



## KNOWLEDGE AND EDUCATION OF HUMAN RESOURCES IN THE CROATIAN HOSPITALITY INDUSTRY

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### ABSTRACT

Knowledge is the most important resource in the new economy. By using and managing knowledge as a capital, people influence the development of science, technology, education, tourism and other sectors of economy. This is especially important in work-intensive industries such as the hospitality industry.

While elaborating the knowledge as the sum of *'initial stock' of knowledge, reasoning and inflow of new stimuli* (Hsu, Shen, 2005) this paper points out that without the constant and systematic innovation of knowledge, it will not be possible to achieve the advancement of supply in the tourism and hospitality industry, and the satisfaction of all its participants.

**Key Words:** human resources, education, knowledge management, hospitality industry, Croatia.

### INTRODUCTION

Tourism and the hospitality industry are work-intensive and service-rendering industries whose subsistence and competitive advantage to the greatest extent depend directly on the availability of high-quality personnel who shape and manage the tourist product. The contact and interaction between client – tourist and the workforce, as well as for defining quality and satisfaction, forms the constituent and most important part of the tourist's complete experience.

It is therefore justifiable to claim that the quality of the personnel determines the quality of the tourist product. In the first place personnel quality is determined by their formal education. The demands of Croatia's tourism and hospitality industry at this time are fulfilled through 74 secondary schools and 10 institutions of higher education. The most recent perceptions indicate that the schooling system itself cannot entirely prepare personnel to fulfill the expectations of their employers. This calls for an evenhanded participation of employers, educational institutions and the specific persons themselves.

In this sense the application of newer concepts related to knowledge management in enterprises gain even greater significance. In spite of the application and popularity of Knowledge Management (KM) in other industries, in the tourist and hospitality industry its general awareness and use are nonetheless sporadic. Its application is therefore a potential as a very effective method to improve business results.



## METHODS OF EDUCATION AND KNOWLEDGE INNOVATION IN CROATIA'S HOTEL INDUSTRY

In Croatia's hotel industry and current economic practice we can distinguish three methods of education and knowledge innovation, and they are: **formal, unofficial and informal education**.

**Formal education** is distinguished by features that appear in the regular (full-time) educational system and its institutions. Formal education is established by regulations and specified legal sources. For this form of education the authorized state ministry approves and regulates the programs and issues approvals to the institutions that will conduct them. Formal education is often criticized for the lethargy of educational institutions, working methods, demands of the economy, standardizations, network of educational institutions, democracy and harmonization of the educational system.

**Unofficial education** encompasses an extensive range of various knowledge innovation programs. It is oriented toward extracurricular demands, both slanted toward the business world, as well as toward adult individuals. The most frequent methods of education or training of personnel in economic praxis are: instructional courses, orientation, profile supplementation, job rotation and professional specialist training. Besides the indicated methods in the economic praxis of developed countries, especially in the hotel industry, the most frequently used methods of unofficial education are: lectures, panel discussions, consultations, seminars, courses, instructions, practical training, study tours, professional excursions, job initiation, internship, group studies, session conferences, presentations, meetings, mentorship, functional knowledge innovation and various combinations of the mentioned methods. The necessities for training and knowledge innovation are numerous, and the most outstanding are the ones related to the development of science and technology, methods of management of business processes and user demands (Vujić, 2008: 225).

**Informal education** is mostly practiced and expressed through guild associations and a variety of information exchanges between particular groups on topical issues, trends and events. The new levels of achievement in informal education are becoming accessible to almost all private citizens by means of the internet and other communication technologies. Communication technologies are within the reach of a large number of persons, they are far more available to the individual than teachers and managers – mentors. By contrast with books and teachers, information science technology enables countless varieties of freedom of deliberation and knowledge innovation, and an enhancement of spare time.

The requirements of Croatian tourism and hospitality industry at this time are carried out by 74 secondary schools and 10 institutions of higher learning. Formal education of a secondary-school level in the Republic of Croatia embraces:

1. **Program of four years duration** (hotel-tourism technician, tourism-hotel salesman and agrotourism technician)
2. **Program of three years duration** (cook, waiter, pastry chef)
3. **Program of two years duration** (assistant cook, assistant waiter, assistant pastry chef and chambermaid)

**Table 1**

Vocation / curriculum	Number of enrolled pupils
Hotel-tourism technician	5,800
Cook	4,034
Waiter	2,541
Pastry chef	407
Tourism-hotel salesman	2,136
Assistant waiter	5
Assistant cook	16
Assistant cook and pastry chef	201
Agrotourism technician	470
Total	15,610

Source: Ministry of science, education and sports of Republic of Croatia

From table 1, it is apparent that the curriculum in school year 2007/08 in secondary schools for tourism-oriented vocations enrolled a total of 15 610 pupils in all grades.



In the same academic year, the higher school institutions in Croatia enrolled a total of 2553 students for various programs in the field of tourism and the hospitality industry. The enrolled numbers per institutions of higher learning are shown in table 2.

**Table 2**  
**Enrolment quotas into institutions of higher education for tourism and hospitality industry programs, in the academic year 2007/2008**

University /2-year or 3-year college / 4-year college	Number of students
University in Zagreb	50
University in Dubrovnik	103
University in Split	200
University in Zadar	107
University in Rijeka	1136
Two-year/three-year college in Karlovac	112
Two-year/three-year college in Šibenik	217
Four-year business school in Višnja	24
Four-year business school in Utilus	40
Zagreb Management School	424
Total	2553

Source: Info processed by authors on basis of data from Student Services of mentioned institutions.

It is necessary to have all the types of formal, unofficial and informal education reticulated into the educational policy of the hotel enterprise. The rapid technological and other structural changes call for this. Therefore hotels must be concerned regarding the type of profiles that the system of schooling educates, and it is up to the hotels to provide the unofficial and informal methods of knowledge innovation for their personnel. This need for particular and specific knowledge emerges from a number of reasons:

1. **First** of all, the attendee of any level of the formal system of education is rarely prepared to immediately perform a concrete job in some enterprise.
2. **Second**, no matter how up-to-date a formal educational program may be, the number and rapidity of changes that are happening at the present time make the existing programs partially out-of-date.
3. **Third**, due to the constant changes, the job, in other words the functions of the job itself change, and for this reason knowledge and skills have to be innovated in the sense of lifelong learning and upgrading on the job, alongside work and through work, joining theory with concrete practice.

The task of all forms of educational activities is to permanently maintain the respective types of knowledge, skills and abilities among workers and managers. To be sure, the educational program should be oriented not only in relation to the existing technical, technological, and organizational levels, but also toward those in the making, in other words the ones that are beginning to be applied in the most highly developed countries of the world. Education for work, alongside of work and through work, as well as the principle of lifelong learning and enhancement are becoming more and more significant. Every business system (hotel) must have an innovation plan that ought to contain: an analysis of the educational requirements and competencies of employees, a training plan within the enterprise, an educational program and an assessment of the educational undertakings.

Empirical norms of time required for knowledge innovation and enhancement of personnel in present-day economy show the following average (Vujić, 2008:239) for:

- management boards 15 – 20 days per year, respectively 6 to 8 % of total working time,
- functional managers 10 – 15, days, respectively 4 to 6 % of total working time,
- other personnel 5 – 10 days, or 2 to 4 % of total working time.

In the economy of the Republic of Croatia the time pertinent to knowledge innovation of all managers and employees of ages between 25 to 64 years old, shows an average of 2 % of the working time, respectively five hours a year at most. In the hotel industry this percentage is 1.5 %. The average in 25 countries of the EU is 12%. This fact needs no comment, save to ask ourselves whether it is possible to enhance and develop our hotel industry and product quality without knowledge. Obviously not!



## KNOWLEDGE IN CROATIAN HOSPITALITY INDUSTRY

Service in tourism depends strongly on the ability of tourism companies to acquire, develop, accumulate and distribute knowledge assets.

What is “knowledge”? Nonaka and Takeuchi state that “knowledge is a justified personal belief that increases an individual’s capacity to take effective action” (Nonaka, Takeuchi in: Hsu, Shen, 2005:352). Without the human reasoning process, information can never become knowledge. Polany (Polany in: Bouncken, 2002) distinguishes *explicit* and *tacit* knowledge. Explicit knowledge refers to knowledge that is transmittable in formal, systematic language. It is open to codification in documents, books, databases, and reports. On the other hand, tacit knowledge is personal, context-specific knowledge that is not easily formalized and communicated.

Service implies and includes an array of complex work processes and direct contacts with guests. Taking into account the specific characteristics of the hotel industry, the knowledge it requires can be categorised as (Bouncken, 2002:30):

- task-specific knowledge (specific procedures, sequences, actions and strategies to fulfil a task)
- task-related knowledge (individual’s shared knowledge of related tasks; enables and contributes to team work)
- transactive memory (includes decentralized knowledge of the other organizational members’ cognitive models)
- guest-related knowledge (knowledge about guests’ needs, desires and expectations).

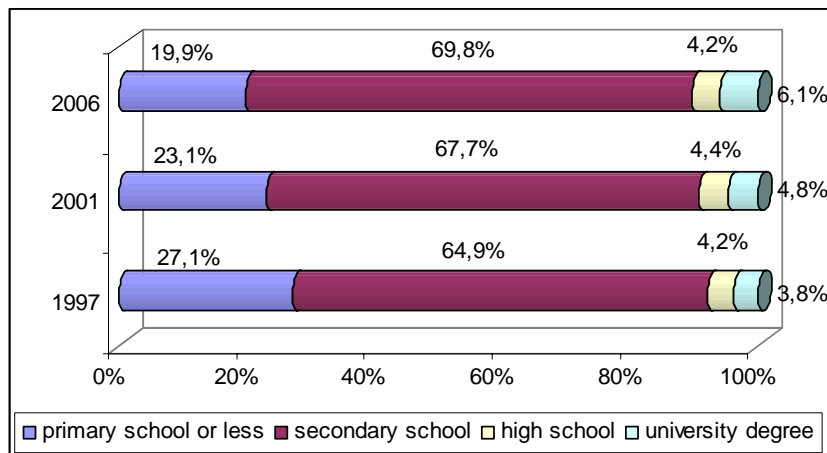
Knowledge can be presented, in a simplified way, by the following expression (Hsu, Shen, 2005:352):

$$Knowledge = initial \text{ 'stock' of knowledge} + reasoning + inflow \text{ of new stimuli}$$

That is – knowledge is shaped by one’s initial stock of knowledge, by what goes on inside one’s head (how one reasons), and by the inflow of new stimuli (such as new data and information).

*Initial stock of knowledge* and *reasoning* are parts of the equation which can be influenced through the procedure of selecting human resources. The success of this procedure, that is, the formal quality of the stock of knowledge referring also to the individual’s absorptive capacity to acquire new knowledge, can be measured through the (resulting) education level of employees. The hotel industry in general, together with the hotel industry of Croatia, is in average characterised by the fairly low education level of its employees. Namely, the majority of jobs in this industry do not require a higher educational degree, and lower salaries in the hotel industry relative to other branches additionally discourage highly educated individuals from seeking employment in this branch. In other words, at the very onset, pre-existing knowledge stock (which also defines the quality of the reasoning process) in the hotel industry is lower than the average at the national level. Even though there are significant positive changes within the educational structure of employees (the share of university degree employees has increased for 2.3 percentage points) the structure is still inadequate and lags behind national averages. The following figures confirm this statement.

**Figure 1**  
**Educational structure of employees (1997 – 2006) – Croatian hotels and restaurants**





**Table 3**  
**Educational structure of employees (2006)**

Educational degree	Structure of employees (%)		Deviation (percentage points)
	Average for Croatia	Hotel industry	
primary school or less	15.2	19.9	4.7
secondary school	60.4	69.8	9.4
high school	7.9	4.2	(3.7)
university degree	16.5	6.1	(10.4)

Source: Statistical Yearbook of Croatia 2007

*Inflow of new stimuli*, the third construct of the equation, is a process which unfolds within the company itself. Knowledge is a resource “trapped” in the head of the individual. Creating and sharing knowledge are intangible activities that cannot be supervised or forced upon people. They can happen only through the willingness of people to cooperate. “Inflow of new stimuli” focuses on the internal processes to increase knowledge, making it necessary for companies to create a culture that will encourage learning, and to provide the infrastructure and appropriate incentives to generating and disseminating (sharing) knowledge. This construct can, in part, be measured by the amount of investments made into educating employees, and it can be additionally explained through the attitudes of managers concerning the importance and necessity of monitoring indicators linked to promoting learning and development.

The survey conducted with the objective of creating a system of indicators on the theoretical framework of the Balanced Scorecard (BSC; Kaplan, Norton, 1998) has only confirmed the assumed deficiency of the hotel industry (Avelini Holjevac, Maškarin, 2005). The whole performance / indicators model was determined by the characteristics of the hotel industry and limitations related to the availability of certain indicators.

As expected, managers still attach the most importance to financial indicators, which they consider to have a weight of 31.2% in overall success. The next most important perspective is that of customers (28.2%), which is not surprising given that the hotel industry is a service industry and is therefore highly market-oriented and requires greater focus on customer-gearred activities. The third most important perspective is that of *learning and growth* (23.5%). The final perspective in terms of importance is that of internal business processes (17.1%).

**Figure 2**  
**System of indicators based on the attitudes of the managers surveyed**

Perspective	% importance (weight)
<i>Finance</i> (profit margin, RevPAR, ROI, ...)	31.2
<i>Customer</i> (Repeated Business Index (RBI), other operating revenue to total revenue, %; % guests complaints, ...)	28.2
<i>Internal business process</i> (labour costs, food and beverage cost, asset investment, ...)	17.1
<b><i>Learning and growth</i> (employee productivity, training hours per employee, pay, ...)</b>	<b>23.5</b>
TOTAL	100.0

Board members and managing directors (as opposed to sales and marketing managers and hotel managers) attach least importance to the *learning and growth perspective*, which is the cornerstone or backbone of the BSC structure. The goals set in the other three perspectives define what the company has to achieve in order to record excellent results; the goals set in the learning and growth perspective establish the infrastructure that enables the achievement of those ambitious goals in the other three perspectives.

Same research showed that the value of the “up-to-date knowledge” indicator measured as training hours per employee is on average 9.8 hours per employee per year. Another result of the survey points to an alarming fact: on average, investments into in-service education and specialisation are exceptionally low. In 3 of the 25 hotels surveyed not a single euro was allocated for this purpose, while the highest annual amount invested by one of the remaining hotels came to a total of EUR 7,426. For the sample surveyed, funds earmarked for in-service education and training per company amounted to EUR 2,269, making an average of only EUR 2.11 per permanent employee.





## GUIDELINES FOR KNOWLEDGE MANAGEMENT IN THE HOTEL INDUSTRY

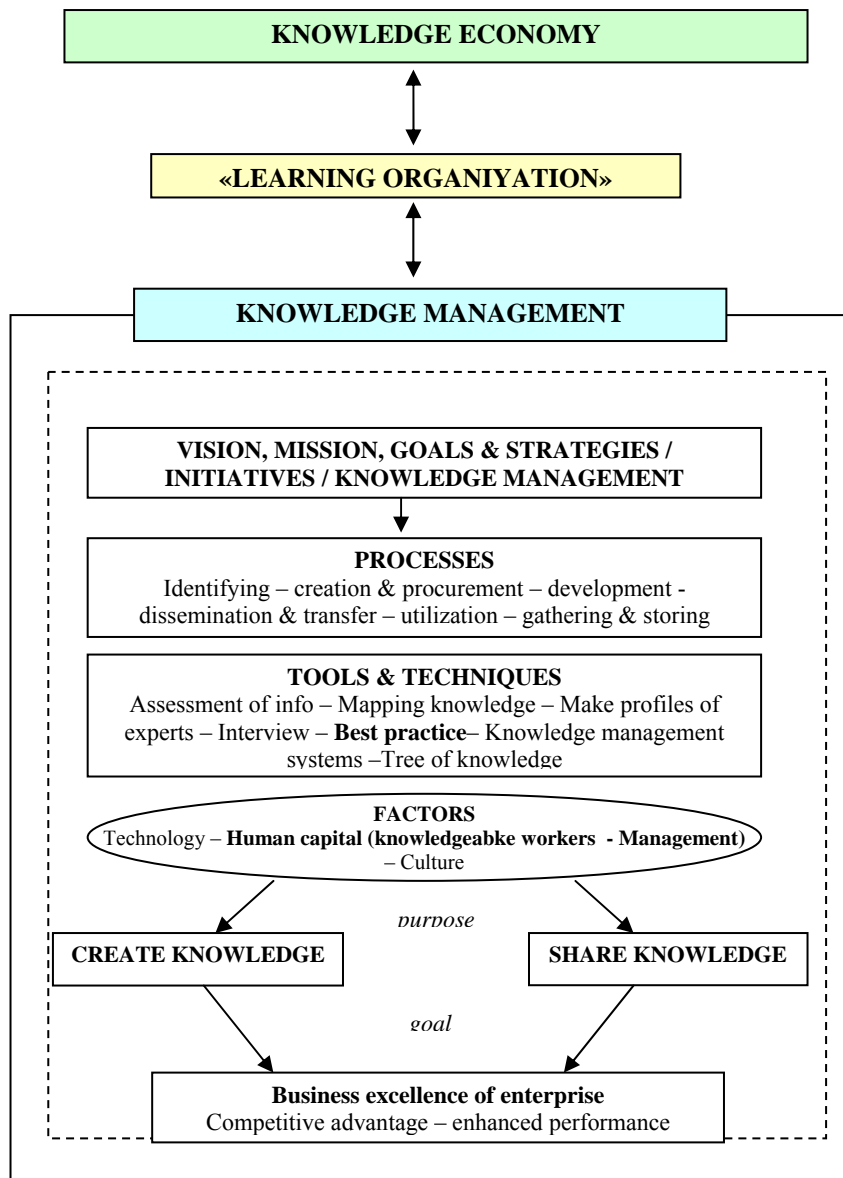
In this time of global changes, the hotel industry is obliged to undertake a whole series of measures in order to improve business performance of the enterprises that operate within the industry. A large share of these measures are related to human resources: enhancement of the industry's image with the aim of attracting high-quality employees, emphasizing the demand for professionalism that can be achieved through education and training of employees, a clearly defined system of rewarding employees, an effective system of employee selection dominated by the idea to bring a person to a workplace that is right for his or her knowledge and skills, etc. The success of business performance of the hotel industry as a whole largely depends on the knowledge, creativity and experience of the hotel personnel and the hotel enterprises.

The strategic or key knowledge has to be administered and that is why we use the expression **Knowledge Management**. Knowledge management is «*a process that helps organizations find, organize, disseminate and transmit important information and qualified knowledge for the activities of an enterprise, such as solving issues, strategic planning, decision-making, etc.*» (Hussain, 2004:1). In the knowledge management cycle it is necessary to pay attention to the processes, tools and techniques that support the effectiveness of knowledge management and factors that are of major importance for knowledge management. After all, the fundamental goal of implementation of knowledge management is to create business excellence, achieve competitive advantages on the market and improve business performance (Figure 3).

The introduction of the knowledge management system into hotel enterprises and hotels is no simple task or procedure. It demands additional efforts and engagement of additional resources (human resources, time, financial means...). The approach should be specific for each organization, every project, and in the process to bear in mind certain general guidelines of implementation. One of the major problems is the fact that hotel enterprises still see the introduction of knowledge management as an expenditure and not as an investment that will result in a higher quality of services and products, more satisfied guests, better competitiveness and performance as a whole.

Systematical knowledge management in the hotel industry is often neglected, in spite of the fact that due to the high rate of fluctuation there is a great loss of employee knowledge and experience. The high fluctuation rate is a characteristic consequence of the hotel industry, such as: seasonal employment, peak period loads, high degree of interaction between employees and guests, large number of unqualified employees, and so on. The need for a meaningful strategy of managing human resources and their knowledge imposes itself as an imperative. The implementation of a system of knowledge management in the hotel enterprise is a complex process. There is no single strategy that would be suitable for all enterprises. Concrete initiatives and programs of knowledge management in organizations are deliberated individually for each organization, taking into account the characteristics and needs of each organization. While doing so a whole series of decisions are made, such as: with whom will knowledge be shared, what will be shared, how will that knowledge be shared; which segment will strategy be focused on (e.g. on the system as a whole, improvement of professionalism of the organization based on its employees, etc.); in which manner will the strategy develop in the organization; will the strategy of knowledge management be relevant for only one part of the organization, one problem, or for the whole organization, and so on. Thus, when speaking about deliberation and implementation of the strategy of knowledge management, we are by and large talking about the **guidelines** of strategy development. They include: deliberation of the methodology of knowledge management, management of the main competencies, learning from «the best practices» and giving more authority to «knowledge workers», expansion of sources of information and knowledge, development of a system of assessment of benefits gained from the initiatives of knowledge management, knowledge management of clientele.

**Figure 3**  
**Basics of Knowledge Management**



Source: Interpretation of the authors

Knowledge management has been in use in other industries for years already, however in the hotel industry in general, hence in the hotel industry of Croatia, it has only partially and hardly ever been implemented. The research results conducted in the hotel enterprise of the Primorsko-Goranska county (...) point to the conclusion that knowledge management is mostly related to programs of employee education and implementation of technology. There is no defined strategy of knowledge management, whereas the projects that could be a component of such a strategy are predominantly unrecognizable as such. If we are talking about the evolution of development of knowledge management in the hotel enterprise, then it is just going through its first phase, the so-called *ad-hoc* management. In the hotel enterprises there is no particular person with the duty to deal with the management of human potentials. Declaratorily, as much as 94 % of the polled hotel enterprises consider that knowledge innovation of all employees is of distinct importance for rendering high-quality services. However, this viewpoint has no reflection on the actual education of personnel – only 44 % of hotel enterprises organize and conduct systematic education of employees. Education is mostly oriented in favor of the managerial staff, and is conducted through seminars, which are in more than 50% of the cases organized by the organizations themselves. The education programs are mostly directed at the development of communicational skills and managerial skills (over 65%) (Črnjar, 2006).



Implementation is possible to deliberate and conduct through the following steps:

1. identify the key, strategic knowledge in the organization
2. strategy development, start the goals related to knowledge management
3. design and launch certain initiatives, pilot projects
4. identify the processes by which knowledge will be shared and created
5. identify the necessary infrastructure, resources (especially human), expenses, identify barriers and helpers of successful implementation.

In the first step it is necessary to establish the object of management – identify the existing knowledge of employees and define the strategic, key knowledge that is indispensable for business performance. A problem that emerges is on occasion of identifying the employee's implicit (hidden) knowledge as well as the large segment of innate skills that employees in the hospitality industry usually have as a rule. In order to identify the mentioned knowledge, a whole string of techniques are applied, such as employee interviews, analysis of the data bases of clients, organizing meetings and socializing between various groups of hotel employees, etc.

Thereafter it is necessary to define the strategy of knowledge management. In most hotel enterprises the strategy focuses on improving transmission of knowledge that includes an exchange and utilization of knowledge between different interest groups in the hotel and outside the hotel. Transmission of knowledge will be achieved between the hotel personnel, the guest and the personnel, the management and the personnel, the boards of management of various hotels in the hotel chain, regional tourist offices and employees, regional tourist associations and the hotel management, and so on. Within the strategy it will be necessary to define the ways and instruments through which the transmitted knowledge will materialize, like for instance through libraries, data bases, books, seminars, conferences, etc. Through strategy emphasis will have to be placed on the processes of adopting new knowledge, development of the existing ones, accumulation of knowledge, dissemination of knowledge. The hotel enterprise introduces a system of knowledge management in order to achieve certain planned business goals. Goals can be connected to: achieving better communication with tourist offices, colleges, institutions, et al, in order to obtain the latest information on trends on the world market; enhancement in acquiring and using the knowledge about guests to improve the quality of services to them; introduction of new technologies, installation of an interior network or the so-called intranet, etc. The goals will determine the fields, sources and manners of acquiring, creating, spreading, discovering and gathering of knowledge of interest for the hotel enterprise and its personnel.

The introduction of the system of knowledge management into an organization is risky and often an expensive process which within a short term frequently does not give visible results. Therefore on occasion of designing a strategy it is often recommended to have the implementation of knowledge management start with the development of one or more pilot programs. Such an approach spends less resource and the projects are easier to manage. If such a project proves to be successful, it is possible to turn it into a plan and include it into the general strategy.

For realization of pilot projects and strategies it is necessary to identify processes that will contribute to the creation and sharing of knowledge within the hotel enterprise. The high employee fluctuation rate is a limitation and has an impact on the accumulation and dissemination of knowledge. Knowledge accumulation focuses on gathering and discovering knowledge in data bases or from persons. Employees must be given access to knowledge that renders advice and guidelines on the values, norms, specific projects and the hotel's servicing procedures. In the case of hotel chains, of utmost importance is to upkeep an inter-hotel exchange of knowledge between employees because it reduces the possibility of repetition of the same mistakes between the various chains. This could result in a development of new knowledge and ideas, and all of this for the purpose of enhancing the quality of services and competitiveness of hotels and hotel chains as a whole.

The transmission of knowledge both vertically and horizontally within the organization is of key importance for the enhancement of accumulation in discovering and disseminating knowledge. In the whole process of defining and implementing the strategy of knowledge management as well as of the specific initiatives and projects, it is among other things necessary to identify the required infrastructure and resources (especially human), implementation costs, and to pinpoint the barriers and the helpers for a successful implementation, and so on.

The hotel industry in Croatia is still far from an implementation of complete systems and strategies of knowledge management. An alarming fact is that the industry in which the knowledge, skills and competencies of personnel are of crucial importance for successful performance of its enterprises and quality of services,





dedicates very little attention to this issue. Of course, a discussion about this fact entails a whole cycle of factors that are the cause, starting from the structure of inadequately educated employees, the bad image of the industry, the seasonal character of business performance etc. Knowledge management emerges as one of the ways to solve a large part of the problems of hotel enterprises and to promote their business performance as a whole, to the satisfaction of all concerned.

### CONCLUSION

The sustainability of tourism and hotel services relies considerably on the continuous increase of knowledge of workers in tourism, and in particular in the hotel industry and in hotels. Although widely used in industry and especially in the service industry, quality and knowledge management in tourism and the hotel industry is developing at a generally slower rate, both in theory and in practise. Surely, one of the most important reasons for this situation is the attitude of management.

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