

THE RELATIONSHIP BETWEEN INTEGRATION OF TECHNOLOGY - INCREASE CUSTOMER SPENDING - CUSTOMER SATISFACTION: MONKEY MODEL

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Abstract: *The purpose of this paper is to determine a link between the integration of technology/technological solutions/applications in the hotel business and guest satisfaction on the one hand, and the integration of technology/technological solutions/applications in the hotel business and stimulation of guest consumption during their stay in the hotel on the other hand. The aim is to examine and identify key elements of the MONKEY model, which will accomplish the purpose of this paper. In this study the survey method was used. The research instrument was a structured questionnaire consisting of three parts: (1) integration of technology, (2) guest consumption and (3) guest satisfaction. The questionnaires were distributed to hotel managers and domestic and international hotel guests on the Opatija Riviera (Croatia). The results of empirical research and analysis form the basis for further modification of the MONKEY model which can directly be used for creating a policy of integrating technology in the hotel business and increasing guest consumption during their stay at the hotel as well as increasing their satisfaction during and after their stay at the hotel. The scientific contribution of the paper is reflected in the authors' presentation of their own MONKEY behavioral model for the analysis of technology integration/technological solutions/applications in the hotel business viewed through the prism of the semantic approach. In this paper the authors present their views and the results of their own empirical research. The results of this research can be useful for hotel managers in order to contribute to improving the quality of the hotel offer and thus respond to the modern demands of the tourism market.*

Keywords: *hotel, information technology, customer consumption, customer satisfaction, semantics, MONKEY model*

1. INTRODUCTION

The development of technology in many ways determines business concepts and business processes (both simple and complex) on all levels and in all departments of the hotel business as a business entity [1]. For a successful business (according to the principles of sustainable development) a new technology must be properly integrated into the hotel's operations. But regardless of the aspiration of hotels to achieve greater profit, the focus of hotel business must always remain on the customer - satisfied customer. Some questions remain: How can specific business processes be improved according to the level of technological development? How can guest consumption in certain hotel departments be stimulated? How can guest satisfaction with the integration of technological solutions be improved? How can technology contribute to guests spending more money during their stay in a hotel (and how to stimulate

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them to do so)? The responses to these questions offer solutions which can modify the way in which technology is integrated in hotel businesses while keeping in mind the global semantic paradigm of technological development.

Due to these questions, the purpose of this paper is to examine the connection between integration of IT solutions in the hotel business and guest satisfaction. Furthermore, the purpose is to investigate a link between integration of IT solutions in the hotel business and stimulation of guest consumption during their stay in the hotel. The aim is to examine and identify key points of the MONKEY model, which will be used to present the philosophy and factor logic of integrating ICT solutions towards increasing the hotel profit while also increasing guest and employee satisfaction at the same time [2].

The paper is divided into five sections. Following the introduction, the second part explains the importance of integration of technology in the hotel business. Then, the MONKEY model is conceptualized. The fourth section explains the research methodology and interpretation of the research results. The conclusion provides a synthesis of the entire paper.

2. INTEGRATION OF TECHNOLOGY AND HOTEL BUSINESS

Consumer satisfaction is a fundamental marketing concept [3], [4], [5], [6], [7]. It is considered to be one of the most important outcomes of all marketing activities in market-oriented firm. It is imperative for hotels to tailor hotel services to the changing needs of guests, with a view to increasing customer satisfaction and retention. In order to increase customer satisfaction using different IT solutions, hotel can elevate the competitive advantage. The hospitality industry has been transformed from a traditional hands-on, low-tech, locally based industry into a global industry that effectively utilizes technology to combine high-touch and high-tech - to the benefit of customers, employees, and firms [8]. Hotel guests and the tourism market are becoming more and more demanding each day. On the other hand, the competition is getting increasingly severe. When buying a product or hotel service guests want to get value for money. Recently, researchers have argued that there is a distinction between customer satisfaction as related to tangible products and as related to service experiences. This distinction is due to the inherent intangibility and perishes ability of services, as well as the inability to separate production and consumption [9]. Nowadays, more and more attention is being given to quality. Hotel competency in service quality has a significant impact on the level of guest satisfaction with service [10]. According to Total Quality Management (TQM), business quality is a precondition for the successful business of every hotel whose management always focuses on profit. Also, many researchers have focused on TQM as a means of achieving and then managing customer satisfaction [10]. Furthermore, TQM states that continuous monitoring of the development of technology and improving business activities of the hotel by integrating modern technological accomplishments and business concepts based on the use of technology is the reflection of a modern approach to accomplishing the plans and strategic goals of the hotel.

By using technology in promotional and other action-directed activities the aim is to:

- Show the guest that technology (technological solutions) can be used in an easy way and that because of this they will have a certain benefit,
- Use technology to objectively and truthfully show guests what the hotel offers,
- Encourage the guest to undertake certain actions,

- Convince the guest of the quality of the product and services, i.e. that “for each dollar paid they will receive the full value”,
- Present products and services in a way that will convince the guest that what is listed in a specific offer is precisely what they need and want at that moment,
- Create a positive “image” for the product and hotel services,
- Encourage the potential consumer of a certain service or product to take action and to make the decision to consume a certain product or service.

By using technology, the offer and promotion of specific products and services due to its content, graphical solutions and design creates a picture of the hotel, as well as an “image” which already exists or which it is aiming to create. Of course, it is crucial that this first impression/encounter with the technology that is used is positive, since at that point in time the guest either gains or loses trust, gains or loses desire and decides whether or not to use IT solutions [11]. In this context, IT solutions can be called self-service technology (SST) facilities. SST facilities are where consumers/guests deliver services themselves through the use of technology [12]. If their first impression is bad, it is highly likely that the guest will not be encouraged to take “action” and they will opt not to use IT solutions/SST to book or purchase what they are being offered and they will search for a better solution. However, positive evaluations of IT solution/SST may tie consumers into relationships with hotels [4].

Therefore, regardless whether profit is the main objective of hotel business, when considering integrating technology in order to improve certain business processes we need to keep in mind that:

- By using technology certain business processes in hotels can be performed better and faster,
- Hotel employees performing these processes are satisfied (and not frustrated),
- Guests are satisfied with the technology at their disposal,
- Technology integration pays off (analyses and measurements necessary),
- Guests are encouraged to take “action”.

While keeping all this in mind, the following question has to be asked: how does integrating certain ICT solutions in hotel business (emphasis on ICT solutions with direct or indirect contact/interaction with guests) make it possible to earn as much money as possible? That is to say, between many different business policies and paradigms in hotel business the answer to this question is very simple and is as follows. Namely, the integration of ICT-based solutions or business concepts (this paper places emphasis on in-house promotional activities) should directly contribute to: (1) bringing more guests to the hotel (direct influence on the average occupancy of the hotel) and/or (2) stimulating or increasing guest consumption during their stay in the hotel (ICT solutions should facilitate guest spending and that while the guests are spending their money they feel content, happy, fulfilled, etc.).

The answer is seemingly logical, simple and even easily implemented. However, bearing in mind the different kinds, specifics and purposes of hotels, their surroundings and guest profiles this entire issue gains additional parameters which call for a significantly broader research.

If the issue is investigated with regard to the first answer then the focus lies more with the global activities of the hotel and hotel sales channels that deal with market placement, SEO (Search Engine Optimization), syntactic and semantic analyses of websites, internet activities, actions on Google, social media and other channels, etc. [13]. The technologies that impact guest satisfaction may be used in advertising campaigns to attract new customers [14]. This paper focuses

on analyzing the question “How can ICT stimulate and increase guest consumption during their stay at the hotel, while ensuring that guests feel satisfied, happy, fulfilled while spending money?” Hotels often utilize technology as a value-added amenity to help promote differentiation and enhance guest satisfaction [14]. In the long term, profit is not the only measure of a successful business. In fact, if:

- A hotel is doing well in terms of profit,
- Every hotel employee is satisfied and performing to the maximum of their abilities,
- Guests are satisfied during their stay,
- Guests are satisfied even after they spend more money than planned at the hotel (which has to be influenced by the new ICT integration-based business philosophy) and
- After leaving the hotel the guests post good comments on online media (websites, booking.com, Expedia, etc.),

then hotel management can believe in the long-term survival of their hotel on the increasingly demanding market.

3. MONKEY MODEL

In the context of this paper and the analysis of the issue of accepting a business concept according to the principles of the semantic paradigm as a precondition for success, emphasis is placed on the time, type of action and the content of in-house promotional activities. In fact, content is what the supply (the hotel) offers, and the demand (the guest) wants. The question is – how can the supply always know what and when the demand wants and constantly adjust itself, e.g. how can specific types of offer constantly be adjusted and changed. The MONKEY model (MONKEY – Model of New KEY for earning money) got its name for several reasons. A monkey is a cheerful, dynamic animal always jumping around, playing, laughing a lot (happiness, enjoyment), it is agile, always looking for something and curious. It is the animal that resembles man the most. The last three letters in the word monkey represent the word KEY. The overall association with the word monkey indicates, in this context, satisfaction, joy, something dynamic that holds the key. Therefore, the MONKEY model introduces a dynamic model representing the complexity of relationships between hotel employees, ICT business solutions and hotel guests.

By integrating ICT solutions, the aim is to stimulate and increase guest consumption during their stay in the hotel by ensuring that while the guests spend their money they are satisfied, happy and fulfilled. Similar to a monkey jumping around on branches (being dynamic), the hotel offer should also be dynamic. The syntagmatic relationship lies in the fact that a certain ICT solution used to convey information to guests should convey a certain information to a precise group of guests in a precisely defined way, at a precise time of day (syntagm: the monkey pours honey which is sweet and sticky, i.e. you easily stick to it). The MONKEY model as a logical base and philosophy for the functioning of ICT solutions basically represents a model that constantly monitors the guest, analyzes their behavior (semantic analysis), provides them with information (pours honey before them), stimulates consumption and thus makes money. The Figure 1 displays how the MONKEY model functions.

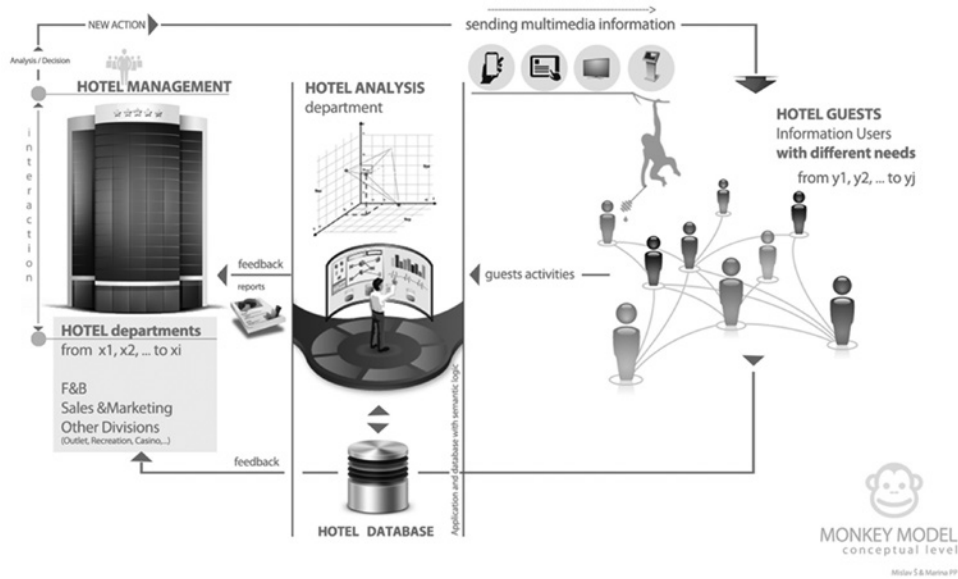


Figure 1: MONKEY model. Source: Authors

$$S_{xy} = \sum_{X=1}^i x + \sum_{y=1}^j y \quad (1)$$

$\sum_{X=1}^i x$ - total supply/promotional activities by all hotel departments

$\sum_{y=1}^j y$ - guest needs and wishes based on data from the data base (loyalty program) + searching services analysis + consuming the services (semantic analysis)

S_{xy} - promotional activities of the hotel

Bearing in mind the differences between individual hotels, they can also have different structures for departments. Departments with the dominant possibility for stimulating guest consumption have a direct link and access to the application in order to send information to guests. Considering the data entered for guest characteristics, the semantic analysis monitors guest activities during their stay in the hotel. Following the semantic analysis and the conclusions arising from it guests receive only the information that will be most interesting for them [1].

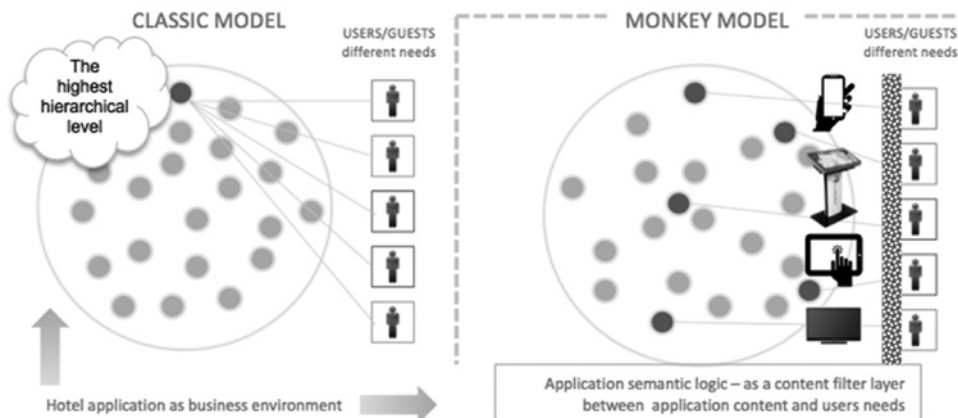


Figure 2: Conceptual comparison of distributing information to guests: classic model (static model) vs MONKEY model (dynamic model). Source: Authors

The Figure 2 shows the conceptual comparison between the classic model and the MONKEY model of distributing information to potential consumers. Hotel departments use their “campaigns” (which aim to stimulate the sales of their products or services) to offer different types of information to their consumers. Potential consumers are different and do not want to consume the same products or services at the same moment. Therefore, a semantic analysis needs to be conducted which will, based on previously gathered guest data and while monitoring their current activities, make it possible to satisfy their needs in real time. These are the fundamental advantages and crucial positive moments emphasized by the MONKEY model. What does this mean in actual business?

For the purposes of monitoring the usage of the application for in-house multimedia informing of hotel guests regarding the regular and special offer of the hotel, the authors have been working on the development of a multidimensional model which would make it more efficient and easier to understand, define, monitor and interpret individual hotel promotional activities in a multidimensional space, while at the same time measuring them by weighting individual elements within the model [1].

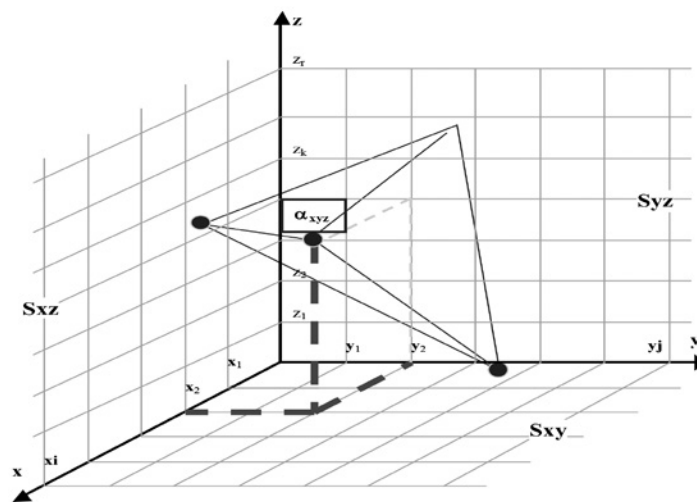


Figure 3: A depiction of the element analysis model of the hotel application in a multidimensional system. Source: Authors

Where:

- x – individual elements/promotional action of the hotel (hotel department)
- y – information from guests search database (wishes, needs, suggestions, questions)
- z – weights of some promotional actions/hotel offers created on the basis of x and y analysis
- α_{xyz} – the weighted value of the promotional action created on the basis of x, y, z
- Sxy – xy plane: a depiction of the promotional actions of the hotel and the needs/wishes of guests in the real system
- Sxz – xz plane: a depiction of the value/weight of the promotional actions of the hotel’s real system
- Syz – yz plane: a depiction of the value/weight of wishes and needs of guests in the real system

Within the depicted multidimensional model, organized data sets for different quantitative qualitative (semantic) analyses can be monitored in the individual columns, lines and planes. The set of all characteristics of hotel promotional activities for all monitored offers (data – information, promotional activities, devices, functions, etc.) and values is defined by points α_{xyz} , of the xyz-prism and the expression:

$$S = \{ \alpha_{xyz} \} \begin{matrix} x=1,2,3,\dots,i \\ y=1,2,3,\dots,j \\ z=1,2,3,\dots,r \end{matrix}$$

This kind of approach makes it possible to describe and analyze all existing uses and measurements of the hotel application for placing the hotel offer with the purpose of stimulating the hotel's in-house guest consumption during their stay in the hotel.

4. EMPIRICAL RESEARCH

In this study the survey method was used. The research instrument was a structured questionnaire consisting of three parts. The first set of questions was related to the integration of technology in the hotel business. Another set of questions referred to the collection of data of guest consumption. The last part of the questionnaire contained questions about guest satisfaction. Questionnaires were distributed to hotel managers and to domestic and international hotel guests in the one of the best 5-star hotels on the Opatija Riviera (Croatia). The research was conducted in March, 2016.

The following table presents several important pieces of information (facts) which are relevant for reaching opinions and conclusions following the empirical research.

Number of rooms (nor)	200
Average occupancy for March 2016 (ao)	73.63%
Number of sold rooms in March 2016 (nsr)	4565
Occupancy factor (of)	1.7
Total number of guests in the hotel in March 2016 (tng)	7760.5 (4565x1.7)
Average number of guests per day in March 2016 (ang)	250.34 (7760.5/31)
Net non-accommodation consumption per guest per day (nnacg)	11.5\$

Table 1: Data obtained from a 5-star hotel on the Opatija Riviera
Source: Data received from hotel management

According to internal data the average net non-accommodation consumption per day per guest amounts to approximately 11.5 \$.

This means that in March 2016 the hotel had a daily net profit of

$$(\text{ang}) 250.34 \times (\text{nnacg}) 11.5 = 2878.91 \$$$

from non-accommodation consumption, which means that in March the hotel had a total non-accommodation net profit of

$$2878.91 \times 31 \text{ day} = 89\,246.21 \$$$

Bearing in mind the average net non-accommodation consumption per guest per day (the hotel's net profit per guest from non-accommodation consumption), one can easily compare the cost effectiveness of investing in the development of an application to the cost of developing and maintaining the application. However, what is certain is that such an application would have a positive impact on guest satisfaction while simultaneously increasing the daily net consumption of guests in the hotel.

Furthermore, the following tables present the data obtained from the empirical research which was conducted via self-administered questionnaires on the Opatija Riviera. The survey included managers from 30 hotels and the research was conducted on the guests of one of the finest 5-star hotels on the Opatija Riviera (Croatia).

Table 2 displays the results of hotel managers' opinions about integration of technology in the hotel business.

Item	%			
	YES	NO	PARTIALLY TRUE	DONT KNOW
The development of technology essentially determines the changes in the hotel business	100%	0%		
Development of IT solutions for use in the hotel business is initiated by the IT industry sector or tourism sector	IT INDUSTRY SECTOR 53.6%	TOURISM SECTOR 46.4%		
In view of the answer to the previous question, please answer whether you think it is...	GOOD 69.6%	BAD 30.4%		
Because of technology integration business processes are always better and faster performed:	YES 65%	NO 0%	PARTIALLY TRUE 35%	
The integration of technology certainly affects the profit increase	YES 39%	NO 3%	PARTIALLY TRUE 52%	DONT KNOW 6%
Does your company measure the profitability of investments in technology?	YES 63.8%	NO 11.6%		DONT KNOW 24.6%
Are you satisfied with the software and hardware that you use in the business of informing visitors and stimulating their spending?	YES 30%	NO 5.8%	PARTIALLY TRUE 64.2%	
Have you ever had the opportunity to participate in projects of development of IT solutions for a particular part of the hotel business?	YES 14.5%	NO 85.5%		
Are software solutions intended for guests customized according to the guests' profile (age, country of arrival habits, Profile, hotel, etc.)?	YES 62.3%	NO 37.7%		
Do you analyze software use - what percentage of guests use certain software, the time of day it is used, if and when specific products or services are reserved or purchased via applications, etc.)	YES 68.1%	NO 31.9%		

Table 2: Integration of technology (hotel managers' opinions)

Source: Authors

When we observe and analyze the opinions from middle and top management gained by the empirical research, we can conclude that they absolutely agree that IT significantly determines hotel business (100%). However, when analyzing their opinions towards initiating changes in hotel business based on technological development, 53.6% of managers feel that the IT sector initiates changes, while 46.4% think that changes are initiated by the tourism industry. At the same time, 69.6% of managers think that this is good and 30.4% think that this is bad. These data indicate that further research is necessary and that it should pay particular attention on a scientific and professional level to the issues of initiating and implementing technologies in hotel business.

In fact, experts in hotel business should be the ones to initiate technological developments that should be applied in the hotel industry to a greater extent, based on their business experience. Furthermore, upon analyzing the remaining data we can conclude that almost 2/3 of managers (65%) feel that IT solutions help perform certain tasks better and faster. At the same time 39% think that integrating technology directly affects an increase in profit, while 52% state that this is only partly true. Based on the analysis of the remaining questions it can be observed that the opinions vary. Such divided opinions indicate that there is great need for conducting further scientific research in this direction.

Table 3 shows the results of guests' opinions which refers to the integration of technology and guest consumption.

Item	%	
Are guests informed of hotel offer (actions, special offers, etc.) via ICT solutions)?	YES 87%	NO 13%
If your previous answer is YES, do you think the information for each offer is placed at the right time?	YES 87%	NO 13%
Does a specific application (via tablet, hotel screen, room TV, smartphone, web site, social network, etc.) offer guests the option of keeping reservations or purchasing certain products with certain benefits (e.g. discount - booking massages)?	YES 81.2%	NO 18.8%
Does the use of software cause the desire to consume a particular service or product?	YES 87%	NO 13%
Have you booked or purchased a specific hotel product or service using technology (via tablet, hotel screens, room TV, smartphone, web site, social network, etc.)?	YES 55%	NO 45%

Table 3: Integration of technology and guest consumption (guests' opinions)

Source: Authors

When analyzing the second data set gained from the research, which refers to the integration of technology and guest consumption, it can be observed that 87% of guests think that they were satisfied with the way they were constantly "digitally" informed about the hotel's standard and special offers (via smartphone, room TV, service desk, tablet, etc.). At the same time, they feel that the hotel management took into account the timing of when to place promotional messages. The majority of guests (81.2%) are aware of the fact that the possibility to reserve and purchase certain products or services "digitally" is at their disposal. It can be concluded that promotional activities are relatively well thought out since 87% of the guests stated that the "digitally received information" enticed in them a desire to consume. It was surprisingly good to find out that 55% of guests bought and consumed certain products or services based on digitally received information from the hotel.

The following table shows the results of guests' opinions which refers to the integration of technology and guest satisfaction.

Item	%		
	YES	NO	PARTIALLY TRUE
I am pleased with the way guests are constantly informed via technology about the products and services provided by the hotel (via tablets, hotel screens, room TV, smartphones, web sites, social networks, etc.)	31.9%	5.8%	62.3%
Are you satisfied with the way in which you can book or buy certain products or services offered by the hotel through the use of ICT?	50.7%	4.3%	45%
Do you think that ICT solutions for informing guests about the in-house hotel offer should be better?	100%	0%	
Do you think that you would have consumed more products and services within the hotel if you had been better informed about them?	89.9%	10.1%	

Table 4: Integration of technology and guest satisfaction (guests' opinions)

Source: Authors

When analyzing data referring to the integration of technology and guest satisfaction, we can see at first glance that guests think that there is a lot of room for improving the guest information system. In fact, 62.3% of guests are partially satisfied with the way they were informed by the hotel. This data also indicates the need to conduct further research in order to gain a fuller insight into the issue and in order to investigate it in a systematic way. Absolutely all guests (100%) feel that ICT solutions for informing guests should be better, of which 89.9% think that they would then consume more products and services.

5. CONCLUSION

The results of the research clearly show that there is a lot of room for improving the hotel in-house system for informing guests by using IT technologies. The authors are aware of the limitations of the research in terms of the sample size since only managers from one region were included in the research. Furthermore, this research only surveyed and examined the guests of one hotel, one of the best hotels in the region, which can result in a distorted insight of the issue. However, this data also provides us with relatively clear information which indicates the need for further scientific research in this area. By taking into account the data regarding the total non-accommodation individual consumption and the total daily guest consumption in hotels, and by correlating this with data obtained from the research it is apparent that there is ample space for various research and simulations that could monitor, direct and stimulate non-accommodation guest consumption in hotels in a more systematic way.

If hotel ICT solutions for the placement of timely multimedia hotel guest information were developed with greater quality (based on a better and more intense cooperation between the IT industrial sector, hotel managers and practitioners, as well as scientists in the field of tourism) and then used better and constantly analyzed based on semantic principles, then the net non-accommodation guest consumption per day would definitely significantly increase. This paper presents the conceptual framework of the MONKEY model. Based on this conceptual model the authors are already

working on the preparations for further extensive research both within Croatia and abroad. For the purpose of further, more complex, empirical research the authors are also simultaneously working on the development of a proposal for an application based on the MONKEY model and on the development of a multidimensional model/matrix that would measure the profitability and quality of application usage. This issue is certainly wide and demanding and due to the increasingly rapid development of IT and communication technology the tourism sector will also have to constantly invest significant effort in order to adapt to these changes, so that new technologies can be correctly implemented and that they can, in the end, positively influence the hotel's business result.

REFERENCES

- [1] Šimunić, M., Pilepić, Lj., Šimunić, M. (2013) *Tourism and e-business: The semantic paradigm as a precondition for success*, Informatologia, Croatian Communication Association, Vol. 46, No. 1, March 2013, pp. 1-7.
- [2] Šimunić, M., Hutinski, Ž., Čubrilo, M. (2005.) *WEB log Explorer Control of Multidimensional Dynamics of WEB pages*, Journal of information and organizational sciences, Vol. 29, No. 2, pp. 39-51.
- [3] Fournier, S., Mick, D. G. (1999) *Rediscovering Satisfaction*, Journal of Marketing, Vol. 63, No. 4, pp. 5-23.
- [4] Beatson, A., Coote, L. V., Rudd, J. M. (2006) *Determining Consumer Satisfaction and Commitment Through Self-Service Technology and Personal Service Usage*, Journal of Marketing Management, Vol. 22, No. 7-8, pp. 853-882.
- [5] Kandampully, J., Suhartanto, D. (2000) *Customer loyalty in the hotel industry: the role of customer satisfaction and image*, International Journal of Contemporary Hospitality Management, Vol. 12, No 6, pp. 346-351.
- [6] Su, A. Y. L. (2004) *Customer satisfaction measurement practice in Taiwan hotels*, Hospitality Management, Vol. 23, pp. 397- 408.
- [7] Han, H., Kim, W., Hyun, S. S. (2011) *Switching intention model development: Role of service performances, customer satisfaction, and switching barriers in the hotel industry*, International journal of Hospitality Management, Vol. 30, pp. 619-629.
- [8] Lee, S. C., Barker, S., Kandampully, J. (2003) *Technology, service quality and customer loyalty in hotels: Australian managerial perspectives*, Managing Service Quality, Vol. 13, No. 5, pp.423-432.
- [9] Bansal, S. P., Singh, R., Gangotia A. (2014) *Measuring the Impact of Sales Promotion; Service Quality and Customer Experience: A Case of e-Ticketing*, Transnational Corporations Review, Vol. 6, No. 4, pp.419-428.
- [10] Chartrunguang, B. O. et al. (2006) *Customer satisfaction, Training and TQM: A Comparative Study of Western and Thai Hotels*, Journal of Human Resources in Hospitality and Tourism, Vol. 5, No. 1, pp. 51-75.
- [11] Pilepić, Lj., Šimunić, M., Car, T. (2015) *Online hotel's sales strategies with emphases on web booking*, Journal of Technology Research, Vol. 6, pp. 1-12.
- [12] Neuhofer, B., Buhalis, D., Ladkin, A. (2015) *Technology as a Catalyst of Change: Enablers and Barriers of the Tourist Experience and Their Consequences*, In: Information and Communication Technologies in Tourism 2015. Switzerland: Springer, pp. 789-802.
- [13] Berners-Lee, T., Hendler, J., Lassila, O. (2001) *The Semantic Web*, Scientific American, Vol. 284, No. 5, pp. 34-43.
- [14] Cobanoglu, C. et al. (2011) *The Impact of Technology Amenities on Hotel Guest Overall Satisfaction*, Journal of Quality Assurance in Hospitality & Tourism, Vol.12, pp. 272-288.

