

# THE ROLE OF DIGITAL MARKETING IN UNIVERSITY SPORT: AN OVERVIEW STUDY OF HIGHER EDUCATION INSTITUTION IN CROATIA

---

**Biloš, Antun; Galić, Tvrtko**

*Source / Izvornik:* **Ekonomski vjesnik : Review of Contemporary Entrepreneurship, Business, and Economic Issues, 2016, 29, 453 - 465**

**Journal article, Published version**

**Rad u časopisu, Objavljena verzija rada (izdavačev PDF)**

*Permanent link / Trajna poveznica:* <https://um.nsk.hr/um:nbn:hr:145:175717>

*Rights / Prava:* [Attribution-NonCommercial-NoDerivatives 4.0 International/Imenovanje-Nekomercijalno-Bez prerada 4.0 međunarodna](#)

*Download date / Datum preuzimanja:* **2025-02-27**



*Repository / Repozitorij:*

[EFOS REPOSITORY - Repository of the Faculty of Economics in Osijek](#)



**Antun Biloš**

Josip Juraj Strossmayer  
University of Osijek  
Faculty of Economics in Osijek  
Trg Ljudevita Gaja 7,  
31000 Osijek, Croatia  
abilos@efos.hr  
Phone: +38531224488

**Tvrtko Galić**

Vipnet d.o.o. Zagreb  
Ul. Hrvatske Republike 43/II,  
31000 Osijek, Croatia  
tvrtko.galic@gmail.com  
Phone: +38514692989

**UDK: 339.138:796+378](497.5)**  
**Preliminary communication**

Received: July 15, 2016

Accepted for publishing: October 6, 2016

# THE ROLE OF DIGITAL MARKETING IN UNIVERSITY SPORT: AN OVERVIEW STUDY OF HIGHER EDUCATION INSTITUTION IN CROATIA

## ABSTRACT

The importance of student sport activities within the structure of academic development is arguably significant. However, university sport is one of the elements of academic development that is not represented adequately as a research subject on a global scale in both scientific and professional environments alike. Along with the global growth of university level education based on the rise of student mobility across countries and continents, and the strong global ICT development, a new perspective on university sport can be observed and several implications analyzed. The focus of this paper is set on the communication capabilities of the internet as a digital medium that can be used as a means of fostering student sport and related activities while taking into account the characteristics and behavioral components of the student population. The primary research was conducted on a sample of students of Josip Juraj Strossmayer University of Osijek. The research provided several interesting implications on student behavior regarding the general information collection and consumption, as well as information about student sport activities on the university level. The paper provides a brief sport marketing literature review and suggests several important guidelines for further research. The assumption that the internet is a key element in the marketing potential of student sport was confirmed. Comparative analysis of digital marketing activities of benchmark universities has been conducted in order to determine suggestions on creating and/or improving digital marketing tools such as web site, social network presence and mobile application for reaching marketing potential of university sport.

**Keywords:** Digital marketing, sports marketing, university sports, social media in sports, sports mobile apps

## 1. Introduction

Sport as a component of human life has been a very important part of human history since the first civilizations and it gradually transformed human in-born characteristics to compete and engage in physical activity from struggle for the basic needs into competition for fun, even into an industry that generates significant financial income. From the above

mentioned, it is clear that sports have changed and developed through centuries in different directions. For this very reason, sport is closely connected to social and sociological traditions of each segment of human population. With its development, sport has become an industry in many segments and that is the reason why sports employees have to ensure a fair competition for all participants and keep sport competitions interesting at the same time. Sport

offers a massive potential for revenue on a global scale for all parties involved (Ratten, Ratten, 2011: 614-615) and has become commercialized and internationalized as a result of various business and marketing ventures created within sport (Bauer, Sauer, Schmitt, 2005: 496-497). Marketing is used as a very powerful tool by sports managers when facing challenges such as leading sports organizations and conducting sports events. The connection between sports and marketing can be seen in the following: sport can be treated as a specific service with intangible qualities based on emotions, but without a marketing concept and approach, it can barely give desirable results. Clearly, the importance of maintaining and empowering customer relationships needs to be stressed by sport organizations (Bee, Kahle, 2006: 109-110).

The internet evolution and massive appearance of social networks have created a parallel virtual world that does not leave much space for sport activities and at the same time, it offers great possibilities of using internet tools for advanced communication with a subject of sport activity. It is interesting to point out that the means of communication to inform about a certain sport topic or event used 20 years ago is hardly comparable to modern methods and means of communication. Web-based portals, internet applications, social networks and digital TV are some of the internet-based tools whose development was hard to predict in the past, but nowadays, life without them seems almost unimaginable. Precisely such circumstances make the marketing use in internet surroundings very significant. The sport industry has adopted these changes and innovations while using digital technologies and the connected media frequently (Mahan, 2011: 255-257; Evans, Smith, 2004: 27-28). However, Hutchins and Rowe (2010: 696) conclude that media sport markets are "characterized by complex interaction, tense competition, and awkward overlaps between broadcast media and networked digital communications." Thinking about marketing as a process of fulfilling two-sided needs, we think about the one that offers something on one side and the other that consumes it for a certain price on the other side. Likewise, in sports we talk about a service that is organized by one subject on one side, and on the other there is the other subject, most likely a sympathizer or a customer, who consumes it by fulfilling his emotionally connected needs. Implementation of online communities allows consumers and sports fans to have a virtual focal point where

they can connect with others, express opinions and feel a sense of belonging (Ioakimidis, 2010: 2-3; Hutchins, Rowe, 2010: 711-712). Furthermore, online communities support not only connecting with other consumers but with athletes, sport organizations and sponsors as well (Mahan, 2011: 255). Interacting with other fans or the sport organization itself in an online environment can increase a fan's level of identification with the given sport organization (Eagleman, 2013: 489).

This paper is focused on the appliance of electronic marketing within the student population at Josip Juraj Strossmayer University of Osijek. Student sport covers a range from recreational sports to obligatory physical education classes. Taking the existing research into consideration, according to which 63% of citizens older than 15 in Croatia use the internet regularly<sup>1</sup>, and data that the internet is used by 96% of young people between 15 and 24 years of age<sup>2</sup>, we can assume that the internet is a crucial element of informing and communication within this population. Sports activities among student population range from recreational sports to competitions at the international level, when students represent the university as well as their country. Exactly that wide range of activities indicates the quality approach to information used by the numerous student population of the Josip Juraj Strossmayer University of Osijek, about student sport activities issues and their physical development. With the purpose of improving the quality of student sport due to different university components and evolution of sports activities, program planning has to be in agreement with students, for which the internet is without a doubt the best channel.

Research goals of this paper are focused on student recognition and knowledge of sports activities and their usage of the internet as the source of information. Research goals include:

- Finding out how the targeted population informs itself about sports events at the Josip Juraj Strossmayer University of Osijek and to what extent is this form of informing different from informing themselves about general activities for students
- Determine the degree of obtaining information about sports events using offline and online media
- Determine to what extent do the Josip Juraj Strossmayer University of Osijek students

think they know about the student sports activities at the university and in their faculties and departments

- Determine to what extent are the Josip Juraj Strossmayer University of Osijek students interested in student sports activities and which factors are important to make the student sport interesting
- To find out which sports are attractive to Josip Juraj Strossmayer University of Osijek students
- Determine the current level of knowing about the form of informing through the internet media about sport activities at the Josip Juraj Strossmayer University of Osijek
- Determine the knowledge of visual elements of university sports union among its students

## 2. The Theoretical Framework

### 2.1 Sport in academic educational system

Academic sport, meaning the sport intended for students, in its greater part takes place in the non-profitable sphere, because its primary goal is the satisfaction of students' health condition. Certain studies indicate that participating in student sports activities is closely connected to their later life style, meaning the freedom of choice to participate in certain sports activities at university is connected to the inner motivation for competition in all fields, which is very important in that development stage in life (Kimball, Freysinger, 2010: 118-121). Academic sport professionals cope with various challenges when trying to provide motivating and enjoyable experiences for students in physical education (Spittle, Byrne, 2009: 253-254). In the academic system of the Republic of Croatia, this mostly refers to physical education class as an obligatory course in the initial years of university. Moreover, the structure and performance are very different at different universities; there are differences at the Josip Juraj Strossmayer University of Osijek itself in conducting this class in different faculties. It all depends on infrastructural conditions, i.e. sports facilities, which are insufficient, considering the number of students at the university.

If we analyze the student sport in more detail, we can define the differences, of which the most important component is the competitive spirit at the local, university, national, European or world level.

The existence of bodies and unions such as EUSA, European university sport association<sup>3</sup> or FISU, International University sport federation<sup>4</sup>, which had its beginnings in the 1950s and whose concern is to take care of academic sport at the international level, surely indicates enough about the level of competition reached by the competitive component of university sport. We can point out the United States university sport, which is the leader in many sports-related issues compared to European universities. The fact that the university itself by its scholarships for athletes attracts many students outside the USA indicates enough how much they invest in university sport and how much attention they pay to this component within the academic community<sup>5</sup>.

If the academic sport is seen through the general division of sports activities, then sport itself can be divided into three main categories, which are physical education classes, recreation and competitive sport. The very last category of the academic sport has the biggest marketing potential, because competitive academic sport by its organization structure is quite similar to professional sport. Universities from the USA exhibit the major difference in this segment when compared to other universities, which can be seen in the number of seminars intended for sport management and sport marketing at the universities in the USA<sup>6</sup>. The fact is that the competition in academic sport in the USA, due to its popularity and the source of income to universities, partially justifies the attention it receives<sup>7</sup>.

### 2.2 E-Marketing

Information technologies have thoroughly changed the nature of marketing. The changes in the informational technology are at the same time threatening and encouraging for the capability of a company to develop a long-term relationship with its customer, by supporting the marketing approach. Following the stated observation, it is necessary to point out several definitions and explanations of the term electronic marketing. Panian (2000: 87) indicates that electronic marketing is the way for "effectuating marketing activities of the company by intensive use of information and telecommunication technology". Chaffey, Ellis-Chadwick, Mayer and Johnson (2009: 8-10) consider that the usage of e-marketing and other digital technologies for accomplishment of marketing goals is, also, a support to modern marketing concept. Ružić, Biloš and Turkalj (2014: 3) suggest that this issue can be observed in different aspects. In a narrow sense, e-marketing can be viewed as a process of making offers, determina-

tion of prices, distribution and promotion, with the goal of profitable satisfaction of customers' needs in the digital market. On the other hand, when we talk about online activities only as supplements of standard offline marketing activities for traditional services or products, then the focus is on the wider sense of e-marketing term.

The marketing scope that is used in traditional interpretation, and which is considered the basis for the marketing theory, included the combining of four elements – product, price, promotion and distribution (Meler, 2005: 177-310). These elements influence each other and the optimization of the relation among them is key to every entity operating in any market. The definition of service marketing, as well as digital marketing, is expanding from the original four to seven elements, adding three new ones: process, physical evidence and people. The classical 4P framework gained its popularity while the product was the object of the exchange process and thus in the center of the marketing research, whereas service as the object of exchange started to be studied much later, so new elements appeared<sup>8</sup>. In most cases and interpretations of the marketing scope in electronic marketing, classical 4P is still used, and 7P is used in the way it adapts to market conditions in which the business entity exists and in which the exchange is conducted.

E-marketing brings new relations into the marketing mix by introducing new definitions that describe new factors, which have not been stated so far. Mootee defines a completely new e-marketing mix considering new 4P: participation, personalization, predictive modeling and peer-to-peer communities.<sup>9</sup> Participation refers to an intensive customer participation in the business entity's processes in a way where the customer redefines a production process and creates a product according to his/her wish. Personalization refers to everyday presence of economic entities in the market with the goal to collect valid information about customers' needs in order to create the product with a real use for customers. Information gathering after that requires also an extensive analysis with a goal to send a message to the customer about products or services. The message has to be precise, prompt and appropriate to the customer so that the customer can perceive it. In order to send the message in this way, it is necessary to use particularly designed content and communicational channels adjusted to the customer. It is not enough to gather and analyze data, it is necessary to have great knowledge about certain areas and market besides the knowledge about the tool application. This includes the collection of informa-

tion about every event that affects the customer. Prediction modeling or predictive modeling implies very determined models that determine the market, based on the gathered and analyzed data, to the micro level, i.e. to the level of each and every individual<sup>10</sup>. This opens up the possibility of personalized approach and communication according to customers' needs and habits. In this way, the possibility of satisfying customers' needs and desires is increased, which is the basis and goal for every modern marketing approach. P2P (peer-to-peer) communities designate the group of digitally connected people that share common interests. Customers nowadays have the possibility to communicate among themselves, and the internet has enabled them to do this without geographical barriers, so the global market is created in this way. The information exchange has never been easier and more important. The proof for this are online communities, blogs, forums and widely popular social networks. All these communities allow easier understanding of customers' attitudes about a product or service, define customers' service approach, allow a simpler way of spreading the messages to customers, and enable the customers to become companies' greatest value. In this way, the easier and long-term relationship with customers is created.

### *2.3 Marketing in sports or sports marketing*

Using marketing in sport originates from its very emergence as a competition sport, whereas more serious and concrete usage of marketing in sport is connected to the involvement of business entities into the competitive sport. Various businesses have recognized sport as a large unused platform with a great potential for promoting their products and services. Some authors argue that the beginning of the sport marketing was in the 1870s when American tobacco manufacturers placed pictures of baseball players in boxes of cigarettes in order to create loyalty and to increase sales (Božičković, 2004: 34-36). According to many authors, the modern concept of sports marketing is related to Mark McCormick who signed a representation contract with the golf player Arnold Palmer in 1960, which led to the founding of International Management Group (IMG), a leading company for sports management in the world (Božičković, 2004: 34-36). The concept of sports marketing experienced its full implementation in the Olympic Games in Los Angeles in 1984 when the organizing committee of the Olympic Games based its financial structure for the first time upon cooperative sponsorship of

several great sponsors, abandoning the model that included many smaller sponsors (Božičković, 2004: 34-36). This model was later accepted by The International Olympic Committee, as well as promoters of all big sports events and international associations of certain sports. This concept is used nowadays as well, with long-term sponsorship contracts. Given the fact that one of the major tasks of marketing is to arouse a desire for a certain product or service, sport as an activity is closely connected to emotion and extremely suitable for getting close to consumer groups. For this reason, many businesses recognized potential opportunities in sports events. By entering the competitive sport fields, companies have increasingly started to affect the development of professional and amateur sports.

While considering the application of marketing in sports, two basic conceptual differences, which marketing experts consider important to distinguish, need to be defined. These two concepts are marketing in sports and sports marketing. It is very important to point out that many authors do not have a clearly defined attitude on definition differences between marketing in sports and sports marketing (Bartoluci, Škorić, 2009: 216-218; Novak, 1996: 19-23; Božičković, 2004: 34-36). The reason for this lies in the fact that when defining marketing in general, most of the authors indicate a certain concept of special fields that have a certain specific application of marketing to certain fields. When defining the term marketing in sports, we start from applying the general marketing approach to sports field in the same way as to agriculture, culture, trade, or any other. Under the general marketing approach in this context, marketing strategy and various tactical and operational activities are considered. Accordingly, the application of marketing in sports is considered to be the application of marketing in a specific area, therefore a more frequently used term is sports marketing. Unlike the marketing in sports that involves the application of general marketing regardless of the marketing field, the term sports marketing is considered to be the application of a specific marketing framework with its own marketing philosophy. Thus, "it can be said that marketing has its own philosophy, because the one who is not familiar enough with a specific (e.g. sport) activity, with all its characteristics and specificity, with obligatory knowledge about marketing management, area of demand and supply (for example sports), products and services, as well as management knowledge, cannot make relevant decisions" (Bartoluci and Škorić, 2009: 216). Wakefield (2007: 12) explained sports marketing as the creation of a fan base in which supporters, media, and

sponsors "pay to promote and support the organization for the benefits of social exchange and personal, group and community identity within a cooperative competitive environment". Smith (2012: 2-3) defines sports marketing as the "process of planning how a sport brand is positioned and how the delivery of its products or services are to be implemented in order to establish a relationship between a sport brand and its consumers". Furthermore, Smith (2012: 2-4) continues to discuss two angles on sports marketing: marketing of sports and marketing through sports rather than focusing on sports marketing or marketing in sports.

Notable application of e-marketing in the sports field is of a recent date, experiencing its expansion through affirmation of social networks. Social networks are being used more frequently by sports organizations and athletes as a tool to communicate with fans and other interested target groups (Pedersen, Thibault, 2014; Ratten, Ratten, 2011; Pfahl, Kreutzer, Maleski, Lillibridge, Ryznar, 2012). There are several types of social networks being utilized by various sport organizations for different communications goals, while Facebook, Twitter and YouTube stand out as the most popular ones (Witkemper, Lim, Waldburger, 2012: 170-171). Engaging with social media as a university-level communication tool has proven effective due to positive business experiences on the effects of social media marketing and the high adoption rate of the social media by the young target audiences (Constantinides, Zinck Stagno, 2012: 3-4). Furthermore, social network utilization at the university level can contribute to increased enrolment level and enable students to make better-informed decisions. The use of mass marketing today is in all structures replaced by direct marketing since mass marketing has lost much of its previous application and effect. When using mass marketing, the key issue concerning the effectiveness of marketing methods remains undefined thus becoming difficult to measure, due to the broad population we are addressing. This broad population includes the marketing field that is not in our focus and it is not and cannot become our customer. With the appearance of digital marketing, the target group has become much better defined; promotional messages are directed specifically toward those to whom they are intended. This fact is especially noticeable in the area of sports<sup>11</sup>.

The internet, together with social media, offers a unique marketing communications method by which various sport organizations (including the university level ones) can attempt to overcome pre-

vious challenges such as low interest levels from fans, less media coverage and lower marketing budgets than other organizations (Eagleman, 2013: 489). Ioakimidis (2010: 2) suggests two key elements in the use of online services to increase the effectiveness of online sports marketing: multimedia and user interaction. However, creating value for target audiences has become more difficult over the years because they expect more benefits from online experiences, including the development of social connections. This approach brings challenges and opportunities to business organizations including various sport organizations. The aforementioned approach was used to form the main research question: what is the most suitable medium to engage university students and overcome communication challenges of university-related sport activities?

### 3. Methodology

The main research focus in this paper was to define the level of awareness of students about sports activities that take place at the Josip Juraj Strossmayer University of Osijek. Taking into account today's communications tools, the student population characteristics and the fact that the

means of communication for informing students is inadequate, it can be safely assumed that the level of awareness of students about sports activities is at a low level.

Considering the fact that available research on this topic is somewhat scarce and only partially applicable, the used methodology was based on several partially compatible papers and studies (Eagleman, 2013; Constantinides, Zinck Stagno, 2012; Witkemper, Lim, Waldburger, 2012; Pfahl, Kreutzer, Maleski, Lillibridge, Ryznar, 2012; Judson, James, Aurand, 2004; Safdar, Mahmood, Qutab, 2010; Perry, Anne Perry, Hosack-Curlin, 1998) and additionally revised and adjusted according to the formulated research goals. The proposed research framework was additionally tested during a pilot study and additionally improved.

Based on the information from the Rector's office, there were 17,337 students at the University during the academic year of 2013/2014. For the purposes of the research, 10% of the student population were involved and tested, thus creating a sample of 1,733 participants. The used quota sample was based on the student share of each faculty or department at the university level (Table 1).

Table 1 Sample overview

FACULTY OR DEPARTMENT	STUDENTS	SHARE	SAMPLE SIZE
Faculty of Economics	3,362	19.4%	336
Faculty of Law	2,511	14.5%	251
Faculty of Electrical Engineering	2,002	11.5%	200
Faculty of Agriculture	1,633	9.4%	163
Faculty of Philosophy	1,304	7.5%	130
Faculty of Civil Engineering	1,222	7.0%	122
Faculty of Medicine	936	5.4%	94
Faculty of Mechanical Engineering	914	5.3%	91
Faculty of Education	903	5.2%	91
Faculty of Food Technology	682	3.9%	68
Department of Mathematics	441	2.5%	44
Department of Cultural Studies	428	2.5%	43
Academy of Arts	244	1.4%	25
Department of Biology	231	1.3%	23
Catholic Faculty of Theology	208	1.2%	21
Department of Chemistry	163	0.9%	16
Department of Physics	153	0.9%	15
<b>Total</b>	<b>17,337</b>	<b>100%</b>	<b>1,733</b>

Source: Rector's office

The survey questionnaire consisted of 22 research and 2 demographic questions. Survey questions used a 7-point Likert scale (describing the level of usage, frequency level, and level of agreement) and several open-ended questions. In addition, it should be noted that during data analysis, 7-point Likert scales were treated as scale variables. Due to possible subjective perception of respondents when a Likert scale is used, the conclusions should be considered with caution. The data were collected via an online questionnaire and personal interviews during 4 months' time, March to June 2014 creating a dataset with 1,733 entries. Based on the sample data, 56.3% participants were female and 43.7% male students; 27.5% were first-year students, 30.5% were second-year students, 19.2% were third-year students, 12.1% were fourth-year students or first-year graduate students and finally 10.7% were fifth-year students or second-year graduate students.

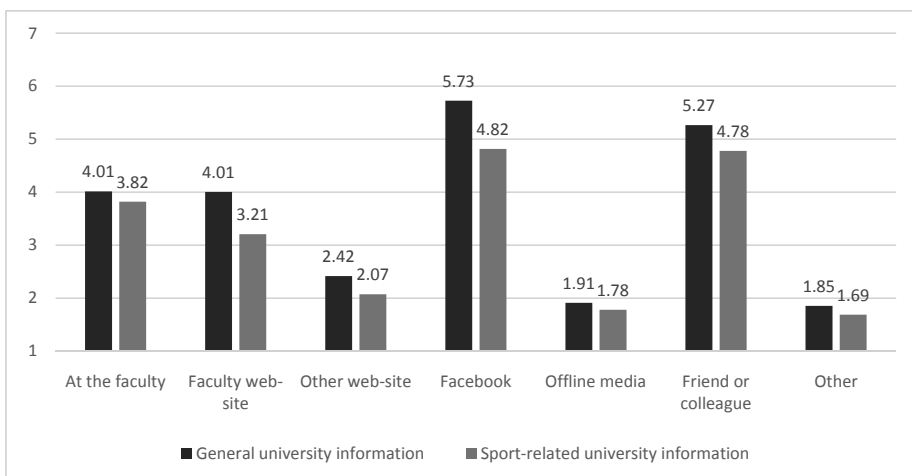
#### 4. Results

The research results describe the ways in which the students learn about college sports and related information through online and offline media. Based on previous research, daily student internet usage was expected. Almost 94% of the respondents use the internet multiple times a day, slightly less than 4% use the internet once a day and the rest use it less regularly. Based on the collected data, there is

a large difference among the devices used to access the internet. Respondents primarily use their personal computers with the mean score ( $\bar{x}$ ) of  $\bar{x}=6.38$  and standard deviation ( $sd$ ) of  $sd=1.37$  and mobile phones ( $\bar{x}=5.68$ ,  $sd=1.97$ ) to access the internet while tablets, institutional devices and other public computers are not used to a greater extent (measured on a 7-point Likert scale).

It should be pointed out that the respondents were asked two questions about using different communication channels for information access. One question referred to the respondent's attitude to general methods of informing about students activities, while the second referred to their attitude regarding information channels of student's sports activities, which enabled their comparison. Again, a 7-point Likert scale was used, with 1 representing the rarest and 7 the most often used (every scale point was additionally described in order to avoid different perception of a given scale; this approach was adopted for every Likert-scale question). Respondents rely the most on the social network Facebook when it comes to general university information ( $\bar{x}=5.73$ ,  $sd=1.76$ ) and sports information at the university level ( $\bar{x}=4.82$ ,  $sd=2.23$ ), and then on friends or colleagues ( $\bar{x}=5.27$ ,  $sd=1.72$ ;  $\bar{x}=4.78$ ,  $sd=2.1$ ) as shown in the graph (Figure 1). The study also confirmed that very few students are informed through offline media such as newspapers, radio or television for both types of tested information.

Figure 1 Reported source of information



Source: Authors' research



However, the paired t-test indicated that for each of the stated information sources there is a statistically significant difference between general university and sport university events. Analyzing the aver-

age score for each item in the conducted test it was shown that the respondents are significantly less informed about sports events (Table 2).

Table 2 Paired t-test for general university and sport-related information sources

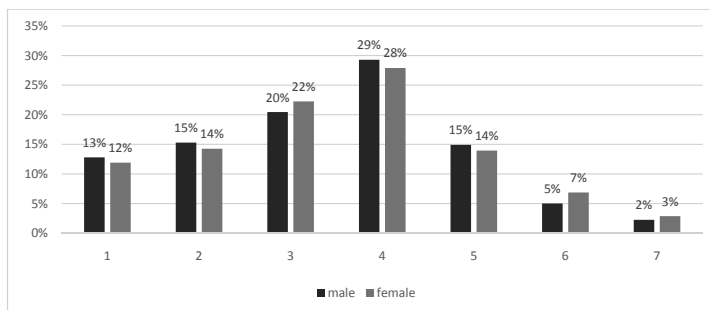
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 At the faculty	.192	2.027	.049	.097	.288	3.947	1732	.000
Pair 2 Faculty web-site	.798	2.007	.048	.703	.893	16.554	1732	.000
Pair 3 Other web-site	.344	1.604	.039	.268	.419	8.927	1732	.000
Pair 4 Facebook	.911	2.150	.052	.809	1.012	17.632	1732	.000
Pair 5 Offline media	.131	1.302	.031	.070	.192	4.187	1732	.000
Pair 6 Friend or colleague	.488	1.947	.047	.396	.579	10.424	1732	.000
Pair 7 Other	.165	1.153	.028	.111	.219	5.961	1732	.000

Source: Authors' research

The study analyzed the recognition of university sports events in relation to other student activities (a 7-point Likert scale was used where 1 represents extremely unrecognizable, and 7 extremely recognizable). The research shows, as it can be seen in the graph (Figure 2), that nearly 50% of responses are ranging between 3 and 4, from which we can conclude that most of the answers are in the neutral attitude of recognition of student sports with slight inclination towards non-recognition. We can divide the Likert scale into 3 sections and simplify the results: the left part with the score range from 1 to 3 indicates non-recognition (to some extent), the central section with the scale item 4 indicates neutral attitude and the right section with the score range

from 5 to 7 indicates recognition. Consequently, it can be observed that 48% of the answers were in the lower (left) section, with only 23% of answers in the right section. This information tells us that students still consider student sports unrecognizable rather than recognizable in comparison to other students' activities. As seen in the chart (Figure 2), if we consider the gender distribution, the average score is in the middle of the scale (female students average score is  $\bar{x}=3.5$  while the male students population is slightly lower,  $\bar{x}=3.42$ ). From this response, it can be concluded that the male and female point of view or recognition is similar. This was confirmed by the t-test, which indicates that there are no statistically significant differences ( $t=-1.052$ ,  $df=1731$ ,  $p>0.05$ ).

Figure 2 Attitude indicator on recognition of public sports events compared to other activities for students with display of gender distribution

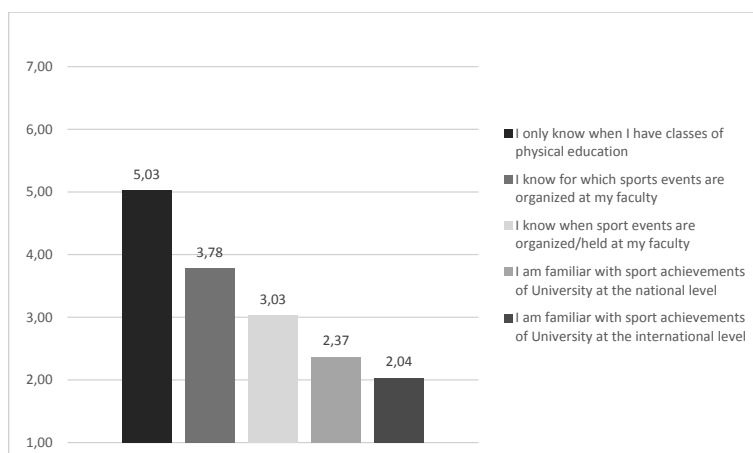


Source: Authors' research

Respondents were asked about their own familiarity with sports events at the university level and showed average grades that point to mediocre knowledge ( $x=3.21$ ,  $sd=1.66$ ). However, the t-test showed a statistically significant difference in the knowledge on gender level ( $t=22$ ,  $df=1731$ ,  $p=0.016$ ), which suggested that the male respondents are more familiar with sports events. In addition, respondents reported the level of agreement with the statements about the level of their personal knowledge of the student sports activities (Figure 3) using the 7-point Likert scale. Research showed that the average grade of

recognition decreases as the level of organization of activity increases. Respondents evaluated the statement that they know when they have classes of physical education with an average grade of  $x=5.03$ , while the other four statements showed the average score of under 4 which confirmed that they are uninformed about both faculty and university level sport activities. In other words, respondents are not familiar with sports events organized at their faculty, academic sport achievements at the university, national or even international level.

Figure 3 Evaluation grade of student sports activities



Source: Authors' research

Using a specific question, it was attempted to determine the level of visual recognition of student sports by examining respondents' familiarity with the mascot of the Josip Juraj Strossmayer University sports federation. The total of 43 respondents who answered that they do know what the mascot looks like were asked a subsidiary question to describe the mascot in order to confirm the recognition. Only 6 respondents (0.35%) gave the correct answer to this question. The data on recognition of the mascot is particularly interesting if we look at final-year students who are presumed to have already had the opportunity to familiarize themselves with the university sports activities (4th and 5th year, i.e. 1st and 2nd year of graduate studies). From the total of 395 respondents only 7 of them (1.80%) said that they knew what the mascot of university sports federation looked like, whereas only 4 described it correctly. The fact that 98% of respondents did not

know what the university sports federation mascot looks like indicates that there is plenty of room for improvement and that the extent of student ignorance in this respect should not be neglected.

## 5. Conclusion

This study deals with the topic of applying e-marketing in university sport. In order to create a complete picture of the research scope, the interrelation of (e-)marketing and sport (student sport in particular) was described in general terms. In the theoretical part, the framework of sports activities related to academic institutions is defined, the ways they are organized, as well as which competitions are organized at each level. It also describes the importance of sports marketing and marketing in sports for competitive sport as well as for the non-profit segment of sport. In both cases marketing

plays an important role in achieving goals of every sports organization or individuals. It is in the sport business segment that e-marketing plays an important role because of the form of its implementation, as well as the target group it addresses using the internet and its tools as an important form of providing information.

The primary research was conducted on the student population of the Josip Juraj Strossmayer University of Osijek. The research showed that the internet is the most commonly used among student population for both general information about student activities, and for information about student sports activities. When analyzing the results of the research related to the student knowledge about the university or the student sports, it can be concluded that students are insufficiently familiar with the student sports activities at the Josip Juraj Strossmayer University of Osijek. Research has shown that students are not familiar with the image of the University Sports association mascot and have no knowledge about the existence of student sports website. Information about student activities are gathered from other students, whereas equally popular is sharing the information via Facebook. A very small number of students is informed through other web sites and offline media such as newspapers, radio or television. The research has shown that the Josip Juraj Strossmayer University of Osijek students think that they are not sufficiently informed about student sports activities. As the conclusion of the research, it can be said that students are not sufficiently informed about student sports activities and that the main source of information about students activities is the internet and the word of mouth, with great emphasis on social networks and the usage of mobile phones to access the internet.

It is important to emphasize that Josip Juraj Strossmayer University of Osijek sport has great potential

and organized activities are not sufficiently represented within the internet medium.. Therefore, further research of this subject can involve the organization obstacles and the Josip Juraj Strossmayer University of Osijek potential. The provided study suggests a foundation from which future research on the internet and social media usage within university and other organizations can be based. This study examined the internet use from the student perspective, but it is possible that a future study could take into account the organization's and the sport consumer's perspectives, and possibly the sponsors' perspectives as well. It is beyond doubt that in the future the application of the internet as the media providing information about university sport will grow, together with constant growth of the internet and mobile devices. Mobile applications are the subject that needs further research because this area is insufficiently explored and certainly has a great potential. Future research efforts may additionally focus on behavior and habits of student internet users, mobile internet and social network usage in university level sport related activities. In addition, future research efforts on this subject may involve a larger number of Croatian universities and other countries as well in order to produce a platform for comparable situational analysis.

This research paper suffers from several limitations. Self-reporting could be subject to personal projection of a respondent and could therefore contain unreliable and incomparable data. Due to possible respondent subjective perception of the used Likert-scale items, the conclusions should be considered with caution. Therefore, the self-reporting measurement is a clear limitation of the collected data and could have an impact on the given conclusions. Future research activities should consider a more objective measurement of internet usage, attitudes and opinions.

## REFERENCES

1. Bartoluci, M., Škorić, S. (2009). Menadžment u sportu. Zagreb: Department for trainers training of the University in Zagreb, Faculty of Kinesiology, University of Zagreb.
2. Bauer, H. H., Sauer, N. E., Schmitt, P. (2005), "Customer-based brand equity in the team sport industry", *European Journal of Marketing*, Vol. 39, No. 5/6, pp. 496-513.
3. Bee, C. C., Kahle, L. R. (2006), "Relationship marketing in sports: A functional approach", *Sport Marketing Quarterly*, Vol. 15, No. 2, p. 101.
4. Beech, J., Chadwick, S. (2010). *Sportski Menadžment*. Zagreb: Mate L.t.d.
5. Božičković, V. (2002). "Što je sportski marketing?", *Marketing u praksi*, Vol. 11, pp. 34-38.
6. Chaffey, D., Ellis-Chadwick, F., Mayer, R., Johnston, K. (2009). *Internet marketing: strategy, implementation and practice*. Upper Saddle River, New Jersey: Pearson Education.
7. Constantinides, E., Zinck Stagno, M. (2012), "Higher Education Marketing: A Study on the Impact of Social Media on Study Selection and University Choice", *International journal of technology and education marketing*, Vol. 2, No. 1, pp. 41-58.
8. Eagleman, A. N. (2013), "Acceptance, motivations, and usage of social media as a marketing communications tool amongst employees of sport national governing bodies", *Sport Management Review*, Vol. 16, No. 4, pp. 488-497.
9. Evans, D. M., Smith, A. C. (2004), "The internet and competitive advantage: A study of Australia's four premier professional sporting leagues", *Sport Management Review*, Vol. 7, No. 1, pp. 27-56.
10. Hutchins, B., Rowe, D. (2010), "Reconfiguring Media Sport for the Online World: An Inquiry Into 'Sports News and Digital Media'", *International Journal of Communication*, Vol. 4, p. 23.
11. Ioakimidis, M. (2010), "Online marketing of professional sports clubs: Engaging fans on a new playing field", *International Journal of Sports Marketing and Sponsorship*, Vol. 11, No. 4, pp. 2-13.
12. Judson, K. M., James, J. D., Aurand, T. W. (2004), "Marketing the university to student-athletes: Understanding university selection criteria", *Journal of Marketing for Higher Education*, Vol. 14, No. 1, pp. 23-40.
13. Kimball, A., Freysinger, V. J. (2003), "Leisure, stress, and coping: The sport participation of collegiate student-athletes", *Leisure Sciences*, Vol. 25, No. 2-3, pp. 115-141.
14. Mahan, J. E. (2011), "Examining the predictors of consumer response to sport marketing via digital social media", *International Journal of Sport Management and Marketing*, Vol. 9, No. 3-4, pp. 254-267.
15. Meler, M. (2005). *Osnove marketinga*. Osijek: Faculty of Economics in Osijek.
16. Novak, I. (1996), "Sportski marketing u sustavu općeg marketinga", *Tržište*. Vol. 8, No. 1-2, pp. 11-24.
17. Panian, Ž. (2000). *Internet i malo poduzetništvo*. Zagreb: Informator.
18. Pedersen, P. M., Thibault, L. (2014). *Contemporary Sport Management*. 5th edition. Champaign, IL: Human Kinetics Publishers.
19. Perry, T. T., Anne Perry, L., Hosack-Curlin, K. (1998). "Internet use by university students: an interdisciplinary study on three campuses", *Internet Research*, Vol. 8, No. 2, pp. 136-141.
20. Pfahl, M. E., Kreutzer, A., Maleski, M., Lillibridge, J., Ryznar, J. (2012), "If you build it, will they come?: A case study of digital spaces and brand in the National Basketball Association". *Sport Management Review*, Vol. 15, No. 4, pp. 518-537.
21. Ratten, V., Ratten, H. (2011), "International sport marketing: practical and future research implications", *Journal of Business & Industrial Marketing*, Vol. 26, No. 8, pp. 614-620.
22. Ružić, D., Biloš, A., Turkalj, D. (2014). *E-marketing*. 3rd revised and expanded edition. Osijek: Faculty of Economics in Osijek.

23. Safdar, M., Mahmood, K., Qutab, S. (2010), "Internet use behavior and attitude of college students: A survey of Leadership Colleges' Network", *Library Philosophy and Practice (e-journal)*, p. 366.
24. Smith, A. (2012). *Introduction to sport marketing*. Routledge.
25. Spittle, M., Byrne, K. (2009), "The influence of sport education on student motivation in physical education", *Physical Education and Sport Pedagogy*, Vol. 14, No. 3, pp. 253-266.
26. Wakefield, K. L. (2007). *Team sports marketing*. New York: Elsevier.
27. Witkemper, C., Lim, C. H., Waldburger, A. (2012), "Social media and sports marketing: Examining the motivations and constraints of Twitter users", *Sport Marketing Quarterly*, Vol. 21, No. 3, p. 170.

## **(ENDNOTES)**

- 1 Digipark Newsletter (2012), "Pregled online tržišta u Hrvatskoj", McCann Erickson Croatia.
- 2 Digipark Newsletter (2012), "Pregled online tržišta u Hrvatskoj", McCann Erickson Croatia.
- 3 European University Sports Association (2015), Available at: <http://www.eusa.eu/>, (Accessed on: April 15, 2015).
- 4 Fédération Internationale du Sport Universitaire (2015), Available at: <http://www.fisu.net/en/FISU-history-3171.html>, (Accessed on: April 15, 2015).
- 5 The US-UK Fulbright Commission (2014), "Sports Scholarships and the Athletic Recruitment Process", Available at: <http://www.fulbright.org.uk/study-in-the-usa/undergraduate-study/funding/sports-scholarships> (Accessed on: June 09, 2015).
- 6 Forbes, (2014), "Sports Industry 101: Breaking Into The Business Of Sports", Available at: <http://www.forbes.com/sites/jasonbelzler/2014/02/05/sports-industry-101-breaking-into-the-business-of-sports/#3ea1caf15491>, (Accessed on: April 18, 2016).
- 7 USATODAY, (2015), "NCAA nearly topped \$1 billion in revenue in 2014", <http://www.usatoday.com/story/sports/college/2015/03/11/ncaa-financial-statement-2014-1-billion-revenue/70161386/>, (Accessed on: April 18, 2016).
- 8 Hanlon, A. (2014), "How to use the 7Ps Marketing Mix? ", *Smartinsights.com*, Available at: <http://www.smartinsights.com/marketing-planning/marketing-models/how-to-use-the-7ps-marketing-mix/>, (Accessed on: August 11, 2015).
- 9 Mootee, I., (2007), Available at: [http://mootee.typepad.com/innovation\\_playground/2007/07/wen-20-and-the-.html](http://mootee.typepad.com/innovation_playground/2007/07/wen-20-and-the-.html) (Accessed on: April 02, 2015).
- 10 MIT Sloan Sports Analytics Conference (2014), "e Marketing: Sports Marketing in the Digital Age", Available at: [sloansportsconference.com/?p=9822](http://sloansportsconference.com/?p=9822), (Accessed on: April 20, 2015).
- 11 Koozai (2012), "How Digital Marketing is Changing the Sports Industry", Available at: <https://www.koozai.com/blog/branding/how-digital-marketing-is-changing-the-sports-industry/>, (Accessed on: April, 2016).

*Antun Biloš  
Tvrтко Galić*

## ULOGA DIGITALNOG MARKETINGA U SVEUČILIŠNOM SPORTU: PRIKAZ ISTRAŽIVANJA NA VISOKOOBRAZOVNOJ INSTITUCIJI U HRVATSKOJ

### SAŽETAK

Važnost studentskih sportskih aktivnosti u strukturi akademskoga obrazovanja je nedvojbeno značajna. Međutim, sveučilišni sport je jedan od elemenata akademskoga obrazovanja koji na globalnoj razini nije primjereno zastupljen kao predmet istraživanja kako na znanstvenom, tako i na stručnom području. Globalnim razvojem sveučilišnoga obrazovanja, utemeljenim na povećanoj međudržavnoj i međukontinentalnoj mobilnosti studenata, te snažni globalni razvoj ICT tehnologija, otvara se potpuno novi pristup sveučilišnom sportu i stvaraju se nove mogućnosti analiziranja njegovoga utjecaja. Rad se usredotočuje na komunikacijske mogućnosti interneta kao digitalnoga medija koji se može koristiti kao sredstvo unaprjeđivanja studentskoga sporta i sličnih studentskih aktivnosti, uzimajući u obzir obilježja i navike studentske populacije. Primarno istraživanje je provedeno na uzorku studenata Sveučilišta Josipa Jurja Strossmayera u Osijeku. Istraživanje je pokazalo nekoliko zanimljivih trendova o studentskim navikama povezanim s općenitim načinom informiranja o studentskim aktivnostima, kao i načinu informiranja studenata o studentskim sportskim aktivnostima na sveučilišnoj razini. U radu je prikazan kratak pregled dostupne literature o sportskom marketingu te se ukazuje na nekoliko važnih smjernica za daljnja istraživanja. Na temelju istraživanja potvrđena je pretpostavka da je internet ključni element u povećanju marketinškoga potencijala sveučilišnoga sporta. Usporedbom s referentnim svjetskim sveučilištima, provedena je analiza digitalnih marketinških aktivnosti kako bi se utvrdili prijedlozi za stvaranje i/ili poboljšanje digitalnih marketinških alata kao što su mrežna-sjedišta, društvene mreže ili mobilne aplikacije u svrhu korištenja marketinškoga potencijala kojega ima sveučilišni sport.

**Ključne riječi:** digitalni marketing, sportski marketing, sveučilišni sport, društvene mreže u sportu, sportske mobilne aplikacije