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I take this opportunity to invite you to cooperate by sending to us the papers of the above-mentioned areas and to make suggestions which can be helpful for improving our work.

Belgrade,  
March, 2012

Professor Milovan Stanišić, PhD, Rector
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INTRODUCTION

Enterprises that want to succeed in the global market, need to invest significant business efforts – to monitor large, numerous and fast events, to apply new technological attainments, and to continuously learn and acquire new knowledge. The main parameter of the success of an organization is the improvement of business productivity. The struggle for higher productivity is actually a struggle for competitive advantage. Competition has become global, so modern enterprises need to appear in the market with global strategies.

Successful business in modern economy is determined by the ability of an enterprise to meet the demands of the market, to track changes which are more and more frequent and dynamic.

The globalization of world economy imposes changes in the way of business thinking in terms of accepting the fact that changes are needed permanently, and that those who do not innovate inevitably disappear from the economic scene. In such a changed economic environment, activities of an enterprise must be long-term rather than short-term oriented. Timely reaction to changes becomes the basis of successful management and training of an enterprise for successful functioning in the global market.

The global economic crisis affected the change in behaviour of enterprises when it comes to maintaining competitiveness. Most of the taken measures boiled down to reducing costs in order to maintain productivity, establishment of strategic partnerships, but again the focal point was price competitiveness,
which may have even been neglected for a while. New business conditions demand a new understanding of competitiveness. Countries in transition were also affected by the economic crisis, primarily on the basis of the withdrawal of high-quality investors, or freezing current investments. Insufficient competitiveness of domestic enterprises again came to the fore in terms of effects of the global economic crisis (Seifert et al., 2008). On the other hand, it is evident that the global economic crisis did not have much impact on the development of newly industrialized countries such as China, India, Brazil, Indonesia, etc.

**COMPETITIVENESS AND CONTEMPORARY BUSINESS**

Contemporary business is characterized by the globalization of markets, the speed of numerous changes, fast rate of technological changes, development of technology and information technology. In order to achieve success in the market, an enterprise must possess competitive advantage in the form of lower costs or product differentiation. Also, it is necessary to achieve competitive advantage through a long-term provision of high-quality goods and services and continuous innovation of products and services. Companies are forced to continuously improve business productivity, which is based on improving the productivity of knowledge of employees, in order to achieve business excellence and world-class products and services. It further includes building new forms of management of an organization, as well as the implementation of the most modern management techniques.

Today, numerous and very different definitions of competitiveness are found in reference books, in which a clear distinction between macro and micro competitiveness is often made. Competitiveness is a contribution of a kind to gross domestic product (GDP), standards of living, employment. Contemporary consideration of issues of competitiveness also involves the differentiation of two basic concepts. One is micro competitiveness – the competitiveness of an enterprise is based on relative prices and product quality, compared to the offer of other vendors, and the other concept is macro competitiveness, whose basis is built in such a manner that a country, by increasing exports of goods and services, covers the imports and, at the same time, reaches the factor incomes, with which it can compete with the incomes of the countries with which foreign trade is predominantly conducted (Presnall, 2003). Also, competitiveness can be analyzed from the perspective of two indexes: Index of Competitive Growth (GCI) and the Microeconomic Competitiveness Index (MICI). GCI is composed of the technology index, public institutions index and the macroeconomic environment index and measures the capacity of the national economy to achieve stable economic growth over the medium-term period and takes into account the level of income per capita. The MICI is a weighted average of two sub-indexes: one reflects the degree of development of strategies and operational practices of companies, and the other refers to the quality of local business conditions.

In the modern business conditions, enterprises can survive only if they provide marketing their products in a particular market or market segment. Since a large number of enterprises fight for the same consumer group, an intense competitive struggle takes place in the market. When two or more enterprises compete in the same market (Grant, 2005), one enterprise has a competitive advantage if it achieves higher profits than the others. Therefore, the competitive advantage is the ability of enterprises to outperform their rivals in achieving the primary goal.

According to Kotler (2004), every new technology is a force for creative destruction – the greatest danger for any company is not other companies, but the application of new technological solutions. Kotler says: “Horse carriages were not defeated by better horse carriages, but carriages without a horse. Transistors harmed the industry of vacuum tubes, photocopying harmed the industry of carbon paper, and digital cameras harmed the photo-film production”. The essence of new technologies is to increase business productivity which improves the competitiveness of enterprises.

Competitiveness is defined as a set of institutions, policies and factors that determine the level of productivity of a country. The level of productivity, on the other hand, determines the sustainable level of prosperity which can be created by an economy. The more competitive an economy is, the more competent will it be to produce a higher level of income to its citizens. The level of productivity determines the rate of return and since the rate of return is the key to the economic growth, the economy that achieves faster medium-term and long-term growth is more competitive (Sala-i-Martin et al., 2007). The concept of competitiveness thus involves both static
as well as dynamic components: although the productivity of a country is clearly determined by its ability to maintain a high level of income, at the same time it is one of the key determinants of the return made by investments.

Porter (2008) suggests that in the competitive struggle for national prosperity it is less important which branch a nation competes in, but it is far more important how it competes.

In the developed world, an association of the term competitiveness is the growth formula. Being competitive means being successful and growing and the prerequisites are the efficiency of the enterprise and its high productivity. The term competitiveness used to refer exclusively to enterprises and their products and services. However, with the strong growth of internationalization of enterprises and the economy as a whole, problems of international competitiveness are more and more present, of particular companies or their products and services, as well as of some narrower or wider sectors, but also economy as a whole (Kovačević, 2002).

The competitiveness of enterprises can be seen as the core of success or failure of a single enterprise (Train and Egbo, 2006).

COMPETITIVENESS OF SERBIA

When we talk about competitiveness, Serbia is in an unenviable position. Aggravating circumstances that stand in the way of inclusion of local enterprises in the global economy trends are primarily related to their long absence from the global market as a result of the international isolation of our country. In such circumstances, an inadequate treatment of foreign markets in the strategy of growth and development of our company occurred.

The results of one survey, which analyzed the competitiveness of domestic enterprises (May-June 2007, the market of the Republic of Serbia), indicate the following when it comes to the assessment of the level of innovativeness of local organizations: a high level of innovativeness – 14.29%, a satisfactory level of innovativeness – 51%, an average level of innovativeness - 24.49%, the low level of innovativeness – 10.22%. As the main obstacles in the development of competitiveness of domestic enterprises the analyzed executives have mentioned: the lack of knowledge – 24.8%, obsolete equipment and technologies – 24.1%, inadequate use of modern methods and techniques of management – 16.54%, the lack of stimulating business environment – 8.27%, the lack of financial capital – 8.27%, business internationalization of local enterprises – 2.34%. As the necessary elements for the development of competitiveness of local enterprises the analyzed executives observed: continuous improvement of knowledge of the management and employees – 20.74%, the standardization of the quality of operations – 20%, development of entrepreneurial culture in the business environment – 17%, investment in the development of national brands – 14.8%, the development of the concept of corporate entrepreneurship of an organization – 8.88% (Alderson, 2009).

According to the global competitiveness index of the World Economic Forum, Serbia took the 96th place at the end of 2010, which represents a fall of 3 places compared to 2009 when it was in 93rd place out of 133 countries for which the index was monitored. Compared to 2008, when it took the 85th place, according to the competitiveness index, Serbia dropped by eight places in 2009, and from 2008 to 2010 by even 11 places. Serbia's ranking in global competitiveness level 2008-2010 is shown in Chart 1. The overall index of competitiveness of Serbia is also shown in Table 1, column Rank CD.

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**Chart 1: Rank of Serbia, adapted according to the global competitiveness index of the World Economic Forum.**
According to the Table 1, by competitiveness, Serbia is in the penultimate 15th place of 16 transition countries of Central and Southeastern Europe, ahead of Bosnia and Herzegovina. Since 2008, Serbia lost its position with the fall of the average mark of competitiveness from 3.90 in 2008 to 3.84 in 2010. Also, it dropped in the list of competitiveness of transition countries from the 13th place in 2008 to the 15th in 2010. Serbia was overtaken by Macedonia and Albania in the list, and the same might happen with Bosnia and Herzegovina which threatens to overtake it.

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rank - CD</td>
<td>Rank - TZ</td>
</tr>
<tr>
<td>Estonia</td>
<td>32</td>
<td>1</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>33</td>
<td>2</td>
</tr>
<tr>
<td>Poland</td>
<td>53</td>
<td>6</td>
</tr>
<tr>
<td>Slovenia</td>
<td>42</td>
<td>3</td>
</tr>
<tr>
<td>Lithuania</td>
<td>44</td>
<td>4</td>
</tr>
<tr>
<td>Montenegro</td>
<td>65</td>
<td>10</td>
</tr>
<tr>
<td>Hungary</td>
<td>62</td>
<td>9</td>
</tr>
<tr>
<td>Slovakia</td>
<td>46</td>
<td>5</td>
</tr>
<tr>
<td>Romania</td>
<td>68</td>
<td>11</td>
</tr>
<tr>
<td>Latvia</td>
<td>54</td>
<td>7</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>76</td>
<td>12</td>
</tr>
<tr>
<td>Croatia</td>
<td>61</td>
<td>8</td>
</tr>
<tr>
<td>Macedonia</td>
<td>89</td>
<td>14</td>
</tr>
<tr>
<td>Albania</td>
<td>108</td>
<td>16</td>
</tr>
<tr>
<td>Serbia</td>
<td>85</td>
<td>13</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>107</td>
<td>15</td>
</tr>
<tr>
<td>Average</td>
<td>64.1</td>
<td>8.5</td>
</tr>
<tr>
<td>Median</td>
<td>61.5</td>
<td>8.5</td>
</tr>
</tbody>
</table>

Table 1: Competitiveness of national economies of countries in transition.
Source: Potrer and Schwab (2009)
CD – rank compared to all countries; TZ – rank in relation to the transition countries

Sixteen transition countries of Central and Southeastern Europe, being observed at the average level, maintained the competitiveness at the same level in the period of the global economic crisis effects. Development of competitiveness in these countries is uneven, some countries reduce the competitiveness as a result of the negative effects of the crisis, others stagnate, and others use the existing conditions for improvement of competitiveness and thereby achieve strong requirements for the growth and development of their economies in the post-transition period.

According to the methodology of the World Economic Forum there are 12 columns of competition, namely:

1. institutions,
2. infrastructure,
3. macroeconomic stability,
4. health and primary education,
5. higher education and training,
6. goods market efficiency,
7. labour market efficiency,
8. development and efficiency of financial markets,
9. technological level,
10. market size,
11. business performance of enterprises,
12. innovations.
The first four columns define the basic requirements and are associated with factors stimulating economy. Columns 5-10 show increased efficiency, so they are the key to the economy by mobile efficiency. The third group of columns (11 and 12) refers to innovations and business, and it is the key to the innovation-driven economy.

Analyzing Table 2, observed in groups of factors of competitiveness in the period 2008-2010, we see that Serbia’s competitiveness deteriorated in most other factors apart from infrastructure, which recorded growth in 2010 of 25.9% compared to 2008, health care and primary education, which recorded growth of 3.4% and higher education and training with the growth of 2.6%. The largest drop in year 2010 compared to 2008 is recorded in macroeconomic stability, which, seen as a competitive factor, dropped from the 86th place in 2008 to the 109th place in 2010, which represents a negative growth, i.e. a decline of 14.9%.

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutions</td>
<td>108</td>
<td>3.4</td>
<td>110</td>
<td>3.2</td>
<td>120</td>
<td>3.2</td>
<td>0.0%</td>
<td>-5.9%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>102</td>
<td>2.7</td>
<td>107</td>
<td>2.8</td>
<td>93</td>
<td>3.4</td>
<td>21.4%</td>
<td>25.9%</td>
</tr>
<tr>
<td>Macroeconomic stability</td>
<td>86</td>
<td>4.7</td>
<td>111</td>
<td>3.9</td>
<td>109</td>
<td>4.0</td>
<td>2.6%</td>
<td>-14.9%</td>
</tr>
<tr>
<td>Health and primary education</td>
<td>46</td>
<td>5.8</td>
<td>46</td>
<td>5.7</td>
<td>50</td>
<td>6.0</td>
<td>5.3%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Higher education and training</td>
<td>70</td>
<td>3.9</td>
<td>76</td>
<td>3.8</td>
<td>74</td>
<td>4.0</td>
<td>5.3%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Good markets efficiency</td>
<td>115</td>
<td>3.7</td>
<td>112</td>
<td>3.7</td>
<td>125</td>
<td>3.6</td>
<td>-2.7%</td>
<td>-2.7%</td>
</tr>
<tr>
<td>Labour markets efficiency</td>
<td>66</td>
<td>4.4</td>
<td>85</td>
<td>4.2</td>
<td>102</td>
<td>4.1</td>
<td>-2.4%</td>
<td>-6.8%</td>
</tr>
<tr>
<td>Development and efficiency of financial markets</td>
<td>89</td>
<td>3.9</td>
<td>92</td>
<td>3.9</td>
<td>94</td>
<td>3.8</td>
<td>-2.6%</td>
<td>-2.6%</td>
</tr>
<tr>
<td>Technological level</td>
<td>61</td>
<td>3.5</td>
<td>78</td>
<td>3.4</td>
<td>80</td>
<td>3.4</td>
<td>0.0%</td>
<td>-2.9%</td>
</tr>
<tr>
<td>Market size</td>
<td>65</td>
<td>3.6</td>
<td>67</td>
<td>3.7</td>
<td>72</td>
<td>3.6</td>
<td>-2.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Sophistication of business</td>
<td>100</td>
<td>3.5</td>
<td>102</td>
<td>3.4</td>
<td>125</td>
<td>3.2</td>
<td>-5.9%</td>
<td>-8.6%</td>
</tr>
<tr>
<td>Innovations</td>
<td>70</td>
<td>3.1</td>
<td>80</td>
<td>3.0</td>
<td>88</td>
<td>2.9</td>
<td>-3.3%</td>
<td>-6.5%</td>
</tr>
</tbody>
</table>

Table 2: Serbia's competitiveness in groups of factors of competitiveness.
Source: Potrer and Schwab (2009)

According to Đuričin and Petraković (2003) new competitiveness is a combination of adequate strategy and high productivity. In addition, productivity is the result of greater efficiency, with the adequate strategy, a temporary monopoly based on low cost or differentiation is converted into a permanent monopoly based on innovation.

The previous table shows a worrying fact that in Serbia innovation, as a factor for achieving competitiveness and survival of the modern organization, recorded a negative growth of 6.5% or a fall from the 70th place in 2008 to the 88th place in 2010.

The Serbian government has recognized the importance of innovation for the increase of competitiveness of the domestic economy. The objectives of the National Strategy for Economic Development of Serbia 2006-2012 are:

- encouraging research and developmental projects aimed at the implementation of new and better technologies in industry;
- continuous education process and implementation of innovations with the aim of increasing the level of adjustment to market changes.
The fact, that for the period 2007-2013 all EU member states have responded to the call for more investment in innovation and have submitted 455 programs, also speaks about innovation as a key factor for achieving competitiveness. EU investments for innovation in the period 2007-2013 amount to more than €85 billion.

Table 3 provides an overview of the best and the worst factors of the competitiveness of Serbian economy.

<table>
<thead>
<tr>
<th>THE WORST</th>
<th>Rank</th>
<th>THE BEST</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of dominance in the market</td>
<td>138</td>
<td>Index of rights protection</td>
<td>20</td>
</tr>
<tr>
<td>Effectiveness of antitrust policy</td>
<td>137</td>
<td>Use of broadband Internet</td>
<td>30</td>
</tr>
<tr>
<td>Protection of minority shareholders</td>
<td>137</td>
<td>Time required to start a business</td>
<td>45</td>
</tr>
<tr>
<td>Brain drain</td>
<td>136</td>
<td>Total Tax Rate</td>
<td>46</td>
</tr>
<tr>
<td>Cooperation in labour-employers relations</td>
<td>135</td>
<td>Dismissal costs</td>
<td>47</td>
</tr>
<tr>
<td>Effectiveness of corporative management</td>
<td>134</td>
<td>Quality of mathematical and scientific education</td>
<td>48</td>
</tr>
<tr>
<td>Application of technology in enterprises</td>
<td>134</td>
<td>Enrolment in tertiary education</td>
<td>49</td>
</tr>
<tr>
<td>Nature of comparative advantage</td>
<td>133</td>
<td>Height of public debt</td>
<td>53</td>
</tr>
<tr>
<td>Efficiency of legal framework to resolve disputes</td>
<td>132</td>
<td>Number of Internet users</td>
<td>54</td>
</tr>
<tr>
<td>National savings rate / load control / intensity of competition / customer sophistication</td>
<td>131</td>
<td>Quality of scientific research institutions</td>
<td>56</td>
</tr>
</tbody>
</table>

*Table 3: The best and the worst factors of the competitiveness of Serbian economy. Source: Potrer and Schwab (2009)*

The fact, that for the period 2007-2013 all EU member states have responded to the call for more investment in innovation and have submitted 455 programs, also speaks about innovation as a key factor for achieving competitiveness. EU investments for innovation in the period 2007-2013 amount to more than €85 billion.

Table 3 provides an overview of the best and the worst factors of the competitiveness of Serbian economy.

Among the worst factors of competitiveness is the degree of dominance in the market which is ranked in the 138th place, the effectiveness of antitrust policy and protection of minority shareholders who are in the 137th place. The best rated factors of competitiveness of Serbian economy are the rights protection index in the 20th place and the use of broadband Internet in the 30th.

According to the World Economic Forum (Alderson, 2009) report, Serbia is in the second phase, called efficiency-driven or a phase of competitiveness driven by efficiency of use of production factors (in addition to Albania, Bulgaria, Macedonia and Montenegro). When it comes to competitive phases in which a country is, we distinguish between factor-driven, efficiency-driven and innovative-driven competitiveness. Every country underwent each of these stages in its development and definitely started with the competitiveness based on the supply with production factors (land, manpower, etc.) through investment-driven competitiveness, which is based on the efficiency which available production factors benefit from (labour, capital, etc.) to innovation-driven competitiveness.

Serbia has all the prerequisites to become one of the globally competitive regions in the near future, along with other Western Balkan countries, provided that local entrepreneurs change their business philosophy most urgently. Owners of capital and executive management are the ones who need to establish new elements of competitiveness in domestic enterprises. It is necessary to abandon obsolete policies and management techniques and to adopt modern management techniques, as well as to learn from the experience of global leaders, as well as companies coming from newly industrialized countries, and which are extremely successful in the global market.
CONCLUSION

The current market situation characterized by intense competitive struggle and rapid changes in the environment are the reason for the appearance of a growing number of companies facing the problem of stagnation and dissatisfaction in the business. In this millennium, it is clear that only those companies which are able to adapt and change quickly will succeed.

Local enterprises during the last ten years have been insufficiently competitive in the international market, and the effects of the global economic crisis have only reinforced the issue of poor competitiveness of local enterprises. Competitors of local enterprises are not only enterprises from developed, mainly EU countries, but also from newly industrialized countries such as China, India, Brazil, Mexico, Turkey, etc. In the modern business environment, enterprises are forced to accept the improved market philosophy.

Improvement of the business of domestic enterprises must be based on the application of management techniques that support competitiveness, innovation and flexibility, as well as on the emergency improvement of knowledge of the employees, especially the executive management. The degree of business performance of an organization can only be achieved on the basis of improving the productivity of all key resources of the business and existing levels of innovation. In this sense, innovation and development of management knowledge and skills of local managers are some of the key points for successful restructuring of the domestic economy. Special attention must be directed to the implementation of new approaches to management, both in conceptual and in organizational terms.

Without the improvement of factor conditions, including primarily the infrastructure and institutions, the promotion of educational and innovative infrastructure and capital markets and the financial system, Serbia will not be able to improve its unenviable competitive position.

When it comes to competitiveness, the world economy does not hold a zero sum game. It allows every country to promote its prosperity, if it achieves the growth of productivity and competitiveness, regardless of the growth or decline in the competitiveness of other countries. This has particularly been facilitated recently by the globalization process, which has, on the one hand, enabled prosperity to those who increase competitiveness, but on the other hand, at the same time, it has relatively increased costs to those with low productivity (Porter and Ketels, 2007).

Once acquired competitive advantage can be maintained only by making improvements. Since competitive advantage is achieved at the level of companies, there are two prerequisites for maintaining an acquired competitive advantage: the global approach and the ability of companies to make their once gained competitive advantage obsolete.

It is extremely important for Serbia to create preconditions for the innovation-driven competitive economy phase, for only those countries, enterprises, which are innovative and flexible, will survive and improve the business competitiveness. Some of the solutions are focused on micro competitiveness, small and medium enterprises, and the formation of clusters.

REFERENCES


ANALIZA KONKURENTNOSTI DOMAĆIH PREDUZEĆA NA GLOBALNOM TRŽIŠTU

Rezime:

Ključne reči:
konkurentnost, savremeno poslovanje, inovativnost.
MODELS FOR THE EVALUATION OF BUSINESS EXCELLENCE IN CAPITAL MARKET OF BOSNIA AND HERZEGOVINA

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Abstract:
It is always a problem to choose one or more indicators or to construct a model that reflects the achieved operating result. Companies all over the world have developed numerous models assessing excellence from various aspects in order to estimate the achieved operating result or overall business excellence. Applying most of the models requires data and estimation that are not available to investors. BEX model is primarily designed to assess business excellence enterprises in the capital market in Croatia. It is also possible to apply this model to all the other similar markets. This paper will be focused more on the possibility of applying the mentioned model in the capital market of Bosnia and Herzegovina, that is, to the most successful companies listed on the Sarajevo Stock Exchange but being a part of SASX – 10 index, and those listed on the Banja Luka Stock Exchange entering BIRS index.

Key words: business excellence, working capital, value of creation.

INTRODUCTION

Beaver (1966) was the first to forecast corporate failure, among the others who worked very hard on the same problem. Therefore, he was the first who compared the characteristics of bankrupt companies to the identical characteristics of healthy companies, using different multivariate tests. Resulting from his research, he concluded that the indicators could improve one’s ability to separate viable from non-viable enterprises.

One study (Beaver, 1966) states the first modern research on the prediction of business problems using ratio and the study is only a continuation of the research studied in his doctoral dissertation. He observed a period of ten years, from 1954 to 1964, for 30 ratios in 79 companies that were determined by activity and property size. For each selected company, he selected companies without problems, but of the same activities and property size. In the section entitled „Suggestion for future research“, Beaver said that he used a single analysis and consequently proposed multiple analysis. Altman obviously accepted the suggestion and two years later published a Z - score model (Sajter, 2009).

Using the Multiple Discriminant Analysis, James (Džejms, 1997) has correctly classified 95% of the companies in the sample, prior to bankruptcy. A few years later, Altman developed a Z - score model which improved the Multiple Discriminant Analysis.
In 1971 a regression analysis was successfully introduced. Both methods (regression analysis and multy - variety discriminatory analysis) were compared and the conclusion was that together these options gave much better results than the superior Multiple Discriminant Analysis. A year later, the investigated Z-score model gave the best results.

The most famous quantitative model for predicting bankruptcy is Altman’s Z - score model was developed in 1968 by Altman, a professor at the Stern School of Business. Z - score model is a set of financial indicators in the multiple variant context, based on the multiple discriminant model for the companies where it is difficult to predict the complexity of making decisions or the scope of their total activities on the basis of a single measure.

In 1977 a new model called logit analysis was developed. The logit and discriminatory analysis was applied to explain the bankruptcy of 23 banks in the period from 1975 to 1976. The relevant research with certain exceptions have shown that the majority of the proposed models lead to satisfactory predictions, according to the correct classification of 70% to 90% of companies in the sample. It should be noted that the results of several research papers are difficult to compare, due to systematic changes in the business cycle, industry and others (Bodie et al., 2006).

Business Excellence model (BEX) for assessing company business excellence was founded in 2007 by Belak and Aljinović –Barać, 2008. The main objective was to develop a model for assessing the business excellence of the company based on financial indicators that were easily available to all external users. BEX index was tested on a sample of companies not listed on the capital market. Test results demonstrated that the application of the same model was possible with correction and limits when calculating individual indicators.

**BASIC CHARACTERISTICS OF BUSINESS EXCELLENCE MODEL**

Applying the logical selection in accordance with sustainability and compatibility criteria in displaying excellence among the multitude of indices from all areas, a total number of 14 indices was selected and those were: 5 structural indices, 5 fiscal performance indices and 4 indices of stockholders investment efficiency in capital market.

A group of indices assorted like this was subjected to statistical tests and consequently, a standard discrimination function was obtained containing only four key indices that had the greatest influence on specifying company’s affiliation to a certain group. Specifying the relative importance of the influence of the weighting factors in the chosen indices to the discrimination of two groups of companies and analyzing further, we have calculated an aggregate index of business excellence – BEX index.

BEX index indicates and measures business excellence of a company in two dimensions and those are:

- Current business excellence (lagging dimension),
- Expected business excellence (leading dimension).

Statistic research and modern scientific methods testified the prognostic value of BEX model by means of checking the real data of the companies on capital market in Croatia and, in the period from 2000 – 2006, the prognostic value reached 90%. Namely, it still needs to be noticed that this is about statistic evaluation of prognostic model potency, while the real prognostic value needs to be postulated using the time series, segmental evaluations and additional information. The advantage of this model compared to other similar models can be manifested in the following (Belak and Aljinović –Barać, 2008):

- BEX model and BEX index are designed in accordance to business conditions in the Croatian economy. Other imported models are designed in different conditions and therefore their accuracy is doubtful.
- BEX index is not dependent on indices from capital market, so it can be used for companies entering the capital market, which is extremely important, but also for other companies which are off the market. For example, basic Altman’s Z-score, as the most popular model, does not provide this.
- The majority of similar models is aimed at forecasting the future danger, caused by financial distresses and bankrupts (for example Altman’s Z – score, Ohlson’s model or Argenty’s model), and less to excellence. Unlike that, BEX enables the evaluation of business excellence as well as forecasting the success and failure which implies much greater quality.
- BEX index contains a brand new index of company’s financial potency which has not been using in the world until now. Besides this, what can also be considered as brand
new is index of new value formation up to now which has not been using in this form in none of the models.

An interesting fact is that statistic research has showed that indices from the market have not been statistically important for deciding whether companies have been good or not. The main reason lies in the fact that there are companies with unsatisfactory business results, but which have positive market capitalization. Therefore indices such as, earning per share, dividend per share, refund to joint -share, yield from dividend and price-earnings ratio, have not manifested as statistically significant as a difference between good and bad companies. This proves that other factors also influence the share price not only business result factor measured by fiscal indices. The positive evidence is derived from especially high BEX index influencing the share price growth and market capitalization. Hence, evaluation of business excellence, by means of BEX index, represents a good foundation for additional evaluation by virtue of other relevant information which can improve the evaluation and forecasting model potency.

**BUSINESS EXCELLENCE MODEL INDICES**

BEX model consists of four indices with the influence of certain weighting factors which is indicated in the following: (Belak and Aljinović –Barač, 2008).

\[
BEX = 0.388ex_1 + 0.579ex_2 + 0.153ex_3 + 0.316ex_4 \quad (1)
\]

Where:

\[
ex_1 = \frac{EBIT}{Total \ assets}
\]

\[
ex_2 = \frac{Net \ business \ income}{Equity \ capital \times \ cost \ of \ equity}
\]

\[
ex_3 = \frac{Working \ capital}{Total \ assets}
\]

\[
ex_4 = \frac{5(Profit + D + A)}{Total \ obligations}
\]

Buffett finds that continuously good return on total capital presents a very powerful index saying that the company in question can retain long-lasting competitive advantage.

Index \( ex_2 \) is based on economic profit/income which exceeds the price of private equity. In the calculation, business profit category is used to avoid influences of unexpected events on business results. The price of private equity is derived from the result of equity capital and the price of capital that the proprietors could accomplish from the alternative risk free investments. If \( ex_2 \) is higher than 1, the company creates the value and if it is smaller than 1 the company „eats“ its own substance.

Index \( ex_3 \) is based on the ration of theoretically free cash flow from all activities, that is, the profit increased by amortization and depreciation and cover of all obligations with that money. Standard measure of obligation cover, by means of free cash flow, totals 20%. That index does not have linear influence. Therefore, the faster the obligations are covered from the cash flow, its influence on excellence grows progressively. In a longer time period, obligation cover from cash flow decreasingly falls. For example, upon investment by debenture of \( ex_4 \) it is being decreased because financial risk is increasing (Čirović, 2011). Upon activation of investment
and first calculation of amortization, fiscal is returned and, upon the first profit accomplishment on the basis of that particular investment, fiscal potency completely stabilizes. Financing by initial public offering does not influence \( ex_2 \) because thereby private equity and its cost increase. As it can be noticed, indices \( ex_1 \) and \( ex_3 \) return final value of BEX index. Namely, in all similar models, so-called dull indices have to exist preventing huge oscillations of indices. These two indices, still determine results of BEX index in limiting domains (Rodić et al., 2011).

**RANKING BY BUSINESS EXCELLENCE MODEL AND INDEX**

Total business excellence is estimated via BEX index as it follows:
- BEX INDEX is greater than 1 = good company,
- BEX INDEX between 0 and 1 = needs improvement.

Detailed ranking of business excellence with forecasts expectations are illustrated in the following Table 1.

**DATA**

The research in the application of business excellence index (BEX index) in the capital market of Bosnia and Herzegovina covers the period from 1/1/2010 to 12/31/2010. To analyze market trends yield, we use an analysis focused on observing the most successful companies, which are located in the structure of stock exchange indices of Sarajevo and Banja Luka stock exchange.

**INDICES**

The official index of the Sarajevo Stock Exchange is SASX-10. This index is the benchmark index of the Sarajevo Stock Exchange, which tracks the price of the top ten companies in the market (excluding investments funds), as measured by market capitalization and trading frequencies. This index is not confined to one market segment but it can also include the issuers listed on the market as well as those of the market. After limiting the participation of issuers in the index, the index value on a day \( t \) is calculated using the following equation:

**Table No.1: Ranking of business excellence and the prognosis for the future**

* Rank of business excellence is defined by analyzing the current trends of actual results. However, accurate forecasts are not statistically confirmed because no sufficiently long time series of historical data, making forecasts, should be taken with caution.
SASX \(10_{(t)} = \frac{\sum_{i=1}^{n} P_{i,t} \times q_{i,R}}{\sum_{i=1}^{n} P_{i,0} \times q_{i,R}} \times 1.000 \times C_t \) (2)

where: \(P_{i,t}\) - is the stock price \(i\) on the day \(t\); \(P_{i,0}\) - is the stock price \(i\) on the day \(t=0\) (initial base date indices); \(q_{i,R}\) - is the number of stock on the audit day and correction factor \(C_t (C_0=1)\).

SASX – 10 is a price weighted index, where the weight is used as a market capitalization of the issuer. Maximum participation of an individual issuer is limited to 20%, which is consistent with the limits set by UCITS III. The index base date is 12/31/2004. The base value of the index at that period was 1.000 index points. The official index of Banja Luka Stock Exchange is BIRS (stock exchange index in the Republic of Srpska – BIRS). BIRS includes the best stocks of enterprises and banks. It was formed on 5/1/2004. Number of shares being a part of BIRS can vary from 5 to 15, depending on the fulfillment of the criteria for inclusion of stocks in the BIRS index. Number of issuers, whose shares are included in the composition of BIRS, depends on the number of shares on the regulated market and the official number of issuers that meet the requirements for the composition of BIRS. BIRS can also include the shares of issuers meeting the general requirements and criteria for inclusion of stocks in BIRS, except for shares of investment funds. Initial value index was 1.000 points. The value of BIRS is calculated by the following equation:

\[ \text{BIRS} = \frac{\sum_{i=1}^{n} P_{i,t} \times q_{i,R}}{\sum_{i=1}^{n} P_{i,0} \times q_{i,R}} \times 1.000 \times C_t \] (3)

where \(i=1,...,n\), \(n\) - is the number of issuers listed on the BIRS; \(t\) - is the trading day; \(R\) - establishment day or revision day of BIRS; \(T\) - a moment previous to calculating BIRS, according to a new composition; \(P_{i,t}\) - the price of shares on day \(t\); \(P_{i,0}\) - the base price of the shares (the price of the formation of audit BIRS); \(q_{i,R}\) - the adjusted number of shares of the issuer \(i\) - while calculating market capitalization, we observe the number of adjusted shares because of the number of shares owned by the public and because of adapting shares participation of BIRS; and \(C\) – correction factor for ensuring the continuity of BIRS.

CONCLUSIONS

Here we will study and analyze companies in particular segments of the capital market in the Federation of Bosnia and Herzegovina. The companies in question are: BH Telecom – Sarajevo; JP Elektroprivreda B&H; JP Elektroprivreda HZHB Mostar; Tvornica cementa – Kakanj; Bosnalijek – Sarajevo; Energopetrol – Sarajevo and Fabrika duhana – Sarajevo.

Observing the results of a single part capital market in B&H, namely the free market, and the structure of the most profitable companies in the index SASX-10 for the period 1/1/2010 – 12/31/2010, we have reached these business excellence results:

<table>
<thead>
<tr>
<th>No.</th>
<th>Company</th>
<th>Profitability</th>
<th>Value of creation</th>
<th>Liquidity</th>
<th>Financial strength</th>
<th>BEX index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BH Telecom - Sarajevo</td>
<td>0.0468</td>
<td>1.8581</td>
<td>0.0244</td>
<td>2.0846</td>
<td>4.0139</td>
</tr>
<tr>
<td>2</td>
<td>JP Elektroprivreda Mostar</td>
<td>0.01264</td>
<td>0.81766</td>
<td>0.00982</td>
<td>0.47188</td>
<td>1.312</td>
</tr>
<tr>
<td>3</td>
<td>Tvornica cementa- Kakanj</td>
<td>0.05432</td>
<td>2.11381</td>
<td>0.02977</td>
<td>2.42899</td>
<td>4.626</td>
</tr>
<tr>
<td>4</td>
<td>Bosnalijek - Sarajevo</td>
<td>0.0091</td>
<td>0.05129</td>
<td>0.03462</td>
<td>0.32326</td>
<td>0.4182</td>
</tr>
<tr>
<td>5</td>
<td>Energopetrol - Sarajevo</td>
<td>0</td>
<td>0</td>
<td>0.08261</td>
<td>0.02133</td>
<td>0.1039</td>
</tr>
<tr>
<td>6</td>
<td>Fabrika duhana - Sarajevo</td>
<td>0.01226</td>
<td>0.4344</td>
<td>0.06043</td>
<td>1.4272</td>
<td>1.9343</td>
</tr>
</tbody>
</table>

Table No. 2: Ranking of companies listed on capital markets in the Federation of Bosnia and Herzegovina according to the business excellence measured by BEX index for 2010.
Upon calculating the total of BEX index for all companies listed on the Sarajevo Stock Exchange, we can notice that the highest value of BEX index was registered by the following companies: BH Telecom Sarajevo (BEX: 4.0139) and Tvornica cementa – Kakanj (BEX: 4.626). According to records from the Table 2, we can see the values of 2.01 to 4.00 and describe the companies operating within this range as very good as it can be expected in the next two years, if management continues with improvements. These improvements are reflected in the following: a) IT; b) management type change; c) replacement of existing equipment; d) employing new staff; e) expansion of production capacity; f) current and investment maintenance; g) the introduction of software packages for stock control and h) the introduction of ISO quality standards. Comparing the companies with the highest values, we have two companies whose values are lower than one: Bosnialijek Sarajevo (0.4182), and Energopetrol Sarajevo (0.1039). The provided data indicates that the existence is threatened and therefore restructuring and business improvements are urgently needed.

The part of one research focuses also on studying and analyzing the segment of capital markets in the Republic of Srpska. The companies subjected to research are: Hidroelektrana na Drini - Višegrad; Telecom Srpske – Banja Luka; Hidroelektrana na Trebišnjici – Trebinje and Boksit – Milići. Studying the results of the analysis of one part of the capital market in B&H, precisely the free market and the structure of BIRS for the period 1/1/2010 – 12/31/2010, we have come to the following:

The greatest value of BEX index in the capital market of the Republic of Srpska was achieved by the company Telecom Srpske (4.03769). This value indicates that the company operates very well and the same can be expected in the next two years if management continues with improvements. However, the lowest value of BEX index was recorded by the company Hidroelektrana na Drini - Višegrad (1.22407) and Boksit - Milići (1.24434). These values reflect that the company operates well, but better results can be expected only if the company starts to improve.

**CONCLUSION**

BEX model is based on financial indicators relevant for measuring business excellence enterprises in the capital markets in transition, and it can also assess the long-term stock prices. Assessment by BEX model is possible through segments of isolated part excellence and BEX index. Studies have shown that the medium and long term movements in share prices may be well approximated by using: a) the status of and trend in BEX index; b) information about the activities of management to improve operational excellence; and c) information about investing in the brand.

Through analyzing BEX index we can conclude that large enterprises with regard to the level of business and management, capability to have insight into the balance sheet and income statement, and statement of cash flows, have extremely large BEX index implying business stability and tendency that this will continue in the future. This leads to the conclusion that need to create a strategy choice at the firm level, as well as a permanent investment, can be followed by increased indebtedness. Adequate balance in financing is to follow the golden rule in finances – one to one; the perfect balance between the owned capital and the borrowed.

<table>
<thead>
<tr>
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<th>Profitability</th>
<th>Value of creation</th>
<th>Liquidity</th>
<th>Financial strength</th>
<th>BEX index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hidroelektrana-Drina Višegrad</td>
<td>0.1119</td>
<td>0.61560</td>
<td>0.1144</td>
<td>1.3166</td>
<td>1.22407</td>
</tr>
<tr>
<td>2.</td>
<td>Telekom Srpske Banja Luka</td>
<td>0.051357</td>
<td>3.1919922</td>
<td>0.0039915</td>
<td>0.790355</td>
<td>4.03769</td>
</tr>
<tr>
<td>3.</td>
<td>Hidroelektrana Trebišnjica Trebinje</td>
<td>0.00518</td>
<td>0.43579</td>
<td>0.01339</td>
<td>1.54942</td>
<td>2.00337</td>
</tr>
<tr>
<td>4.</td>
<td>Boksit - Milići</td>
<td>0.00737</td>
<td>0.85471</td>
<td>0.02004</td>
<td>0.36222</td>
<td>1.24434</td>
</tr>
</tbody>
</table>

*Table No. 3: Ranking of companies listed on capital markets in the Republic of Srpska according to the business excellence measured by BEX index for 2010.*
The advantage of BEX model, apart from other similar models known in the world, consists in the fact that the BEX index can be calculated in companies that have just been listed on the capital market, which is not possible with other models.

Using and benefiting BEX model, the possible investors should be able to assess whether the prices, under which the securities are offered at the market, are reasonable or not. The quoted prices of the securities have to reflect the possible value of the company so that the company could be satisfied as they represent the issuers of securities and investors who entrust their money.

REFERENCES


MODELI ZA PROCENU POSLOVNE IZVRSNOSTI NA TRŽIŠTU KAPITALA
U BOSNI I HERCEGOVINI

Rezime:
Uvek je problem odabrati jedan ili više pokazatelja ili konstruisati model koji odslikava postignuti poslovni rezultat. Za procenu postignutih poslovnih rezultata ili ukupne poslovne izvrsnosti preduzeća razvijeni su brojni modeli u svetu koji izvrsnost procenjuju sa različitih aspekata. Korišćenje većine modela zahteva podatke i procene koje ulagačima na tržištu kapitala nisu dostupne. BEX model primarno je izraden za procenu poslovne izvrsnosti preduzeća na tržištu kapitala u Hrvatskoj. Njegova primena je moguća i za procene poslovne izvrsnosti na svim sličnim tržištima kapitala. U ovom radu će biti reči o mogućnosti njegove primene na tržištu kapitala BiH, tj. na najuspešnije kompanije koje se kotiraju na Sarajevskoj berzi/burzi, a koje se nalaze u sastavu SASX-10 indeksa i Banjalučkoj berzi hartija od vrednosti, a koje se nalaze u sastavu BIRS indeksa.

Ključne reči:
poslovna izvrsnost, radni kapital, stvaranje vrednosti.

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INTRODUCTION

As the intellectual component in products and services gains more and more importance, developing knowledge management within an organisation wins greater priority. All present-day companies compete in knowledge, but unless applied and accessible to all who might need it at any time given, the knowledge existence within a company becomes useless. In this sense, knowledge management implies acquiring collective knowledge with the aim of achieving a company’s business goals. Basically, the role of knowledge management is to guarantee that people can access all knowledge they need, where they need it and when they need it, i.e. actual knowledge at the right place, in the right time.

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PREREQUISITES FOR SUCCESSFUL APPLICATION OF KNOWLEDGE MANAGEMENT

Although there is no universal definition of knowledge management, a conclusion can be derived from analysis of definitions of this concept occurring in the literature, that every knowledge management definition implies exploitation of knowledge accessible from external sources, its implementation and storage in business processes, products and services, its representation in databases and documents, promotion of knowledge increase through organizational culture and employee motivation, transmitting and applying knowledge throughout organization, as well as estimating benefits resulting from knowledge use and its implementation into the organization basis. The most general approach to this concept is to view knowledge management as a process representing unity of the three components (Macintosh, 1995): people, processes and technology and which goes through the following phases: knowledge creation, knowledge capture, knowledge storing, knowledge sharing and knowledge application, thus forming its life cycle.

As a strategic approach to knowledge management, which considers the unity of technology and human factors as the foundation for survival in a variable environment, the definition given by Y. Malhotra (1997) stands out by defining knowledge management as follows: “Knowledge management refers to the critical issues of organizational adaptation, survival and competence against discontinuous environmental change. Essentially it embodies organizational processes that seek synergistic combination of data and information processing capacity of information technologies, and the creative and innovative capacity of human beings.” It is the concept representing collective knowledge of an organization with the ultimate goal to apply this knowledge efficiently to the decision making situations. Concisely, knowledge management is the process through which organizations generate value from their intellectual and knowledge-based assets (Santosus and Surmacz, 2001).

To gain insight into successful application of knowledge management concept, it is crucial to study the factors which determine the level of success and competitiveness of an organization. The claim of this program, requiring various employee competencies, is supported by virtually unified authors’ opinion (Mertins et al., 2001). Subsequently, corporate culture, human resources management, leadership, information technologies and control are key factors which determine knowledge management program success.

Instances of numerous business activities and fields prove that free knowledge flow and a successful knowledge management program are the preconditions of successful business practice. For example, particularly in the field of trading and services business orientation is based upon sense-and-respond (your clients’ needs) philosophy (Kotler, 2003). The mission of present-day organizations no longer consists of finding the right consumer for the created products and services, but comprises creating the right product and service offer for prospects and the existing clients. A company’s customer centered business practice covers all business activities involved in the fields of marketing and product or service distribution. This would cause lowering the costs of attracting clients in the long run and would consequently build customer loyalty to the organisation. The precondition for such business orientation is certainly availability and accessibility of knowledge in all business practice segments within this field, and it will be discussed in further parts of this paper.

COSTUMER RELATIONSHIP MANAGEMENT AND KNOWLEDGE CREATION

The concept of Customer Relationship Management (CRM) includes directing a company’s marketing activities towards establishing, forming and maintaining good long term business relations with the selected consumer segments, and it is based upon making use of electronic technology. Adrian Payne (2006) views CRM as an approach to modern business practice aimed at creating, developing and strengthening business relationships of a company with carefully selected consumer segments in order to optimize value for both the consumers and business profitability, and generally to maximize value for all company stakeholders. Parvatiyar and Sheth’s (2001) view of CRM concept is defined as a comprehensive strategy and process aimed to attracting, maintaining and enhancing partner relationships with selected consumer segments, with the final goal of creating superior value both for customers and the company itself.
One of the key superior values for an organization is the knowledge it possesses, and its ability to apply this knowledge to its business decision making processes. Knowledge management process has five distinct stages, namely: creation, acquiring, storage, sharing, and application of knowledge (Đorđević-Boljanović, 2009). The first step is knowledge creation. It represents the initial link which enables an organization to start building and applying its knowledge, and which forms a knowledge pool to be used in processes that manage corporate marketing activities.

The new economy implies a shift from mere data collection-based marketing and creation of consumer databases towards CRM, as a process of modifying consumer behavior over time, thus enabling the organization to learn from every interaction with customers and to adapt to their behavior and habits. The flow of communication with consumers consists of various episodes that vary in content, frequency, duration, and the impact they have on business relationships. Considering the significance of an episode for consumer’s assessment of relations with retailer, episodes can be classified as routine and critical ones.

Routine episodes are situations which haven’t led to significant changes nor improvements in relations among retailers and consumers, either positive or negative. In retail communication, they can grow into critical, even if an agreement with the retailer is not reached. Critical episodes, from the consumer’s standpoint, have great significance for future communication and business relationships with the retailer. These are the interactions among customers and employees within an organization, and may be either highly satisfactory or extremely unsatisfactory (Bittner et al., 1990).

During a retail communication episode, the customer experiences one or more interactions with the retailer while they are being served. With consumers, these interactions can create cognitive equilibrium (feeling of satisfaction) or disequilibrium (feeling of dissatisfaction). In other words, while being served, consumers experience an impression of satisfaction (feeling of satisfaction) or disequilibrium (feeling of dissatisfaction). In other words, while being served, consumers experience an impression of satisfaction or dissatisfaction, which is the key to creating critical episodes as a factor of changes in business practice and communication.

In the process of gathering information and creating knowledge about building the relationships and the consumer satisfaction degree, it is of the utmost importance for a commercial or service business to establish whether or not there were changes in communication, and whether these changes are positive or negative in terms of future business relations. A retail market research, conducted in Serbia among other things, has dealt with collection of knowledge on consumer-retailer relationship (Stanković, 2009). The consumer sample has consisted of 503 adults, into two age groups: (a) younger, aged 18 - 25, and (b) older than 25. The sample of retail businesses has featured their representatives present on the local market who communicate with consumers directly, either traditionally or electronically.

According to this study, after the purchase process, a significant majority of consumers, up to 66.2%, experiences a certain feeling (satisfaction or dissatisfaction) about the purchase made (Stanković, 2009). Consumers are therefore indifferent to the completed purchases and collaboration with their retailers.

A series of interactions that build an episode create a service chain. It can be analyzed both from the consumer’s and the company’s standpoint.

The other end of this communication chain is the organization which uses information gathered during a series of interactions to improve the relations established with its clients. At the same time, it also represents a further concretization of the stance on the bond between the concepts of knowledge management and customer relations management. An interesting classification of knowledge which plays a major role in the organization - clients interaction can be used to support this stance: the professors of St. Gallen University (Dous et al., 2005) have classified knowledge into: the knowledge “for”, the knowledge “from” and the knowledge “about” customers.

The first type of knowledge, aimed at the customer’s support during the purchase process, flowing directly from the company to its customers, represents a prerequisite for successful business practice. The knowledge “for” client comprises information on the products (services), the market and the suppliers. As for the second type of knowledge, the one “from” customers, it is of crucial importance to implement it into company business practice in order to promote product and service innovation, spread of new ideas, as well as continuous improvement of its products and services. Collection and analysis of the knowledge “about” customers certainly represents the oldest type of knowledge management activities in the field of CRM. In addition to basic data on customers and their past purchases or services used, this type of
knowledge includes current consumer demands and needs, their future aspirations, activities, and financial capabilities.

KNOWLEDGE ABOUT CUSTOMERS AS A SOURCE OF COMPETENCE

The knowledge management plays an important role in the concept of CRM through the following three levels (MacStravic, 2004):

- The knowledge management within Customer Interaction Management (CIM) represents the knowledge which the company acquires in order to make the sales, marketing and customer service more effective and efficient, as the ultimate goal of CIM. This involves training and enabling all individuals and systems to access and use knowledge in order to identify the reasons out of which a customer demands specific goods or services, the criteria for selecting specific brands and providers, the channels for seeking or receiving the necessary information. The emphasis is on knowledge about clients in general.

- The knowledge management within Customer Experience Management (CEM) refers not only to customers’ expectations, but also considering the elements that may cause their dissatisfaction, which has already been discussed. All this requires a separate evaluation of customers significant for the company, and of marginal customers who are not that profitable for its business. This type of knowledge can be used for particular customization, purchase frequency increase and value creation for the company. The existing knowledge on what the customers like and dislike, and the knowledge about their current and potential interest for some other products or services that the company provides, form the basis for the application of the knowledge management concept in CEM.

- The knowledge management within Customer Success Management (CSM) focuses upon continuous relations and the impact on potential customers, trying to establish how these relations and experience in transactions affect them and how to exploit this effect for the mutual benefit of both the buyer and the organization. Here we primarily think of the usefulness of knowledge which can be directly enhanced by a successful knowledge management program, with the aim of motivating customers. Therefore, it is of the utmost importance for an organization to acquire knowledge on what kind of impact the customers expect them to carry out, why the customers are loyal to the existing relationship with a particular organization etc.

The parallel implementation of knowledge management and Customer Relationship Management concepts in the companies belonging to both public and private sectors of the economy, has led to the development of the Customer Knowledge Management (CKM) concept (Gibbert et al., 2002). Amrit Tiwana (2001) also terms this concept as “knowledge-enable customer relationship management”, thus implying the ability to manage customers’ knowledge in order to establish standards of forming value and to share knowledge, with the ultimate goal of strengthening relations and enhancing communication and business practice efficiency.

An organization that succeeds in integration of its knowledge into the minds of its employees and its clients (human capital), into the current opportunities and capabilities (structural capital) and into connections and relationships (relationship capital), is on the right way to become a leader. More concisely, an organization must learn to alter their behaviour patterns exclusively in the direction of what they know about their clients (Tiwana, 2001). The memorable quote “if only we knew what we know” originally by Lew Platt, a former Hewlett-Packard CEO (“If only HP knew what HP knows, we would be three times as profitable.”), in fact, expresses the very essence of the knowledge management concept. It could be, in a sense of observing the links between the Knowledge Management and Client Relationship Management concepts, changed into “if only we knew what our customers know.” In fact, companies have become aware of the fact that the knowledge, necessary to create and sustain competitive advantage, must also include the knowledge a company owns about its customers (but also about those who are not their customers). Or, as P. Drucker (Draker, 2002) put it: The present-day customer has information ... The one who has information has power. Power therefore shifts towards the customer, be it another company or end user. This further implies the need to strengthen the bonds between the Customer Relationship Management and Knowledge Management concepts, resulting more frequent emphasis on the connection between the two.
Figure 1 features the conceptual framework of the knowledge flow in an organization, which is a prerequisite for successful implementation of CRM, and this is a precondition of implementation of the CKM concept.

As the figure shows, the key aspects of studying knowledge flow within an organization, essential for the implementation of the CKM concept, are the strategy, processes, systems and change management. The strategy implies perceiving customer knowledge as a valuable source for product innovation and process improvement, meaning that management needs to view its clients not as a burden but as a valuable source of knowledge. The processes imply that the optimal way to manage knowledge is to implement it into employees’ regular daily work activities. The systems imply the creation of knowledge repositories within an organization, which are necessary for overcoming the limits and business units separation issue. The change management includes encouraging organization managers to acquire and share their knowledge about clients.

Starting from the strategic framework of applying the CRM concept within organizations (Knox et al., 2003), it is important to put emphasis on the bond between the knowledge creation process and the marketing strategies conducted with the aim to establish good long-term relationships:

- The strategy of attracting and acquiring new customers (Customer Acquisition) represents the implementation of numerous communication and business activities, intended to attract new customers and convince them to make their first purchase with that particular company. It is implemented through a series of offline activities (product and service promotions, innovative ways of communication, direct purchase incentives) and online activities (website, online communication and sharing). It can be said that the implementation of this marketing strategy particularly contributes to the organizational level of learning.

- The strategy of customer retention represents implementation of activities and techniques with the purpose of maintaining business relationships with customers (personalization, mass customization, good purchase deals, creating and activating extranet, as well as creating e-mail groups, forums and online chats).

- The strategy of directing the purchasing trends of consumers and deepening the communication-business relationships with the most profitable customers (customer extension) represents establishing a deeper and superior quality communication with the most profitable customer segments aimed to increase the long-term, so called lifetime customer value. The implementation of this marketing strategy particularly contributes to the individual level of learning, as the organization strives to es-
Establish the best possible communication with its premium consumers, even at the individual level.

These strategies require a continuous research to be conducted, the collection of information and the creation of knowledge to be at disposal of the organization’s employees, and to be used by managers to make decisions necessary to direct their future cooperation with customers.

The results of a research, conducted on a sample of retailers and consumers in Serbia, confirm that understanding the customer needs and keeping them informed represent a valuable source for innovation in business processes. In fact, the research has shown that there is a sound basis for the claim that an absence of information on a traditional offline retailer leads to the domestic consumers’ decision not to be engaged in electronic trade with such retailer (Stanković, 2009). Interestingly, 23.7% of research participants could not answer this question, suggesting the possibility that emergence of e-companies the consumers know almost nothing about, would lead to numerous difficulties with engaging consumers in electronic trading. It can be assumed that those would primarily be difficulties caused by impossibility of face to face contact with sales staff, the lack of nonverbal communication and body language, as well as other factors that effect building of a trustworthy retailer-consumer relationship, which requires further research. The study concluded that e-retail represents an unknown concept for a large number of consumers, and therefore a novelty in performing purchase activities, establishing communication and relationships with retailers. The “culprit” for this is the lack of information about the retailer, the lack of communication, and the lack in creating knowledge about costumer’s needs and requirements. Not being informed about innovations in business practice negatively affects a customer’s decision to engage in retailer’s new business activities, such as the area of e-business.

The implementation of the Customer Knowledge Management concept (CKM) is of a particular importance when the following characteristics of business relationships are considered (Peppers and Rogers, 2004):

- Reciprocity - Every human relationship is bi-directional. To consider a set up state of business affairs as a relationship, it is essential that both sides participate in establishing it and be aware of the existence of these relations.
- Interaction - The two sides interact when they exchange information about themselves, and when this exchange becomes a driving force for building their mutual relations. This further implies their mutual interest in building business relationships.
- Iteration - The two sides participating in an exchange is in interaction that takes place over time, which builds a history of their interaction. In time, this history gains a certain context which produces an ever increasing efficiency in future interactions of these participants. Each subsequent interaction is the next iteration, the next step based on all the previous iterations. A series of performed iterations indicates the frequency of retailer-costumer interactions, and the quality of their existing relationship. In other words, the more you interact with a person, the easier it will be to understand each other during every subsequent interaction, and to predict their thought pattern.
- Developing mutual benefit - One of the main driving forces of building retailer-consumer relationships is the development of mutual benefit for both parties in the exchange. Due to the aforementioned context of exchange development, and benefits gained and expected, inherent to exchange, it is of an interest to both sides not to make mistakes and to recover rapidly and efficiently from mistakes that still may occur. This happens because both parties expect that the future value, gained in exchange, will exceed costs of investing in that business relationship.
- Changes in behavior - What influences creation of mutual benefit for both parties in the exchange is not just the context, which represents the history of business interactions over time, but also the fact that current and future business activities of both sides reflect that context of trade and their mutual business relations. Business activities evolve over time, as well as the terms of exchange and people themselves including their behavior.
- Uniqueness - Every relationship is different, specific and unique. Companies intending to build good relationships with their customers must be aware of the uniqueness of their needs and demands, and adapt their behavior and communication style to specific characteristics of individual costumers.
Trust - The ultimate request, but also the result of any successful relationship with a tendency to develop further, is trust. If a consumer develops a business relationship with a company, they actually intend to develop trust in that company’s work, that is to believe that it will operate with the customer’s best interest in mind. Trust is the feeling which makes foundation to development of any relationship, including a business relationship and which determines its future.

The aforementioned characteristics of building business relationships among companies and their customers and clients indicate their complexity, and also their susceptibility to changes. The complexity of established relations and the delicacy of building consumers’ trust render the need to learn and analyze their behaviour, needs and shopping habits, as well as their attitudes towards the company after product or service consumption. Therefore, getting familiar with the business situations, studying the factors that have led to their formation, and especially following trends, observing and listening to customer behavior on the market – all of the factors enable companies to deal with emerging potential changes, as well as to reduce the risk of negative effects of future changes.

MARKETING CONCEPTS BASED ON KNOWLEDGE

Knowledge creation and management are crucial for implementation of some key marketing concepts, the most current of which are Involvement Marketing and Customer Information Management (West, 2000). Consumer Involvement Theory (CIT) implies understanding psychology and behavior of the targeted customer segments, and represents a genuine application of the CKM concept in practice. Consumer behavior provides a retailer with knowledge necessary to create new ideas, approaches and strategies of marketing communication. In this respect, it is crucial to consider the two dimensions of the mentioned concept (McNamara, 2011):

1. Involvement - refers to the time, energy, thought processes, money and other resources that people use in relations with an organization;
2. Rationality / emotionality in decision making (rational / emotional) – represents a scale used to measure ratio vs. impulsiveness, desire vs. logic, passion. vs. wisdom in building the mentioned relationships.

In a study of the telecommunications and health care sector in the U.S., the authors Varki and Wong (2003) came to the following conclusion – the more clients are involved in the exchange process, the greater interest they show in building relationships with service providers, in equality within the exchange and also in active participation in solving problems. Activating the role of costumers with a high degree of involvement in problem solving processes provides the greatest possibilities of building long-term relationships (Varki and Wong, 2003).

Inclusion of consumers in knowledge creation for an organization creates a number of advantages. Firstly, the organization acquires timely and current information about its customers, which is a direct parameter of business quality. Secondly, clients are interested in providing information about themselves, since it directly influences knowledge creation, and thus creation of custom has made an offer, which, in the long run, represents the parameter of trust in the organization. Thirdly, client involvement in the creation of knowledge about themselves is another very significant and valuable long term factor in building partnerships on the market.

At this point, it is interesting to show some data obtained at the retail market of Serbia (Stanković, 2009). Specifically, the results show that a statistically significant majority of consumers feel they represent active participants in the retail business. However, on the other hand, the research has shown the following:

- Consumers in the local domestic market do not feel that retailers really care about them and their needs. This could, in other words, represent a problem and reduce the quality of building customer relationships in the long run.
- There is no sufficient foundation to claim that retailers are concerned enough for individual customer needs and demands nor do the consumers feel that way.

Such results may suggest that domestic retail market doesn’t implement so-called planned approach to change management and direction of retail-customer relationships, nor do customers and consumers actively participate in the long-term exchange processes.

The concept of Management of Information Exchange with Customers enables online and offline knowledge collecting, which will be significant for efficient building of good business relationships and
better customer service. In this sense, the so-called information-intensive strategies play a major role, because they contain the information that needs to be continuously monitored and updated by organizations (Glazer, 2004):

- Customer features (demographic and psychographic data);
- Customer reactions to the company decisions (data on customer preferences, customer behavior and their reaction to the company activities);
- Purchase history (data on the products and services bought and used by customers; data on revenue, costs and the profits pertaining to the purchase made).

The aforementioned results lead to the conclusion that practical implementation of these marketing concepts effects the construction of six key CKM dimensions (Gordon, 1998):

- Creating new value for customers;
- Identifying the active role of clients in exchange and value creation;
- Designing and establishing business processes, communications, technology and people as indispensable technical support in value creation for customers;
- Establishing cooperation between organizations and their clients;
- Recognizing the value of long-term customer and consumer purchase (so-called customer lifetime value);
- Researching ways to build a chain of business relations within the organization itself, as well as business relationships among the organization and its stakeholders, including suppliers, distribution channels, exchange intermediaries and stakeholders.

Having considered different aspects of the application of knowledge-based marketing concepts, a conclusion can be made that the benefit of these is great if one insists on a multi-dimensional approach to this issue.

MONITORING CUSTOMER RELATIONS LIFE CYCLE AS A FACTOR OF COMPETENCE

The quality of the concept of modern business is monitored by measuring the profitability of clients and organizations. The research of partnerships among clients and organizations, Gummesson (1999) has observed the formation of so-called “profit chains” or “customer relationship life-cycle”. This implies the customer and client value creation process, presented through the stages of relationship management leading to creation of an organization’s profit. Storbacka terms this process a “return to business relationship”, indicating that the established relationships bring significant benefits to both sides. Profit represents an important benefit for an organization, while consumers and clients find pleasure in the purchase which has been made and having their requests met.

Figure 2 shows the process of making profitability. This includes the processes of profitability development within an organization which form the basis for building business relationships with environment. Raising the quality of internal operations leads to creation of employee satisfaction and motivation in the organization. Raising the quality of their operations leads to a better customer service.

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**Figure 2: Return on business relationships.**

*Source: Egan (2004)*
This further leads to customer satisfaction, retention and building customer profitability, but also to creation of the organization profitability. Prerequisite for the creation of return on business relationships is reflected in the quality of communication among employees and in the possibilities and ways of motivating employees to enhance their knowledge. Business communication has to be conducted and monitored within three levels: in organizations themselves, with consumers or clients and among organizations. (Dobrijević, 2010). Clear communication, both verbal and nonverbal, internal communication in an organization as well as the communication with clients and customers, represents an important factor in building employee satisfaction, and consumer trust in their retailers. Among other factors that influence corporate culture, the factor of quality of communication and information flow is one the most powerful (Nikolić and Terek, 2011).

The aforementioned study has found that clear communication is an important factor in building customer trust towards the retailer (Stanković, 2009). Most customers and retailers have evaluated the factor of communication with the sales staff (clear verbal communication, balanced verbal and nonverbal retailer messages, timely information and the like) as an important and/or very important for building trust. Diverse knowledge about customers has a versatile use value for an organization, so identifying high-quality and useful knowledge is a key factor in customer value creation.

Establishing and developing relationships based on learning (Learning Relationship) depend on numerous factors, both those that encourage the development of this process making it a source of organization competence, and those that affect it negatively and diminish it.

As displayed in Figure 3, the established business relationships evolve through the following five stages (Peppers and Rogers, 2004):

I. Awareness of potential trade partners phase – In this first stage, potential participants in the trade become aware of the possibility of exchange and, in this sense, establish business relations. However, there still isn’t any exchange between them.

II. Research Phase – This is a “trial period” for establishing trade participants relations. Communication is established among them while necessary information are being transmitted, including information on customer demands, priorities, needs and desires. This phase is a very delicate one, because if one of the involved parties shows insufficient desire, indifference or reserve toward the other party, the development of business relationships could be very quickly and easily disrupted.

III. Expansion phase – This stage takes place if the retail trade participants successfully “overcame” the previous stage, meaning both the retailer and the customer were convinced of the suitability and importance of their trading partners. This enables the strengthening of mutual relations, the interdependence of trading partners, and their willingness to take risks in business operations. A research on Serbian retail market has showed that domestic consumers feel that they represent active participants in the exchange. Namely, the question “Do you feel that, as a buyer (consumer), you represent an...
active participant in the purchase?" was positively answered by 64.2% of customers (323 respondents), which is a statistically significant majority of respondents, while 20.4% of customers (101 respondents) provided a negative answer. On the other hand, surveyed retailers were asked the question “Does your company strive to actively involve customers in gathering information related to: customer needs, changes in product ranges and services, the atmosphere and arrangement in retail stores, web site design etc.? “. 76.0% (38 respondents) of the total number of respondents answered with a “yes”, while 20.0% of retailers (10 respondents) answered negatively. A statistically significant majority of retailers on the domestic market aims to actively involve their consumers in the process of gathering information about their needs, as well as other elements of the retail trade (changes in product ranges and services, the atmosphere and arrangement in retail stores, web site design etc.) (Stanković, 2009).

IV. Phase of trust and commitment - At this stage, the partners, having established a business relationship, reached a certain satisfaction level with it, and are aware of the benefits this relationship brings. Consequently, the parties in the exchange begin to develop commitment to the established relationships and the feeling of trust is created. Therefore, both partners are much less prone to consider alternative business relationships with other potential trading partners. Partners are interested in a consistent investment into their business relationship, and into its long-term orientation. At this stage, consumers gain a sense that they represent active participants in the exchange.

V. Disruption (conflict) phase - Disorders are always possible and potentially present. The stage of disorder occurs when one of the parties estimates that the costs of further investment into a business relationship will exceed the benefits that party gains from this business relationship. This phase can occur during any development stage of business relations.

Through the entire evolution process of learning relationships, the factors which encourage the development of these relations occur. One of these factors is communication, expressed through formal and informal communication styles of trading partners, as well as through verbal and nonverbal forms of communication. Electronic communication has enabled the establishment of direct, personal communication, which can additionally effect the development of consumer trust in their retailers. Cooperation is an important motivating factor, because it involves both trading partners, it deepens their communication and creates a sense of relationship permanence, equality and reciprocity in business. While the factor of conflicts is negative for the business relations development, the conflict resolution factor encourages this development. Reaching a mutually acceptable compromise, without having to implement formal procedures, especially impacts the development of trust among the exchange partners, as well as commitment to developing their business relationships.

Managing the process of establishing learning relationships depends on the retailer’s ability to perform filtering of information received from its customers, to use them and manage the information useful for their future cooperation. Consumers are, on the other hand, very precise in their expectations of retailers. They simply expect to get what they want - when they want it, where they want it, and in the way they want it. Modern technology makes it possible to respond to these consumer desires with the right product at the right time, on the right place and in the right way. Communication technologies and database management technology enable retail companies to collect large amounts of data on individual customer needs and demands, and also enable their use in customizing products and services to meet specific customer needs and demands. (Pine et al., 1995).

The introduction of e-business leads to abandonment of the outdated “product-centric” business orientation, based on the product ranges, and to its transition to a “customer-centric” business orientation based on customer needs. Modern business enterprises are also called “customer-strategy enterprise” (Peppers and Rogers, 2004), referring to their partnership with the clients as the focus of the business.

Peppers and Rogers (2004) suggest that developing partnerships between organizations and their clients guarantees stability of the trade between them. If customers choose to engage in exchanges with a competitive organization, they need to spend some time and energy, often very much time and energy, to get to know a new organization and provide it with the same information and knowledge their former partners have already acquired about them. This decision leads to the so-called switching cost,
which occurs when a consumer establishes trading relationships with another organization. Therefore, developing a quality relationship with the existing trade partner and developing loyalty to it represents a more profitable option for a consumer.

Partnerships are an integral part of the process of generating knowledge about the partner in the exchange – the so-called “knowledge-generating process” (Håkansson and Johanson, 2001). These are built on the basis of knowledge about the trading participants, and imply the organization’s obligation to adapt its offer to customer needs when customers provide information about themselves (Peppers and Rogers, 2000). With each subsequent interaction, their relationship gets better and better, and also “smarter and smarter” (Egan, 2004) in terms of expanding knowledge about the client, in terms of the organization’s ability to predict future customer needs. Due to all this, learning relationships as a form of partnership represent important and powerful means of creating competitive advantage of organizations. (Selnes and Sallis, 2003). In this way, an organization learns about the characteristics, needs and desires of each individual customer through conducting business transactions and communication interactions. On the other hand, a consumer learns about the characteristics of their partner organization through the processes of product purchase and using its services. We can conclude that the benefits of these partnerships are the following (Peppers and Rogers, 2004):

1. From each new trading experience, and through any feedback received from their partner organizations, the client himself learns more and more about their own preferences. Thus the client becomes more capable, more efficient and effective in the purchase processes, as well as in managing other aspects of their personal and business life.

2. From each new interaction and each subsequent feedback received from their clients, the organization learns about their own strengths and weaknesses, advantages and disadvantages. Consequently, it becomes able to manage the marketing, communicational and other aspects of their business more efficiently and effectively.

This leads to the conclusion that in the era of business interactivity, in which clients participate actively in business and where it is possible to do business with each individual client, one of the critical factors of business success is establishing quality relationships with a particular group of the most profitable customers.

CONCLUSIONS

The previously mentioned shift of market economy towards a new, knowledge economy, also requires changes in the approach to marketing. Customers no longer wish to be treated uniformly, but individually. Therefore, the new economy implies a shift from mere data collection and customer database creation based marketing, to an actual Customer Relations Management (CRM) – a process that modifies a consumer’s behaviour over time enabling the organization to learn from every interaction with its customers and to adapt to a customer’s behaviour and habits. This strengthens relationships among customers and companies. Unlike traditional marketing which focused on the company itself (the goal of targeting customers was to help the company sell as many products as possible at lower cost), CRM places the client in the center of its interests. Although the ultimate goal is still to increase the company profits, this is achieved by focusing on the customer service and taking their benefits and values into consideration, and not what the company wants to sell. This is achieved by strengthening the customer-company bond. CRM should not be seen as an overnight solution, but as a solution that contributes to organization profits in the long run. (Newell, 2002).

On this occasion we emphasize the fact that knowledge economy has changed the way of man’s thinking, both as an individual and as a product buyer or service user, so the modern business practice must inevitably adapt to these changes. All participants in the knowledge economy, namely managers and their clients should take the following findings into consideration:

- Knowledge economy shifts from focusing on products and services themselves to focusing on the experience and knowledge of service / product users. This precisely is the area where companies find opportunities to differentiate and achieve competitive advantage.
- Companies, being aware of the need to transform its structures and processes, increasingly rely upon the knowledge they possess, not only about themselves, their employees, products and services, but also upon the knowledge of their service customers and product buyers.
- Knowledge economy alterations the boundaries which define the main role protagonists in
the economy: consumers are not only customers, but they enter the domain and authority of the seller by their involvement in product design innovation and service development; sellers are able to put themselves in the position of their customers by adopting knowledge about their experiences, needs and aspirations. This relation, two-sided in all respects, brings benefits to both parties.

- Product buyers and service users access more easily to various information and knowledge related to the purchase and manufacturers, they adapt to e-commerce and online shopping, their taste and needs change often and rapidly, and their main producer directed requirement is an individual approach achieved by possessing knowledge about clients.

- Organizations know how much knowledge their employees have, and this knowledge should be multidimensional, competent, accessible and applicable.

The intention of the authors of this paper is to point out the necessity of innovative application and interrelating the modern management and marketing concepts in order to achieve and maintain competitive advantage of organizations. We put special emphasis on understanding the advantages offered by the concept of CKM. In this sense, the application of this concept provides answers to the following important issues:

- An effective response to the expressed demands for quality servicing of consumer and customer needs and demands;

- Creating products and services that will serve to meet new needs and requirements customers are often not aware of;

- Adequate response to requests for the products and services which will facilitate and simplify clients’ life and work;

- Finding a solution to the issue of the lack of time, especially the time spent on browsing product ranges and shopping; and

- Customer impatience in terms of time and the speed of a company’s feedback to their needs and requirements.

We believe that the benefits of the aforementioned concept can be the key to achieving and maintaining competitive advantage of organizations in an environment of multidimensional problem-solving as an imperative of modern business.

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ULOGA MENADŽMENTA ZNANJA U IZGRADNJI ODNOSA SA KLIJENTIMA

Rezime:
Menažment znanja predstavlja interdisciplinarni poslovni model, u čijem se fokusu nalazi generisanje i razmena znanja unutar organizacije. U procesima generisanja i distribucije znanja, ključnu ulogu imaju zaposleni, čije zadovoljstvo čini paradigmu ostvarivanja uspešnog menadžmenta znanja.

Tokom protekle decenije, menadžment odnosa sa klijentima pokazao se kao koncept neophodan za ostvarivanje poslovnog uspeha u praksi preduzeća na svetskom tržištu. Njegova suština zasniva se na uspostavljanju i održavanju dugoročnih odnosa sa klijentima, sa ciljem stvaranja vrednosti kako za klijenta, tako za organizaciju.

Kao i svaka druga vrsta odnosa, i odnosi koje organizacija gradi sa svojim klijentima doživljavaju promene tokom tzv. "životnog ciklusa odnosa sa klijentima". Tokom ovog procesa, stvaraju se „prinosi na poslovne odnose“ čiji je preduslov upravo smešten unutar same organizacije.

Direktno upućeni ka istom cilju, a to je satisfakcija potrošača, koncepti CRM i menadžment znanja, u svojoj sinergetskoj formi, deluju putem integrisanog koncepta Menadžmenta znanja o potrošačima, odnosno klijentima preduzeća. Multidimenzionalnost savremenog poslovanja zahteva povezivanje kompetencija stručnjaka bazičnih poslovnih oblasti, medu kojima poseban akcenat treba staviti na deljenje znanja, komunikaciju i građenje partnerskih odnosa u poslovanju.

Ključne reči: menadžment odnosa sa klijentima, partnerski odnosi, životni ciklus odnosa sa klijentima, povezivanje kompetencija.

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IMPORTANCE OF MARKETING MIX IN HIGHER EDUCATION INSTITUTIONS

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Abstract:
Understanding factors and circumstances that create certain market environment conditions is a primary goal of any modern-oriented higher education institution that enables harmonizing the supply with current demands as well as defining appropriate marketing strategies. The process of formulating the strategy of a higher education institution, in addition to reviewing the existing services, includes identifying new opportunities, analyzing relevant competitors and positioning against them and similar. The need for change in marketing strategy, that is market restructuring of a higher education institution, presents a natural consequence of economic oscillations which are the result of market needs and competition dynamics. Continuous monitoring and adjustment of modern developments with the needs of the target market affect the overall perception of service quality and satisfaction of users. Since the choice of marketing strategy involves defining the best ways of achieving the goals, keeping in mind that marketing as a business function, it should contribute to the improvement of educational institutions of governance process, orientation towards the market, or aligning curriculum with the needs of target groups. The Education Reform in Serbia has initiated all educational institutions (private and state) which market-oriented their activities, due to insufficient, inadequate application of current marketing and marketing tools. Using different combinations of marketing mix instruments can lead to achieving competitive advantage in education market. The main role of marketing strategy is to combine competences and other strategies of an educational institution, coordinating the challenges and limitations imposed by its environment and finding the best ways of achieving its mission and vision.

Key words: marketing, marketing mix instruments, higher education, marketing strategy.

INTRODUCTION

Intensive development of society and commerce leads to expansion of the service sector, and in such manner it becomes a propagator and dominant force in developed countries, which indicates the necessity of getting to know the significance and specific nature of marketing within the service sector. Considering the education that represents a service activity and its market influenced by various circumstances, educational institution management permanently finds itself facing the pending problem of how to
accord its offer and marketing strategy with ever-changing market requirements. Today, education management is considered a survival condition, as well as a condition of modern society development. Competitive institutions are called only those, which, in the easiest way, adapt to changes of the environment and first adopt innovations.

Application of a marketing strategy enables quality improvement in the system of higher education through synergistic application of marketing mix in order to create a service that corresponds to the expectations of target market and deliver a superior value. Competitive advantage is more and more basing itself on intangible assets (the know-how and expertise of teaching staff, quality of lectures, team work, staff development, etc.), which the competition cannot acquire or successfully imitate in a short period of time. Communication of a higher education institution with target market requires a specific approach, since the decision on the choice of faculty is made once in a life-time. It is defined by time and the decision-making process depends on the family, friends, school and media and therefore it has to be created in a way in which a mixture of marketing communications influences stated segments of target public. Communications, environment, corporate behavior (reputation, innovation, financial power, social responsibility, management quality) shape the image of an educational institution, which, from a long-term aspect, provides competitive advantage and service user loyalty. Also, the price, as one of marketing mix instruments, should, at the same time, be considered as a significant element of educational institution strategic planning, which is often (especially in our background) crucial when deciding which faculty to choose. When defining marketing activities (marketing mix) for educational institutions, special attention must be paid to service distribution, i.e. it is necessary to define attractive geographic frame, in which service delivery will be in accordance with the needs and requirements of the target market, respecting the factors (economic, political, sociological, technological, ecological, etc.) acting in a particular background.

The Education Reform in Serbia has prompted all educational institutions to market-orient their business activities, considering insufficient, inadequate application of marketing and marketing instruments so far. Continuous monitoring and harmonization of modern achievements with the needs of the target market influence overall perception of service quality and user satisfaction.

MARKETING IN EDUCATION

The main goal of marketing in higher education institutions is to define quality education system, market-oriented, whereby one cannot ignore the institution primary role and function, which is to provide a specific type of service of general social benefit, in accordance with its needs. Marketing strategies and activities of business marketing in educational system are limited, much more than in other service and production industries, due to the direct influence of state regulations defining the educational system, with established control mechanisms of accreditation bodies, prescribing the evaluation system, as well as quality control system.

Basic role of a marketing strategy is to combine competence and other strategies of an educational institution, to coordinate challenges and constraints of the environment and to find best ways to realize its missions and visions. Therefore, in order for the organization to be able to meet contemporary requirements of ever-changing business environment, it is necessary that it itself becomes subject to the change and initiate them on its own. (Đorđević-Boljanović, 2010)

Formulation of a higher education institutional marketing strategy includes decisions about: 1. The institution’s current programs and markets – whether to maintain, build, or drop them. 2. Future new program and market opportunities. 3. Analysis of competitors. 4. Positioning of the institution in relation to competitors. 5. Selection of target markets and designing of the marketing mix. (Kotler and Keller, 2009). Creation of marketing mix service concept needs to be realized in a way that provides synergy between marketing, process management and human resources management. Thus, if the heart of modern strategic marketing, as indicated by Kotler, is comprised of market segmentation, evaluation and selection of target market segment and positioning, i.e. differentiation, then their use in organization pursuits should primarily be oriented towards gaining competitive advantage. This should especially be the case with the offer positioning with the aim of providing a more favorable image on a certain segment in comparison to the present and potential competition.

MARKETING MIX STRATEGY

Marketing mix has both communicative and operative functions. Communicative function is the
need to transfer to users the relevancy of services for their needs or preferences. Operative function aims to remove boundaries in transactions or exchange, so that the users, who have opted for that service, can enter the exchange process with minimal effort. Positive synergy comprehends special combination of instruments resulting in extra effectiveness, efficiency or both (Milosavljević and Todorović, 2001). Complexity of all marketing mix instruments of higher education services is shown in Table 1. Instrument synergy is used to realize short-term and long-term goals of higher education institutions.

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**Table 1. Expanded Marketing Mix for Services**

Source: adapted from Zeithaml et al. (2006)

The fact of a combination of instruments being a complex process is evidenced by a great number of international research studies. With a series of empirical research studies, conducted at the Singidunum University of Belgrade in 2008 and 2009 on target group of students/freshmen (504 first year and 305 second year), we obtained information on marketing application, importance of certain marketing instruments and strategic concepts. In the decision-making process when estimating alternatives to which faculty to choose, the students have stated: teaching process (41%), university image (23%), quality of classes/professor attitudes (16%), good employment possibilities (13%), Belgrade as study location (2%), height of tuition fees (2%) and installment payment of tuition fee in several months (1%) (Gajić, 2010) (see Chart 1.).

![Chart 1. Estimation of student attributes in decision-making process](Source: Gajić, J. (2010))
Different combinations of marketing mix instruments provide comparative advantage in education market.

**EDUCATION AS A PRODUCT**

When it comes to educational offers, Kotler first-ly refers to curricula and services.

Offering services involves special challenges because most services are intangible, inseparable, variable, and perishable. Most services do not exist until the service provider performs the service, usually in the presence of the customer. The limitations of services *vis-à-vis* products also comprise the strengths of services. The professor can expect responses from students – their puzzled looks during a lecture or their vague answers on a quiz – and modify the course content and explanations. (Kostadinović, 2001). The majority of services represent combinations of tangible and intangible elements (they are not completely “clean”, mainly containing some physical elements) and services are analyzed on three levels: substantial, tangible and increased. By understanding these levels, marketing managers can shape a service in a way which is attractive to the users. The essence of educational services can be perceived differently, depending on students’ expectations and wishes. The essence of a service is not determined only by user experience with that service, rather their understanding/perception of the service without experience. Therefore their decision is also determined by other sources, such as: media, friends, associations etc. (Bruhn and Georgi, 2006).

The essence of a service can (but not necessarily) be the base for the Unique Selling Proposition, and in that case the essence of a service is a base for differentiation and expectation, as well as the user’s behavior. In most service industries (educational institutions, airline companies) the essence of a service is a basic, but not also the characteristic/special requirement and in the case of differentiation, additional services or other marketing instruments are used.

The essence of a service is not important only because of its effect on perception and the user’s behavior, particularly because it greatly defines the task of other marketing fields. The well-defined essence of a service is a starting point for the systematic and successful marketing service (Bruhn and Georgi, 2006).

The essence of an offer is always limited with some tangible form, even when referring to very intangible services. If we consider students, the essence of a service they are looking for is information/knowledge. The offer tangibility can have a form of an amphitheatre, a classroom, a blackboard, computer or other technical elements. Each of tangible offer characteristics (properties, quality level, packaging and name/brand) is significant, considering its modification in order to make the offer more attractive for the users.

Characteristics are individual components of an offer that can be easily added-on without a change in service style or quality. If a university wishes to increase the number of enrolled students, it should increase concern for them before and after lectures, then increase the number of recreational facilities and introduce free-of-charge courses for students and their parents. The usage of characteristics has a lot of advantages – they are also instruments for differentiating the service from competitive ones. The main advantage is that the characteristics can easily be added-on, but also rejected.

The most important decision, when considering marketing mix in educational institutions is which curriculum and services are to be offered to students, partners and other public. An institutional program/service mix consists of all the programs and services that the institution makes available. For example, many universities offer educational programs (classes, library and information services, computer laboratory, campus lectures, etc.), recreational programs (athletic facilities and clubs, film series, dances, etc.), personal-growth programs and services (counseling center, advisors), curative services (health center), and future-planning programs and services (career counseling, placement services, etc.) (Smart, 2004).

**PRICE/TUITION FEE**

The price is one of marketing mix instruments, which, combined with other instruments, should allow the realization of industry goals, the educational institution mission, and the realization of short-term and long-term industry goals. The price can be viewed as an economic, but also as a psychological factor. From an economic point of view, the price determines income and profit, and psychologically, the price determines values that a product or a service has. It is a quality indicator and equally affects
the image and the other elements as well. Due to the specificity of the very service, intangibility of price determination requires a special approach, since the price is considered an important strategic element in an attempt of service organization to achieve competitive advantage in the market. The price of a service influences users and informs them not only about the quality they can expect from the service, but also about its costs.

As stated above, the price needs to be considered both from the economic and psychological point of view. The price for users has multiple meanings — it influences their perception and it informs them on what they can expect from the services in terms of quality and costs as well. Administrators-in-charge for price formation in higher education institutions are not often aware of the significance the price has for a user. For instance, the price, formed by some educational institution, does not represent the only cost for the user. The following diagram shows some costs and benefits for the users. In addition to the monetary price, users face other costs, such as costs for effort, physical costs and time costs.

Regardless of the university’s tuition fee (the official tuition and fees printed in the catalogue), prospective students and their families — and reimbursing companies — are interested in the effective price (the amount they will actually pay for the educational benefit) and the value received. The effective price is the net amount actually paid after financial assistance and other discounts are subtracted (Kotler and Fox, 1995).

According to William Ihlanfeldt, the institution should consider:

1. the effects of a given pricing policy on the nature and mission of the institution,
2. the effect of a given pricing policy on enrollment, and
3. the degree to which a particular pricing policy may encourage acceleration.

In addition, the institution must weigh:
- prices charged by comparable competing institutions, and
- the effects of its own price level and price changes on the actions of such competitors.

These considerations provide a basis for setting prices. Pricing decisions should reflect the institution’s mission, goals, and priorities (Kotler and Fox, 1995).

Education represents experience that cannot be evaluated before it has been experienced, and the results of attending some educational institution can be evident only after employment and starting a professional carrier. Also, one should bear in mind that the price represents only one marketing mix component, through which user choice is influenced. Potential students, in addition to the tuition fee, will also be interested in educational institution program, educational service quality, location, way of communication and other characteristics. Many students, faculty students and their families are ready to pay a higher price in order to get quality education. When deciding on the educational institution choice, location of the institution and/or its academic prestige can be crucial in making that decision, regardless of tuition fee price. Consideration and use of the price as a marketing instrument cannot be observed separately, rather only as a part of overall marketing strategy.

**PROMOTION – COMMUNICATION OF HIGHER EDUCATION INSTITUTION WITH TARGET MARKET**

Promotion is a process of communication between a university and service user with an aim to create a positive attitude on products and services, leading to their favoring in the process of purchase on the market. Promotion is efficient if other instruments as well (product, price, distribution, people, process and environment) efficiently perform their roles, i.e. promotion cannot compensate for weaknesses in efficiency of other instruments.
Effective communication comprehends that a university understands students’ needs and wishes. The university should have the “know-how” in coding a message, which is reflected in the way students are to decode it. It needs to send out the message via effective medium, communicating with the target group. It also needs to develop a feedback channel, in order to the “know-how” target group reacted to the message.

The communications planning flow should begin with considering the target audience and work backward to the communicator. The marketing communicator must make the following decisions (Kotler and Fox, 1995):

1. identify the target audience,
2. clarify the sought response,
3. develop a message,
4. choose the medium or media,
5. select source attributes, and
6. collect feedback.

These planning steps are essential for effective communications, whether advertising, marketing publications, or public relations are used.

In order for a university to be successful, it has to find a way to promote its products and services. Higher education institutions should effectively communicate with their products and public. It’s not enough only to have good curricula and competitive prices, but the service user and all the interested need to be informed of the goals, activities, offer of the institution and motivated to join and become users. That communication takes place in several forms. Faculties, schools and other educational institutions are always (speaking for themselves) sending out a message to the public on their existence regardless of whether they formally have a communication program or not. Also, the institution must determine and get a comprehensive insight into information needs of internal environment (faculty, staff, existing students and others within the internal environment, etc.).

In order to use appropriate communication channels it is necessary to perform grouping of marketing communications: personal sale, sale improvement, advertising, publicity, public relations, and sponsorships, direct marketing, etc. According to Kotler and Fox (1995), most educational institutions use public relations, marketing publications and, to a lesser extent, advertising. The best definition of today’s modern practice has been given by professors Lawrence V. Long and Vincent Hazelton, who have described public relations as “communicative management function through which the organizations adapt, change or maintain their environment in order to reach their goals” (Vilkoks et al., 2006). Public relations should encourage open two-way communication and mutual understanding, whereby in such process the organization itself changes its positions and behavior and not only the target group (Živković, 2011).

Whatever is the format of information, honesty is, to a reasonable extent, the best solution. Potential students want honesty, which maximizes efficient choice, regardless of how they are developed or changed in enrollment process (Canterbury, 1999). Of course, we should not neglect modern communication media, i.e. social networks, the aim of which is to communicate their way into a trusting relationship between the institution and its users. The research has shown that people usually become motivated to share important information with their friends on the network, because they expect their experience to be helpful or of any use to someone.

Higher education institutions communicate with various groups (students, parents, donors, employees and community), whose interests vary. Schools, universities and other educational institutions are interested in achieving understanding and sympathy of the public. The public/partners are not related only to the educational institution, they are connected also among each other. The public, particularly, can affect attitudes and behavior of other members of external environment through an institution. Their enthusiasm will additionally motivate the teachers, professors, to improve their services. In addition, alumni can be generous donors and promoters of a faculty, and in that way students influence the attitudes and behavior of the remaining part of university public/partners.

In marketing we distinguish between internal and external information search. Since the choice of faculty does not exist as previous experience, the internal way is insufficient and it is resorted to external informing.

External comprehends gathering information from various external channels (friends, advertising, informers, etc.) and the results of mentioned research indicate that the majority of subjects have
made their decisions on the recommendation of a friend 72% (Gajić, 2010) (Chart 2).

The media, as a source of information has had least influence on forming attitudes, and personal sources have proven themselves to be the most dominant.

The research results (Gajić, 2010) in relation to efficiency of communicative instruments indicate that the personal contact has highest influence to future users of educational services. Considering the importance of the decision to be made, 83% of students find the university presentation in secondary schools best way of promotion, 9% stated internet, 5% television and 1% newspaper (Gajić, 2010) (Chart 3.).

Development and application of efficient promotion strategy is a complex task. There is no unique approach that guarantees success, but key activities in promotion management must comprise, except the analysis of potential students, identification of their needs, as well as the analysis of competitive promotion activities.

EDUCATIONAL SERVICE DISTRIBUTION

The main question concerning the delivery of educational services is "How to make programs of higher education institution more accessible and acceptable for students?" When it comes to the location of the institution, we should bear in mind multiple meanings of that term. First, the location can refer to the place where the institution is (e.g. University of New York is located in New York, Singidunum University in Belgrade). Then, it can refer to the characteristics of the area in which the institution is located. Location can also have a relative meaning, i.e. it can be viewed in relation to where current and future students and high school students live. Most educational institutions have already had its buildings in one or more places. Usually, when an educational institution starts to think about improving efficiency of its work, that is sought to be realized within the existing facilities. The institutions, in the first place, consider how to attract the users, to the existing buildings, while the idea of getting the clients more familiar with their offer is accepted slower.
Delivering programs and services is as important as designing them because delivery system determines who can benefit from the universities’ programs and services. Since educational services usually cannot be “stored up”, educational institutions need to consider how to make their services as convenient as practicable to their target markets in terms of both locations and schedules. Increased convenience and quality may include implementation of distance education and/or the use of new technologies (Kotler and Fox, 1995).

Universities should take into account physical buildings, including appearance, signage, functionality and atmosphere of service space, as well as messages that the building and the environment send to the visitors, employees and students.

PEOPLE IN EDUCATIONAL INSTITUTIONS

People, as a key instrument in educational process, are constituted of curricular, extracurricular staff, students and other partners in the environment, doing business with the university. Curricular and extracurricular staff together participates in service delivery and influence perception of service users. All the students that participate in service delivery influence the decisions of a service user, depending on the nature of that service. How the participants dress, their personal opinion and behavior influence the perception of a service user. Those, who provide service or persons in personal contact with future service users, are highly important, considering that direct contact is dominant because the one, who delivers the service, creates the service. Research has shown that contribution of these agents can be the key in a success of a service institution.

Staff

Internal marketing refers to management of necessary actions, in order to provide understanding of all organization members and in order for their roles to be accepted in implementation of marketing strategies. This means that everyone in vertical hierarchy from rectors, deans to lower qualified staff, have to be aware of the significance of the role they perform, as well as of their contribution to marketing strategy implementation. All employees have to recognize intentions and requests of the students, as well as specific nature of services, shaped with marketing concept. Staff motivation is improved with training and education. To maintain and develop effective, friendly and informative internal channel communication and interaction among employees and departments, it is necessary to have open communication through the institutions. Communication is also important in development of internal relations in the institution. Even the best intentions are useless if they are not communicated in a proper way (Dobrijević, 2011). The research has shown that there is a positive relation between a successful internal communication and positive attitude of employees towards the company (Dobrijević, 2011).

Staff motivation represents a significant element in marketing plan implementation and internal marketing. People work in order to meet physical, psychological and social needs. To satisfy employees in marketing, managers have to detect their needs and develop motivational methods that would enable meeting their needs (Vilijams, 2010). It is very important for the motivational plan to be ethic and comprehensible to the staff. Generally, to improve motivation of employees, higher education institutions can find out what the employees think, feel and want through internal investigations. Organizations can motivate their staff either financially, promotion-wise, using flexible benefit programs, etc. It is possible for the motivation to be only for individuals, using special methods, based on individual system of values. Managers can reward their employees with money, plus extra benefits, promotions, non-monetary rewards etc.

Success of a higher education institution depends on quality and dedicated staff. With the purpose of creating the very same, it is necessary to provide motivational working conditions (academic freedom, adequate financial compensation, etc.). Successful academic systems must offer to their teaching staff adequate working and compensation conditions, possibility of carrier building with appropriate guarantees for long-term specialization and employment. Without these conditions, an academic institution cannot be successful nor think about world-wide reputation.

In order for modern universities to be competitive in the market, they need to be marketing-oriented, get a thorough insight into all types of users, types of potential students and their needs. It is necessary to establish the decision-making process based on quality, values or cost-effectiveness for the students and on the persons who find important their carrier, social recognition or leisure. Successful
educational institutions in their strategic planning rely on investigations of market segments of future students. Identifying target market is the starting point in this process and the university can opt for either mass marketing (if it ignores the differences among potential students or confronts them) or target marketing (if it respects the differences in future students).

For some universities, marketing approach creates a value between university partners (stakeholders). University partners are future students, existing students, alumni, staff (ex-students), donors and all that provide financial support. For state universities, partner list is complemented with taxpayers, legislation and sometimes even with general public.

The three fundamental freedoms of the university – to teach what they want; to whom they want; and in the way they want – have constituted the key weaponry in the armory of higher education institutions. They have used them as benchmarks for measuring progress and indeed estimating the extent of acceptable change in the sector. Society has now changed. No longer are universities seen as the most powerful organization in the society. The corporate world has taken over and has begun to exert an influence on other forms of organizations in a way never imagined in the past. Higher education now finds itself in a situation where it increasingly has much to learn from the outside world and indeed relies heavily on others to maintain its viability. One of the new lessons universities are learning from the business and commercial world today is how to develop a customer perspective (Maringe and Gibbs, 2009).

In order to determine satisfaction of students at the beginning of the academic year and the results of how much students are satisfied with the first classes, confirms positive impression of offered service (43%), 36% are moderately satisfied, 13% of subjects believe the classes could be better and 3% of subjects are not satisfied with offered service (Gajić, 2010) (Chart 4.).

The results confirm that marketing activities cannot be effectively implemented without cooperation with the staff. The staff is the key element in productivity growth, providing quality service to users and gaining competitive advantage. The quality represents service performance level perceived by the students. Service quality is especially important and can be very variable, depending on skills, motivation and mood of service deliverer (professors and student service staff).

**Students**

Process of selecting a faculty is a key decision in the life of every individual and requires information on alternatives, as well as on how those alternatives are ranked in relation to concrete situations.

Many decisions about educational choice (and about making significant donations) are high-involvement decisions. High personal involvement usually is present when one or more of the following conditions exist (Kotler and Fox, 1995):

1. The consumer’s decision will reflect upon his or her self-image and could have long-term consequences.
2. The cost to carry out the decision involves major personal or economic sacrifices.
3. The personal and social risks of making a wrong decision are perceived as high.
4. There is considerable reference-group pressure to make a particular choice or to act in a particular way, and the target consumer is strongly motivated to meet the expectations of these reference groups.
For many students, "the process of studying not only represents the acquisition of certain skills and theoretical knowledge. It is also related to personal growth and social development" (Jurkowitsch et al. 2006).

An improper decision can be brought on the basis of the tendency for conformism or so-called fitting in – to be closer to home, minimize costs of all kinds, opt for prestigious names. The research shows that student services, counseling, parents, potential students and higher education researchers indicate the importance of fitting in (Canterbury, 1999).

Success, quality and total outcome of university experience determine to which extent a service user is satisfied (Maringe, 2005).

When it comes to the increase of student’s freedom of choice, research studies treating student behavior when making a choice show that we cannot presume the students will make a rational choice of institution and field of study, even if we put them in the position to choose. Choice of type and concrete institution is influenced by a complex combination of personal expectations, motivations and aspirations, and all of them influenced by the family, peers, relatives, media, teachers, idols, etc. (Gajić, 2010).

Special consideration should be given to the influence of parents in the process of choosing a faculty and the effect of that process to the family. Necessity of discussion within the family, as primary reference group, is caused by several factors: socioeconomic status, the fact whether the child is the first in the family enrolling a faculty, parents’ education and geographic region, among other, but none of these elements look like those referring to other decision processes.

Having in mind that influence of reference groups on decision-making process is very important and that people as consumers take on certain behavior standards under their influence, in the above-mentioned research (Gajić, 2010) there are the following results (Chart 5).

In order for us to determine which of the reference groups has the key influence on students in the process of making such an important decision, our results have confirmed that the family, as a primary reference group, affected 20% of subjects. However, a rather interesting data is that as many as 63% of students have responded they have made the decision on their own. Hypothetically speaking, their profile says they can be classified as routine users, who know what they want and have no need for additional information. According to numerous research studies, it is believed that the highest influence of commercial propaganda is possible exactly on that target group, especially having in mind that younger population is characterized by sophisticated information gathering processes, most of them electronic, so they are often called natural techno profiles. They particularly have a visual communication, resulting in a real fear that this could be reflected in their verbal abilities in the future.

Student satisfaction is a subjective estimation of an individual and total experience they have in relation to service characteristics, as well as between what they have actually received and the perception of the gap among received and expected benefits. Academic and pedagogical quality of classes, university infrastructure, and administrative staff service quality should be carefully organized and supervised.

Chart 5. Influence of reference groups in decision-making process
Source: Gajić, J. (2010)
Teaching process

Observing a service process, education falls into a category, which comprehends treatment of mental stimuli that refer to intangible actions oriented towards conscience of people. In this process, a student needs to be mentally present, but can be located either at the very location where the service is created (amphitheatre or classroom) or at a distant location connected over telecommunication networks.

Considering the characteristics of a service process, managers must have a clear insight in the benefits of educational services, understand the students, and formulate channel distribution strategies and shape service providing system (using information technologies). Educational services are personal and characterized by intensive, intellectual, emotional and/or physical participation of students in a service process. Services are often realized in a number of steps, which, basically, constitute the very service process. Production and consumption of educational services take place simultaneously and students’ participation in it is rather important. They evaluate service quality, hence the shaping of the service process – detailed planning on how to provide a service – is vital to maintain (improve) educational service quality. The process is so important that some authors describe it as a real essence of service (Senić and Senić, 2008).

At the university there is clear differentiation among services realized in direct contact with the users and various service processes taking place outside of direct contact. From the aspect of a university, there can be several functions and services involved in the process of creating an educational service, but the students (public) see them as a single integral process or system. Also, a student (service user) is an integral part of service system model, within the organization and he/she interacts with other parts of the organization in the service process representing a resource for service production.

Successful schooling would have to be founded on teaching (didactic) principles. All teaching systems, methods, forms and all instruments/means of work rely on them. Without teaching (didactic) principles, in other words, every system, method, form and every mean of work would be incomplete. Teacher’s skill in preparation of systems, methods, forms and means of work with teaching principles would be, as a result, productive and the students would learn with quality. (Simeunović, 2004).

Marketing concept is a way that enables educational institutions to provide their services efficiently with continuous communication both with the target market and within the organization. But marketing concept and culture must be, first of all, clear to all employees, i.e. it needs to take hold within an educational institution.

Service environment

Service environment gives an external picture on what kind of service a user can expect and helps employees and users to make service transaction in an easier way. Also, service environment for the employees and users indicates desired roles, behavior and transactions in the service process. Using service environments, an institution is differentiated in comparison with the competition and sends out the message to the segment destined.

Only a strategic approach to understanding the role and importance of service environment allows service offer to be on the appropriate level and to positively influence perceived quality. Service environment represents service package affecting creation of expectations, i.e. represents a visual metaphor of intangible service. It is also an element in image building and in that sense it sends a message, draws attention and provokes effects/reactions in users (Veljković, 2009). Service environment elements, influencing the users, include both facility exterior and interior shown in Table 2.

Web presentations and virtual display of environment through the internet are newer forms of communication, which institutions use in order to make their service more tangible before and after purchase (Zeithaml et al., 2006).

Physical environment can play a significant role in students’ choice. Since, it is one of the most important decisions in life of young people and their families, that has caused modern educational institutions to offer virtual tours, all with the purpose of providing future users with a closer insight in the environment, before making a decision which educational institution to enroll at. Internet technology allows the institutions to make their service and environment more familiar to the users. Tangible image on the web creates expectations in users, posing standards of service delivery and it is very important for the services to meet those expectations. Presentations and virtual tours in the internet also should support the position of the service/brand, as well as to be consistent with other marketing messages.
CONCLUSION

Modern universities gain competitive advantage primarily through attractive curricula, renowned teaching staff, which applies modern technologies in performing teaching process and through quick adaptation and reaction to changes or new needs of a background.

In addition to consideration of students’ needs, higher education institutions must also take into consideration wishes of other groups such as staff, alumni, parents and the state. A great challenge for an educational institution is to synchronize interests of different groups, and to maintain balance in order to satisfy interests of the society and service users at the same time.

Higher education institutions in Serbia have understood the importance of marketing application, as well as its contribution to improvement of many aspects of university activities, such as internal and external communication, improvement in the process of educational service delivery, financing issue and determining height of tuition fee, teaching process quality, but in the first place user satisfaction.

Higher education institutions in Serbia have understood the importance of marketing application, as well as its contribution to improvement of many aspects of university activities, such as internal and external communication, improvement in the process of educational service delivery, financing issue and determining height of tuition fee, teaching process quality, but in the first place user satisfaction.

When it comes to marketing strategy concept for emerging markets, there must be a lot of uncertainties in terms of speed and development, in relation to competition behavior, with appropriate combination of characteristics of marketing mix instruments. Only the one, which has developed a system of monitoring and deciphering signals of a background, can have a timely reaction to new opportunities and risks. New technologies create new markets and new possibilities improve marketing mix, develop and introduce new products/services into the market. New ways of communication and service processes, only with the help of new technologies, allow more efficient delivery of educational services.

Table 2. Elements of Physical Evidence
Source: Zeithaml et al. (2006)
REFERENCES


ZNAČAJ MARKETING MIKSA U VISOKOOBRAZOVNIM INSTITUCIJAMA

Rezime:

Razumevanje faktora i okolnosti koji kreiraju tržišnu atmosferu je primarni cilj savremeno orijentisane visokoobrazovne institucije, kako bi usklađila ponudu sa aktuelnom tražnjom i definisala odgovarajuću marketing strategiju. Proces formulisanja strategije visokoobrazovnih institucija, pored sagledavanja postojećih usluga, predstavlja i identifikovanje novih mogućnosti, analizu i pozicioniranje prema relevantnoj konkurenciji i sl. Potreba za promenom marketing strategije, odnosno tržišnog restrukturiranja visokoobrazovne institucije javlja se kao prirodna posledica pulsiranja sistema privređivanja koja je zasnovana na dinamici tržišnih potreba i konkurencije. Kontinuirano praćenje i usklađivanje savremenih dostignuća sa potrebama ciljnog tržišta utiču na ukupnu percepciju kvaliteta usluge i na usklađivanje novih strategija. Osnovna uloga marketing strategije je da kombinuje konkurenca i druge strategije obrazovne institucije, usklađuje izazove i ograničenja iz okruženja i pronalazi najbolje načine za ostvarivanje misije i vizije.

Ključne reči: marketing, instrumenti marketing miksa, visoko obrazovanje, marketing strategija.

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MOTIVATION FOR WRITING AND READING THIS ARTICLE

The major goal of this paper is to serve as a guideline for the organization of research presentations in written form. The major purpose of the entire effort is to make research presentations as easy to comprehend as absolutely possible. “The process of clarifying your thinking, of which writing papers is one aspect, is a valuable part of improving your research” (Ernst, 2005). The same structure is valid for thesis work, as well as for conference and journal publications, or technical reports for research sponsors.

The motivation to write this article came from the observation that the vast majority of papers in journals, conference proceedings, and the majority of observed oral presentations do not follow the basic structure, as outlined in the abstract here. In most cases, research results are obscured by poor presentation. It is not possible to quickly understand, either the essence of the presented contribution, or the most important research details. This is happening despite the presentation advice appearing to be quite natural and effective for easy understanding of contributions made in a given article. “If you do not write well, why should readers believe you were any more careful in the research itself?” (Ernst, 2005).
Writing contributions in a form that other people can understand is a very slow process. Excellent presentation also brings some risks for the evaluation, due to “noise in the refereeing system” (Ernst, 2005). A novel idea, well presented, can be claimed to be too simple or even trivial by reviewers, and the judgment is subjective. This author believes in simplicity of any original idea as its ultimate advantage. A number of papers describe new ideas only via programming codes, or complicated diagrams, without presenting clear concise descriptions and/or figures and illustrations on how they work. This style could potentially bring favorable opinions from reviewers with similar attitude on presentation, or without real desire to understand the details. A well-understood idea also brings the risk of being identified as already existing by reviewers. When it is novel and if well understood, it also becomes easier to identify the drawbacks and criticize it. If a problem statement has a new name, different from the name well-known in the community (meaning that the literature review is not done properly), it becomes difficult to identify proper referees for the article and/or to properly judge its contribution. In summary, there are also reasons not to apply some pieces of advice from this article, if the publication of an article is the sole motivation.

This article places particular attention to four key parts of a research report: the title, abstract, introduction, and to the main body of text. Each of them should be self-contained and complete to the greatest possible extent, because there are four different types of readers. Among those who will ever see any part of a particular work, perhaps an estimated 80% (the numbers are subjective, based on experience of authors) will see only the title, 15% will read the abstract (and possibly parts of the conclusion in search for information missing in the abstract), 4% will also read the introduction, and the remaining 1% willmeaningfully go through the whole paper (some of them may fully read and analyze it, depending on their particular interests and skills, content value, and its presentation).

“A paper should communicate the main ideas of your research early and clearly” (Ernst, 2005). Clear and appealing text in one part increases the chances that a reader will go to the next part and eventually use and cite the work. The readers could be important persons: thesis examiners, reviewers of conferences and journal submissions. They all have limited time to spend on a particular article and time should be used wisely, to make the greatest possible reading and understanding progress for a given amount of time. Reading time normally grows with the clarity and usefulness of text and presentation. Misleading title narrows the readership. If the abstract does not clearly state the contribution made, and fails to attract the reader, then the reader may not advance to the introduction (or the first chapter of a thesis). Sometimes it is beneficial to convince an important reader (examiner, reviewer) that there is no need to study much the main body of the research report, if the introductory text properly presented the contribution and gave a clear picture of the coming text. “A reader who understands the structure and big ideas can better appreciate the details” (Ernst, 2005).

**RESEARCH AND PROBLEM SOLVING**

Is research a problem solving exercise? Are there some research activities that do not solve any problems? We believe that this is not the case. If there is no problem to be solved than the related activity could be a development, implementation, or another type of work. Consequently, any research article should make a clear problem statement.

We were frequently faced with articles, even grant proposals, that in fact do not have any real problem to be solved. An example is description of a “novel” software architecture whose evaluation remains fully subjective, without defining any problem to solve. This does not mean that proposing a new architecture is not a valid research problem. However, it so only when the integral parts of doing research are addressed in the article: what problem is resolved by the design of a new architecture, what existing architectures are, what are assumptions and limitations made, how new architecture compares with existing ones etc.

Another example is research article (Stojmenović, 2000) on teaching recursion in the first computer science course. Existing textbooks suggested complicated or no proofs that recursive Fibonacci numbers and binomial coefficients algorithms have exponential time complexities (existing teaching solutions), which were proven on final exams to not be well understood by students. Article (Stojmenović, 2000) described an elegant proof in two lines, easily understood by all students. The proof does not have to be original itself; the main novelty is in applying this proof in the classroom. In general, the identification and application of existing concepts and techniques to new domains and problem statements is a research activity and represents contributions.
SELECTION OF ‘TITLE’

The selected title of an article should enable the expert to figure out the essence of the basic idea(s) and the main contribution(s), even without reading the paper (Milutinović, 1996). Further, the title should induce the reader to think deeply over the philosophy of the contribution described in the paper (Milutinović, 1996). An example is the title of Kalosha et al. (2008). It states the problem (georouting), the area (sensor networks), desired properties (beaconless, guaranteed delivery) and essence of new idea (select and protest based). Proper title leads to more hits in Google Scholar searches. An imprecise title may bring wrong referees or examiners for the work, and less appreciation.

ABSTRACT: PROTECTING THE CONTRIBUTION

In our opinion, the abstract is the most important part of a research article. Suppose that one has five minutes of time for an oral presentation, or a few hundred words of written space to protect a new idea and contribution and gain deserved recognition. Note that in many cases abstracts are offered freely while the whole paper needs time (and sometimes also financial resources) to download or acquire. Examples are CiteSeer and Springer databases. How would this time or space be used wisely?

The time/space limitation is almost naturally enforced. Researchers may not pay attention to an article if the abstract does not make convincing statements. Instead of listing topics covered in the article, abstract should convey the essential information found in the paper. The author should make an effort to claim the contribution properly at the most visible place, and not expect readers to do so. Consequently, a good idea may not be noticed by the research community, and those who reinvent it at a later time will get credit instead of the initial inventor (Milutinović, 1996).

The authors generally agree with the five part structure of the abstract as described by Milutinović (1996), as follows (using a simple and concise language):

a) Problem statement of the research under consideration;
b) A short list of existing solutions and what their drawbacks are, from the point of view of the above defined problem statement;
c) Essence of the proposed solution, and why it is expected to be better under the same conditions;
d) What type of analysis was done to show that the proposed solution is really better than any of the existing ones, from both the performance and the complexity points of view;
e) What the major numerical highlights of the analysis are. Here we recommend also some qualitative (non-numeric) highlights that may be more feasible and helpful in many cases.

The length of each part should be flexible. For example, the proposed solution could be the first one (a) simple statement with few words for (b), while the new idea (c) may take about half of the abstract to express with sufficient intuition.

The abstract should be written for researchers that are familiar with the research area, and can grasp the contribution easily. Some of them could have worked on the same or related problems. A clear abstract is the key to having the work properly credited in other people’s work. One should envision literature reviews of forthcoming papers by other researchers. They could simply “cut and paste” the abstract into their articles, which then serves as an extended patent protection. This could be even done semi-automatically, as others do not really need to read or understand the whole article, to cite it properly. If an abstract is without proper content, citations to the article in other papers may not be very informative either. Should they be? It is the author’s obligation in the first place to properly describe the idea with limited space, without expecting that someone else will do this later on behalf of the authors.

Examiners and reviewers will especially appreciate such an abstract to have a friendly start with the text, and obtain a clear picture in a very short period of time. Misleading abstracts are unfortunately quite common practice in research literature. The limited space is too often simply wasted by writing general sentences about the field and excessive explanations about the problem, that should be part of the introduction or Chapter 1. It is best to first answer the above five questions, then see whether there is space left to say anything else.

This structure is also suitable for performance evaluation type of articles. In a performance evaluation based article, the problem is to determine the best protocol under various conditions. Existing performance evaluations are existing solutions. What are their drawbacks? Why is this evaluation
novel, and what new insights about the protocols are gathered? How does performance evaluation data in this article compare to previous ones?

Survey type of articles however may have a different presentation style. A survey should describe all relevant solutions, classify them according to assumptions made and some properties (that is, present a taxonomy), and draw some conclusions. The contribution of a survey article should still be clarified. It could be the first survey on a given topic or problem, or may present sufficient novel material not covered in existing tutorials, or it could give a taxonomy not seen previously. The survey may also properly describe existing solutions, in a clear and concise manner, compared to existing surveys. A statement of gain the reader will obtain by reading the survey or tutorial article is needed in the abstract. Detailed instructions for writing survey articles can be found on the website of the second author.

CONTENT OF INTRODUCTION OR CHAPTER 1

In brief, the introduction of a paper intended to be published in a journal or conference, or Chapter 1 of a master or doctoral thesis, should present the same content (summary of the article), in the same order, as the abstract, with more space provided. Normally it is about ten times longer as a rough approximation. There is also space to address some possibly additional items, such as motivation.

While an introduction is normally a single section, Chapter 1 should have separate headings to address the structure and natural flow in the explanation. The abstract may be sufficient for an expert in the field or researchers who have worked on the same problem. The Introduction or Chapter 1 should suffice to comprehend the essence of contribution for people generally working in the area. They should be able to correctly understand what the important aspects of the contribution are, and how good the contribution is.

In our view, the introduction or Chapter 1 should present sufficient information, and be sufficiently self-contained, so that important readers and evaluators do not need to read the rest of text, being assured in the contribution made, and validity of the text to follow. If they are pressured with shortage of time and the need to make a decision on the value of the article, or a citation and reference to it in their own work, let this part give answers to all important possible questions, and earn appreciation. Readers and especially followers of the specific research directions will appreciate such a style and will prefer mentioning such work rather than the work of someone else who remained unclear in the introduction and the article was never read due to the lack of time or loss of confidence.

Here are recommended sections, or subsections, or parts of an introduction.

- General overview of the field (basic facts needed to tune the reader to the thesis or paper);
- Problem statement (precise definition and importance);
- Very technical definitions and statements should be avoided (and presented in later text) and instead, good intuition for the involved definitions or facts should be presented and even illustrated if desirable;
- Existing solutions and their criticism (limited normally to only those directly relevant to the contribution of the thesis), a motivation for doing research on the topic should be stated;
- Contributions (proposed solutions; why they are expected to be better; essence of the idea(s) used in proposed solutions);
- Conditions, context, assumptions and limitations of the research done;
- Analysis (theoretical, experimental, simulations, implementations, etc.) done in the thesis; under what conditions and scenarios is the new solution the best one?
- In case of thesis work, it is recommended to add specific statements about the contribution of the thesis author to the thesis work, and the contribution of the thesis to the research field. This is normally done by listing all existing and intended journal and conference publications out of the thesis, which include their authors and titles, and references to proper sections in the thesis.
- The structure and content of the rest of the document is normally outlined at the end of an introduction or Chapter 1 in a single paragraph.

Some sections should normally present the highlights with pointers to later sections and chapters that provide details. The introduction should attempt therefore to present a full version of the article in a concise, readable and intuitively clear form.
LITERATURE REVIEW:
THE NEXT SECTION OR CHAPTER

Chapter or section 2 should give a full literature review. Many articles present it at the end of the paper, leaving the reader to wonder about the actual contribution until the very end of the text. The literature review (or related work section) should collect all known results relevant to the problem stated, whether or not they are used in the proposed contributions. No additional literature review shall be added in later chapters, where the text could only refer to well known results (e.g. those covered in the undergraduate computer science program such as Dijkstra’s shortest path algorithm, sorting algorithms etc.) which can be reasonably assumed to be public knowledge for the particular field. In these cases, they should not be described (that is, if there is a need to describe how a well known shortest path algorithm works, then this should be done in the literature review section).

It is important to underline the need for a clear cut, clear separation line, between existing work and new ideas being presented in the paper. There are in fact three such separation lines: one in each of the abstract, introduction (or Chapter 1) and the most important one between the literature review section and the rest of text. That line should be very sharp.

In some cases, the paper may present minor variations, with major consequences, of an existing solution. In this case, the contribution may look large in the essence, but short in text. This author still advocates to separate these two, even if it means a single paragraph of text in describing novel ideas.

This approach however may not receive positive feedback from reviewers that do not share this philosophy. Separation lines are then needed inside the text itself as a compromise. The main problem with placing separation lines inside the text, rather than by placing content in different sections, is that the separation between existing and new ideas easily remains unclear if the presentation is not very careful. Of course, the assumption here is that the primary intention was to be honest with the contribution made in the article.

One of the major pieces of advice is to do a really thorough literature review on the suggested topic. In most observed cases, however, this does not occur. This is also not really advocated by most supervisors. It is also not emphasized in other papers seen on how to write research articles. We have even seen PhD theses without any literature reviews on the topic. This advice stems from a scientific view of doing research, where the best solution is searched for given model and assumptions. There exist also an innovation view of research, where a good solution is desired for a practical problem. In the scientific point of view, the new solution should be compared with competing solutions, the best existing solutions under particular assumptions, metrics, and models. In the innovation viewpoint, the emphasis is rather on the validation of the new idea, with/out comparing it with something else that exists. A very frequent problem, however, is to mix the two approaches, by attempting to solve a practical problem by using its simple modeling (every model is incorrect but some of them are useful) but evaluating it in a different practical model (Stojmenović, 2008). Another issue is comparison with solutions that use different metric and assumptions from the one used in new solution (unfair advantage) (Stojmenović, 2008).

While on one hand doing a thorough literature review could prove to be dangerous for the new idea in mind, it is expected to be very rewarding in the long term, as it opens the views to different models, assumptions, different problem statements, and offers material for new contributions with much greater compensation for potentially lost contribution. In fact, ideas are normally credited to original authors anyway, not to those that duplicate it. One of the identified problems is that the existing practice is to merely cite a paper on the subject of study (which happens to be very close to the stated problem and possibly presenting a competing solution), without thoroughly studying it, or describing it properly, which opens the door for an even more dangerous duplication, one that eliminates the excuse of possible independent work.

It is very easy for a reviewer or even examiner to save his time by observing a missing important reference, and claiming that that the particular reference may solve the same problem in a better way. That may or may not be true, but some decisions are not recoverable (e.g. in the case of conference submissions).

The list of references is important for the selection of reviewers, especially when submitting to a journal. Editors normally check the reference list in search of reviewers working on same or similar problem. If the list appears “tiny” on the exact problem statement, editors may search for reviewers on Google Scholar for instance. Reviewers selected
that way may be subjective in their evaluation if their important relevant work was not cited in the submission (“the paper does not cite me, therefore something is wrong here”).

For every discussed reference, it is very important to relate them to the stated problem and contribution in one of several ways: it does not exactly solve the same problem, it solves the same problem but makes different assumptions about the system, it does not meet certain desirable properties (e.g. it is not a real-time solution), it has some additional limitations, or it makes the same assumptions but does not work well under certain important conditions and scenarios that are the primary target of the new solution. A clear statement for each identified solution in this respect is recommended. The space allocated to describing existing solutions should also be proportional to its closeness to the new idea and assumptions. Some solutions do not need to be described at all, and a simple convincing statement of why they do not solve the problem at hand may suffice. Other solutions may need a brief description of the general philosophy of the solution before being able to make a similar statement. Otherwise the solution is a candidate to be a competing one, and requires more attention and space. Such existing solutions need clear, concise descriptions of how they work, so that readers can understand a comparison. They are targets for defeat by analytical and/or experimental comparisons. There might be a clear reason why a particular competing solution is inferior to the newly proposed one. Inability to defeat a particular solution certainly leaves a negative impression on readers.

In summary, the literature review should be a critical one, focused around desired outcome and contribution relevant. It should discuss advantages and drawbacks of known solutions that are relevant to the problem studied, and also discuss the relevance of each reviewed item to the topic studied and newly proposed solutions.

THE REMAINING CHAPTERS OR SECTIONS

The remaining sections/chapters should present new contributions (including conditions, assumptions, and limitations, where appropriate) and their analysis. That is, the very same items listed above should be presented in full, preferably in the same order. Assumptions refer to the simplifications made in the model used, so that the solution can be easily understood, while preserving most properties of a realistic model and enabling easy theoretical and/or experimental tractability. Analysis could be analytical, by simulation or implementation. Analytical analysis could provide, for example, the proof of validity of the major ideas of the paper. It could lead to a rough estimation of the performance (e.g. message complexity for communication among sensors or average/worst time complexity for computation in sensor processors), calculation of parameter values for simulation, and other relevant properties and findings.

“When presenting an algorithm, first state what the output is and preferably the key idea, before discussing steps” (Ernst, 2005). Pseudo-code description, if used, should include the mnemonic name for the algorithm, its input and output. Such pseudocodes should be preceded in text with clear concise descriptions of same algorithm.

One should always keep in mind that a figure may be worth a thousands words. Important new concepts, and new ideas, should be illustrated by examples and figures as appropriate, to help the reader in understanding them, and to demonstrate one’s own understanding of these concepts. This author found most mistakes in student’s understandings by simply asking them to give different types of examples. The same is with readers. Examples should not be trivial, but meaningful and helpful.

Figures with examples, and diagrams with performance evaluation, should not be overly repetitive. A new example is welcome if it offers something essentially different and insightful compared to previous ones. Similarly, additional performance diagrams are welcome only if they offer new performance data, substantially different from data in previous diagrams, for the selected set of parameter values. Repetitive diagrams offering similar value for the analysis should be omitted or moved to an appendix of a thesis. The overall contribution is not evaluated by the overall length of a thesis or paper, but by its technical content. In other words, the additional size in page length should be justified by the additional contribution, explanation and insight made.

Captions deserve special attention, which is neglected in a typical written presentation (Milutinović, 1996). Reading only the figure captions of the paper should almost substitute the first rough reading of the entire paper. In case of simulation diagrams, parameter values and protocol names must be clearly
visible and/or listed in the caption. Captions should include title, description of one or more phenomena that deserve attention, explanation (essential reason for observed behavior) and possibly the implication for the protocol/system design.

It is a very difficult task to find a new solution that is best in all circumstances. The primary task in the simulation part of an article is to identify assumptions, metrics, models and parameter values for which the new solution is better than existing ones. The authors should search for scenarios in which their solution is the best. More details on simulation can be seen in (Stojmenović, 2008). One should not be overly optimistic about new ideas and make unfounded claims. A smaller but justified claim is better than a large unfounded one. Bigger claims open bigger doors for attacks by referees and examiners. Referees may easily turn down the complete idea because of an unsupported large claim, but can also easily accept even a minor contribution if it is well documented and proven.

One of the key pieces of advice is to include all the possible criticisms of your own idea and contribution directly in the article. It is much better that authors criticize their own work and demonstrate good judgment than to leave such pleasure to the examiners and referees. Authors should show that they are in full control of the problem, solutions, and their performance.

**ON CONCLUSIONS AND REFERENCES**

Some people read only the abstract and the conclusion. Thus important things missing in the abstract should be placed in the conclusion section. It could state what has been achieved by the current research, and could discuss and reiterate major advantages and drawbacks of the new solution. The most important part of the conclusion section is to list future work that can be done using the results of the current article. This may offer readers with some open problems to study, and such feasible problems could lead to later citations of the article. Sometimes the space can be used to in fact briefly outline some ideas that the author intends to develop further. The ownership of some other possible solutions, not fully explored, to the same or a relevant problem, or subject of your forthcoming different article, can be protected by outlining them briefly in the conclusion section, possibly even with reference to an upcoming article.

One recommendation is to follow a ++ pattern in the introduction and the main text. That is, to start with positive enthusiastic comments about new work and the contribution, then become realistic and list all the drawbacks and limitations, but then finish on a positive note, with a clear statement about the value of the new contribution. It is important that the reader finishes reading the article with a positive impression. He might be writing a follow up report afterwards.

**OVERALL FLOW AND APPEARANCE**

It is important to check if the article has an overall flow, a smooth transition from topic to topic, from familiar information to new information. Within each of the abstract, introduction, or main text, repetitions should be avoided. One statement and its description should be given in a single, most suitable place in that part of the article.

Writing should be clear and concise. “Writing more clearly will help you think more clearly and often reveals flaws or ideas that had previously been invisible even to you” (Ernst, 2005). “Use shorter and more direct phrases wherever possible” (Ernst, 2005). Each concept or algorithm should have a descriptive name. Terms should be normally defined before using them, and should be used precisely and consistently. Ambiguities should be avoided. The text should discuss how related concepts are different and/or similar. Avoid passive voice. Do not use words like “obviously” or “clearly”, which may insult reader’s intelligence (Ernst, 2005).

Finally, after the scientific presentation is deemed acceptable, it is time to pay more attention to the language used and the overall appearance. It is very important to use proper English grammar and sentence structure, and avoid slangs. Misprints must be corrected. One always expects very professional referees and examiners. Their opinion is partially subjective, compared to, say, an evaluation expected from a knowledgeable robot. A good approach in extracting a positive impression for the subjective part of the overall evaluation is by showing the overall care taken in writing the article.

**RELATED WORK ON PRESENTING RESEARCH ARTICLES**

This literature review is limited to items that are not elaborated elsewhere in this article. There is
plenty of advice for writing research articles that can be found on the Internet. However, most of it deals primarily with language, grammar and formatting issues, and does not go deeply into discussing how to properly and effectively present the essence of the contribution made in a given article.

Instructions for preparing transparencies and oral presentations (Milutinović, 1996) are complete and we found no need to elaborate on them further here. A particular feature in article written by Milutinović (1997) is to use semantics based layout strategy on transparencies.

Alba (2002) presented some brief comments and advice addressing the following problems that students and new researchers face: structure the document, formatting guides, content, readability, electronic edition and diffusion. The suggested structure of the document is: Introduction, Problems (this part includes literature review), Resolution methods, Experiments, Results, Conclusions, and References. Resolution methods should stress the novelty of the method and approach, a specific non-ambiguous explanation of the method (e.g. pseudocodes), mathematical or formal issues of proposed techniques, parameters and most important decisions made to select these methods or techniques, plans to solve the problems with proposed appropriate methods, and expected results after having done so. The experiments section should present the goals and sets of experiments, parameters and problem instances intended for use (preferably in table form), measures, statistical analysis, and criteria to judge the value of the results, steps to follow to get the results with justification.

Woodford (1999) lists the overall steps in writing a journal article, dissertation or grant proposal, in a brief note, while the full text is available in his book. It begins from asking whether the time is right for writing, to analyzing and possibly answering the examiner’s remarks. Ernst (2005) discusses rejection: "In most cases, reviews offer an opportunity to improve the work". To avoid reputation of submitting “a half-baked work”, only submit to obtain new information (including concerns not predicted in advance).

Recommendations for writing articles also depend on the research field. Sherrill (2003) briefly described recommendations for writing articles in the chemistry discipline. The parts of a paper are: Abstract, Introduction, Methods (or Theoretical Methods), Results and Discussion, and Conclusions. Similar structure for papers can be found in other fields, e.g. psychology.

The structure of a research paper is less rigorous in mathematics field. Normally papers are collections of theorems and proofs, and every known proof from other sources is cited in the text where needed. Here are a few of pieces of advice by Cheney (2000) that are found to be quite relevant for computing and engineering articles (e.g. description of algorithms, protocols and systems). “Mathematics is preeminent in its striving for absolute precision in its formal written text. Precision in writing is not easily attained, but one always begins by using the correct word at the proper place and by carefully constructing each sentence. We also advise against the use of slang, colloquialisms, and other non-standard linguistic devices” (Cheney, 2000).

“Use English descriptions and English text in preference to mathematical symbolism wherever possible.” (Cheney, 2000). “It makes for smoother reading. Mathematical symbolism is by its nature intimidating, even to mathematicians. There is nothing so daunting as having to read a page of formulas! Keep the formulas to a minimum and avoid symbols if ordinary language will do as well. There may be cases where, for good reason, one wishes to violate this rule.” (Cheney, 2000).

Another good reason to avoid math formalism is the impact of possible misprints. A single misprint anywhere in a fully mathematical formula and the expression can have disastrous consequence for the interpretation and understanding, not only of that particular formula but the rest of the text. In some cases, the reader is even unable to continue reading the article. On the other hand, a single misprint in an English sentence, even an awkward English sentence, allows the reader to automatically correct and continue reading. In some cases, the best approach is to give a math expression followed by its decoding with analogous statements in English. Sometimes it is simply not easy to avoid math symbolism without losing precision.

WRITING GOOD SYSTEMS PAPERS

The advice so far was applicable to technical papers in general. To address the readership of IEEE Transactions on Parallel and Distributed Systems, we address some specific problems in “systems” papers, following closely (Levin and Redell, 1983). They listed thirty-odd questions to help writing a
better technical paper. Questions related to originality of ideas, focus, presentation and writing style are close to the discussion here, often given from a complementary perspective. Questions specific to systems papers are about reality, lessons learned and choices made. Does the paper describe something that has actually been implemented? If so, how has it been used, and what has this usage shown about the practical importance of the ideas? Otherwise, do the ideas justify publication now? What authors learned and what should the reader learn from the paper? How generally applicable are these lessons? What were the alternatives considered at various points, why the choices were made the way they were, and did the choices turn out to be right? How realistic are assumptions? Does the formal model, if presented, give new information, and is it supported by any deep theorem?

According to Levin and Redell (1983), writing a good paper is a hard work, but you will be rewarded by a broader distribution and greater understanding of your ideas within the community of journal and proceedings readers.

REFERENCES


AN OPNET BASED NOVEL CROSS-LAYER MODEL FOR ANALYZING SOA-BASED INFORMATION SERVICES

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Abstract:
Service Oriented Architecture (SOA) based information systems and services are finding wider applicability in complex, mission-critical operational environments. In order to effectively help design and prepare information sharing services for such complex operational environments, designers have to consider various architecture tradeoffs and interactions across the SOA application, communication middleware and network infrastructure layers. In this paper, we describe a novel modeling and analysis framework for analyzing and evaluating the performance of SOA-based information services and their myriad design & deployment options over varying network infrastructures under varying conditions of network load. Our modeling framework developed in OPNET defines critical Measures of Effectiveness (MOEs) to characterize performance of candidate applications considering the SOA interaction characteristics, as well as the underlying SOA communication middleware and network infrastructures. Our modeling framework provides the ability to both analyze as-is application scenarios as well as potential alternative architectures that may include differing application characteristics (e.g. increase in the application’s data generation rate), varying the SOA interaction characteristics (e.g. pub-sub vs. request-response communication styles, use of JSON vs. XML for data-interchange, use of SAML security tokens etc.) or network characteristics (e.g. varying background traffic and latency). A key feature of our modeling framework is the ability to uncover issues resulting from adverse or unforeseen interactions between the Application, SOA interactions and Network layers. Our initial results on evaluating Information sharing services across enterprise inter-agency infrastructures interconnected by public/private networks demonstrate the viability of our cross-layer modeling framework.

Key words: SOA, OPNET, cross-layer, publish-subscribe, request-response, modeling.

INTRODUCTION & RELATED WORK

As a part of the transition of the National Airspace System (NAS) to Next Generation Air Transportation System (NextGen), there are critical challenges from the perspective of information collection, processing, analysis and dissemination. The main goal is to transform NAS information systems and services into a Service Oriented Architecture (SOA) based agile information-centric system, able to effectively and efficiently deliver the right information to the right people at the right time, through improved common situational awareness and decision support capabilities.
In order to effectively help design and prepare information sharing services for such complex operational environments, designers have to consider various architecture tradeoffs and interactions across the SOA application, communication middleware and network infrastructure layers. There are specialized simulation tools addressing communication network performance evaluation (OPNET, 2011) and tools addressing purely SOA behavior (Brebner, 2008); however, there is a paucity of tools that consider the end to end system behavior from the SOA application down to the network layer.

Paul Brebner (2008) presents a tool for performance modeling of Service Oriented Architectures. The tool enables performance models to be generated from available architectural artifacts and performance data. While this tool can model complex systems leveraging service composition, it does not explicitly address the underlying communication network fabric. Our approach in contrast is centered on extending a well-known network simulation environment to include the SOA stack, thus providing a comprehensive SOA simulation framework.

In this paper, we describe a novel modeling and analysis framework for analyzing and evaluating SOA-based information services and their myriad design & deployment options over varying network infrastructures under varying conditions of network load. The focus of our modeling framework is on characterizing performance of candidate applications considering the SOA interaction characteristics, as well as the underlying SOA communication middleware and network infrastructures. In particular, we define several critical Measures of Effectiveness (MOEs) for SOA-based information services that can be evaluated from both the Service Providers’ and Consumers’ points of view. These MOEs can be used to quantify & evaluate whether a specific SOA solution and deployment meet the Quality of Service (QoS) requirements. Further, the identified MOEs enable comparisons of the effectiveness of the various design and deployment strategies ranging from the SOA Application to the SOA communication middleware and Network Infrastructure layers.

The modeling framework provides the ability to both analyze as-is application scenarios as well as potential alternative architectures that may include differing application characteristics (e.g. increase in the application’s data generation rate), varying the SOA interaction characteristics (e.g. pub-sub vs. request-response communication styles, use of JSON vs. XML for data interchange, use of SAML security tokens etc.) or network characteristics (e.g. varying background traffic and latency).

A key feature of our modeling framework is the ability to uncover issues resulting from adverse or unforeseen interactions between the Application, SOA interactions and Network layers. For example, in evaluating the efficacy of alternative SOA interaction patterns in networks with high loss communication lines (e.g. radio links), synchronous SOA interaction such as the request-reply message exchange pattern may be less effective than asynchronous interactions such as the pub-sub pattern both in terms of throughput and response time. The framework can also quantify the tradeoffs involved in SOA security architectures, such as local vs. remote authentication, encryption and the use of security tokens or digital certificates. Another example is the ability of the framework to help quantify the need for SOA layer reliability mechanisms over different network infrastructures.

In the following sections we detail related work and our Measures of Effectiveness (MOEs) for SOA-based information services. We then describe our novel cross-layer modeling framework and its configuration and design options to evaluate various tradeoffs and scenarios, as well as some initial results on evaluating Information sharing services across enterprise inter-agency infrastructures interconnected by public/private networks.

**MEASURES OF EFFECTIVNESS**

SOA promises many benefits that are essential for mission critical operational systems: flexibility and agility to adapt to new events or changing user needs; reduced development cost by defining and employing components that can be orchestrated and reused; improved interoperability and information dissemination through use of standards-based technology; and the ability to rapidly introduce new capabilities by composition of existing services.

There are also challenges with realizing SOA, however, that if not carefully addressed, negatively impact the value of introducing SOA and significantly adds to the deployment risk. Specifically, the use of SOA in a mission critical environment requires stringent QoS requirements such as performance and reliability guarantees that are not usually accounted for in typical WEB 2.0 deployments.
Meeting QoS requirements in a SOA deployment is achieved by carefully selecting the proper topology, architecture, communication pattern, communication middleware, adapting to the network infrastructure and by balancing the ripple effects that each choice adds to the overall system QoS. Establishing SOA QoS metrics enables the measurement and comparison of specific SOA deployment choices and thence navigation of the solution space in search of optimal configurations. As such, this section identifies these QoS metrics by defining Measures of Effectiveness (MOEs) for SOA-based information sharing services. The proposed MOEs are drawn from quality dimensions for SOA-based applications and network performance measurements. Leveraging the Quality Dimensions for Distributed Computing, we harmonized two prominent studies; the Software Engineering Institute Study of Quality Attributes (Barbacci et al., 2011) and the UML Profile for QoS (UML, 2008), resulting in the taxonomy illustrated in Figure 1.

For the purpose of the modeling framework analysis we focus on the Performance and Dependability quality dimensions with key performance metrics (circled in Figure 1) corresponding to Throughput, Latency and Jitter as well as the Reliability metric under the Dependability dimension. While we also account for the performance impacts associated with various security measures, we do not qualify the effectiveness of the security measures in our current work.

<table>
<thead>
<tr>
<th>MOE Category</th>
<th>QoS Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Throughput</td>
<td>Goodput, SOA Throughput, Network Throughput</td>
<td>Application level throughput, SOA level throughput and raw Network throughput in bits per unit time</td>
</tr>
<tr>
<td></td>
<td>Data Efficiency Factor</td>
<td>Ratio of Goodput to SOA layer throughput</td>
</tr>
<tr>
<td>Service Latency</td>
<td>Service or Transaction Latency</td>
<td>Application interaction latency as defined by SOA communication style (e.g. publish-subscribe or request-response)</td>
</tr>
<tr>
<td>Service Reliability</td>
<td>Packet Loss Rate (PLR)</td>
<td>Ratio of lost packets to transmitted packet</td>
</tr>
<tr>
<td></td>
<td>SOA Service Reliability</td>
<td>Ratio of failed service invocations to total service invocations</td>
</tr>
<tr>
<td>Capacity</td>
<td>Service Rate</td>
<td>Number of service requests fulfilled by a service provider over a unit of time</td>
</tr>
</tbody>
</table>

*Table 1: MOE Definitions*
Table 1 relates the MOE category with the QoS Metrics and provides a description of the instrumented measurement in our modeling framework, and can be used to compare simulation scenarios and analyze tradeoffs corresponding to design and architecture choices.

MODELING FRAMEWORK

The SOA modeling framework is constructed using OPNET Modeler, a discrete event simulation toolkit (OPNET, 2011) and leverages many of the underlying capabilities of OPNET with respect to network infrastructure (routers, switches, links, etc.), background traffic and the standard TCP/IP stack. On top of this base, we have developed detailed custom models of SOA service and middleware layers, information message exchanges and statistics that comprise the multi-layer, configurable SOA Modeling Framework.

Network scenarios modeled in OPNET mimic the inter-agency Net-Enabled Test Environment (NETE), a number of agency enterprise infrastructures that are interconnected by public/private Wide Area Networks (WANs) that span the continental U.S. Figure 2 depicts a sample network scenario where each of the colored ovals is a representative public/private WAN with associated core and edge routers and sources of background traffic. These WANs interconnect agency sites that are indicated by small red circles. The right side of the figure depicts a sample enterprise infrastructure, modeling servers and workstations interconnected by LAN components such as switches, routers and protected by firewalls.

Our simulation framework includes the following main types of network elements (NEs): (1) a SOA-capable node model that can serve as a server or workstation, to function as Service Provider and/or Consumer, (2) Security device model such as Firewall, DMZ servers (3) WAN & LAN routers, switches, etc. and (4) Background traffic nodes that can be used to inject cross traffic. These NEs can be interconnected with communications links of various bandwidths, reconfigured in various topologies and locations, and subjected to various types of network conditions (failures, congestion, etc.) to adapt the network scenarios to real-world deployments. Further, the deployment of Service Providers and Consumers, the information sharing services (e.g. weather), the frequency and type of information exchange etc. can also be modified to suit.

Each network element is characterized by an OPNET node model that spans the layers in the OSI stack from Application to Physical layer. In order to facilitate modeling and performance analysis of SOA information services, we have developed a custom SOA Service & Middleware Sub-layer that abstracts real-world logical and functional SOA features as depicted in Figure 3. The key logical and functional components of this layer are outlined below:
Message Definition & Creation component includes a graphical user-interface in OPNET’s ACE Whiteboard (depicted in Figure 4) that can be used to define messages, and logical roles, such as Service Provider, consumer, security interface, etc. Each of the horizontal black lines in Figure 4 corresponds to a logical role (or tier), that can then be tied to a physical infrastructure in a network scenario. Information exchange messages (the vertical lines between the logical tiers) and their characteristics such as application message sizes, names and associated processing delays can be specified using this component. Options and functions applying to these messages can be specified by using the SOA Processing layer functions described below.

The model includes a graphical interface to design or customize complex information service interactions between various logical tiers. User parameters drive a host of model behaviors ranging from message formats, processing delays, logic, message exchange patterns, etc.

The SOA Processing Layer contains the functional components that constitute core SOA layer features.

Encoding/Data Formats: These functions factor the impact of various data formats and encoding sizes on SOA layer overheads and thereby message sizes and processing times. Key parameters that impact message size include: type of message payload (XML compressed, XML, binary, etc.), original
payload size, the size of message header, and data compression ratio.

Message Exchange Patterns: These functions aid in the construction of different message exchange patterns such as Request-Response or Publish-Subscribe interactions. For instance, in Publish-Subscribe interactions this layer incorporates asynchronous timers that schedule publish events to subscribed clients at user-specified intervals.

Security: This function block includes support for WS-Security features such as local or remote authentication using SAML tokens or digital certificates, encryption and the associated information service impacts such as processing delays and security message exchanges. Security features can be enabled or disabled for information service interactions, and various parameters tuned to assess performance impact, e.g. the impact of different SAML token expiry timers.

In general, the various layers in the SOA layer also compute appropriate processing delays, i.e. the latency occurred by all the activities in the SOA layer in the provider and consumer nodes. Once the delay is determined, the simulation model schedules the processing delays as discrete events in simulation event queue before scheduling message transmission and after message reception, to simulate the message processing delays occurred in the SOA layer. Parameters that affect the processing delay can include communication parameters (message size, data compression ratio etc.) as well as computing infrastructure (CPU speed, memory, etc.).

The Transport Bindings layer binds to underlying transport mechanisms such as HTTP for Web Services, and thence delivers or receives messages to/from the SOA layer.

**SIMULATION SCENARIOS AND SETUP**

We have created a set of simulation scenarios to evaluate the performance of SOA-based information services with various SOA-related parameters under varying networking conditions. This section outlines the scenario setup and presents the performance measurement and analysis on the QoS metrics based on the MOEs defined in our modeling framework.

Three sets of scenarios have been experimented to measure the SOA service performance under the following three different service and network conditions:

- **Scenario #1**: Gain in performance from encoding: use of XML compared with use of compression.
- **Scenario #2**: Performance tradeoffs from Security options: local or remote authentication.
- **Scenario #3**: Impact of network congestion on End-to-end service latency and packet loss rate.

**SCENARIO DESCRIPTION**

Topology and network setup: Figure 5 shows the network topology where a set of WAN routers are interconnected via OC-3 links, with a set of SOA capable nodes (consumer and provider nodes) connected via access links. The cross traffic is injected on the link between NY and Philadelphia, which serves as the bottleneck link. OPNET’s Background Traffic utility is used to generate the cross traffic.

SOA services and traffic generation: Scenario #1 and #2 include the Request-Response service, and Scenario #3 includes Publish-Subscribe service. The SOA consumer is located in the Service Consumer site and SOA service provider is located in the Service Provider site. For Request-Response service, the consumer requests a service and the provider responds with the requested data. For Publish-Subscribe service, the consumer subscribes to a service and the provider sends the subscribed data at regular intervals. For Request-Response service, the average request inter-arrival time is set to 300 seconds (exponentially distributed). For Publish-Subscribe service,
the publish interval is set to 600 seconds. Both the request and response message size is set to 1000 bytes. Service starts at 500-second from the start of simulation which lasts for the duration of simulation which is set to 1 hour. At the start of service, authentication process takes place. The authentication is performed remotely by the server in the Security Provider site. Password-based authentication is used in the Scenario #1 and #2, and Token-based authentication is performed in the Scenario #3.

**PERFORMANCE EVALUATION AND INITIAL RESULTS**

Scenario #1 - Gain in Performance from Encoding: This scenario evaluates the impact of message compression on Data Efficiency. Performance results from Scenario #1 simulation runs are presented in the Table 2.

In the table, the first column shows the message compression ratio: 0% corresponds to the case when an xml message is sent without compression, and 15%, 30%, 45% and 60% are values for the compression ratio when the message is sent using an encryption scheme. The average data payload used in this experiment is 3,199.6 bytes. Any SOA message carries this payload and an additional xml overhead. The second column denotes the throughput in bps at the SOA layer. This throughput is the highest in case when there is no message compression. Data efficiency that is defined as the ratio of the user payload data and total message data is presented in the third column of the table. As expected the case without message compression shows the worst performance (the lowest data efficiency).

Scenario #2 - Performance tradeoffs from Security options: This scenario is to compare the performance in the latency category, resulting from the temporal overhead when authentication is performed locally vs. remotely. At the start of each Request-Response cycle, authentication is performed. Figure 6 shows a comparison of the average service latency (end-to-end message delay) when authentication is performed locally (left) and remotely (right). As anticipated, remote security authentication adds additional latency to the end-to-end message delay. Depending on the application QoS requirements, this additional delay may be a significant impairment to deployment of remote security authentication.

Scenario #3 - Impact of network congestion: This scenario evaluates the impact of the network congestion on the SOA traffic. Cross traffic is used to inject

<table>
<thead>
<tr>
<th>Compression Ratio</th>
<th>SOA Throughput (bps)</th>
<th>Data Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>12121.6</td>
<td>0.263983303</td>
</tr>
<tr>
<td>15%</td>
<td>11065.6</td>
<td>0.289175463</td>
</tr>
<tr>
<td>30%</td>
<td>10009.6</td>
<td>0.319693095</td>
</tr>
<tr>
<td>45%</td>
<td>8953.6</td>
<td>0.357386973</td>
</tr>
<tr>
<td>60%</td>
<td>7897.6</td>
<td>0.405186386</td>
</tr>
</tbody>
</table>

Table 2: Data Efficiency and SOA Throughput under varying degree of compression ratio

![Figure 6: Average Service latency for local and remote authentication](image-url)
congestion on the link between NY and Philadelphia, where the user traffic passes through. Four different levels of cross traffic (50%, 70%, 80%, and 90% of link bandwidth) are used to observe the end-to-end SOA message delays and their variances, and packet drop rate at the bottleneck link (NY → Philadelphia) where the cross traffic and user traffic meet.

Figures 7, 8, and 9 show the average service latency and its variance, and average packet drop rate measured at the NY bottleneck link, respectively. In all three QoS measurement categories, the performance is sustained until the level of cross traffic reaches to around 70 percent of the link bandwidth. From 80 percent, the performance of the SOA traffic drastically deteriorates, resulting in an average of

![Figure 7: Average Service latency for varying cross-traffic](image)

![Figure 8: The variance of Service latency for varying cross-traffic.](image)

![Figure 9: The average packet drop rate at the bottleneck link between NY and Philadelphia](image)
~3.7 seconds for service latency at 90%. The variance of the service latency and packet drop rate at the bottleneck link also drastically increase accordingly.

**SUMMARY AND NEXT STEPS**

In this paper, we have presented a novel modeling framework for analyzing and evaluating SOA-based information services and their myriad design & deployment options over varying network infrastructures under varying conditions of network load. Our framework implements a layered approach with a number of critical design & deployment capabilities at the SOA service and middleware layer that will aid designers in evaluating the ability of an information service design to meet specific QoS requirements.

Our initial results show the feasibility of evaluating the performance impacts of various SOA design choices or network conditions on end-to-end performance. In our future work, we intend to extend our modeling framework to include more sophisticated features at the SOA service & middleware layer, for instance SOA layer reliable messaging options, as well as support additional network infrastructure capabilities, such as Air-Ground aircraft networks and mobile ad-hoc networks.

**REFERENCES**


INTEGRATING SUSTAINABLE TOURISM IN TOUR OPERATORS’ SUPPLY CHAIN

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Abstract:
Implementation of the concept of sustainable tourism development in the business of tour operators is based on the respect of environmental, social and economic aspects in all stages of the formation and execution of travel arrangements. For tour operators, the integration of these principles in the process of creating a supply chain and contracting services with providers is of particular importance. In this way, the tour operator can achieve a greater level of control over inputs included in a travel arrangement, guaranteeing the quality of customer services and taking responsibility in relation to other stakeholders. Experiences of tour operators in leading source markets have shown that it has long-term positive economic effects. Although tour operators face a number of difficulties in the process of integrating sustainable tourism in the supply chain, positive experience has shown that well-placed management system and intensive long-term cooperation with providers gives good results.

Key words: tour operators, sustainable tourism, supply chain.

INTRODUCTION

The rapid development of tourism from the second half of the 20th century until today, has been a significant generator of the overall economic development in many countries (Unković, 2009), but negative effects have also been reported. It is a series of negative consequences for the natural and social environment which are the result of numerous participants’ actions in the tourism market, but one cannot deny that travel organizers, who have influenced the direction of massive tourist flows, have had a significant share of responsibility (Oppermann and Chon, 1997; Laws, 1997). The research conducted on the British market (Holden and Kealy, 1996; Curtin and Busby, 1999) showed that, despite the differences between mass-market tour operators and specialist tour operators, the resource destruc-

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This resulted in a series of joint and individual activities, and in 2000, a special initiative was adopted (Tour Operators Initiative and The Center of Environmental Leadership in Business, 2003) in the adoption of which big international tour operators, with the support of leading international organizations (UN, UNESCO and WTO), participated. According to Holloway (2002), the most important goals of this initiative are related to the exchange of positive experience in the field of environmental problems solving, using energetic and other resources more efficiently, creating arrangements which will have a smaller impact on the natural and social environments.

ECONOMIC EFFECTS OF THE INTEGRATION OF SUSTAINABLE TOURISM DEVELOPMENT IN THE BUSINESS OF TOUR OPERATORS

Implementation of the concept of sustainable development in the business of tour operators is not only the result of changes in consumer demands and the pressure of the public, but there is a direct economic interest of travel organizers themselves. Direct short-term economic effects are visible in the savings achieved due to a more efficient use of resources, reduced energy consumption, water consumption, savings due to waste reduction and the like. Especially important are improving the quality of services and new experiences offered to consumers, which lead to a higher level of satisfaction of tourist trip participants and a larger number of repeat purchases. Creation of such an additional value and recognizable brand qualities of tour operators affect the strengthening of the market position and the increase in demand due to attracting new groups of consumers, mainly tourists who have a developed ecological awareness. Increasing the level of consumer loyalty and attracting new market segments indicate a long-term positive economic effects based on new promotional and overall marketing opportunities present in the market. A tour operator affects a higher level of trust, loyalty and motivation of employees themselves. The positive results include the establishment of better and long-term relations in cooperation with all business partners at the destinations. This reduces the risk of possible conflicts and problems in cooperation not only with direct suppliers, but also with local authorities, representatives of local communities and local population. A good reputation that a tour operator has at a destination can ensure them an easier access to certain resources, which are sometimes limited, and the sources of funding may be available for them under favourable conditions. (Integrating into Good Practices A Tour Operator’s Supply Chain, 2011).

The essence of implementation of the concept of sustainable tourism development in the business of tour operators is based on taking into account the environmental, social and economic aspects in all stages of the formation and execution of travel arrangements. According to a study prepared by an association of tour operators Tour Operators’ Initiative and the Center of Environmental Leadership in Business (2003), the most important areas of implementation of these principles are:

- In the product development process, where the key issue in creating package deals is the selection of integral components with minimal adverse effects on natural and social environment and ensuring long-term positive economic effects for all participants;
- In the process of procurement and contracting with suppliers, with the use of criteria based on the sustainable tourism development as the basic principle;
- In relations with customers, guaranteeing the quality integral components of arrangements, as well as safety and security of consumers, providing the necessary information and advice for a responsible behaviour of tourists at destinations;
- In relations with destinations, by supporting the efforts of numerous participants aimed at sustainable development, particularly contributing to the realization of activities in the field of conservation and similar projects at destinations;
- In the internal management of human resources and business processes in the organizational structure of the travel organizer itself.

DIFFICULTIES FACED BY TOUR OPERATORS IN THE IMPLEMENTATION OF THE CONCEPT OF SUSTAINABLE DEVELOPMENT IN ESTABLISHING THE SUPPLY CHAIN

Achieving expected effects in the business of tour operators encounters, however, a number of limitations. They are primarily a result of the fact that tour operators do not control the largest num-
ber of services and products involved, and tourism value chain, and they influence the overall customer satisfaction. Even when it comes to components which are an integral part of the package deal itself, a tour operator is faced with difficulties in trying to provide the required level of service quality and the implementation of sustainable development principles. Travel organizers generally do not own transport and accommodation facilities, but they provide them by contracting with suppliers. However, even though tour operators do not have direct control over the package deal components, the guarantee of quality is very important for consumers and tour operators must take responsibility to ensure the application of sustainability principles in all inputs included in their own products. It imposes tour operators the need for close cooperation with suppliers – providers of services in all stages of design and execution of an itinerary, whereby the process of procurement and contracting of constituent components of package deals is particularly significant (Jovanović, 2009).

Tour operators that have their own facilities or long-term contractual arrangements, which allows them to exercise control over services provided in accommodation facilities or provided by incoming agencies at a destination, are in a better position. Environmental labelling of products (Eco-labels) is a useful tool that can be used by tour operators in the selection of products and services necessary for the formation of travel arrangements. These are certificates issued by specialized organizations based on specially defined environmental standards. According to the information of the World Tourism Organization there are over 100 certificates for eco labelling in the world. Among these standards there may be differences among individual regions, but the process of finding appropriate vendors can be significantly eased for tour operators.

The extent to what a travel organizer will be in a position to adequately resolve the difficulties in trying to incorporate the principles of sustainable tourism development in the contracts it signs with suppliers, and/or with its partners in the supply chain, depends on:

- The scope and quality of available offer at a destination,
- The level achieved in the implementation of the concept of sustainable tourism development with the suppliers themselves at the destination and their willingness to balance their business with the requirements of tour operators,
- External factors which may represent key constraints to sustainable destination development (e.g. the development of a system for waste water and solid waste treatment, the policy of protection of cultural and historical heritage and natural environment and similar factors).

When planning the necessary activities, travel organizers should bear in mind that the conditions for application of the principles of sustainable tourism development differ considerably when source markets and possibilities of receiving countries, typical at a lower level of overall economic development, are compared. In these cases, tour operators require far more intensive cooperation with suppliers, also including visits to the destination, and the very process of contracting, which requires a high level of precision in defining the overall quality of services, is particularly sensitive. At tourist destinations, it is often necessary to direct the tour operator’s activity towards the public sector as well in order to ensure the development of appropriate infrastructure (the system of waste recycling, wastewater treatment, development of public transport on the principles of sustainable development) (Sekulović and Unković, 2010).

It is necessary that tour operators create a policy of sustainable supply chain and an appropriate management system which includes an action plan, the basic evaluation of suppliers’ services, including the perceived disadvantages and advantages, as well as the monitoring and reporting system which will ensure prompt definition of problems, as well as monitoring the progress made. The created policy must also contain motivating instruments aimed at suppliers in order to achieve the sustainable development related objectives.

**ESTABLISHMENT OF THE SPECIAL MANAGEMENT SYSTEM WITH THE APPLICATION OF THE CONCEPT OF SUSTAINABLE TOURISM DEVELOPMENT IN THE SUPPLY CHAIN OF TOUR OPERATORS**

For the realization of desired goals related to sustainable tourism development in a destination, a tour operator needs to set up its own management system, to adopt a special action plan, to introduce special training programs, and also to maintain a system
of monitoring and control in order to monitor the effects achieved. Setting up a separate management system in the process of contracting with suppliers of certain services is aimed at achieving economic, environmental and social sustainability as an essential characteristic of services at a destination. For the realization of these objectives it is necessary to form teams to design and implement a certain policy (Tour Operators’ Initiative and The Center of Environmental Leadership in Business, 2003).

Nowadays, it is typical for big travel organizers to form a specific organizational structure which should contribute to a more efficient application of the concept of sustainable tourism development in the process of making contracts. Practice has shown that better results can be achieved by involving representatives of various departments (department managers and representatives for individual destination, managers from the sector of contracting and procurement, human resources, marketing, production of package deals, as well as managers of the sector for quality, health and safety of consumers), and also representatives of major suppliers, who thus effect the common policy and operational activities together. The creation of a separate organizational unit for sustainable development has also produced good results. The task of this organizational unit is reduced to coordination and a series of operational activities in the implementation of adopted plans, consulting role, as well as providing technical support in all matters related to sustainable development. The organizational unit for education and training of employees is tasked with creation and implementation of training programs for employees who work on the creation and realization of a trip, and sometimes the training includes representatives of the supplier as well. The given organizational structure is characteristic of major travel organizers, and the solutions typical for medium and small businesses are in accordance with their size and specificities in the arrangement production.

In addition to defining the organizational structure, for achieving desired goals an action plan needs to be adopted. The assumption of its successful implementation is setting certain standards which specify the criteria to be used in the selection of bidders at the destination. Standards must be flexibly set so that they can be applied in different socio-economic and environmental conditions and adapt to the suppliers of various sizes and production capabilities. In this case, positive effects occur with the inclusion of supplier representatives since this may contribute to a better understanding of local conditions and help to anticipate potential problems and more effective work in finding a solution.

The process of contracting is a particularly sensitive stage. Contracting capacity utilization and different services at a destination includes the definition of product quality, price, amount of fees, implementation requirements, etc., and it is important that contracts are in a written form in order to avoid possible misunderstandings that can lead to conflicts. The criteria related to sustainability (especially minimum standards) should be incorporated in contracts with suppliers and it is essential that such issues are clearly formulated and presented to suppliers from the outset. For tour operators, it is necessary to define minimum standards that suppliers must meet, and organizers often set optional criteria, defining even the stimulus system for suppliers who want to meet those criteria.

Permanent and quality information of managers and employees, with certain training programs, is extremely important, because the representatives who work on contracting capacities and execution of package deals at the destination must be trained for active collaboration with suppliers and monitoring during the realization of activities under the action plan in the domain of sustainable development. At major tour operators, the representatives, who are in charge of the health care control and safety of tourists in hotels, often have the obligation of monitoring in terms of sustainability. To achieve this, they must go through certain training programs, and receive the precise technical instructions. Training programs and practical training also include employees of business partners at the destination. Thus, for example, training programs in hotels include employees at various levels - from managers of different sectors to the hostesses and guides.

Establishment and implementation of a monitoring system is one of the key steps in the realization of the business of tour operators on the principles of sustainable development, together with informing all participants within an organizational structure of a tour operator on the results achieved in the supply chain. It is very important that this process also includes other key stakeholders such as suppliers and other interested representatives of destinations, consumers, media representatives and others.
In these processes, tour operators have a number of opportunities to get the role of carriers of knowledge transfers, and/or positive experiences and good practices to their business partners at the destination. Such a role of tour operators is based on the fact that they have a direct insight into changes in consumer requirements, but also that they have greater opportunities to access modern technological solutions in relation to small businesses, their business partners around the world. Activities aimed at suppliers can be related to raising awareness about the necessity of implementation of the concept of sustainable development, providing technical support and initiatives in the field of implementation of the concept of sustainable tourism development. A good example of technical support is making the manual “A Practical Guide to Good Practice: Managing Environmental and Social Issues in the Accommodations Sector” which the associations Tour Operators’ Initiative and Conservation International have prepared. The manual was translated into four languages (Spanish, French, Turkish and Portuguese) and it was available in the electronic form, and 30,000 copies have been distributed through tour operators – members of this association to hotels with which they make contracts of capacities (Integrating Good Practices into A Tour Operator’s Supply Chain. TO Initiative, 2011).

EXAMPLES OF GOOD PRACTICE IN FORMATION AGENTS SUPPLY CHAIN

The world’s major tour operators can also be considered leaders, in a certain way, in the implementation of the concept of sustainable tourism development in the formation and realization of activities within a supply chain. For example, German LTU Touristik tour operator introduces a special technical manual that aims to help hotels in an effort to ensure ecological characteristics of their services (drinking water, the area around the hotel, saving energy, a way of buying services, waste disposal and communications). A British tour operator My Travel Northern Europe has developed a system of training programs, and it issues a special guide for hotels (50 Steps Towards a Better Environment Programme).

The world’s largest tour operator – TUI particularly stands out with series of activities aiming at implementation of the concept of sustainable tourism development. The long-term strategy of development of various programs of the tour operator has a common goal: the creation of specific tourism experience creating trips that minimize negative environmental impacts, respect a specific culture and people at destinations, while providing real economic benefits for the local community (TUI Travel PLC, 2010).

In operational business TUI puts strong pressure on its business partners, primarily hoteliers, but also the carriers and other entities at a destination whose activities effect the environmental changes. It is about certain requirements based on the principles of sustainable tourism development, whereby the tour operator expresses willingness to leave the destinations which are not able to adequately solve the problems concerning the protection of natural and social environment. Within these activities, a special place belongs to the creation of a supply chain, with numerous examples of good practice around the world. To illustrate this, we will present a long-term successful business cooperation which was developed by TUI Nordic, a leading tour operator within the TUI, with the hotel group of Blue Village hotels. These are hotels, resorts and similar accommodation facilities in attractive maritime destinations, intended for clients with high requests. In the process of contracting with these accommodation facilities, the tour operator puts forth the quality which also includes environmental characteristics of products and services. The condition for establishing cooperation is the implementation of rules of conduct in the business of accommodation facilities adopted by international organizations (Code of Conduct for the Travel and Tourism Industry - World Wide Fund for Nature’s). Each hotel is supposed to have a management system based on ecological principles, a special action plan on environmental protection and a responsible person that deals with issues, such as the use of products which do not pollute the environment, the procurement process in which the hotel gives priority to local manufacturers, and solid waste and used water treatment, the application of the system for saving water and energy. To achieve common results, an important part of activities refers to permanent trainings for hotel managers and regular reports which hotel managers are obliged to send to the tour operator. This has led to the expected results and today 15 TUI Nordic Blue Village hotels and resorts in Europe and Turkey have an ISO 14001 certificate (TUI Nordic, 2011).
But, no less significant are other specific initiatives TUI Travel PLC. With the aim of establishing more quality relationships with all parties interested in the implementation of the concept of sustainable tourism development, TUI introduced a special interactive environmental website in 2001. The website is designed for the destination partners, representatives of state and civil organizations at destinations, organizations dealing with conservation or other issues related to environment protection, travel agencies, consumers and media representatives. The website provides not only information, but, which is especially important, it provides an opportunity for communication and dialogue. Significant effects in the sales activities are provided thanks to updated information also intended to arrangements vendors as well who can establish a dialogue with potential customers in a proper way. It is particularly important to provide a complete insight into the TUI activities for the environmental protection as a part of the overall quality of products and its ethical principles by which it seeks to differentiate itself from the competition.

TUI devotes special attention to organizing trips to sensitive regions, such as travel programs in areas with dolphins or diving in protected areas with coral reefs. One of the recent activities related to the development of a specific manual intended for tourists (Little Guide for Protecting Species in cooperation with the German Federal Agency for Nature Conservation). The manual is aimed to inform tourists and provide a practical help with buying souvenirs, also trying to prevent any unpleasant situations tourists could face due to illegal purchase. The manual actually contains lists of illegal souvenirs made of protected plant and animal species in some areas, as well as desirable souvenirs with the purchase of which tourists influence the sustainable growth of a local economy. (TUI Group - Sustainable Development, 2011).

However, one should also point to positive experiences of less known tour operators. Atlas Voyages (Suppliers’ Hygiene Control Campaign, 2011) is a leader in tour operator business in the market of Morocco. A new approach to contracting services with providers in the area of Morocco has been applied since 2004, placing special requests regarding food quality and hygiene. The tour operator’s management has identified 17 hotels and restaurants as the most important suppliers, starting from the amount of contracted and provided services, and it has directed the program of activities on quality control to them. A specialized London agency dealing with the HACCP standard implementation was also involved in the process, so that all 17 suppliers have fully achieved the needed results applying the standards which have guaranteed food quality. In the next stage, the cooperation with suppliers was related to energy conservation and recycling of waste materials. In the process of cooperation with suppliers, a significant role features the set monitoring system based on regular visits to facilities and monthly reports submitted to the tour operator’s management. In the process of evaluation of the achieved results, an important role also features tourists who, through a detailed questionnaire, assess the quality of services. Activities of this tour operator have contributed to the increasing level of service quality in hotels and restaurants, which is especially important for a country where hygiene and food quality are one of the limits in tourism development that need to be overcome in approaching the international market. There is also a general opinion that Atlas Voyages has positively influenced the adoption of national legislation covering issues of hygiene and food quality in hospitality facilities. (Atlas Voyages. Suppliers’ Hygiene Control Campaign, 2011).

**CONCLUSION**

The criteria applied by tour operators in the choice of destinations and services, which they will include in their travel programs, today inevitably include the evaluation of the implementation of the concept of sustainable tourism development. This assessment, however, is not applied for tour operators in our country. Most of them puts price to the fore as an instrument for achieving competitive advantage as a result of the limited purchasing power and underdeveloped environmental awareness.

However, entering the international market imposes the need that our incoming tour operators offer products with characteristics of sustainable development. The prerequisite for this is an innovated approach in cooperation with domestic suppliers (hoteliers, transport companies, service providers in rural tourism, etc.) where it is necessary to note that tour operators are faced with a number of limiting factors. In Serbia, very serious environmental problems are present in a large number of tourist destinations, but the fact is that even the highest category of hotels still do not show readiness to respond to the demands of the leading European source markets (with few exceptions such as a small
number of hotels in Belgrade or individual farms in Vojvodina). Although there are no hotels in Serbia which have an eco-label of green hotels, new initiatives primarily related to Belgrade hotels provide some encouragement. The Hyatt Regency is the first hotel that has formed the so-called green team, and its activities are primarily focused on cost-effective heating system, light control, recycling of waste materials. In Serbia, 54 new hotels have been built in the last 3 years and most of them use new environmental technologies, so it should be expected that more opportunities for the offer of tourism products with the characteristics of sustainable development will be created.

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PRIMENA KONCEPCIJE ODRŽIVOG RAZVOJA TURIZMA U LANCU SNABDEVANJA TUROPERATORA

Rezime:
Primena koncepcije održivog razvoja turizma u poslovanju turoperatora zasniva se na uvažavanju ekoloških, socijalnih i ekonomskih aspekata u svim fazama procesa formiranja i izvođenja turističkih aranžmana. Za turoperatore poseban značaj ima integrisanje ovih principa pri formiranju lanca snabdevanja i ugovaranju usluga sa dobavljačima. Na taj način turoperator može da ostvari veći stepen kontrole nad inputima koje uključuje u turistički aranžman garantujući kvalitet usluga potrošačima i preuzimajući odgovornost u odnosu na druge stakeholdere. Iskustva turoperatora na vodećim emitivnim tržištima pokazala su da to ima dugoročne pozitivne ekonomske efekte. Iako su u procesima implementiranja principa održivosti u lanac snabdevanja turoperatori suočeni sa nizom teškoća, pozitivna iskustva su pokazala da dobro postavljen menadžment sistem i intenzivna dugoročna saradnja sa dobavljačima daju dobre rezultate.

Ključne reči: turoperatori, održivi turizam, lanac snabdevanja.

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CULTURAL IDENTITY AND CULTURAL TOURISM – BETWEEN THE LOCAL AND THE GLOBAL (A CASE STUDY OF PULA, CROATIA)

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Abstract:
Cultural identity and tourism are today inevitably linked: in the globalized world of unified values and dramatic economic, political and social changes, tourism becomes an opportunity for cultural and social contact, communication and cultural exchange. A growing need for confirmation of local cultural identities as well as the tourists search for identity could be seen as a response to the globalization of cultural trends. In this paper we set the hypothesis that the cultural tourism, as a sustainable alternative to mass tourism, represents the best model for local development in the turbulent global context, because it optimally uses the authentic characteristics of destinations and the unique elements of identity to differentiate them from competitors. In this way, it protects and strengthens the cultural identity, values, lifestyle and economy of local communities. To test our hypothesis, we conducted a primary research. We used a hybrid methodological strategy, combining quantitative and qualitative methods in order to examine 417 tourists, 296 local residents and 15 experts. We have conducted parallel content analysis of monographs and multimedia resources. Collected data have shown that the key elements of the destination identity are heritage tourism, creative industries, multiculturality and the local way of life.

Key words: cultural identity, cultural tourism, destination management, Pula.

INTRODUCTION

In the context of dramatic economic, political and social changes that are shaking the world, cultural tourism has an important role in communicating the core values of intercultural dialogue, protection and promotion of cultural diversity and preservation of cultural heritage, whose tangible and intangible assets constitute the important part of the cultural identity. Cultural tourism, which is best related to the changes in preferences of (post)modern tourists and requirements of sustainable development (in other words: which cares for the culture it consumes while culturing the consumer), helps to reconfirm the importance of our own cultures while improving intercultural communication, respecting other cultures and deepening mutual understanding and solidarity among different ethnic, national, religious and linguistic entities.

In the cultural tourism communication process, seen as creative and stimulating interaction of elements between different cultures and individuals, local values and identities interact and interface with development of global cultural demands. Many
local communities are now actively trying to identify and develop their tangible and intangible cultural assets as the means of developing comparative advantage in an increasingly competitive tourism marketplace, and to create local distinctiveness in the face of globalisation. In addition to neutralizing the negative effects of traditional forms of tourism, regeneration and protection of cultural heritage treasures, contribution to employment and sustainable economic growth, the fundamental advantage of cultural tourism is that, by using the heritage treasury, with a minimal investment, it attracts the fast-growing segment of cultural tourists, which consumption is not significantly affected by fluctuations in the global market.

Combination of cultural and tourism development policies acts as a catalyst, promoting the local destination as the most desirable place to live, work, visit and invest in. Investing in cultural tourism can significantly improve the quality of life of local residents and their guests, regenerate derelict urban areas and increase the value of real estates. We will test this model in the case study of Pula and Istria, and explore concrete possibilities of development of cultural and creative tourism through events and attractions covering the most recognizable elements of heritage and identity (the Roman heritage, Austrian fortresses, Mediterranean and Central European identity). Our hypothesis was that development of cultural and creative tourism models could solve some typical problems of Croatian Adriatic destinations such as seasonality, revitalize the Old Town, increase employment and attract the recession-resistant segments of tourists. To test our hypothesis, we have conducted a primary research in Pula, in order to collect information for the situation analysis and strategic planning of cultural tourism. We have examined 417 tourists, 296 local residents and 14 experts. The main objective of our research has been to assess the key stakeholders’ perceptions and perspectives of Pula as a cultural tourism destination and to define the key elements of its cultural identity, which makes the city unique and recognizable in the perception of its guests and residents. We have combined the quantitative and qualitative methods: the survey method has been conducted and questionnaire technique has been used to collect some data from tourists, local population and cultural tourism experts. We have conducted parallel content analysis of monographs and multimedia resources about Pula. One of the aims was also to train future professionals for the research and critical reflection of the development of their communities. Therefore, the study has included students of the second and third year of Interdisciplinary Study Programme of Culture and Tourism at the Juraj Dobrila University of Pula, who have surveyed tourists and local residents, interviewing experts in related fields and critically exploring secondary sources.

THEORETICAL FRAMEWORK: CULTURAL IDENTITY, CULTURAL TOURISM AND GLOBALISATION

Nowadays, cultural identity and tourism are inevitably linked: in the globalized world of unified values and dramatic economic, political and social changes, we define tourism primarily as an opportunity for cultural and social contact, communication and cultural exchange with other individuals and cultures. In this communication process, seen as creative and stimulating interaction among different cultures and lifestyles, local values and identities interact and interface with heterogeneous cultural demand, that changes simultaneously on the global, local and individual level. Therefore cultural tourism does not provide exclusively an opportunity for the protection and preservation of local cultures and heritage, as an authentic expression of cultural identity in the globalization process. At the same time it also affects the cultural identity of the traveling individual and the visiting community. Tourists travel because they look for a new experience, different from their everyday life; they wish to learn something new about themselves and the world around them, and they seek for the new identities. Thus their cultural identity constantly changes in the process of exploring different worlds in pursuit of this new, added quality of life. The visiting community also changes, in both positive and negative sense. For many developing countries tourism is the only way to participate in the global economy and to develop their own economies (Jelinčić, 2009). At the same time tourism, offering a standardized and unified experiences and products, degrades local values and the environment. In this sense, we set the hypothesis that the cultural tourism, which “cares for the culture it consumes while culturing the consumer” (Richards, 2007b), as a sustainable alternative to mass tourism, represents the best model for local tourism development in the turbulent global context, because it optimally uses the authentic characteristics of destinations and the unique elements
of their cultural identity to differentiate them from competitors and to position themselves better in the global market. In this way, it protects cultural heritage and strengthens the cultural identity, values, lifestyle and economy of local communities. At the same time, it enables intercultural dialogue and sustainable development, promoting cultural diversity and a common European identity (Jelinčić, 2010).

One of the objectives of cultural tourism is the sustainable use of cultural distinctiveness as a tourist resource. The concept that could be applied here is from the UNESCO’s report Our Creative Diversity, where culture is defined as the whole complex of distinctive spiritual, material, intellectual and emotional assets that characterize a society or a social group, and which includes creative expression (e.g. oral history, language, literature, performing arts, fine arts and crafts), community practices (celebrations and patterns of social interaction that contribute to group and individual welfare and identity), and material or built forms such as sites, buildings, historic city centres, landscapes, art, and objects (UNESCO, 1995). Therefore the concept of culture we use and perceive as a process, includes what people think, do, create, and exchange with others. Culture could be defined also as a „living identity“. Culture and cultural heritage, as an expression of identity and history of the people they belong to, could serve also as a tool for the establishment of identities and differences, which at the same time localize and globalize the cultural and tourist experience, characterized by contact and mixing of cultures (Jelinčić, 2009).

The modern tourists’ requests for authentic cultural experiences and unique local products could be seen as the response to globalization processes in tourism. According to Richards, if globalization is observed in terms of an increasing integration of economic, social and cultural systems, then tourism can be considered both as a cause and an effect of a globalization process. Namely, rising education levels, on the global level, enable more people to access culture, while the effects of globalization create more interest in distant cultures as well as in local heritage. On the other hand, the processes of cultural globalization accelerate the exchange of cultural symbols among people around the world, leading to changes in local popular cultures and identities (Richards, 2007b). In this respect, a growing need for the confirmation of local cultural identity could be actually seen as a response to the globalization of cultural trends. So the appreciation of distinctive culture characteristics has become the central concept in the reflection of the contemporary cultural tourism (Ivanovic, 2008), which could be defined as the tourism of special interests, covering visits of people outside their permanent place of residence, completely or partly motivated by the interest in history, arts, heritage and lifestyle of the location, region, group or institution. The term refers to both tangible and intangible dimensions of culture, and we consider visitors to be cultural tourists if they are at least partly motivated by a desire to participate in cultural activities (Jelinčić, 2009). The UN World Tourism Organisation defines cultural tourism as travelling with the aim of learning about foreign cultures, presentation of one’s own art work, the visiting of festivals, cultural sight seeing, etc. In a certain respect, all tourist trips could be considered as cultural tourism, because they „satisfy tourists’ needs to learn about foreign countries and raises their cultural level, knowledge and experiences by meeting other people“ (Richards, 2007b).

According to the UNWTO, cultural tourism includes 40 percent of the total number of trips in the international tourism, and this share is constantly growing at a rate of as much as 15 percent annually. At the same time, experts estimate that more than 50% of tourist visits in Europe are motivated by cultural heritage, and cultural tourism has the highest growth rate in the entire tourism sector (Richards, 2010). Obviously, it is the market on the rise bringing visitors of higher education, expectations and consumption. The new, postmodern type of tourist is also interested in creative tourism, as a new generation of tourism, which involves an authentic experience and engagement in the real cultural life of the social community in the destination. It is based on the expression of individual’s creative potential and the self-creation of the tourist experience, and incudes more educational, emotional, social and participative interaction with the place, its living culture and the local people.

European and wider global trends and experiences indicate that continuous and increased demand for this form of tourism is followed by substantial improvements in market supply, growing international competition of cities and regions of culture and the transition from specialized market niches in the mass market. Parallel to the emphasis on cultural distinctiveness and heritage rather than prevailing natural attractive factors, diversification and differentiation of standardized destination products and reorientation from “high” and the elite to the
consumption of popular culture and an interest in exploring the everyday life of the local population are included.

The purpose of this research was to explore the essential elements of cultural identity and heritage which could differentiate and better position the destination in the global tourism market, improve the cultural and creative tourism development, reduce seasonality, contribute to employment, sustainable economic growth and quality of life, regenerate derelict urban areas and increase the value of real estates in typical Adriatic (Mediterranean) destinations such as Pula. We will test this model in the case study of Pula and Istria, and explore concrete possibilities of development of cultural tourism.

**METHODOLOGY:**

**A HYBRID APPROACH**

To explore concrete possibilities of cultural tourism development, and to identify key elements of cultural identity and destination image in the global tourism market, we have combined quantitative and qualitative methods: the survey method has been conducted and questionnaire technique has been used to collect data from tourists, local population and cultural tourism experts. The main goal has been to assess different interest groups’ perceptions and perspectives of Pula as a cultural tourism destination and to define the key elements of its cultural identity, which makes the city unique and recognizable on the cultural map of Europe and in the perception of its guests and residents. We have conducted parallel content analysis of monographs and multimedia resources about Pula. One of the aims has also been to train future professionals for the research and critical reflection of the development of their communities. Therefore, the study has included students of the second and third year of Interdisciplinary Study Programme of Culture and Tourism at the Juraj Dobrila University of Pula, who have surveyed tourists and local residents, and interviewing experts in related fields.

We have used a hybrid methodological strategy, combining survey and interviews to examine 417 tourists, 296 local residents and 15 experts. The first phase of the research has been conducted intentionally during April and May in the Pula old town, to explore attitudes and preferences of guests who visit the town off-season. Our assumption has been that they could be potentially interested in the segment of cultural tourists whose characteristics and preferences are the most important considering the development of cultural and creative tourism in the area. In the tourists survey we have used a questionnaire comparable to ATLAS Cultural Tourism Research questionnaire (Richards, 2007a) and to TOMAS Cultural Tourism Research (Institute for Tourism, 2008; 2009). We have used partially modified ATLAS questionnaire with additional questions about experiences and attitudes of respondents related to cultural identity and cultural tourism development perspectives in the city, with their proposals and suggestions for the cultural tourism improvement. The visitors have been asked about their socio-demographic profile, the main motivation and the holiday type, the level of satisfaction with the stay in the destination and attractions they have visited, sources of information regarding the destination, the type of accommodation and the length of stay. Also, they have been asked about distinctive elements of the city identity and characteristics they have, most and least, liked, as well as recommendations for improving the cultural tourism offers. Both open and closed questions have been included. Questionnaires, translated into English, German and Italian, and containing 21 questions, have been the basic instrument for gathering information. The sample has been occasional including visitors of the Pula old city centre.

In the first phase we have also surveyed the sample of 296 randomly intercepted local residents. They have been asked about their socio-demographic data, their perceptions of Pula both as a cultural tourist destination and a place of residence, and suggestions towards cultural tourism development. The special group of questions has focused on cultural identity and distinctive and unique characteristics of the city. We have examined the attitudes of the local residents related to strengths, weaknesses, opportunities and threats of the cultural tourism offerings as the inputs for the strategic analysis. We have also explored their awareness, satisfaction, sources of information and frequency of visits to cultural events in the city. We have been interested in the degree of awareness of the importance of cultural heritage and the perception of cultural events, and the opinion on the city’s candidacy for European Capital of Culture. Both open and closed questions have been included. A five-point Likert scale has been used for the measurement of notions.

For interviewing experts, we have used semi-structured interview in which we have asked them to describe the current situation in the field of culture
and tourism in the city, to list the main problems and development priorities and to offer a strategic vision. We have asked them about the current and desired identity and image of the city, and the manner in which the city has been perceived by its inhabitants, visitors and potential investors. In conclusion, we have asked them whether projects such as the European Capital of Culture could strategically direct the city towards the development of the synergy between culture and tourism, and about the prospects in education and employment in the field of culture and tourism.

Qualitative research has included content analysis of monographs and multimedia sources about Pula, such as the Internet.

RESULTS

Tourists

The obtained data show that most tourists, who visit the city off-season, come on their holiday and that culture is one of the most important motives to visit the city. The collected data show that Pula could be considered a typical cultural tourism destination, with an emphasis on heritage tourism and creative industries. Although one third of guests have said that the sun and the sea have been the main motive of their visit, a half of the respondents have cited urban, cultural and creative tourism as the main motive for the visit. Almost a third travels intentionally to visit the cultural attractions or events in Pula, which is more than the Croatian (26%, according to TOMAS Cultural Tourism 2008) and the European average (25% according to ATLAS Cultural Tourism Research). Many of them combine the classic sun/beach holiday with wellness and eco-tourism, cultural/creative tourism, rest in the countryside, or visiting the city. Foreigners are often interested in opportunities for shopping in the old town. Shopping as a motive often goes with urban tourism/visiting the city. Almost half, more precisely 44% of 419 interviewed tourists had already visited Pula and Istria. They spent in Pula on average 5.5 nights. Most of them, 47% stayed at the hotel, 37% in private accommodation, 9% in a camp and 7% in other forms of accommodation (friends and relatives, hostels, couch-surfing). Most of them were very pleased with the stay in the destination: the most frequent rating was 8 out of 10, and the average rating 8.7.

They have liked, most of all in Pula (open question): cultural heritage/history (115 answers or 27%), the sea, beautiful beaches, nature and climate (58), the Arena (45) and people (37). We can conclude that the main positive associations related to the identity and image of the city were: culture, history, beautiful nature, pleasant climate, kind people and Arena as the iconic symbol of the city. Tourists perceive Pula primarily as a city of rich cultural and historical heritage, surrounded by beautiful nature and the sea, with mild climate, relaxed atmosphere and friendly hosts, recognizable for its Roman amphitheatre.

Most complaints (open questions) have been related to problems with traffic and parking, the neglected old town, lack of entertainment and places to go out, old town infrastructure, etc.

Recommendations for the improvement of cultural tourism have been related mostly to improvement of entertainment attractions, events and places to go out (especially in the evening and out of season), extension of working time of shops and restaurants, investments in the renovation of the old city centre (“clean, renovate and revive the old city core!”), improvement of information and signaling, and improvement of the gastronomic offer.

Speaking of attractions, most (a half) of respondents are interested in cultural and historical monuments (primarily Arena, 25% of them), then museums (more than a third), protected natural heritage (a third), and religious sites. It is interesting to notice that a lot of tourists are interested to visit the cinema and theatre, which means that it would be advisable to prepare some special programs for them (in foreign languages).

Regarding the organization of trips, about one-third uses all-inclusive packages, a third has booked accommodation and transport separately and 35% have booked nothing in advance (self-organized trip). Far the most common source of information is the Internet, it has been used by two thirds of the guests, and this very high proportion of new technology users differs our sample from ATLAS and TOMAS Cultural Tourism Research. It is followed by family and friends (47%) as a source of information, an earlier visit (21%), a tourist agency (19%), guide books (9%) and brochures.

The last group of questions has focused on sociodemographic profile. It has been found that most respondents (81%) have been foreign tourists, most of them from Italy (23%), Germany (17%), Austria (10%), the United Kingdom (8%) and Slovenia.
The share of respondents from Croatia has been 19%.

More than a half of respondents have been female (51%) and 49% of them have been male. Most respondents have been young (20-29: 25% or total of 37% younger than 30 and middle-aged (30-39: 28%, 40-49: 23%). In total, there are 47% guests in the age group from 30-49 (the same proportion as in TOMAS Cultural Tourism 2008). A minor part is in the age group 50-59 (11%) and 8% are older than 60. Most of the respondents, 40% have a university degree, approximately equal proportion is for secondary school qualifications (39%), and 18% of them have masters or doctorates. The quarter of the total number of respondents (26%) has a culture-related job, which is in line with the European average (30%) and considerably more than the Croatian average (13% according to TOMAS Cultural Tourism 2008).

Local residents

In the first phase of the research we have surveyed the sample of 196 randomly intercepted local residents. Among the respondents, 55% have been female, and 45% male; 55% have secondary school qualifications (most of them are students), 39% have a university degree, 3% master or doctorate, and 3% elementary school.

Firstly, they have been asked about their perception of the city. On a scale of 1-5, the statement „Pula is a tourist city“ has got an average rating of 3.65. The statement „Pula is a city comfortable for living“ has had an average rating of 3.5 and the statement “The attractiveness of tourism offer could be increased by the better valorization of cultural heritage“ has got an average rating of 4.3. Then a group of questions has followed related to the identity and image of the city. The answers on the question “What makes the city unique and recognizable” have been very interesting; the majority of local residents has answered it is primarily for its Amphitheatre (60%), its rich cultural and historical heritage (42%), the sea (7%) and there has been several associations related to its shipyard, the Film Festival, multiculturalism, the beauty of nature (the Brijuni islands are nearby), the clean sea and beaches. Although it has been a small sample, we can conclude that the local residents also perceive the Arena and the old town as “holders” of the identity and image of the city.

Also, local residents have been asked about the main strengths and weaknesses of the city as a tourist destination. As a major advantage of Pula, they have mentioned the sea, climate and the (richness of cultural and natural) heritage. The first place in the perception of its residence convincing holds the sea, then the history, culture and heritage (“huge fund of monuments in a small space”), position and proximity to emissive markets and resources.

As major weaknesses they have stressed:
1. traffic infrastructure (most complaints);
2. neglectedness of the old city centre; poor management of resources;
3. lack of facilities for entertainment (especially for youth and out of season);
4. unordered Riva, infrastructure problems;
5. industry in the city centre, unused port;
6. high prices;
7. lack of information;
8. extreme seasonality;
9. poor gastro-offer;
10. lack of intersect oral collaboration and networking of politics, culture and tourism.

We have explored as well their perception, awareness, satisfaction, sources of information and frequency of visits related to cultural events in the city. Among its residents, Pula has been perceived as the town of festivals and creative industries ("eventful city", creative city, “the city of movie and book”). Average grade (on the scale 1-5) for the cultural offer of the city has been 3.2. The research has shown that most of local residents relatively regularly (from once a week to once a month), and more often during the summer, visit the theatre, cinema, exhibitions, concerts and festivals. Among the most popular festivals are the Pula Film Festival, the Pula Book Fair, Pula Superiorum, Monte Paradiso, PUF, Seasplash etc. Majority (a half of them) uses the Internet as a source of information about the cultural offer in the town, then the local press (a third), posters, brochures and flyers (a fifth), radio/TV 10%, and agencies and tourist info-centre only 5%. We have been interested in the degree of awareness of the importance of cultural heritage and the perception of cultural events, and the attitude related to the city’s candidacy for European Capital of Culture. We have found that the residents are well-informed about the local attractions. Having been asked to list the five most important sites, they have most frequently mentioned the Amphitheatre, the Temple.
of Augustus and the Roman Forum, the Golden and Twin Gate, the Hercules Gate, the old town and the Castle, the Cultural centre Rojc, the Small Roman Theatre, the fortification system, Uljanik shipyard, Cape Kamenjak and the Brijuni Islands. Regarding the possibility of nomination for the European Capital of Culture, the majority is reserved, a third of them consider the project could positively contribute to improve the image of the city, while 25% have no information about this project.

As suggestions for improving the cultural and creative tourism offer in the city, they have recommended: to invest in the renovation of the old city, traffic and infrastructure; to invest in culture and education, more events and happenings (especially facilities for the young people), longer openings hours for shops and restaurants, to renew abandoned and forgotten military complexes and to put them into the cultural function; better coordination, networking and education of all culture and tourism structures, to improve cooperation with the civil sector, to organize cultural events all year-round and to improve promotional activities.

Experts

We have interviewed 15 experts (from the related sectors: tourist industry, culture, local and regional administration, education and science and civil society). Most of them have considered current situation complicated, primarily due to recession and lack of cooperation and coordination between the sectors of culture and tourism. However, they have emphasized the great potential for the development of cultural tourism, primarily because of the rich cultural heritage and developed cultural industries in the town. They have emphasized the need for research and more precise defining of the core values of identity and image the city wants to communicate to the target markets. As the important problems they have cited insufficient strategic thinking of the cultural tourism development, insufficient use of resources of cultural heritage and creative industries in tourism, poor condition of the old town, inadequate promotion and communication, inertia and bureaucratization of the system. They have highlighted the need to encourage entrepreneurship in the field of culture and tourism, which could revive the old town, and stressing the lack of Destination Management Companies, which could design the quality offer off-season.

They consider culture and tourism, and cultural tourism in general as the strategic guidelines for the development of the city. Considering development priorities they have listed the following: defining the main development projects and reaching the public consensus about them, regulating the public infrastructure and put in order the old city centre, defining the most important tourist segments and adjusting the cultural tourism product to them, increasing the level of cultural tourism offer in the city (to attract the greater spending power segment), better presenting the attractions through manifestations and cultural routes, extending the season, taking advantage of good position and increasing the number of airlines and ship-lines, using the European Union funds and networking and the opportunity to develop cross-border projects, improving education and professionalization in the sector of culture and tourism, valorizing the fortification system, involving the civil society and the alternative scene in the cultural and creative tourism offer. Part of them consider the candidature for the European capital of culture title desirable and important for the city, as an opportunity to better valorize and finance the culture, to develop the infrastructure and renew the city centre. Other (cultural workers) are more critical and consider the city at this time does not meet even minimum requirements for candidacy. As a conclusion, they have emphasized the importance of education and professionalization in the field of culture and tourism, and as a positive example they have cited the Interdisciplinary Study Programme of Culture and Tourism, which educates staff that will direct the strategic development of local cultural tourism.

Content analysis – monographs and multimedia

As the content analysis of multimedia sources and monographs (such as Puna je Pula/Pula is Full of the well known Istrian scientist and writer Mijo Mirković/Mate Balota) shows, the key developmental periods, which formed the identity of Pula were periods of the Roman and Austro-Hungarian rule, and the period after the World War II, when industrial and military city was slowly turning into a regional cultural and tourist centre. Pula, however, currently has a rather undefined image of former military and port city, and is recognized within the broader framework primarily for its shipyard and the
Roman amphitheatre (Balota, 2005). The city unfortunately minimally uses possibilities offered by a rich multicultural history and preserved heritage, and the fact that it is situated in the specific border contact zone of different cultures and identities.

Ancient identity elements are today especially visible in the abundance of cultural heritage sites and archeological monuments: Arena as an iconic symbol of the city, the extraordinary attractions of the old town (the Triumphal Arch of the Sergy from the 1st century BC, the Hercules Gate and the Twin Gate, the Temple of Augustus and a small Roman Theatre, the Roman Forum), which are still waiting for an adequate evaluation in compliance with the new identity strategies. Archaeology, as a very attractive segment for the contemporary postmodern cultural tourists, is not still widely used, but there are new possibilities, especially in the context of cross-border cultural itineraries. The city generally underutilizes the image of the former Roman colony. Thus, for example, The Ancient Week in May, when interactive costumed performances take place in the city’s streets, should be extended to the entire season, and gladiatorial combats could become a permanent and distinctive content and attraction in the roman Amphitheatre. One of the important and unused cultural identity checkpoints certainly is the Kastel (the Castle; one of the seven hills of Pula and the Venetian fortress with the Historical Museum of Istria inside as a repository of collective memory). By testing the opening of one tunnel, this spring has started the valorization of completely ignored potential of “Pula catacombs”, 40 kilometers of Austrian shelters in the form of tunnels below the hills of Pula.

Austria has left high-quality architecture to contemporary local residents (beautiful districts, like Veruda villas and parks, but also a powerful fortification system, which still awaits a proper valorization) and the most important urban facilities, such as the former Arsenal, on whose foundations the most famous Croatian shipyard Uljanik arose. The shipyard has become a symbol of the urban identity of the contemporary city. However, the largest Istrian town with a rich maritime tradition has not had its Mari-
ism, creative industries, multiculturalism, civil society and the local way of life. Culture is one of the most important motives to visit the city. Although one third of visitors have said the sun and the sea have been the main motive of their visit, a half of the respondents have cited urban, cultural and creative tourism as the main motive for the visit. Local residents, their guests and experts agree that the city is recognizable primarily for its unique cultural, historical and natural heritage, and that the cultural identity “holders” are the Amphitheatre, the old town core with the Roman monuments, turbulent history and multiculturalism, and a unique combination of the atmosphere of the ancient old town by the sea and the former Austria’s main naval port with powerful fortification system, which is still waiting for the proper valorization. To develop competitive products on the base of the distinctive cultural identity, it is necessary to point out special features and enhance the unique characteristics of the destination. This means that the planning priorities have to be investing in the “identity holders”, such as the old city core, cultural heritage and cultural industries, extending the season through inclusion and integration of attractions in events and cultural routes, valorization of the former military zone and the fortification system and design of new integrated cultural tourism products that could be financed by international funds. One of possibilities, which could significantly contribute to the investments in the cultural infrastructure and facilities, and in the renewing of the old town, is the candidacy for the European Capital of Culture title. Key stakeholders agree that Pula first has to fulfil some essential requirements, such as professionalization and education of experts in the field of culture and tourism, where the newly established Juraj Dobrila University of Pula could play a great role as a scientific research centre of the region with specialized educational programmes such as Interdisciplinary Study Programme of Culture and Tourism.

The research has indicated the great potential for development of cultural and creative tourism through attractions, events and stories covering the most recognizable elements of identity and heritage (the Roman heritage, the Austrian fortresses, the former military complex that could be put in the cultural and tourist function, Mediterranean and Central European identity, the industrial heritage, the military heritage, the alternative scene in the social center “Rojc” etc.). The research has shown that Pula also fits in the concept of an eventful and creative city, as “the city of the movie and the book”, with all its festivals (primarily the Pula Film Festival in the summer and The Book Fair in the winter time). Development of cultural and creative tourism could solve typical problems such as seasonality, revitalize the Old Town core, increase employment and attract new and recession-resistant segments of cultural and creative tourists. In consideration of the strategic development of the city, after they have solved infrastructure requirements, the key stakeholders could “play” with stories and identities of the ancient town and, at the same time, the postmodern city, using creative potentials of its citizens and actual and future experts, and some of them have participated in this study.

REFERENCES


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**SWOT analysis – Pula as a cultural tourism destination**

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**KULTURNI IDENTITET I KULTURNI TURIZAM – IZMEĐU LOKALNOG I GLOBALNOG (PRIMER PULE U HRVATSKOJ)**

**Rezime:**


**Ključne reči:**

kulturni identitet, kulturni turizam, menadžment destinacije, Pula.

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THE POWER OF DIALECTICS

A valid critical examination of history and contemporariness of philosophical and scientific thinking makes it clear that dialectics is neither a skill of simple discussion nor a method of dividing and relating concepts, nor the intellectual predominance of contradictions.

Dialectics is a general philosophical theory and method, but not an abstract learning about a method and not a set of rules and not a set of formulae which, as such, are supplied by examples taken from scientific practice. This means that dialectics is a method of radically critical thinking, or “a theoretical infrastructure of critical thinking which sets self-realization of the man in history as the ultimate aim for itself.” (Marković, 1994).

DIALECTICS OF CONTEMPORARY WORLD PROCESSES AND RELATIONS

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Abstract:
Contradictions of nature and the nature of contradictions of post-capitalism, post-socialism and neoliberalism, which are concretized through the world processes and relations of economic crisis, demands humanistic critical examination of theoretical paradigms on which they are based. In the process of theoretical and empirical inquiry, methodological correctness demands to open some important questions: 1) meaning of the concept of dialectics; 2) what does the social science argue about contemporary processes and relations and 3) is the dialectics, and if it is, when, the nature of contemporary processes and relations?

Key words: social theory, scientific method, methodological directions, positivism, dialectics.

“To know is to predict, to predict is to have power.”
Kant

“To measure is to know.”
Bentley

“Morality is determined by knowledge.”
Socrates

THE POWER OF DIALECTICS

What dialectics refers to is the general structure of human historical practice and its essential aspect - critical thinking. And as a general philosophical method, dialectics cannot be a mere cognitive process of description and analysis of the existing, but the method of determining objectives and means of the human action. If this is so, we ask a question: What actions and what kind of actions? The answer is as follows: The one(s) and of that kind which will be realized based on the following methodical principles:

1. Reality should be grasped as a complex totality, and not as a mere sum of parts, which can be analyzed in isolation. Only such a comprehensive approach reveals possibilities of radical change.

2. Beyond sharp contrasts and dichotomies which conceptual research stems from, mediating examples and cases should be discovered.
3. The study of synchronous, structural relations should be complemented by the study of diachronic historical relations. Objects can be understood only in light of their origin and future potentials.

4. For the changes to be understood and practically carried out, the conflict of immanent forces and tendencies should be studied, and on the level of thought, internal contradictions of terms should be resolved.

5. Unlike processes in nature, which are subject only to the external mechanical determination, social processes must be observed in light of possible self-determination of the participants.

6. The perspective of transcendence is opened by critical research, which follows the concept of practice. This perspective is no arbitrariness, but an exception from the quintessential inner limitations of subjects.

Therefore, dialectics is not only a method of learning but also a method of producing reasonable and humane reality. The production can be based only on the grounds of humanistic criticism of reality seeking optimal possibilities to transcend it, and not its mere negation. In this context the main question dialectics answers to is: How to overcome the world of ordinary life, the familiar, given world, which is fixed, reified, which is received without reflection and criticism, in which human relations are fetishized and practice is reduced to abstract labour and a mere supply? And if this transcendence has to be mediated by thought, how to reach the thought of the true spiritual reproduction and the product of reality, to be held up to a concrete totality, and not be satisfied by an abstract fictional totality and not to end up in oblivion of the true subject creativity, or in absurdity, or in alienated transcendence of alienation only in thought.

It is said in a form of a synthetic conclusion: “Dialectics is concerned with “the thing itself”. But “the thing itself” is not an ordinary thing, not even a thing at all. “The thing” philosophy deals with is the man and his position in the universe, or, the same thing expressed in other words: the totality of the world, which the man discovers in history, and the man who exists in the totality of the world.” (Kosik, 1968).

Discovering the totality of the world in history occurs through and with the help of three basic concepts of wholeness, based on a certain conception of reality, which “postulate corresponding epistemological principles:

1. atomistic-rationalist view, from Descartes to Wittgenstein, sees wholeness as a totality of the simplest elements or facts;

2. organicistic and organicistic-dynamic view, which formalizes wholeness and expresses the rule and priority of wholeness over the parts (according to Schelling, and Spann);

3. dialectical point of view (according to Heraclitus, Hegel and Marx), which sees reality as a structural unit that develops and creates.

In the twentieth century, there was an attack from two sides on the view of reality as a totality. For empiricists, as well as for existentialists, the world fell apart and ceased to be a totality, it became a mess, whose regulation was up to the subject. Order was brought in the chaos of the world by a transcendental subject or the subjective perspective, for which the totality of the world was broken and made up for by all sorts of subjective horizons.” (Kosik, 1968), which are formed (politically, economically, legally, culturally and ideologically) as globalization and regionalism (Draker, 1995). In these modern world processes and relations of globalization, in these pseudo-concreteness, the power of force and the force of power of military-economic centres see the man only and primarily as an object, which means that in the objective-historical practice of mankind, the prime importance of the man as a subject - as a real historical subject (the practice) is not recognized. That is not even possible because it is a false totality - “bad totality” in which the social reality looms “only in the form of an object, final results and facts, but not subjectively as an objective human practice”.

False totality of contemporary globalization and regionalism, unlike globalization and regionalization, where the man is a real historical subject, appears, according to Karel Kosik’s researches, “in three basic forms:

1. As an empty totality, which lacks reflection, determination of individual moments and analyses; an empty totality excludes reflection, i.e. the conquest of reality in the form of isolated moments, like it excludes the activity of analytical reason as well. “Namely, every factual and purely analytical approach to reality completely oversees the relevant: that the understanding of a historical fact is determined by the holistic conception of reality and that the relations between ostensibly completely objective items are only the final result of a subjective human activity, which in turn becomes understandable only in the complete historical context. Therefore, science and analytical mind seem likely, particularly today
when positivism and pragmatism dominate so strongly, to consolidate and rationalize the mystifications already present in reality – about humanness and democracy of globalism, about the humanity of military “inauguration” of democracy, about Americanization of the world.

3. “As a bad totality, in which the actual subject is replaced by a mythologized subject. As other important concepts of materialist philosophy, false consciousness, reification, the relation between a subject and object, lose the dialectical character if isolated, torn out of the materialist theory of history and separated from the concepts, with which they create unity in whose “open system” they only acquire their real significance. Similarly, the category of totality also loses its dialectical character if understood only “horizontally”, as a relation between parts and the whole, and if its further organic properties are neglected: its “generic-dynamic” dimension (the creation of a whole and the unity of contradictions) and its “vertical” dimension, which is a dialectics of appearance and essence” (Kosik, 1968).

Therefore, the two dimensions of the bad totality make it bad, and they are: firstly, that the social reality (and within it, a global society) is viewed only as an object and final results, but not subjectively as objective human practice – “the fruits of human activity are separated from the activity itself”, and secondly, the man as a real historical subject is replaced by a fetishized subject – impersonal forces independent of people and their activities. “The social reality is not learned as a concrete totality if the man within the totality is observed only and primarily as an object, and in the objective-historical practice of humanity the prime importance of the man as a subject is not recognized. So, it is not about the concreteness or the totality of reality, primarily about completeness or incompleteness of facts, about the volatility and mobility of horizons, but about the basic question: what is reality? If it is a social reality, can the answer to that question be a reduced response to another question: how was human society created? In asking the question which determines what social reality is, in determining how social reality was created”, (Kosik, 1968) different views of society and the man – the essence of the difference between dialectics and other theoretical approaches, directions and schools are contained.

POWER AND WEAKNESS OF POSITIVISM

Positivism is the most influential philosophy in contemporary science, according to which the sole function of science is to describe and explain what exists, and if at least some laws are known, to extrapolate what could probably be. Rising against
all metaphysical speculative research of social reality, positivism has provided a significant contribution to the constitution of modern social sciences. Its insistence on the facts available to be observed and verified and the demands to replace metaphysical speculations with objective and precise knowledge are built into the foundations of all modern sciences.

That is the truth, but it is also true that, according to the positivistic view, all evaluations in terms of needs, feelings, ideals, and ethical and aesthetic criteria – are considered to be essentially irrational. From a scientific point of view, they are insignificant.

In the positivistic view of the role of science in society, it is justified and acceptable to advocate the practical application of its results, for every science, in addition to being purely theoretical, must also have a practical function in a society, if not directly, then at least indirectly (Brdar, 2008). However, what is not acceptable is the positivistic determination that the sole function of science is to find the most appropriate means for achieving the goals set by others, as well as to fetishize the role of empirical facts, hence to unduly reduce the object of scientific research and simplify the cognitive process. The request for the application of scientific results in practice cannot and must not be reduced to the positivistic demand that science should be integrated in the existing order and serve as an effective tool for perfecting, strengthening and stabilizing that order. Such a demand ignores the critically-transforming role of science and reduces it to an apology for the existing order, an ideological tool of social practices of the ruling class.

Facts are the basis of a cognitive process, but it is not founded only on them. Reasonable abstractions are not a less important component of the cognitive process, because their use is often a condition for the discovery of scientific laws, especially in social sciences. Therefore, unacceptable and wrong is the positivistic demand that social phenomena should be explored like natural ones, that their essence should be observed, independently of the subjects and their values and experiences. This demand oversees the specificity of social phenomena: the fact that they are a product of human activity, and they contain human purposes, values, aspirations and experiences, without which scientific knowledge inevitably remains one-sided, external and superficial. Hence, one can say that the basic characteristic of positivism is extremely great distrust of abstractions and theory in general – a belief that truly new knowledge of the world (of contemporary world phenomena, processes and relations) is brought to us only by empirical facts. (Kolakovski, 1972).

Neo-positivism goes a step further from the doctrine of Comte, Hume and Berkeley by connecting empiricism with the methods of modern deductive logic. However, even then (perhaps exactly because of the connection), what is scientifically important and theoretically and empirically current for this theoretical and methodological direction, the philosophy of which is based on skepticism, is the claim that, at best, we can only know individual things and processes which can be directly observed – heard, seen, palpated. For the sake of the truth, it should be said that “modern positivism, compared with old positivism, has made a certain step forward in that it acknowledged creativity and the importance of theoretical thinking, freed it of its absolute dependence on sensory experience and thus explained the increasingly great role it plays in modern science. However, neo-positivism has acknowledged only the organizational and prognostic role of theory in relation to experience; it explicitly denies that, for example, philosophy and mathematics tell us anything about the world and its structure. This agnosticism, which was repeated in various forms through all stages of the previous development of positivism, is one of its most typical characteristics – it is the one point where positivism” (Marković, 1994) and dialectics strongly disagree to the largest extent.

Historicism as a method of understanding, as a theoretical and methodological direction, whose founders were Dilthey and Rickert, provides a significant contribution to overcoming the positivistic unilateralism in the study of social phenomena. The reference of the founders of methods of understanding to the meaningful and valuable dimension of social phenomena is extremely significant for a comprehensive understanding of these phenomena. Max Weber, in regard to Dilthey and Rickert, made an even more positive shift in explaining social phenomena (Veber, 1976). In contrast to their subjectivistic and intuitionalistic conception of understanding, Weber approached understanding as a method of scientific explanation. By setting requirements for a meaningful and especially causal adequacy in understanding social phenomena, he created a cognitive foundation for the causal explanation of social phenomena.

However, the creators of historicism quite unilaterally understood social phenomena, because they reduced them to the mental activity of individuals,
ignoring their practical and social dimension. Over- looking the practical and social side of human activ- ity, they unduly denied the possibility of a causal explanation of social reality, and thus the possibility of discovering scientific laws, which is the ultimate goal of any science. Due to his nominalistic views of society, Weber reduced the causality mostly to forms of individual and historical causation, and for this reason, his methodological approach does not provide determination of the laws that govern soci- ety. Instead of laws, social sciences, he says, should establish typical models of social phenomena, pro- cesses and relations.

From the analysis of sociological thought, it is derived that classical sociological theories include: socio-darwinistic theories, individual-psychological theories, collective-psychological theories, and for- mal-sociological theories.

From the essence of socio-darwinistic theories, it fol- lows that they are unilateral. This is because social phenomena and processes are explained by a more or less mechanical application of the law of survival which governs the organic world. They are thus not applicable for understanding human nature and hu- man society. Even though Gumplović treated social conflicts as natural phenomena, and the state as a natural product that is outside all moral principles of people, he made a significant contribution to the explanation of the class, the state and political parties.

Individual-psychological theories of society, as indicated by their essence, represented a theoretical shift, not only in relation to biologicist but also to positivistic-rationalistic theories. With their theoret- ical approach, Tarde, Pareto, and especially Weber, have contributed to a comprehensive explanation of the man’s individual conduct. Representatives of individual-psychological theories of society, because of their nominalistic views of society, especially Tar- de and Pareto, did not discover the quintessence of social phenomena, what is specific for social phe- nomena, and what separates them from individual psychological phenomena. The man’s invention and his tendencies to imitate which Tarde shows, and various residues, or innate feelings, aspirations and inclinations of the man, which Pareto starts with, undoubtedly are significant for people’s social lives (Pareto, 1935). However, the diversity of social life, and especially its dynamics, cannot possibly be ex- plained by immutable instincts, feelings and prefer- ences. If one embraces the thesis that these psycho- logical properties of a man are changeable, then the cause of their change must be sought in the society, thus denying the basic starting point of these theo- ries. Weber’s theory is more fruitful than Tarde’s and Pareto’s because it recognizes a certain influence of society on the individual behaviour of the man. This influence is realized through social values involved in the mental interaction of individuals. However, due to the nominalistic understanding of society as a mechanical sum of individuals, Weber’s theory cannot explain the dynamics of social events. Weber’s interpreta- tion of history as a product of economic, political and ideological, and especially religious fac- tors actually means leaving the baseline individual- psychological point of view.

Durkheim’s sociologistic theory of all collective- ly psychological theories made the greatest contri- bution to understanding and explaining social life. It convincingly showed that, apart from the con- sciousness of individuals, there is also a so-called collective consciousness, embodied in collective per- formances, and that consciousness affects the behav- iour of individuals. Durkheim overemphasized the importance of collective consciousness in social life. On the one hand, he completely negated any role of the individual and their (i.e. individual) conscious- ness in social life, and on the other hand, especially in his later works, he marginalized the importance of the so-called morphological structure, the hu- man population, natural and technical environment, economics and politics in social events. Theoretical shortcomings of his teacher, Marcel Mauss largely managed to eliminate and overcome by his under- standing of the man as a total being, as a unity of biological, psychological and social elements and the society as a complete phenomenon, composed of bio-psychological, historical and social factors. The theory of the national spirit of Le Bon (1920) is extremely unilateral and hardly sustainable. He re- duces a people or a nation to a natural-spiritualistic entity, thus replacing the scientific approach in the interpretation of the nation with the metaphysical approach. Wundt’s theory of social psychology is much more acceptable because he does not see the “soul of the people” outside the “soul of the indi- vidual”, but treats it as a cultural and psychological phenomenon shaped through the cultural history of a people by a functional connection of individu- als based on effects of a common language of myth and religion.

Formalistic sociological theories constitute a sig- nificant step forward in explaining social relations and social structure. Namely, by analyzing the im- pact of various forms of social relations, such as
conflicts and cooperation, dominance and submission, integration and disintegration, competition and adaptation, etc., on social life they drew scientific attention to processes neglected by other theories, and which realistically exist in all social groups and which are important for all social groups. Separation of forms of social phenomena from their content, which these theories otherwise strive to, is not realistically possible. It is possible only in the sphere of speculation, but not in the real life, in which forms are inseparably linked with the content of social phenomena. It was, after all, apparent to advocates of formal theories, who, in their analysis of social processes, had to rely on psychological, cultural, economic and even biological factors.


1. Behavioural sociological theories made a significant contribution to understanding human behaviour. By treating the man’s behaviour as a joint product of his individual consciousness and the environment he lives in, they have managed to overcome weaknesses and unilateralism of both individual psychological, and various collective-psychological theories. The theory of Thomas and Znanjecki (1958), and especially Mill’s and Hans’s theory of motivation and social structure made a particular contribution to this. However, what behavioural theories have failed to observe are global social systems and structures, which condition the content and character of different social states and events, which, as incentives, influence social behaviour of individuals and groups.

2. Functionalistic theories which see human society as a complex, functional unit of various social, psychological and cultural phenomena and processes, pose a major theoretical breakthrough in the scientific explanation of society. Functionalsists, with their understanding of society as a real whole, overcome the weaknesses of nominalistic, individual-psychological theories. At the same time, with the complex understanding of the social structure which does not neglect the man as individual, functionalistic theories largely overcome the weaknesses of various psychological theories which reduce society to a collectively psychological entity. What functionalists do is over-emphasize the static nature of society and integrative relations within it. Malinowski, Brown and Parsons saw society, basically, as a static whole whose parts are harmoniously connected and tightly integrated, thereby ignoring or undervaluing social contradictions, tensions and conflicts that are immanent to every society (Parsons, 1969).

3. “On the whole, theoretical efforts of neo-functionalists - Merton (1979), Coser (1986), and Dahrendorf (1959) – to overcome the weaknesses of the theory of Parsons remained half finished. Albeit they accepted the fact that social conflicts are an integral part of social reality, they failed to discover a deeper connection among conflicts and radical structural changes. Their theoretical evaluation of conflict regulation and the form of structural change shows that they largely remain within the integralist conception of society. It is clear from their attitudes on the plurality of conflicting groups and the conflicts among which there is no possibility of accumulation, and therefore no possibility for a radical and fundamental change of the social structure.”

4. Critically assessing the psychological and spiritualist theories we may say that scientifically speaking their baseline is disputable, but apart from that, their contribution to understanding social lives of people is significant. Sorokin’s theory of the development of socio-cultural systems bears a strong imprint of spiritualistic view of society and history, because three basic super-systems of meaning, which represent timeless and spaceless ideas, are, to him, the basis of all social phenomena and processes (Sorokin, 1962). However, Sorokin’s theory is not entirely idealistic because he still sees empirical socio-cultural systems, the real social reality, as a functional unity of the personality system, social systems and culture to which he gives an ontological primacy.

5. The critical theory of society, in general, has provided a remarkable contribution to the understanding of existential problems of the modern man:

a) Horkheimer (1970), Marcuse (1968), Fromm (1980), and Habermas, with an enthusiastic, lucid but also substantiated critique of the instrumental mind and the modern technical and reified civilization based on it, theoretically broke the naive technocratic belief that scientific and technological development au-
tomatically brought social progress and man’s happiness;

b) With a very cogent analysis of economic and political relations, as well as the spiritual condition of the man in modern industrial civilization, they showed that the man, with the scientific and technological development, managed to conquer nature and to master it, but at the same time, with the inhuman use, he built a reified and alienated world in which he lost his human quintessence – the creative freedom and individuality.

Theoretical efforts in the search for a new society, a new civilization, which would be guided by the human use of modern science and technology and thereby would provide a free and the versatile life of the man, have not been very fruitful. Fromm saw a new, more humane society in the form of humanistic socialism, i.e. humanism applied to industrial society, but he did not offer any theoretical postulates on which the society should be based, nor he theoretically determined its carrier. Habermas sees the future society as a society based on communicative action in which individuals engage in social relationships and exercise free communication based on rational arguments rather than the power such as a utopia.

6. Structuralistic theories of Foucault, Levi Strauss and Althusser undoubtedly represent a contribution to the explanation of society, culture and history (Levi Strauss, 1978). With their theoretical preferences, if nothing else, they drew attention to the uncritical perception, the exaggerated role of the subject, the man in social events and the neglect, or underestimation of the role of objective, structural factors in these events. The emphasis of the subconscious, in the form of an anonymous and faceless opinion (by Foucault), or the universal, objective and impersonal spirit (by Levi Strauss), as the only factor that shapes and explains the social structure and its changes, is difficult to accept because it negates any role of the subject in the socio-historical events. The same is true of Althusser’s theory which explains social structure and changes in it with the principle of super-determination. It denies any role of the subject in the social life, for it explains structural social changes with the action of the impersonal principle of super-determination.

7. With the critical assessment of phenomenological theories, it can be concluded that they cannot be completely discarded. It is not necessary, because they can be very productive in understanding social relations in small social groups. Phenomenological theories, despite all efforts, have not given convincing arguments for the denial of the ontological status of social phenomena. There is no valid reason to consider the social world less real than the physical and mental world. On the other hand, its interpretative paradigm with which the constitution of social phenomena and social order is explained is highly formalistic and unilateral. By reducing interaction – the basis of social phenomena – to an interpretive component and by binding the interpretation to the radical situationism, ethno-methodologists offer a completely unrealistic image of society. Society, for them, is a set of isolated and unrelated situations which are realized in an absolute vacuum.

8. Although on the track of major social changes brought about by the modern scientific and technological revolution, theories of the industrial and postindustrial society are very bold and still not completely empirically founded. There are indisputable facts, stated by the advocates of the theory of new postindustrial society, that the application of results of the scientific and technological revolution in all modern societies, more or less independent of their political organization, has led to the development of mass production, the general increase in the levels of standards of living, and major changes in the structure of work and the population, particularly working population, which made the social and class structure of society seem more distributed, more dynamic and more open.

Precisely from the empirical point of view it is hard to accept their claims that in a society which is in the process of creation, the property loses its significance, that social conflicts are mitigated or they even disappear and that the new society strives to satisfy higher human needs which lead to the versatile development of the man. Primarily, the entire modern civilization is still based mostly on private ownership. Real socialism, which tends to build new social relations on the negation of private ownership, has experienced a historical crash precisely in recent years, while the shareholder ownership, which is a dominant form of ownership in modern capitalism, is, essentially and consequential, private property.

The scientific-technological revolution, albeit it contributed to the increase in the standard of
living of all classes, did not abolish or mitigate social conflicts, on the contrary, the sources, causes and bearers of social conflict were multiplied. In the modern society, as Thürén well perceived, social conflicts do not take place, as before, only in the economic sphere, and between two basic classes, but they spread to the political, ethnical and cultural plan where new bearers of conflict appear. In all modern societies both in the West and the East, as convincingly shown by advocates of the critical theory of society, which Thürén also basically accepts, the man, due to the inhumane use of science and technology, becomes more dependent, less free and more alienated than he used to be.

If in a radical way we take and reinvent a theoretical paradigm of positivism and the -isms based on it, as well as the positivistic view of what science can do (determination of empirically verifiable facts, setting relatively arbitrary hypotheses, deduction of the results of these hypotheses and acquisition of only those hypotheses which work, which are proved suitable for predicting future experiences), we come to the findings of what it does not do: interpret these hypotheses as expressions of objective, natural or social laws. The reason for this is that the positivistic science considers such interpretations ungrounded, dogmatic, metaphysical, in other words, non-scientific. Therefore, it is not necessary for our practice, for a successful practice of globalism i.e. a successful control of the environment we live in. Likewise, or because of this, it is not difficult to determine in a scientifically valid way that one of the gnoseological roots of modern positivism is a practicistic attitude which refuses to move even a step further from what is enough for the practical egoistic purpose – isn’t it a birthplace of kitsch and trash? There is a bare practicism at work and it works though and with the help of globalisation. This makes the corporate-ideological roots of positivism even more visible.

Namely, science has suffered a fundamental structural change by becoming completely unphilosophical. The highest object of theoretical speculation is no longer the human welfare (or, more precisely, welfare itself) as it used to be, apart from the speculation itself being understood as the highest form of a good life, but everything is subordinated to the unique practical task of increasing technical knowledge and technical power in order to satisfy the assumed essential interest in a better life in material comfort and abundance. This science is dominated by superficiality, bare pragmatism through and with the help of the scientific kitsch and trash. And what reason is limited to is the world of objectivity, calculatedness, manipulativeness, exact sciences, quantifications, mastering and enslaving the nature, and with it the man as a natural being as well. Namely, the promises of technology, especially the indications of information technologies have turned into a threat, and they are a threat, and not just the physical, both to the man and the nature. Unduly subordination of nature, or its uncontrolled enslaving extends nowadays to the man himself. And it leads and has led to the greatest challenge of human existence – the challenge which has ever grown from its own deeds and actions.

IS DIALECTICS THE NATURE OF CONTEMPORARY WORLD PROCESSES AND RELATIONS?

The results of scientific analyses point to the existence of principle differences “between thinking which considers reality a concrete totality, i.e. a structural whole which develops and forms, and the viewpoint in which human knowledge can or cannot reach the totality of aspects and facts, i.e. all qualities, relations, processes of reality. Otherwise, the reality is understood as a set of all facts. Since human knowledge can never principally comprise all facts, because additional facts and aspects can always be added, the viewpoint of concreteness or totality is considered to be a mystique. A totality truly does not mean all facts. A totality means: reality as a structured, dialectical whole, in which and from which arbitrary facts (a group of facts, a set of facts) can be rationally understood. To collect all the facts, actually, it does not mean to know the reality; all (piled up) facts are not still a totality. Facts are the knowledge of reality, if they are understood as the facts of a dialectic whole, i.e. if they are unchangeable, indivisible, from no other things derivable atoms, from whose sum the reality is comprised of, but if they are understood as structural parts of a whole. The concrete or a totality are not, therefore, all facts, a set of facts, a set of all aspects, things, relations, because this sum lacks the most important – the totality and concreteness. Without understanding of what facts mean, i.e. without understanding that the reality is a concrete totality, which for the knowledge of any fact or a set of facts becomes a meaningful structure, the knowledge of the concrete reality or a mystique or an unknowledgeable thing in itself remains.” (Kosik, 1968).
If the theoretical-methodological principle of dialectic examination of social reality of contemporary world processes and relations wants to be truth-like, a radical critique, it must be a viewpoint of a concrete totality only then in order for dialectics to be the nature of world processes and relations, or a viewpoint of a totality, which understands reality in its internal laws and under superficial and accidental phenomena discovers necessary internal connections, is opposed to the viewpoint of empiricism, which is adherent to the phenomenal and accidental manifestations so it cannot come to the realization of developmental processes of reality. “The viewpoint of totality implies the dialectics of lawfulness and coincidence, inner quintessence and phenomenal sides of reality, parts and the whole, products and production and the like.” (Kosik, 1968). What does this mean? Before and above all, it means that every phenomenon, every process and every relation on a local, national, regional and global level can be understood as a moment of a whole. Videolectet, every social phenomenon (economical, political, legal, cultural and spiritual) is a historic fact in so much as it is examined as a moment of a certain whole, only then when it “fulfills a dual role which only makes it a historic fact: if, on the one hand, it defines itself, and on the other, it defines a whole; if a producer is the product at the same time; if what determines is simultaneously the determined; if it discovers something else, and is also deciphered by dint of something else; if through another it obtains its true meaning and at the same time gives meaning to something else. The interdependence and interconnection of a part and the whole at the same time means: isolated facts are abstractions, artificially torn off moments of the whole, which only by fitting into the appropriate whole get concreteness and truthfulness. Also, the whole in which its moments are not distinguished and determined is an abstract, empty whole.”

Therefore, dialectics is not and it does not express the nature of globalization, but its radical critique – it takes the thing in its root. And, for the man, this root is not globalization but the man himself. Globalism is a false totality. And in modern globalism, there is in action and it acts: mystification and false consciousness of people of events – of contemporariness and of the past, hypothesizing and privileging of a whole compared to its parts – the road which “instead to the concrete totality leads to a false totality” where globalism and regionalism represent the true and higher reality, and the existence of reality can exist, which we are witnesses of, “independent of facts, especially those which contradict it. In this formulation – the hypothesized and newly independent whole opposed to facts – a theoretical rationale of subjectivism, which anticipates and forces facts in the name of a higher reality, is derived. The facticity of facts is not the reality of facts, but their fixed superficiality, unilateralism, immobility. The reality of facts is contradictory to the facticity of facts, not because it would be the second-order reality, and so, in this sense the reality independent of facts, but because the internal relation is dynamics and contradiction of the totality with the facts.” And what dialectics is and does is the nature of the process of globalization. This is because dialectics is not a method of reduction, but a method of spiritual and thoughtful reproduction of reality, a method of development and explication of social phenomena from the practical activity of the historical man.”

However, when explaining or understanding current world social processes and relations one has to bear in mind what Kosik does, and that is: “differentiating between systematic and additive knowledge and dialectical knowledge” of a totality. The difference is theoretically and in work operationalized as “basic differences of two different concepts of reality. If reality is a set of facts, human knowledge can be only abstract, systematical and analytical knowledge of abstract parts of reality and the whole of reality is unknowable. Precisely because reality is a structural whole which develops and shapes, the knowledge of one fact or a set of facts becomes knowledge of their place in the totality of the reality. In contrast to the summative and systematic knowledge of rationalism and empiricism, which start from the determined baseline principles in the systematic process of linear addition of further facts, the dialectical thinking starts from the assumption that human knowledge is realized in the spiral motion in which every beginning is abstract and relative. If reality is a dialectical, structured whole, the concrete knowledge of reality, in no way, means a systematical annexation of facts to facts and of knowledge to knowledge, but it is a process of concretization, which goes from a whole to its parts and from parts to a whole, from a totality to antitheses and from antitheses to a totality, and in this, spiral-like advancement of gathering, where all notions come in reciprocal motion and they enlighten one another – the concreteness is achieved. The dialectical knowledge of reality does not leave certain terms untouched in the further flow of learning; it is not the summative systematization of notions, built up on the unchangeable and once and for all acquired essence, but a spiral-like process of
mutual pervasion and enlightenment of notions, where abstraction (unilateralism and isolation) of the aspects of overcoming in the dialectic, quantitative and qualitative, regressive and progressive collection are present. The dialectic understanding of totality means that the parts are not only in the internal interaction and connection with themselves and with the whole, but that the whole cannot be petrified in the abstraction which stands beyond the parts, because it creates (forms) itself as a whole in the interaction of the parts.

Opinions of knowability and unknowability of concreteness as the knowledge of all facts are based on a rationalistic and empiric idea that learning is done through analytical and summative method, whose assumption is the atomistic idea of reality as a sum of things, processes and facts. Conversely, in the dialectical opinion, reality is understood and presented as a whole, which is not only a sum of relations, facts and processes, but their creation, their structure and genesis as well. The dialectical whole includes the creation of a whole and the creation of unity, the unity of opposites and their genesis.” Therefore, dialectics as a critical opinion which tends to comprise the thing itself, i.e. the movements of contemporary globalization and regionalism (the way they are today) must learn their reality, which means that it is not even satisfied with abstract schemes of that and such a reality, but not even with abstract ideas of the same. What the dialectical opinion has to and wants to do is to abolish the ostensible independence of the world of the direct daily touch. “The opinion which breaks pseudo-concreteness in order to get to the concreteness is, simultaneously, a process in which the real world is discovered under the world of ostensibility, behind an outer ostensibility of a phenomenon a law of the phenomenon, behind a visible motion the real internal motion, behind a phenomenon – the essence. What gives the character of pseudo-concreteness to these phenomena is not their existence in itself, but the independence in which the existence occurs. That is why the destruction of pseudo-concreteness, which dialectical thinking must perform, does not discard existence or objectivity of these phenomena, but disrupts their ostensible independence by proving their inference, which contrary to their pretension to independence comes forth with the evidence of their realization.”

If a concrete totality is the answer to the question what reality is, i.e. an epistemological principle and methodological postulate, then the dialectics of a concrete totality is a theory of reality and its knowledge as reality. This means that the dialectics of a concrete totality is not “a method of comprising and describing all aspect, features, qualities, relations and processes of reality, but a theory of reality as a concrete totality”. What does it further mean? Kosik says: “If reality is understood as concreteness, as a structured whole (which, therefore, is not chaotic at all), which develops (therefore, it is not unchangeable and given once and for all), which is formed (therefore, it is not completely finished and changeable only in parts or their organization), this view leads to certain methodological conclusions, which become a heuristic guide and an epistemological principle for studying, describing, understanding, explaining and evaluating certain themed parts of reality, whether it is physics or literary science, biology or political economy, theoretic problems of mathematics or practical issues of regulating human life and social relations.”

The afore mentioned thoughts (results of multidisciplinary research) lead to the conclusion that the concrete totality is a dialectical view of knowing the reality which can be operationalized as:

- A complex process whose moment is the destruction of pseudo-concreteness, i.e. fetishes and ostensible objectivity of phenomena, and the knowledge of its real objectivity;
- A complex process of knowing the historical character of a phenomenon, in which the dialectics of individual and human in general is shown in a certain way;
- Realizing the objective content and meaning of a phenomenon, its objective functions and historical place within social whole;
- Whole is not hypothesized and does not have primacy over its parts in any way;
- Whole is built to the extent in which the parts are structured and destructured;
- Whole is a unity of opposites – dynamic and always open;
- Whole must be understood not only in the horizontal dimension (regarding the relation to parts) but also in the vertical dimension (regarding the dialectics of a phenomenon and the essence, the general, specific and individual);
- Whole is created by the social production of the man and not the interaction of autonomous structures.

Kosik provides an even better conclusion when he says: “If knowledge has not performed the destruction of pseudo-concreteness, and has not discovered,
under the ostensible objectivity of a phenomenon, its real historic objectivity and because of that it replaces pseudo-concreteness with concreteness, it becomes a prisoner of the fetishistic understanding whose product is a bad totality. Social reality is here understood as a sum or a totality of autonomous structures which mutually influence each other. The subject disappears or, more precisely, the real subject, the man as an objective and practical subject is replaced with a mythologized, reified, fetishized subject: the autonomous movement of structures.” (Kosik, 1968). It appears that this provides an answer to the question whether modern science has performed the destruction of pseudo-concreteness in general, and especially the pseudo-concreteness of contemporary world processes and relations. Consequently our cry for dialectics, for dialectic thinking, for the application of dialectic method only by dint of which facts of contemporary world processes and relations can be deciphered.

REFERENCES


DIJALEKTIKA SAVREMENIH SVETSKIH PROCESA I ODNOSA

Režime:
Protivurečnosti prirode i priroda protivurečnosti postkapitalizma, postsocijalizma i neoliberalizma koje se koncretizuju kao svetski procesi i odnosi ekonomske krize zahtevaju humanističko kritičko propitivanje teorijskih paradigmi na kojima su zanovani. U procesu teorijsko-empirijskog propitivanja metodološka korektnost i naučna higijena zahtevaju da u samom otpočinjanju procesa istraživanja ukažemo i pokušamo da validno odgovorimo na sledeća i bitna i aktuelna pitanja: 1) značenje samog pojma dijalektike; 2) šta o savremenim pojavama, procesima i odnosima zbore teorije o društvu, odnosno nauka za koju Hajdiger u Uvodu u metafiziku kaže da je danas u svim svojim granama tehnički, praktički posao dobijanja i prenošenja informacija i 3) da li je, ako jeste kada, dijalektika priroda savremenih svetskih procesa i odnosa?

Ključne reči:
društvena teorija, naučni metod, metodološki pravci, pozitivizam, dijalektika.

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INTRODUCTION

The creation of united Europe, without doubt, is one of the greatest political processes of today. In the years immediately after the Second World War, before the ruined and economically exhausted Europe, the fateful question was set: What is next? Realizing all the nonsense of the mutual wars of nationalism and religious intolerance, the leaders of the western European nations have chosen wisely the only real path – to build a common future.

The political borders, as a result of a certain ethnic and historical development, could not be deleted for a long time. However, the commitment of a part of those countries to overcome themselves and to be a lesser obstacle for the exchange of ideas, people and goods and to become a condition for peace projects slowly started to develop.

France, Germany, Belgium, the Netherlands and Luxembourg are the five European countries that in 1985 in the small town in Luxembourg signed the agreement named after the place of signing - Schengen (Den Boer, 1997). The purpose of the agreement was to facilitate the communication of the population of these neighboring countries that could pass from one state to another without showing any document on the border (passport, identity card) to achieve harmonization and the abolition of the borders between the Member States (Single European Act, 1986).

DANISH “NO” FOR SCHENGEN AGREEMENT - BEGINNING OF THE DESINTEGRATION OF THE EUROPEAN UNION?

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Abstract:
Has the European Union forgotten its internal borders? This question is often asked after Denmark introduced its terrestrial and water border crossings control with Germany and Sweden and after France sent immigrants from North African countries back to Italy. The aim of this paper is to explain that the freedom of movement of the citizens is one of the main achievements of the Union, and it must be protected. If certain members of the Union try through the introduction of border control to make control to the massive entries into their countries, it may occur European Union to lose the character of the community where the "visas", "asylum", "immigration", and other polices connected to the freedom of movement for the persons as a part of the third pillar that is called cooperation in the region of the justice and internal affairs.

Key words:
European Union, internal borders, border control, freedom of movement.

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In the beginning the Schengen Agreement had no points of connection with the European Union, but over the time the Member States of the Union joined the agreement on visa liberalization that exempts only Great Britain and Ireland which have separate agreements in the part of the visa regime on communication (Anderson, 2000).

European Council, the countries which are not part of the Schengen area, puts them on the white or the black Schengen list and depending on where the person comes to the borders of the Union receives such treatment (Revising EU Border Control Rules, 2005). Since 2009, the Republic of Macedonia has been a part of the white Schengen list which means that its citizens have no need of visas for entry into the EU countries for stays of up to 3 months over a period of 6 months.

**EXTERNAL BORDERS OF THE EUROPEAN UNION**

Due to the limited competences of the EU in the promotion of the concept of European citizenship and its central request – free movement of persons, the Member States have chosen the path of interstate bargaining, which is included in the EU law. Schengen Agreements of 1985 and 1990 have the character of classical interstate conventions concluded between the Member States, with the exception of Great Britain and Ireland and plus Iceland and Norway which are not members of the EU. The agreements are in force since 1995 (Burian, 1999).

The main objective of the Schengen Agreement is the establishment of a free movement zone on the territory of all Member States, without internal borders and internal control. The temporary suspension of such a regime can be justified only if it is required by the interests of the public order or national security. The freedom of movement within the EU, without internal borders and control is followed by the so-called compensatory measures which consist of a common visa regime, intensification of police, customs and judicial cooperation and joint activities in the prevention of transnational forms of crime, especially terrorism and organized crime (Apap et al., 2001). Schengen Convention defines the harmonized forms of external border control, specified with a general guideline for external borders that contains operating instructions for entering the EU territory and detailed vetting procedures.

**POLITICS CONCERNING THE LEGAL STATUS OF FOREIGNERS**

With the Treaty of Amsterdam it is determined that the EU is based on the principles of liberty, democracy and respect for fundamental human rights and freedoms guaranteed by the ECHR and constitutional traditions common for the states – members as general principles of the *acquis* (The schengen acquis as referred to in Article 1(2) of Council Decision 1999/435/EC, 1999). Despite this general policy, in respect of fundamental rights and the rights of the EU citizens, special attention deserves the EU policy regarding the rights of the EU citizens of the third countries on any ground (immigrants, foreign workers, students, etc.), being located on the territory of any Member State. It was already stated that it is not an acceptable conception on a difference, discrimination, status of foreigners and that is the reason why the fundamental freedoms and rights should be respected and protected equally for everyone. According to the Treaty of Amsterdam these persons enjoy all the fundamental rights (personal freedom, property rights, etc.) but not political rights (electoral rights, performing public functions, etc.) which are reserved for the local citizens. However, with the EU Treaty (Maastricht to Nice), any special status for foreigners is not provided versus the calculated rights of the EU citizens for being the citizens of the Member States.

The need to establish a policy of entry, residence and employment of foreigners is becoming more popular because the immigration wave, having been intense especially since the beginning of the nineties after the collapse of the former socialist countries and economic migration caused by the huge unemployment and poverty in countries in transition (Weiler, 1991).

Having spent several stages while the EU legislation was established regarding the treatment of these persons, the policy of visas towards the citizens of the third countries has received special significance. It has gained importance and having been lifted on a common level because the EU external borders remain the only control line for entry and stay of the foreigners.

**ASYLUM POLICY**

Asylum is an institute of international law with which application is to provide protection for persons
emigrated to another state. The person-refugee cannot be returned to the country from which he/she has escaped because of fear of political persecution or prosecution for racial, religious, ethnic, social or political affiliation. The state decides whether a person will be approved the asylum status in accordance with the Geneva Convention on refugees adopted in 1951. In recent times, the mass reappearance of migrants, due to the economical problems of the countries in transition, has imposed the need to define a common EU asylum policy.

In the Treaty of Maastricht it is a part of the third pillar for cooperation of the Member States in the sphere of justice and home affairs (Justice and Home Affairs, 2011). The right of asylum is guaranteed by the Charter of Fundamental Rights of EU and the Treaty of Amsterdam, a matter for asylum is common and moves to the common EU policy in the sphere of the first pillar (European Community). It requires the creation of mutual funds to help refugees, harmonization of national legislation in this area and so on, which includes assistance to countries which have received the refugees and to facilitate the repatriation and reintegration if the asylum is required because of military events in the home country (Chryssochoou, 2001).

IMMIGRATION POLICY

An immigrant is considered a citizen of any state which is not a member of the EU or a person without nationality who wants to settle on the territory of another member state because of the search for a job or exercise of other aims, including the connection to his family. Free movement of persons, throughout the territory of all the Member States without internal borders, raises the issue of immigration at the European level and requires the establishment of foundations for the common policy on immigration. With the Treaty of Amsterdam this is a common policy and becomes an integral part of the first pillar of the EU (visa, asylum, immigration and other policies related to the freedom of movement for persons) implicating adoption of measures for coordination of the legislative and other activities of the Member States and mutual activities of the EU bodies (Hobbing, 2005). The only policy on immigration began to be transformed after the Summit in Tampere in 1999, when the emphasis was on preventing the illegal immigration (Learning Space, 2011).

However, the assessment remains despite the political objectives of the EU which has not developed appropriate instruments for consistent immigration policy causing the problems that are worked out below.

NORTH AFRICA- REASON FOR REACTION OF FRANCE

“Every citizen of the Union shall have the right to move and reside freely within the territory of the Member States, subject to the limitations and conditions laid down in this Treaty and by the measures adopted to give it effect.” Article 18 of the EC Treaty.

This is only one of the articles that regulate the right of free movement and residence of the citizens of the European Union which is subject of elaboration in this paper, i.e. the fact that a Member State denies and declares illegitimate the residence permit which was given by another Member State to citizens of the third countries (Caparini and Marenin, 2006). Although, de facto the Article regulates the residence and the movement of the Union citizens, with the entry permission itself, it means you have the same rights as all other citizens who respect the laws of the country in which they are located and the acquis communautaire of the EU (Regulation (EC) No 562/2006 of the European Parliament and of the Council, 2006).

The first reactions around the movement on the borders came from France due to the influx of immigrants from the North-African countries during the spring of 2011, and introducing controls on the border with Italy which showed that the internal borders of the Union were not forgotten but only waited for a moment when they would appear to the scene again. Within a short period more than 700 people were arrested who had passed the border between these two countries with the treatment of illegality, regardless of previously received permission to enter Italy and within the European Union itself.

Cecilia Malmstrom, a head of the Department of Interior Affairs of the Union, complained to the French side on the ground that she did not have the right to monitor the border crossings unless it was threatening the public safety. According to her, the given case was not within this framework and France violated the recommendations of the Schengen Agreement which ensured the freedom of movement of the citizens within the Member States.
The active discussion of the Ministers of Interior of Italy and France, Roberto Maroni and Cloud Zeno shows that each of them defends his own position. The Italian Minister claimed that France was hostile and France is on the viewpoint that, in accordance with the so-called the Chambéry Agreement, it has the right to deport anyone back to Italy.

For real, the problem is in the lack of a single immigration policy of the European Union and the people without documents are treated differently depending on where they are arrested (Duff, 1997). The consequences are often born by the workers without licenses in the field of structural engineering in the French cities, mostly because they use the cheap railway transport, which is now intensively controlled. The persons from Tunisia, who are not able to stay in France at the moment, react that it is a question of the former French colony and ask the authorities in Paris also to recall their recent relations, in their mutual past.

The EU Ministers have also faced to the similar problem with the opening of the Schengen Area to the Balkans and South East - Europe countries. The Republic of Macedonia together with Kosovo, Serbia, Albania was one of the warned that may face to serious problems in the further regulation of its status in the Union if it does not stop the wave of migrants under the veil of an application for asylum in the Western European countries trying to gain economic benefit.

**DISRUPTION OF THE FUNDAMENTAL BENEFITS OF THE EU**

The initial reaction on a ministerial level is that most of the countries (15 of 22 states) agree that they should return the passport control. The next step is to return the immigrants in the countries where they came from and the more detailed plans must be adopted with the revision which, according to the rules of the EU, has to be voted in the European Parliament.

The arguments for these opinions among the other things are in the process of adoption of the Maastricht Treaty (1992) which spent more controversies and revisions (Corbett, 1993). One of them was asked by Denmark where on the first referendum the signing of the agreement was not accepted and the second passed by a narrow majority.
after the supply of several concessions by the Danish Government. They are now summoned, when introducing measures for protection of the safety of its own population, from crime and terrorism.

The position of the Minister Sandor Pinter of Hungary is that the implementation of the passport control will mean regression of the benefits of the Schengen Agreement. Also, it may cause a range of reactions and other types of freedoms, if the freedom of movement is limited for the EU citizens as one of the fundamental benefits of the Union. According to him, some other modality must be found that would help to overcome the problem that appeared, but not on the damage of the already acquired rights and benefits of the European citizens.

The summer period is a moment for introducing the border control entry in Denmark by its neighbors which is seen as an inappropriate act of the government to appease the radical right wing under the cover of the explanation that this is to prevent cross-border crime and not to tighten the control of the free passage of passengers within the EU. The Danish Minister for Customs and Taxation Peter Christensen emphasizes that a greater number of the tourists will not notice that there is an increased number of unimpressive present duty officers that would not allow queues at the entrance in Denmark.

However, this is only a result of the significantly improved video-control at the borders of Germany and Sweden in order to improve the detection of the smugglers of weapons, drugs and people, and according to the authorities in Denmark, it is a serious problem not only in this country but also in the whole European Union.

The circumstances are going to support the activities undertaken by Denmark and confirming the decisions of the EU summit in June by which the country was assured that the EU will not initiate action against it for violation of the European laws and provisions of the Schengen Agreement. At the same time, the European Council gave green light for planning and introducing new border controls aiming to control the illegal migrations (Council decision, 2004).

To a certain degree, the politicians, considering the situation of their countries, approve such measures which modify the Schengen Agreement. However, the citizens of the neighboring countries of Denmark react predictably. This act is considered to be negative in terms of political reputation of the country primarily among the ordinary people from the neighboring countries.

The supporters of the Danish move direct bigger attention to the rights of the sovereign countries to prevent the crossing of the borders of the undesirable elements in a legal way. “A sovereign country is obligated to protect the interests of its own people”, says Daniel Van der Steppe, M.P. from the Netherlands. His opinion, that the entry of new countries in the Schengen Area is in favor of the import of crime from the poor to the rich countries in the EU, is accepted by other members in this highest legislative body of the Union. The M.P. from Great Britain, William Dartmouth goes even further claiming that: “For the national states it is the best to decide themselves for their fade. The leadership of the Union has shown that is not able to do that.” With this statement he predicts the end of the European idea, towards which the countries of the Western Balkans, including the Republic of Macedonia, are aiming.

The defenders of Schengen and the European idea criticize the decision according to which the countries within the Schengen Area are allowed to reintroduce the border controls according to their aspiration. For them it is not an excuse to decrease the safety. On the contrary, the cooperation of the police in the EU member states can only contribute to the improvement of the security in the countries (Van Dijk and Van Hoff, 1998). Manfred Weber, from the German conservative Christian Social Union (CSU) claims that the security in the Bavarian-Czech border area, where he lives, has increased after the abolition of the borders because the cooperation between the German and the Czech police is much better now than before.

Cornelia Ernst from the German Left considers that the central European institutions which did not react strong enough, in the case of the re-introduction of the borders by Denmark, have failed: “When Denmark sets permanent border controls for Sweden and Germany, then it is a breach of the agreement and I expect from the European Commission to treat it like that”.

The mutual resolution which was adopted on all these controversial discussions is reduced to the statement for “deeply regrets for the re-introduction of the limits”. Only with one sentence France is reproached – the influx of refugees does not justify the abolition of the Schengen Agreement.
If you carefully analyze the original formulation of the Pillar of Justice and Home Affairs (known as the third pillar of the EU), policies for asylum, migration and citizens from the third countries are accepted according to their solution in the Treaty of Amsterdam (1997) and as such are integrated in the EC Treaty. It also includes the problem considering the questions of international crime, various forms of judicial, customs and police cooperation, including the Office of Europol for exchange of information.

CONCLUSION

The freedom of movement of people and goods, the common European market and the single European currency are the most important benefits of the European Union during its 61 - year existence. The fact that two of its members began the changes which are somehow isolated appearances and without support from other countries, suggests that there are changes in the awareness of united Europe which Robert Schuman had in mind, the initiator of the European idea for unification. The European Commission and the European Parliament are the bodies with the power to take action for changing the situation. So far their efforts in that area have been limited.

Being aware of the precedent, France and Denmark explained the procedure that carried in anxiety into the European family, justifying it with acts that had validity (France with the agreement signed by Italy and Denmark with argument that it is a question of protection of their own territory from criminal and terrorist actions). The very fact is that it seeks support for what has been done, meaning that what happens is outside the practices of the European Union which stands for unity in every way.

I would not like to join the skeptics who, since the unification of the European Union, have claimed that it is an artificial creation which will eventually collapse after the example of the major federations in the world (USSR, Yugoslavia). However, I believe that, on the next summit of the EU Parliament, a solution will be found and that it will be focused primarily on the strengthening of the external borders of the European Union rather than the establishment of the internal border control, no matter how much invisible it will be.

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DANSKO „NE“ ZA DOGOVOR IZ ŠENGENA - POČETAK DEZINTEGRACIJE EVROPSKE UNIJE?

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THE DIALOGUE BETWEEN RELIGION AND SCIENCE: TRUTHS, IDEAS AND BELIEFS

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Abstract:
Science and religion are two distinct but not two hostile paths: two ever valuable efforts of human spirit! Science and religion would have less intellectual disputes and social conflicts if only both of them would explicate their principles, and then in even dialogue, espay and evaluate possibilities and frontiers of their principles and sorts of enabled questions and answers. Religion might be interesting for science as it opens new and unknown fields of human experience. Frontiers of science and religion are historically changeable, which does not mean that they can escape. Religion is not a sort of less developed science, but an independent way of thinking, beliefs and actions, offering to believer a solution of some problems otherwise unsolvable, even by assistance of science and its methods.

Key words: human development, independent thinking, social conflicts.

Between religion and science there is an old feud and hatred: even a collection of redundant insults could be made! With a few questions and answers, I will try to eliminate misunderstandings between them, for I believe that one should not renounce old truths in favour of new delusions. One such misconception is that science can solve all our problems – the misconception of scientism. A. N. Whitehead (Vajthed, 1976) said correctly: neither religion has always been wrong, nor has science always been right!

The importance of the question is of paramount importance for science, because only those who ask the right question can look forward to the correct answer. Here are just four questions about the relationship between science and religion which speak about the power as well as the weakness of science in the critique of religion.

If religion is an expression of ignorance, how come the progress in scientific knowledge cannot repress religion like ignorance? In other words: does religion weaken with the development of science?

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“The tremendous awakening, after the terrible earthquake, with new issues”
F. Nietzsche
If religious statements are scientifically false, why does 4/5 of humanity still believe in them?

If religion is really an illusion, is reality which does not need illusions possible?

If faith is opposed to reason, how come most wise minds of science have not found contradictions between reason and faith?

Here are four answers to four questions in the same order in which questions followed one another.

If the scientific development threatened religion, then in societies where science is developed to the highest degree, there would be the smallest number of believers. And that, according to the data and ordinary experience, is simply not true, because in societies where science has been developed the most, we find the largest number of believers.

The question now is: where does the idea that religion is dying out along with the development of science? This idea could only arise from the analysis of empirical data on visiting religious services in churches. All the research shows there is a decline in the number of believers who perform religious rites in the church: the church is in the world, but the world is not in the church!

Of course, the empirical data on the number of believers who perform church rites does not lead to the conclusion that religion is dying out, but only that the church form of religious belief is weakening. For example, there are 83% of believers in Finland, and only 5% visit the church once a week. In England the ratio is 60:10, in Denmark it is 80:13 etc. What does this mean? This means that the performance of religious rites is not a sufficient proof of faith, because one can regularly perform a religious rite, and not believe, and some may believe, but not perform religious rites. St. Augustine already knew this when he said: God has many that the church does not have and the church has many that God does not have. It is better to be with God without the church than to be with the church without God!

Therefore, a believer can remain faithful to their god although they do not go to church, and vice versa. The number of those who believe is much larger everywhere than the number of those who perform religious rites in a church. Faith is transferred from the public to the private sphere: from the visible to the invisible faith, from an objective event to a subjective experience! There is not a crisis of faith and faith is not dying, it is just changing its form.

Therefore, the same faith can live in different ways. A lonely believer occurs more often: every man presents his own church, and every man presents his own pope. Religiousness is a broader term than churchliness, because there are also religious people outside church.

Today, the church must come to terms with the fact that it no longer represents the whole nation, but only a part of the flock of believers – it is no longer the conscience of the nation in the multi-ethnic and multicultural society. There is salvation outside the church as well, although the church still preaches the extra ecclesiam nulla salus. From now on, we will have to get used to not to seek religious feelings, ideas and values only in traditional, i.e. church forms of religion, but beside them, outside them, even against them (a monk, a mystic, a heretic, a sect, a cult and a denomination). The church is no longer the only meeting place of people and their gods. A religious relationship can not be reduced to church affiliation. The emergence of personal faith is evidence that a believer’s choice is not finalized by his belonging to a religious institution. There is a wonderful saying: I live in a flock, but I hunt alone. Today it is even possible to choose God himself (Urlih, 2003).

A strong faith may not be a scientifically true faith. One belief does not have to be scientifically true, but it can satisfy some other needs. For example: when a tribe believes that a chatty woman will not have offspring, then women are reluctant to say much, so they are easier to be tolerated! Likewise, the belief that an evil spirit can enter a human being through their open mouth is not true, but it has a powerful influence on verbal behaviour of members of a community. This belief is certainly not true, but it makes sense, because it works, it is functional. Another example: a fairy tale is not true, but a fairy tale makes sense, because if it did not make sense, we would not tell it to our children and to each other. The fascist ideology is not scientifically true, but it makes sense, because if it had not, it would not have pulled such crowds. A lie is certainly not true, but a lie makes sense, because if it did not, people would not lie so much. The conclusion is clear: a true statement must make sense, a meaningful statement may not be true!

What does this mean with regard to our subject? This means that if a scientist denies the truth of theological statements, it does not mean that he denies the meaningfulness of religion.
(2003) often points out: If religious claims refer to the meaning of things, the question of their empirical confirmation is irrelevant. Some symbolical systems provide knowledge, other offer salvation. Joyous news of salvation may not be true, just like true news may not be joyous. If a doctor tells someone that they suffer from an incurable disease, then he told the truth, but the truth that kills. When you should tell the truth – it is advised by religious and moral standards. When you should not tell the truth – it is advised by experience and life. Standards are general, a decision is personal. Outside cognitive systems, the man is not concerned with the truth so much as he is with the salvation from the truth. Sometimes it does not matter if the answers to human suffering are true, it is important that they are comforting (Hese, 2006). There is so much evil in the world that every man needs a little hope and comfort. That is why even those who know a lot can believe: if faith once was the faith of the poor in spirit, there are signs that it becomes the faith of the rich in spirit! (Argil, 1975; Poinkare, 1989)

People evaluate their ideas and beliefs in at least two ways: gnoseologically and psychologically. A true idea can be rejected if it is unpleasant, and a false one can be accepted if it is pleasant. Truths are usually unpleasant. The doctor can tell his patient the truth which can make the patient die, but if instead of the truth he tells a noble lie, he might even help him. Psychologists express this in the following way: 1) What this man says seems true, but I find it uncomfortable, so I will not listen to him any more. 2) What this man says cannot be true, but I find it pleasant, so I will listen to him.

Problems posed by religion are not the ones which are solved by science. It has never solved them and it will never solve them! With religious ideas, beliefs and practices the man proves that for the questions, which he cannot provide a scientific answer for, he can offer an answer of another kind. In trouble, one does not look for a teacher, but a saviour. Scientists cannot solve problems that saints successfully solve. In this sense, religion is attractive for science in that it continually points to the limits of science and its methods: one lives on the imperfections of the other!

Science, as a form of rational thinking, which is aware of its limits, will not engage in issues that are beyond frames of rational solutions, since these are the issues of another type. The logic of reason is not the logic of faith. To delimitate means to prevent interference of one evaluation criterion with other forms of spirit. The reason, which is aware of its cognitive powers, is the mind, for it knows that it knows nothing of the occurrences that are beyond his cognitive power. “The use of reason in the debate about the holy is almost as meaningless as the attempt to eat soup with a fork. The existence of theology is only justified if it is completed with prayer and liturgy” (Armstrong, 2005).

The impotence of science opens up a vast field of religion. Science is a limited view of the world, which means that the wholeness of the world has never been and cannot be a subject of science. The man has a strong need to know the whole, that is, to connect his scattered information into one system. This is just what religion offers to him. For the truth is the whole. When the whole breaks into pieces, there is no more whole, or truth. Lao Tzu said a long time ago: Separate a cart into parts – and there is no more cart. God is a symbol of the synthesis of all our knowledge into one whole. F. Nietzsche has a right to shout: We infinitely yearn to be whole. In addition, science constantly changes its view of the world and many scientific truths have been proven wrong. S. Freud pointed out: the latest misconception in science is called the truth. Religious systems, by contrast, are not prone to changes. Lao Tzu warned that one should steer clear of science, because it is an endless quest, a never-ending adventure.

Science explains and understands some facts with the help of its rational concepts, theories and methods. All that is not possible to explain and understand in a rational way, it declares an illusion – it does not exist for it. Only what you can observe is a fact, and what cannot be observed is an illusion from the viewpoint of science. Science is a form of thought; religion is a way of life. No one has ever prayed to God in a scientific language. What the scientific language names an illusion is perhaps only a layer of the mystery of life, the mystery which is as real as life itself, but it remains unreachable and incomprehensible to the scientific language. K. Jaspers says well: The world in the consciousness is not everything at all. I. Kant in The Critique of Pure Reason saw far ahead: I had to abolish knowledge to get a place for faith. E. M. Remarque added: May the little jungle in us be blessed.

If religion is an illusion, how was it possible that all societies known to us had a religion, and how has the illusion been able to survive through the centuries, alongside with rational responses to
environmental and social challenges? If religion is an illusion, how was it possible for the illusion to become socially recognized and obligatory as a way of symbolizing collective experience? It is an illusion to believe that one can live without an illusion. In a world without illusions, the man is a stranger, Albert Camus pointed out.

How can an original system of beliefs, ideas and practices be regarded as a collective delusion, if it met socio-psychological and other needs and desires of the man? How is it possible that these misconceptions have lived for so long and survived all the external changes in nature and in society if they have not satisfied the emotions, intellect and will of people? It would be too much even for one misconception to last as long as the man himself: if a delusion lasted for so long, then the man himself would be a delusion!

A human being can feel and experience what he cannot understand and explain. They cannot think. "And I operated on many smart brains", - the neurosurgeon replied, "but I have never seen a single thought."

Confucius said: There is nothing more obvious than what eyes cannot see and nothing more tangible than what senses cannot feel. There exists not only what can be seen, but what cannot be seen as well. The thought cannot be seen, but it exists. The force of gravity exists, but it is not visible. Radioactive radiation exists, even though it cannot be seen. Ivo Andrić, in Signs Near the Travel-road, says exactly: When I can not see, I will not watch. There is a difference between those who watch and those who see. Those who watch perceive only things; those who see penetrate their soul, their essence. Some phenomena exist only if we believe in them (future, love and God). If we do not believe in them, they do not exist for us. In addition to the systems of knowledge there are systems of belief.

If we could know everything, we would have nothing to believe in: we believe when we do not know! Eastern wise men say: The biggest part of what we know is the smallest part of what we do not know. It is not true that faith ends where reason begins, it is true that faith begins where reason ends. Where reason grows weary, faith encourages. Faith and reason are the two powers of the same soul. What we can not learn through reason we will not declare non-existent. The most reasonable peoples in our history believed in the most amazing things, which only proves that the mind can not be and is not a natural enemy of faith. Socrates was the most sensible citizen of the Athenian state, but he went to the oracle whenever he needed to make a crucial decision. Faith can also be reached in a reasonable way, and not just through experience, feelings and actions. Pascal's famous bet on God says: If you believe in God, and God does not exist, you lose nothing, but if you do not believe in God, and God exists, you can lose everything. Therefore, even from a purely logical and rational point of view, it is better to believe than not to believe.

Faith is the first contact with the other world: perhaps with the better part of ourselves, which we are usually unaware of. There are experiences that we cannot express with words and concepts, and yet, they are experiences of something or with something, because if they were not related to something – they would not exist. These are the so-called mystical experiences. Mystical here means only that they cannot be rationally explained and understood. This is something which is not expressible but is present, and it demands to be recognized: the unconscious darkness in us! Because one cannot claim
that the experience of mystics is something empty, because every experience must be an experience of something. And when you keep silent about something, that something is nothing, just there are no words to say something, so it turns out that we are silent about nothing. Silence also points to something one is being silent about – silence can even be an eloquent speech.

We are closer to God when we are silent than when we talk about it. While we are silent, we suspect and keep a secret which cannot be put into words. By keeping silent we pay respect to the unutterable. We must be aware that both what is said and what is not said, i.e. the unutterable, which has to be testified by silence, are the truth. The expressible and the inexpressible create our experience together, so we can believe both those who speak and those who remain silent. Something expressible refers to something inexpressible. Religion knows best the limits of human expression – that is why a mystic keeps silent. We need a lot of talk and even more silence.

In deep mourning, when you bury someone close to you, not a single word can be heard. Even Aristotle observed that in such circumstances it is unwise to say anything, you can only move a finger. Any talk about it is just one more mistake. It is the experience beyond language, and therefore the experience has the advantage over knowledge. Cemetery is identified with silence which tells the man about himself: about his ultimate destiny and tranquility! The poet says well: Landscapes of our blood remain nameless. A concept and a word cannot express what a look and silence can. Two people in love create a community of looks and silence. There are experiences that are beyond language, unspeakable in any way. And when you try to express them, you meet insurmountable difficulties. When the feelings and thoughts are transferred into words and concepts, a betrayal always occurs.

A mystic does not lose interest in a mystery that will never be expressed through a language. A. F. Capra in The Tao of Physics said: Science does not need mysticism and mysticism does not need science; but the man needs both (Kapra, 1989; Gerc, 1989). Now it becomes clear that the so-called historical conflict between science and religion is a wrong understanding of both, because there is no conflict between them and there can not be one, if we draw a clear distinction between scientific and religious statements.

If we, as intelligent beings, agree that a part of our lives can be explained and understood in scientific terms and theories, we can also agree with the fact that a part of our lives resists the scientific method of thinking. In other words, life is partly clear, partly mysterious: at one moment it calms us, at another it disturbs us.

The science itself, which by its nature denies faith, is either indifferent to religion, or everything it handles is completed on the basis of religion. The search for the truth is based on a belief that there is the truth, just like the search for the meaning of life is based on a belief that life has a meaning. The statement that the thoughts of a scientist are founded means only that they are based on a certain assumption, which he believes to be productive although he does not know if it is true. Since his cognitions are based on the assumption adopted by faith, it follows that the cognitions are, in fact, beliefs and there is not a method with which they can be proven as completely certain. S. Kierkegaard says correctly: Faith is the rope which you must hang onto unless you want to hang yourself. Hugo would add: Everything hangs, but nothing falls. Empirical science cannot build a foundation in itself and is therefore forced to found itself on assumptions around it. As theology is based on a certain assumption, its destiny is shared by science as well. Science as organized skepticism harbours distrust towards a priori discovered or revealed truths, until it is convinced that it is based on these truths itself. Maybe science has the advantage of replacing one assumption with another, which is not possible in theology. In any case, since science as a system of knowledge is based on a system of belief, it is clear that it can not be a purely rational activity. Anselmo is right: I believe that I can understand.

CONCLUSIONS

The difference between scientific and religious statements can be found in the field of logic, since theological statements can be extremely logical, just like scientific ones (a good example is Thomas Aquinas). Illogicality can be taken as the first sign that it is not about scientific statements. E. Fromm warned that even paranoid thinking may be logical – logic does not rule out insanity. If false statements can be just as logical as truthful statements, then the difference between them cannot be found in the field of logic. In other words, true thinking has to be correct, correct thinking does not have to be true. Everything
can be logical, nothing may be true. Logic teaches us the correct way of telling incorrect things. A lie can be presented in a logical manner, as well as all other misconceptions. Beware of logic, because it may, not necessarily, have to do with the truth. True knowledge does not necessarily have a logical form, because the truth can be found even in forms that are not purely logical, but perhaps theological or mythopoetic.

The difference between scientific and religious statements cannot be reduced to the difference between sense and nonsense, because theological statements are extremely meaningful, just like scientific ones. Statements about God, devil, angels, ghosts, etc. are not factual statements but evaluations, and therefore assessment criteria of statements about facts should not be applied to them. These are two lines of statements that should not be confused. Holy books are not sciences about the man, but instructions for his salvation. And no instructions spring out of empirical science. From the scientific analysis of free-falling body nothing can be concluded about the moral decline of the man. It is one thing to know the chemical composition of water, and the other to give a thirsty man to drink. The fact that a man is tall does not mean that he also has high moral values. Therefore: a statement about a fact and its evaluation talk about the same thing, but in different ways. Evaluations cannot be derived from facts, but they refer to facts. Because one thing is knowledge of the facts and the other is awareness of the value meanings: the former is useful for thinking, the latter is good for living. The former is, therefore, a fact and its significance for science and the latter is value and its importance for life.

It is wise to distinguish between significance and meaning. An event can be very significant regarding its socio-psychological consequences, and have no meaning or sense. One event may have no significance regarding its socio-psychological consequences, but has an exceptional meaning, because it is full of truth and sense. The events referred to in the Holy Scriptures are not important in themselves, but the significance or the meaning of these events (real, potential and imaginary) for believers and their lives are of utmost importance. These events could happen at any time and anywhere, even in imagination, which is completely irrelevant, because historical facts and historical time are not important, but superhistorical meanings and mythical time (the Greek philosophy and Roman law with their meanings defy time and are a slap in the face of time).

The difference between scientific and religious statements can not be determined even with respect to truthfulness, since both types of statements are true within their domains and criteria of truth which are valid in them. Only when theological statements refer to empirical facts, they can be verified, refuted, rejected or accepted by science, whereas in any other case, science cannot say anything about the value of such statements, even if they are true or not. Empirical science cannot say anything about superempirical meanings (Dokins, 2007). However, the dialogue between science and religion is enabled by the existence of rational dimension in both systems of ideas, beliefs and practices. Therefore, a critique of religion from the standpoint of science includes only the rational (cognitive, intellectual, logical and conceptual) layer of religion, that is, the dogmatic or rational theology, while other layers remain mostly beyond the reach of the criticism. A rational critique of religion cannot be successful to the same extent in which religion relies on irrational layers in the experience of a believer.

Science and religion are two different paths leading the man towards the truth about himself and the world he lives in. These are two different but, by no means, two hostile paths: two equally worthy efforts of human spirit! This mental and humane assumption about equality in the dialogue excludes all those points of view implying those religious ideas, beliefs and rituals on a lower level in the development of the man’s relationship with the world and himself, and this level of development will be overcome when the man masters scientific methods of understanding and ruling the world and himself as well. Religion is a property of the human spirit, and not a lower level in its development. The man is an incurably religious being.

The difference between scientific and religious statements can only be found in the area of human needs and desires: scientific statements meet the need for rational knowledge; theological statements meet the needs beyond knowledge (the need for consolation, salvation, the ultimate meaning of life and death). Any belief which does not meet some human needs and desires is condemned to extinction. Religion is not extinct. It meets some permanent needs and desires. So, the future of religion does not depend on a rationalist critique of religion, or the development of rational theology, but the needs and desires of people and ways of solving their problems. Rationalism is far from understanding life: it is an offspring of a writing-desk. Religious faith should not be interpreted as irrational, but
only as a different form of spiritual understanding and expression of our experience. Religion is not a science in its infancy, which will move to a museum when the science grows up, but it is an independent way of thinking, the beliefs and actions, in which a believer solves some of his problems, those that cannot be solved in other ways, including the support of science and its methods. Religion is not a form of underdeveloped science. If science led to disbelief, then scientists would all be nonbelievers, and that is simply not true.

Ultimate achievements in science, philosophy and art came from the ranks of scientists, philosophers and artists who were believers, in one way or another. Mohammed said: There are two things I abhor: a learned man who does not believe and a pious fool (Emerson, 1997).

If you forget everything I have said, I would like you to forget the last thing I am about to utter now. If one says that religion is a delusion, it has not been said to be a lie yet; if one says that it is not the truth, it has not been said not to make sense yet; if one says that it is an illusion, nothing has been said about its life value yet; if one says that it is old, it is not said to be outdated.

If this paper begins with the questions where all my hopes and doubts have been risen, it is understandable that I have not searched for the answers only in one direction and clearly defined. The philosopher of the will to power said: I’m too curious, too inquisitive, and too impetuous, to like a response as harsh as a fist.

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- introduction,
- main text,
- conclusion.

Footnotes/Endnotes/Acknowledgements: We encourage authors to restrict the use of footnotes. If necessary, please make endnotes rather than footnotes. Information concerning research grant support or the assistance of colleagues should appear in a separate Acknowledgements section at the end of the paper, not in a footnote.

5. REFERENCE LIST

A complete reference should give the reader enough information to find the relevant article. Please pay particular attention to spelling, capitalization and punctuation here. Completeness of references is the responsibility of the authors. Please avoid references to unpublished materials, private communication and web pages. The surname of the author and the year of publication appear in parentheses after the citation, for example (Fisher, 2010). If more than one publication by the same author appear in one year, they must be distinguished by an a, b, etc., for example 2001a, 2001b. In case of quoting the actual words of another author, the page number should be provided, e.g. (Hollard, 2010, p.23). If the name naturally occurs in the sentence, only the year is given in parentheses, e.g. “Benoliel (1999) thinks…” If there are two authors, the surnames of both should be given (Fisher and Hollard, 2009). If there are more than two authors, the surname of the first author only should be given, followed by *et al.* (Wilson *et al.* 2008).

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A complete reference should comprise the following:

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Tables and figures and/or schemes should not be embedded in the manuscript but their position in the text indicated. In manuscript tables and figures should follow the text, each on a separate page.

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Authors should use tables to achieve concise presentation or where the information cannot be given satisfactorily in other ways. Tables should be prepared with the aid of the Word table function, without vertical lines. The minimum size of the font in the tables should be 10 pt. Tables should not be incorporated as graphical objects. Styles and fonts should match those in the main body of the article. Tables should follow the text on the end of the manuscript and should be numbered consecutively using Arabic numbers and their position in the text should be indicated. Each table should have an explanatory caption which should be as concise as possible.

7. FIGURES

Authors may use line diagrams to illustrate theses from their text. The figures should be clear, easy to read and of good quality. Styles and fonts should match those in the main body of the article. Lettering and lines should be of uniform density and the lines unbroken. Axis labels should be in bold face. Units should be placed next to variables in parentheses. Figures should follow the text on the end of the manuscript and should be numbered consecutively using Arabic numbers and their position in the text should be indicated.

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All equations must be numbered, Arabic numbers, consecutively in parenthesis at the end of the line, as presented:

$$NSV = \sum_{k=0}^{n} NP_k \cdot a_k$$

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