THE IMPACT OF ICT ON HOTEL OPERATIONS: CASE OF HOTELS IN BOSNIA AND HERZEGOVINA

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Abstract: *Technological development and ICT have been recognized as one of the main factors of changes in business and enterprise management. The impact of ICT in tourism has been recognised as one of the main drivers changes in the past several years. This chapters seeks to provide insight into influence of ICT on tourism and impact of ICT utilization on operations in hotels. The chapter is based on research which has been conducted among hotels and hotel managers in Bosnia and Herzegovina aiming to determine the level of ICT utilization and its impact on hotel operations and performance. The results indicate that ICT has contributed to changes in behaviour of guests as well as operations in hotels and their business performance.*

Keywords: *tourism, hotels, ICT, organizational changes, business operations.*

1. CONTEMPORARY TRENDS IN TOURISM AND HOSPITALITY

The main reason for changes is turbulent, complex and competitive surroundings of the organization. Changes in the environment have an impact to a certain extent on the processes and activities in the organization. Different segments of the organization can be included by changes: strategy, objectives, mission, culture, human resources, technology, organizational design, etc. Organizational changes are of great significance for the organization. Organizations must change and adapt to their own environment in order to survive and thrive, especially regarding the long term. The complexity, unpredictability and instability of changes in environment have overtaken traditional approaches and concepts of work within organizations. In today's world, organizations are constantly seeking for new ways to deliver the value of its interest-influential groups, to adapt to changes in their competitive, social and technological environment and to achieve and maintain leadership in their domains. Changing of business environment, entering of new and more educated employees at the marketplace, rapid advancement in the field of technology, especially information and communication technology, impose a need for technological organizational changes. It follows that organizations of all companies must always change, adapt and innovate.

An issue arises about the impact of technological (organizational) changes on the business of hospitality companies. The development of technology, other business parties, as well as tourists have better access to information but they also are becoming more demanding. Due to the increasing accessibility, tourists are starting to use the internet more and more when choosing and booking accommodation. It is possible to select, book and pay without the physical presence of the customer or tourists in the hotel. Innovations in the hospitality industry are continuous due to the continuous introduction of new technologies, new business models and new communication approaches.

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Even though it is known that ICT can improve business, there are authors who point out that there is no direct positive link between implementation of ICT and competitiveness and there is no real connection between ICT and productivity. Never the less according to Armendia Muneta & Ollo Lopez (2013) ICT offers new opportunities for tourism business: gaining competitive advantage, maintaining market share, improving productivity, business development, management innovation. ICT is considered to be a strategic tool for enhancement of benefits in the tourism industry.

In other words, it is evident that the operations of the hospitality companies in tourism are almost impossible to perform without the acceptance and implementation and use of modern technology and organizational change.

It was not until the mid-twentieth century that tourism underwent significant changes and ceased to be a privilege for the elite classes and became a mass phenomenon created for all classes of society. Trends such as paid annual leave, work on the development of roads and regional roads, and globalization of markets resulted in the fact that tourism became a mass phenomenon. According to the latest research, there is a growing division within the tourism markets. Besides traditional tourists there are new tourists whose primary goal of the trip is not a vacation but an opportunity to learn new things. The appearance of a new kind of tourists reduces the growth of traffic directed towards coastal destinations, and a growing percentage of the world tourist traffic is taking selective forms of tourism.

There are numerous researches on the subject of tourism and trends in business tourism. Contemporary trends are different, so it varies from new consumer trends, political changes, new technology, market fragmentation, globalization, environmental concerns.

Due to all the unpredictable external influences and turbulent environment, it is very difficult to form a pattern that tourism companies should behave by. According to numerous studies, in order to achieve success at the global market, services that have been offered has to have universal appeal, and product development must emphasize adaptability. In order to meet the global criteria, it is very important that the services offered by tourism enterprise play a role of universality, that is, regardless of geographical, racial, religious, cultural, political and many other affiliations, can be consumed in the same way. New trends affect buyers, i.e. tourists go to those who provide them comfort, they save time and reduce stress. One of the criteria that buyers impose in tourism is certainly safety. Nowadays, there is a growing presence of mobile applications, virtual payments, wireless networks, hackers, customers are wanting that tourism companies provide them with a dose of security regarding their money and information.

Home proximity syndrome discourages many from time-consuming travel. In the centre of the attention are coming extended weekends. The main reason is the insecurity of workplace. Increases the desire to care about yourself. It primarily refers to the tourists less than 50 years of age. Segment of population above 50 years of age will be looking for new destinations, does something new, generally want to experience something new (Vuković, 2006).

Modern tourist market has undergone major qualitative and quantitative changes. From the beginning of the tourism development where tourism is seen as a privilege for the upper classes of society, through travel only for relaxation to travel that involves learning about new cultures and customs. The tourist market is nowadays brought to a very unstable category, whose changes

are very difficult to predict because of contemporary trends that are constantly changing and have a strong impact on demand. Modern forms of tourism are forms of tourism transport of small groups, aimed at meeting the cultural and natural characteristics of the destination, in accordance with the principles of sustainable tourism development.

According to the research of the contemporary trends in tourism, one in particular stands out and those are information systems in tourism. Information systems in tourism facilitate a traditional way of business operations of tourism companies. Systems facilitated business, supply and demand at the tourism market. Customers are provided an overview of all the information about the destination before booking. Tourism companies have enabled progress and ability to follow all global trends that tourists themselves demand. The best promoter of good business of tourism company is still satisfied tourists. Therefore, according to Stojanović (2014) wishes and needs of tourists and the information placed on the tourist market must be taken into account, because once lost confidence is difficult to regain.

Today, tourism is one of the most important economic activities in the world that carries numerous positive, but also negative consequences for the environment and the local community. Application of sustainable development idea in the economy means doing business in a socially responsible way. Hotel companies that operate in a socially responsible manner are in harmony with the environment, rationally use natural resources and generate less waste, respect and protect the cultural landmarks of the local community in which they operate and care for the well-being of the entire community and their employees (Golja, 2009).

Quality, innovation, creativity, brand, hospitality company can be profiled at the tourism market. Tourists are becoming more demanding, they want more, and they become more sensitive regarding the business of the hospitality company and the products of its activity. Doing business in a socially responsible way is becoming an important element of any hospitality company that can keep its position at the turbulent tourism market. An enterprise development strategy that does not respect the basic principles of sustainable development leads the company in a bad direction from the beginning. It is necessary to implement all the determinants of sustainable development in the business strategy of the company and with their emphasis and constant adaptation and innovation, it is possible only to survive among the competitive hospitality companies at the market. A hospitality company can stand out and retain the loyalty of its guest and, of course, prove its economic viability by constantly improving and adapting (Golja, 2009).

Development policy of environmental protection, strengthening environmental awareness and changes in the market have influenced the changes in behaviour and business operations of hotel companies in relation to the environment; and then there's the introduction of the environmental label quality at the hotel offer and the changes in morality the hotel managers and employees whose environmental awareness is growing (Pavia, 2006).

In adjusting to the market requirements, that is, the needs, desires, motives and expectations of their guests, B&H hotels should implement the model that will lead their business to achieve the principles of excellence and leadership market position. The problems in our country relate to the lack of knowledge, ability, awareness, desire, and intention on a new approach to the dimensions of business excellence. There are no strategic initiatives in companies about the need to introduce organizational excellence (Žilić, 2006).

The concept of corporate social responsibility started to be applied since the 1950s, but it is only recently that this concept has been linked to tourism in terms of sustainability. Corporate social responsibilities are all activities of a particular company that contribute to the well-being of the community and are above the interests of the company, shareholders and legal requirements. It is accepted that the application of conceptions of sustainable development in business practice actually operates starting from the environmental and socio-cultural dimensions of sustainability, with the achievement of economic growth because production can and should grow, but don't jeopardise the man health, plant and animal species, natural flows (Črnjar, 1997).

Having all this in mind we conducted a research in Bosnia and Herzegovina (B&H) aiming to determine the level of ICT utilization in B&H hotels and its impact on their operations and performances. This paper is based on the results of this study.

2. ORGANIZATIONAL CHANGES IN TOURISM

Nowadays, globalization, advances in technology and the IT sector, and humanity's ecological awareness and the importance of protecting the environment are at a high level, and they are in constant turmoil and changes; in order to survive at the market, businesses must constantly invest in their development, act quickly, and adapt to all the changes that occur daily in both the indoor and outdoor environment. Every company is striving to meet better requirements of the market, and turns to the modern management and organizational changes that are imposed on them.

As a direct factor in changing trends in contemporary business organizations is certainly the external environment of the company. The external environment represents everything outside the organization itself.

Robbins & Judge (2009) state that the environment is composed of institutions or forces that operate on the performance of the organization, and over which the organization has very little control. It usually involves business partners, customers, suppliers, government institutions, banking sector, etc.

In the business world, it is well known that businesses need to continuously invest in their development and growth, and adapt and make changes according to the requirements of both the external and internal environments of the organization. In order for organizations to adapt in the best possible way without negative consequences, it is crucial that they understand the processes and the type of change that is being imposed on them. They need to know their internal business processes well enough to be able to understand the external environment, because both environments, both internal and external, have a major impact on the outcome of change.

Increasing demands of the environment and the increasing complexity of changes, it has become very difficult to plan which approach for the change to choose and not make a mistake. For this reason, a large number of supporters of the new approach to changes have emerged, referred to as continuous improvement or *kaizen*. The word kaizen comes from two Japanese words, "kai" which means change and the word "zen" which means to see, learn or gain wisdom (Đokić-Pešič, Đokić, 2010).

Organizational change and its implementation is very sensitive and not so easily feasible procedure. For organizational change alone, a series of checks and tests must be carried out in

order for the company or organization to first ascertain which organizational changes need to be made and how to make them successful. According to numerous researches, implementing of organizational changes can run into various obstacles, starting with the working staff and their resistance, over the risk of the inability of proper implementation of change, potential loss, etc. According to Benazić (2014) Organizations are at risk of losing the creative potential and energy needed to continue working effectively, while employees respond to the possible shocks and stresses the changes that follow. Namely, due to insecurity among employees' organizational inertia can occur as well as increased absence or fluctuations and reduced cooperative and slowing of changes.

Implementation of organizational changes at the very beginning requires a change in behaviour and habits of the working staff in the organization. Many researches speak about the importance of the attitude that the behaviour of the highest level of management is quite important for the other employees to properly accept and experience the change.

Change should be understood as a complete set of activities that will enable the organization to move from its present, current state to a new, improved state, that is, a position that will enable it to fulfil its goals and in new, future, changed environmental conditions. The organization can function successfully only through interaction with the environment that organisation is part of. Consequently, the structure and functioning of the organisation must reflect the nature of the environment in which the organization operates. This is not just about the external environment of the organization. Namely, it is necessary to establish a balance between the pressures that occur in the external environment of the organization and those within the organization itself (Aleksić, 2009).

Organizational change and management would be irrelevant if the environment in which the organization operates were stable. In this case, the organization would seek to maintain once achieved compliance through continuous small adjustments that would lead to continuous improvement in performance. However, the environment in which today's organizations operate is not only stable but extremely dynamic and sometimes even turbulent. In such an environment, the only way to survive organizationally is to change. Because organizations must respond to changes if they are to survive and prosper, change becomes inevitable and the key to success lies in adaptability. Belak & Ušljebrka (2014) conclude that organizational change and management represent one of the basic prerequisites for the survival and prosperity of the company.

Today's organizations are facing numerous challenges arising from the development of new technologies, changing demographic situation of workers, the phenomenon of global economic competition and economic shocks related to financial market volatility. The ability of a quick and appropriate adaptation to these challenges has become vital for the success of individual organizations. According to some aspects, the foundation of a company's competitive advantage is no longer rested on resources such as manufacturing plants or financial assets, but on their ability to accept change. At the same time, many studies show that the results of large changes are often disappointing. One of the explanations for the observed failures is the claim that organizational changes, especially major ones, generally draw the most attention to expensive information systems and complex new structures, and that people in companies are neglected. Penava & Šehić (2014) pointed out that the ability and driving force for change in an organisation very much depend upon the extent to which its employees are open, dedicated and motivated for change.

Since the organizations must respond to change if they want to survive and prosper, change be-comes inevitable while the key to success lies in adaptability, and the idea of the change varies as the understanding of change management shifts from the traditional idea of a set of functions related to design tasks and implementation of the organizational change processes, and in the first plan sets a requirement for the construction of such organization that will be able to monitor and adapt to extremely numerous changes in the business environment. Although organization-al change is primarily conditioned by changes of factors in the organization's environment, the necessity for change arises from the ongoing need for the organization to be successful. The goal is to find new or improved ways of using resources to increase the ability of an organization to create value, and therefore its performance, as well as the performance of individuals within the organization, by moving from the current state to the desired future state. Organizational change has significant implications for a company's ability to cope with events that can occur and need to be planned, achieve competitive advantage, and successfully manage diversity, and increase efficiency and capacity for innovation. (Aleksić, 2009)

When we want to classify organizational change, there are numerous divisions according to different authors who have studied the organization. In these divisions they encounter different names for exactly the same types of organizations. According to Daft (2010) there are several classifications of organizational changes based on different criteria, however, the most common classification of organizational changes according to the criteria of the content:
- Technological organizational changes,
- Structural and systemic organizational change,
- Personnel organizational changes.

Technological organizational changes represent the changes that appear both at the organi-zational structure and the employees in the companies. Technological changes have actually started to happen on a larger scale over the past twenty years along with the progress and tech-nology development. The very growth and advancement of information technology has led to information revolutions in all spheres and in all parts of society (Sikavica, 2011). Information technology has changed the way business and production of all companies. It supports organ-izations to make changes to make business easier, and even in some more dramatic and risky ways. Information technology essentially shortened production time, reduced costs and makes it attractive to all organizations. Technological changes are affecting personnel at work as well, and by introducing these changes employees are getting rid of some repetitive and routine jobs in which they spent a lot of time in the past and now they can use this time in more productive way. Employees are now facing a challenge, where they must retrain and acquire new knowl-edge and skills to keep up with everything technological change imposes.

A change in the structure means a change in the organizational structure of the company as a whole or a change in the organization of its individual parts (Sikavica et al, 2008). Such changes in the structure and system of the organization are actually due to the growth and development of the organization and all its factors. Depending on the size and extent of the change, they can mean reorganization or complete transformation of the organization. Reorganization is actually about changing and upgrading an existing structure to make the organization as efficient as possible. While some more radical changes lead to the transformation of the organization (Sikavica, 2011).

Personnel changes are actually made when the employees or staff members are the source of the ineffective operation of the organization. Personnel changes are related to the amendments and

extension of the values, abilities, skills and behaviour of each employee. Motivation of employees is one of the most important factors on which depends success of business organizations. Motivation is closely linked to the skills and knowledge that employees possess, and if these factors are lacking in that organization, personnel organizational changes need to be made. The key role here is management who must recognise the need for changes related to employees, and the best way to implement changes avoiding in this way possible resistance by employees and conflict situation (Holt et al. 2008).

2.1. Impact of ICT on organizational changes in tourism and hotels

In the context of globalization, internationalization and the increasing and increasing changes in the markets, all organizations are forced to find ways to use and apply new techniques and new technological breakthroughs to keep up with others. In order for organizations to optimally adapt to new ways of doing business, it is essential that they improve and standardize the business process and adapt the organizational culture to the increasing globalization requirements.

The unprecedented and rapid development of technology has influenced the interconnection and establishment of virtual communication that facilitated and accelerated economic activity between states, regardless of spatial distance and national borders. Bedeković & Golub (2011) state that the Internet and communication technologies allow the simultaneous use of visual, audio and text communications, with the free flow of information globally providing instant access to information, virtual presence and direct participation in different events, regardless of where in the world they are occurring.

The open market as it is today due to globalization imposes and sets high quality criteria, managerial skills, environmental awareness of the business, employees' skills. The globalization that brings with it the development of highly sophisticated information technology is impossible to avoid. In addition to increasing competition, globalization is reflected in the constant technological changes that all organizations are exposed to. In order to fulfill the wishes of increasingly demanding customers, all organizations are forced to continually redefine and redesign their business strategies and processes to achieve drastic business process improvements and to retain customers. Of course, this is further emphasized by the elimination of barriers to the international trade in goods and services, so that customers can access products and services from around the world, and even in relatively closed markets, in less developed regions, where local businesses have until recently been protected by various forms of state interventionism.

In terms of tourism, globalization and the transition of the world to a global village, strongly influenced by the growth and development of technology and technology, that is, technological advancement, means a major expansion of the tourism market. New tourism companies, hotels, restaurants, travel agencies, brokerage agencies and the like are emerging. The process of globalization strengthens competition among destinations and thus the destination as a whole is made meaningful. Opitz (1998) stressed out another problem arising from globalization is the impact of travel on the environment and the preservation of cultural identity. Accordingly, tourism is attributed to the number of positive roles and not so positive ones.

Change management in tourism has changed a lot because the very nature of organizational change has shifted from that of traditional change in the past. Until the beginning of the twenty-first century, no attention was paid to change as an important factor in the management of

tourism enterprises. However, it is important to emphasize that organizations must abandon the traditional ways of managing change and increasingly focus and base their business on stimulating intangible assets, namely developing creativity, managing knowledge and intellectual capital. This way of managing change is crucial in the process of quality improvement, based on the resources that actually create the future, thus creating a solid foundation for development, innovating the concept of sustainability and achieving competitive advantage (Velagić, 2011).

In tourism, change management is quite different from any other economic sector. Everything must be centered around providing a unique service to the guest, utilizing all the creativity and innovative capabilities that the tourism business has. Achieving competitive advantage in tourism and hospitality has become a priority for all participants in the tourism market due to the rapid development of technology and increasing customer demands.

Technological change and development are revolutionizing production and services alike, and at the same time creating a vague boundary between them. These processes increase efficiency by optimizing logistics and creating more transparent pricing, allowing real competition. At the same time, an additional need for organizations for creativity and innovation is created. More and more, technological development is forcing organizations to invest in creativity, development and innovation, otherwise they will hardly have a chance to survive in the market. It is these everyday changes in the dynamics of the economy that need to be investigated and recorded to affect growth and development.

The presence of trends related to the automation of marketing strategy and communication with potential guests with the significant development and implementation of virtual reality with the help of technologies result in the development of completely new markets and market segments. Easily established relationships and technological innovations are definitely crucial to shortening business cycles and are directly referencing the competitive advantage of tourism and hospitality businesses.

One of the basic characteristics of modern tourism business is the use of computers, specified software, contactless cards, loyalty cards, that is, taking advantage of all the advantages that technology development has brought with it. The application and use of all these aids in everyday work is crucial for the business of every tourism business. Babić (2014) points out that using them reduces labor costs, replaces full-time job reports, increases competitiveness in the market, facilitates administrative-legal work, makes every job and job easier, and thus employees are relieved of some routine jobs that have taken their time and reduced their productivity and efficiency.

Technology has a major impact on tourism as an industry and conditions the development of tourism. Technological organizational changes in tourism and hospitality are primarily related to improving and facilitating the operation of the hotel, helping to meet all guest requirements, and promoting the tourist offer and products offered by the hotel company.

Technological organizational changes in tourism have made it possible to promote hotels on a global scale, with a wealth of information on hotel businesses, their offerings and opportunities. It is the technology that enables the guest / tourist to have all hotel information available at any time of the decision, which has led to significantly and much more informed guests. The presence of technological organizational changes in tourism and hospitality can be observed through the following trends:

Mobile applications - Mobile technologies have produced a constant sense of immediacy that has forever changed tourists' interactions with service providers, in this case hoteliers and their expectations. From mobile bookings, check-in options, access to rooms, mobile technology dominates the list of the best new technology solutions;

- Access and use of information - Hotels have long been available, but underutilized. Information is the most valuable resource for many brands and a key priority in the hotel personalization process. Application of technology in guest rooms / accommodations. Introduction of technology with on-demand content, flat screen TV, access to fast WIFI, possibility of extinguishing light from bed, remote control of sound system;
- Provide security to guests - With increasingly sophisticated hackers increasingly attacking people's attitudes towards security, they have completely changed, and this area is subject to increasing financial investment. Investing in security especially when it comes to payments is significant. Guest privacy is a growing challenge in deploying mobile devices and social networks;
- Energy efficiency - Among the capital IT expenditures in the hotel industry is to invest in energy management technology. For most hotels, energy is among the top three ranked costs, so energy efficiency efforts are very significant given the assumed financial savings. Intelligent technologies help hotels track and report on energy consumption. (Barjaktarović, Pindžo, 2016)

Today, it is almost impossible to imagine the business of hotel companies without the use of information technology. The application of information technology helps hotels to establish electronic management and management of all departments in the company. This is primarily related to the networking of the financial sector, with marketing, human resources, sales, control, reception, inventory management. This part is of utmost importance for the best possible management and strategic planning of the business. Technological organizational changes in the hotel industry are also reflected in building their own or incorporating them into an existing reservation system. The reservation system refers to connecting with airlines, travel agencies, hotel chains or tourist boards (Barjaktarović, Pindžo, 2016).

3. RESEARCH INTO IMPACT OF ICT ON HOTEL OPERATIONS IN HOTELS IN B&H

This study focuses on hotels located in most developed tourist destinations in B&H. Hotels are classified according to their standards in five categories from 1 to 5. In order to identify the impact of ICT on operations in hotels in B&H, a survey research was conducted on a sample of 100 3, 4- and 5-star hotels. For the purpose of the research, a questionnaire and a stratified sample were designed. The sample included 40 3-star hotels, 54 4-star hotels and 6 5-star hotels.

The respondents pointed out that the hotel uses some form of advertising, whether it is content marketing, email marketing or social media marketing, but that they do not use paid advertising in social media marketing or mobile marketing. 63% of hotels indicated that they do not have a digital strategy 63 and only 23% indicated that they will formulate one in the future.

Even 15% of hotels do not have employees or departments with IT responsibilities and 38% use external companies or consultants for all IT assignments. Hotels which do have IT department were asked to identify frequency of different assignments in this department (Graph 1.)

Table 1. Application of digital marketing elements in hotel business

	YES		NO		X² p	
	f	%	f	%		
Hotel has a web site	100	100,0%	0	0,0%	/	/
Use of Google tools: Google AdWords, Remarketing etc.	44	44,0%	56	56,0%	1,44	0,230
E-mail marketing	60	60,0%	40	40,0%	4,00	0,046
Mobile marketing	41	41,0%	59	59,0%	3,24	0,072
Content marketing	78	78,0%	22	22,0%	31,36	0,000
Social media marketing	94	94,0%	6	6,0%	77,44	0,000
Use of paid advertisement in social media marketing	55	55,0%	45	45,0%	1,00	0,317

Source: Authors´ research
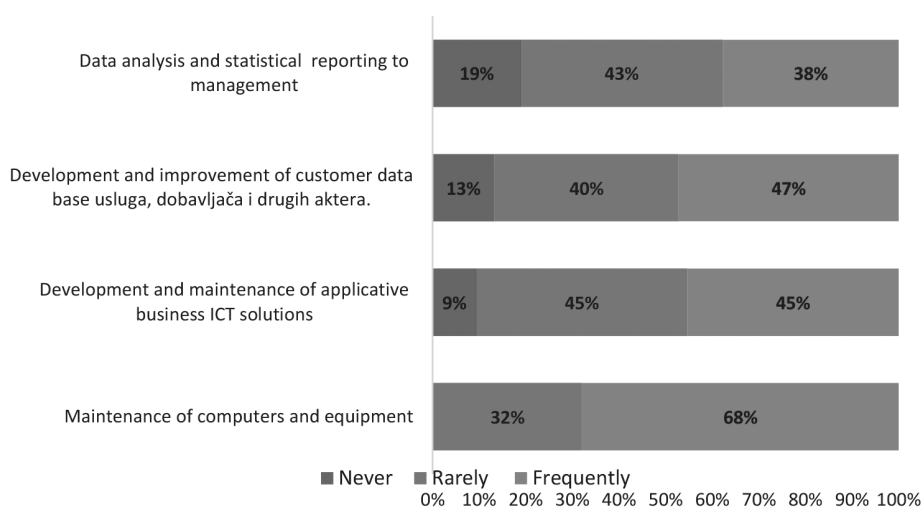
Graph 1. Intensity of different assignments in IT department

Source: Authors´ research

Most hotels do not have any software at their disposal to assist them in certain business activities, while for those hotels that have a particular solution, the most common is Hotel Management Software. A much smaller percentage of hotels have solutions such as CRM.

Table 2. Revenue from online/offline reservations

	f	%	X² p
Online (hotel web site, social media, booking platforms, e-mail etc.)	69	69,0	14,44 0,000
Offline (telephone, reception desk etc.)	31	31,0	
Total	100	100	

Source: Authors´ research

The survey results indicate that hotels generate statistically significantly more revenue through online bookings (social networks, their own websites, through different web platforms) than offline (Table 2). However, as far as the reservation system is concerned, as many as 69% of respondents indicated that they make more income from bookings made online than offline or in person or by telephone.

A higher percentage of hotels (29%) account for up to 30% of the total revenue from bookings made through digital channels, while 28% do not have such records at all (Table 3).

The research results indicate that annual revenues using information technology increased, which is presented in Table 4. Exactly 73% of respondents indicated that utilization of ICT has positively influenced revenue and improved business performance.

When it comes to cost reductions caused by the introduction of technological organizational changes, a significantly higher percentage of hotels (45%) state that they have reduced costs between 0-10%. (Table 5)

Table 3. Revenue made from reservations through digital channels

	f	%	X^2 p
Less than 30%	29	29,0	
31-60%	25	25,0	2,960 0,398
61-100%	18	18,0	
Do not know	28	28,0	
Total	100	100,0	

Source: Authors´ research

Table 4. Influence of ICT utilization on revenue

	f	%	X^2 p
Increase	73	73,0	
Decrease	5	5,0	75,14 0,000
No changes in revenue	22	22,0	
Total	100	100,0	

Source: Authors´ research

Table 5. Influence of ICT utilization on costs

	f	%	X^2 p
0-3%	25	25,0	
5-10%	20	20,0	28,88 0,000
10-15%	9	9,0	
Costs have not decreased	46	46,0	
Total	100	100,0	

Source: Authors´ research

A statistically significantly higher percentage of hotels believe that the introduction of technological organizational changes has led to an increase in the total number of overnight stays, but also to an increase in the number of overnight stays of foreign guests. Also, a significantly higher percentage of hotels accept the claim that the existing organizational structure, due to the use of information technology, results in retention of existing guests, as well as results in attracting new guests. Such results are expected as foreign tourists can book our hotels only online or through digital channels. Foreign tourists do not have the ability to view hotel rooms, restaurants and surroundings live, and having good representation and providing information on the internet means a lot to them, as it can best approximate their hotel atmosphere before arrival.

As many as 94% of respondents said that the introduction of technological changes has led to an increase in the total number of hotel nights, which is a goal that all hotel companies strive for. The general goal of social media presence and technological literacy is to attract new guests. It is up to the other departments of the hotel to make these guests happy and to make the guest come back again. The highest level of agreement was with the claim that the use of information technologies increased the number of foreign guests by as much as 95%. Foreign tourists,

especially those from developed countries, who are increasingly interested in research tourism, when booking and staying, are looking for technical and technological literacy as they themselves are.

5. CONCLUSION

Business environment today is dynamic, turbulent and complex. The global economic and social structure has changed. Tourism has become one of the key economic sectors globally. One of the main factors in this changing environment is technological advancement and development of ICT. The application of ICT has altered the way business is done in tourism. ICT and its application in tourism has become more important over the years since ICT has transformed tourism offering new opportunities for its development. Tourist organizations can greatly benefit from ICT and its implementation with minimal costs and with little resource from the staff. ICT can have effects on competitiveness of tourist organizations as well as their market share, effectiveness and efficiency, productivity etc. On the whole, the research results prove that ICT has positive impact on business performance in B&H hotels. The study has proven that ICT had an impact on revenue increase and cost reduction, increase in reservations online and foreign guests, as well as total hotel nights. The study shows that there is room for improvement since not all hotels have recognized the benefits of ICT application in their business and do not have staff responsible for ICT application, insufficiently use all possibilities of digital marketing and customer management software.

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