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Editor's note

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The Journal enables authors to present their researches relating to advancing and improving the practice, as well as understanding information systems of the organization. The Journal accepts theoretical, methodological and empirical contributions, i.e. the works that significantly contribute the thematic fields of the Journal, i.e. management, finance, marketing, law, IT technology, agriculture, and other interdisciplinary topics. It will provide enough space for original empirical and developmental researches.

The works can be presented as:

• Theoretical, clear and empirical researches on the conception, structure, development and usefulness of interdisciplinary science being important for the progress of theory and practice.

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The International Journal Vallis Aurea is a biannual journal, with the pretension to affirm the integral, holistic view of interdisciplinary research. The journal aims to unite the academic methodology and sincerity with professional focus and practices.

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With all our hearts and sincerity, we wish to express our deepest gratitude to all the authors, reviewers, and editorial board members for their valuable contribution for this journal. We look forward to a successful cooperation.

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IMPROVEMENT OF THE ACTIVITIES OF STUDENT SERVICES AT UNIVERSITY NORTH, UNIVERSITY CENTER VARAŽDIN

Abstract:

An organization is a group of people who enable the achievement of a common goal using their own efforts. Organizing is a process which has two specific parts: the structure of a company and coordination of human resources. They are both very important and almost indispensable in business economics and the modern business world. Therefore, in the context of this definition, University North is seen as an organizational unit with all its features, i.e. advantages and problems. An organization (manufacturing or service) cannot be imagined and cannot operate or survive in the market unless proper, timely and quality selection of the organizational structure together with its maintenance and improvement are taken into account. Having that in mind, certain problems have been noticed in the organization of University North which hamper its effectiveness. Student services, as one of the organizational units, contribute to its work and it is very important for the total satisfaction of the most work in student services and previous knowledge, it has been noticed that the effectiveness of tasks carried out by the student services is not at the expected and required level, i.e. it is possible to increase their efficiency to a higher level by reorganization and certain improvements. The efficiency and effectiveness of student services is determined by the satisfaction of students and all other stakeholders - teachers, workers, graduates, employers, associates, and others. The paper presents an analysis and research of a better organization with the purpose of improving the organization and efficiency of the Student Services at University North. Upon recognizing and defining the problems for this research, the data have been collected in order to get an insight into the current situation, which is generally defined by the hypotheses. Using surveys, this research examines the students' satisfaction / dissatisfaction regarding the services provided by the Student Services on a daily basis.

Keywords:
student services, students, efficiency, reorganization

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Introduction

Organisation is a process that involves two specific components: the structure of a company and the coordination of human resources. Both are very important and almost indispensable in business economics and today's business world [1]. In the context of this definition, the University North can be viewed as an organizational unit with specific characteristics. An organization cannot exist, do business or survive in the market unless due care and attention is given to the timely selection of adequate and quality organizational structure, its maintenance and continuous development. Various organisational problems have been observed at the University North that hinder its effective operation. Student Services, as an organizational unit of the University, is a factor in the operation of the University and affects the satisfaction of the most important stakeholders, i.e. students.

Moreover, it has been observed that, in terms of effectiveness in performing its activities, the Student Services does not meet the expected and required quality levels. Restructuring efforts are needed to enhance its efficiency. Student Services is the place of first contact of students with the new education system. It is a place at which the journey of an academic citizen begins. Students receive information from the Student Services almost on a daily basis, either in a direct contact with the staff or via e-mail and website. They can get answers to all of their questions, as well as any other information concerning timetables, exams, entry of grades, complaints and all other aspects of study. It is important that the Student Services staff is efficient and effective in providing services to students and any other interested party.

Research hypotheses and research goal

The following null and auxiliary hypotheses are proposed in this paper:

H0 - Reorganisation of the Student Services at the University North is necessary to increase the level of its effectiveness and efficiency.

H1 - Reorganization of the Student Services at the University North would increase the satisfaction of students, teachers, and all other interested parties.

The primary goal of this research is to confirm or reject the main and auxiliary hypotheses. In case the null hypothesis is confirmed, the following objectives will be set:

• determine whether the Student Services are well organized;

• determine whether Student Services office hours are adjusted to accommodate the needs of students, teachers and external associates, i.e. all end users;

• determine whether the Student Services staff is helpful to students, teachers, i.e. all end users;

• determine whether there is a need for additional training of the Student Services staff;

• set out the guidelines for training;

• set out the guidelines for the improvement of the quality in Student Services,

• consider the possibility for adjustments, in terms of physical office environment, to accommodate student needs;

• develop proposals for improvement of the organization of the Student Services;

• identify the most important factors that affect its efficiency;

• identify key resources required for effective operation;

• identify structure and organization (of people, space, time, finances, etc.) that would improve the effectiveness of the Student Services.

Research methods

Descriptive methods are used in the theory section of the paper. This section of the paper provides a literature review. In the empirical section of the paper, various quantitative techniques and methods were used, such as sampling, analysis, synthesis, as well as survey, as briefly described later in the text.

Sampling

According to Petz, a sample is a limited number of members of a particular population (a subset) that will be investigated. A sample is selected from a population making sure that the selected group accurately represents the population from which it was selected. Such a sample is called an impartial or a representative sample. If this has not been achieved, the sample is biased (not representative of the population as a whole) [2]. A method of purposive sampling, i.e. quota sampling, was used in this research. A quota sample is a purposive sample. Using his/her knowledge of the population with regard to the subject of research, the researcher creates a sample by preselecting the elements from each stratum. Sample size depends mainly on the variability of the measured characteristic, as well as the precision with which one wants to measure a particular characteristic.

Analysis and synthesis

Depending on the scientific field in which they are used, analyses fall into one of the following categories: economic, historical, mathematical, engineering, and the like. In contrast to analysis, a scientific research method that combines parts or elements into a single or unified entity, or combines simple concepts into complex ones and complex ones into even more complex ones is called synthesis [3].

Survey

A survey is a specially prepared document for the purpose of collecting information and respondents' opinions about a specific problem. It is used as a cost-effective alternative to other techniques when there is a spatial gap between the respondents. This method is less time-consuming than interviews. A survey can be successfully used to solve relationship problems with customers and suppliers, as well as in cases when it is necessary to collect the opinions of a large number of people. Despite the weaknesses and shortcomings of this method, a well prepared and conducted survey can benefit an organization. It is important to carefully consider and formulate the questions, select an adequate method of conducting the survey, choose well the customers, the method of presenting the results, as well as preventive and corrective actions.

The disadvantages of the survey are:
• generalized questions cause the respondents to have an impression that the survey is not suited to their scope of activities or relevant to them;
• often, the answers are given in groups and do not reflect the opinion of an individual;
• surveys are not well-received because respondents have the impression that changes will be made to their workplace that could put their livelihoods at risk and therefore they tend to embellish the facts;
• it is not possible to put additional questions;
• sometimes the person responsible gives the questionnaire to his/her associates, which compromises the results of the survey;
• sometimes respondents become annoyed with and give answers without paying attention;
• due to poor preparation of questions and poor instructions on how to fill in the

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questionnaire some survey fail to fulfil their purpose.

The main advantages of the survey are:
• information about the problem is received in writing,
• the results are obtained in a short amount of time,
• the cost of implementation is negligible,
• data processing is easy [4].

Based on the above, a questionnaire was prepared for the purpose of evaluating student satisfaction with the Student Services. The first section of both the questionnaire for evaluation of student satisfaction with the Student Services and the questionnaire for evaluation of teacher satisfaction with the Student Services elicits information about the respondents, while the second section of the questionnaires addresses specific issues relating to the purpose of the survey.

The surveys employed open-ended questions (respondents are asked to volunteer answers using their own words and write down all the details) as well as closed questions (the most common answers from which respondents were required to choose were YES and NO. These types of questions were usually followed by: "If you have answered YES, please explain why" or "If you have answered NO, please explain why").

University North Student Services

The aim of this chapter is to briefly describe the position and role of working procedures of the Student Services within the University North operations. The chapter describes the current situation in the Student Services as determined by an analysis of its activities.

Basic structure of the Student Services

The University North delivers university and professional study programmes at two University Centres located in Koprivnica and Varaždin [5]. As shown in Figure 1, Student Services is made up of three organizational units:
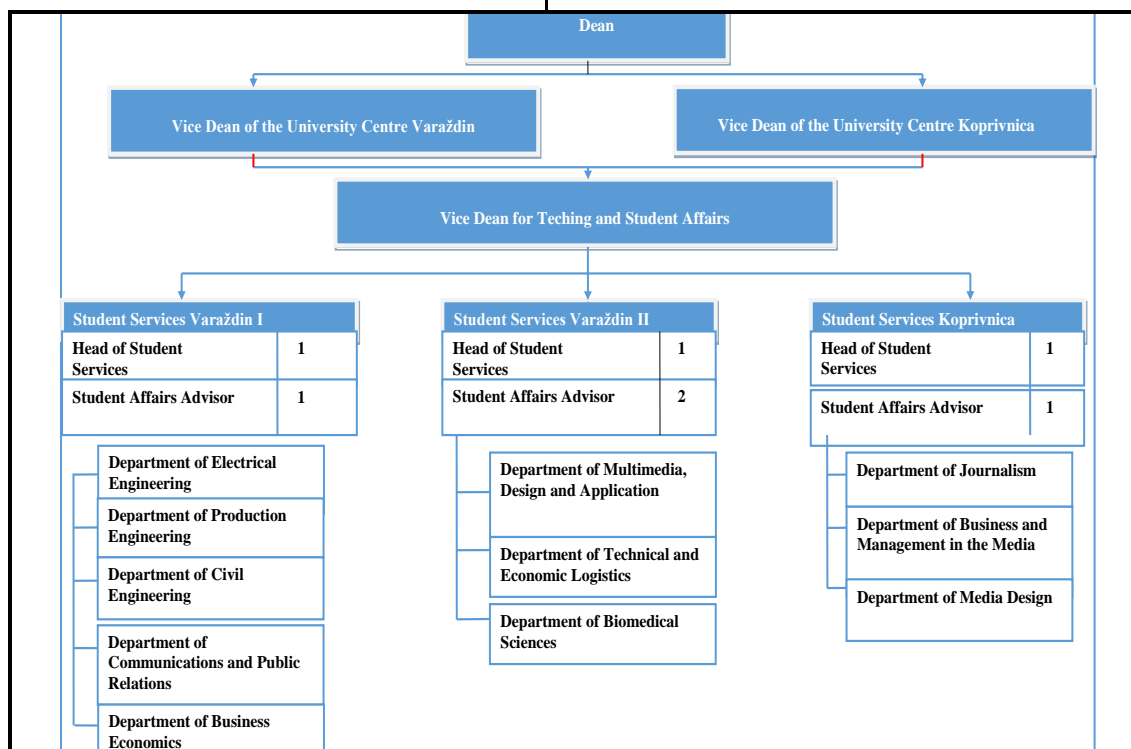

Figure 1. Current organizational structure of the University North Student Services [6]

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Short description of activities performed by the Student Services

The main activities of the Student Services are defined in the following regulatory acts:

• Statute
• Regulations on Studying
• Quality procedure of the Student Services QP - 07 - 04.

The main activities of the Student Services include the following [7]:

• processing of applications and enrolment of students in the first year of study;
• enrolment of students transferring from other higher education institutions;
• enrolment of students in the next year of study;
• verification of a semester;
• exam-related administration;
• creation and maintenance of records;
• graduation-related activities;
• coordination of degree award ceremony activities.

Research and analysis of the current situation

With a view to improving the work of the Student Services at the University North, measures should be proposed in the framework of this research to ensure a better flow of information between the students, teachers, and external associates, on the one hand, and the staff of the Student Services of the University North, on the other, and create adequate working conditions. A survey was conducted to gather feedback about the satisfaction/dissatisfaction of students who regularly use the services of the Student Services.

The survey seeks to examine the satisfaction/dissatisfaction of students, teachers, external associates, as well as the Student Services staff at the University North. In other words, its aim is to identify, based on the results of research, the activities of the Student Services whose quality should be improved or which should be adjusted to meet the requirements of all interested parties. Furthermore, the aim is to obtain information which could serve as the basis for creating potential improvement measures with a view to increasing the satisfaction of all interested parties thus improving the quality and efficiency of the support provided by the Student Services. The research was conducted to draw attention to the problems in the organization of the Student Services and the need for its reorganization.

Do students enrolled at the University North find that Student Services staff provide quality services and are available to them?

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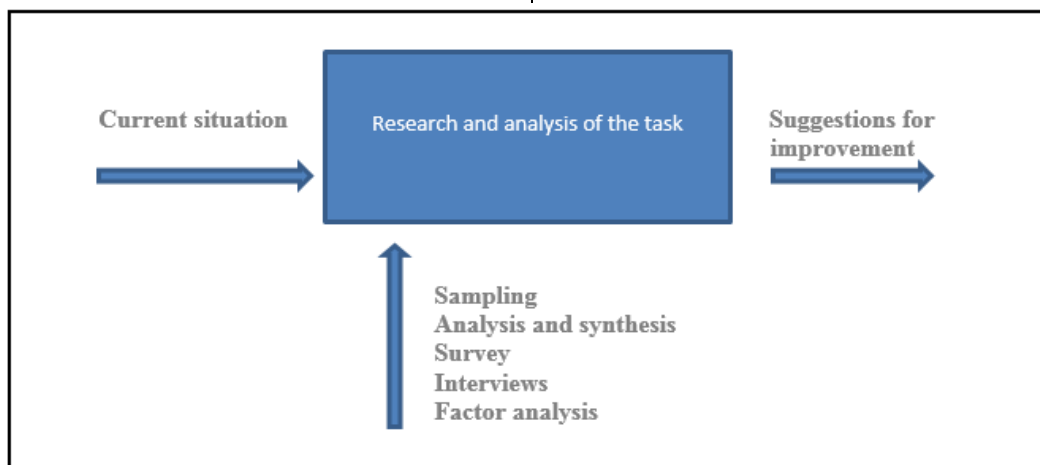
Figure 2. Flow chart of the research process [8]

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Analysis of student survey

571 students enrolled at the University North - University Centre Varaždin participated in the survey. Participation in the survey was voluntary and anonymous. Prior to filling in the questionnaire, students were verbally informed about the research. The survey was conducted using a Questionnaire for evaluation of student satisfaction with the Student Services (hereinafter referred to as the questionnaire). The overall response rate was satisfactory (above 90%), resulting in the research sample of 571 respondents.

Survey results

A semi-structured questionnaire consisting of four sections was used to collect data. The first section of the questionnaire focuses on general information about the students, as shown in Table 1.

		N	%
Which study programme are you attending?	Electrical Engineering	73	12.78%
	Multimedia, Design and Application	99	17.34%
	Production Engineering	80	14.01%
	Civil Engineering	113	19.79%
	Technical and Economic Logistics	97	16.99%
	Biomedical Sciences	109	19.09%
What is your year of study?	first year	222	38.88%
	second year	170	29.77%
	third year	179	31.35%
Specify your mode of study.	full-time	262	45.88%
	part-time	309	54.12%
Are you currently employed?	no	378	66.20%
	Yes, full-time.	96	16.81%
	Yes, part-time.	97	16.99%

Table 1. General study-related information about the respondents [9]

Students answered questions about the study programme they are attending, their year of study, mode of study, and employment status by choosing one of the offered answers.

1. Which study programme are you attending?

The survey included students enrolled in six undergraduate professional study programmes at the University Centre Varaždin. 73 (12.78%) respondents study Electrical Engineering, 99 (17.34%) study Multimedia, Design and Application, 80 (14.01%) study Production Engineering, 113 (19.79%) study Civil Engineering, 97 (16.99%) study Technical and Economic Logistics, and 109 (19.09%) study Biomedical Sciences (Figure 3).
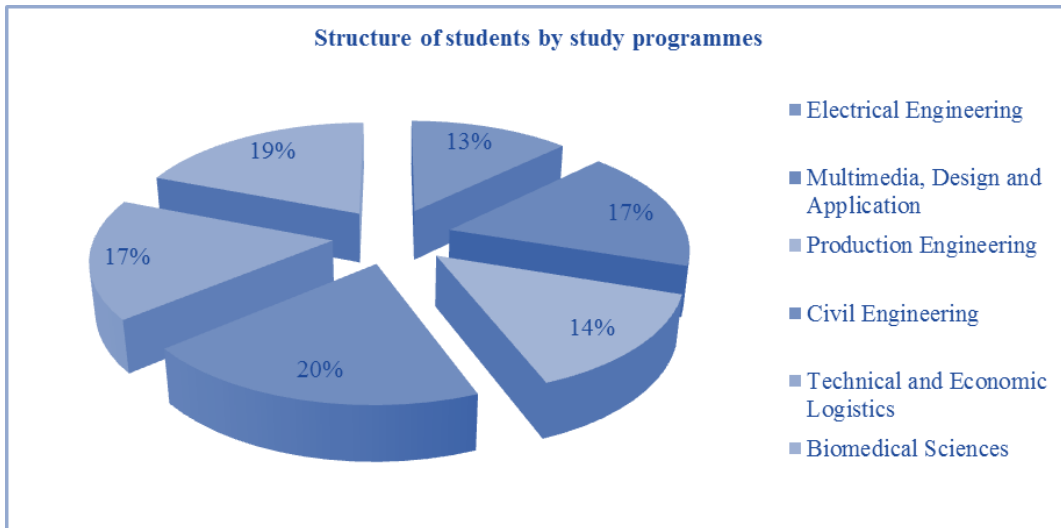
Figure 3. Structure of students by study programmes [8]

2. What is your year of study?

The survey included students from all study years. 222 (38.88%) respondents were first-year students, 170 (29.77%) respondents were second-year students, and 179 (31.35%) and were third-year students (Figure 4).
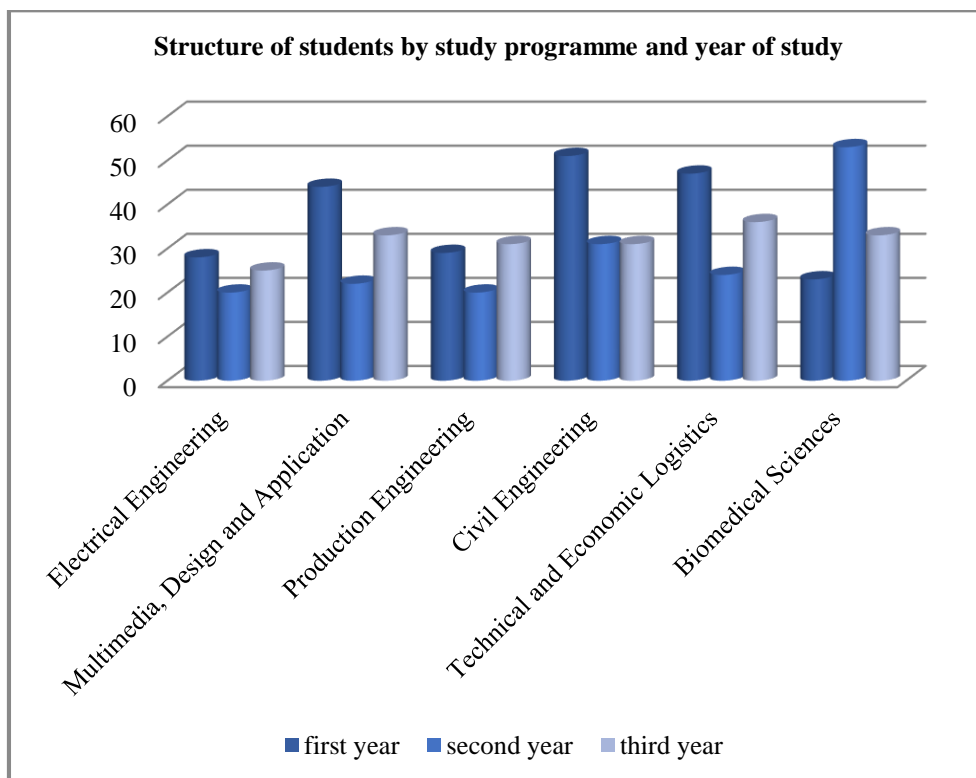
Figure 4. Structure of students by study programme and year of study [8]

The aim of this section of the questionnaire was to gain information as to how students usually contacted the Student Services; the frequency of their visits to the Student Services; the reasons for their visits; and which Student Services office hours they would prefer (Table 2).

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How do you usually contact the Student Services?	by coming to the office	430	75.30%
	by e-mail	85	14.89%
	by phone	21	3.68%
	a combination of the above	35	6.13%
How long do you usually wait for a response to your enquiry sent to the Student Services by e-mail?	one day	271	47.46%
	three to five days	169	29.60%
	there have been instances when the Student Services have not replied to my e-mail	85	14.89%
	no answer	46	8.05%
How often do you come to the Student Services office?	once a week	30	5.25%
	several times a week	8	1.40%
	once a month	529	92.65%
	no answer	4	0.70%
What is the most common reason for coming to the Student Services office?	to write an application	127	22.24%
	to pay tuition fees	211	36.95%
	write down a reason	200	35.03%
	no answer	33	5.78%
How long do you usually stay in the Student Services office?	up to 5 minutes	378	66.20%
	5 - 15 minutes	158	27.67%
	more than 15 minutes	32	5.60%
	no answer	3	0.53%
Which of these working hours do you find the most convenient?	09:00 to 13:00	57	9.98%
	12:00 to 16:00	160	28.02%
	13:00 to 17:00	170	29.77%
	16:00 to 20:00	96	16.81%
	write down working hours		
	the whole day	37	6.48%
	in the morning (until 16:00)	19	3.33%
	in the afternoon (until 20:00)	21	3.68%
	no answer	11	1.93%

Table 2. General data on contacts with the Student Services [9]

3. How do you usually contact the Student Services?

The second section of the questionnaire focuses on the satisfaction of students with their communication with the Student Services. Students were asked to indicate their level of satisfaction on a 3-point Likert scale by choosing one of the following: extremely satisfied, very satisfied and satisfied. If they reported they were not satisfied with the communication, they were asked to describe their complaints.

4. Are you satisfied with the communication with the Student Services?

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As shown in Figure 5, 199 (34.85%) students who reported that they were not satisfied with the communication with the Student Services cited one of the following reasons: staff were not answering the phone, staff were not responding to their e-mails; long waiting periods for the issuance of indexes (student log-books), slowness in solving problems (Figure 5).
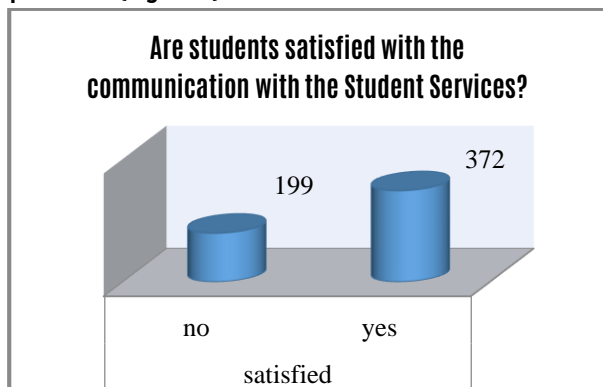
Figure 5. Level of student satisfaction with the communication with the Student Services [8]

If you have answered YES, please rate your satisfaction

Of 372 (65.15%) students who reported they were satisfied with the communication with the Student Services, 255 (68.55%) chose satisfied, 91 (24.46%) students chose very satisfied, and 26 (6.99%) students chose extremely satisfied (Figure 6).
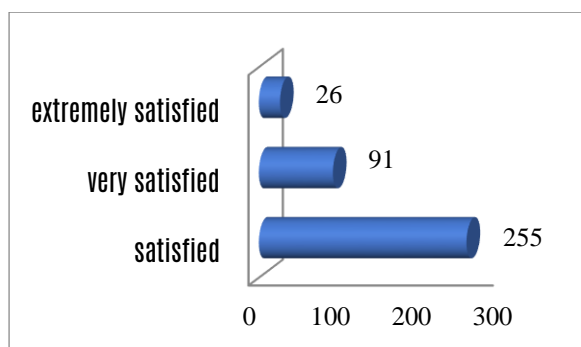
Figure 6. Level of student satisfaction with the Student Services [8]

5. Have you ever had any complaints about the services delivered by the Student Services?
When asked whether they had any complaints about the services of the Student Services, 433 (75.83%)

students answered NO, 2 (0.35%) students did not answer the question, while 136 (23.82%) students reported that they did have complaints about the services (Figure 7).
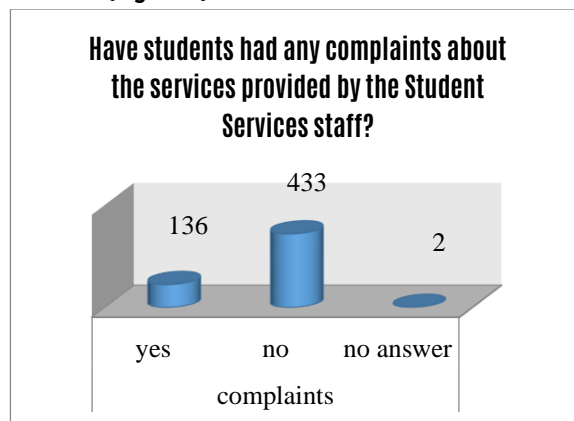
Figure 7. Student complaints about the services of the Student Services [8]

Here too, the most frequent complaints were about the staff not answering the phone and not responding to e-mails; long waiting periods for the issuance of indexes; expensive application fees; expensive transcript fees; and office hours.

The purpose of the third section of the questionnaire was to assess student satisfaction with the work of the Student Services staff on the following five items:
•   (Item no. 6) Student Services staff's friendliness towards students
•   (Item no. 7) Student Services staff competence
•   (Item no. 8) Satisfaction with the feedback received from the Student Services staff to study-related enquiries
•   (Item no. 9) Satisfaction with the promptness in dealing with student applications
•   (Item no. 10) Satisfaction with the Student Services physical office environment
A Five-point Likert scale was used to measure the level of satisfaction: 1 - very dissatisfied, 2 - dissatisfied, 3 - neither satisfied nor dissatisfied, 4 - satisfied, 5 - very satisfied.

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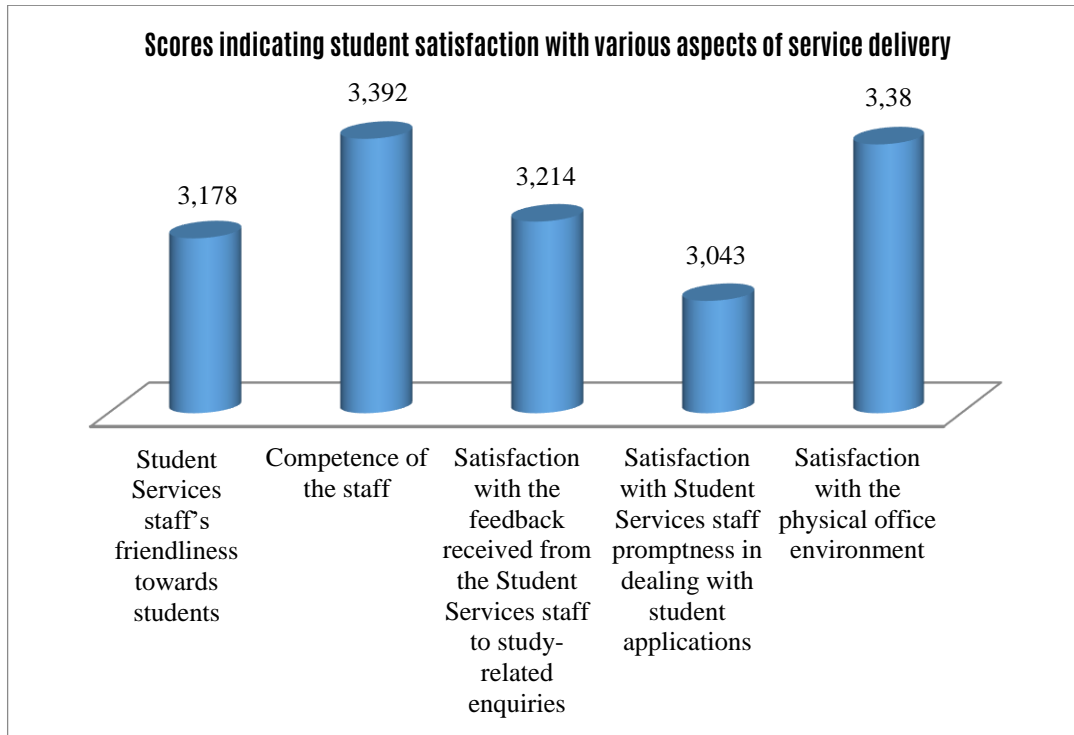
Figure 8. Student satisfaction with the Student Services [8]

Staff competence attracted the highest scores (3,392), second-highest scores were given to the satisfaction with the physical office environment (3.380), followed by the satisfaction with the feedback received from the Student Services staff to study-related enquiries (3.214), and the Student Services staff's friendliness towards students (3.178), whereas the satisfaction with the Student Services staff promptness in dealing with student applications was given the lowest scores (3.043) (Figure 8).

The fourth section of the questionnaire focused on students' opinions and attitudes about the good and the bad examples in the work of the Student Services. This section of the questionnaire asked students to give their suggestions as to how to improve the work, as well as the quality and efficiency of services provided by the Student Services.

11. Which experiences involving the services of the Student Services staff would you highlight as POSITIVE?

199 students (34.85%) expressed a positive opinion of the Student Services staff describing them as competent, friendly and helpful.

12. Which experiences involving the work of the Student Services staff would you highlight as NEGATIVE?

228 students (39.93%) complained about having to wait for a long time for the issuance of indexes and expressed their dissatisfaction with the Student Services office hours, small office space, and staff not answering the phone and responding to their e-mails.

DISCUSSION AND SUGGESTIONS FOR IMPROVEMENT

571 students enrolled in the University North - University Centre Varaždin were surveyed. Prior to taking part in the survey, students were verbally informed about its purpose. Participation was anonymous. The survey was conducted using a Questionnaire for evaluation of student satisfaction with the Student Services.

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Student survey results show that 75.30% of the students contact the Student Services staff by coming to the office. The data obtained from the survey contain student preferences with regard to office hours of the Student Services. The respondents were offered four four-hour-long office hours to choose from. The majority (29.77%) of students reported that office hours from 13:00 to 17:00 would be the most convenient for them. 26.97% of the students preferred afternoon office hours (17:00 to 20:00).

The data obtained from the survey indicate that 34.85% of the respondents highlighted as positive the staff's competence, friendliness and helpfulness. As negative, 39.93% of the students highlighted the fact that the staff were overloaded with work. In their opinion the ratio of students to the Student Services staff is inadequate, as is the space. In addition, they find the organization of work to be poor and sometimes they feel that the staff do not have all the information.

The data obtained from the survey, once reviewed and analysed, corroborated both null and the auxiliary hypothesis. In other words, the statement that a reorganisation of the Student Services is necessary to increase its efficiency and effectiveness in order for students and other interested parties to be satisfied with the work of the Student Services is justified.

The possible changes to the organisation of the Student Services could involve:
• changes to the organisation of office space;
• changes involving human resources;
• regulatory changes; and
• a combination of the above.

To successfully implement organisational changes, it is necessary to create an environment which will facilitate them, as shown in Figure 9.
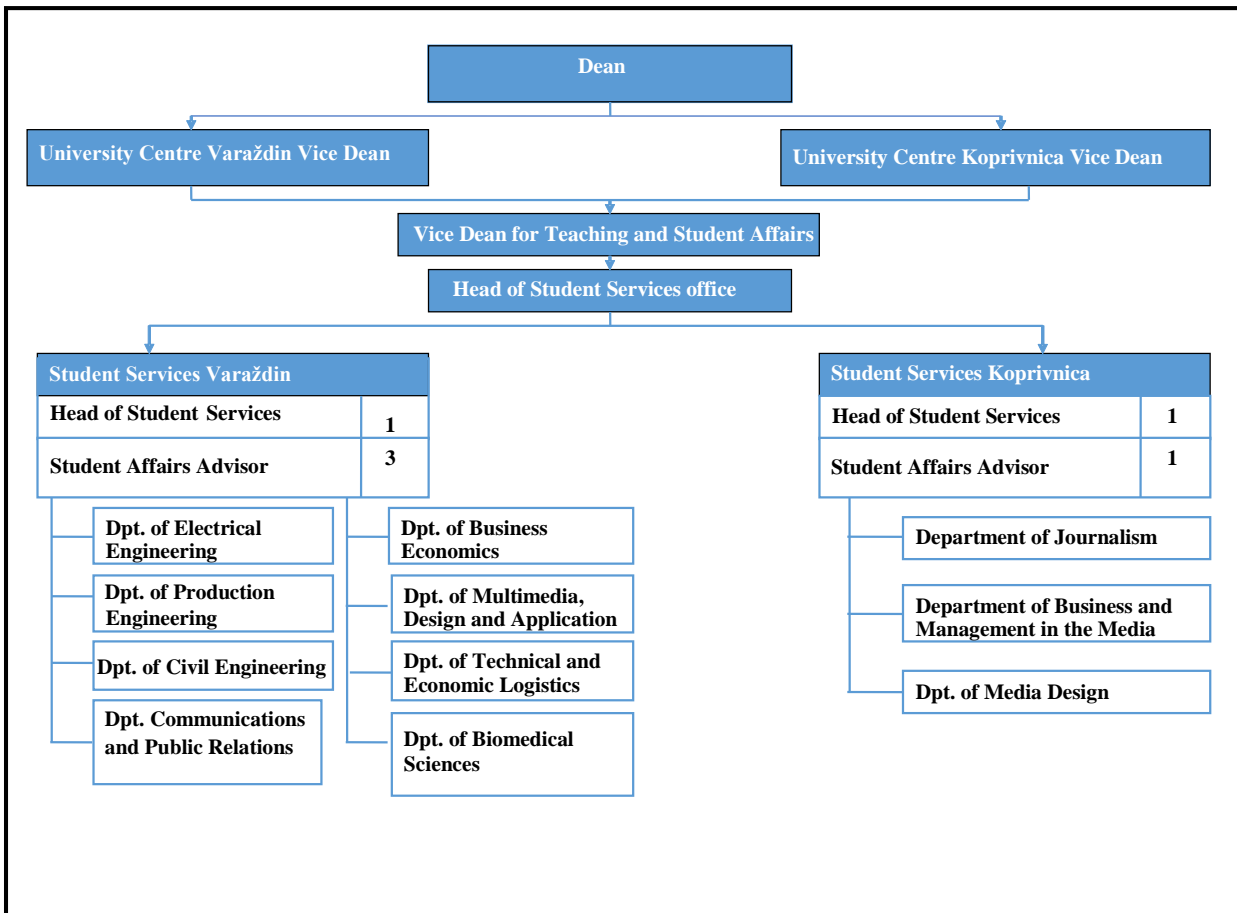
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Figure 9. Proposed structure of the Student Services at the University North [6]

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Conclusion

The efficiency and effectiveness of the Student Services is determined by the satisfaction of students as well as all other interested parties, i.e. teachers, administrative staff, former students, employers, external associates, etc. The survey shows that the level of student satisfaction with the Student Services varies and that there are certain organisational problems. This confirms the main hypothesis which states that a reorganization of the Student Services at the University North is necessary to increase the level of its effectiveness and efficiency, as well as the auxiliary hypothesis relating to the increase of the level of satisfaction of students and other interested parties. The following have been identified as possible solutions and opportunities for improvement of efficiency and effectiveness of the Student Service:

- reorganization of the Student Services office space

The Student Services should have two separate offices. One would be used for daily interactions with students, teachers, etc., while all other activities would be performed in the other office.

-changing of the Student Services office hours

To improve the availability of its services, two days a week, the Student Services office should be open for students and other interested parties also in the afternoon.

- monitoring the efficiency of the work of the Student Services

Further surveys can be conducted to monitor the quality of the work of the Student Services. There is a need to rate the performance of individual employees. To be able to do that, it is necessary to set standards, develop the rating criteria as well as incentive schemes and successful employee reward programs.

-visiting other higher education institutions

It is recommended to visit other universities, both in Croatia and abroad, in order to exchange experiences with their staff and see firsthand how other HE institutions have organised their activities. It is necessary to reorganize the Student Services to improve its effectiveness. The proposed changes as to the office space would allow for the specialization of activities and would facilitate staff efficiency.

Each individual activity should be standardized to ensure consistent execution of activities. Two days a week, the Student Services office should also be open in the afternoon to facilitate greater access to its services. Further research on this issue is needed to identify the impact of individual factors and examine a possible synergistic effect of factors on the effectiveness and efficiency of the work of the Student Services. The Deming cycle can be applied to the activities of the Student Services to ensure that all activities are planned (plan), implemented (do), monitored (check) and improved (act).

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FRAUD RISK ASSESSMENTS: AN EMPIRICAL ANALYSIS

Abstract:

This paper provides the theoretical review of the fraud risk characteristics, systematization of the existing fraud knowledge and the causes of fraud occurrence. Moreover, it determines the roles and the responsibilities of managers and auditors in the fraud risk assessments. In addition, risk factors relating to the misstatements arising from fraudulent financial reporting have been examined. According to the results of numerous scientific and expert studies it is obvious that a system of internal controls, including fraud risk assessments as an elementary component of this system, contributes to reducing fraud occurrence. In order to gain information about the factors that could cause fraudulent financial reporting, the empirical research has been conducted on the sample of companies operating in the Republic of Croatia. The respondents, accountants and auditors, revealed how often they meet fraud risk factors.

Although, according to respondents' answers, companies rarely encounter circumstances that indicate the possibility of fraud, the obtained data imply that there are possibilities that financial statements contain misstatements as a result of fraud. Examples of circumstances indicating the possibility that the financial statements contain a material misstatement resulting from fraud include: last-minute adjustments that significantly affect financial results, followed by transactions that are not recorded in a complete or timely manner or are improperly recorded as to amount, accounting period, classification, or entity policy and unsupported or unauthorized balances or transactions. The problems, which the accountants most frequently encountered were undue time pressures imposed by management to resolve complex or contentious issues, an unwillingness to address identified deficiencies in internal control on a timely basis and missing documents.

Keywords:

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Introduction

The fraud risks represent significant or very significant risk for every organization. In that sense the most important factor is proactive fraud risk approach which is primarily related to the increased awareness of possibility of fraud occurence in the company, identifying the most sensitive areas and early detection of fraud. Large frauds have led to the downfall of entire organizations, massive investment losses, significant legal costs, incarceration of key individuals, and erosion of confidence in capital markets [10]. Due to these facts regulators very often require implementation of proactive fraud prevention programs. In that sense the role of management, board of directors, accountants and auditors have been highlighted in ensuring reliable financial reporting. Fraud has a negative impact on organizations in different ways, including financial, reputational, psychological, and social [9]. Fraud causes, not only tremendous losses to business world, but also morale problems in workplace [19]. Since many fraudulent schemes remain undiscovered, or months and even years may pass till they are discovered, and because there are often no reports of fraud, it is very difficult to calculate the exact amount of losses due to fraud. It is estimated that the typical organization's annual loss of revenues is 5% [2].

This paper discusses managements' and auditors' responsibility for preventing and detecting fraudulent financial reporting. The implementation of fraud prevention activities is much more complex issue then detecting fraud as a result of undesirable events. Fraud prevention activities, among other activities, include fraud risk assessments, testing fraud controls and fraud auditing. In modern business environment detecting and investigating fraud activities is by far the most complex issue due to the fact that perpetrators "cover their tracks".

Fraud, by definition, entails intentional misconduct, designed to evade detection [10].

In order to gain information about the factors that could cause fraudulent financial reporting, the empirical research has been conducted on the sample of companies operating in the Republic of Croatia. The aims of this empirical research are to identify the fraud risk factors, to investigate how often do the accountants and auditors encountered circumstances indicating the possibility of fraudulent financial reporting. In addition, this paper explores the perception of the accountants about the fraud risk assessments in their companies.

Theoretical background

Singleton et. al. stated that there is no definite and invariable rule that can be laid down as a general proposition in defining fraud, as it includes surprise, trick, cunning and unfair ways by which another is cheated [20]. In business environment fraud is an intentional deception, misappropriation of a company's assets, or manipulation of its financial data to the advantage of the perpetrator [7]. For an act to be fraudulent there must be: a false statement, representation, or disclosure; a material fact, which is something that induces a person to act; an intent to deceive; a justifiable reliance; that is, the person relies on the misrepresentation to take an action; an injury or loss suffered by the victim [18]. Fraud always involves a deliberate action by one person to gain an unfair advantage over another person, and can take many forms [23]. In addition, fraud can be defined as "any intentional act or omission designed to deceive others, resulting in victim suffering a loss and/or perpetrator achieving a gain" [10]. Fraud usually can be divided into internal and external fraud. According to Jans et. al. merely all research is conducted in the field of external fraud, and concerning internal fraud, there is a gap in the academic literature [12].

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One of the most commonly used classifications of fraud is from The Association of Certified Fraud Examiners (ACFE), which have identified three primary categories of fraud based on numerous investigated fraud cases. These are asset misappropriations, corruption schemes and financial statement fraud schemes. According to ACFE, asset misappropriations are those schemes in which the perpetrator steals or misuses an organization's resources; corruption schemes involve the employee's use of his or her influence in business transactions in a way that violates his or her duty to the employer for the purpose of obtaining a benefit for himself or herself or someone else; and financial statement fraud schemes are those involving the intentional misstatement or omission of material information in the organization's financial reports [1]. Although fraud is a broad legal concept, for the purposes of the International Standards on Auditing, the auditor is concerned with fraud that causes a material misstatement in the financial statements, and accordingly two types of intentional misstatements relevant to the auditor are misstatements resulting from fraudulent financial reporting and misstatements resulting from misappropriation of assets [11].

For each of these types of fraud, the risk factors are further classified based on the three conditions generally present when material misstatements due to fraud occur incentives/pressures, opportunities, and attitudes/rationalizations [11]. According to Rezaee and Riley, financial statement fraud occurs for a wide variety of reasons, including when motives are combined with [17]. Motivated person, being able to rationalize his or her behaviour, will find a way to commit fraud.

There is a lack of academic research in the field of financial fraud investigations and assets misappropriation. Most of the research was carried out by the professional organizations. According to the latest 2016 global fraud study, asset misappropriation was the most common (83% of cases) type of occupational fraud, as well as the least costly, while financial statement fraud involved less than 10% of cases, but those cases had the greatest financial impact. In accordance with report, the median duration of the fraud was 18 months, and the losses rose as the duration increased. The study also highlighted that organizations of different sizes tend to have different fraud risks. According to the study, corruption was more prevalent in larger organizations, while check tampering, skimming, payroll, and cash larceny schemes were twice as common in small organizations as in larger organizations. In accordance with report, while the implementation rates of anti-fraud controls varied by geographical region, external audits of the financial statements, code of conduct, and management certification of the financial statements were consistently among the most commonly implemented across organizations in all locations. The study also highlighted that formal fraud risk assessments were present in less than 40% of the reported cases. According to the study, victim organizations that implemented this control experienced losses 47% smaller and schemes 50% shorter than organizations that did not. [3]

The PwC's 2014 Global Economic Crime Survey stated that accounting fraud had always been one of the major crimes reported in their surveys. In 2014 22% of respondents reported experiencing accounting fraud. On the other hand, asset misappropriation is by far the most common economic crime experienced by the organisations reporting any fraud (69% of cases) [13]. According to the PWC's Global Economic Crime Survey 2016, there was a decrease in the detection of criminal activity by methods within management's control, with detection through corporate controls down by 7%. The study indicated that 22% of respondents have never carried out a fraud risk assessment and

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a further 31% only carry out such an assessment annually. The PWC's findings also indicated that one in ten economic crimes are discovered by accident. [14]

According to PWC's 2016 study, economic crime is a serious issue affecting organisations in Croatia, with no industry being immune. Conducted survey indicates that approximately one out of four Croatian organisations (26%) reported having experienced one or more instances of economic crime in the last two years. This study highlited that although the reported rate of economic crime is lower than the global and Eastern European results (36% and 33% respectively), it may be that fraud incidents are not always detected. According to the study the role of fraud risk assessment is underestimated, as 25% of Croatian respondents have not performed this assessment. The study also indicated that a key pre-requisite for efficient crime prevention and detection is awareness of the risks an organisation is actually exposed, and in this respect, organisations should be encouraged to implement risk assessment exercises on a regular basis. [15]

From these studies it is possible to conclude that fraud is a worldwide problem. Fraud prevention programs which include fraud risk assessments are necessary to address the risk of fraud.

Internal controls and fraud risk assessments

There is numerous definition of internal control in expert and scientific literature. Internal control is broadly defined as a process, affected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories: effectiveness and efficiency of operations, reliability of financial reporting and compliance with applicable laws and regulations [5]. It is conducted by all employees at all levels within the organization in order to achieve effectiveness and efficiency of operation.

The internal control system must be tailored according to the company's needs. To achieve that, the process of organizing and implementing internal control system should be established by the management. In other words, the primary responsibility for internal controls and the preparation of financial statements rests with both, those charged with governance of the entity and the management.

It is important that management, with the oversight of those charged with governance, place a strong emphasis on fraud prevention, which may reduce opportunities for fraud to take place, and fraud deterrence, which could persuade individuals not to commit fraud because of the likelihood of detection and punishment [11]. In broader sense, every employee plays an important role in implementing internal control process. For example, the role of accountant is "important in the design of internal control procedure to ensure compliance and the achievement of the company objectives" [16].

However, understanding internal control system is crucial for managers and employees but also for those who are in charge for its supervision. In that sense internal and external auditing has the most significant role. Due to the fact that internal control is a key component of the risk management process internal auditors "must assess the adequacy and efficiency of controls for responding to the risks of managing the business and their information systems" [8].

When performing financial statements audit, external auditor should assess the risk of fraudulent financial reporting. In making these assessments the auditor is required to have sufficient understanding of internal control systems in order to design audit procedure that are appropriate in the circumstances. The auditor is not expressing an opinion about the efficiency of internal control. The

auditor "responsibility is to communicate appropriately to those charged with governance and management deficiencies in internal control that the auditor has identified in an audit of financial statements" [11].

In that sense external auditors are contributing to the achievement of company objectives. In addition, auditing is conducted in order to ensure the "true and fer" financial reporting. Reliability of financial reporting and compliance with applicable laws and regulations are set as basic internal control objectives. When expressing independent and objective audit opinion about the financial statements, auditors provide to the management useful information about any internal control deficiencies detected in the process of financial statements auditing. In that sense they provide reasonable assurance regarding the achievement of the company's objectives.

The most commonly used framework for the assessment of internal controls is the COSO framework. COSO Framework provides a "standard for all the companies to assess their internal controls and determine a way to improve them" [5]. According to this framework internal control consists of five interrelated components: control environment, risk assessment, control activities, information and communication and monitoring. This paper puts an emphasis on the risk assessment component of the COSO framework.

Once the aims and appropriate control environment have been established the company should assess the risks that can jeopardize the established aims. Every entity faces a variety of risks from internal and external sources that must be assessed. "Risk assessment is the identification and analysis of relevant risks to achievement of the objectives, forming a basis for determining how the risks should be managed" [8]. The foundations of an effective fraud risk management program are rooted in a risk assessment. The assessment may be integrated with an overall organizational risk assessment or performed as a stand-alone exercise, but should, at a minimum, include risk identification, risk likelihood and significance assessment, and risk response [10].

Management has overall responsibility for risk management in the company. They should ensure the functioning the process in order to achieve the objectives of internal controls and therefore the objectives of the company. According to the COSO Framework definition „enterprise risk management is a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives [6]." The risk assessments in a company should start from the „characteristics of each business goal, from the highest level (for example, keeping a company profitable) to the lowest level (for example, safeguard a cash), to document collected information and assess every risk that can undermine or block the achievement of the objective"[22]. The effectiveness of fraud risk assessments "depends on the understanding of the fraud concept within the environment (a company, time period and the effectiveness of internal controls)" [21].

The risks of fraudulent financial reporting include identifying, analysis and managing the risks of preparing true and reliable financial information. The examples of fraudulent financial reporting risks include: transactions that are not recorded in a complete or timely manner or are improperly recorded as to amount, accounting period, classification, or entity policy, unsupported or unauthorized balances or transactions, last-minute adjustments that significantly affect financial results, missing documents [11].

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Management of the company has overall responsibility for fraud risk assessments and implementing controls for fraud prevention and detection. These assessments can be made annually or continuously. The nature, extent and frequency of managements' assessments vary among the companies. If the management has not made the fraud risk assessments can be an indicator that the management does not attach the required attention to the internal controls. Futhermore it is necessary to emphasize the importance of the role of the chief accounting officer in preventing and detecting fraudulent financial reporting, because, "as a member of top management, the chief accounting officer helps set the tone of the organization's ethical conduct; is responsible for the financial statements; generally has primary responsibility for designing, implementing and monitoring the company's financial reporting system; and is in a unique position regarding identification of unusual situations caused by fraudulent financial reporting" [5].

External auditor is responsible for obtaining reasonable assurance that the financial statements taken as a whole are free from material misstatement, whether caused by fraud or error. When obtaining reasonable assurance, the auditor is responsible for maintaining professional scepticism throughout the audit, considering the potential for management override of controls and recognizing the fact that audit procedures that are effective for detecting error may not be effective in detecting fraud. The auditor may suspect or, in rare cases, identify the occurrence of fraud, but does not make legal determinations of whether fraud has actually occurred.

According to ISA 240, "the auditor's ability to detect a fraud depends on factors such as the skilfulness of the perpetrator, the frequency and extent of manipulation, the degree of collusion involved, the relative size of individual amounts manipulated, and the seniority of those individuals involved. While the auditor may be able to identify potential opportunities for fraud to be perpetrated, it is difficult for the auditor to determine whether misstatements in judgment areas such as accounting estimates are caused by fraud or error". [11] However, because of their expert knowledge, external auditors are often in great position to provide useful perspectives on best practices in financial reporting and controls, including the mitigation of the fraud risks [4]. In fact, whenever the external auditor has determined that there is evidence that fraud may exist, the professional standards require that the matter should be brought to the attention of an appropriate level of management in a timely manner. If the external auditor suspects fraud involving management, the external auditor must report these suspicions to those charged with governance.

However, the efficiency of the external auditing in fraud detection has been an object of many expert and scientific research sometimes with the conflict findings. In accordance with ACFE's 2014 global study, external audits are implemented by a large number of organizations (as they were present in more than 80% of the fraud cases), but they present the least effective control in combating occupational fraud. Such audits were the primary detection method in just 3% of the reported fraud cases reported. Furthermore, although the use of independent financial statement audits was associated with reduced median losses and durations of fraud schemes, these reductions were among the smallest of all of the anti-fraud controls analysed in the study. Consequently, the study concludes that independent audits serve as a vital role in organizational governance, but data indicates that they should not be relied upon as organizations' primary anti-fraud mechanism. [2]

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Accountants' and auditors' perception regarding fraud risk assessment and circumstances indicating the possibilitiy of fraudulent financial reporting

Data and methodology

In order to gather information on the fraudulent financial reporting of companies in the Republic of Croatia, a questionnaire survey was conducted. The respondents were the accountants in medium and large-sized companies and external auditors. Accountants evaluated how often, when performing accounting tasks in the company, faced with certain statements that constitute examples of circumstances that may indicate the possibility that the financial statements contain a material misstatement resulting from fraud. The incidence of the same circumstances has been tested on the second sample made up of external auditors. However, the external auditors were answered how often they meet with the statements in its auditing practices.

Methods used to analyse the collected data were adjusted to the variables which were formed through the questions and statements. First part of the questionnaire consisted of some basic information about the respondents and companies where respondents are employed. In the second part of the questionnaire, circumstances indicating the possibility of financial reports containing significant misstatements as a result of fraud were analysed. Statements, which are part of the International Standard on Auditing 240 - The Auditor's responsibilities relating to fraud in an audit of financial statements, are formed on the bases of examples of circumstances that indicate the possibility of fraud. Examples of circumstances, which are divided into four groups in the

International Standard on Auditing, were modified for the purpose of this survey, i.e. simplified and adapted to the survey scale. For the purpose of evaluating how often respondents encountered certain fraudulent financial techniques, on the Likert scale from 0 to 5 (where 0 means "never'", and 5 means "very often") respondents evaluated how often they encounter circumstances indicating the possibility of fraud.

Empirical results - Accountants' and auditors' perception regarding circumstances indicating the possibilitiy of fraudulent financial reporting

The information from the survey were gathered from May 27 to July 14, 2012, after eliminating the incomplete questionnaires and those not satisfying the set criteria, the final number of collected questionnaires was 142 from accountants and 42 from auditors.

The following information is gathered in order to describe the characteristics of the respondents. 71% of accountants were employed in medium-sized companies, and 29% in large-sized companies. Most of the auditors were employed in small audit firms (78%), followed by medium-sized firms (20%), and the smallest number in large audit firms (2%). According to the results of research over the 70% of survey respondents are accountants with more than 10 years of work experience, 16% have between 6 to 10 years, 11% have between 1 to 5 years and 5% are performing accounting in less than 1 year period. Considering the many years of work experience it is assumed that accountants should be familiar with the functioning of the accounting information system and internal control system in the companies in which they are employed. As for the auditors in the research period 42% have more than 10 years of experience in the

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field of auditing, 24% have 6 to 10 years, 29% have 1 to 5 years while 5% have less than 1 year of experience. While performing audit activities, 54% of respondents stated that they were under pressure from the client when they were supposed to express "qualified opinion". 22% of respondents stated that they never gave "qualified opinion". On the question, if the companies to which they had given "qualified opinion" engaged them to perform audit afterwards, 46% of auditors responded that they were still engaged, while 41% of auditors were engaged only in some cases.

On the Likert scale from 0 to 5 (where 0 means never, and 5 means very often) respondents evaluated how often they encountered circumstances indicating the possibility of fraudulent financial reporting. The research results are presented in Table 1.

Statement	Accoutntants		Audtiors	
	Rating Average	Response Count	Rating Average	Response Count
Transactions that are not recorded in a complete or timely manner or are improperly recorded as to amount, accounting period, classification, or entity policy.	0,94	142	2,98	42
Unsupported or unauthorized balances or transactions.	0,63	142	2,64	42
Last-minute adjustments that significantly affect financial results.	1,13	142	3,21	42
Tips or complaints about alleged fraud.	0,35	142	1,29	42
Missing documents.	1,17	142	2,29	42
Unavailability of other than photocopied or electronically transmitted documents when documents in original form are expected to exist.	1,06	142	2,24	42
Missing assets of significant magnitude.	0,18	142	1,48	42
Undue time pressures imposed by management to resolve complex or contentious issues.	1,36	142	2,45	42
An unwillingness to add or revise disclosures in the financial statements to make them more understandable.	0,97	142	2,32	41
An unwillingness to address identified deficiencies in internal control on a timely basis.	1,17	142	2,54	41
Frequent changes in accounting estimates that do not appear to result from changed circumstances.	0,6	142	2,32	41
Tolerance of violations of the entity's code of conduct.	0,57	142	1,78	41

Table 1 The participants' perception regarding circumstances that may indicate the possibility that the financial statements may contain a material misstatement resulting from fraud

According to the responses of accountants, companies rarely encountered with the aforementioned fraud risk factors. The problems, which the accountants most frequently encountered were undue time pressures imposed by management to resolve complex or contentious issues, an unwillingness to address identified deficiencies in internal control on a timely basis, folowed by missing documents and last-minute adjustments that significantly affect financial results. Although, according to respondents' answers, company rarely encounter circumstances that indicate the possibility of fraud, averages obtained at the level of enterprises indicate that there is a possibility that the financial statements may contain a material misstatement resulting from fraud.

The auditors are more likely to agree with certain circumstances that indicate the possibility of fraud than the accountants. However, when interpreting the results it is necessary to take into account that the accountants answered how often they meet with asked circumstances of the company in which they are employed, while the auditors answered how often they met with asked circumstances in its auditing practices. Examples of circumstances indicating the possibility that the financial statements contain a material misstatement resulting from fraud, which the auditors most frequently encountered, were last-minute adjustments that significantly affect financial results, followed by transactions that are not recorded in a complete or timely manner or are improperly recorded as to amount, accounting period, classification, or entity policy and unsupported or unauthorized balances or transactions. Auditors are also set some additional statements, according to which auditors encountered with fewer responses to confirmations than anticipated or a greater number of responses than anticipated (12% very often, and 37% often, rating average 2,98) and unusual delays by the entity in providing requested information (10% or respondent met very often and 32% often, rating average 2,95).

Empirical results - accountants' perception regarding fraud risk assessment component

In order to gather information on accountants's perception regarding fraud risk assessment, accountants also provided data of risk assessment component in their companies. The specified variable was formed as an unweighted average of statements referring to fraud risk assessment, which are based on the examples of questions for risk assessment principles in COSO's Internal Control over Financial Reporting - Guidance for Smaller Public Companies, Volume III: Evaluation Tools (2006). It should be noted that there is no methodology or framework that would be fully able to consider all the issues related to risk assessment. The areas covered in this paper are examples, based on the COSO framework, which should be considered and they represent a methodology that can help in the evaluation of risk assessment component. For the purpose of evaluating this component of internal control system, again Likert scale from 0 to 5 (where 0 means "strongly disagree", and 5 means "strongly agree") was used.

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Statement	Midium-sized companies		Large-sized companies		Total	
	Rating Average	N	Rating Average	N	Rating Average	N
Financial statements are align with the requirements of accepted accounting principles.	4,75	101	4,73	41	4,75	142
Information presented in financial statemets are classified and summarized in a reasonable manner, neither too detailed nor too condensed.	4,63	101	4,68	41	4,65	142
Risk identification consider both internal and external factors and their impact on the achievement of financial reporting objectives.	4,10	101	4,15	41	4,11	142
Fraud risk assessment is an integral part of the identification and analysis of risks.	3,93	101	4,00	41	3,95	142
The company's assessment of fraud risks consider incentives and pressures, attitudes, and rationalizations, as well as opportunity to commit fraud.	3,93	101	3,90	40	3,92	141
The company's assessment consider risk factors that influence the likelihood of someone committing a fraud and the impact of a fraud on financial reporting	3,88	100	3,88	41	3,88	141
The company's assessment consider the possibilities of fraud in high-risk areas of accounting (eg, revenue recognition, important estimates).	4,05	101	4,17	41	4,08	142
Risk assessment - total rating average	4,19	100	4,20	40	4,19	140

Table 2 The accountants' perception regarding fraud risk assessment

Total rating average for the risk assessment component for all respondents was 4,19, which means that employees generally agree with the claims of a risk assessment that should exist in companies. Almost all respondents strongly agree that in their company financial statements are prepared in accordance with the requirements of accounting standards. However, in medium- and large sized companies the claims relating to the assessment of the fraud risk, which can be seen as an integral part of risk assessment at the company level, are at least represented. Respondents are at least agreed with the statements that in their companies are considerd risk factors that influence the likelihood of someone committing a fraud and the impact of a fraud on financial reporting, as well as with statement related to consideration of incentives and pressures, attitudes, and

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rationalizations, as well as opportunity to commit fraud.

Conclusion

Risks that modern companies are facing today are changing and complement as a result of changes in environment, the use of modern technologies, ways of communication and also due to more stringent legal and regulatory frameworks. In that sense one of most significant risk with a possible serious impact on the organization is the risk of fraudulent financial reporting. Significant time, financial and human resources are necessary in order to manage properly these risks due to the fact that fraud risks can be various and very complex. Fraud risk management includes identification, assessment and surveillance of fraud risk. Many frauds can be prevented if the fraud risk factors are on time identified by the auditors and accountants.

The conducted empirical research investigated how often do the accountants and auditors encounter circumstances indicating the possibility of fraudulent financial reporting. Based on the results of conducted empirical research it can be concluded that the fraud risk assessments are at satisfactory level by the accountants' perception. However, the companies should devote more attention to assessing the risk of fraud. Moreover the assessment of the fraud risks should be considered as an integral part of the overall risk assessments at the company level. The results of the study show that the companies rarely encounter circumstances that may indicate the possibility that the financial statements contain a material misstatements resulting from fraud. Althought these study identified a number of problems that can cause the financial statements can be misstated. In that

sense it is crucial that those charged to the quality of financial reporting process, management, accountants, external auditors, devote enough time and their resources to identify, access and manage the fraud risk factors in order to create addition value for the organization.

This empirical research has its limitations inherent to the applied research method. In addition, the respondents - accountants can be included or familiar with some form of fraudulent activities. The limitations of the research can be viewed throught the size of sample, as well as the fact that 37% of auditors have less the five years of working experience. However, the presented results of research certainly provide valuable information.

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ANALYSIS OF ECONOMIC POTENTIAL IN SECTOR OF VITICULTURE AND ENOLOGY IN POZEGA-SLAVONIA COUNTY

Abstract:

Pozega-Slavonia County has a long tradition of viticulture and oenology at which it becomes ever more recognizable. Although this is the economic segment of high importance for the local economy and regional development this study has shown that there is low percentage of representation in relation to the total agriculture potential of the county. In Republic of Croatia there are counties with higher number of vineyards planted (per unit of the area) vine production in Pozega-Slavonia County shows a greater amount of products of higher quality. With the analysis of the available statistical data it has been noticed that there is room for growth of this market segment and potential of multiplier effects in the development of the local economy with additional uprising in this sector.

The target of the research has been gaining an insight into the current state of the agricultural sector of Pozega-Slavonia County emphasizing on production of fresh grapes and wine. Goal was to gain perspective in correlation between viticulture and winemaking with complete agriculture situation in Pozega-Slavonia County and to compare this branch with other counties in Croatia.

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Data processing

The study was conducted by analyzing statistical data available from public institutions of the Republic of Croatia (the Paying Agency for Agriculture, Fisheries and Rural Development, Central Bureau of Statistics, Croatian Chamber of Commerce, Pozesko-Slavonska County office) that in their job description have processing of statistical data and publishing results. Suspecting the possibility that not all of the stakeholders are included in data analysis available by institutions, all of the data is subject to the standard error of medium value. As all data inputs are equally subject to error it is realistic to assume that the nominal amounts of data fluctuate from real data, but the likelihood is that the error uniformly susceptible to all the data so that the trend towards conclusions should be within the significance level of less than 5%. Although there is the possibility of divergence between the published data and the realistic situation in the economy, data publish by institutions is considered official and as such it is used in the processing and analysis of this paper. It is important to note that all legal entities operating in the agricultural sector are not liable to income tax system. Therefore, the total value of the agricultural sector in the Pozega-slavonia County can be higher than the official statistics of the Tax Administration, Chamber of Commerce and the National Bureau of Statistics. Due to the impossibility of collecting data on the total value of output with all entities involved in agricultural sector research activity is focused only on income tax payers. Official statistic is issued by stated public institutions and as such is consider relevant data.

Analysis of the sector viticulture and winemaking in Croatia

The territory of the Republic of Croatia is located between the limits of 42° and 47° north latitude. The entire economic sector of viticulture and oenology at the national level in a sense of territorial and administrative view is organized in accordance with the Regulations on the geographical areas of wine growing and it divides entre territory od Republic of Croatia into 3 regions, 12 sub-regions and 72 wine region [1].

Region	Surface (hectare)	%	Zone	Surface (hectare)	%
Eastern Continental Croatia	6.482,38	31,30	Zona B	4.062,72	19,62
Coastal Croatia	10.163,97	49,08	Zona C1	6.482,38	31,30
West continental Croatia	4.062,72	19,62	Zona C2	10.163,97	49,08
Total:	20.709,07		Total:	20.709,07	

Table 1: Vine-growing regions and zones in the Republic of Croatia

According by the previously mentioned Regulations entire territory of Croatia belongs to the vine growing zone B (sub region Moslavina, Prigorje - Bilogora, Plešivica, Pokuplje and Zagorje - Medjimurje), zone C (sub region Hrvatsko Podunavlje and Slavonija), zone CII (sub region Hrvatska Istra, Hrvatsko primorje, Dalmatinska zagora) and zone CIII (sub region Sjeverna Dalmacija and Srednja and Južna Dalmacija). According to the data available from the Agency for Payments in Agriculture, Fisheries and Rural Development (below: Paying Agency) which was created based on an analysis of the national system of identification of land parcels, and records the use of agricultural land in the Republic of Croatia (below: ARKOD) in 2015th there was total of 1.094.793,30 hectares [2] of agricultural land available on national level. Paying Agency reported that total area of vineyards was 20.709 hectares (cumulative of all sub regions) and on that surface in 2015th was produced a total of 690,787.39

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hectoliters of wine [3]. The total land surface of Croatia is 56,594 km2 [4] and usage for the purpose of agricultural land makes total of 19.34 %. Plantations of vineyards occupy 20.709,07 hectares or 1.89% of total agricultural land of the Republic of Croatia. Highest amount of surface on witch there are crops of vineyards is found in Istria County (3.106,04 ha), followed by Osijek-Baranja County (2.479,77 ha), Dubrovnik County (2.467,49 ha), Split-Dalmatia County (1.898,12 ha), Vukovar-Srijem County (1.696,12 ha), Zadar County (1.524,00 ha) and Pozega-Slavonia County (1.424,68).
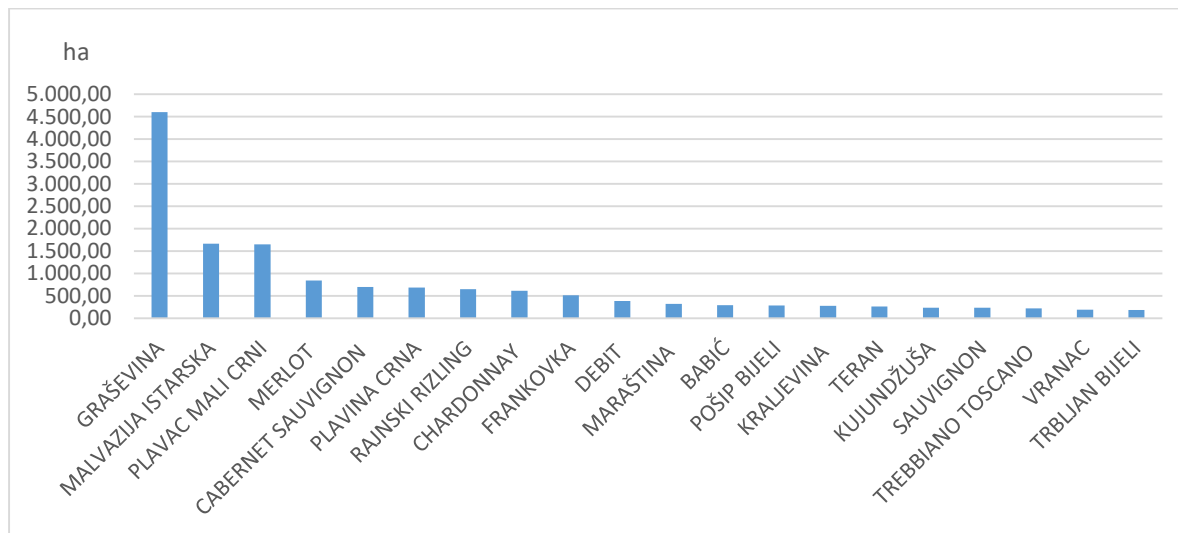
Table 2: Distribution of grape varieties in Croati

By the total sum of all area surfaces in agriculture (expressed in ha) at the national level it is noted that most common grape variety is Graševina with 4.598,52 hectares (over 22 % of total production), followed by the Istrian Malvasia 1.664,34 hectares (over 8 %) and Plavac Mali 1.650,44 ha (over 7 %). The top three vine culture account for over 38 % of the total utilization of agricultural land are under vineyards while other varieties of vine does not exceed more than 1000 hectares (cumulative over the entire surface of the Republic of Croatian/per varieties). Sector of wine production, observed in the context of the district (regional) division is led by the Osijek-Baranja County with a production of over 136.000,00 hectoliters and makes 19.77 % of the total wine production. Pozega- Slavonia County (below: PSC) is fourth in wine production makes 9.93 % of the total national production of wine

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County	Grapes (ton)	Wine red/ rose (hectoliters)	Wine white (hectoliters)	Total (hectoliters)
Osječko-baranjska	20.807,32	26.319,62	110.248,76	136.568,38
Istarska	17.954,56	42.821,30	76.803,14	119.624,44
Vukovarsko-srijemska	13.317,28	9.797,21	82.030,45	91.827,66
Požeško-slavonska	10.775,09	7.140,75	61.421,54	68.562,29
Dubrovačko-neretvanska	7.909,22	36.200,41	15.782,71	51.983,12
Zagrebačka	5.956,45	4.467,88	37.381,76	41.849,64
Splitsko-dalmatinska	6.481,43	20.234,73	20.059,83	40.294,56
Total (all Countys)	105.366,61	176.599,05	514.188,34	690.787,39

Table 3: County according to the total grape and wine production in 2015th

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According to data for 2015th issued by the Paying Agency in all wine regions of Croatia there is a total of 20.709,00 hectares of vineyards witch produce 105.366,61 tons of fresh grapes and a total of 690.787,39 liters of wine. On average, this would mean that the yield per hectare was 5.09 tons while from one kilogram of grapes it was produced 0.66 liters of wine. These conclusions came from calculating the mean of the total data and may vary depending on the way the vines but also on the method of production of wine.
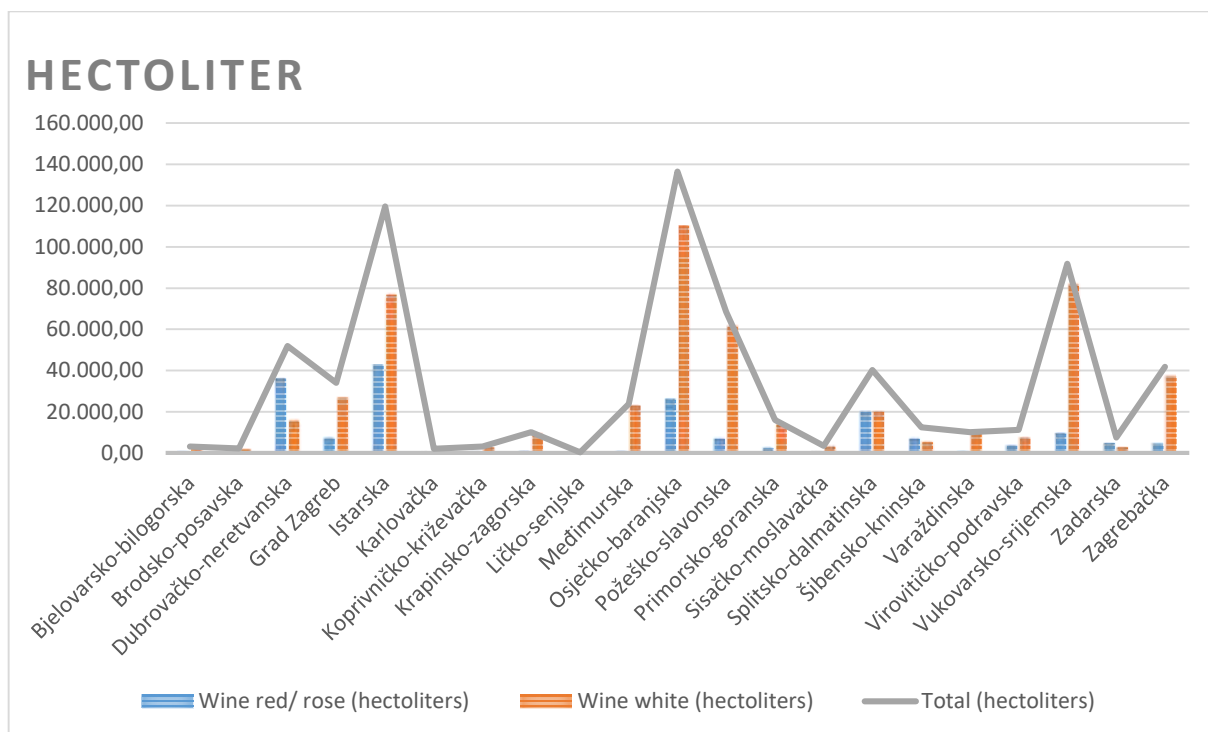
Table 4: Production of wine by county 2015th

Wine consumption (per capita) in 2015th is estimated at 24.5 liters. The economic value of wine production represents 7.3 % of total agricultural production [5]. According to the data available from Croatian Chamber of Economy in 2015th import / export balance of the wine sector was negative.

PRODUCT	IMPORT		EXPORT		BALANCE	EXPORT-IMPORT RATIO
	2015.		2015.		2015	
	TON	EUR	TON	u EUR	u EUR	(%)
Wine of fresh grapes	28.920	29.006.754	4.932	12.398.328	-16.608.426	43

Table 6: Balance of import / export of wine of fresh grapes

The coverage of import by export rations is only 43% giving a negative sing to foreign trade balance of the wine sector. Although the Republic of Croatia geographically and climatically situated in extremely favorable conditions for the production of grapes and wine, and there are several centuries-old tradition of viticulture and wine, market balance still failed to achieve more exports than imports. Researching this disbalance by analyzing of the current state of the sector of wine production may

give a partial answer to this problem in the fact of the high costs of grape production in the domestic economy. According to the analysis of the Institute of Social Sciences Ivo Pilar from 2013 year the problems of first instance encountered by winegrowers and winemakers in the production and sale of grape and wine listed is the high price of putting wine on the market[6]. The average price of lower quality wine in the Republic of Croatia was 7.29 kuna per liter. This price level is the result of data analysis of average prices in 2014th and 2015th and are available from the Bureau of Statistics [7]. The average exchange rate of the euro against the kuna in the year 2014/2015 was 7.638 EUR [8]. From this we conclude that the average price of table wine in the Republic of Croatia is the not less than 0.95 euros per kilo while the most competitive import competitor offers its products at a price not less than 0.77 euro per kilo according to Croatian Chamber of Economy.

COUNTRY FOR EXPORT	EXPORT 2015.		COUNTRY OF ORIGIN	IMPORT 2015.	
	ton	EURO		ton	EURP
Bosnia and Herzegovina	1.619	4.393.716	Macedonia	14.228	10.992.860
Germany	683	1.675.768	Italy	5.771	4.604.763
Czech Republic	1.680	1.092.048	France	510	4.078.387
Montenegro	144	901.809	Germany	922	2.101.270
Serbia	126	665.913	Kosovo	3.607	1.908.160
United States of America	94	566.586	Bosnia and Herzegovina	1.209	1.192.427
Netherlands	19	522.353	Slovenia	271	789.290
Austria	147	485.000	Spain	428	754.380
Switzerland	47	227.067	Hungary	508	342.864
Singapore	6	225.230	Austrija	114	336.794
Slovenia	57	206.638	Montenegro	548	327.977
China	17	164.111	Czech Republic	243	322.542
Canada	23	109.969	Serbia	267	290.844
Japan	16	79.642	Other countries	294	964.196
Wine of fresh grapes	4.932	12.398.328	Wine of fresh grapes	28.920	29.006.754

Table 7: Import and export of wine in 2015th

Agriculture in Pozega- Slavonia County

According to data available from the Administrative Department for Economy and Construction Pozega-Slavonia County this regional government unit has surface aria of total 181.811,00 ha (or 1.832 km2), which makes 3.2% of all land of Croatia. Of the total area of the county declarative agriculture acreage makes 81.442,59 ha (49.29% of the area) but National system of identification of land parcels, and records the use of agricultural land (ARKOD) system accounts for only 42.443,61 hectares which makes utilization of 3.87% of total agricultural land of the Republic of Croatian. Such utilization of agricultural land puts PSC in the ninth

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place (out of total of twenty-one county). As ARKOD system is an integral part of the Integrated Administration and Control System (IACS) by which the Member States of the European Union allocate, monitor and control direct payments to farmers and includes areas that are really used in agriculture for this research it provides relevant statistical information.

The most common types of use of agricultural land in the PSC applies to arable land with a total of 36.419,53 ha (83.80%). Under permanent vine is only 1.462,57 hectares and is located behind the meadow (2.451,46 ha) and orchards (1.760,07 ha).

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- ARABLE LAND 83,80%
- GREENHOUSE 0,01%
- MEADOW 5,64%
- GRASSLAND 2,67%
- VINEYARDS 3,37%
- RECLAIMED VINEYARDS 0,26%
- FRUT VARIETIES 4,05%
- NURSERY GARDEN 0,02%
- MIXED PERMANENT CROPS 0,03%
- OTHER LAND 0,15%
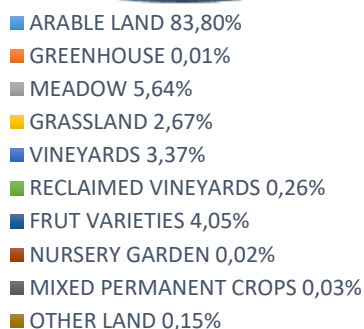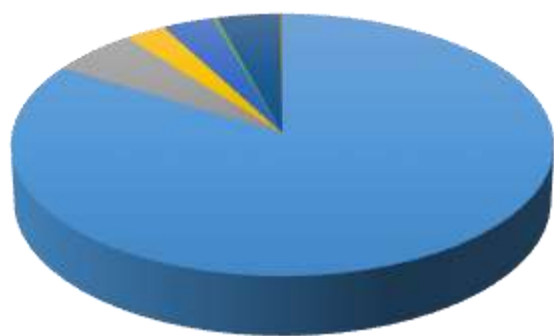
Table 8: Surface and uses of agricultural land in PSC

The most common crops that were sown in the examined period (season 2014th /2015th) in PSC relate to corn 11.191,30 ha, wheat 6.923,71 ha, soy 3.407,56 ha, barley 2.631,48 ha, meadow 2.193,87 ha, oats 1.998,24 ha, grass 1.833,26 ha, tobacco 999,16 ha
According to Croatian Chamber of Economy in 2014th the share in total "GDP" income of PSC from agricultural sector consisted of 16 % while the share of employment in agriculture accounted for 12.26 %. Business entrepreneurs that are profit tax payers, according to the same report, generated a total income of £ 3.227 billion[9].

Viticulture in Pozega- Slavonia County

Pozega-Slavonia County belongs to the vine region Eastern Continental Croatia, sub-region Slavonia and is composed of three vineyards: Kutjevo (1.288,06 ha), Pakrac (20,23 hectares) and Pozega-Pleternica (116,40 ha). Under the vineyards in the PSC there are 1.424,68 hectares (or 1,649 parcels) and by the comparison of the available data we can conclude that only 3.35% of the total (real) agricultural land Pozega-Slavonia County is used for the purpose of wine growing. On this surface production in 2015th/2016th year was 10.775,09 tons of grapes from witch was made 68.562,29 liters of wine (bought black and white). In relation to the agricultural area on witch there are permanent vineyards PSC occupies seventh place (out of a total of twenty Croatian counties plus the City of Zagreb), while the production of grapes ranks fourth in same comperosment. Although the total number of hectares that are under vineyard lags behind some counties with production volume of grape, wine production surpasses the larger counties (Dubrovnik-Neretva County, Split-Dalmatia County and Zadar County). Additional analysis of available data (PAAFRD) for 2015th it can be concluded that production of fine wine with a geographical indication and a protected designation of origin (VRKZP - premium wine ATC (wine PDO)) winemakers from the analyzed territorial units (PSC) lead at the national level with produced over 10.800,00 hectoliters of wine of high quality.

The production of quality wine with a geographical indication and a protected designation of origin (KVKZP - quality wine ATC (wine PDO)) makes a total of 49.397,26 hl which is fourth overall quantity produced at the national level.

County	VRKZP - premium wine ATC (wine PDO)	KVKZP - quality wine ATC (wine PDO)	V - table wine without ESL (with reference to a variety and vintage)	V- wine without PDO	Red wine/rose (hectoliter)	White (hectoliter)
Požeško-slavonska	10.866,27	49.397,26	466,98	647,03	7.140,75	61.421,54
Istarska	7.408,75	50.566,29	3.480,95	14.962,59	42.821,30	76.803,14
Osječko-baranjska	4.320,70	103.614,73	1.101,77	879,4	26.319,62	110.248,76
Vukovarsko-srijemska	4.135,21	58.381,28	19.213,46	253,5	9.797,21	82.030,45
Dubrovačko-neretvanska	2.894,19	8.554,69	438,87	3.818,26	36.200,41	15.782,71
Splitsko-dalmatinska	1.958,57	3.783,99	1.997,90	12.293,27	20.234,73	20.059,83
Virovitičko-podravska	1.277,00	5.058,80	122,2	1.030,15	3.689,55	7.488,15
Zadarska	1.223,49	723,31	184,1	541,1	4.753,05	2.805,90
Zagrebačka	1.134,32	9.049,85	15.679,39	11.424,95	4.467,88	37.381,76
Grad Zagreb	778,8	16.418,08	913,6	8.719,43	7.233,86	26.864,13

Table 9: Production of wine with a geographical indication and a protected designation of origin

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By the analysis of data issued by PAAFRD for 2015th conclusion was that the national average yield per hectare of vineyards was 5,09 tons of grapes and production of 655,60 liters of wine per ton of grapes. A more detailed analysis of the same data leads to the conclusion that the average yield of grapes in PSC was 7,56 tons per hectare of which is produced 636,30 liters of per ton of grapes. Although higher yields of grapes per unit of surface (hectare) final product (wine) recorded lower production volumes (in relation to the national average). This situation can be partly justified by the high level of produced wines of higher quality (according to the method of organoleptic ranking).

The potential for viticulture and enology Pozega-Slavonia County

Using available data of the Central Bureau of Statistics and the Paying Agency average prices and yields seven most common cultures that in 2015th accounted for the maximum utilization of agricultural land in Pozega-Slavonia County were formed. The analysis of data related to yields and prices of agricultural goods in the period from 2012th to 2015th (available from the Department of Statistics) calculated by the average value of the yield per unit area (ton per hectare) and average price per unit mass (kuna per ton).

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Crop	Average yield ton / hectare	Average value price kuna / ton	Potential kuna
Corn	6,75	1.107,44	7.475,22
Wheat	4,65	1.231,71	5.727,45
Soy	2,45	2.826,30	6.924,44
Barley	3,85	1.254,15	4.828,48
Oats	2,88	1.115,58	3.212,87
Tobacco	1,88	8.540,46	16.056,06
Grapes	6,15	4.775,00	29.366,25

Table 10: Potentiial of income from agriculture crops in PSC

Rating according to a nominal amount of money that can be achieved per unit of area production of grapes imposed as most profitable. If judged only according to the statistical analysis of the yield per unit area and multiplied by the cost per unit mass conclusion is that production of grapes gave largest amount of potentional nominal income. The data listed in the table is the result of the calculation of the average value of the data (prices and yields) published from 2012th to 2015th. The data is available from the Central Bureau of Statistics and represent the national average for a given period. The emphasis needs to be placed on the fact that the wine growing is labor-intensive branches of agriculture and the share of manual (human) work is higher than field crops. With the use of new technologies and machines ratio of hours of manual labor still exceeds other cultures, which increases production costs. The cost of growing vines may vary between vineyards, and there is no a unique analysis of the production cost of agricultural crops (by public institutions) so that the real amount of profit can vary in relation to this analysis.

Viticulture and Enology as a generator of economiy

Agricultural activity of viticulture and winemaking can have multiple positive impact on regional development. With an industry that follows the grape and wine production (raw materials, machinery, tools, packaging …) this economic activity can generate the development of other industries. Tourism, education, transport… are some of the industries that their business can lean on the this agricultural sector. Wine tourism is a very important form of tourism, which records a number of benefits for the local community. He achieved multiplier effect through the consumption of visitors which is injected into the local economy … growth in wine tourism can lead to improvement of infrastructure, services and facilities that use local people, especially in communities where such developments would not otherwise be possible. [10] With a market share that wine production has on the economy of the County (share in GDP in the county, investment, employment …) this sector gives the possibility of regional development through the tourism sector. Wine product industry creates a platform on which it is possible to acheve a recognizable marketing component for entire County. There is possible further growth of the tourist brand destinations of Pozega-Slavonia County with the specific relationship between tourism and its marketing environment means that

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it takes a lot more closely reflect and understand the impact of the environment than it is in other areas of economic potential of continental and wine tourism at the local and regional development is indisputable [11]. Currently there is still no clear strategy and then real boom of this segment of the economy is still expected.

Wine is a product that contains highlighted potential for export. This commodity is relatively easy to organize logistically to be available anywhere in the world. By increasing the share of this industry segment there is possibility to open up an export-oriented economy.

Conclusion

Wine-making and viticulture as part of priority regional development policy in Croatia has a significant share of funded development projects and long-term contributions to sustainable development of the country[12]. This sector has a high market results in spite of a small area of distribution (of the total potential arable land surface in PSC), low representation in the total volume of agricultural crops in the county (3.37%) and lower averages compared to the national average (total area under permanent crops, total production of grapes and wine). Although statistically sector of viticulture and oenology carried out in the PSC does not excels compared to other regions and counties it highlights the amount of production of high quality wine with a geographical indication and a protected designation of origin. The long tradition and expertise, favorable atmospheric conditions, geographic location support the efforts of businessmen in achieving high quality products. Currently the largest single employer in Pozega-Slavonia which operates the real

sector of business activity conducted in the field of viticulture and winemaking.

The potential of viticulture and winemaking in the county is much higher than what is currently being achieved. Analysis of the data has shown that the output of this industry only in grape production is potentially significantly higher than previously realized. If this agriculture sector (vine growing) would be complemented with the segment of production and marketing wine, the economic segment could significantly change the economy of the County. Sector of grape growing and wine making can have multiple effect on other sectors of economy in Pozega-Slavonia County. Oher industries can lean on this sector and improve their business. With export potential that is custom with wine making sector development of tourism I PSC is realistic. Relationship between potential tourism brand of the County and local wine supply makes a good platform for united growth of bought commercial sectors.

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PHOTO 3.
Lončanica | Flower Pot
PHOTO BY: JOSIP MESIĆ

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CONNECTION OF SPORT RESULT WITH SPORT CONSUMER

Abstract:

Contemporary sport and in particular football has become a wide range of today's social life, which is embedded in all the vital elements of the social structure, especially economic elements. Therefore arose a great need for scientific research of "this phenomenon" as it can be found in the literature. Sport - economy - society has a diverse and changing mutual relations in accordance with the present time. In order to increase the sports market, it is necessary for sport teams to be present in the communication with their consumers on social networks. The primary objective of this paper is to analyze the connection between sport result as a sport product to the final sport consumer on the example of football clubs and their fans. This connection is sought through social networks.

The paper also aims to show that sport result is not the only criterion of proximity to the sports consumer, and that the result itself does not provide the largest number of consumers, for example the 'fives'' in football at least when it comes to social networks. Through regression analysis it is shown that consumers via social networks are not fully connected with the result that clubs realize, at least when it is viewed by selected characteristics used in this paper in a single time point. Definitely for searching more reliable connection of results with sport consumers through social networks, must be used an extended period of time and several indicators which can be the subject of some future research. It should be noted that economic elements are increasingly affecting the sport itself but also the sport result, especially the top one.

Keywords:

sports result, sports consumer, football

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Introduction

Contemporary sport is an important factor in world sports market clients which consists of more than one billion people across the globe. Sport as a quaternary sector of activities in the modern economy and in the organization of society is increasingly becoming a factor of production of newly values [1]. Sport of today has evolved from the past times and from simple entertainment into a respectable economic branch and has become an integral part of many of the developed economies of the world [2]. Today it can be said that contemporary football represents an important factor in the world. Football is the most common and the most popular sport in the world, and represents the first association in connection with the concept of sport. In addition to its importance in the sports aspect, it has a great importance in the global market, because this is also the place where the largest amount of money rotates. Football clubs, with the aim of their development as well as the existence, must in addition to athletic performance achieve also the economic results and behave commercially. The market comprises all potential customers who share a particular need or desire and who would be willing and able to involve in the exchange in order to meet those wishes and needs [3].

When we talk about the concept and importance of social networks today, and in the sport, great attention is turning to Facebook and Twitter. Two huge social networks that have found their place in the field of sports, ie. Football. Social character is indispensable nowadays. These two networks are the most common in the world, football culture, football and other values are promoting through them. Informations are shared faster and more efficient among fans, it is given greater support, mobility is increased because nowadays when everyone has smart device informations themselves literally come to you.

Sports product in this study is defined as a sports result that some clubs achieve. It is in dematerialized form and, as such, meets the market needs and desires of potential consumers of sports, to a certain extent. Clubs are focused on sports customers, club fans and club members ie costumers of their products.

It is a fundamental objective of this paper to analyze the connection between sports results as a product with the final sports consumer in the case of football clubs and their fans or consumers. The fundamental problem of this work is reflected in the fact that in today's contemporary sport public perception is that only a very successful racing result gathers mass, and the media promotes and enable the sport consumers to experience success, joy, victory and happiness. The paper also aims to show that the result is not the only criterion of proximity to the sports consumer, and that the result itself does not provide the largest number of consumers. Sport and sport influence on certain aspects of society can characterize sports product as much wider range.

Through regression analysis using the example of top-level football league, league of fives, will be examined whether there is a significant correlation between sports results and selected indicators of rating ie fate in clubs. Data for the top 5 leagues in the world (German, Italian, French, English, Spanish league) was collected through technical literature and internet for 25 February in the football season 2014/2015 for current football clubs in that period. „League of fives" is popular name for the top five leagues in the world. As restrictions in this work that can be prominent are reliability and validity of the data variables used in the research part of the work.

Method

Examinee sample

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Clubs sample represents 97 entities, where entities are 'clubs of league of fives' - football clubs 5 most powerful leagues (Spanish, Italian, English, German and French League) season 2014/2015.

Official league titles are:

1.   Spain Football League - Liga de Futbol profesional, processed a total of 20 clubs
2.   The Italian Football League - Liga Serie A, processed a total of 20 clubs
3.   English Football League - FA Premier liga, processed a total of 20 clubs
4.   German Football League - Bundesliga, processed a total of 17 clubs
5.   French Football League - Ligue 1, processed a total of 20 clubs

Variable sample

The sample of variables consisted a set of 15 variables:

PŠP - Ranking in Spanish league, standings of the Spanish soccer league for 25.02.2015.

FŠP - Facebook followers in the Spanish league, the number of Facebook followers of the Spanish soccer league for 25.02.2015.

TŠP - Twitter followers in the Spanish league, the number of Twitter followers of the Spanish soccer league for 25.02.2015.

PEN - Ranking in English league, standings of the English football league for 25.2.2015.

FEN - Facebook followers in the English league, the number of Facebook followers of the English soccer league for 25.02.2015.

TEN - Twitter followers in the English league, the number of Twitter followers of the English soccer league for 25.02.2015.

PNJ - Ranking in German league, standings of the German football league for 25.02.2015.

FNJ - Facebook followers in the German league, the number of Facebook followers of the German soccer league for 25.02.2015.

TNJ - Twitter followers in the German league, the number of Twitter followers of the German soccer league for 25.02.2015.

PIT - Ranking in Italian league, standings of the Italian football league for 25.02.2015.

FIT - Facebook followers in the Italian league, the number of Facebook followers of the Italian soccer league for 25.02.2015.

TIT - Twitter followers in the Italian league, the number of Twitter followers of the Italian soccer league for 25.02.2015.

PFR - Ranking in French league, standings of the French football league for 25.02.2015.

FFR - Facebook followers in the French league, the number of Facebook followers of the French soccer league for 25.02.2015.

TFR - Twitter followers in the French league, the number of Twitter followers of the French soccer league for 25.02.2015.

Data processing methods

Result processing methods included the calculation of descriptive statistical parameters: arithmetic mean (AS), standard deviation (SD), minimum value (Min) and maximum value (Max), coefficient of variation (V), asymmetry degree (Skew) and curvature degree (Kurt).

In order to determine whether there is a significant correlation between sports results and selected indicators was used regression analysis. So sports result is used as a criterion while the followers on social networks are used as predictors. (R) multiple correlation coefficient is calculated what is that maximum level of possible connection of all predictor variables (as one variable) with criteria variable. The significance of R has been tested with F test. (R^2) determination coefficient is calculated, or the proportion of explained variance criterion variable based on a set of predictor variables. It is also calculated Beta coefficient (partial regression coefficients) which represents

the size of the contribution of individual predictor variables in prediction results in the criterion variables. That is the importance of each predictor for success in the criteria. Data were analyzed by statistical package STATISTICA 12.0.

Results and discussion

Basic descriptive statistics

The basic statistic parameters have been calculated using descriptive statistics and results can be seen in Table 1.

	AS	SD	MIN	MAX	V	SKEW	KURT
FŠP	9.162.495	25.287.999	5.161	83.094.484	275,99	2,85	6,87
TŠP	1.678.880	4.431.105	3.100	14.900.000	263,93	2,86	6,96
FEN	10.073.672	17.808.223	2.240	65.000.000	176,78	2,08	4,00
TEN	3.343.135	9.928.063	5.000	44.900.000	296,97	4,26	18,65
FNJ	2.646.160	6.811.801	387	27.439.733	257,42	3,34	11,46
TNJ	307.278	547.177	1.000	1.910.000	178,07	2,47	5,22
FIT	2.897.581	6.421.987	14.464	24.726.625	221,63	2,82	7,68
TIT	394.715	607.897	14.500	2.420.000	154,01	2,61	6,74
FFR	543.902	1.079.288	1.660	4.172.317	198,43	2,64	7,03
TFR	312.042	508.571	1.100	1.990.000	162,98	2,65	6,93

Table 1. Descriptive indicators measuring variables
AS-arithmetic mean, SD-standard deviation, MIN-minimum value, MAX-maximum value, V-coefficient of variation, SKEW-asymmetry degree, KURT- curvature degree

From Table 1. it can be seen that the clubs in all leagues have averaged more followers on Facebook than on Twitter. It stands out the most followers in the English league (10,073,672) and in Spain (9,162,495), which was expected. By looking at the two best monitored leagues it can be emphasized more variation in the Spanish league, which tells us that the followers of the English league, by the clubs, are more homogeneous. Generally it can be seen that those leagues, with a maximum average value of the number of escorts, have the highest range of the results, which is confirmation of the great dispersion of results. Spanish League has the highest standard deviation and the largest maximum value of the followers. It can be seen that the smallest number of Facebook followers has the French Football League, and that the difference in Twitter followers and Facebook followers of that league is very small. General is quite a big difference in the number of followers on social networks. Facebook is in four leagues more present than Twitter. These are all positive asymmetric

distributions while curvature measure shows that all variables are leptokurtic what is confirmation of small dispersion results in all variables.

Regression analysis

The initial matrix is processed by regression analysis and is shown in Table 2.

	b*	b	t	p
Facebook	-0,5068	0,0000	-3,4926	0,0007
Twitter	0,1144	0,0000	0,7883	0,4325

R	0,4256
R^2	0,1812
F (2.94)	10,3984
p	0,0001

Table 2. Regression analysis, all leagues

b*-partial regression coefficient, **b**-regression coefficient, **t**-the t-test value, **p**-significance level, **R**-multiple correlation coefficient, R^2-determination coefficient, **F**-the F-test result

Multiple correlation coefficient value in Table 2. is relatively small (R = 0,42), which is a significant error with p = 0,00, according to the F-test as well as multiple correlation coefficient of determination (R^2=0,18). However, it can be seen from Table 2 that the only serious impact on the criterion variable has predictor of Facebook (b* = 0,506, p = 0.00), while the regression coefficient of the predictor variable Twitter is much smaller and not statistically significant.

From the above it can be concluded that the achieved sports result has relevant impact on the number of followers on the social network Facebook while with

Twitter followers this is not the case or at least in this research has not shown. Looking at all leagues of fives together, it can be concluded that the result is not fully connected to the number of followers on social selected networks. These are the results taking into account all leagues together. To determine whether the same results can be obtained also in other leagues partially it is created regression analysis for all 5 leagues.

	b*	b	t	p
FŠP	-2,5540	0,0000	-0,5156	0,6127
TŠP	1,9966	0,0000	0,4031	0,6919

R	0,5648
R^2	0,3190
F (2.94)	3,9821
p	0,0382

Table 3. Regression analysis, Spain League

b*-partial regression coefficient, **b**-regression coefficient, **t**-the t-test value, **p**-significance level, **R**-multiple correlation coefficient, R^2-determination coefficient, **F**-the F-test result

The value of the coefficient of multiple correlations in Table 3 is (R = 0,56) and is statistically significant with mistake p = 0,0382, according to the F-test.
Obtained results in Table 3. indicate that in the Spanish league overall, the result is associated with a number of followers on selected social networks. This result is most influenced by two football clubs, Real Madrid and Barcelona who are one of the most popular clubs in the world. By each winning trophies and new transfer, they 'collect' more people on their social network. Spain League is actually the strongest example of the connection between

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number of followers and social networks, maybe because it does not have so many dispersion of titles invaders, at least in recent years as in other leagues. Nevertheless, these two clubs including another 3-4 from Primera traditionally are predominant in their results as, at the end, withdraws a large number of followers on social networks. Probably the dominance of Primera clubs in the last few years affected on the number of followers on social networks.

However by partial looking at individual predictors, achieved sports result of Spanish clubs has no relevant impact on the number of followers on social networking site Facebook as well as Twitter.

	b*	b	t	p
FEN	-1,1428	0,0000	-3,8680	0,0012
TEN	0,5770	0,0000	1,9529	0,0675

R	0,7364
R^2	0,5422
F (2.94)	10,0684
p	0,0013

Table 4. Regression analysis, English League

b*-partial regression coefficient, b-regression coefficient, t-the t-test value, p-significance level, R-multiple correlation coefficient, R^2-determination coefficient, F-the F-test result

The value of the coefficient of multiple correlations in Table 4. is relatively high, amounts (R = 0,73), is significant with mistake p = 0,00, according to the F-test, as well as the determination coefficient of multiple correlation (R 2 = 0,18). It means that with 54% can be described the proportion of explained variance of the criterion variable based on a set of predictor variables.

Obtained results in Table 4. indicate that in the English league watching in total, sports result is associated with the number of followers on selected social networks. It may be noted that the English league shared a similar approach with the Spanish league when it comes to the connection between followers and results. Precisely all fans of football confirm noted observations as a common dilemma between the English and the Spanish leagues as a „winner" of strongest football league in the world. Yet looking partially, results imply that English clubs result has relevant impact on the number of followers on the social network Facebook while on Twitter has not.

	b*	b	t	p
FNJ	-0,4092	0,0000	-0,6253	0,5412
TNJ	0,0708	0,0000	0,1082	0,9153

R	0,3444
R^2	0,1186
F (2.94)	1,0095
p	0,3879

Table 5. Regression analysis, German League

b*-partial regression coefficient, b-regression coefficient, t-the t-test value, p-significance level, R-multiple correlation coefficient, R^2-determination coefficient, F-the F-test result

The value of the coefficient of multiple correlations in Table 5. (R = 0,34) is not statistically significant, with mistake p = 0,3879, according to F-test, as well as the determination coefficient of multiple correlation which is relatively small and is (R^2 = 0,11).

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It means that with only 11% can be described proportion of explained variance criterion variable based on a set of predictor variables in the German league. The results from Table 5. show that in the German league no predictor is related to the criteria and achieved sporting results. It can be seen that the Germans have the most loyal football fans. An excellent example is the Borussia Dortmund, which stands out as a football team with unfaithful fans. On their home games in the average was 80,424 spectators, they left behind Barcelona (77,632 viewers), Manchester United (75,335), Real Madrid (73,081), Bayern Munich (72,882). ''. Only this information is the best example of regression analysis of the German league. Among the most visited teams on the old continent the German league has the highest number. Perhaps this league is a good indicator of how the result is only one of the important factors of attachment to the club. German clubs attract and retain sports consumers obviously in a different ways.

	b*	b	t	p
FIT	4,0373	0,0000	2,2185	0,0404
TIT	-4,4476	0,0000	-2,4439	0,0257

R	0,6081
R^2	0,3698
F (2.17)	4,9887
p	0,0197

Table 6. Regression analysis, Italian league

b-partial regression coefficient, **b**-regression coefficient, **t**-the t-test value, **p**-significance level, **R**-multiple correlation coefficient, R^2-determination coefficient, **F**-the F-test result*

The value of the coefficient of multiple correlation in Table 6 (R = 0.60) is statistically significant with mistake p = 0,0197, according to F-test, as well as the determination coefficient of multiple correlation which is ($R^2 = 0,36$).

Unlike the German league the Italian league is completely opposite, it can be seen in the results in Table 6. The results indicate that both selected predictors are significantly associated with the level of sports performance. For Italian fans victory and achievement is dominant predictor of commitment to the club. Research from 2015 shows that Italian football people are the most superstitious. [9]

	b*	b	t	p
FFR	-0,3481	0,0000	-1,5371	0,1438
TFR	-0,3890	0,0000	-1,7177	0,1051

R	0,6471
R^2	0,4187
F (2.94)	5,7621
p	0,0130

Table 7. Regression analysis, French league

b-partial regression coefficient, **b**-regression coefficient, **t**-the t-test value, **p**-significance level, **R**-multiple correlation coefficient, R^2-determination coefficient, **F**-the F-test result*

The value of the coefficient of multiple correlation is presented in Table 7. (R = 0,64) and is statistically significant with mistake p = 0,0130, according to F-test.

The results of Table 7. show that in the French league, just like in the Spanish league, overall result is

associated with a number of companions on selected social networks.

But also, partially, looking at individual predictors achieved sports results of French clubs have no relevant impact on the number of followers on social networking site Facebook as well as Twitter. For the French league is a known fact that majority of clubs in the history was national champions so the dispersion of this criterion is very high, unlike other leagues.

	AS	SD	Facebook	Twitter
Facebook	5,161.23 7	14,858,1 26	1,00	0,77
Twitter	1,234,99 4	5,001,26 3	0,77	1,00

Table 8. Correlation between followers on Facebook and Twitter 2

AS - mean, SD - standard deviation, highlighted correlations were significant at p <, 05000, N = 97

Table 8 shows the correlation between the two predictors that were used in the regression analysis. From Table 8 it can be clearly seen that there is a positive correlation between the two predictors and amounts to 0,77 and is statistically significant. This leads us to the conclusion that there is a correlation between the number of followers on Facebook and Twitter but that it is not complete. This fact must be taken into account when interpreting the results. So it can be said that different social networks may represent the different populations, stakeholders or something else.

Conclusion

Sport, especially football nowadays has such an impact on environmental, economic, political and all other spheres that it is hard to imagine what would happen if it did not exist. Through the last few years sport has developed into a dizzying range that it began to cross the European framework, and its popularity began to transfer furthermore on the rest of the world where football is not the primary sport. The market is bigger and bigger, and football has begun to receive more and the popularity with the development of social networks. Proportional to the increase in sports market wishes and needs of sports consumers have also increased. Large sums of money through an incredible increase in the value of the transfer is a reason why clubs are forced to seek new sources for survival, development and financing of investments and repayments.

Sports consumers are extremely important for the success of the club. They buy the products of the club. More consumer means ranging from television rights are higher, and more money in the club coffers.

The results of the work are the best example of the highly integrated nature of sports results and consumers are the Spanish and the English Football League, while German, French and Italian show dispersion connection. English and Spanish have a rich football tradition, successful, which is why they have a lot of instant companion on social networks that accompany them just because they are the most successful clubs in the world. It could be said that the perception of the public is that only a very successful result gathers mass, does not apply to every division. Very many factors come to mind when looking at the connection of consumers and results. German league is a unique indicator where the stadiums are always full, consumption is still high regardless of the result. From the work it can be concluded that the sports result is associated with

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sports consumer, but not to the extent that it depends directly on it. Spain and the English Football League show that the result is associated with the consumer, while the other three leagues do not suggest that. For a number of football news and articles we find that the French, German and Italian league is a football league with 'truer fans".
Regression analysis shows that consumers are not fully linked with the result, at least when it is viewed by selected characteristics used in this paper in a single time point. Definitely, searching for validity and more reliable connection of results with sport consumers through social networks, it must be used an extended period of time and several indicators, and that can be the subject of future research. The implication is that; if consumers are fully associated with the result then all would root for result-best club, and there already exists a range of other factors (tradition, place of residence, the atmosphere in the stadium, a good marketing team).

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PHOTO 4.
Orljavska ulica u Požegi | Street
PHOTO BY: JOSIP MESIĆ

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MARKETING STRATEGIES AND THEIR APPLICATION IN SMALL AND MEDIUM ENTERPRISES EMPHASIZING THE MODERN METHODS

Abstract:

This paper will be focused on marketing strategies and their application in SMEs. Application of marketing today has become almost mandatory and the need for implementation of a common strategy. The marketing elements and strategies to invest more and more and business and other entities allocate an increasing proportion of its funds administration with a view to later less uncertain business. Marketing and its strategy is possible, and should be implemented in almost any aspect of a subject. If it does not comply with the above instruction, often in question leads itself existence same entity because who does not progress, ie. who is stagnating, in fact, going backwards, because the competition is not standing still.

The competition is more ruthless, especially nowadays. The reason for this is the increasing power of buyers or consumers who have an increasing role in defining a product or service. One of the reasons is also the opening of borders, cheaper transportation, labor costs, etc. All of this points to the need for separation from dozens of new ideas, products, services, etc. Any strategy including the implementation of the marketing strategy should be preceded by thorough market research and situation in general. A number of entities, institutions and others neglect this very important step because of unwarranted fear of spending scarce resources, which actually unwittingly placed in a even worse situation, implementing some strategies which later often results in failure and even higher additional costs.

Keywords:
marketing strategies, small and medium enterprises, implementation

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Introduction

There are many marketing strategies and methods of application thereof, and in this paper will be discussed about the strategies that can be easily implemented in an environment of Republic of Croatia and the business opportunities created by the same rule. Already widely known more or less used resources are guaranteed, tourism, production of all shapes and feed primarily due to the favorable geological position and climatic preconditions, industries and others. This paper will cover only some of the strategy and will briefly explain the advantages, disadvantages, route of administration and others. Požeško-slavonska County also has a number of untapped potential. Some of the main reasons for not using them are usually lack of will, ignorance, political and other interests, lack of experts, and all the above is often a continuation of past "outdated" attitudes and manner of subjects and management of the entire industries. In these areas there is a high possibility of using digital marketing, which, as we shall see in the work of a contemporary form that can certainly contribute to the benefit of those who use it, ie. Implemented in your business entity, and other. Life nowadays has become unthinkable without the Internet. In some moments we are not aware that we are "connected" to the network and access the Internet as normal as the availability of some key elements in life ie. the factors necessary in life and for the very existence. The globalization of the world also contributes to the universal "Internetization" and search links in all spheres of life. There are many features and benefits of the Internet and, as already mentioned, most people today take it "for granted", ie. become our everyday life, but we are not even aware of. If you look in the past or not-so-distant past, the world has changed in terms of technology and changing rapidly, which they themselves can not conceive, and had need on a daily basis to be adjusted but also take into account the negative sides of the same.

Internet marketing

Internet marketing and Internet advertising, more and abbreviated as i-marketing, web marketing, online marketing, or eMarketing, is advertising of products and services via the Internet. [7]

In order to achieve a successful online campaign, people in charge of the implementation of Internet marketing must follow new trends in information technology and trends in the habits and preferences of consumers. Internet marketing or advertising over the Internet has several advantages over traditional forms of marketing. The key advantage of this type of marketing is a low cost, measurability and precise targeting specific groups of people. Every day, the advertising can be traced and thus collect visitor statistics Website and customer specific products and services. These data are collected in databases and also gets the ability to obtain the desired information at any time. This method enables better decision-making and it is evident how the individual investment worthwhile. At any time, it is possible to stop the campaigns that do not generate a satisfactory return and start a new campaign, which is expected a better result.

The campaign over the Internet can be run for several hours, and the results are visible almost immediately. The share of these online campaigns in the world are growing more and more, and in some countries such as the United Kingdom's Internet surpasses advertising on television. Campaigns over the Internet lately is increasingly being implemented by Google AdWords. Adwords is one of Google's most cost-effective services. An example is the 2009 year in which Google through advertising via AdWords revenue of $ 23 billion. AdWords offers Pay-Per-Click (PPC) advertising, targeted web advertising, banners and other means of advertising. Turns out our local, national and international distribution. Listing on Google is a short text consisting of one-line headline and two

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lines of text. Advertisements can also be a picture but must comply with standard parameters defined by the Interactive Advertising Bureau (IAB). Many businesses have recognized the importance of Google ads and so created a huge demand for the service. To be able to meet this demand requires advanced technical support and engineering. Pay-Per-Click (PPC) is a system through which Google charges visits some sites that I asked for service and an ad. The person who gives ad choose words that best describe their business and choose the highest price you want to pay. Name Pay Per Click (pay per click) is used, because it is actually working principle of this advertising. Owner Pay Per Click (pay per click) ads pay the agreed sum of money every time a person clicks on an ad that leads directly to your web site [8]. A person can clearly define which area will Google search engine users see the ad. Can be determined speaking countries, state, city, time and other parameters and thus pinpoint the target group that a firm is important. After placing ads Google AdWords offers a variety of statistical tools to monitor the use of our site related to the ad. The offer is possible at any time to change or delete and to stop cost.

Internet marketing plan

As well as marketing plan, internet marketing plan is a detailed description of the objectives and procedures with which it's possible to achieve the realization of one or more marketing objectives. Marketing plan is drawn up to increase business efficiency. It is necessary to make a plan before introducing a new product, the brand or the introduction of new product lines. In the same way, and Internet marketing plan increases the chances of success in the implementation of business decisions. Internet marketing plan does not use the traditional media but concentrates on conveying marketing messages over the Internet. Marketing plan usually refers to a period of one to five years

and belongs to the entire business plan. Internet marketing plan should be part of any marketing plan because it uses the media that is available to many people. Today, more and more people use the Internet, which is developing faster and faster. The rapid development and easy Internet access are enabled by information technology.

E-marketing plan is a plan for the formulation and implementation of e-marketing. It is a dynamic document routing, linking the company's business strategy (models of e-commerce) with marketing strategies. Companies usually drawn up annual plans, long-term plans and strategic plans . In fact, the e-marketing plan does not differ from offline planning and includes analysis, planning, implementation and control, and applies to all levels of planning [4].

Information technology

With the development of information technology (IT) communication costs it's decreased and so it is now possible to exchange information in seconds from anywhere in the world that is connected to the Internet network. Internet is a medium that can not be ignored because it allows direct communication with a large number of customers and potential customers. This medium allows easy measurement of success and based on the collected statistical data facilitated investment decisions marketing efforts in certain groups, sectors, geographical areas and more. Information era is the fastest growing social phenomenon. The progress of this phenomenon in particular contributed to the website on which the wider difference of opinion attitudes and other information. A successful website must be useful for the person who opened it and allow the user to meet their needs and desires related to a particular topic. The key concept of information technology is to connect. A huge role in connecting different websites and their users have a search engine. When

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comparing the performance of different media came to the conclusion that the 50 million users Radio took 38 years, television 13 years, the Internet 4, iPod 3, and Facebook only two years. From the comparison it's shown that the less time people need to get used to the new media, and marketing of individual companies must take the opportunity to find customers who need to meet specific wishes and needs. This led to the development of Internet marketing.

One of the most common reasons for business failure of firms, particularly those in the field of electronic commerce vaguely defined objectives. Declaration goals must be clear, measurable and time-determined. Companies perceive great potential of e-commerce and immediately rush to use e-tools without are unambiguously define your goals and clearly defined strategy [4].

Creating an Internet Marketing Plan

Before the Internet Marketing you need to know the potential customers who might be interested in specific products, services and ideas. When the company is sure that he wants to use Internet marketing it's necessary to make a detailed plan of such marketing. People who draw up a plan and that are responsible for the implementation of Internet marketing have certain knowledge. They have to know the characteristics and mode of implementation of the classic marketing that is done over '' old '' media. In this release include: radio, television, posters and other similar media. In addition to knowledge of marketing to people who implement and draw up such plan is necessary and IT educated. They need to know basic computer concepts and how to conduct the campaign planned actions via the computer. It also requires an understanding of statistical concepts in order to monitor the success of the campaign. Today a lot of programs and tools facilitate the planning and

implementation of internet marketing but are placed great demands and it is a great responsibility to the people who are in charge of the job. There are special seminars where employees learn how to plan and implement Internet marketing. Such seminars usually charged and last from several hours to several days. Examples of seminars held on the topic of Internet marketing can be found in every major city. For example, these seminars are held in Osijek in HUP (Croatian Employers' Association).

For its business CEA says: '' With all my activities emphasize the importance of the social role of employers, and maximum efforts are trying to influence events in the region, in order to be more adaptive needs of the economy ''. It is important to raise awareness of the need to properly escorted internet marketing. Creating an Internet Marketing Plan and its implementation can be internal and external. Internal means that Internet marketing plan and its realization conducted by employees of the company. Their goal is to improve business expenses. The cost of Internet marketing are relatively low in relation to the availability and effects of realisation. For this type of marketing you definitely need a good education and skills of employees in order to increase chances of a successful Internet marketing campaign. The experience gained from the past, but conducted campaigns to better plan their future. When a person have more experience, he or she can better assess potential problems so they plan before they occur in practice. Some of the useful tools for independent creation of internet marketing plan are: ad serving, media planning, DoubleClick Ad Planner and others. Internet marketing plan can be carried out externally. External implementation of Internet marketing plan is 'outsourcing'. The benefits of the services of another company that offers a compilation of Internet marketing plan and its implementation. Before the '' outsourcing '' was the only way to reduce costs. 'In the meantime, the

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practice of outsourcing has developed and is today the selection of management and opens the way to increase efficiency and value added [9].

It is possible that at first glance externally making Internet marketing plan seems expensive but it is important to look at all the cost perspective. Thus, the more likely errors in the internal implementation than external. This can be explained by the amount of experience that employees are costly for business.

1.	Summary	Setting objectives for Internet marketing, and specifying the objectives of your promotions on the Internet.
2.	Web analysis market statistics	In order to reach these data it is necessary to find or commission research that will lead to real data on the state of the market, including the Internet market.
3.	Creating a web marketing strategy communication	Planning and strictly determine the optimal web strategy in accordance with the established objectives and the state of the markets.
4.	Planning the necessary funds for web marketing	determination of specific segments of implementation of web marketing strategy. Planning prices, research, analysis, creation of special studies, promotional material, etc..
5.	The creation of the marketing team	Functions in the team determine who will perform marketing tasks and how. The organization of human resources here is an extremely important part in creating a successful business, including in the implementation of Internet marketing plan ie. Web marketing plan. All of the above is the case for the creation of such a team in your company.
6.	Creating a corporate identity	Classic elements of web marketing strategies include the peculiarities of the Internet (mission, logo, etc.).
7.	Determination of Time Limits	The organization of marketing activities without the precise dates, can jeopardize the entire internet marketing plan.
8.	Designing promotional campaigns	Creating conditions for effective designing individual internet marketing campaign.
9.	Creating additional (bonus) marketing materials and campaigns	The guidelines, descriptions of individual steps in the performance of web marketing campaigns, the integration of the necessary documentation, preparation of special materials, planning presence at trade shows, conferences, media or monetary sponsorship, presenting at seminars.
10.	Translation of own market research	By using their own resources (websites, mailing lists, surveys, etc.) to create the notion of a particularities of users of Internet services / Web services target company (or your competition).
11.	The implementation of promotional programs	Based on the prepared segments internet / web marketing plan implemented specific marketing campaign.
12.	Measurement results of marketing activities	The exact data that enable very precise determination of the following marketing campaigns and correction mode presence Web companies on the online market and the market in general.

Table 1. Internet Marketing Plan, source: http://www.marketing-odjel.com/web_marketing_plan, 10.04.2016.

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E-marketing and marketing information systems (MIS)

The electronic marketing (e-marketing, telemarketing, online marketing) is a way of achieving market-oriented activities of the company with intensive use of information and communication (Internet) technology. These two technologies, and their synthesis, are applicable in the realization of all marketing functions important from the point of business small business owners, such as: Notification of market, Market research, Advertising and public advertising. The use of Internet technology causes the realization of these marketing functions in a manner significantly different from that practiced in the framework of traditional marketing [3].

The marketing research on the Internet are standardized procedures of application of scientific methods in the process of collecting, registering, processing, analysis and interpretation of data within the Internet environment, which again used for making marketing decisions.
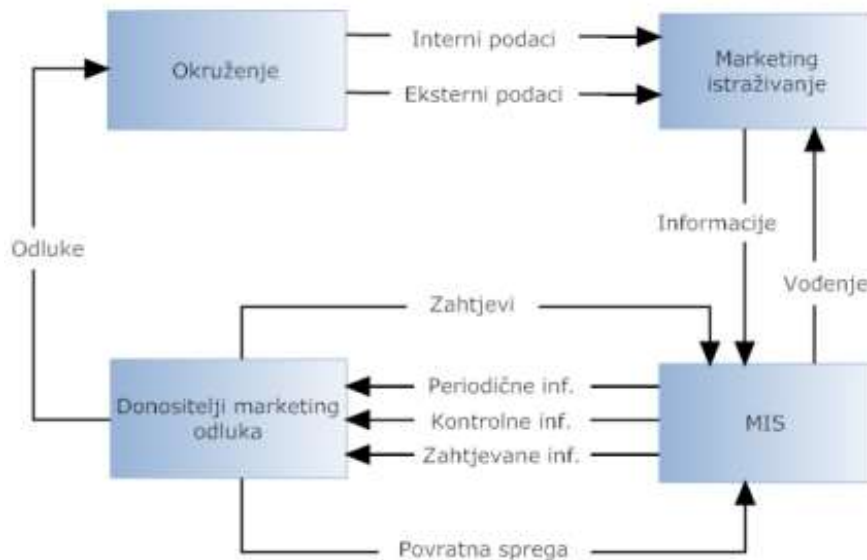
Figure 1. MIS vs. eMIS, Source: http://oliver.efos.hr/nastavnici/druzic/dokumenti/emktg2009/spp-emarketing2010-05-eMIS.pdf , 26.06.2015.

E-marketing techniques

Online technologies enable a number of techniques primarily aimed at the promotion and advertising, which resulted in a number of new terms and promotional techniques described as the technique of e-marketing. This is usually referred to the following terms:

- Viral marketing;
- Affiliate marketing;
- Permission Marketing;
- Referral marketing;
- One-to-One Marketing;
- E-mail marketing;
- Frequency marketing;
- Real-time marketing;
- Content Marketing [8]

"Viral" marketing is used to emphasize the detail techniques used to spread marketing messages. Affiliate ie. associated or affiliated with marketing indicates the advertising technique that

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works so that the owners of small Web sites placed links, banners, etc., on their own website and thus get paid for driving sales. Marketing techniques refferal marketing is considered one of the most successful and most effective ways of promoting a basic goal is to actually across the users themselves, visitors and other increases attendance, sales and profits. One reason for the success of this technique is that the site itself, the product, manufacturing or sales program and others. Not recommended by the subject itself, but from other users who have the same positive experience. This fact instills greater confidence to new customers and thus their response more. Content marketing ie. marketing content aims to provide quality, relevant and valuable information which in turn are intended to lead to profitable user actions.

Advantages and Disadvantages of E-commerce

Electronic commerce its exponential growth and great popularity to numerous advantages over conventional methods of trading. The advantages of electronic commerce offers can be divided into:

- Benefits for vendors,
- Benefits for consumers.

Advantages for one and the other categories are largely related. For example, if traders cut costs they are able to reduce the cost. Using improved marketing merchants create competitive advantage, and customers receive better products [5].

It is widely known that the number of companies that appear on the Internet continues to increase, and some of the benefits that help them in making decisions about participating in the Internet market are:

- Expanding market

- The size of the sales program
- Improved marketing
- Cost reduction
- Longer working hours and others.

As mentioned above, there are numerous benefits of Internet commerce and the consumers themselves, and some of them are:

- Better information
- A larger variety of products
- Flexibility (the personalization of e-shops and the like.)
- Convenience (buying from the comfort of their own homes and the like.)
- Lower prices and others. [4]

There is no electronic commerce is not without its difficulties. Some of these difficulties have caused themselves traders mismanagement affairs, some created by the state and its laws, and the others are inseparable companion of electronic commerce. However, the impression is that all the problems solved because many institutions have given priority to electronic commerce as a main driver of the economy in the future. [3]

- Some of the difficulties that arise in electronic commerce are:
- Too fast changing technology (requires specialization)
- The lack of marketing concepts (non-implementation of basic marketing rules)
- Legislation (diversity of laws between countries)
- International difficulties (linguistic and cultural differences)
- The digital divide (lack of Internet connection in all households - the last time the digital divide drastically reduced)
- The inconvenience of the product (because of the size and the like) and others.

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In addition to Pay-Per-Click ads Google and other search engines, allows users to quickly find sites that interest them. How could a company that had a better positioning in the results, must in your website targeted to enter items to which they will be search engines to recognize. The developers of each search engine listings criteria by which it seeks website. The aim is that the user as soon as he found what he was looking for. A better result in the positioning of a website can be achieved by SEO (search engine optimization) optimization.

'Search Engine Optimization (known as SEO) and website optimization for search engines or search engines is part of Internet marketing that deals with the positioning of websites on search engines for the keywords that best match the content of the page. The goal of optimization is to increase targeted visits to web sites with search engines and thus increases the number of contacts or direct sales. World statistics and studies have shown that nearly 90% of all visitors to the average website is coming from the search engines [10].

It is necessary to consider a lot of factors that affect the successful SEO optimization. In many companies the process of compiling SEO optimization comprises the following steps: Research the competition and the market, research and application of keywords (keyword), optimising the site (on-page SEO), structuring website and internal links, successful link building, monitoring results and optimize results. SEO optimization can be on-site and off-site. SEO On-site optimization means that the page add keywords to help search engines recognize the content of the website and offer them to the user. SEO Off-site optimization does not include the keywords on the page than links with ostailm sites with similar content and other links that can take users to the exact content of that which

is sought. Well coordinated combination of on-site and off-site SEO optimization improves the positioning in the results and further reduce their Pay-Per-Click. So, a combination of different methods and tools as well as to able to achieve optimum availability of the site and our lead over the competition.

Techniques and means of advertising on the Internet

In principle, we should distinguish advertising web site (page) of the advertising of certain products or services on the Web, although it is sometimes difficult to distinguish. The World Wide Web is an excellent ad option, however the web site should be supported to become successful comparing to competitors and to get the attention of visitors. Web is comparable to the endless street full of shops which is an extremely important customer to supply the exact address specific trade, because otherwise the customer will not find [4].

There are many online ways to promote someones web, for example, banners, sponsor relations, editor comments, links and many others. It is impossible to make a distribution that would apply for more than a few days, but for this very reason the division is not limited to a certain number. One advertising techniques that lately quite often used on the Internet and in other media and product placement. Surreptitious advertising can be defined as a form of advertising in which a particular product or service represents an integral part of any content that is presented to the audience. Refers to the presentation of products or services with the aim of by the audience perceived as quite normal part of what the public consumes, and seeks to show that

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less noticeable, and yet with it greater influence on consumers.

An example of this method of advertising are displaying images, videos, etc., multimedia content, containing at a glance "invisible" ad for a brand, product and so on. This form of advertising can occur "by accident", with financial compensation by the seller or however, without any financial compensation. Same division and ways of advertising are dynamic processes, and they sometimes experienced marketers or expert in the IT sector is very difficult to monitor.

Conclusion

Philip Kotler, one of the most respected authority theory and practice of marketing, under the management marketing involves social and business processes through which individuals and / or groups come to what they need and what they want. So, marketing is a continuous process of planning and executing the conception of ideas, goods or services, determining their price, promotion and distribution, which creates the exchange, satisfying both individual and organizational change. [4]

The implementation of marketing on the Internet environment today means an advantage over the competition and gain the trust of the broader aspects of the customers. Marketing is certainly in itself plays a major role in the life cycle of any company, be it manufacturing, sales and service. Entities in the economy is often due to lack of financial means "forget" that they neglect marketing which ultimately can often lead to the deterioration of the same subject, because regardless of the quality of the product or service offered, if the potential buyer is not aware of the

offer and quality to sales process will not come . As in any other market, and to the "global" -Internet market there is a need for marketing ie. advertising activities without which the same market could not long survive. So we can say how the man without the possibility of connecting to the Internet today is as a man who don't have some of the key factors for life. It has become unthinkable to be without "connections" while driving the bus, during a picnic in the countryside, during lectures at universities. Citing the negative side internalisation, we can conclude that the Internet enables "parallel lives", that the real is imposed to the virtual.

Some of the problems that appeared in the research and writing of this paper are certainly factors limiting the number of participants, ie. Research on the quality of the sample. There is still insufficient awareness of the respondents about the use of computer programs and applications that help in conducting research is also a problem in quality circles the research. Small communities in which we live, with consequently a lack of knowledge in the filed of information and is one of the reasons the previous occurrence of problems in the implementation of the very research in general.

As the basic differences and conclusions related to the required solutions and the very results of the research concluded that they need to work on the education of young professionals or those older marketing and its importance. Implement something in the system is most easily-showing success stories and examples from real life, not insisting solely on theory, which often does not apply in full, all depending on the environment and circumstances. If the people who are responsible in some businesses in a quality way to present the features and benefits "marketing" mindset, before they are placed very strong tool that will help them if

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they implement it in the right way greatly help grow the company. The research results have been somewhat disappointing and, because of delays in the modern business world, but not unattainable and can be quickly corrected by the above methods and proposals.

Nowadays, it is practically possible do not leave the house for some food, pay bills, buy furniture, clothes, hang out with friends, use internet banking etc. All the above perhaps can be done even "better" over the network, but as much as previously mentioned sound negative, I think it does have a much more positive factors that help us in life, to overcome various obstacles and in many other ways. The time and amount and type of changes that also yields have become key factors that influence the survival of subjects in the global market, and he certainly must learn, if you do not want to be, "stuck in time."

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Kulaš, Anita [1]

ANALYSIS OF EMPLOYMENT IN REPUBLIC OF CROATIA AND SELECTED MEMBER STATES OF EUROPEAN UNION ACCORDING TO ECONOMIC ACTIVITY

Abstract:

Employment is very important for the development of every country. Without jobs and employees there is no development of anything. Therefore, it is extremely important that each country take into account the employment of its citizens.

Employment is an agreement between an employee and an employer that the employee will provide certain services on the job in the return for compensation.

For the purpose of the work it has been conducted a detailed analysis of the employment in selected European Union Member States in the period from 2002 to 2012. It has been analyzed the employment according to economic activity.

The analyzed countries are the Republic of Austria, the Republic of Bulgaria, the Czech Republic and the Republic of Croatia.

The aim of the work is to show that there were differences in structure between the observed countries.

Keywords:

employment, Croatia, European Union, economic activity

Author´s data:

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Introduction

Every country in the world takes care of employment of its citizens. Employment is one of the important macroeconomic indicators of the degree of economic development of each country.

For the purpose of the work it has been conducted a detailed analysis of the employment in selected European Union Member States in the period from 2002 to 2012. It has been analyzed the employment according to economic activity. The analyzed countries are the Republic of Austria, the Republic of Bulgaria, the Czech Republic and the Republic of Croatia. In that time, Croatia was an associate member of the European Union.

Analysis of employment

"Employment is an agreement between an employer and an employee that the employee will provide certain services on the job, and in the employer's designated workplace, to facilitate the accomplishment of the employer organization's goal and mission, in the return for compensation [1]." "Persons in employment are persons who did any work for payment in cash during the reference week. Those are employees, self-employed persons and family members who are helping in a business entity owned by a family member, persons who worked on contract for direct payment in cash or kind [2]."

Since employment is possible to analyze with different points of view, before analysis of employment according to economic activity, there will be present a brief results of previously conducted analyzes of employees by gender, geographical coverage and level of education for each country [3].

Analysis of employment in Republic of Austria

Analysis of employment in Austria showed that there were more employed men then employed women in the observed period. Employment by geographical coverage showed that there was more employed in urban areas then rural areas. According to level of education, analysis showed that the share of employed with higher education grew and it was about 20%. Share of employed with secondary education was about 65%, while the share of employed with primary education was about 15%.

An analysis of employment according to economic activity in Austria showed that during the period the highest share of employees was in the manufacturing (between 15 and 19%) and wholesale and retail trade; repair of motor vehicles and motorcycles (between 15 and 16%).

With almost 10 percent share there were construction and health care and social welfare.

The lowest share, under 1% had mining and quarrying; electricity, gas, steam and air conditioning; water supply, sewerage, waste management and remediation activities; real estate; activities of households as employers; activities of households that produce different goods and perform a variety of services for personal needs and activities of extraterritorial organizations and bodies.

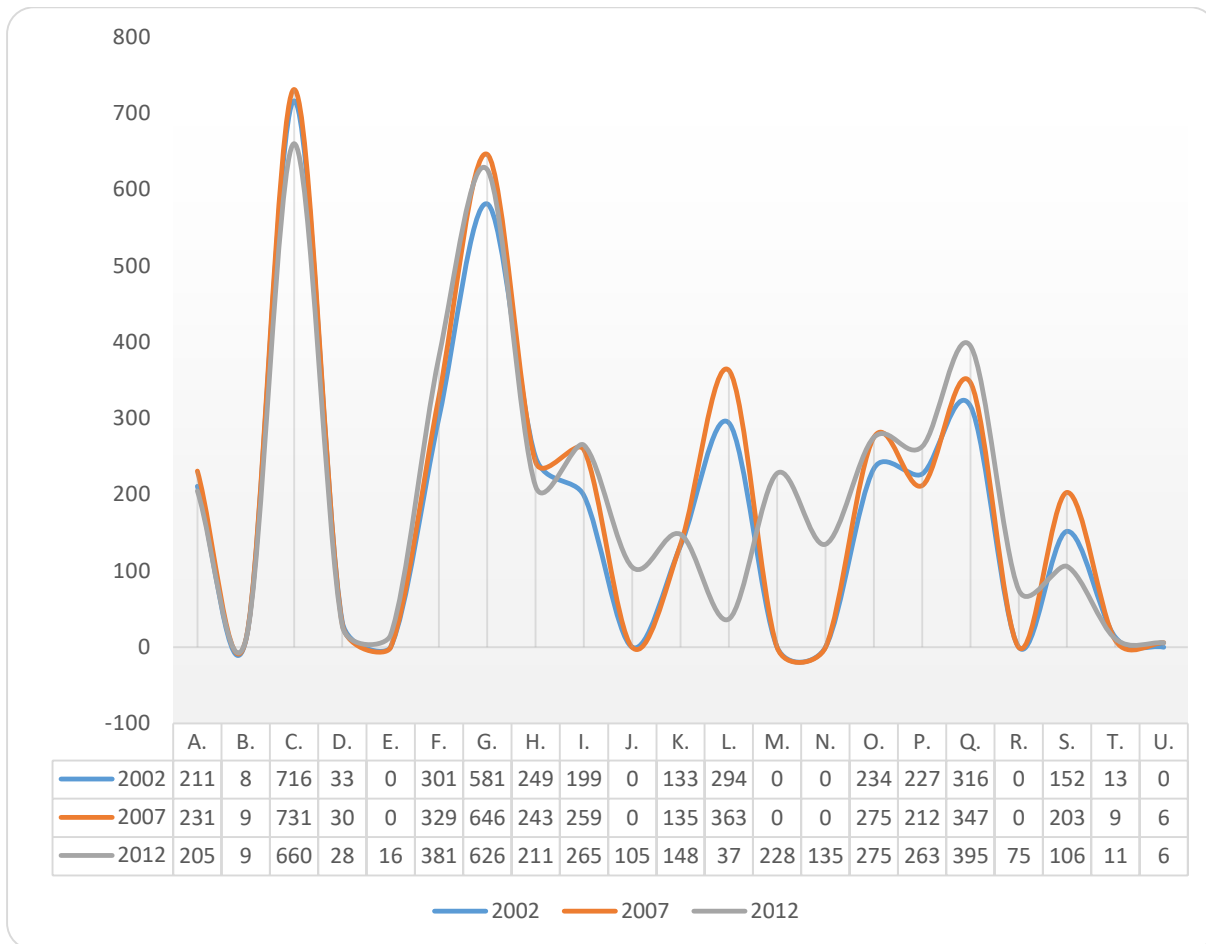Below is Figure 1 that shows the employment in Austria according to economic activity in 2002, 2007 and 2012.

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	A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	K.	L.	M.	N.	O.	P.	Q.	R.	S.	T.	U.
—2002	211	8	716	33	0	301	581	249	199	0	133	294	0	0	234	227	316	0	152	13	0
—2007	231	9	731	30	0	329	646	243	259	0	135	363	0	0	275	212	347	0	203	9	6
—2012	205	9	660	28	16	381	626	211	265	105	148	37	228	135	275	263	395	75	106	11	6

Figure 1. Employment according to economic activity in Austria (in 000)
Legend: A - Agriculture, forestry and fishing; B - Mining and quarrying; C - Manufacturing; D - Supply of electricity, gas, steam and air conditioning; E - Water supply; sewerage, waste management and remediation activities; F - Construction; G - Wholesale and retail trade; repair of motor vehicles and motorcycles; H - Transport and storage; I - Activities to provide accommodation and food service activities; J - Information and communication; K - Financial and insurance activities; L - Real estate activities; M - Professional, scientific and technical activities; N - Administrative and support service activities; O - Public administration and defense; compulsory social security; P - Education; Q - Human health and social care; R - Arts, entertainment and recreation; S - Other service activities; T - Activities of households as employers; Activities of households that produce different goods and perform a variety of services for personal needs; U - Activities of extraterritorial organizations and bodies.
Source: made by author according to data of the International Labour Organization

Analysis of employment in Republic of Bulgaria

Analysis of employment in Bulgaria showed that there were more employed men then employed women in observed period. Share of employed in urban areas was lower than 50% in 2006, but in 2013 it was higher and was about 75% of employed.

According to level of education, analysis showed that the share of employed with higher education grew and it was about 25%, while the share of employed with basic education fell and it was about 15%. Share of employed with secondary education fluctuated and it was about 60% of employed. Below is Figure 2 that shows the employment in Bulgaria according to economic activity in 2002, 2007 and 2012.
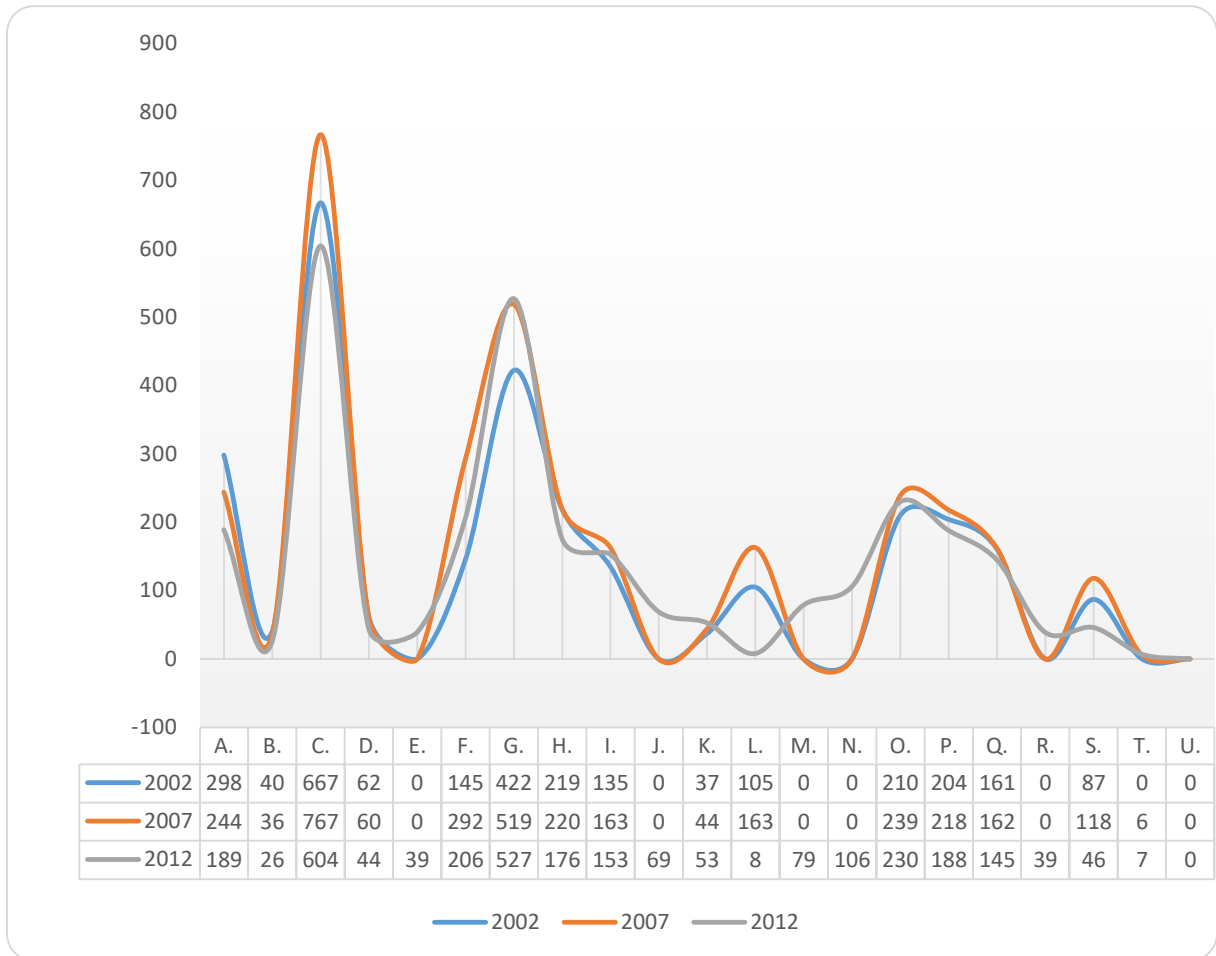
Figure 2. Employment according to economic activity in Bulgaria (in 000)

Legend: A - Agriculture, forestry and fishing; B - Mining and quarrying; C - Manufacturing; D - Supply of electricity, gas, steam and air conditioning; E - Water supply; sewerage, waste management and remediation activities; F - Construction; G - Wholesale and retail trade; repair of motor vehicles and motorcycles; H - Transport and storage; I - Activities to provide accommodation and food service activities; J - Information and communication; K - Financial and insurance activities; L - Real estate activities; M - Professional, scientific and technical activities; N - Administrative and support service activities; O - Public administration and defense; compulsory social security; P - Education; Q - Human health and social care; R - Arts, entertainment and recreation; S - Other service activities; T - Activities of households as employers; Activities of households that produce different goods and perform a variety of services for personal needs; U - Activities of extraterritorial organizations and bodies.

Source: made by author according to data of the International Labour Organization

An analysis of employment according to economic activity showed that during the period the highest share of employees was in manufacturing. It ranged from 19% to 24%.

With about 15 percent share was a wholesale and retail trade, repair of motor vehicles and motorcycles.

The largest decline in the share experienced the following economic activities: agriculture, forestry and fishing from about 10% to 3%;

transport and storage from 8% to 6% and other services from 3% to 1%.

The biggest changes happened in construction and real estate activities. The share of construction fluctuated from 5% to 9%. Share of the real estate fluctuated from 4% to 5% and then fell under 0.5%.

Analysis of employment in Czech Republic

The analysis of employment in Czech Republic showed that the share of employed men were higher than the share of employed women. Share of employed in urban areas fluctuated during the period and it was about 65%. Analysis of employment by education in Czech Republic showed that the share of employed with primary education was falling and it was about 6%, while the share of employed with higher education during the observed period grew and it was about 20%. Share of employed with secondary education was about 77%.

Below is Figure 2 that shows the employment in the Czech Republic according to economic activity in 2002, 2007 and 2012.
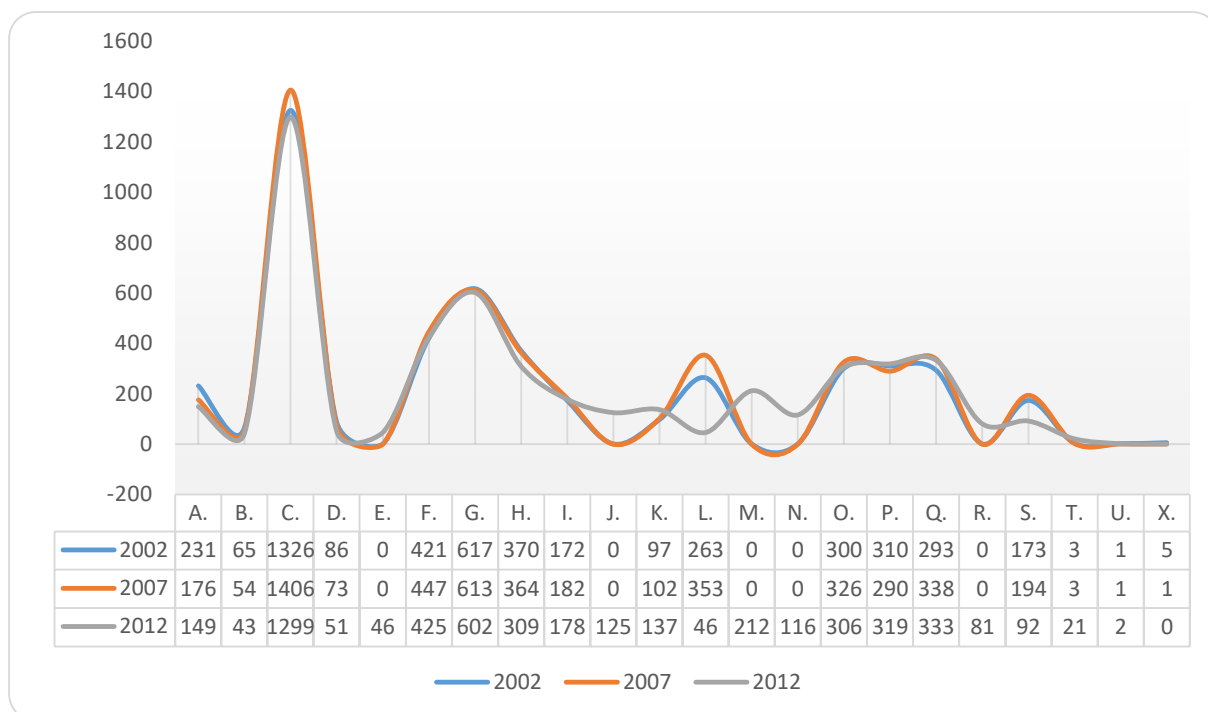
	A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	K.	L.	M.	N.	O.	P.	Q.	R.	S.	T.	U.	X.
2002	231	65	1326	86	0	421	617	370	172	0	97	263	0	0	300	310	293	0	173	3	1	5
2007	176	54	1406	73	0	447	613	364	182	0	102	353	0	0	326	290	338	0	194	3	1	1
2012	149	43	1299	51	46	425	602	309	178	125	137	46	212	116	306	319	333	81	92	21	2	0

Figure 3. Employment according to economic activity in Czech Republic (in 000)
Legend: A - Agriculture, forestry and fishing; B - Mining and quarrying; C - Manufacturing; D - Supply of electricity, gas, steam and air conditioning; E - Water supply; sewerage, waste management and remediation activities; F - Construction; G - Wholesale and retail trade; repair of motor vehicles and motorcycles; H - Transport and storage; I - Activities to provide accommodation and food service activities; J - Information and communication; K - Financial and insurance activities; L - Real estate activities; M - Professional, scientific and technical activities; N - Administrative and support service activities; O - Public administration and defense; compulsory social security; P - Education; Q - Human health and social care; R - Arts, entertainment and recreation; S - Other service activities; T - Activities of households as employers; Activities of households that produce different goods and perform a variety of services for personal needs; U - Activities of extraterritorial organizations and bodies; X - not classified by economic activity.
Source: made by author according to data of the International Labour Organization

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Analysis of employment in Republic of Croatia

Share of employed men during the period was higher than the share of employed women. Share of employed in urban areas significantly changed, so, over the entire period was 100%, while in 2013 it fell, and it was only 58%. Analysis of employed by education in Croatia in observed period showed that the share of employed with higher education and the share of employed with secondary education grew, while the share of employed with primary education fell. Share of employed with higher education was about 21%, the share of employed with secondary education was about 61%, while the share of employed with primary education was about 18%.

An analysis of employment according to economic activity showed that during the period the highest share of employees was in construction; agriculture, forestry and fishing as well as wholesale and retail trade, repair of motor vehicles and motorcycles.

The share of construction in 2002 was 20.36%, in 2007 it was 19.34%, while in 2012 it was 17.4%.

The share of agriculture, forestry and fishing in 2002 it was 15.49%, in 2007 it fell to 13.01%, while in 2012 it increased to 13.7%.

The share of trade ranged between 14.25 and 13.46%. With a share of less than 1%, there were mining and quarrying and activities of households as employers.

The biggest changes happened in real estate (in 2002 it was 3.84%, in 2007 it was 5.19%, and in 2012 it was only 0.19%) and other services (in 2002 it was 3.42%, in 2007 it was 4.41% and in 2012 it was 2.01%).

Below is Figure 2 that shows the employment in Croatia according to economic activity in 2002, 2007 and 2012.
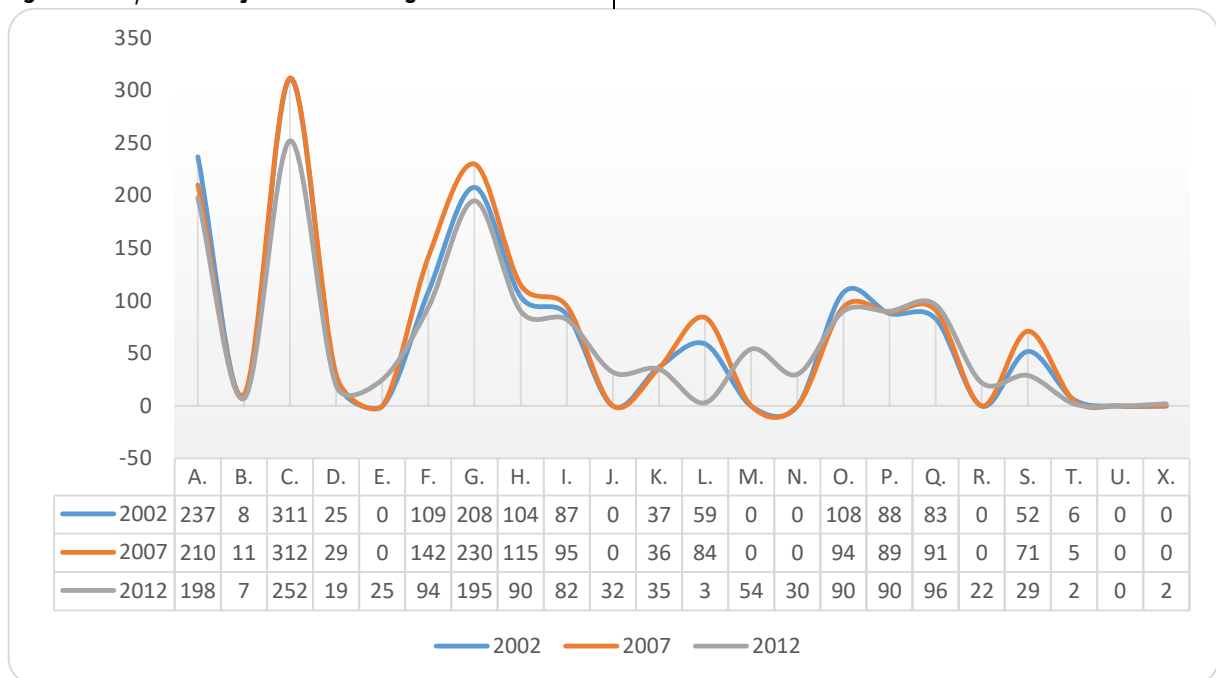

	A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	K.	L.	M.	N.	O.	P.	Q.	R.	S.	T.	U.	X.
2002	237	8	311	25	0	109	208	104	87	0	37	59	0	0	108	88	83	0	52	6	0	0
2007	210	11	312	29	0	142	230	115	95	0	36	84	0	0	94	89	91	0	71	5	0	0
2012	198	7	252	19	25	94	195	90	82	32	35	3	54	30	90	90	96	22	29	2	0	2

Figure 4. Employment according to economic activity in Croatia (in 000)

Legend: A - Agriculture, forestry and fishing; B - Mining and quarrying; C - Manufacturing; D - Supply of electricity, gas, steam and air conditioning; E - Water supply; sewerage, waste management and remediation activities; F - Construction; G - Wholesale and retail trade; repair of motor vehicles and motorcycles; H - Transport and storage; I - Activities to provide accommodation and food service activities; J - Information and communication; K - Financial and insurance activities; L - Real estate activities; M - Professional, scientific and technical activities; N - Administrative and support service activities; O - Public administration and

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defense; compulsory social security; P - Education; Q - Human health and social care; R - Arts, entertainment and recreation; S - Other service activities; T - Activities of households as employers; Activities of households that produce different goods and perform a variety of services for personal needs; U - Activities of extraterritorial organizations and bodies; X - not classified by economic activity.

Source: made by author according to data of the International Labour Organization

Analysis of differences between observed states

In order to make more complete analysis, below is the analysis of the differences between the observed countries in three observed years.

For activities under the letter E, J, M, N and R in 2002 and 2007, there are no recorded data, and therefore they are not even in the table.

Acti.	Austria	Bulgaria	Czech	Croatia
A.	5,754	10,673	4,8806	15,572
B.	0,2182	1,4327	1,3733	0,5256
C.	19,525	23,89	28,016	20,434
D.	0,8999	2,2206	1,817	1,6426
F.	8,2083	5,1934	8,895	7,1616
G.	15,844	15,115	13,036	13,666
H.	6,7903	7,8438	7,8175	6,8331
I.	5,4268	4,8352	3,6341	5,7162
K.	3,6269	1,3252	2,0494	2,431
L.	8,0175	3,7607	5,5567	3,8765
O.	6,3812	7,5215	6,3385	7,0959
P.	6,1903	7,3066	6,5498	5,7819
Q.	8,6174	5,7665	6,1906	5,4534
S.	4,1451	3,116	3,6552	3,4166
T.	0,3545	-	0,0634	0,3942
U.	-	-	0,0211	-
X.	\	\	0,1056	-

Table 1. Employment according to economic activity in 2002 in observed states (in %)

Table 1 show that there are significant differences in the structure of employees by

economic activities. It is noted that Croatia leads in Mining and quarrying and Agriculture, forestry and fishing. In the Czech Republic about 28% of employees work in Mining and quarrying, in the Republic of Austria about 20% of employees and in the Republic of Bulgaria about 23% of employees work in Mining and quarrying. Significant differences exist in Real estate activities, where the largest share of employees has Austria (about 8%), and at least Croatia and Bulgaria (close to 4%).

Below is Table 2 that shows employment according to economic activity in 2007.

Acti.	Austria	Bulgaria	Czech	Croatia
A.	5,734856	7,505383	3,575056	13,01115
B.	0,223436	1,107352	1,096892	0,681537
C.	18,14796	23,59274	28,55982	19,33086
D.	0,744786	1,845586	1,482836	1,796778
F.	8,167825	8,981852	9,079829	8,798017
G.	16,03774	15,96432	12,45176	14,25031
H.	6,032771	6,767149	7,393866	7,125155
I.	6,42999	5,013842	3,696933	5,885998
K.	3,351539	1,35343	2,071907	2,230483
L.	9,011917	5,013842	7,170425	5,204461
O.	6,82721	7,351584	6,621978	5,82404
P.	5,263158	6,705629	5,890717	5,51425
Q.	8,614697	4,983082	6,865732	5,638166
S.	5,039722	3,629652	3,940687	4,399009
T.	0,223436	0,184559	0,060938	0,309789
U.	0,148957	-	0,020313	-
X.	\	\	0,020313	-

Table 2. Employment according to economic activity in 2007 in observed states (in %)

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The most significant change compared to 2002 happened in the sector Agriculture, forestry and fishing in Bulgaria and Croatia (fell approximately 3%). Other activities did not experience significant changes.
Below is Table 3 that shows employment according to economic activity in 2012.

Act	Austria	Bulgaria	Czech	Croatia
A.	4,898447	6,441718	3,045789	13,68348
B.	0,215054	0,886162	0,878986	0,48376
C.	15,77061	20,58623	26,55356	17,41534
D.	0,669056	1,499659	1,042518	1,313062
E.	0,382318	1,329243	0,940311	1,727713
F.	9,103943	7,021132	8,687653	6,496199
G.	14,95818	17,96183	12,30581	13,47616
H.	5,041816	5,998637	6,316435	6,219765
I.	6,332139	5,214724	3,638594	5,666897
J.	2,508961	2,351738	2,555192	2,211472
K.	3,53644	1,806408	2,800491	2,418798
L.	0,88411	0,272665	0,940311	0,207326
M.	5,448029	2,69257	4,333606	3,731859
N.	3,225806	3,612815	2,371218	2,073255
O.	6,571087	7,839127	6,25511	6,219765
P.	6,284349	6,407635	6,52085	6,219765
Q.	9,438471	4,942059	6,807032	6,634416
R.	1,792115	1,329243	1,655765	1,520387
S.	2,532855	1,567825	1,880621	2,004147
T.	0,262843	0,238582	0,429272	0,138217
U.	0,143369	-	0,040883	-
X.	\	\	-	0,138217

Table 3. Employment according economic activity in 2012 in observed states (in %)

It is observed that only in 2012 appeared data on the activities under the letters E, J, M, N and R. Therefore, in 2012 there recorded significant changes. Namely, compared to 2007 the most significant changes happened in activities Real estate activities and Other service activities that recorded significant fall in share of structure.

Manufacturing registered a fall in all countries by almost 3% compared to 2007.

Transport and storage registered a fall in almost all states except Austria compared to 2007. Construction registered fall in Bulgaria and Croatia for almost 2% compared to 2007. In Austria registered increase for 1% compared to 2007.

Bulgaria only registered fall in Agriculture, forestry and fishing.

Conclusion

The analysis showed that in all countries most people work in Mining and quarrying. In addition, in Bulgaria and Croatia, a lot of employees work in Agriculture, forestry and fishing. The most significant changes recorded in 2012 compared to 2007. Precisely, changes were in Real estate activities and Other service activities.

So, it can be concluded that employment according to economic activity is largely determined by the degree of economic development, and that there are differences between observed countries.

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