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ANALYSIS OF THE WEB-SITE QUALITY OF FIVE-STAR HOTELS IN THE REPUBLIC OF CROATIA

ANALIZA KVALITETE WEB STRANICA HOTELA S 5 ZVJEZDICA U REPUBLICI HRVATSKOJ

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Abstract

The marketing presentation of the overall offering via the Internet is becoming an increasingly important factor in the successful performance of any hotel as a business system. More and more, and to a growing extent, the representatives of hospitality and tourism demand are using the Internet, a modern mass media, to acquire information relevant to the offering. The paper analyses the quality of the Web sites of all Croatian hotels falling into the first category, which gives them the right to carry five stars. This type of sample was chosen with the aim of demonstrating how hotels in the highest category have developed their presentational Internet models. The paper's hypothesis is: The best hotels have the best-defined Web-page contents. The task of research is to determine whether the actual contents of these Web sites deviate in any way from the established guidelines of the Multi Medial Information Model, which the authors have taken as being an ideal model and which they consider is capable of creating the preconditions to achieving enhanced performance on the tourist market. In accordance with analysis results, the authors seek to suggest measures to improve the current condition of the Internet presentations of the best hotels and the individual segments of their overall product.

Sažetak

Marketinška prezentacija cjelokupne ponude putem interneta, postaje sve značajniji faktor uspješnog poslovanja svakog hotela kao poslovnog sustava. Predstavnici ugostiteljsko-turističke potražnje sve češće i u sve većoj mjeri, do relevatnih informacija o ponudi dolaze putem interneta kao suvremenog mas medija. U radu se analizira kvaliteta web Site-ova svih hotela u Republici Hrvatskoj koji su razvrstani u prvu kategoriju, što podrazumijeva njihovo pravo za isticanjem pet zvjezdica. Opredjeljenje za ovakav uzorak ima za cilj ukazati kako hoteli, koji su u najvišoj kategoriji razvijaju svoj prezentacijski model na internetu. Hipoteza u radu glasi: najbolji hoteli imaju najbolje definirane sadržaje na web stranicama. Istraživanje ima zadaću utvrditi eventualna odstupanja stvarnog sadržaja web site-ova s definiranim odrednicama Multimedijskog informacijskog modela (Multy Medial Information Model), kojeg su autori postavili kao idealan i za kojeg smatraju da može stvoriti pretpostavke većeg poslovnog uspjeha na turističkom tržištu. U skladu sa rezultatima analize, pokušat će se predložiti mjere za unapređenje postojećeg stanja internetske prezentacije najboljih hotela i pojedinih segmenata njihovog cjelovitog proizvoda.

1. INTRODUCTION

Internet-based presentation is becoming an increasingly important factor in the overall performance of a hotel, in both its aspect as a business system and as the most representative accommodation facility. However, too little attention is given to the presentational structure, contents and design of the Multimedia Information Model (MMIM) – the Web site – in Internet-based hotel

presentation. The result is the loss of exceptional opportunities of providing optimum information to a variety of business partners and individual Internet users. The paper addresses this issue by outlining and illustrating an «optimum-universal» organisational structure (model) for Internet-based hotel presentation, which systematically describes the characteristic features that define a hotel as a very important business entity.

The pattern of accommodation facilities in Croatia

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fails to meet current tourism demand, in particular, demand for hotels of the highest category, 5-star hotels. In this paper, research focuses on analysing the presentational contents of 5-star hotels and on detecting whether the best hotels are using the Internet in the best possible way to present their services and facilities to future consumers. The top hotels in Croatia were selected for the research sample. According to the decrees of the Ministry of Tourism, these hotels (23) meet the elements and criteria /**1**/ prescribed that positions them in the first category, the qualitative peak of Croatia's tourism offering, and allows them to carry 5 stars, the maximum.

The paper is based on two assumptions: that Croatia's tourism and hospitality industry lacks a comprehensive and unique structure in terms of organisation and content, and that most hotels in Croatia are presented on the Internet by poor-quality models (Web sites) which take very little advantage of the opportunities that the Internet as a medium provides. Also, the results of analysing the Web-page contents of Croatia's best hotels will serve as a measure of comparison in assessing their quality relative to the proposed model, which the authors consider may represent the platform or standard of a well-designed Internet-based presentation.The paper covers all 23 five-star hotels in Croatia, listed in the catalogue of registered hotels and verified by the Croatian Ministry of Tourism on 12 January 2010. These hotels are listed in Table 1.

Table 1: Five-star hotels in Croatia by capacity, county and Web address

	Name of hotel	City/Town	County	No. of rooms	No. of beds
1.	Monte Mulini http://www.montemulinihotel.com/hr/	Rovinj	Istarska	101	202
2.	Sol Coral https://www.istraturist.com/HR/hoteli/Sol_Coral_1355.itu	Umag	Istarska	250	370
3.	Ambasador http://www.liburnia.hr/hotel.do?ambasador&cfid=31680859&cftoken=82140925	Opatija	Primorsko-goranska	229	436
4.	Milenij http://www.milenijhoteli.hr/hotel_milenij.asp	Opatija	Primorsko-goranska	116	236
5.	W.A.Mozart http://www.hotel-mozart.hr/	Opatija	Primorsko-goranska	29	58
6.	Atrium www.hotel-atrium.hr	Split	Splitsko-dalmatinska	101	202
7.	Le Meridien Lav http://www.starwoodhotels.com/lemeridien/property/overview/index.html?propertyID=1956	Podstrana	Splitsko-dalmatinska	381	772
8.	Admiral http://www.hoteladmiral-slano.com/hr/	Slano	Dubrovačko-neretvanska	241	508
9.	Ariston http://www.importanneresort.com/index.php?dubrovnikhotel=ariston_hotel_dubrovnik&lodging=hr	Dubrovnik	Dubrovačko-neretvanska	206	412
10.	Bellevue http://www.hotel-bellevue.hr/Home.aspx?PageID=1&gohome=true	Dubrovnik	Dubrovačko-neretvanska	85	168
11.	Croatia http://www.hoteli-croatia.hr/	Cavtat	Dubrovačko-neretvanska	487	898
12.	Dubrovački vrtovi sunca http://www.kompas.hr/en/Croatia/Dalmatia-Dubrovnik-/Orasac/Hotel-Radisson-Blu-Resort-Spa-Dubrovnik-Riviera.aspx	Orašac	Dubrovačko-neretvanska	201	402
13.	Dubrovnik Palace http://www.hotel-dubrovnik-palace.com/	Dubrovnik	Dubrovačko-neretvanska	308	598
14.	Excelsior www.hotel-excelsior.hr	Dubrovnik	Dubrovačko-neretvanska	158	315
15.	Grand Villa Argentina http://www.gva.hr/default-hr.html	Dubrovnik	Dubrovačko-neretvanska	174	304
16.	Hilton Imperial Dubrovnik www.dubrovnik.hilton.com	Dubrovnik	Dubrovačko-neretvanska	147	294

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17.	Kazbek http://www.kazbekdubrovnik.com/	Dubrovnik	Dubrovačko- neretvanska	13	26
18.	More www.hotel-more.hr	Dubrovnik	Dubrovačko- neretvanska	36	67
19.	Rixos Libertas Dubrovnik http://www.rixos.com/	Dubrovnik	Dubrovačko- neretvanska	254	504
20.	The Pucić Palace http://www.thepucicpalace.com/	Dubrovnik	Dubrovačko- neretvanska	19	37
21.	Sheraton http://www.hotel-sheratonzagreb.com/	Zagreb	City of Zagreb	306	430
22.	The Regent Esplanade http://www.theregentzagreb.com/	Zagreb	City of Zagreb	209	416
23.	The Westin Zagreb www.westinzagreb.com	Zagreb	City of Zagreb	291	584
TOTAL				4,342	8,239
Total in Croatia		601 hotels		51,299	98,345
Share of 5*-star hotels (%)		3.8%		8.5%	8.4%

Source: www.mint.hr (21.01.2010)

2. MULTIMEDIA AND INTERNET-BASED HOTEL PRESENTATION

Out of the basic functions or areas of marketing (market research, product planning, sales, distribution, and promotion as a system of communicating with the market) /2/, special focus is centred on promotion as a system of measures and activities used to communicate to markets the features and consumption opportunities of goods and services. To perform successfully on the increasingly discerning and sophisticated tourism market, a hotel, being a market-oriented business system, must dedicate special attention to promotion as a way of communicating with the market and the hotel environment.

Today, the Internet represents a novel dimension in promotion systems on global markets. Out of the many ways of communicating (services) the Internet has to offer, the World Wide Web (a hypertext-based information system) is particularly interesting because it is easy to use, consists of pages of a multimedia nature, and has almost no constraints in terms of time and space.

The information content and general design a hotel uses to present itself on the Internet provide the entire world with an image of the hotel and clearly display what the hotel is about. Increasingly, this presentation is becoming the first contact between potential guests and a hotel and, accordingly, a hotel needs to leave a good first impression, if it is to keep the interest of potential guests. This moment, among others, is a vital factor of the overall performance of a hotel as a business entity.

The question often arises as to what a Web site actually means and what benefits can it provide to a business, in this case, a hotel. The most important effects that can be achieved are listed below:
1. A Web site can do all that printed material does.
2. A Web site contributes to increasing general knowledge about a hotel and the services it provides, and it raises awareness of what a hotel has to offer it clients.
3. A Web site acts as a 24-hour front desk, always ready for business.
4. A Web site makes it possible to publish on-line promotional catalogues in which items can be constantly changed (this implies amending, adding or deleting specific items) at no additional cost.
5. A Web site lets you know which information Web readers most frequently access and why.
6. A Web site makes the entire sales transaction possible without human intervention (it should be note that WWW-based selling is a much more complex matter than advertising, as it implies additional issues such as safety and security).

In today's global perception of business efficiency, multimedia has an exceptionally strong influence, and the features of multimedia are changing the definition of computing, communication in general, education, business and entertainment. Multimedia presents the most effective way of exchanging all possible kinds of information among people and businesses, and this fact is vital to promotion in the hotel industry and tourism. The natural ability of people to perceive different types of input in their environment, together with the abundance

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of diverse contents, puts people in a position to communicate through a variety of media, that is, through multimedia. The more variable, dynamic, rich in content, and perceptively appealing a multimedia system (MMIM) is, the more effective it is. The systematically monitored and designed integration of multimedia elements (text, images, sound, animation, video recordings, enhanced supervision-controllability) have made advertising remarkably effective, and in combination with the Internet as a medium and the WWW as a multimedia-oriented information system, this integration is opening up a new dimension within promotional activities in general. Where the effectiveness of the promotional activities of a hotel as a business system are concerned, the effect of advertising can be considered successful and effective if it manages to:

1. attract and keep the attention of guests,
2. create a desire to consume what is being advertised,
3. truthfully present a service and guarantee its quality,
4. prove that there is only a small number of dissatisfied service-consumers and that consumers get full value for each monetary unit they invest (value for money),
5. create the impression of a hotel that can be absolutely trusted,
6. make consuming a service as simple as possible (by providing detailed instructions on how to book or buy a service),
7. convince a customer to buy immediately (by offering prizes, easy payment terms, discounts, etc.),
8. create dependence for repeat consumption after the initial consumption (enhance guest loyalty).

In planning advertisements of a multimedia character using a medium such as the Internet, each individual multimedia element deserves to be separately considered with regard to the advantages it has in describing the specific entities, attributes and variables of a specific hotel. Accordingly, potential guests (at first, this means any Internet visitor to a hotel's Web site) must be provided with enough essential information about a hotel as a supply provider and about all services available to guests not only in a hotel, but in a destination, as well. By focusing on the importance and characteristics of multimedia elements, the following table illustrates why, and in which way, multimedia – or the integration of its components – are so vital to the Internet-based presentation of hotels.

Table 2: Multimedia elements and their application in Internet-based hotel presentation

Multimedia element	Importance for Internet-based hotel presentation
TEXT	Represents the fastest way of disseminating information. Enables major "blitz" information, and basic hotel data, to be described and easily forwarded. Its disadvantage is that if independent of, and if not integrated with, other elements it seems curt, unsubstantial and unattractive. Today, text alone is recognised as being unacceptable and inadequate in attracting guests and bringing them to a hotel.
IMAGE	A much more independent element, confirming the rule that "a picture speaks a thousand words". Together with text, image can create a whole that works independently although with certain shortcomings, that is, it may seem slightly incomplete.
FILM (VIDEO RECORDINGS)	Thanks to the multimedia nature of today's computers, short films and video recordings of hotel events, scenes from a hotel's restaurant, bar, etc. can easily be added to text and images. This enables any visitor to a hotel's Web site to experience a bit of the hotel's or destination's atmosphere.
ANIMATION	Sometimes animation may be more successful than a film in expressing an idea or message. To capture the interest of readers, animations should involve as much creativity, imagination and humour as possible, while also maintaining a sound business spirit.
SOUND	When an event or concert traditionally held in a hotel or a destination is described by text, images and video recordings, it would seem as if something is missing were there no sound. Only with the presence of this multimedia element, which enables music or speech to be heard, can such an event be fully depicted and experienced.
"ENHANCED SUPERVISION"	The best thing is that multimedia makes "hopping around" possible and ensures 100 percent control over, and selection of, contents that an individual is interested in. A computerised multimedia program enables us to skip the "tedious" parts and view the interesting ones as many times as we want. Also, there is no waiting for the tape to rewind, as a multimedia programs quickly jump to different areas.

Source: By the authors, after: Rathborne, A., Multimedija i CD-ROM-ovi za neznalice, Znak, Zagreb, 1995.

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In addition to the individually listed features, possibilities and advantages of multimedia elements, it should be noted that certain shortcomings are present today, which will need to be resolved in an appropriate and, for the wide masses, acceptable way if hotels and other businesses are to make the best use of Internet presentation on a more massive scale. In short, to further advance the use of multimedia in general, and of Internet-based hotel presentation in particular, and make it more effective, it is necessary to generally improve the transmission of multimedia information, increase the capacity of secondary computer memory, develop data-compression algorithms that are more efficient, increase the throughput of communication channels of computer networks, and enhance computer power and the speed of multimedia content (information) processors. These improvements will help to bring about multiple opportunities for presenting information to users, depending upon their knowledge, tastes, education, interests, etc /**3**/.

3. BASIC FEATURES OF MMIM AS AN IS FOR INTERNET- BASED HOTEL PRESENTATION

Information systems are dynamic and changeable systems that need to be continuously adjusted to change within a business organization, as well as to change within their environment. A variety of methods may be applied in the early stages of an IS's life cycle to achieve a variety of goals. The application of a specific method or modelling/ designing process results in a model. Modelling is the process of developing a model. A model is created by the process of abstraction in which are selected the relevant objects/elements that a MMIM, as an IS for Internet-based presentation, must contain. These objects are usually called entities. Relevant properties – attributes, which are further described by variables, etc. – are attached to each model entity. Their definition is essential, if they are to represent an information whole within the model's framework. A model is, therefore, a simplified expression of a system's relevant characteristics. It is a set of specific entities, their attributes and variables, together with a set of their interconnections, which a model brings together in a logical and functioning whole. Designing a multimedia IS for Internet-based hotel presentation is about finding a relevant or optimum model (MMIM) for presenting a hotel as a real tourist-receiving business system. With reference to the above, surveys of Web users have revealed some

important features of user behaviour that should be keep in mind when designing and creating MMIMs intended for WWW publication. Namely, the company Sun (http://www.sun.com/sun-on-net/uidesign) has conducted studies showing that:

1. people show very little patience with poorly designed and organized Web sites, which they have no intention of visiting again,
2. users generally do not want to go on to the lower levels of Web pages if these are not fully visible on the screen,
3. users do not want to read a lot of text, and they mostly tend to skip text and look for links they can activate to continue surfing the Web space.

These and other studies have helped to create a variety of recommendations on how Web pages should (or should not) look, the most important recommendations being /**4**/:

1. Content should be placed on each page.
2. Individual Web pages should contain 25-50 percent less information than corresponding paper pages, because reading from a screen is 25 percent slower than reading from paper.
3. Web pages should use larger letters than paper pages.

Obviously, as technology develops, the rules of designing various information models, including MMIMs for the Internet-based presentation of hotels, will need to be constantly supplemented and perfected in an ongoing process. However, regardless of what changes are made, it is essential to keep in mind that every future user for whom these systems are intended, that is, every potential guest, is the deciding factor throughout the designing process and the determinant factor in building the systems. This means that the principle of user-based Web-site design should be applied throughout the process of creating MMIMs as information systems for Internet-based hotel presentation /**5**/.

A problem emerges, however, because there is no specific «settled structural mode of obtaining information» that a user could learn and use to search hotel Web sites with ease. As Web sites, MMIMs differ not only in design (which is not a problem in itself, as a hotel's Web design should set it apart from other hotels), but also in model structure and, most importantly, in content. Not all hotels provide as much essential information as they should according to the principle of maximum communication quality or optimum communication. This makes it necessary to define and introduce standards, prescribing the mandatory model elements and attributes of specific presentation entities, to ensure easier access to information and shorten the time required to find information. Concerns regarding the development

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of a presentation MMIM arise due to the complexity in defining individual model entities, as well as their attributes, that is, the variables determining them. Another issue is linked with establishing individual multimedia elements within a model or its separate entities, elements used to describe variables as constants. The following section provides a detailed description of entities, their attributes and variables, combining multimedia elements in a variety of ways. Because the primary business of all hotels worldwide is very similar regardless of the parameters that define them, entities and their attributes as elements of MMIMs for Internet-based hotel presentation can be defined with great certainty. Table 3 provides a list of entities and attributes.

Table 3: **Contents of entities in the MMIM**

Index Entity	Home Page + Menu[1]
Entity 1.	General data/information
Entity 2.	Location
Entity 3.	Accommodation
Entity 4.	Food and beverages
Entity 5.	Recreation
Entity 6.	Other services
Entity 7.	Hotel staff
Entity 8.	Booking form
Entity 9.	Response/interaction form
Entity 10.	Interesting links in the destination and world

These entities define in detail the MMIM as a hotel Web site. This MMIM meets the needs of all kinds of hotels, regardless of their type, size, location, etc. However, because the model is represented by entities and their attributes, that is, variables that specify them, each hotel is free to link entities and attributes in any way it chooses in accordance with its specific features and depending upon its concrete needs. It should be noted that the model possesses the characteristics of a "multidimensional" model, while navigation is of a non-linear nature, resulting in the loss of the entities' hierarchical importance. Hence, the order or sequence of individual entities

is really not important (non-linearity also applies to the linkages of attributes, which, too, have all the characteristics of entities, apart from being seemingly on a "lower hierarchical level", to make understanding MMIMs easier).

The universal MMIM presented can be adjusted to hotels of all types and sizes, and it ensures that users can easily access all relevant contents and find the information they are looking for. As required, the model can easily be expanded or scaled down, depending upon the specific features of each hotel as an independent business entity and depending upon a hotel's business, political, social, cultural and other environments.

The entities presented above have served as a platform for analysing all Croatian hotels categorised as 5-star hotels, the research subject of this paper. The following chapter examines the results of research.

4. FINDINGS OF RESEARCH REGARDING THE WEB SITE QUALITY OF FIVE-STAR HOTELS IN CROATIA

The contributions of the domestic and foreign literature are modest where research involving such a narrowly specified segment relating to Internet-based hotel presentation is concerned. This paper has applied a combination of the normative method and the comparative method. The former, by depicting the MMIM as an optimum and universal presentation model, was used to define the «normative», that is, the optimum model, while the latter was used to compare the optimum model with models existing on the Internet and WWW (models currently presenting the hotels researched). By applying the method of analysis, the MMIMs of individual hotels were decomposed to entities, their attributes and variables, to obtain the clearest possible sequential illustration of individual «modules» of the model. Some entities were analysed in-depth (by attribute variables) as presented in the following section (Tables 4 to 14).

First, the entities were analysed only in terms of quantity, by recording the existence or non-existence of any data referring to each entity. Then, each entity was systematically analysed by attributes and variables. If the research were to focus solely on quantitative analysis, it would not be possible to make any valid conclusions. Hence, the following sections present the results of the qualitative analysis of all entities by their predefined attributes and variables within the MMIM.

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[1]In terms of content, this entity may be included within other entities and their variables to make it easier to navigate the entire model as a single Web site.

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Table 4: **Attributes and variables of INDEX ENTITY**

INDEX ENTITY (Home Page + Menu)	ATTRIBUTES										
	Menu / contents	Contact information						"Hotel charm" - distinctiveness			
Analysis of variables	List of all Entities, i.e. Menu with contents	Full name of hotel	Hotel address	Phone	Fax	Active e-mail	Contact person	Hotel logotype	Full name of hotel	Hotel category	Hotel photo
Variable exists	22	23	21	21	21	20	12	19	23	18	23
Variable incomplete	-	-	-	-	-	-	-	-	-	-	-
No variable	1	-	2	2	2	3	11	4	-	5	-

As can be concluded from Table 4, the purpose of the **Index Entity** is to provide Internet users, as potential guests, with information regarding a hotel's primary features. This information is provided by the attributes «Menu/Contents», «Contact Information» and «Hotel Charm – Distinctiveness», which describe the home page of a hotel's Web site. A qualitative analysis of the Index Entity variables shows that the situation is at a satisfactory level where the major, standard variables are concerned (a hotel's full name, images of the hotel, address, telephone numbers, telefax numbers, logotype, etc.), as these variables were identified in more than 87 percent of cases. The only objection can be made with regard to the lack of the names of contact persons (in 11 hotels, or 48 percent).

Table 5: **Attributes and variables of Entity 1 (GENERAL DATA/INFORMATION)**

ENTITY 1 GENERAL DATA/ INFORMATION	ATTRIBUTES											
	Hotel information						Information of hotel's immediate environment					
Analysis of variables	Year of construction	Number of employees	Number of rooms/ beds	Languages spoken by staff	Overview of facilities (general)	Other information	Official language used of destination	Official currency	Destination's time zone	Current and average seasonal temperatures	Social order	Other information
Variable exists	8	-	20	22	22	17	6	6	9	7	4	12
Variable incomplete	3	-	1	-	1	1	1	1	-	1	-	2
No variable	12	23	2	1	-	5	16	16	14	15	19	9

The attributes of **Entity 1** are «Hotel Information» and «Information on a Hotel's Immediate Environment», and they indicate that the purpose of this entity is to provide potential guests with information regarding the important, characteristic features determining a hotel and its immediate environment. A qualitative analysis of Entity 1, carried out by examining the variables of its attributes, shows that the current state of Entity 1 is at a much lower level than that of Index Entity. Results show that only the variables «number of rooms/beds», «languages spoken by staff» and «overview of hotel services and facilities» are satisfactory. The state of other variables is unsatisfactory, particularly with regard to the attribute «Information on a Hotel's Immediate Environment», which lack information about the official language of the destination, official currency, weather and state system, information that might be very important for guests to know before making a decision to visit a specific destination.

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Table 6: **Attributes and variables of Entity 2 (LOCATION)**

ENTITY 2 LOCATION	ATTRIBUTES													
	Macro location				Micro location				How to reach us					
Analysis of variables	Textual description of macro location	Image of position of continents relative to the globe	Image of position of country within continent	Image of position of city relative to country	Textual description of micro location	Image of location of hotel in the city	Image of hotel and hotel surroundings	Exact address of hotel	Micro description of how to reach hotel	Link to timetable of vessel service	Link to railway timetable	Link to bus timetable	Link to airport timetables	Other information
Variable exists	13	3	6	7	17	20	20	20	16	4	3	5	6	6
Variable incomplete	-	-	-	-	2	-	2	-	1	-	-	-	-	-
No variable	10	20	17	16	4	3	1	3	6	19	20	18	17	17

Concerning **Entity 2**, analysis shows that only the attribute «Micro Location» is satisfactorily covered, while the attributes «Macro Location» and «How To Reach Us» are very poorly covered. The result is that any potential guest looking up a hotel on its Web site via the Internet will learn very little or almost nothing about the hotel's location at either the micro or macro level.

Table 7: **Attributes and variables of Entity 3 (ACCOMMODATION)**

ENTITY 3 ACCOM-MODATION	ATTRIBUTES													
	Front desk			Rooms					Holiday flats					
Analysis of variables	Textual description of front desk	Image of front desk	Other information	Description of room amenities	Image of rooms	Image of view from room window	Image of bathroom	Room rates	Description of amenities in flat	Image of flat	Image of view from flat	Image of bathroom in flat	Image of kitchen in flat	Holiday flat rates
Variable exists	-	5	6	22	23	11	11	16	17	20	10	11	5	10
Variable incomplete	-	2	2	-	-	1	-	-	-	-	1	-	-	-
No variable	23	16	15	1	-	11	12	7	6	3	12	12	18	13

Entity 3 is one of the most dominating entities. This entity provides information on the accommodation-related features of a hotel to any Internet user wanting to learn about a hotel by visiting its Web site. In analysing Entity 3, the variables of all three attributes describing the features of hotel accommodation are examined. Analysis shows that the attribute «Rooms» is covered to a relatively satisfactory extent, while the worst situation is concerning the attribute «Front Desk»". As can be seen in Table 7, not one hotel has provided their Web site with a written description of their Front Desk, and most hotel Web sites do not display a photograph of the Front Desk. When examining the attribute «Holiday Flats», we see that as many as 18 hotels do not have a photograph of a flat's kitchen, despite the fact that the kitchen is a primary element in the offering of a flat. Most hotels (12 out of 23) display neither photos of views from flats nor photos of a flat's bathroom.

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Table 8: **Attributes and variables of Entity 4 (HOTEL FOOD AND BEVERAGES)**

ENTITY 4 FOOD AND BEVERAGES	ATTRIBUTES								
	Areas for consuming food and beverages					Food		Beverages	
Analysis of variables	Description of all areas	Individual description of each area	Position of each area within hotel	Image of each area	Opening hours of each area	List of all dishes offered	Bill of Fare (of all dishes offered)	List of all beverages offered	Bill of Fare (of all beverages offered)
Variable exists	18	11	6	16	8	4	3	2	2
Variable incomplete	3	6	-	1	2	2	-	-	-
No variable	2	6	17	6	13	17	20	21	21

The role of the attributes and their variables in **Entity 4** is to provide the best possible description of a hotel's gastronomic offering through an appealing and truthful presentation. The intention is to make potential guests desire to consume this offering. Special emphasis should be placed on food and beverages characteristic of the region in which a hotel is located. Also required are descriptions of the premises in which food and drinks can be consumed. Similar to the case of Entity 3, it can be concluded that the presentation of food and beverages has as unsatisfactory effect, considering the importance and role of the attributes analysed in Entity 4. Table 8 shows that as many as 17 hotels (or 74 percent) do not provide a list of all dishes offered, 20 hotels (87 percent) do not provide a Bill of Fare, and 21 hotels (91 percent) do not provide a list of beverages or price list for beverages offered.

Table 9: **Attributes and variables of Entity 5 (RECREATION)**

ENTITY 5 RECREATION Analysis of variables	ATTRIBUTES																			
	Sport							Entertainment						Medicinal recreation						
	List and description of all sports areas	Image of each sports area	Terms of use	Possibility and need of booking	Requests for equipment	Prices of services	Opening hours	List and description of all entertainment areas	Image of each entertainment area	Terms of sue	Possibility and necessity of booking	Prices of services	Opening hours	List and description of all areas for med. Rec.	List of medicinal services provided	Description of each medicinal service	Terms of use	Possibility and necessity of booking	Prices of services	Opening hours
Variable exists	9	7	2	1	23	3	3	9	8	5	2	1	4	6	6	6	5	4	6	5
Variable incomplete	2	-	-	-	-	-	-	2	1	-	-	-	-	1	1	-	-	-	-	-
No variable	12	16	21	22	-	20	20	12	14	18	21	22	19	16	16	17	18	19	17	18

In **Entity 5**, the situation is unsatisfactory with regard to most of the variables within the individual attributes. Analysis of the attribute «Sports» indicates a pronounced lack of information concerning the conditions for using and booking sports facilities, and service prices. Analysis of the attribute «Entertainment» shows the situation as being the most critical in the variables «Booking» and «Prices». On most hotel Web sites, the attribute «Medicinal Recreation» has no variables informing potential users about premises, services, conditions, prices, working hours and booking of such services. The hotels have failed to focus attention on advertising the opportunities for sports activities, entertainment and medicinal recreation – either within the hotel or in its immediate environment – that are available to guests during their stay in a hotel. The best hotels in Croatia have completely neglected and omitted this part of the offering in the Internet-based presentation of their overall offering.

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Table 10: **Attributes and variables of Entity 6 (OTHER SERVICES)**

ENTITY 6	ATTRIBUTES														
	Hair stylist (A1)						A2	A3	A4	A5	A6	A7	A8	A9	An
OTHER SERVICES	Description of services	Image of hair stylist shop	Service providers	Prices of services	Opening hours	Terms of use	Same as A1	Same as A1	Same as A1	Same as A1	Same as A1	Same as A1	Same as A1	Same as A1	Same as A1
Analysis of variables															
Variable exists	2	2	-	1	1	-	3	4	3	-	2	1	-	2	2
Variable incomplete	-	-	-	-	-	-	1	1	1	1	1	1	2	2	3
No variable	21	21	23	22	22	23	19	18	19	22	20	21	21	19	18

Legend: A1=hair stylist; A2=pedicurist; A3=massage/sauna/bases; A4=ironing service; A5=sewing service;
A6=laundry service; A7=baby sitter service; A8=pet sitting service; A9=parking/garage/car wash; A10=other services

The role of **Entity 6**, its attributes and variables is to provide information to potential guests and Internet users about all «Other Services» available to them within a hotel and in its immediate environment. In this entity, all attributes have identical variables. Hence, the variables for each attribute will be analysed in the same way. Due to lack of space, results in Table 10 are shown in detail, by variable, only for the entity's first attribute (service), that is, «Hair Stylist». Analysis of the variable of Attribute 1 (Hair Stylist Services), together with the services defined by the other attributes, shows unsatisfactory results. Namely, the services a hotel provides may be the deciding factor based on which a potential client will decide whether to stay at a specific hotel. It seems, however, that this fact is of no importance to Croatia's best hotels. This is clear from data in Table 10 that present a qualitative, individual and summary review of this entity's variables and attributes. Viewed summarily, the results are defeating: in from 18 to 23 hotels (from 78 to 100 percent), the variables describing the features of a hotel in this entity do not exist. This situation is absolutely unacceptable.

Table 11: **Attributes and variables of Entity 7 (HOTEL STAFF)**

ENTITY 7	ATTRIBUTE			
HOTEL STAFF	HOTEL STAFF (from 1 to "n")			
Analysis of variables	List of hotel employees	Photo of each employee	Job description of each employee	Information for official contact
Variable exists	1	-	1	8
Variable incomplete	2	-	1	2
No variable	20	23	21	13

The intention of **Entity 7** is to enable potential guests to learn about a hotel's staff over the Internet, thus creating a sense of familiarity. The results of research pertaining to Entity 7 once gain lead to the conclusion that almost none of Croatia's best hotels provide such information content on their Web sites. The variables that their Web sites do possess in but a few percentages (these variables, for the most part, being incompletely or poorly presented) are, however, negligible considering the mass of negativity within this entity.

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Table 12: **Attributes and variables of Entity 8 (BOOKING FORM)**

ENTITY 8 BOOKING FORM	ATTRIBUTES									
	Booking form				Instructions for using form		On-line booking			
Analysis of variables	Possibility of selecting among hotel	Possibility of defining length of stay	Possibility of entering personal data	Possibility of making special requests	Instructions on how to use booking form and about booking, in general	Name of on-line booking service (Web address opening a new window)	Real types of rooms provided via on-line booking	Price policy with regard to booking date	Possibility of selecting among hotel	Method of payment
Variable exists	17	19	16	13	14	14	19	18	19	18
Variable incomplete	-	1	-	1	-	1	-	1	1	-
No variable	6	3	7	9	9	8	4	4	3	5

By creating **Entity 8**, a hotel provides potential guests with the opportunity of booking hotel services in a very simple way while visiting a hotel's Web site. A summary and individual qualitative analysis of this entity's attributes and variables concerning a hotel's interactive booking form leads to the conclusion that most hotels allow guests to choose hotel arrangements (17 hotels), define the period of stay (19 hotels), enter their personal data (16 hotels) and make special requests (13 hotels). Analysis of the attribute «Booking Form Instructions» shows slightly poorer results, because as many as nine hotels (or 26 percent) do not provide such instructions on their Web sites, while eight hotels do not state the name of their on-line booking service. Analysis of the attribute «On-line Booking» gives satisfactory results, as the majority of hotels provide this option.

Table 13: **Attributes and variables of Entity 9 (RESPONSE/INTERACTION FORM)**

ENTITY 9 RESPONSE / INTERACTION	ATTRIBUTES			
	Response/interaction form			Usage instructions
Analysis of variables	Possibility of choosing type of response	Possibility of sending text of chosen response	Possibility of sender entering personal data	Instructions for using Response Form
Variable exists	6	6	8	4
Variable incomplete	1	1	2	1
No variable	16	16	13	18

The situation concerning Entity 9 is lacking in many respects. The variables «Possibility of Choosing Type of Response» and «Possibility of Sending Text of Chosen Response» do not exist in as many as 16 hotels (or 69.5 percent). Analysis of the attribute «Instructions for Using Forms» also provides unsatisfactory results, because 18 hotels (or 78 percent) have failed to provide such instructions. A summary of the results of research pertaining to response forms that should be a part of any «seriously» designed Web site indicates that Croatian five-star hotels have substantially failed in this segment of their Internet-based presentation.

The role of **Entity 10**, as an MMIM module, is to provide quality links leading potential guests to interesting information. Links to specific business partners and other actors in a destination (tourist boards, travel agencies, transport providers at the micro and macro level, etc.) are listed and described. Data in Table 14 shows that this variable exists in 48 percent of cases (11 hotels) with links to tourist boards or organisations, in only 35 percent of cases (eight hotels) with links to hotels in the destination, and in 22 percent of cases (five hotels) with links to restaurants and transport providers (air, bus, train or ship services) in a destination. The variable «Links to Entertainment in the Destination» fares the best, with 12 hotels providing such links.

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Table 14: **Attributes and variables of Entity 10 (LINKS)**

ENTITY 10 LINKS	ATTRIBUTES					
	Tourist boards/ travel agencies	Hotels in the destination	Restaurants in the destination	Entertainme nt in the destination	Transport providers (air, bus, train, vessel)	Other
Analysis of variables	Brief description of contents to which the links lead	Brief description of contents to which the links lead	Brief description of contents to which the links lead	Brief description of contents to which the links lead	Brief description of contents to which the links lead	Brief description of contents to which the links lead
Variable exists	11	8	5	12	5	6
Variable incomplete	1	1	-	-	2	1
No variable	11	14	18	11	16	16

5. CONCLUSION

As a business entity and main provider of the tourism receiving and accommodation offering, every hotel should strive to take the best advantage possible of world trends and conveniences provided by modern technologies in telecommunication. This paper seeks to demonstrate the way in which five-star hotels make use of the advantages that new technologies provide alongside the Internet and to point out what these highest-ranking hotels need to do to keep abreast of contemporary trends. An analysis of a sample of Croatia's 23 top hotels reveals the following findings:

1. The paper presents a multimedia information model, which hotels should apply to participate in world communication and in information exchange via the Internet, thus helping to raise their overall performance to a significantly higher level.
2. A qualitative (individual and summary) analysis of entities has established that the best hotels are still very far from taking advantage of all the opportunities that the Internet makes available through modern computer and telecommunication technologies.
3. The hotels have created their MMIMs – Web sites for hotel presentation – without taking a systematic approach and without the assistance of experts in the field of tourism, psychology and information science.
4. Presentational models of exceptionally poor quality are the result of such an approach. For the best hotels in Croatia, an eminent tourism receiving country of longstanding

tradition in tourism, this is both disturbing and unacceptable.
5. Viewed globally, the fact that very few of the entities are present to any satisfactory extent indicates the need to bring about wide-reaching change and to implement a systematic approach in addressing this issue. It is imperative that the situation regarding Internet-based hotel presentation be changed for the better in the shortest time possible.

If the best hotels in Croatia are looking to perform successfully on the increasingly discerning world tourist market in the long run, they will need to commit to systematically resolving the problem of their Internet-based presentation.

The authors consider that preconditions for further research on a sample including all 600 hotels in Croatia have been created as a result of analysing the Internet-based presentations of the country's 23 top hotels. Such a comprehensive analysis, based on the conclusions stated above, would help to define a standard MMIM and put forward suggestions for hoteliers on how to improve their offering. Also, the research would create a platform for differentiating the research subject according to various criteria characterising hotel facilities (size, market position according to ownership – hotels as part of international or national hotel chains, and other criteria).

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