

PROPOSAL EVALUATION METHODOLOGY FOR COMPUTER APPLICATIONS IN TOURIST-HOTEL FACILITIES

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Abstract

The paper proposed a methodology for evaluating computer applications in the tourism and catering organizations, which is then applied to the evaluation of a specific tourist and spa facilities, "Atomic Spa - Gornja Trepcă" in western Serbia.

Keywords: computer application, tourism, evaluation.

INTRODUCTION

Globalization emerged as a result of social development and reduction of direct labor for the satisfaction of basic living needs of man is brought to accelerate the development of services, above all tourism and catering, as more and more people moving away from their primary place of residence.

Also, more and more people are using the latest technology, computing and the Internet, primarily for monitoring events, but also for planning their trips and visits in their free time to get better conditions for themselves in terms of opportunities that are available (time, money etc.) [1].

So tourist and catering organizations if want more guests, and certainly they want to, must use modern technology to show their capabilities and transfer their business in accordance with these new opportunities. Clearly there are some advantages that are automatically appearing for those who do their business in an modern way, because some things work faster, better and more efficiently with a computer than without it [2].

Note also that here in a natural way positioning and ranking of tourism and catering organization is being done because all these organizations have limited capacity so that in case of increased demand naturally increases the

price, and in cases of reduced demand, falling prices for their services [3].

THE PROPOSAL FORMULA FOR THE EVALUATION

For the evaluation of computer applications in the tourist-catering organizations we suggest the following formula:

$$O = k_1 \cdot f_1 + k_2 \cdot f_2 + \dots + k_n \cdot f_n$$

In which are:

f_i assessment of certain aspects of computer applications,

k_i difficulty coefficient of these aspects in computer applications.

At the same time understand the following:

$$0 \leq f_i \leq 1$$

where 0 stands for no application and 1 for enforcing the maximum use, also

$$k_i > 0 \text{ and } \sum_{i=1}^n k_i = 1.$$

The number and type of aspects of computer applications are in principle different

for different types of tourism and catering organizations, here we will specify some of them:

f_1 - Employment of specialists to work on computers and their maintenance,

f_2 - types of programs and computer systems and their adaptation for use in the enterprise,

f_3 - having internet connection and its quality,

f_4 - internet connection for guests of the hotel and its quality

f_5 - web presentation of the organization and its quality

f_6 - online reservation

f_7 - possibility of booking through a central reservation system

f_8 - database of users

f_9 - database of suppliers

f_{10} - Database on employees

f_{11} - Bookkeeping

f_{12} - Database of guests who appear more than once and their habits and needs as well as f_8 aspects sub-aspect etc..

Difficulties are in principle different, but the greatest one where for koeficients k_5 , k_8 and k_{12} .

Evaluation is:

Very bad if	$O < 0.25$
Bad if	$0.25 \leq O < 0.5$
Almost satisfactory if	$0.5 \leq O < 0.7$
Satisfactory if	$0.7 \leq O < 0.85$
Good if	$0.85 \leq O < 0.95$
Excellent if	$0.95 \leq O < 1$

EXAMPLE: “ATOMIC SPA GORNJA TREPČA”

First we will give part of which is available as part of the website of the spa [4], which will give us criteria for evaluating

Atomic Spa GORNJA TREPCA is, like every jewel of mother nature, gently placed in the narrow gorge of the river Banja, hidden in a beautiful thick forests between two mountains Vujan and Bukovik. This wonderful embrace of wood and water lies in the heart of Cacak valley placed in southwestern Serbian region called Sumadija.

From the heart of the Earth, emerging through magma rocks collecting geothermal energy, rises the water enriched with minerals and rare elements, miraculously balanced to help our health.

Spa is situated among three towns, Cacak, Gornji Milanovac and Mrcajevci. Due to its crossroads position, it is easy to reach.

Gornja Trepca is 18 km far from Cacak, 159 km far from Belgrade, 9 km away from Gornji Milanovac, lying 8,5 km from Ibars motorway, one of the main traffic streams in Serbia.

This geographical position of the spa brings mild continental climate to the area of Gornja Trepca. The mountains and the fresh air, are enrich this magnificent place with peace and quiet. Insignificant oscillation of the temperature during the year, creates abundant flora. Any exhausted organism of today's hectic life easily finds recovery and relaxation here. Surprisingly, the average temperature is 20 degrees and during the summer it hardly passes above 30 degrees centigrade.

THERMOMINERAL WATER

The temperature of the thermomineral water is between 27 °C - 31 °C and the stories about its miraculous effectiveness originate from the period of the ancient Rome.

Mineral waters of the spa Gornja Trepca are rich with minerals, mixed in ideal concentration. This, along with its physical and chemical characteristics, makes the usage of this unique water possible in therapy purposes. The analysis done in the last five decades period prove the stability of physical characteristics, chemical content and temperature, basic elements for the water healing power.

Thermomineral springs of the Trepca spa are among the few continuously professionally studied and best known in Serbia.

RHEUMATIC DISEASES

Chronic inflammatory rheumatism
Spondyloarthropathy
Rheumatoid arthritis
Degenerative rheumatism -Joint arthritis
Spondilosis and spondylarthrytis
Diskopathy
Extra-articular rheumatism
Myofibrillitis
Fibrositis, panniculitis, tendonitis, bursitis
and psychogenic rheumatism
Metabolic joint diseases -Gout

NEUROLOGICAL DISEASES

Multiple sclerosis
Condition after suffered myelitis and encephalomyelitis
Adhesive spinal arachnitis
Post traumatic myelopathy
Cerebellar paralyze, mono and polyneuritis
Neurosis, neurasthenia, dystonia and depressive conditions
Parkinson's disease
Condition after cerebral-vascular insult-hemiplegia, hemiparesis, paraparesis

DISEASES OF THE GASTROINTESTINAL TRACT

Chronic gastritis
Ulcer disease of stomach and duodenum
Colon irritable

DISEASES OF BLOOD VESSELS

Chronic diseases of arterial periphery blood circulation

Chronic vein origin edema
Lymph edema

The advantage of Atomic Spa Gornja Trepca lies in the fact that bathing in the hypo-thermal water is not contraindicated for the patients suffering from heart diseases. Numerous studies and research in the chemical contents of the water, are giving solid basis for conclusion that portfolio of indications which could be successfully treated in the Spa ought to be

updated and expanded by new groups of diseases.

THERAPIES

ELECTRO-THERAPY

In the modern, well-equipped application rooms, tastefully furnished spa is offering treatments with devices for: shortwave diathermy (SWD), universal diadynamic (UDD), therapy ultrasound (US), interference currents (IFS), electrophoresis of medicines (EM), galvanization, lamps with UR and UV rays, Bioptron lamp, magnet, laser and vacuum.

KINESOTHERAPY

A Kinesotherapy gym with devices and equipment for therapy gymnastics.

HIDROTHERAPY

Four thermomineral therapy pools, twenty seven hydromassage tubs, "pearl" tub and twenty one common tub for rest in thermomineral water.

Mineral water is the most important resource in medical rehabilitation and therapy. Specialists in neurology, rheumatology, physical and internal medicine and other well-trained medical staff offer a complete service in order to satisfy the patients needs. The supervision of expert doctors working in the spa, together with thermomineral effect, materializes the best results in health service.

Our proposal for evaluation of the aspect f_5 is:

$$f_5 = 0.5$$

What is the main objection and the grounds for giving such grade?

There are no statistical data shown on the effects of application of these therapies? It is clear that this place does not heal completely, but it helps those who use them to better live and they have the right to know what and how much effect they should expect from this place!

All grades with difficulties:

$f_1 = 1$	$k_1 = 0.09$
$f_2 = 1$	$k_2 = 0.07$
$f_3 = 0.6$	$k_3 = 0.08$
$f_4 = 0.4$	$k_4 = 0.09$
$f_5 = 0.5$	$k_5 = 2.2$
$f_6 = 0$	$k_6 = 0.06$
$f_7 = 0$	$k_7 = 0.08$
$f_8 = 1$	$k_8 = 0.12$
$f_9 = 1$	$k_9 = 0.04$
$f_{10} = 1$	$k_{10} = 0.02$
$f_{11} = 1$	$k_{11} = 0.03$
$f_{12} = 0$	$k_{12} = 0.1$

Sum of all grades:

$$O = 0.564$$

So we have almost satisfactory evaluation.

CONCLUSION

Based on the previous example can be concluded that this method may evaluate the application of computers and to see what is needed to do to make this application better. In this way the whole business will be better.

REFERENCE

- [1] Gubin S. 2010. Informatics literacy in hotel industry; Master thesis Universty Singidunum, Belgrade (Serbia).
- [2] Njeguš, A. 2007. Informacioni sistemi u upravljanju turističkom destinacijom; Project: *Edukacija zaposlenih u turizmu; Upravljanje turističkom destinacijom II*; Belgrade, 109
- [3] Pavlović, D; Spasić, V. 2008. Efekti primene savremene informacione tehnologije u poslovanju malih turističkih agencija; Magazine *Turizam i hotelijerstvo*; Universty Singidunum; Belgrade
- [4] <http://www.atomskabanja.com/english.html>