stimulus. This is a one-time reward paid mostly after the holiday. It is also sometimes provided automatically before the beginning of the summer period as a one-time bonus. The stimulus effect is not very significant. In the case of its automatic pay out once a year, it is sooner or later taken for granted.

#### *BENEFITS*

##### *EMPLOYEE BENEFITS*

These are intangible stimuli. Within the hotel industry, they may include incentives such as individual or group language courses, sport and cultural activities, transport at night, provision of company uniforms as well as their cleaning, free catering, company car or telephone, etc. These benefits increase employee satisfaction, loyalty and performance. They also represent a tax advantage for employers. They have become increasingly popular among employees recently and often represent the decisive factor in terms of starting employment.

Source: Own processing

The ideal solution in terms of benefits is the today popular so-called Cafeteria system. This system includes a group of benefits that are for example point-valued differently so that an employee can “spend” the points assigned to him for a given month according to his preferences. This packet may include a fitness centre, massages, wellness centre, theatre, cultural or sport events. An increasing number of companies uses so-called Multisport card that is very popular nowadays. It is currently an ideal solution of the cafeteria system for companies. An employee receives a card that includes one free entry to a preferred contracting establishment each day of the month for a relatively small amount of 750 CZK per month. It offers 1,690 facilities in the Czech Republic currently and it is possible to use it in Slovakia and Poland as well. Further extension is planned not only in the Czech Republic. The range of services is infinite – wellness centres, massages, fitness centres, sports facilities (tennis, volleyball, football, basketball, etc.), cinemas, bike rental, etc. An employer can pay the whole card or there is a possibility of different ratios of a sum paid by an employer to a sum paid by an employee. The recommended solution is that an employee participates in this benefit (100, 200 CZK) since this can lead to the card being used more efficiently.

There is a wide range of remuneration tools and employee benefits applicable within the hotel industry. We have presented and discussed those that can be implemented easily and rather quickly and that are characterised by a high probability of efficiency. The priority objective of companies is to build such a remuneration system that is well-balanced and creates a quality statute of the total pay. Consequently, this will lead to a synergic effect for an employee that will enable to achieve the set company goals in a more efficient way.

### *Case Study*

The following case study demonstrates the efficiency of the above-mentioned tools and the importance of their implementation. It is an overview of sales, related costs and realised gross profit in the restaurant Terrace at the Golden Well that has already been awarded as the best restaurant in the Czech Republic (by Mr. Maurer’s Grand Restaurant) three times and that also ranked among the top 25 restaurants in Europe (according to the travel portal TripAdvisor).

**Table 2: Overview of economic indicators Terrace at the Golden Well**

<i>Year</i>	<i>Revenue</i>	<i>Cost</i>	<i>Salaries</i>	<i>Profitability</i>	<i>GOP</i>
2013	17,904,498	16,107,352	7,520,088	10.04	1,797,146
2014	20,827,437	15,943,535	8,110,088	23.45	4,883,902
2015	21,637,065	16,113,808	8,110,081	25.53	5,523,257
2016	29,266,415	19,240,683	8,699,635	34.26	10,025,732
2017	32,409,446	21,342,825	8,750,827	34.15	11,066,621

Source: Own processing

- 2013 without changes,
- 2014–2015 implementation of benefits,
- 2016–2017 implementation of participation on sales.

Due to the right and primarily individual approach to each employee as well as to each client, all the given categories experienced an increase in the period from 2013 until 2017. Employee satisfaction with the possibility to influence their remuneration led to the increase of sales by up to 81 %. This was mainly due to the share in sales. The amount of sales in the upshot exceeded the percentage increase in salary costs. Despite the fact that labour costs increased by 7.6 % between 2015 and 2017, sales growth brought turnover higher by 49 %. This also had an overall impact on the profitability of the company that increased from the original 10.04 % up to 34.15 %. These results should certainly lead to the satisfaction of employers. In order to close the satisfaction triangle, it is necessary to mention also the increase of 14.3 % in absolute satisfaction of guests with the services provided. This is finally confirmed by the transformer of work performance management process that ensures the satisfaction of guests by way of influencing on employees and the subsequent satisfaction of employers.

## Conclusion

Work performance management is an important tool for efficient harmonisation of the interests of all the parties involved and this way to achieve the set goals. Nevertheless, most hotels, except those that are a part of transnational chains, apply it to a very limited extent. When it is implemented, then it is static, unsystematic, inconsistent, non-complex, ossified and very little effective. Most operators and owners manage their businesses in an intuitive way, without more extensive plans and strategies for the medium and long terms. Their main goal is to “keep the business

alive” and to achieve a certain amount of profit. Development and growth are secondary to them. Therefore, they do not deal with planning the development of their employees, their evaluation and creation of an effective remuneration system.

The possibilities of further development of companies are significantly reduced without an efficient employee performance management system. Its absence can even put the future existence of a company in danger. Thanks to the uniqueness of each company, there is no universal performance management system applicable to all businesses since each has a different strategy, goals, organisation of work, structure and so on. Therefore, it is necessary to approach the creation of a comprehensive performance management system on an individual basis and in a selective and unique way. Within evaluation, this means moving away from static thinking, noticing what happened and simple evaluation of the past. It is necessary to focus on the future through motivation and problem solving. It is necessary to gather feedback (micro-evaluation) continuously, i.e. not only at the end of the year but during the evaluated periods. Based on the results, it is necessary to correct the goals or the real way to accomplish a set goal. Finally yet importantly, it is necessary to create an efficient remuneration system that can be applied individually according to the needs of each employee in order to achieve company goals.

Thanks to these approaches, it is possible to ensure the satisfaction of employees, which is the most important issue in services. The performance of a satisfied employee is much higher and, especially according to the theory of isosceles triangle of satisfaction, it creates a satisfied guest who then likes to come back and based on his/her own personal recommendation introduces other guests. This increases turnover, or more precisely profit, and last but not least a satisfied employer.

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### Contact information

Ing. et Bc. Michal Motyčka, DiS., Ph.D.  
 Faculty of Philosophy and Science, UGLAT  
 Silesian University in Opava  
 Krčmářovská 233/53  
 196 00 Prague-Čakovice  
 Czech Republic  
 T: (+420) 603 378 515  
 E: [michal.motycka@goldenwell.cz](mailto:michal.motycka@goldenwell.cz)  
 F: (+420) 257 535 020

### Description of the author

The author has been working in the field of gastronomy and hotel management for more than 20 years. For the past 13 years, he has been working as the director of the Golden Well Hotel, which, together with the Terrace at the Golden Well, is ranked among the best in the world. He has also been dealing with human resources management for a long time. His aim is to find a set of tools and their various combinations in order to achieve a steady growth in the performance of the hotel staff. Last but not least, he also works as a researcher at the Institute of Spa, Gastronomy and Tourism at the Silesian University in Opava.

# MEASURING PRICE ELASTICITY AND ITS APPLICATION INTO THE REVENUE OPTIMIZATION PROCESS

Martin Petříček, Štěpán Chalupa

***Abstract:** The paper focuses on various possibilities of measuring price elasticity of demand with the application of log-log regression analysis. The elasticity measured can be than an input for the optimization process. The critical element of this optimization is the value of the coefficient of price elasticity, which was in the given contribution (for the selected accommodation facility) to the value -0.297, which indicates a price inelastic demand. This approach also has some limitations. It assumes a regression function that is linear in parameters, and also it is only a simple regression. Despite this fact, the results are comparable to other approaches.*

***Key words:** Demand, Elasticity, Price*

***JEL Classification:** D40, L83*

## Introduction

Price elasticity is one of the key elements that must be known when considering the right price management and consequently also the revenues of any accommodation facility. The price is one of the most important information for customers (Varini et al., 2002). There are currently a large number of alternative approaches to pricing. Steed and Gu (2005) work with four basic methods, namely cost-oriented pricing, market-based pricing, a combination of the two, and best-practice based. Combined approaches include the quadratic model of Gu (1997), which is based on the identification of fixed and variable costs, expected demand and its price elasticity (the author is not concerned with its determination but only with estimation). Tung et al. (1997) propose a six-step pricing process based on market prices, identifying competitors, comparing hotels with competitors, setting price limits, and segmenting customers. Analysis and subsequent modeling of demand allow identifying changes in demanded quantity when

changing the selling price, as well as changes in customer behavior. When determining the price elasticity of demand, it is necessary to take into account a large number of factors that influence customer decisions. In addition to the price, the above-mentioned non-price factors, such as seasonality, day of the week or time before arrival (Cross, 2009), also influence the customer. The price elasticity of demand thus has a direct impact on the price of products sold as well as on the performance of accommodation facilities (Du et al., 2016). The basic models used in publications focusing on revenue management in the hotel industry include (1) lineare and non-linear demand function (Lee et al., 2011), (2) logistic regression (Talluri et al., 2004), or (3) multiple logistic regression (Anderson et al., 2016; Ratliff et al., 2008). All these models are based on dynamic product valuation not only for individual customer segments but also for the given occupancy of the accommodation facility and time horizon (Guizzardi et al., 2017; Oses et al., 2016). This paper aims to present a way of measuring price elasticity and the possible application of given output to optimize sales.

## Materials and Methods

As part of the process of optimizing sales through the price indicator, it is therefore, necessary to know how consumers react to price changes. This information is crucial for other optimization approaches. One such approach is also presented in this paper, and inputs to this process can be considered the original selling price, planned price, price elasticity, and sales (usually daily). Methodically, this approach can be characterized in the following relation

$$TR = \sum_{i=1}^n \left[ Q_i + E_{(pd)i} * (P_{pi} - P_i) * \frac{Q_i}{P_i} \right] * P_{pi}, \quad (1)$$

where  $TR$  is total sales (revenue),  $Q_i$  represents daily sales,  $E_{(pd)}$  is the elasticity of the product,  $P_i$  the initial sale price and  $P_p$  the planned sale price. The planned selling price is the same size as the original price, with the difference that it is an input to the optimization process as one of the variables where the range in which optimization will be performed must be set. This optimization is carried out in the *CrystalBall* extension called *OptQuest*, and for its successful application, it is also necessary to set



several primary conditions. These conditions apply to maximum total sales (which are limited by actual capacity), minimum expected sales (related to the accommodation plan). It is also necessary to set the goal of the optimization process (ie TR maximization) through one variable – the planned price. However, based on the aim of the paper, it is also necessary to focus on the methodological principles used to determine price elasticity of demand. A simple log-log regression analysis method will be used to determine the coefficient of price elasticity of demand. In this logic, theoretical regression function is defined as:

$$\log Q_i = \beta_0 + \beta_1 * \log P_i + \varepsilon_i, \quad (2)$$

where  $Q_i$  is the quantity demanded,  $P_i$  is the initial average price of the quantity demanded  $i$ . Values  $\beta_0$  and  $\beta_1$  are parameters of the theoretical regression function, and  $\varepsilon$  is a random error. Thus, the demand function will be expressed as a function of quantity demanded. We will estimate this theoretical regression function in order to obtain an empirical regression function:

$$\log Q_i = b_0 + b_1 * \log P_i + e_i, \quad (3)$$

where the estimate of parameter  $\beta_1$ , i.e.,  $b_1$  is the slope of the estimated regression empirical function, i.e., the coefficient of price elasticity of demand. For the solution, the OLS method will be used, and it can be mentioned that there is a  $B$  function

$$B = \sum_{i=1}^n (\log Q_i - b_0 - b_1 * \log P_i)^2, \quad (4)$$

whose solution is under the condition (5)

$$\sum_{i=1}^n e_i^2 = \sum_{i=1}^n (\log Q_i - b_0 - b_1 \log P_i)^2 \rightarrow \min, \quad (5)$$

which corresponds to the following solution (6) and (7):

$$\frac{\partial B}{\partial b_0} = 2 \sum_{i=1}^n (\log Q_i - b_0 - b_1 * \log P_{1i}) * (-1) = 0 \quad , \quad (6)$$

$$\frac{\partial B}{\partial b_1} = 2 \sum_{i=1}^n (\log Q_i - b_0 - b_1 * \log P_{1i}) * (-x_i) = 0 \quad . \quad (7)$$

For measured parameters,  $b_0$  and  $b_1$  applies

$$b_1 = \frac{\frac{1}{n-1} \sum_{i=1}^n (\log P_i - \overline{\log P}) * (\log Q_i - \overline{\log Q})}{\frac{1}{n-1} \sum_{i=1}^n (\log P_i - \overline{\log P})^2} \quad , \quad (8)$$

$$b_0 = \overline{\log Q} - b_1 \overline{\log P} \quad . \quad (9)$$

If we want to measure the price elasticity of demand, we need to work with data that is not affected by the extremes (such as data at the end of the calendar year or significant events that are organized). There are two ways to make this adjustment. One option is to remove extremes from the mentioned values, for example, using the Grubbs' test. Other way is to make another adjustment and this is based on the assumption that, in extremely high or meagre added value (profitability) of services sold to traditional collective accommodation, decision-making on price is influenced by several other factors than only the quantity demanded. It is the same decision-making logic of enterprise that is described in the enterprise's behavior in duopoly or cartel (for more information see Kaplow, 2013; Escobar & Llanes, 2018). At first, it is necessary to find an index that evaluates the profitability of the service sold on the market. For these purposes, based on the obtained values was calculated the *RevPAR* (Revenue per Available Room) index for each day, which was defined as

$$RevPAR = Occ * ADR \quad , \quad (10)$$

where *Occ* is the average daily occupancy, and the *ADR* is the average daily rate. In order to make a final adjustment to the above-mentioned extreme values, it is useful to know the exact distribution function of the variable (in our case, *RevPAR*). In order to eliminate high and low values, only such *RevPAR* values were chosen that are higher than 10% percentile and less than 90% percentile. The adjustments described above are carried out for

each year and consequently are used only those data that achieve the RevPAR values between specified percentiles. These values better reflect the real market situation and are more appropriate to achieve the objective of the contribution.

## Results

The methodological approaches described above are then applied on a concrete example of measurement of price elasticity and optimization process. This example is limited to one segment only (business clients). Data for 2018 were chosen for measuring price elasticity, and the presented regression function is as follows

$$\log Q = 6.73285954 - 0.29716318 * \log P + \varepsilon. \quad (11)$$

Based on the regression function set like this, it is apparent that the value of the coefficient of price elasticity is about -0.297, and this is a demand that is price inelastic. Based on the described approaches at the beginning of this paper, it is then possible to apply the given elasticity to optimize sales. However, this output is on the content frame of the paper. The elasticity measured above points to the fact that this is a significantly inelastic demand, which corresponds to the given segment.

## Discussion

Similar studies achieve similar results. Hiemstra et al. (1993) measure the elasticity of demand for accommodation facilities of the lower-priced category (-0.35) and the higher price category (-0.57). Damonte et al. (1998) focus on measuring price elasticity and its comparison between selected US regions in low and high season. The measured values for Columbian County range between -0.8 and -1.8. For Charleston County then between -0.1 and -0.3. Rossello et al. (2005) examine aggregate demand for accommodation services from Germany (elasticity value -0.84) or the Netherlands (-0.51).

## Conclusion

The methodical approaches that are presented can be used to measure price elasticity of demand while knowing historical data in the form of the quantity sold and corresponding prices. It is possible (and in many cases will also be a prerequisite) to adjust the value of the quantity sold to the size of realized sales. In principle, however, this adjustment will not significantly affect the overall output as it is only a different measure of the quantity sold. The regression used has, of course, several restrictive criteria that can distort an individual output. It is mainly a presumption of linearity of the regression function in its parameters and also the fact that we are still working with single and not multiple regression. On the other hand, it is necessary to point out that even this elementary principle achieves results that are applicable and comparable with the results of other studies.

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**Contact information**

Ing. Martin Petříček, Ph.D.  
Department of Economy and Economics  
The Institute of Hospitality Management in Prague  
Svídnická 506  
181 00 Prague 8  
Czech Republic  
T: (+420) 283 101 140  
E: petricek@vsh.cz

**Description of the author**

The author focuses on general problems within the business economics, he also specializes in decision-making processes and application of simulation principles in these processes included revenue management.

Ing. Štěpán Chalupa  
Faculty of Informatics and Management  
University of Hradec Králové  
Rokitanského 62  
500 03 Hradec Králové  
Czech Republic  
T: (+420) 283 101 179  
E: chalupa@vsh.cz, stepan.chalupa@uhk.cz

**Description of the author**

Štěpán Chalupa focuses on business intelligence, data mining and text mining and business modelling in hospitality industry. The tools and methods are just a step from their implementation in e-business and complex hotel information system.

# INFORMATION AND COMPUTER TECHNOLOGIES AND SOCIAL NETWORK USE IN HOTEL EFFICIENCY

Sylva Skupinová, Eliška Smotlachová, Jan Máče

***Abstract:** The article deals with analysis of the relative number of individuals using selected ICT in relation to hotel-keeping branch. The analysis includes the data of the time series 2009–2018. With the use of regression and correlation analyses there was set up the prognosis of the relative number of individuals searching for information on travelling or accommodation in selected information and communication technologies. There has been evaluated the correlation coefficient  $r = 0.986$  which verges the perfect dependence.*

***Key words:** ICT, Regression and Correlation, Social Networks, The Czech Republic*

***JEL Classification:** C10, D83, O3*

## Introduction

At the present time we take the use of information and communication technologies (hereinafter ICT) and social networks in hotel-keeping for granted. For instance in hotel marketing the ICT and social networks can be considered as necessary in light of pressure of a competitive environment which literally forces to use the modern technologies. It is quite sure that the hotel efficiency is closely connected with pieces of information available at social networks, which should get as efficiently as possible to the target customer, thus to the prospective guest. Respective social networks in the Czech Republic underwent their intriguing history. Before the foreign social networks came to the Czech Republic, the first Czech social networks started to rise. They were the most widespread in the time when Facebook had not yet become the most widely used social platform and had not been available to all users. Before the Facebook worldwide predominance it was Myspace – the ruling social platform and the number one in its branch. In the record-braking year 2007 it reached up to 80 millions users and gained

800 million dollars on advertising (Lupa, 2011). However, Myspace was not too widespread in the Czech Republic. That is why there excelled the Czech social networks such as Libimseti.cz, Spoluzaci.cz or Lide.cz. In 2009 Facebook surpassed the boundary of a million user, while in November 2008 – when Facebook got its Czech localisation – it has only 150 thousands users (Lupa, 2009). Today, the biggest role is played by the foreign social networks; the Czech ones are mostly on the background and some of them has already finished. The best known and the most visited social media still remain YouTube and Facebook, which are known to 98, resp. 99 percents of internet users. Instagram significantly bettered; its knowledge increased inter-annually by 11 percentual points up to 92 percents (Brejčák, 2018). It is apprehensible that besides the social networks an unsustainable position is represented by accommodation on-line booking such as Booking.com, or travel agencies specialised in internet sale of holiday sojourns, e.g. Invia.cz or common browsers such as Google.cz or Seznam.cz.

## Materials and Methods

In order to process the article there were used the data obtained form the Czech Statistical Office (ČSÚ, 2019). The data were processed by standard statistical methods. The time series were analysed according to elementary principles featured for instance by Artl & Artlová (2009). The methods of searching for the best convenient trend have been described for instance by Litschmannová (2010). Analysis of dependences has been carried out with the use of linear regression and correlation analyses, as described in detail by Novák (2015).

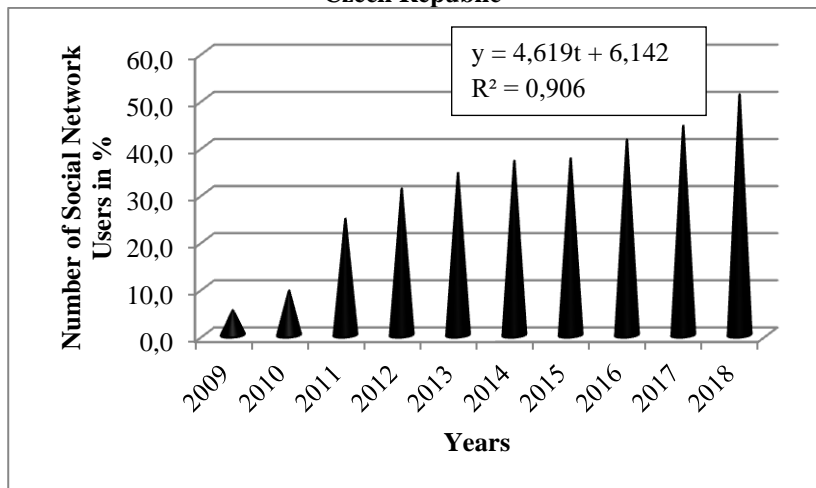
## Results

Naturally, the use of social networks in hotel-keeping will relate to development of the number of social networks in the Czech Republic in the last 10 years (Graph 1). There is an evident linear trend with high coefficient of determination  $r^2 = 0.906$ , thus the quality of the regression model is perfect. In the Graph 1 it is evident there is a linear increase of the number of users within the time series, whereas the correlation in the time is very high ( $r = 0.952$ ); thus it is possible to make estimation of the number of users for the year 2019 based on this trend. If the trend does not change we could expect 57 % social network users. The basic index for this year – with



the year 2009 as the base – would make unbelievable 1,100 % increase. Such a jump undoubtedly shows evidence of today's essentiality of the social networks amongst the citizens in the Czech Republic. Prognosis for this year increased by 11.8 % compared to the last year.

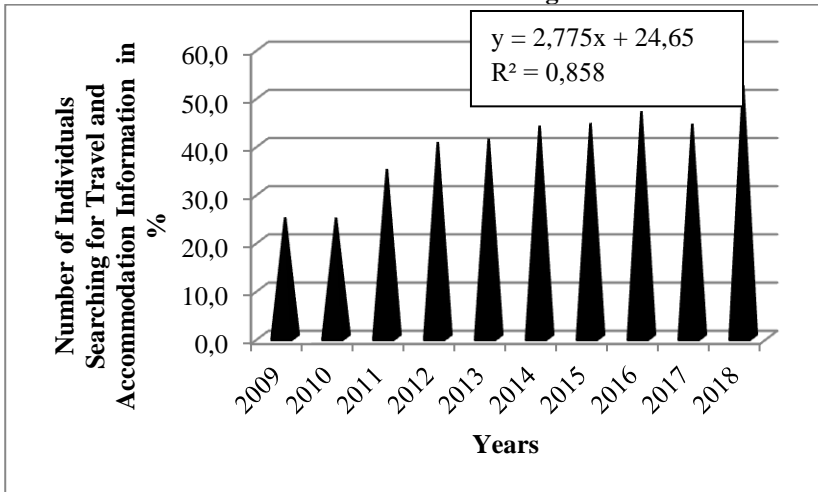
**Graph 1: Development in Number of Social Network Users in the Czech Republic**



Source: Self-processed, ČSÚ (2019)

Development of the individuals searching for travel and accommodation information using selected ICT (Graph 2) is interesting as well. Also here there is very well perceptible linear trend in the last 10 years, with a high dependability ( $r^2 = 0,858$ ). Prognosis for this year would be also of high quality – if there is not a change in the trend it would make 55.8 % individuals searching for travel and accommodation information using selected ICT. The basic index for this year – based on 2009 – would increase by interesting 220 %. Thus, the relative number of these users has doubled in the course of the last 10 years. The increase would be 6.5 % compared to the last year.

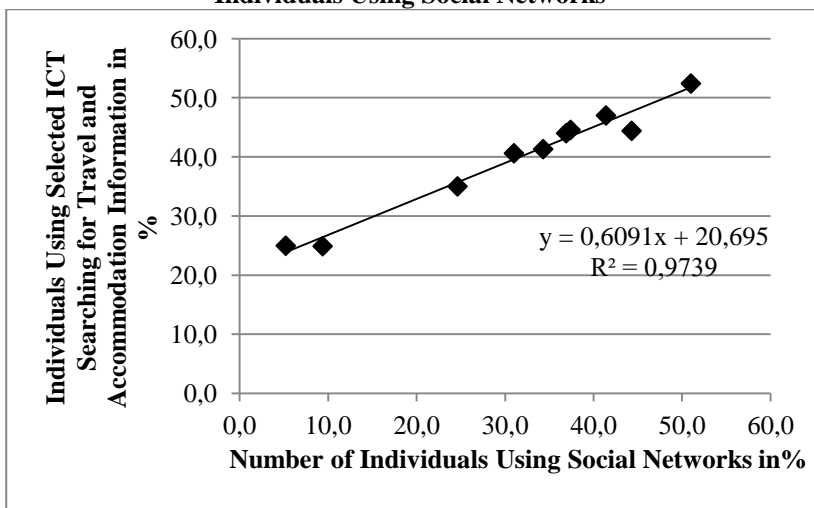
**Graph 2: Development in Number of Individuals Searching for Travel and Accommodation Information Using Selected ICT**



Source: Self-processed, ČSÚ (2019)

The regression and correlation analyses definitely confirm the close dependence of the individuals using selected ICT searching for travel and accommodation information (in %) on the relative number of the individuals using social networks in the last 10 years – in time series 2009 – 2018. The correlation coefficient is 0.986 % for why it is almost perfect dependence (Graph 3). Therefore, it is clear that if the prospective customer uses an ICT to search for accommodation, he/she will also use social networks, which are the ideal option for a hotel management to attract customers.

**Graph 3: Dependence of Individuals Using Selected ICT Searching for Travel and Accommodation Information on Relative Number of Individuals Using Social Networks**



Source: Self-processed, ČSÚ (2019)

## Discussion

Out of the ČSÚ source data it results that not longer than both the relative number of individuals using social networks and the relative number of individuals using ICT searching for travel and accommodation information would exceed 55 % in this year. Such a high ratio necessarily perforce the hotel-keeping sphere to improve its companies' web sites and not to hesitate to propagate their services at social networks. It is clear that the use of social networks also enables to find out necessary information on the guests. As presented at the portal "Pomáháme hoteliérům" (Pomahamehotelierum.cz) it definitely holds that the more information on their guests the hotels find out, the better they can influence the guests' emotions. If the guests are pampered, they are satisfied and they stay loyal regardless of competition. Furthermore, the guest's feedback – so called review – becomes the marketing of the 21<sup>st</sup> century in the hotel sphere. Overnight stay reviews are an important factor being a part of the review

marketing and creating the hotel reputation and a good name. Digital marketing obtains the guest's attitude to the hotel and its services. Usage of the reviews both in on-line and off-line environment serves to hotel propagation and to the market success improvement. Each positive rating from the guest is of a high value for the hotel. In the last year 80.7 % of individuals using selected ICT used internet; interesting are also relative numbers of individuals using internet banking in the last year in the frame of the use of selected ICT, which was 57.6 % (ČSÚ, 2019). These values also pull the hotel-keeping branch to the phase where using ICTs is a matter of survival at the market.

## Conclusion

Out of the Czech Statistical Office it definitely results that within the last 10 years there came to an unusual increase in the use of information and communication technologies and social network by individuals. It results that in this year the relative number of individuals would exceed 55 %. Linear regression and correlation analyses confirmed the definite, almost perfect dependence ( $r = 0.986$ ) of the number of individuals using selected ICT searching travel or accommodation information in percents on the relative number of individuals using social networks in the time series 2009–2018. This dependence was monitored in the last ten years, when the internet was used by 80.7 % individuals in the frame of the use of selected ICT; in the line with it the relative number of individuals using internet banking was 57.6 % (ČSÚ, 2019). These findings imply to the result that a quality hotel web-sites and social network using marketing are necessary to the competitive strength of the Czech hotel-keeping.

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### Contact information

Dr. Ing. Sylva Skupinová  
 Department of Management  
 The Institute of Hospitality Management in Prague  
 Svídnická 506  
 181 00 Prague 8  
 Czech Republic  
 T: (+420) 283 101 140  
 E: skupinova@vsh.cz

### Description of the author

Assistant Professor at the Department of Management at IHM in Prague, teaching courses in statistics and applied statistics. Her research is in the area of statistical modelling using regression and correlation analysis. The author of numerous scientific publications.

Ing. Eliška Smotlachová  
Department of Economy and Economics  
The Institute of Hospitality Management in Prague  
Svídnická 506  
181 00 Prague 8  
Czech Republic  
T: (+420) 283 101 140  
E: smotlachova@vsh.cz

**Description of the author**

Assistant Professor at the Department of Economy and Economics at IHM in Prague. She has been with IHM since its inception teaching courses in accounting, marketing, management, business economics and financial management. At the present time, teaching courses in accounting and microeconomics. The author of numerous scientific publications.

PhDr. Jan Máče, Ph.D.  
Department of Economy and Economics  
The Institute of Hospitality Management in Prague  
Svídnická 506  
181 00 Prague 8  
Czech Republic  
T: (+420) 283 101 140  
E: mace@vsh.cz

**Description of the author**

Vice-Rector for study and member of the Department of Economy and Economics at IHM in Prague. He has been with IHM since 2004. His focus is on microeconomics, history of economics and management. The author of numerous scientific publications.

# VALUE ADDED TAX, LOCAL FEES AND SHADOW ECONOMY IN RELATION TO TOURISM AND HOSPITALITY INDUSTRY OF V4 GROUP STATES

Petr Studnička

**Abstract:** *Act No. 565/1990 Coll., for Local Fees, as amended, is a legal requisite that affects each of us. Income from local fees is from 100 % revenue to municipal budgets. In relation to tourism, hotel and spa hospitality, the local spa or recreational stay fees and the local hotel accommodation fees are the most important. Very important in relation to local fees is Act No. 235/2004 Coll., for Value Added Tax, as amended. The goal of this article is to compare the performance of these two indicators in The Visegrád Group States (Czech Republic, Slovakia, Poland, Hungary).*

**Key words:** *Hospitality, Local Fees, Municipal Budgets, Tourism Industry, Value Added Tax*

**JEL Classification:** *H71, H83, L83*

## Introduction

The taxation of tourism services does not differ too much from other economic areas and always corresponds with the tax system in the country concerned. The greatest volume of revenues flows mostly through value added tax (VAT) and personal or corporate income tax. The rate of the taxation of tourism services differs both in individual countries and within the European Union. The introduction of tourist taxes, charges and local fees at municipal level has been included in the tax system of many countries for a long time. "In the Czech Republic the history of the introduction of the first local fee in the spa town of Karlovy Vary dates back to the year 1475" (Plzáková, et al., 2018, p. 22).

Act No. 565/1990 Coll., for Local Fees, as amended, is a legal requisite that affects each of us. It regulates and legislatively defines eight types of local

fees that can be levied by municipalities. Income from local fees is from 100 % revenue to municipal budgets. The most significant volume is the local waste collection fee. In relation to tourism, hotel and spa hospitality, the local spa or recreational stay fees and the local hotel accommodation fees are the most important (Radvan, 2012).

While a local spa or recreational stay is paid by every tourist (guest) who spends a night in a destination for healing or recreation, the local hotel fee is paid by the accommodation operators. The annual volume of both selected local fees, which collect on average 18 % of the total number of municipalities in the Czech Republic (6,258), reaches more than 0.75 billion crowns (Plzáková, et al., 2018).

## **Materials and Methods**

On the basis of the analyses aimed at setting and selecting local fees in direct connection with tourism, hotel and spa hospitality services, it can be stated that the Local Fees Act deserves another amendment. This is due to the obsolete, insufficient and often inoperative apparatus, as well as in light of the growing influence of the shared economy and the growing segment of shared housing, that is, short-term rentals of apartments for tourists.

It was analysed data about VAT and local fees in relation to tourism and hospitality industry of The Visegrád Group States. The Visegrád Group is a cultural and political alliance of four Central European states – the Czech Republic, Hungary, Poland and Slovakia, that are members of the European Union (EU) and NATO – for the purposes of advancing military, cultural, economic and energy cooperation with one another along with furthering their integration in the EU.

The Group traces its origins to the summit meetings of leaders from Czechoslovakia, Hungary, and Poland held in the Hungarian castle-town of Visegrád on 15 February 1991. After the dissolution of Czechoslovakia in 1993, the Czech Republic and Slovakia became independent members of the group, thus increasing the number of members from three to four. All four members of the Visegrád Group joined the European Union on 1 May 2004 (The Visegrad Group, 2019).

In the framework of the desk research method, the research of the available literature was carried out and the findings were verified on the basis of



questionnaire survey and statistical data (Statistical Offices, National Tourist Boards, Municipality Budgets etc.).

## **Results**

This is caused by historical development, when now we no longer have soldiers in basic or civil service, and the benefits of state social support do not count on so-called education (first group). This outdated approach does not only stem from history, but also from the current and, in particular, the future development of the market for shared services, which are particularly popular in the tourism sector. The second group covers economic reasons, from the point of view of the limitations municipalities face when collecting a local spa or recreation fee. It is law that municipalities that offer a spa or exist in a place of concentrated tourism can collect this fee. On the one hand, the place of concentrated tourism is not defined anywhere and, on the other, it is a discriminatory provision for other municipalities. Another economic reason to consider is the setting of the maximum rates for local fees charged in the Czech Republic compared to those in foreign countries, where so-called tourist tax is more widely differentiated (according to the type and class of the accommodation, according to the geographical location of the place, by season, etc.). The rate is usually higher, and often by a large scale. The third group of reasons are administrative reasons, not only in respect to municipalities, but also in respect to providers of temporary accommodation services for a fee. The administration of local fees is a burden for smaller municipalities, and sometimes the introduction of a local fee does not offset administrative burdens. Another reason falling within this category is the setting of so-called flats where the municipalities proceed with a "trial and error" method due to the interpretation of the law not being entirely clear (PlzÁková et al., 2016).

From the viewpoint of the general regulation of taxes, especially VAT, it is interesting to compare how individual European Union states approach to this taxation in the case of the VAT rate for accommodation services. Only three out of 28 European Union member states apply the basic VAT rate to accommodation services while the remaining 25 countries apply the reduced VAT rate; this is the first reduced rate in 15 cases, the second reduced rate in six cases, and the third reduced rate in one case. According to Annex No. 2 to Act No. 235/2004 Coll., for Value Added Tax, the Czech Republic applies the first reduced VAT rate, which is currently 15 % (Table

1). Table 1 gives an overview of the VAT rates and local taxation in the V4 group states.

**Table 1: Overview of the taxation of tourism services  
in the V4 group states**

<i>State</i>	<i>Reduced VAT rate</i>	<i>VAT rate</i>	<i>Order of the reduced VAT rate</i>	<i>Local tax (charge/fee) connected with accommodation services</i>	<i>Rate of the local tax (charge/fee)</i>
Czech Republic	Yes	15 %	1.	Yes – The maximum amount established by law	Up to 0.77 €/person/day
Hungary	Yes	18 %	1.	Yes – The amount according to the capacity of the accommodation facility and the region	1.50 €/person/night
Poland	Yes	8 %	1.	Yes – The amount as decided by the municipality	0.50-3.00 €/person/night
Slovakia	Yes	10 %	1.	Yes – The amount as decided by the municipality	Unlimited

Source: Processed by the author using Ranson, 2014, European Tourism Association, 2012 and [www.vatlive.com](http://www.vatlive.com), 2019

## Discussion

No directive to regulate shared accommodation is expected to be issued at the European Union level. The European Agenda for the Collaborative Economy (2016) points out the fact that the sharing economy must be understood as a great opportunity for growth, innovations, and the

modernization of the economy, but problems connected with dissimilar conditions for business must be expected. The tax rules are different in every country and also the regulation of especially local taxes in the destinations of tourism within one state differs very frequently. It is local taxes on tourism what is established at regional unit level in a country concerned or even at town and municipality level. The unambiguous or not completely innovated regulation of the liability to pay local taxes on tourism often leads to losses on the side of destinations of tourism.

The economic activities of people, companies, as well as institutions, are normally classified as official and unofficial. The cause is the existence of dual economic structure consisting of so-called official and unofficial sector. The official sector is normally understood as the lawful economy, while unofficial (informal) sector is considered as so called informal economy. This classification is essentially artificial, because the economy of each state always functions as a whole. The border between the official and shadow activities can be moved, depending on the criteria used. Parting line forms a statistical criterion that allows distinguishing registered (visible) and unregistered (hidden) economic effects in official statistics. The second indicator is a measure of legality, which highlights the consistency of economic activities with the law. The decision on the classification of economic phenomena is not often derived from the nature of the phenomenon itself, but from its implementation, from its methods of accounting, etc.

Definition of the shadow economy is a difficult theoretical problem. The authors emphasize the legal aspects of economic activity and come out of the fact that the shadow economy is a complex and multifaceted phenomenon, which is part of the reproductive process of the whole society. The existence of shadow economy is a manifestation of non-compliance with legal norms and social rules within the framework of economic activities. The outcome of the informal economy is a redistribution of income (revenue) among the population, entrepreneurs and the state. Its size (range) can be measured with the aid of monetary value of informal production for a certain period of time. In essence, a macroeconomic indicator is involved, which corresponds to the character of the aggregate gross national income. In this context, the statistical criterion is used.

Complex of the shadow economy is defined by so-called elements, i.e. the shadow activities, transactions, payments and receipts, which can be implemented in both the formal and informal sectors. Often there is a

blending of these elements between the two sectors. Assembly constituted by these elements and by the links between them is regarded as the shadow economy, which is usually divided into "black" and "gray". The European Union average share of gray economy is estimated at 18.5 %. Revenues generated in the informal economy are called for "dirty money". Their beneficiaries are those forced to legalize illegally obtained money, i.e. "launder". These machinations concern not only cash, but also non-cash money (Belešová et al., 2016).

## Conclusion

Tourism has many positive economic impacts such as the support of small and medium enterprises, job creation, tax revenues, etc. The proposed amendment to the current version of the Local Tax Act would simplify the set system and reflect current and future developments in the tourism market. At the same time, the amendment to the law would give more power to the competence of the municipalities and reduce the administrative burden. Plus, the fee for the use of public services in the tourism sector in our communities would be closer to the situation abroad.

"A new construction of a local fee for stay that would merge the currently existing two local fees into one monetary benefit and examine the effect of the proposed change on the revenues of the municipal budget" (Studnička, Pátek, 2018, p. 75).

To reduce the level of shadow economy in the lodging and catering industry, the system of electronic registration of revenues in the Czech Republic, Slovakia and Hungary (partly) was created. The application of this system has two basic aims, to reduce shadow economy, to increase efficiency of taxation system (especially income tax and VAT) and to narrow the business environment in V4 Group States economy when the straight businessmen in various industries are not able to compete to those who avoid the tax payments.

Shadow economy activities are quite challenging for tourism industry, especially for lodging and catering businesses. In last decades the pressure from government bodies to reduce and regulate such activities has been growing. Electronic registration of company revenues is just one example of such effort. With the help of electronic registration the state wants to

prevent such activities as manipulation with accounting and cash systems, money laundering, the sales outside the taxation system etc.

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**Contact information**

Ing. Petr Studnička, PhD.

Department of Hotel Management

The Institute of Hospitality Management in Prague

Svídnická 506

181 00 Prague 8

Czech Republic

T: (+420) 283 101 176

E: studnicka@vsh.cz

**Description of the author**

Petr Studnička is a Head of Department of Hotel Management at the Institute of Hospitality Management in Prague. His areas of expertise are destination management, hospitality management, regional development and public administration.

# SENIORS AND EXPERIENTIAL GASTRONOMY AS A TOOL TO IMPROVE THE PERFORMANCE OF A TOURIST DESTINATION

Lenka Turnerová, Eva Ottová

***Abstract:** The process of globalization permeates all sectors of the economy, so it is increasingly difficult to determine where its starting field is, whether in production, trade, or whether the customer or the client is involved in its development. International trade of networks of multinational companies creates a homogeneous environment that completely eliminates domestic specifics. At this moment, the solution is in the concept of tourism, which should offer such services that will make individual destinations so unique that the client chooses them as their priority. The authors focus on analysing the expectations of the segment of seniors in the area of experiential gastronomy and its inclusion in the offer of travel agencies. The research concentrates on the analysis of the results of the questionnaire survey, which showed preferences of respondents aged 55+ for this type of travelling. The research is the second stage of monitoring the preferences of the 55+ segment in the field of adventure tourism.*

**Key words:** Catering Facilities, Destination, Gastronomy, Globalization, Segment 55+, Seniors, Tourism, Travel Agencies

**JEL Classification:** Z300

## Introduction

The aim of the paper is to introduce the next stage of research focused on the segment of tourism clients aged 55+ and their expectations in the field of experiential gastronomy as a tool for improving the performance of tourism destinations. The research focuses on the forms of experiential gastronomy and their development in relation to the development of expectations of this customer segment. An offer in experiential gastronomy

is changing rapidly – its diversity – also due to the influence of foreign tourism and its segment of seniors.

Gastronomy represents the main part of catering services, which together with accommodation services and transport are basic services of tourism. People have different preferences in tourism, they expect a diverse offer of travel agencies. And one form of tourism that motivates travellers is certainly food and gastronomy. The concept of motivation in tourism may vary according to different sources, but the theory often used is the division of motives into so-called push and pull. Push motives are natural and original, and express the inner needs and desires of humans to travel. Push motives include relaxation, rest, recovery, or knowing something unknown. If people want to experience a special atmosphere, get to know the way of life in a country or taste local specialties, then they are motivated by pull factors. These are caused by the destination itself and are a summary of the knowledge that tourists have about the destination.<sup>1</sup>

When travelling for gastronomy people are motivated both by push factors and pull factors as tasting new dishes they recognize something unknown and also learn about the local culture and the way of life.

Gastronomic tourism can be defined as a form of tourism in which gastronomy and culinary experiences are the main motive. It can be participation in specialized gastronomic events or experiences connected with consumption, preparation and presentation of food, or familiarization with gastronomic traditions in the given destination.<sup>2</sup> Gastronomic tourism can be divided into two main groups which can be intertwined. The first group represents tourism focusing primarily on the consumption of food, which offers both the taste of national cuisine and regional dishes. The second group is tourism focusing on the consumption of beverages and its participants travel most often to discover wine, beer, whiskey or vodka. Soft drinks include especially coffee and tea.<sup>3</sup> A special position in gastronomic tourism has a gastronomic tour that, in addition to culinary experiences, provides information on the history and sights of the destination.

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<sup>1</sup> Available at: [http://kcr.vse.cz/wp-content/uploads/2009/10/Valentova-Konference\\_VSE\\_zari-2009.pdf](http://kcr.vse.cz/wp-content/uploads/2009/10/Valentova-Konference_VSE_zari-2009.pdf)

<sup>2</sup> KOTÍKOVÁ, H. *Nové trendy v nabídce cestovního ruchu*, str. 39.

<sup>3</sup> LEPKOVÁ, H. *Pivní turistika v České republice*. Brno, 2012. Diplomová práce. Masarykova univerzita.



Culinary tourism began to operate as a separate sector in 2001 and in 2003 Erik Wolf founded International Culinary Tourism Association. At present, it can be considered as a very important sector and its importance is growing dynamically.

## **Materials and Methods**

The main aim of the article is to recapitulate the main findings in the area of expectations of the 55+ segment in the experiential gastronomy. The research focused on the diversity of the forms of experience offered in the Czech Republic and on the expectations of the selected customer segment in this area. While the first part of the research is based on the analysis of statistical data, the second part of the research was carried out using a questionnaire survey (about 100 respondents). The interviewees were mostly the students of the Institute of Hospitality Management in Prague. The majority of respondents were people aged 55 to 65 (90 %), the rest aged 65+. Men accounted for 49 % of the total responses, and women for 51 %. 30 % of the total number of the respondents were university graduates, the majority of the respondents were secondary school graduates (58 %).

## **Results**

Experiential gastronomy as a way of eating has no limits and it depends only on the operators and their experience and what form of experience they use to address the guests. The art is to satisfy all the senses, so that the experience of the food, environment of the restaurant and skills of the staff complement and enhance the atmosphere.

Experiential gastronomy connected with gastronomy concerns not only the food itself, but also its composition, arrangement and overall presentation. The smallest detail plays an important role here. From the point of view of the servicing staff, experiential gastronomy is closely connected with the function of a sommelier, who completes the overall impression of the food by the right recommendation of a drink. Even a waiter's role in this activity is not negligible. Environment in the restaurant that wants to operate experiential gastronomy must be unforgettable, unrepeatably and unique.

All of these "components" of the experiential gastronomy must be complementary, and one without the other will not work. Experiential gastronomy certainly has a great future, but people in our country must first get used to this type of catering. Not everyone is willing to give more money for food than he/she is used to pay in a restaurant. A big problem in Czech destinations is the lack of qualified staff with no experience and enthusiasm.<sup>4</sup>

While eating guests require a show, personal contact and food preparation preferably in front of their eyes. At the same time, guests expect more freshness, higher quality and variety, they want to see the preparation and be able to watch the completion of their food.

There are many forms of experiential gastronomy. Some are directly related to food preparation. If the kitchen is a part of the restaurant, the guest can watch the whole preparation (activcounter). If the food is just being finished in front of the guests, it is "front cooking", which is a popular culinary experience. Cooking in front of the guests offers many possibilities how to impress the clients and give them an unforgettable experience of the visited destination. Especially if it is possible to combine the experience with local specialties, traditions, seasonality, etc.

Another form is the client's personal participation in preparing or completing of a meal, known as the "fondue". For example, unusual service is popular. It can mean historical costumes and interesting fancy dresses, all in the style of a given restaurant or organized event. This is related to thematic events, which are also a form of experiential gastronomy. The problem is not even a medieval feast at a castle or dinner with a beautiful view. The unconventional service may also include a unique concept, (e.g. the guests are serviced by a model railway), which fits into the overall concept and interior of the company. This is a truly unique experience for both adults and children.

A part of the gastronomic experience can be music. The overall atmosphere of the restaurant is enhanced by an unusual interior. The number of design restaurants continues to grow and their expansion is often driven by franchising. "Fine dining" is now considered to be the peak of experiential

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<sup>4</sup> Available at: <http://www.gastromagazin.cz/zajimavosti-a-ruzne/zazitkova-gastronomie-co-si-pod-ni-predstavit/>

gastronomy, which means multi-course dinner that combines the atmosphere of a place with unique dishes and client care.<sup>5</sup>

Gastronomic festivals and celebrations are gaining popularity in the Czech Republic and their number and forms are expanding. Personal interviewing took place in all larger cities in the Czech Republic (Prague accounted for 24 % of the total number of respondents).

The introductory part of the survey was aimed at finding out the knowledge of the concept of gastronomic tourism. Most respondents associate this concept with food. 72 % of respondents have not participated in any of these events yet.

Another aim was to find out the motivation of those who attended at least one event of that kind. The overwhelming majority (58 % of respondents) mentions recommendations from their family or friends as the main motivation, 22 % give inspiration from discount portals and 18 % were lured by various charts of the best restaurants.

45 % of respondents answered positively if they ever attended a gastronomic festival, of which most (59 %) marked the Prague Food Festival, 35 % beer festivals and the remaining 6 % are divided among 4 other events.

76 % of the respondents have not visited an experiential restaurant yet. Of those who visited, most often mentioned Dětenice (26 %), Ambiente in Prague (13 %) and Prehistory in Písek (8 %).

Only 5 % of the respondents took part in the culinary tour, but 27 % of them would travel for the culinary experience up to 50 kilometres from the place of living and 29 % would be interested to travel even abroad.

From the offer of various gastronomic events, the respondents would most often choose a cooking course (52 %), wine tasting or a beer festival. 40 % of the respondents are willing to spend up to CZK 1,000 for a gastronomic experience, only 6 % of the respondents would be willing to spend more than CZK 5,000. The difference in expenditures for gastronomic experiences was mainly based on the level of education, when the amount increased with the level of education achieved. The willingness to travel

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<sup>5</sup> Available at: <http://www.lafinestra.cz/napsali-o-nas/trendy-soucasne-ceske-gastronomie>

greater distances, respectively abroad is also increasing according to the education level.

## **Discussion**

Gastronomic tourism is becoming an increasingly important motive for travelling, not only in the Czech Republic but also abroad. However, the term or concept is not yet widely known or used by the public as an opportunity to spend leisure time for customers aged 55+. Some respondents participated in culinary tourism without knowing it, and the reason is the lack of knowledge of the concept of gastronomic or culinary tourism.

It was possible to deduce from the respondents' reactions that under the term gastronomic tourism they often imagine travelling abroad and do not fully consider that these opportunities are often close to their homes. The respondents are willing to travel because of gastronomy abroad, but in the Czech Republic most respondents would not be able to travel more than 50 km to 100 km.

## **Conclusion**

People are generally more educated, have more resources available, require more quality and healthy food. They are more experienced in travelling and the Internet makes food more accessible to them, they want to taste and get to know the cuisines of other nations. Not only the charts of the best restaurants or professional magazines, but also TV shows contribute to the growing interest in gastronomic tourism. Only a few Czech travel agencies focus on gastronomic tourism, but in most cases, tours for gastronomy are only a minor part of the tours offered. The exception is the travel agency Culinaria Travel, which has the largest offer of domestic and foreign tours focused on gastronomy travelling. The second largest offer of gastronomic tours is provided by the GEOPS travel agency. There is also the travel agency CA Pivo a víno.cz, which offers a wide range of tours for beer, wine and gastronomy.

There are not many travel agencies in the Czech Republic that offer tours for gastronomy, or focus exclusively on gastrotourism, but a wide variety of gastronomic events, festivals and events taking place in the Czech Republic

proves that gastronomy is a separate motive for traveling and its meaning is still growing.

The conclusions of the research motivate us to further focus on comparing the perception of experiential gastronomy of the senior segment with other age categories.

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### **Contact information**

doc. Ing. Lenka Turnerová, CSc.  
Department of Marketing  
The Institute of Hospitality Management in Prague  
Svídnická 506  
181 00 Prague 8  
Czech Republic  
T: (+420) 283 101 172  
E: turnerova@vsh.cz

### **Description of the author**

The author graduated from University of Economics, Prague. She focuses her scientific and educational work on international business, marketing and strategic management. She is an expert in franchising.

PhDr. Eva Ottová  
Department of Languages  
The Institute of Hospitality Management in Prague  
Svídnická 506  
181 00 Prague 8  
Czech Republic  
T: (+420) 283 101 172  
E: ottova@vsh.cz

### **Description of the author**

The author is a teacher of German language and Czech language for foreigners. She is the Head of the Department of Languages at IHM in Prague and the core of her research lies in the historic and linguistic interconnection between Czech and German culture.

# LUNCHEON VOUCHERS IN THE CZECH REPUBLIC

Blanka Zimáková, Karolina Macháčková

**Abstract:** *The paper deals with the use of luncheon vouchers in the Czech Republic. The luncheon voucher can be defined as a voucher that has the character as security, it is the most popular and widespread fringe benefit. Currently two types of luncheon vouchers are used – printed and electronic ones. In the article is mentioned the history of luncheon vouchers, legislation, advantages, and disadvantages resulting from the provision and acceptance of luncheon vouchers and follows an example of tax savings for employers. In conclusion, the proposal of the Ministry of Finance for the introduction of the so-called luncheon voucher flat-rate expenses is mentioned.*

**Key words:** *Benefit, Employee, Employer, Flat-rate Expenses, Legislation, Luncheon Voucher*

**JEL Classification:** *E24, G18, J18, J32*

## Introduction

The aim of the paper is to introduce the history, present and further development of luncheon vouchers, which are still the most widespread and popular benefits for employees in the Czech Republic. A meal or luncheon voucher is valuable at a certain nominal value which may be spent only for specific reasons or on specific goods. Luncheon voucher is an employee (fringe) benefit, allowing them to eat outside restaurants, especially for lunch. They allow companies to subsidize lunches for their employees without having to set up and run own canteen. Luncheon vouchers have favorable tax treatment, they are tax-deductible items for employers. Vouchers are typically in the form of paper tickets but are gradually being substituted by electronic vouchers in the form of a special payment card. The topicality of the paper is based on reactions and extensive discussions on the submitted proposal of the Ministry of Finance of the Czech Republic on the introduction of the so-called luncheon voucher flat-rate.

Luncheon vouchers are historically the first and the oldest of all fringe benefits to become the standard today, 93 % of employees consider luncheon vouchers the best benefit. Food vouchers are used by approximately 1.3 million employees and vouchers worth CZK 16 billion annually.

The history of Luncheon Vouchers began in the UK after World War II, in 1946. At that time, the government guaranteed a special tax regime to ensure healthy alimentation for the population. If the company did not have its own canteen, so had to arrange new cooperation partnerships with a network of outside restaurants that would be willing to accept luncheon vouchers. At the same time, it was necessary to establish its own system of printing, registration, and accounting. Only eight years later, in 1954, the entrepreneur John Hack founded the Luncheon Vouchers Company, which introduced the first unified nationwide voucher system.

Since the 1960s, other European countries have gradually adopted a unified food system. Food vouchers appeared in the Czech Republic at the beginning of the 1990s. The global food phenomenon has spread to many countries outside of Europe.

## **Materials and Methods**

The basic legislation relating to the distribution, provision of receiving, billing and taxation of luncheon vouchers include Act No. 262/2006 Coll., The Labor Code and Act No. 586/1992 Coll., On Income Taxes, as amended.

Act No. 262/2006 Coll., The Labor Code, states: *“The employer is obliged to allow alimentation availabilities to all employees in all shifts; the employer does not have this obligation towards employees on a business trip.”*

According to the law, the employer is therefore obliged to ensure his employees the possibility of alimentation during their working duty. The law does not specify whether the employer should only contribute to his employee's alimentation either pay it in full, or in what amount. Employee has no legal claim to meal vouchers. It is only the employer's voluntary decision. It is an internal agreement between the employee and the employer, a kind of benefit to which the employee partially contributes.



Act No. 586/1992 Coll., On Income Taxes, as amended, Section 24, Para. (j) point 4 states: *“Expenditure (costs) for achieving, securing and maintaining income are also expenditure (costs) on working and social conditions, health care and increased rest periods of employees spent on running their own catering facilities, in addition to the value of food; or allowances for meals provided through other entities and provided up to 55 % of the price of one luncheon per shift, however, up to a maximum of 70 % of the luncheon allowance specified for employees in § 6 para. (a) ITA for a business trip of 5 to 12 hours. The value of meals provided as an in-kind payment by the employer to employees for consumption at the workplace or in the context of canteen provided through other entities is exempt from tax as employee income (Section 6 (9) (b) of the ITA).”*

The Income Tax Act follows several limitations:

- Tax-deductible luncheon voucher can be issued if the shift (duty period) lasts at least 3 hours (not on holidays and illnesses).
- If the duty period lasts (including a break) for more than 11 hours, a second luncheon voucher could be issued.
- If an employee is entitled to a luncheon allowance due to a business trip, he/she cannot receive a luncheon voucher. It is possible, but the employer is not entitled to tax deductibility.

## Results

The luncheon voucher is not a substitute for money. This implies several restrictions:

- Luncheon vouchers cannot be used when purchasing alcoholic beverages or cigarettes.
- Most stores do not accept more than 5 luncheon vouchers for a single purchase.
- The merchant is not obliged to return cash for luncheon vouchers. Many luncheon voucher operators return up to CZK 5–10, but it is their best will.

There are currently two variants of luncheon vouchers – printed paper luncheon vouchers and electronic luncheon vouchers. The acceptance of luncheon vouchers is somewhat disadvantageous to restaurant runners because of the commission fee that charges the voucher issuer. The amount of commission varies, it is approximately 5 %. In response, restaurant

runners calculate higher prices for food and drinks. The commission for luncheon vouchers is estimated at up to CZK 800 million per year.

Until recently, luncheon vouchers were only issued in paper form. Luncheon vouchers are issued in the form of a block from which individual pieces are plucked. Vouchers can have different denominations ranging from CZK 20 to 130. The client may change the value change at any time during the contractual relationship. Order processing, including distribution, is usually a matter of days. Most luncheon vouchers providers offer their customers the possibility to put directly on the luncheon voucher the logo, the name of the organization or even the name of the employee or other identification sign. The largest providers of paper luncheon vouchers on the Czech market include Sodexo luncheon vouchers (Gastro Pass) from Sodexo Pass CR, Ticket restaurant from Edenre CZ and Luncheon Chèque Déjeuner from Up Czech Republic. The premises where the luncheon vouchers can be redeemed are agreed in advance and their list is available on the website. It is also possible to search for specific contract facilities by city, region or type of services provided. Currently, luncheon vouchers can be used by more than 32,000 contractual partners.

With a massive increase in technology and digitization, paper luncheon vouchers are slowly substituted by electronic luncheon vouchers. An electronic luncheon voucher is a pre-charged card that can be recharged to a certain amount at any time, so it works the same as contactless payment cards. Instead of cash, only the value of the charged vouchers is deducted. There is no problem with paying a higher purchase. Most cards have a maximum daily limit, but cash cannot be withdrawn. the other rules remain unchanged. Electronic luncheon vouchers have been in use since 2015, the proportion of users is still lower in relation to printed luncheon vouchers, but various surveys show that most users would like to replace paper luncheon vouchers with electronic ones.

Electronic luncheon vouchers have a number of advantages over paper luncheon vouchers:

- The customer does not have to count down how many luncheon vouchers he/she will use at the checkout.
- The only limitation is the daily limit, which most companies have set to CZK 500, and the card may also require a PIN code.
- A significant benefit of electronic luncheon vouchers is that customers no longer have to divide their purchases at the checkout. The cashiers themselves recognize which items the luncheon

vouchers can be used for, and self-service cash registers can be used in supermarkets. For example, drugstores, cosmetics, prints or alcohol, and cigarettes cannot be paid with an electronic luncheon voucher.

- The key advantage for electronic luncheon vouchers is, above all, the administration of luncheon vouchers.

Electronic luncheon vouchers on the Czech market are provided by eight companies. Lidl luncheon vouchers have become a new and modern provider of luncheon vouchers, the aim of which is to create the widest possible acceptance network of restaurants that could accept Lidl luncheon vouchers. At present, the Lidl luncheon voucher is provided to its employees by more than 4,000 companies and can be used at more than 7,000 acceptance sites throughout the Czech Republic. The significant success of “Our luncheon vouchers” is mainly due to unrivaled conditions - zero commission fee for all employers and a minimum fee of 2.5 % for restaurants. Also, as of June 2019, customers can use paper and electronic vouchers from most providers in all Tesco stores.

In 2018, Mastercard conducted an independent survey focused on the frequency of use of luncheon vouchers with the following results:

- Most often, luncheon vouchers are being used for paying on average 2–3 times a week – 42 %,
- Once a week – 21 %,
- Every day of the week – 20 %,
- Less than once a week – 17 %.

Customers especially appreciate the comfortable, simple and hassle-free luncheon voucher payment. *Resource:*  
<https://www.mistoprodeje.cz/clanky/vyzkumy>; (cit.09/ 2019)

Tax-deductible is 70 % of the value of meals on business trips. From 1 January 2019, the Ministry of Labor and Social Affairs increased the value of meals on business trips to CZK 97 per day. This is decisive for the calculation of the tax-deductible amount of the allowance for dining services. The best value of the luncheon voucher for employees and employers thus increased to CZK 123. Compared to 2018, the value of the most advantageous luncheon voucher increased by CZK 5, in the last three years it is an increase of CZK 18.

**Table 1: An example of an employer's tax savings in meal vouchers**

<i>From the employer's point of view</i>	<i>Wage allowance</i>	<i>Provision of meal vouchers or TRC card</i>
Gross wage	21,421 CZK	20,000 CZK
Social and health insurance (33.8 %)	7,241 CZK	6,760 CZK
Employer's labor costs	28,662 CZK	26,760 CZK
Meal allowance per employee (21 working days)	0 CZK	1,420 CZK
Total cost per employee	28,662 CZK	28,180 CZK
Cost difference per month per employee		482 CZK
Cost difference per employee per year		5,784 CZK
Employer annual savings total (20 employees)		115,680 CZK

Source: <http://www.edenred.cz/ticket-restaurant/kampan>

## Discussion

The proposal of the Ministry of Finance of the Czech Republic can rightly be called a revolution in the area of luncheon vouchers. The ministry is working on a proposal to introduce a so-called Dining/luncheon flat-rate expenses. The employer transfer payment to his employee, which will still be exempt from taxes and levies, directly to his account. The aim is to simplify the luncheon voucher system. The intention is not to cancel the luncheon vouchers, only a simple and cheaper alternative will be made, thanks to which even very small companies will be able to afford luncheon vouchers. Whoever wants, can still stay in the current original regime. The Ministry states that there are approximately 4.3 million employees in the Czech Republic, of which approximately 1.8 million go to lunch in the canteens at work, and approximately 1.5 million employees receive luncheon vouchers from the employer. About 1 million employees do not have discounted meals or luncheon vouchers. And thanks to the possibility to receive a contribution to meals in cash, these people would also have the possibility of a more advantageous meal. Thanks to flat-rate electronic voucher system administration and luncheon vouchers fees will be reduced. Even restaurants and retailers would not have to pay high commissions.

Another advantage of flat-rates expenses is that they do not need to be checked. Obviously, the opponents of the luncheon voucher introduction include luncheon vouchers issuers who would lose their commissions by this step.

## Conclusion

Unsustainable development is evident in the area of luncheon vouchers, mainly related to the overall evolution and development of technology and digitalization.

For a long time, it was common to use luncheon vouchers only in printed form and no one paused over the administrative burden of using them. The number of electronic luncheon vouchers is constantly increasing and their use by employers and restaurants is increasing. In the horizons of several years, it is likely that printed luncheon vouchers will completely disappear. Luncheon flat-rate expenses an expected luncheon voucher revolution and, if approved, will become a common and widespread form of employee benefit very quickly.

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### **Contact information**

Ing. Blanka Zimáková  
Department of Hotel Management  
The Institute of Hospitality Management in Prague  
Svídnická 506  
181 00 Prague 8  
Czech Republic  
T: (+420) 283 101 176  
E: zimakova@vsh.cz

### **Description of the author**

Ing. Blanka Zimáková has been working at the Institute of Hospitality Management in Prague since 2003. She is an Assistant Professor at the Department of Hospitality Management, where she is also the General Secretary of the department. Author lectures and practices mainly Gastronomy services – service and Gastronomy operation management. In her teaching, research and publishing activities, she focuses primarily on gastronomy.

Ing. Karolina Macháčková  
Department of Economy and Economics  
The Institute of Hospitality Management in Prague  
Svídnická 506  
181 00 Prague 8  
Czech Republic  
T: (+420) 283 101 140  
E: machackova@vsh.cz

### **Description of the author**

Ing. Karolina Macháčková works at the Department of Economy and Economics and teaches Banking, Business Economics, Management, and Marketing. She studies Ph.D. at the Czech University of Life Sciences Prague.

# POSSIBILITIES OF WINES AND FISH DISHES PAIRING: PRELIMINARY STUDY

Emil Žižka, Jiří Zelený, Zbyněk Vinš

**Abstract:** *The paper aims to find out what is the role of wine as a product complementing fish and seafood dishes. Sensory evaluation and on-line questionnaire were employed. Sensory evaluation was conducted using JAR scale with nine panelists with previous experience in wines and fish dishes pairings. The on-line questionnaire was filled by 123 respondents working in gastronomy or with experience in wines and fish dishes pairing. It is concluded, that the red wines with fish dishes do not always mean an unbalanced result since deviations were acceptable. Although white wines matched better, and red wines were slightly dominant, combinations with red wines were better than poorly chosen combinations with whites. Despite the fact of the dominance of the red wines, they can be a good match for fatty fish dishes; thus, the use of JAR scale is not always convenient. People with previous experience of wines and fish dishes pairing see wine as an essential element enhancing the overall food experience and represent a high potential on the market of the fish restaurants. The restaurant operators, however, should focus on how to re-engage participants in wine and food pairing events, as previous participants do not show repeated interest. The restaurant concept of pairing wines and fish dishes has potential, as guests would like to learn in this area and perceive the concept as something new.*

**Key words:** *Czech Republic, Fish Restaurants, Gastronomical Concepts, Just-about-right, Questionnaire, Seafood, Sensory Evaluation*

**JEL Classification:** *L66, L83, Q13, Q22*

## Introduction

Only a small scientific record is devoted to the pairing of wines and dishes. Some of the studies showed the possibility of wine and food pairing using “body deviation-from-match” approach (Harrington & Hammond, 2015). In

particular, the more significant deviation was manifested when Riesling wine was paired with beef meat or Cabernet Sauvignon/Merlot wines with poultry. The role of acidity in wine and food pairing was supported (Koone, Harrington, Gozzi & McCarthy, 2014) as well as the role of aroma (Madrigal-Galan & Heymann, 2006). Besides, steaks from meats of exotic ungulate animals were matched to wines in previous studies (Zelený & Kubátová, 2016). The rest of the theoretical background contains mainly approaches of popular science websites and books supported with fragments of conducted scientific researches.

The wine and food pairing rules can be more general and traditional, in most of the cases following some complementary taste patterns such as fine meal with fine wine, strong and spicy meal with full-bodied strong wine, white meat with white wine, red meat with red wines or some rare examples of rosés, strongly aromatic or spicy meals with intense and aromatic wines, and desserts and sweet food with sweet wines. There are also possibilities of choosing opposite taste patterns in wine and food, for instance, sweet wine with salty food. The rule of similarity of character does not necessarily work with sour or acid food and wine with high acidity. It is because these two components of high acidity are supporting each other, which eventually will not reach harmony of taste. A dry wine with high acidity is perfectly matching with fatty meals because the acidity from wine is digesting the fat, and the food appears to be softer (Vinařský Fond, 2018; Harrington, 2008). Concrete tastes of wines and meals include saltiness, sweetness, bitterness, sourness, and umami. Tactile sensations include texture, temperature, body, and fattiness of the meal (MacNeil, 2015; Harrington, 2008).

More particular recommendations, often connected with the word “enogastronomy” (from Italian) could be used too. Successful pairing can be made when knowledge about all aspects of wine is obtained (Burešová, 2010). These combinations include champagne and caviar, Stilton cheese and Port wines, Fumé Blanc with fish, or lobster with Chardonnay from California. Particular combinations are often classified into one of the following categories (Harrington, 2008; Smithson, 2014; Bonné, 2017):

- No match – the mixture of the chosen wine and food is wrong and has a negative impact on the senses. Commonly, the chosen food has a high level of spicy, bitter, or if the food is highly salty.
- Refreshment – wine plays some support for a specific food. This wine should be approached as a refreshing element for the chosen food. Some aspects can match with the food, the rest of them do not match at all.



- Neutral – are average combinations with lack of individuality.
- Good match – correct cooperation of the elements such as saltiness, bitterness, or sweetness.
- Synergistic match – the harmony of all components and parts that works when mixed.

Concerning pairing of particular fish dishes, lean and flaky fishes such as sea bass, tilapia, black sea bass or pollock are believed to be well accompanied with wines Pinot Grigio, Sauvignon Blanc, Chablis or Friulano (Briscone & Parkhurst, 2018), medium-textured fishes such as cod, monkfish, halibut and red snapper are well paired with Vermentino, Pinot Gris, Sauvignon Blanc or dry Rieslings (Peterson, 1996), meaty fishes such as salmon, tuna fish, mackerel or swordfish could be paired with white Burgundy, Chardonnay or vintage Champagne (Green, 2007). Strongly flavored fishes such as anchovies, sardines or mackerel should be matched with Lambrusco, Cava, Champagne or Grenache Blanc (Briscone & Parkhurst, 2018), while the seafood should be paired with Chablis, Muscadet, Champagne, Cava or white Burgundy (Clique Hospitality, 2019).

When red wine and the fish dish should be paired, mostly, it is perceived as an unpleasant combination when the wine overwhelm the delicate taste of the fish (Berardelli, 2009). Exceptions are wines with low to medium body and soft tannins. Addition of acidity from lemon should be skipped as well when the food is prepared with the intention to match with red wine. Lean fishes should be paired with red wines mentioned above. Fatty fishes like salmon, sardines, or mackerel could be paired even with more structured wines like Rioja (Bernstein, 2018). Research conducted by Tamura et al. (2009) proved the role of iron contained in the red wines (approximately 0.3mg/100 ml for white wine and 0.5mg/100 ml for red wine) as the primary determinant of the seafood and wine match. The higher the content of the iron in the wine was, the less pleasant was the taste. It was approved by soaking of the scallops in wines causing more unpleasant aroma for scallops soaked in red wines.

Although it may seem that the fish only purpose is as a source of food and needed nutrition, for many nations it represents much deeper meanings such as a part of the culture or signature dish of the national cuisine. In Japan, the first food on the imagine ladder is sushi. In Mediterranean cuisine, it would be French traditional fish soup called Bouillabaisse, Portuguese sardines, or in Scandinavia typical dish gravlax, made out of raw salmon (Bittman, 1999). From the global point of view, the fish meat covers 17 % of protein

needs. All of the seafood and fish contain healthy fatty acids Omega-3; these acids are EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid) necessary for cardiovascular and neuro system. There have been as well positive impacts on the child's health when the mother during pregnancy consumed a sufficient amount of fish (FAO, 2016).

## **Materials and Methods**

The research aim was achieved by sensory tasting and an on-line questionnaire. For the sensory tasting, all of the wines included in the tasting were firstly consulted with Moravian winemaker and with F & B Manager of a restaurant in Prague. The list of fish dishes has been consulted with a professional chef from a fish restaurant and with a lector from the courses oriented on fish and seafood cuisine.

The evaluators for sensory tasting had to have previous experience in wine and food pairing. All of them were invented by e-mail or by phone. In total, nine evaluators (18 to 35 years old) participated and filled the evaluation sheet with instructions for the tasting including the degustation order of wines and dishes, proper way of tasting (mixed method was used). In particular, the "body deviation-from-match" method was used for evaluation according to Harrington & Hammond (2015) meaning 9-point evaluating scale was provided ranging from "-4" (for absolute dominance of the dish) to "+4" (for absolute dominance of the wine). Evaluators could write down some additional comments that are included in the results. The ČSN ISO 8589 (2008) standards for workplace layout were met. For each wine, a separate glass of the same type was provided. Serving temperatures were 5 °C for sparkling, 12 °C for whites and 16 °C for red wines. Tasting sample of 100 ml for each wine was provided.

The questionnaire contained seven questions and was filled in March and April 2018 by 123 respondents from the Czech Republic with wine and food pairing experience or professionals working in the hospitality sector. Questions were aimed to explore consumers' attitudes toward fish restaurants and wines and fish dishes pairing.

## Results and Discussion

Structure of the 12 tested combinations can be seen in Table 1. In Chart 1, each value of the marked pair represents the average value from the ranking of 9 evaluators. Standard deviations for evaluation of each pair are included. Following results represent comments of evaluators together with numerical results. In general, +2 or -2 values were not exceeded, so none of the pairs was unbalanced.

Gravlax paired with Cava caused slightly unpleasant aftertaste of the salmon. In particular, the sparkling made the fish taste minutely more dominant, but in general, the combination showed low deviation-from-match but interestingly with the highest standard deviation (SD = 1.16). Combination with Valentina showed more obvious disadvantages as dill was dominating because bubbles were highlighting the taste of it. This tendency was evident in relatively high negative value meaning high deviation-from-match.

Sauvignon Blanc – Shrimps made one of the best combinations with very low deviation-from-match. Spicy freshness and acidity of the wine did good harmony with the shrimp flesh, spiciness from the garlic and with the guacamole. More to this, this pair was one of 3 combinations with the lowest standard deviations (SD = 0.63). Pinot Gris – Shrimps did not achieve the same quality of the match.

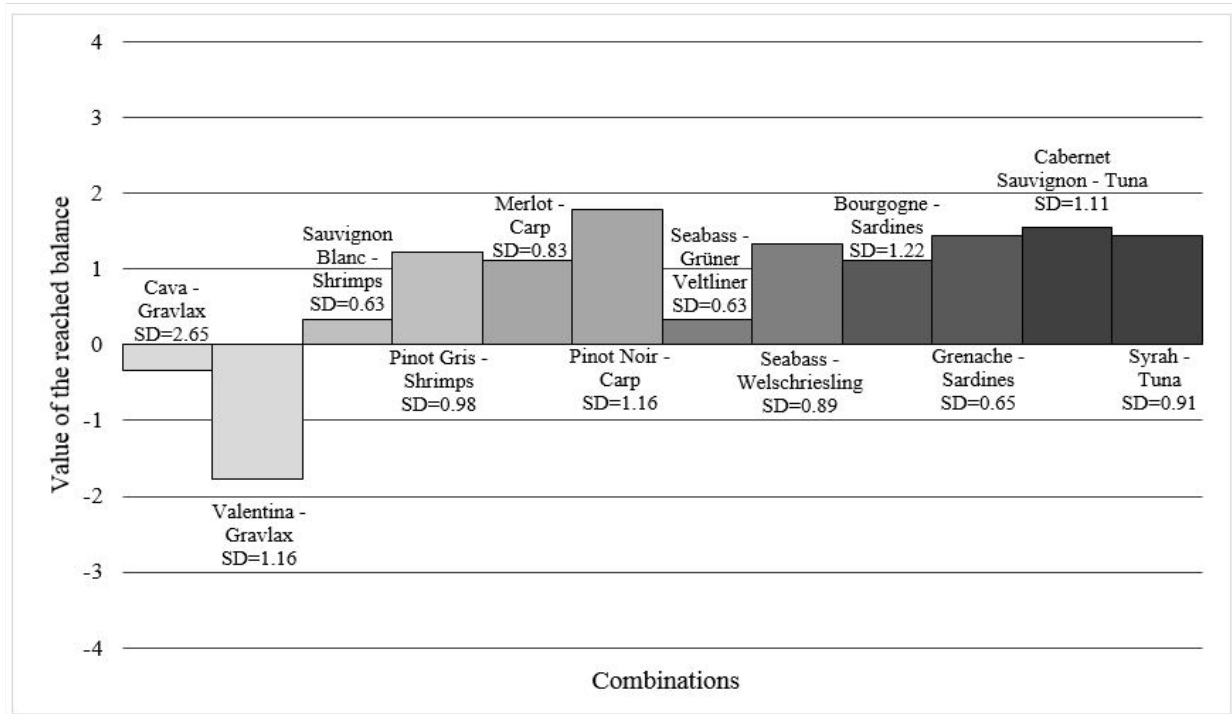
Following combinations demonstrate relatively high deviation-from-match. In all of the cases, wines dominated the pairs, i.e., pinot noir and merlot dominated over the carp and purée, causing loss of softness of the dish. Grenache and red Bourgogne over the sardines, nonetheless some of the comments appreciated the pair with red wines, especially the high alcohol of Grenache overshadowing the oily fish meat. It manifested one of the lowest standard deviations (SD = 0.65). Cabernet Sauvignon and Syrah showed the same domination of wines, even though participants thought red wines suit better than whites as it did not destroy the natural aroma of fish. One of the best combinations with the lowest standard deviation (SD = 0.63) was Grüner Veltliner – Seabass compared to Welschriesling – Seabass, where the fruity aroma of wine was covering the desired taste of the fish meat.

**Table 1: Wines and Dishes Paired for the Sensory Evaluation**

<i>Course</i>	<i>Name of the Dish</i>	<i>Ingredients</i>	<i>Wines for Pairing</i>
Cold starter	Gravlax, mustard-dill sauce	classical mustard, coarse grain mustard, Dijon mustard, fresh dill, honey, olive oil, pepper, raw salmon, salt, sugar	Cava Brut, Giró Ribot, Spain
			Valentina Dry, Zdravko Mastnak, Slovenia
Hot starter	Grilled shrimps, garlic, guacamole	fresh shrimps, garlic, salt, pepper, parsley, olive oil, avocado, tomatoes, onion, lemon juice	Sauvignon Blanc Gran Reserva, 2017, Bisquertt family, Chile
			Pinot Gris, Jožko Mavrič Goriška Brda, Slovenia
Main course I.	Carp on red wine, potato purée	bay leaf, butter, carp, cream, garlic, nutmeg, parsley, pepper, potatoes, red wine, salt	Merlot 2016, Baloun winery Moravia, Czechia
			Pinot Noir 2011, Jožko Mavrič Goriška Brda, Slovenia
Main course II.	Seabass, Beluga lentils, purée from Hokkaido pumpkin	Beluga lentils, carrot, garlic, kale, lemon, olive oil, onion, parmesan cheese, pepper, pumpkin, pumpkin oil, rosemary, sage, salt, seabass fish, sweet potato, thyme, vegetable broth	Grüner Veltliner 2018, Žarošice winery, Moravia, Czechia
			Welschriesling 2018, Žarošice winery, Moravia, Czechia
Main course III.	Sicilian sardines	bay leaves, breadcrumbs, extra virgin, olive oil, lemon juice, orange juice, parsley, pepper, pine nuts, raisins, salt, sardines, sugar, vinegar	Moillard Grand Vin de Bourgogne (red) 2013, Burgundy, France
			Grenache, 2004, Priorat, Spain
Main course IV.	Tuna steak, sweet potato fries	garlic powder garlic, olive oil, orange juice, oregano, paprika, parsley, pepper, salt, sea salt, soy sauce, sweet potato, tuna steak	Cabernet Sauvignon 2015, Bageri, Goriška Brda, Slovenia, 2015
			Syrah 2009, Jožko Mavrič, Goriška Brda, Slovenia, 2009

Source: Authors' elaboration

**Chart 1: Final Pairing Results**



Source: Authors' elaboration

Results of the on-line questionnaire can be seen in Table 2. More than half of respondents (59 %) visit restaurants to eat fish dishes once a month. If they choose to pair fish dishes with wines, very often (33 %) it is a menu with already created combinations, but most often (37 %) they like to choose their own combinations of wines and fish dishes. More than 70 % of respondents are satisfied with the quality of fish dishes in restaurants and evaluate it as good or very good. The vast majority of respondents (67 %) perceive wine as an element improving the overall impression of eating fish dishes. If they have ever attended an event for pairing wines and fish dishes, they were primarily satisfied (46 %), but show no further repeating interest in the future. The interest in visiting a restaurant offering pairing of wines and fish dishes was stated by 37 % of respondents, because they have inadequate knowledge in this area, and by 35 % of respondents because they perceive it as a new gastronomic concept. Television and the Internet are the most common (52 % respectively 23 %) sources for obtaining information on pairing wines and dishes.

**Table 2: Results from the Questionnaire**

<i>Frequency of visiting the restaurant in order to consume fish dishes</i>				
Once a week 8 %	Once a month 59 %*	Once a half-year 26 %	Never 7 %	
<i>Preference for the way the wine and fish dish pairings are offered</i>				
Already paired menu 33 %*	Own possibility to pair 37 %*	Sommelier's recommendation 23 %	Does not prefer wine & fish pairing 7 %	
<i>Satisfaction with the quality of the fish dishes in restaurant facilities</i>				
Excellent 10 %	Very good 31 %*	Good 42 %*	Fair 13 %	Poor 4 %
<i>Attitudes toward wine as a beverage improving the enjoyment from the fish dish consumption</i>				
Positive impact 67 %*	No or negative impact 23 %	Does not prefer wine & fish pairing 10 %		
<i>Satisfaction with the wine and fish dish pairing events in restaurants</i>				
Satisfied 23 %	Satisfied - but with no interest in future 46%*	Dissatisfied 15 %	Never participated 16 %	
<i>Possible interest in a restaurant offering the already paired fish dishes with wines</i>				
Interest - because has poor knowledge in pairing 37 %*	Yes - since has no experience with such a restaurant 35 %*	Yes - but with own selection of wines 21 %	No interest 7 %	

<i>Sources of new information about the wine and fish dishes pairings</i>			
Literature	TV	Internet	Tastings
15 %	52 %*	32 %*	1 %

Note: \*shows responses exceeding 30 %.

Source: Authors' elaboration

## Conclusion

The results point to the fact that the pairing of the red wines with fish dishes do not always mean an unbalanced outcome. Although some combinations were better or worse, deviations were by no means marginal and were acceptable. Although white wines (which also achieved the best three results) matched better, and red wines were slightly dominant when paired with fish dishes, combinations with red wines were often not worse than a poorly chosen combination of white wines and fish dishes. Thus, it always depends on the assessment of the individual combination. Another critical factor is that the “deviation-from-match” system does not necessarily reflect the quality of the overall combination. It is particularly true of the slightly dominant red wines in the case of fatty fish dishes. Here the dominance of red wines is acceptable as it helps to hide the excess fat of the food.

People with wine pairing experience with fish dishes represent a high potential on the market of the fish restaurants, as they often visit such restaurants. Restaurant operators should not only offer a prepared menu, but also the possibility of pairing by the consumers themselves. They see wine as an essential element enhancing the quality of overall culinary experience. They are relatively satisfied with the quality of fish dishes, as well as with events aimed at pairing wines and fish dishes. However, restaurant operators should focus on how to re-engage participants in such events, as participants do not show repeated interest. The restaurant concept of pairing wines and fish dishes has excellent potential, as guests would like to learn in this area and perceive the concept as something new.

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## **Contact information**

Bc. Emil Žižka

Student

The Institute of Hospitality Management in Prague

Svídnická 506

181 00 Prague 8

Czech Republic

Ing. Jiří Zelený

Department of Hotel Management

The Institute of Hospitality Management in Prague

Svídnická 506

181 00 Prague 8

Czech Republic

T: (+420) 283 101 130

E: zeleny@vsh.cz

Department of Humanities

Czech University of Life Sciences

Kamýcká 129

165 00 Praha 6

Czech Republic

## **Description of the author**

The author is a PhD candidate at the Czech University of Life Sciences in Prague. During his studies, he was awarded the Dean of the Faculty Prize for best publishing, and in Australia, he was awarded the Best Student Contribution Award at the IFPM International Conference. The author's lectures and research activities are focused on the connection between the agricultural economy and sensory analysis. In this area, he holds many certificates, including Advanced in Wines & Spirits Weinakademie Österreich. The author has worked for several years as PR & Event

Manager of the largest wine competition in the Czech Republic and has gained professional experience by conducting lectures, organizing tastings and shading in managerial positions in 7 European countries, Israel, Russia, and Australia.

Ing. Zbyněk Vinš  
Department of Hotel Management  
The Institute of Hospitality Management in Prague  
Svídnická 506  
181 00 Prague 8  
Czech Republic  
T: (+420) 283 101 130  
E: vins@vsh.cz

**Description of the author**

Zbyněk Vinš is an Assistant Professor at the Department of Hospitality Management at the IHM in Prague. In his teaching, research and publishing activities, he focuses primarily on gastronomy.

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