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APPLYING INFORMATION TECHNOLOGY TO BUSINESS DECISION-MAKING IN THE HOTEL ENTERPRISES[1]

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Abstract

Awareness that the successful performance of any company depends upon making and implementing decisions has caused special attention to be focused on researching issues related to the decision process. Research seeks to reveal the regularities that govern this process in order to limit irrational behaviour and to lead decision-makers to use rational methods in accomplishing rational objectives. Given that uncertainty characterises today's business environment, this topic is increasingly gaining the attention of management and becoming a major issue in the business-decision process, while changing the current role of analysis in making business decisions. Certainly, rapid IT development is an important source of change, enabling the emergence of new decision-making methods and techniques not previously applied by managers. Due to the exceptional value of information in eliminating higher or lower levels of uncertainty, various information systems have been developed that serve for

[1] The research results derive from the scientific project *"Logistics Flows Management in the Tourism Destination"* financially supported by the Ministry of Science, Education and Sports of the Republic of Croatia.

using information as a basis for making business decisions. This Paper focuses on Decision Support Systems, because their purpose is to provide assistance to managers in making the appropriate decisions to non-structured problems in decision-making. These systems enable the interactive application of decision-making rules, models and model bases together with databases and the individual approach of the business-decision maker. The survey was conducted on a representative sample comprising 124 hotels in the Primorsko-Goranska County and the Istria County of the Republic of Croatia. Results show that, in Croatian hotel practises, information technology continues to represent an operational tool used primarily to support operational management levels, while top management levels often fail to recognise and, consequently, fail to apply to any significant extent the advantages information technology offers to improve the management of their facility.

Key words: Information Technology, Business Decision-making, Decision Support Systems, Management, Hotel Enterprises.

1. INTRODUCTION, AND SUBJECT OF RESEARCH

The hotel systems of today are operating in an increasingly demanding market in which the right decisions that hotel management structures have made in their struggle for survival are confirmed, while their wrong decisions are underscored. The aim of any business system is not only to survive in the changing conditions of its environment, but also to continue to grow and develop. That is why management and decision-making processes are carried out. In terms of IT, these processes are very demanding. Today, not only does IT provide support to management in making business decisions, but it is also a component part of management. The use of IT in making business decisions is expected to result in accurate, timely, precise and highly reliable information, the contents and form of which is geared to the needs of management. *The application of information technology* affects the vital management and organisational issues of a hotel business system and incurs high costs, casting doubt on the justification of its existence. This give rises to a pressing need to address the issue of the success of IT investment, placing it in the focus of a business system's management structures.

Often, a hotel's management knows too little about IT, its possibilities and constraints, and this prevents it from breaking its settled patterns of decision making, which are changing under the impact of new technological trends. Also, IT managers are frequently overwhelmed by the technological opportunities provided by new technologies, and they fail to take into consideration business needs and the way IT can fit into them. The Croatian hotel industry has not yet been able to align the technological approach and the business approach to IT and IT usage, and to take full advantage of the opportunities of using IT in the business decision process.

The primary *purpose and objective* of the research is to examine whether hotel managers apply information systems to business decision-making, how often they use information systems in the decision process, how satisfied they are with the functionality of these systems, and whether managers understand the importance of such systems and the opportunities they provide for businesses. It is possible to learn which types of business decisions are made in conditions of uncertainty, and which information sources and decision-making methods are used. As a starting point, the level to which Croatia hotels are equipped with information technology was established, together with the level to which existing information systems have been developed and the extent to which they are implemented in overall business operations.

In consideration of the purpose and objective of research, the following *research hypothesis* was formulated: Information technology in Croatian hotels is primarily used as a tool for automating business, expediting the execution of business operations, and reducing the number of errors in processing, and not as a factor in making sound business decisions that would ensure the long-term growth and competitiveness of the hotel business system on the world market.

Hence, the problem and subject of research refers to two interconnected objects of research: hotel management and information technology.

2. INFORMATION SYSTEMS TO BUSINESS DECISION-MAKING

The International Federation for Information Processing (IFIP) defines an information system as follows:[2]

An information system is a system that gathers, stores, safeguards, processes and delivers information vital to an organisation and society in a way that makes this information accessible and serviceable to whosoever wishes to use it, including the management, clients, staff and others. An information system is an active social system that may, but does not necessarily need to, use information technology.[3]

To prevent information from becoming a multiplicity of incoherent knowledge and to enable it to be accessed when needed, information is organised in a coherent, meaningful unit – an *information system*. In a hotel business system, information flows are organised in the form of a hotel information system. The primary function of this system is to make information available to all levels of hotel management, as well as to the environment of a hotel business

[2] After: Čerić, V., et al., Poslovno računarstvo, Znak, Zagreb, 1998, p. 32.
[3] In this paper, the term "information system" refers to an *IT-supported information system*. IT is daily gaining the attribute of a prime mover and carrier of the advancement in the economy and society at large. Today, it is extremely difficult or almost impossible to gain a competitive advantage on the tourism market with the application of IT.

system. At the same time, it has the task of identifying the information needs of users; capturing, recording and retrieving data; planning information flows; transforming data into information, and providing this information to users.

As decision-oriented systems, information systems can be grouped into several types or classes. The different types of information systems are also called IS development stages by some authors dealing in these issues. Most often in the foreign literature mention is made of five development stages or five IS types: *Transaction Processing Systems (TPS), Management Information Systems (MIS), Managerial Support Systems (MSS) and Office Automation Systems (OAS).*[4] It should be noted that no hard borders exists between any of these systems. Instead, they all contain certain common elements, which will be examined in the following section.

TPS is a fundamental part of an information system. Providing support to current business and transactions, it belongs to the operational level of business. Older names for these systems are Operational Information Systems, Automatic Operational Processing (AOP), and Electronic Operational Processing (EOP).[5] In the hotel, this system carries out the preparation, processing, sending and receipt of orders from guests; invoicing; payroll processing; the monitoring of stock; the keeping of records on products and services sold; debts, etc. Although such systems are not directly decision-oriented, their output represents the input of other types of IS. Hence, their primary aim can be said to be the production of information for other ISs that form the superstructure.

MIS is primarily intended for middle level management, providing middle managers with synthesised and categorised information obtained from an IS's transaction part. These systems secure reports and direct access to data on an enterprise's current and past business.[6] The primary feature of these systems is providing support to the process of making known, recurring and structured business decisions, in which operative procedures, decision-making rules and information flows are pre-defined.[7]

The group of systems designated for support to managerial activities across all decision-making levels are known as *MSS*, and they include they following systems: *Decision Support Systems (DSS), Group Decision Support Systems (GDSS), Expert Systems (ES) and Execute Support Systems (ESS).*[8]

[4] Bidgoli, H., Modern Information Systems for Managers, Academic Press, San Diego, 1997, p. 12.
[5] Martin, E. W., et al., Managing Information Technology, Macmillan, New York, 1994, p. 31.
[6] MacLeod, R., Management Information Systems, Macmillan, New York, 1993, p. 427.
[7] Kasavana, M., et al., Managing Computer in the Hospitality Industry, Education Institute of the American Hotel & Motel Association, East Lansing, Mish., 1992, p. 290.
[8] Pietsch, T., et al., Strategisches Informationmanagement, Erich Schmidt Verlag, Berlin, 1998, p. 23.

DSS are systems providing support to semi-structured or non-structured decision problems.[9] They give answers to WHAT-IF questions. (For example: What would happen if the price of raw materials were to increase by 10 percent? Which would be the consequences if the number of employees dropped by ten people?) These systems are particularly suited to middle and top levels of management. *GDSS* seeks to expand the DSS concept using special communication tools, thus providing support to the decision-making of a group of managers.[10] The advantages of group decision-making are seen in the fact that a greater number of participants will possess greater and more varied knowledge, and they will be capable of viewing a decision from a variety of aspects, with better decisions being the outcome. Decision-makers may use various program tools as support to group decision-making. Also used are multimedia presentations, PC-based meetings, joint offices, joint monitors, audio/videoconferencing, electron mail, tools for group authorisation, computer conferences, systems for project management and so on.[11]

ES are program systems belonging to the field of Artificial Intelligence and are used for problem solving at the expert level. They belong to intelligent systems as they apply knowledge, are capable of learning and adapting, or they can understand language. Unlike DSS, these systems are able to answer IF-THEN questions. A major feature of these systems is their ability to explain the procedure they used to solve a problem.[12]

ESS are systems providing information that top managers require in the decision process but which they cannot find in a company's traditional IS (for example, pricing; information on markets, customers and rivals; etc.). They allow users individual access to database searching and enable them to make *ad hoc* reports. Usually designed to be user-friendly, these systems are often customised and include graphic software of great potential.

OAS provides support to managerial functions across all of levels of decision-making in an enterprise, as well as support to all business activities generally conducted in the office. This system consists of a range of various technologies that could be classified in the following groups: document processing (copying, text processing, picture processing, etc.), communications (e-mail, telex, etc.), teleconference (audio and video conferences, work at home, etc.), supporting systems (support to group work, job organizers, etc).

The basic information subsystems of a hotel exert a sort of dominance over data processing with regard to the areas that they cover. This dominance is

[9] The decision process is partially structured if it cannot be fully described in the form of procedures, and if it changes from case to case. DSS problem-solving models are often based on quantitative (statistical methods or on operational research methods.

[10] After: Sikavica, P., et al., Poslovno odlučivanje, Informator, Zagreb, 1999, p. 308.

[11] O'Connor, P., Using Computers in Hospitality, Continuum, New York, 2000, p. 53.

[12] After: Negnevitsky, M., Artificial Intelligence: A Guide to Intelligent Systems, Addison-Wesley, 2002, p. 125.

reflected in the fundamental types of information subsystems (accommodation subsystem, food and beverage subsystem, hotel-maintenance subsystem). A primary task of these systems is to collect, process and disseminate information at the level of transactions performed. In analysing data from the standpoint of decision-support information systems, it is necessary to have full access to data and to be able to acquire data at the level of the entire hotel business system, without dividing it into information subsystems. Only these types of systems are capable of providing the right information to the decision-maker – the hotel manager – by analysing data from internal databases, as well as from other sources (external databases). In addition to aiding the early diagnosis of problems, these systems also serve as a starting point for detecting guest preferences within market segments and the propensity of guests to buy a hotel product.

3. CHARACTERISTICS OF THE RESEARCH SAMPLE

The basic sample unit in the research conducted is the hotel as the object of observation. The basic group is finite, as its number of elements is known at the time of research (184 hotels), and it has been taken from the database of the Ministry of the Sea, Transport and Development involving categorised hotels in the Primorsko-Goranska County and the Istria County.[13] Research was conducted on a sample of 124 hotels (63 hotels in the Primorsko-Goranska County and 61 hotels in the Istria County). *The sample represents 67 percent of the hotels belonging to the basic group.*[14]

To provide greater insight to the characteristics of hotels as sample elements, the research presents an overview of the sample's many attributes: the number of beds (in classes of 25, 26-50, 51-100, 101-250, 251-500, 501-750, more than 751 beds), hotel category (from one to five stars), average rating of hotel quality[15], number of employees, management structure, respondents with regard to management levels, respondents with regard to qualifications, the position respondents hold, legal forms of operations and so on.

Almost half of the hotels in the sample are hotels with a number of beds ranging from 251 to 500 (as much as 43% of hotels), categorised as 3-star hotels (53%), and employing an average of 50 workers (70%). Of the total number of employees, managerial staff accounts for 28% on average. *Managers across all managerial levels were selected as respondents, with top and middle management*

[13] http://www.mmtpr.hr/ (Overview of categorised hotels as on 9 May 2005, Ministry of the Sea, Tourism, Transport and Development of the Republic of Croatia)

[14] Pilepić, Lj., Primjena informacijske tehnologije pri donošenju poslovnih odluka u hotelskoj industriji, doctoral dissertation, University of Rijeka, Faculty of Tourism and Hospitality Management in Opatija, Opatija, 2007, pp. 195-209 (sample projecting)

[15] The criterion for obtaining the average rating of hotel service quality involves the number of hotels and the category of hotels, with the number of hotels being multiplied by the corresponding hotel categoy and then divided by the total number of hotels.

represented in relatively equal measures, and lower level management making up only a minor part (3%). Most of the managers possess university qualifications (hospitality and tourism program, or program in economics), while hotel managers with only secondary school qualifications are rare, making this sample representative in terms of quality as well. The managers hold various positions in the hotels: chairperson of the managing board of a joint-stock company, food and beverage manager, front desk manager, assistant manager, financial manager, etc.

4. RESEARCH METHODS

The *survey method* was used in the research. Designed by the authors, the questionnaire was distributed to the addresses of all categorised hotels in the Primorsko-Goranska County and the Istria County. The survey was conducted in the period from June to September in 2005. Responses to the questions posed were collected by regular mail (58%) and to a lesser percentage by electronic mail (42%).

The questionnaire consists of seven interrelated parts.[16] The *first part* refers to the basic features of the hotel, provides respondents with information regarding the survey and research, and seeks to obtain their collaboration and encourages them to give objective and truthful responses. The *second part* refers to the basic features of the respondents – managers at various management levels in the hotel (seniority, sex, educational background, etc.). In the *third part*, respondents are asked to circle one or more of the responses provided. Based on these responses, it is possible to understand whether the existing IT infrastructure meets the needs of the hotel with regard to functionality; what type of IS is used; which, if any, business transactions are done electronically; and so on. The *fourth part* seeks to evaluate the level to which managers are aware of the importance of IT usage in business. Each question provides two possible responses of which only one is correct. In *part five*, the respondents are asked to rate (1 – very poor…5 – excellent) the average level of computer literacy, company investments in IT training for employees, the level of IT usage as a tool in process re-engineering, etc. In *part six*, respondents are asked to make estimations in percentages regarding certain facts. They are asked to estimate the percentage of total investments that is invested in IT, and the percentage that should be invested in IT in the respondent's opinion; the percentage of total investments in training that is invested in IT training and the percentage that should be invested in IT training in the respondent's opinion. In the final, *seventh group* of questions, respondents are asked to answer questions regarding the financial stability of their

[16] For the purpose of this research, parts of the questionnaire were adapted after: Müller, J., Istraživanje o korištenju informatičke tehnologije u hrvatskim hotelima (I) – putokaz za ponudu, Infotrend, No. 86, Zagreb, 2000, pp. 9-14; Müller, J., Istraživanje o korištenju informatičke tehnologije u hrvatskim hotelima (II) – putokaz za ponudu, Infotrend, No. 87, Zagreb, 2000, pp. 48-54; Graovac, I., Hrvatski menadžeri i sustavi za potporu odlučivanju, Infotrend, No. 142, Zagreb, pp. 52-56.

companies and how they perceive what needs to be done to improve the existing IT infrastructure in their companies to make business decision-making more efficient.

Results were processed using the software package MS Excel 2002 and SPSS 13.0. Pearson's correlation coefficients (r) between individual responses were calculated, and they suggest a cause and effect relationship between variables, that is, IT features and elements as support to the decision process in hotels. Only some of these are presented in this paper.

5. RESEARCH RESULTS

The following table clearly illustrates that managers of all levels are responsible for making all types of decisions, with the exception of lower level management, which does not make any decisions of strategic importance to their business systems. The only difference is in the frequency with which the individual types of decisions are made relative to the total number of decisions taken. Top managers neglect their primary decisions, making mostly tactical decisions, although these are generally non-programmed. What is required is delegating responsibilities and competences to lower levels of decision-making, which would finally enable top managers to get on with their job and that is taking care of company strategy. Other levels of management are mainly occupied with their primary decisions.

It is evident that managers across all levels predominantly use data generated by their information systems, almost as much as they use data obtained from the business system's environment. Top managers, however, take decisions based on concise, strategic and future-oriented information, whereas managers at lower levels primarily rely on detailed, precise and short-term information.

Table 1.
What types of decisions do you make, and which sources and types of information do you use in business decision-making?

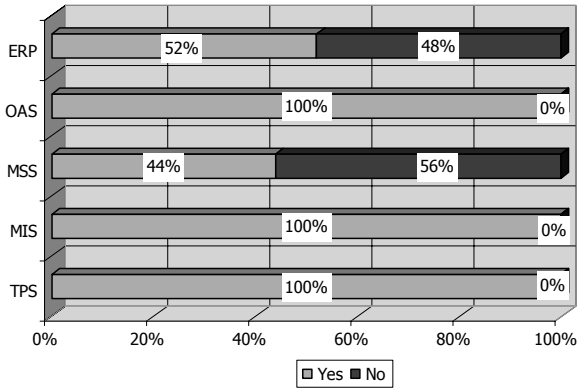
Decision type	Number of managers by organisational level*					
	top	percent.	middle	percent.	lower	percent.
strategic decisions	46	77%	38	63%	0	0%
tactical decisions	60	100%	58	97%	2	50%
operational decisions	44	73%	44	73%	4	100%
programmable decisions	60	100%	58	97%	1	25%
unprogrammable decisions	45	75%	57	95%	3	75%
individual decisions	51	85%	58	97%	2	50%
group decisions	53	88%	54	90%	2	50%
intuitive decision-making	46	77%	40	67%	0	0%
decision-making by considering	54	90%	44	73%	1	25%
rational decision-making	60	100%	56	93%	3	75%
Information sources						
information system	48	80%	57	95%	2	50%
management	58	97%	35	58%	1	25%
environment	47	78%	51	85%	2	50%
Information type						
detailed, precise, short-range	21	35%	36	60%	3	75%
summary, strategic, long-range	53	88%	36	60%	1	25%

* Note: the numbers in absolute amounts represent the number of positive responses, and the numbers in relative amounts, the share of positive responses in the total number of respondents with regard to management level (a total of 60 top managers, 60 middle managers and four lower-level managers were surveyed).

Source: Author's elaboration

It is disturbing that 41% of respondents gave a negative reply to the question *"Does the existing IT infrastructure meet the requirements of business decision-making?*" This fact is also evident in the rating for *"To which extent does IT keep in step with the requirements of business decision-making?*" which is unexpectedly low (2.86 of a possible 5), indicative of a failing commitment of managers in the use of IT as support in decision-making.

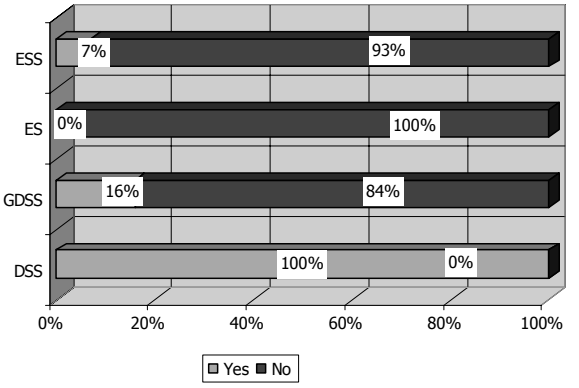
In all hotels, it is possible to find *Transaction Processing Systems (TPS)*, *Management Information Systems (MIS)* and *Office Automation Systems (OAS)*, which is not the case with *Managerial Support Systems (MSS)* and *Enterprise Resource Planning Systems (ERP)*.



Source: Author's elaboration

Figure 1. Do you possess the following Information Systems?

MSS are present in 44% of hotels, with Decision Support Systems (DSS) present in all 44% of cases, while Group Decision Support Systems (GDSS) and Executive Support Systems (ESS) cannot be found in a large number of hotels. Not in one hotel can Expert Systems (ES) be found.

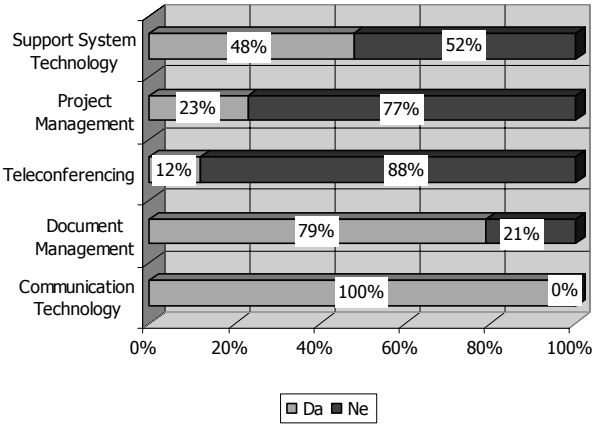


Source: Author's elaboration

Figure 2. Which types of Managerial Support Systems do you possess?

In view of IT used in Office Automation, the following results can be obtained (Figure 3). The prevalence of technologies integrated in OAS is as follows: Communication Technology (electronic mail, voice mail, facsimile,

etc.), 100%; Document Management (micrographics, digital image processing, text information management systems, electronic publishing, etc.), 79%; and Support System Technology (support to group work, job organizers, presentations, etc.), 48%. Hotels fail to take full advantage of the following technologies: Project Management, 23%; and Teleconferencing (audio and video conferencing, computer teleconferencing, work at home, etc.), 12%.

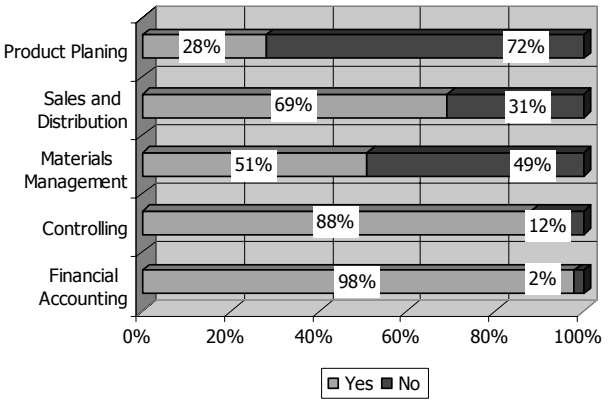


Source: Author's elaboration

Figure 3. Which technologies participate in Office Automation Systems?

In most cases, the ERP Systems modules used in the surveyed hotels provide support to the following segments of business: Financial Accounting (98%), Controlling (88%), Sales and Distribution (69%), Materials Management (52%), and Product Planning (28%).

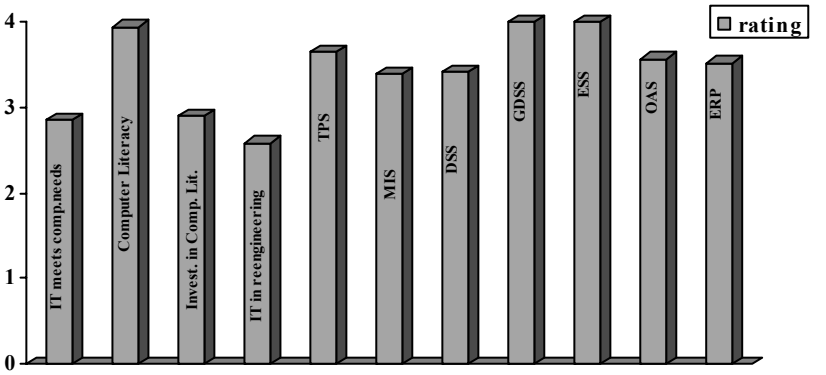
Interestingly, in those hotels that do not have ERP Systems, 93% of managers have reported that their hotel would need to implement such a system, and that such an investment would be justified and worthwhile. The reasons managers give to support this claim most often involve better resource planning and management, improved reporting and support to the decision process, more efficient operations, optimisation and enhanced monitoring of business processes, etc.



Source: Author's elaboration

Figure 4. Which module of Enterprises Resource Planning Systems you do possess?

The average level of Computer Literacy of respondents is rated at a substantial 3.95 (basic knowledge of rudimental MS Office programs being the criterion).[17] Managers are dissatisfied with the investments their companies make to provide IT training for employees. Amounting to 14% of the total funds invested in employee training, these investments have received a very low rating (2.90).



Source: Author's elaboration

Figure 5. Ranking of satisfaction with information systems

[17] Satisfaction ranging from a rating of 1= very poor to 5 = excellent.

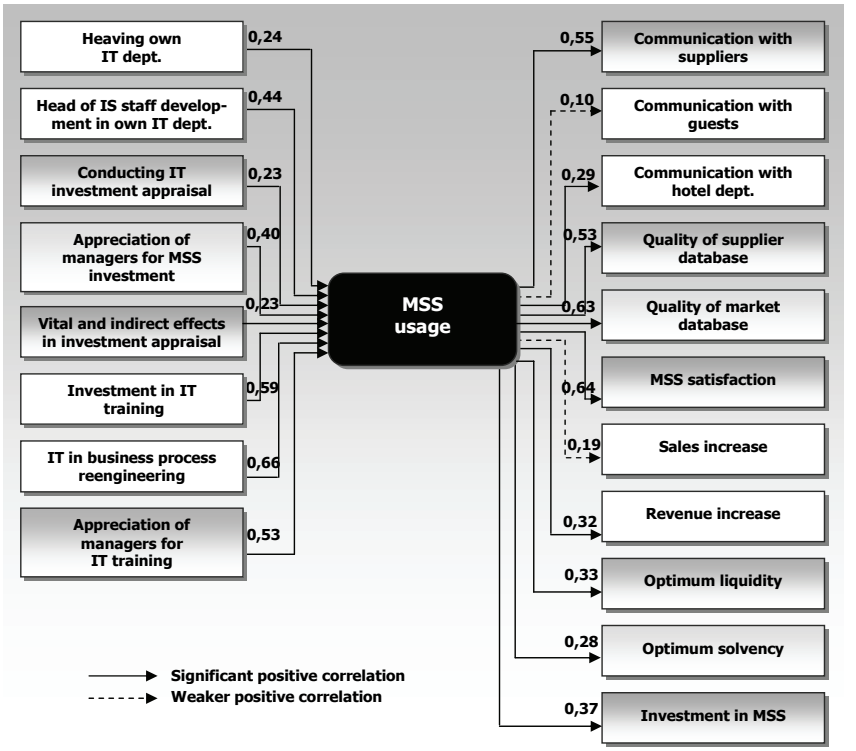
Low ratings were also given to MIS (3.39) and DSS (3.42), which means that these sophisticated information technology tools have not yet been fully accepted by companies and managers. TPS (3.65), OAS (3.57) and ERP Systems (3.52) were given slightly higher ratings. Managers who have MSS have given the highest ratings to GDSS (4.00) and ESS (4.00).

Investments to manager support systems are estimated to account for a mere 9% of IT investments. This is probably a partial cause for the survey results mentioned above and the reason why managers have given very low ratings to MSS functionality. In the opinion of managers, 24% of all IT investment funds should be earmarked for manager support systems.

That managers are aware of the importance of applying IT to enhance the efficiency of business decision-making is evident in their concern for the need to improve the existing IT infrastructure of their companies. The major part of IT managers considers that it is necessary to improve the existing Decision Support Systems (74%), increase the amount of investments in training ICT users (74%), enhance data integration and access (62%), and improve databases relating to the overall marketplace (59%).

The consistency and coherence of the responses of respondents and the results of the survey were testing by placing into correlation those questions that were logically related and, so, should display a strong correlation in the responses by respondents, as well.[18] In this way, six indicators were identified that display the greatest correlation with others and which, accordingly, have the largest influence on all aspects of IT application and management in hotels. The following indicators can be singled out: MSS usage, investment in MSS, MSS satisfaction, the appreciation of managers of the importance of MSS investments, IT usage in reengineering processes, and investment in IT training for employees. By focusing on one of these indicators and identifying logical input and output, that is, by deducing which indicator is the cause and which the effect, correlation can be established following the cause and effect relationship (Figure 6).

[18] Using SPSS software, Pearson's correlation coefficient was calculated for individual responses (99 questions from the questionnaire were taken for correlation). Correlation was considered to be significant providing the correlation coefficient was r>0.2, after: Pilepić, Lj., Primjena informacijske tehnologije pri donošenju poslovnih odluka u hotelskoj industriji, doctoral dissertation, University of Rijeka, Faculty of Tourism and Hospitality Management in Opatija, Opatija, 2007, pp. 338-352.



Note: To the figure can be added:
Causes: TPS satisfaction (0.48), MIS satisfaction (0.64), OAS satisfaction (0.29).
Effects: DSS satisfaction (0.98), GDSS satisfaction (0.31), ESS satisfaction (0.20), ERP satisfaction (0.79).

Source: Author's elaboration

Figure 6. Association of MSS usage with other management factors, with IT and operations

Research has established a strong positive correlation between MSS usage and increase in revenue (r=0.32), optimum liquidity (r=0.33) and optimum solvency (r=0.28). This primarily means that managers using MSS in the decision process are likely to expect an increase in profits, together with the optimum liquidity and solvency of their facility. They are managers who attach great significance to the importance of IT investment and IT training, with the effect being satisfaction achieved through the use of these systems in decision-making.

From the above, it can be concluded that Croatian hotels and hotel management are today in the same position in which most American companies were some ten or so years ago, though more in terms of IT applications in

business decision-making than in terms of the level of technology. Emphasis is placed on building a unique transaction basis and on making more efficient and comprehensive use of the company's IS, with focus on reengineering with the help of IT.

Action that needs to be taken in the field of business IS involves the following: putting in place efficient strategic ISs that would enable Croatian hotels to accomplish long-term business objectives and activities, in particular, growth and gaining advantages over rivals; organizing additional training for managers concerning the strategic aspects of IT; instructing all employees regarding IT application in business decision-making; setting up a system of well-designed electronic communication regardless of the company's spatial organization (open distributed business systems); setting up a system for supervising business and monitoring business results; increasing the trust of guests, etc. Action required at the *national level* involves creating favourable conditions for IT application in Croatia, securing capital for enterprises in the field of high technology, training employees in businesses and in the government administration, encouraging research, adapting international technical standards as national standards, etc.

6. CONCLUSION

Awareness that the successful performance of any company depends upon making and implementing decisions has caused special attention to be focused on researching issues related to the decision process. Research seeks to reveal the regularities that govern this process in order to limit irrational behaviour and to lead decision-makers to use rational methods in accomplishing rational objectives. Given that uncertainty characterises today's business environment, this topic is increasingly gaining the attention of management and becoming a major issue in the business-decision process, while changing the current role of analysis in making business decisions. Certainly, rapid IT development is an important source of change, enabling the emergence of new decision-making methods and techniques not previously applied by managers. Due to the exceptional value of information in eliminating higher or lower levels of uncertainty, various information systems have been developed that serve for using information as a basis for making business decisions. Integrating information systems into businesses has today become a necessity, because of the growing need for flexibility and the mounting pressure to increase the speed of the business decision process.

Emphasis is placed on Decision Support Systems, because their purpose is to assist managers in making proper decisions regarding non-structured problems. Although DSS are primarily linked to strategic levels of management, they may occasionally influence lower management levels, as well. In such cases, DSS have an advisory feature and may provide users with derived information

aligned with the strategic decisions of higher managerial levels, thus providing assistance in the operational segment of business. In this way, DSS create a kind of bridge connecting lower and higher management levels, even though the primary and dominant DSS function is to provide support in making strategic decisions.

Analysis shows that top-level managers spend too much time making operational and tactical decisions, thereby neglecting their fundamental function in the company, which is how to develop and deliver a strategy, a vision of the future.

MSS can be found in a small number of hotels. The application of these systems in the decision process is still at an insufficiently low level, and their functionality is very poor. Many managers have reported their general dissatisfaction with the use of IT in meeting the needs of business decision-making, indicative of a failing commitment of management to apply IT as a support to the decision process. Low ratings were also given to the existing TPS and management information systems for the needs of middle management.

It can be concluded that the Croatian hotel industry has not yet been able to align the technological approach and the business approach to IT and IT use, and to take full advantage of the opportunities of using IT in the business decision process. Information technology in Croatian hotels is primarily used as a tool for automating business, expediting the execution of business operations, and reducing the number of errors in processing, and not as a factor in making sound business decisions that would ensure the long-term growth and competitiveness of the hotel business system on the world market.

Today, information technology is a fundamental infrastructure of advanced countries, and its global presence is a vital potentiality to small countries with relatively minor markets. Hence, these examples can serve as a "road map" in developing an information society in Croatia and attaining the so desired growth and investment cycle.

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PRIMJENA INFORMACIJSKE TEHNOLOGIJE KAO PODRŠKE PROCESU DONOŠENJA POSLOVNIH ODLUKA U HOTELIMA

Sažetak

Svijest da odluke i njihova provedba čini budućnost uspješnog poslovanja svake tvrtke, dovodi do posebne pozornosti u istraživanju problematike kako se odluke donose, nastoje se otkriti zakonitosti koje tim procesom upravljaju, kako bi se ograničilo neracionalno ponašanje, a donositelja odluka usmjerilo na korištenje racionalnih metoda za postizanje racionalnih ciljeva. Kako današnju poslovnu okolinu karakterizira nesigurnost, ova tema sve više zaokuplja pažnju menadžmenta i postaje sve važnija u procesu poslovnog odlučivanja, te mijenja dosadašnju ulogu analize u donošenju poslovnih odluka. Važnu promjenu svakako predstavlja i ubrzani razvoj informacijske tehnologije, koja je omogućila pojavljivanje nekih novih načina i tehnika odlučivanja koje menadžeri prije nisu koristili. Radi izuzetne vrijednosti informacije, kojom se može ukloniti veća ili manja razina nesigurnosti, razvijeni su različiti informacijski sustavi, koji služe za upotrebu informacija kao baze pri donošenju poslovnih odluka. Integracija informacijskih sustava u poslovne subjekte danas postaje nužnost, zbog sve veće potrebe za fleksibilnošću te velikog pritiska na brzinu donošenja poslovnih odluka. Naglasak je na sustavima za podršku odlučivanju, budući da je njihova namjena pomaganje menadžerima u donošenju kvalitetnih odluka u nestrukturiranim problemima odlučivanja. Istraživanje je provedeno na reprezentativnom uzorku od 124 hotela iz Primorsko-Goranske i Istarske županije u Republici Hrvatskoj. Rezultati pokazuju da informacijska tehnologija u hrvatskoj hotelskoj praksi još uvijek predstavlja operativni alat i prvenstveno pruža podršku operativnoj razini upravljanja, dok vrhunski menadžment često ne poznaje u dovoljnoj mjeri sve prednosti upotrebe informacijske tehnologije u kvalitetnijem upravljanju svojim objektom, pa ju u tom smislu i nedovoljno koristi.

Ključne riječi: informacijska tehnologija, poslovno odlučivanje, sustavi podrške poslovnom odlučivanju, hotelski menadžment, hotelska poduzeća.

JEL klasifikacija: C81, L83