

Organizacija



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Organizacija

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Evaluating Logistics Suppliers in the Slovenian Market

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This paper focuses on logistics performance of companies in the Slovenian market. The research is analysing the point of view of managers in production, trade and services oriented companies about their logistics needs. Specifically, we examined their perception of different characteristics of a logistics provider and their evaluation in the process of outsourcing. There are few logistics functions that have been outsourced.

This paper presents the outsourcing process with of outsourcing characteristics. The authors also identify elements of a successful outsourcing strategy, basing their conclusions on the research on the sample of 150 the biggest Slovenian companies.

The authors will intend to answer the following question in the research: Which indicators do customers use to evaluate their suppliers? It would be expected that in purchase decision processes, customers give strong consideration to the resources and the competence of the supplier as criteria to provide higher quality and more reliable and efficient transportation of goods. One of the aims of research will be to measure the perception of respondents about the different characteristics of logistics provider. Within any organization, there will be differences of opinion about key buying factors, their importance, and how well the company performs on each factor.

Key words: Logistical services, Outsourcing, Logistical provider, Logistics

Vrednotenje dobaviteljev logističnih storitev na slovenskem trgu

Prispevek se nanaša na logistične značilnosti organizacij na slovenskem trgu. Z raziskavo smo proučevali sedanja stališča managerjev v proizvodnih, trgovskih in storitvenih podjetjih organizacij glede potreb na področju logistike. Še posebej smo raziskovali zaznavanje različnih dejavnikov logistične oskrbe in njihovo vrednotenje v procesu outsourcinga. Obstaja nekaj logističnih funkcij, ki jih lahko vključimo v outsourcing.

V prispevku je predstavljen proces outsourcinga in njegove značilnosti. Na osnovi vzorca 150 največjih podjetij v Sloveniji so bili v raziskavi ugotovljeni elementi uspešne strategije outsourcinga.

V raziskavi so avtorji hoteli odgovoriti na naslednja vprašanja. Katera merila kupci uporabljajo za ocenjevanje svojih dobaviteljev? Pričakovati je bilo, da bodo kupci v procesu nakupa dali večji poudarek virom in kompetencam dobavitelja pri doseganju visoke kakovosti, zanesljivosti in učinkovitemu transportu.

Eden od ciljev raziskave je bil tudi merjenje zaznavanja anketirancev glede različnih karakteristik logistične oskrbe. Znotraj organizacij obstajajo različna mnenja glede ključnih dejavnikov nakupa, njihov pomen in kako dobro podjetje obvlada vsak dejavnik.

Ključne besede: logistične storitve, outsourcing, logistika, logistična oskrba

1 Introduction

Operating conditions in logistic industry with the accession to European Union change considerably. Slovenia has already joined to European Union, but also other transition countries in the Former Yugoslavian countries will face the time of accession to the European common market. Therefore, for companies operating in those mar-

kets primary goal is to extensively prepare for the new business environment. Slovenian logistical companies have stressed the issue of adjusting the number of employees to the scope and structure of operations following Slovenia's accession to the European Union.

Competition among logistical companies is increasing because of these changing market conditions in the Former Yugoslavian countries. Slovenian logistical compa-

nies are adapting to new common European market. They are reacting to strong competition in logistics industry by becoming more involved in the supplier selection process, by outsourcing logistical services and by becoming more critical, detailed, and comparative in their supplier evaluation.

Logistics companies in Former Yugoslavian countries are adapting to development guidelines at various levels. Like Mentzer et al., (2004) argued logistics offerings are subject to differences across countries. Logistics service expectations differ across national and cultural boundaries, enhanced personal interaction frequently occurs in service settings, and service use patterns frequently differ across countries as well as more traditional influences such as timeliness and responsiveness.

Overall, in this paper is to present a research, the objectives of which are:

- to review the existing literature in logistics as a functional system and the outsourcing of logistics activities,
- to outline different set of criteria for choosing the most suitable logistics provider, and to explore which indicators customers use to evaluate their logistical suppliers,
- to identify the significant outsourcing logistical activities, and
- to examine who is taking the buying decision of logistics in sample companies.

The paper consists of two parts. First, the theoretical foundation for the outsourcing of logistical services and for the analysis of manager's perception of characteristics of logistics provider is provided. Second, the empirical analysis, based on the primary data collected is presented. The results will render possible the preservation of the competitiveness of the logistics services on the Slovenian market.

2 Literature review

2.1 Outsourcing partner selection

The basic concept of outsourcing is unambiguous: It involves choosing a third party or outside vendor to perform a function or tasks supporting that function in order to incur business benefits. The outsourcing arrangements can be grouped into four categories: out-tasking; co-managed services, managed services and full outsourcing, also known as business process outsourcing (Sanders and Locke, 2005).

Boyson et al., (1999) examined the reasons why some logistics outsourcing partnerships are successful and how best to manage a 3PL relationship. In particular, their research identified the most effective means and methods for evaluating and selecting 3PL from outsourcing user's perspective, and identified the most effective means for organizing, operating, and monitoring 3PL relationships. Sink and Langley (1997) presented a conceptual model of the 3PL purchasing process, which, according to their

analysis, consists of five distinct steps or phases. Overall, approximately 60 per cent of Fortune 500 firms report having at least one contract with a third party logistics provider (Lambert et al., 1999).

A recent study by Persson and Virum (2001), discusses the potential economic advantages of logistics outsourcing. Some of these are: the elimination of infrastructure investments; access to world-class processes, products, services or technology; improved ability to react quickly to changes in business environments; risk sharing; better cash-flow; reducing operating costs; exchanging fixed costs with variable costs; access to resources not available in own organization.

As recently as a decade ago, 3PL was an emerging industry in many parts of the world. However, the rate at which use of these services grew, the rate of growth across functions and the reasons for this growth differed in different parts of the world. In Europe, firms tend to use 3PL both for international transport and for the distribution of products in foreign markets. Nearly two-thirds of the European distribution centers used by American, Japanese, Korean and Taiwanese manufacturers are managed by 3PL providers (Mckinnon, 1999). 3PLs helped firms deal with multinational transportation requirements and inconsistencies.

Several recent studies have addressed the issue of growth in the 3PL market and other freight intermediaries in detail. A study by Murphy and Poist (1998) provides a review and synthesis of research on this topic. A main part of supplier selection research is oriented towards the purchase of products rather than services. It reveals that supplier evaluation and selection is employed routinely in industrial purchasing. Most evaluation methods used by industrial buyers could be classified into three basic types: (1) a categorical approach; (2) a weight-point plan; and (3) a cost-ratio method (Sink and Langley, 1997).

Candidate evaluation begins with the establishment of selection criteria. Quality, cost, capacity, and delivery capability are used to evaluate distribution providers. In selecting an external logistics provider, however, the criteria are typically more rigorous. References provided by current customers, cultural compatibility, and financial strength, depth of management expertise, operating and pricing flexibility, and information system capabilities play essential roles (Sink and Langley, 1997).

Specialists in logistics prepared a process model of how to choose an external supplier. The process includes five steps:

- (1) Defining the need for transferring logistics services onto external suppliers.
- (2) Elaboration of alternative solutions.
- (3) Evaluation of candidates and deciding for a supplier.
- (4) Realization of services (transfer onto external supplier).
- (5) Evaluation of external supplier's work.

Elaboration of criteria for selecting potential external suppliers in logistics is very important. There exists an extra study about the importance of parameters – features

of logistics' quality (Menon, McGinnis and Ackerman, 1998).

2.2 Managers' perception of the importance of characteristics of logistical provider

Mentzer et al., (2004:15) found out that logistics services have become a significant source of competitive differentiation between firms. »Diverse regulations across borders, longer lead times, and increased transportation costs all add to the difficulty of managing logistics services internationally. As a service offering, logistics is often characterized by intensive customer contact, extensive customization requirements, and a reliance on extrinsic cues for service performance. Because of these qualities, logistics services are also subject to cultural influences that exist in cross-border trade«. In the case Balkans countries exists several differences (religious and cultural issues, trade regulations, shipping distances, and cross-currency issues etc.) between them and as a result we found different research results. And as further Mentzer et al., (2004: 15) suggested that identifying specific customer segments, some which may transcend national borders, logistics managers can benefit from reduced costs, enhanced revenue, and the ability to differentiate their offering from the highly competitive marketplace.

The buying behaviour literature suggests that the importance of particular purchase makes a difference in terms of the buying process. A purchase can be important for the firm for several reasons. Purchased service attributes can be differentiate based on whether they are standard or non-standard, simple or complex and have a standard or a novel application. Purchases involving large expenditures, difficult to obtain items, or irreplaceable supplies are very important or "strategic" buys (Maltz and ElIram, 2000). We are agree that purchasing industrial services, like logistical services, is a time-consuming, complex, and expensive activity.

Which indicators customers use to evaluate their suppliers? We would expect that in their purchase decision processes, customers would give strong consideration to the resources and the competence of the supplier as the means necessary to provide higher quality, more reliable and more efficient transport of goods; therefore, the service provider must ensure a complete execution of all logistics and related activities. As a result, as Murphy and Poist (1992: 14-23) and Bardi et al., (1989: 4-11) point out, companies now tend to differentiate and select carrier or shippers on the basis of more specific attributes, such as "timeliness" and "reliability". Vaidyanathan (2005: 93) argued that logistics managers consider information technology, quality, cost, services, performance and intangibles as important factors in selecting logistics providers.

One of the aims of our research was also to measure the perception of respondents about different characteristics of logistics provider. Selecting the right list of factors can be difficult. Within any organization, there will be differences of opinion about the key buying factors, their im-

portance, and how well the company performs on each factor. Most logistical providers choice research has concerned itself with the identification of those benefit attributes that companies perceive to most differentiate logistical providers (Lambert et al., 1993: 21-28; McGinnis 1990: 12-19; Murphy and Hall 1995: 14-23).

Because of the market competitiveness most logistics providers tend to expand their operations in other countries. Research by Stone (2001) studied the approaches that U.K. logistics service providers have used to implement expansion within the single European market. The study found that expansion has proved demanding and, for many U.K. logistics service providers, the single European market has yet to fulfil its initial promise.

One of the major challenges of services marketers is the assessment of the quality of service offerings. Because of the general nature of services (i.e. intangibility, inseparability, heterogeneity, and perishability), service quality is usually difficult for customers to evaluate (Palmer and O'Neill, 2003). In conceptualizing physical distribution service quality, Mentzer et al., (1989) synthesize 26 elements of physical distribution and customer service reported in the logistics literature over more than two decades to arrive at a parsimonious three dimensional construct composed of availability, timeliness, and quality (Mentzer, Flint and Hult 2001: 83). This structure was supported by later empirical evidence, with slight reconceptualizations based on additional extensive qualitative research (Mentzer et al., 2001: 83; Bienstock et al., 1997).

As Svensson (2002: 426) said »altogether, marketing activities and logistics activities may be seen as a chain of interdependent activities that complement each other in order to facilitate the exchange.« In our empirical research we explore the close interrelationship between marketing communications and logistics.

3 Empirical findings

3.1 Company profile

The main research instrument for empirical investigation, e.g. a questionnaire, was developed on the derived theoretical basis. The covering letters with questionnaires were mailed to the corporate directors of 150 the biggest Slovenian enterprises. We choose the strata based on the annual net profit. The survey was conducted in January, 2005. During the four-week period following the mailing, a total of 37 responses were received and that gave the response rate of 24,7%. The results present in this paper are related to the sample of 37 respondents. While one would have preferred a higher response rate or a larger sample, it should be noted that most previous studies of logistics outsourcing have involved no more than 250 responses (Boyson et al., 1999). As such, the 37 usable responses in the present research would appear to offer a plentiful and appropriate database for research of logistical providers.

The collected empirical data were processed with SPSS 10.0, where the emphasis was given to descriptive statistical analysis. We intend to use the regression analysis and hypothesis testing. The regression analysis and hypothesis testing produced very modest research findings because of the too small sample of the companies in the sample.

Some of the possible limitations of the survey results should be noted. First, the low response rate might be considered a concern, but in fact, it is expected in organizational research as opposed to consumer research (Hansen et al. 1996: 85). When small sample sizes are being employed, when each subpopulation of interest has fewer than 30 respondents, we should be very careful to ensure that any inferences are appropriate given the data collection. But in this paper a small sample represents a high proportion of our population and such concerns are less relevant (Bock 2002: 240).

The relevant data of the companies were provided mainly by members of the managing boards (70,3% of cases). Other respondents appeared in not more than three companies.

Table 1: Position of respondents in the companies

Position in the company	Frequency	(%)
Members of the managing board	26	70,3
Head executive	4	10,8
Counselling specialist	2	5,4
Business consultant	2	5,4
Other	3	8,1
Total	37	100,0

The companies included in the sample are distributed according to industries (see Table 2).

Table 2: Distribution of the companies in the sample according to industries

Industry	Frequency	(%)
Production of industrial products	11	29,7
Trade	9	24,3
Production of consumer products	6	16,2
Business services	6	16,2
Services for final consumer	5	13,5
Total	37	100,0

The sample consists of one company (2,7%) with less than 100 employees, 35,1% of the companies with less than 500 employees but more than 100, 35,1% of the companies with the number of employees bigger than 500 but

smaller than 1001, and 27,0% of the companies with more than 1000 employees.

Table 3: Size of the respondents companies

Number of employees	Frequency	Percent (%)
51-100	1	2,7
101-500	13	35,1
501-1000	13	35,1
More than 1000	10	27,0
Total	37	100,0

3.2 Market characteristics and business strategies of entrance on foreign markets

Then respondents in the surveyed companies were asked about their largest sales geographic region. The respondents had the possibility to choose among different answers. The results show that the largest respondent sales market is Slovenia, followed by markets of former Yugoslavian countries. The next large sales market is the market of EU countries, followed by the market of East Europe.

Table 4: Respondents largest sales geographic region

Geographic region	Frequency	(%)
Slovenia	36	97,3
Former Yugoslavian countries	27	73,0
EU	25	67,6
East Europe	25	67,6
CEFTA	22	59,5
USA	12	32,4
Pacific - Asia	10	27,0
Australia and New Zealand	9	24,3
Japan	8	21,6
Africa	8	21,6
Latin and Middle America	6	16,2

The presented research findings in the continuation relate to the above-stated sample of companies.

One of the main issues of research was to explore the business strategy of entry in the new market in the sample of Slovenian companies. With the growth of international trade, an increasingly diverse array of products of different national origins is now available in many countries throughout the world. This has resulted in greater interest

in examining the primarily business strategy of entry in the foreign markets. The respondents had the possibility to choose among different answers. The data analysis shows that the most often planned business strategy in the sample of Slovenian companies were the strategy of market development (76,3%) and the strategy of new product development (73,7%). Opening the own company's subsidiary in the foreign market (50,0%) was the next most often used business strategy, following by outsourcing (42,1%), the strategic alliances with other companies appeared in 39,5 percent of cases while alliances with companies of raw materials appeared in 31,6 percent of respondents. The less often used business strategy for the entry in the foreign market was by respondents the licence agreement (13,2%).

Table 5: Business strategies used for entry in the foreign markets

Business strategy	Frequency	(%)
Market development	29	76,3
Product/service development	28	73,7
Opening of company's own subsidiary in the foreign market	19	50,0
Outsourcing	16	42,1
The entrance on foreign market with alliances	15	39,5
The strategy of alliances with companies of raw materials	12	31,6
Licence agreement	5	13,2

To understand the differences in the respondents' view of the chosen business strategy of foreign market entrance, we tried to find out if there are some statistical differences between companies of different main activity or industry. We compared the groups of companies according to industries (production of industrial products, trade, and production of consumer products, business services and services for final consumer). Accordingly, we make the hypothesis as follows:

Null hypothesis H_0 : There is no difference among groups of companies of different industries regarding business strategies.

Alternative hypothesis H_1 : There is a difference among groups of companies of different industries regarding business strategies.

We made the cross-tabulation for all business strategy of entrance on the foreign market in the table five. We used chi-square statistic (χ^2) to test the association between the dependent variables (business strategy) and the independent variable (industry). The results indicated a statistically significant difference for two specific business strategy regarding entrance on foreign markets e.g. product or service development ($p=0,043$) and strategy of opening the company's own subsidiary in the foreign markets ($p=0,034$). So, we can reject the null hypothesis and conclude that there is a significant difference among five groups of companies regarding following business strategy: product or service development and opening the

company's own subsidiary in the foreign markets. No other statistically significant differences among the remaining business strategies were found.

3.3 The overview of logistics in Slovenian companies

In our research we were interesting if Slovenian companies are planning, executing and control the whole logistical chain. The 78,4 percent of respondents answer in the affirmative, while the remaining 21,6 percent of respondent answer in the negative. Results show that respondents are aware of managing the entire logistical function.

Table 6: The indicators to evaluate logistics suppliers

The indicators to evaluate logistics suppliers	Frequency	(%)
Competitive price and payments conditions	26	68,4%
Adequate quality of logistical services	23	60,5%
On-time delivery	21	55,3%
Reliability of offered logistical services	17	44,7%
Technical equipment and ability to manage the entire logistical function	12	31,6%
The full service of logistics and connected services	10	26,3%
The speed of delivery	7	18,4%
The size of logistics provider	1	2,6%

One of the objectives of the paper was to explore which indicators customers use to evaluate their suppliers. Respondents had the possibility to choose among different answers. Results show (see Table 6) that the competitive prices and payments conditions were by respondents the important factors in selecting logistics providers (68,4%). The research suggests that respondents are given more importance to following factors in choosing logistics provider: adequate quality of logistical services (60,5%), on-time delivery (55,3%) and reliability of logistical services offered (44,7%). Managers also consider technical equipment and ability to manage the entire logistical function, the full service of logistics and connected service and the speed of delivery as important factors in selecting logistics providers. From results, it appears that firm characteristics (such as the size of logistics provider) influence the choice of logistics providers.

Purchasing industrial products and services is a time-consuming, complex, and expensive activity. To properly understand organizational buying we must be knowledgeable about the business buying center concept. One way to view a buying center is to categorize members which decide of purchases. It is useful to consider the various people within an organization who might be called

upon to contribute to a purchasing decision. One individual or a group of individuals may perform different roles; he can act as initiator, gatekeeper, influencer, decider, user or buyer (Mahin 1991).

The results show that the purchase department is usually taking the buying decision (55,3%), followed by the logistics department (47,4%) and sales department or marketing department (36,8%). Directors are also taking buying decisions (28,9%). Respondents had the possibility to choose among different answers.

Table 7: Department taking a buying decision

Department	Frequency	(%)
Purchase department	21	55,3%
Logistics department	18	47,4%
Sales department/Marketing department	14	36,8%
Director/President of the Managing Board	11	28,9%
Managing Board	1	2,6%
Finance department	1	2,6%

The data in Table 8 indicate the percentage of different logistics activities outsourced by responding organizations. Approximately one-third of the responding organizations outsource either two or three logistics activities, while fewer than 10 percent of the responding organizations outsource one logistics activities. The most frequently outsourced activity (92,1 percent of respondents) is "road transport", followed by "customs broking" (44,7 percent of respondents) and "distribution" (39,5 percent of respondents). In 18,4 percent of cases, Slovenian respondents outsourced "warehousing", while product marking, labelling and packaging is outsourced by 13,2 percent of respondents.

Table 8: The most often outsourced logistical services by Slovenian companies

Outsourced logistical activities	Frequency	(%)
Road transport	35	92,1%
Customs broking	17	44,7%
Distribution	15	39,5%
Warehousing	7	18,4%
Product marking, labelling, and packaging	5	13,2%

4 Conclusion

This paper also expands previous research on logistics functional processes and logistics outsourcing on the Slovenian market.

There are several implications of these findings for logistics management. Results indicate that have different business strategies of entrance on foreign markets across

countries can contributed to the development of different marketing strategies for those market segments. And also, the effectiveness of entire logistical function depends upon which logistics provider use. The logistics marketplace is highly competitive, and thus suggests that managers are involved in selection of logistics provider. Furthermore, outsourcing plays an essential role in the logistics industry. The survey identified the following as significant outsourcing functions: road transport, customs broking, distribution, warehousing, product marking, labelling, and packaging.

Because of the differences across companies in selected business strategy in foreign market entry, we conclude that managers should develop different marketing strategies for entrance on foreign markets across industries. A better understanding of entire logistics function from the planning, through implementation and control in the sample of Slovenian companies, would contribute to business organizations in the field of logistic industry.

Future research should examine the evaluation the logistics providers and outsourcing in other South-Eastern European countries. The comparison of these findings in other business environments and situations will benefit the competitiveness in logistics market.

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Some Aspects of Business Ethics in Family Enterprises in Slovenia¹

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At the most basic level a family enterprise may be defined as an enterprise, which is controlled by members of a single family. But family enterprises are not homogenous. They vary in terms of degrees of family involvement. The research cognitions described in the present paper show that 30,9 % of the observed enterprises face strong influence of the families through the ownership as well as management of the enterprise.

The main purpose of our paper is therefore to better understand the association between the degree of involvement of a family in ownership and management of a family enterprise and the business behavior of family enterprise in different business situations. The main data source for our paper is the survey of 350 SMEs in Slovenia.

Overall findings suggest that enterprises, characterized by a high degree of family involvement do not differ significantly from the firms that are characterized as non-family ones, regarding the total sales revenues, economic efficiency, value added per employee, export orientation and cooperation with large companies. The same goes for firms characterized with a low degree of family involvement. It is very likely, that in the present state of development of family firms and market economy in Slovenia, the degree of family involvement is not crucial for business behavior and business performance regarding the variables analyzed. Several extensions of our research are also proposed.

Key words: Business ethics, Family enterprises

Nekateri vidiki etike podjetja v družinskih podjetjih v Sloveniji

Družinsko podjetje lahko opredelimo kot podjetje, ki ga obvladujejo člani družine. Vendar pa družinska podjetja niso homogena skupina podjetij. Razlikujejo se glede na stopnjo vključenosti družine. Po rezultatih raziskave, ki jo opisujemo v prispevku, je v 30,9% proučevanih podjetij prisoten močan vpliv družine z lastništvom in vodenjem teh podjetij. Glavni namen prispevka je zato razširiti razumevanje povezave med stopnjo vključenosti družine v lastništvo in management ter obnašanjem družinskega podjetja v različnih poslovnih situacijah. Glavni vir podatkov je bila raziskava 350 malih in srednje velikih podjetij v Sloveniji. Rezultati raziskave kažejo, da se podjetja z visoko stopnjo družinske vključenosti v podjetje bistveno ne razlikujejo od nedružinskih podjetij, in sicer ko gre za proučevanje razlik v poslovnih prihodkih, uspešnosti, dodani vrednosti na zaposlenega, izvozni usmerjenosti in sodelovanju z velikim podjetji. Enaka ugotovitev velja tudi za podjetja z nizko stopnjo vključenosti družine v podjetje. Glede na trenutno stanje razvoja družinskih podjetij in tržne ekonomije v Sloveniji stopnja vključenosti družine v podjetje ni ključnega pomena za obnašanje in uspešnosti podjetij (z vidika analiziranih spremenljivk). V prispevku predlagamo tudi smeri nadaljnega raziskovanja.

Ključne besede: etika podjetja, družinska podjetja

1 Introduction

At the most basic level a family enterprise may be defined as an enterprise, which is controlled by members of a single family. Numerous attempts (especially in developed market economies) to define a family enterprise are found in the literature; we pay attention to this issue also

in our research carried out in Slovenia. We assume that some characteristics of a family enterprise in transition economy are different from that in developed market economy.

Family enterprises are not homogenous. Empirical researches have revealed that, among others, family enterprises vary regarding the degree of family involvement in

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ownership and management. Family system forms fundamental principles, values and norms that influence culture and business ethics of a family enterprise. It may be expected, that the degree of this influence varies regarding the degree of family involvement in ownership and management. Business ethics in our paper is understood as the system of norms and rules that had to be followed, especially by the management.

Main purpose of our paper is to better understand the association between the degree of involvement of a family in ownership and management of a family enterprise and the business behavior of family enterprise in different business situations. The main data source for our paper is the survey of 350 SMEs in Slovenia.

The paper is structured as follows: in the third chapter the literature review is presented regarding the importance, characteristics and definitional problems of family businesses in developed market economies as well as in transition countries. In the fourth chapter business ethics in family businesses is discussed. In the fifth chapter hypotheses are formed, while in the sixth chapter data collection and methodology used are presented. After findings in the seventh chapter, conclusions are presented in chapter eight.

2 Literature review on family enterprises

Although family businesses are no doubtfully considered as a very important part of economies – this holds for developed market economies as well as for transition countries – there is a lack of consensus regarding the definition of a family enterprise. In the literature three main streams regarding this issue may be found (Sharma 2004): articulation of multiple operational definitions of family enterprises (for example: Westhead and Cowling 1998; Astrachan and Shanker 2003), development of scales to capture various types of family involvement (for example: Astrachan et al. 2002) and the development of family firm typologies (for example, Sharma 2002). The focus of most of these efforts has been on defining family enterprises so they can be distinguished from non-family enterprises. None of these articulations has yet gained widespread acceptance.

However, while differences between family and non-family business have been explored (for example: Jorissen et al. 2005; Westhead and Cowling 1997; Klein 2000b), it should be recognised, that family firms are not homogeneous. Empirical research has revealed that family enterprises vary in terms of degrees of family involvement (Westhead and Cowling 1998; Sharma 2004). Three key issues have been frequently utilized when describing family involvement (found in the literature described above): (i) whether a single dominant family group owns more than 50 percent of the shares in a business, (ii) whether the firm is perceived by owners/managers to be a family one and (iii) whether a firm is managed by members drawn from a single dominant family group. These three issues are also

used later on in this paper with the purpose to analyse the strength of family involvement into the family business.

At the heart of this issue is whether family business entrepreneurs will place family concerns over business success or growth. Ward (1987) contends that they differ with respect to their inclination to pursue a business-first or a family-first philosophy. Dunn (1995) formed a model to analyse and categorize family enterprises. The model provides insight into the source and effect of family values and family dynamics on business growth and development. Although the sample used in the research was very limited, it could be estimated that business-first firms were more likely to possess the attributes needed for growth. Similarly, Singer and Donahu (1992) identified two distinct types of family businesses: the family-centred business, where the business is the way of life, and the business-centred family, in which business is a means of livelihood.

Ward (1987) suggests that family-oriented enterprises will be rather rigid and will centralise decision making, with family members taking the most important decisions. Donckels and Froehlich (1991) claim that such enterprises will be more stable than progressive and more conservative about growth. While Hoy and Verser (1994) point out that strategic planning in family firms is complicated by the overlapping needs of family, management and owners, Ward (1987) stresses that, since planning is associated with change and risk-taking, family-oriented firms will also fail to make strategic plans.

Moreover, it is very likely that family dynamics change over time. In the first generation, the owner will probably also be the founder, issues of survival and growth will dominate business decisions and family involvement may be rather limited. As the enterprise matures, the family may turn its attention to support increasing number of siblings in a business (Gersick et al. 1997), and enterprises may focus on family objectives to a greater extent than previously (Dyer and Handler 1994). There is some evidence, for example, that first generation enterprises in the UK are less pro-family than subsequent generations (Cromie et al. 1995).

Regarding studies on family enterprises performance and their comparisons with non-family enterprises Westhead and Cowling (1997) call attention to the fact that there is little consensus about the “best” indicator to accurately capture the performance of small and medium-sized enterprises among which family ones prevail. Research studies on family enterprises performance have very often focused on a single measure and many studies also have unrealistically assumed that profit maximization is the only (or prime) objective of family enterprises. The authors found in their study that family enterprises are not solely profit maximizers. To a greater extent, respondents in family enterprises suggested “a prime objective is to maintain/enhance the lifestyle of the owners” and “to provide employment for family members in the management team”. As a result, in some family companies there is potential conflict between financial and non-financial objectives. Westhead and Cowling (1997) point

out, that the performance and wider social contribution of family businesses cannot be assessed by "hard" financial performance indicators alone. Gallo in coauthors (2004) discover in comparative study of Spanish family and non-family enterprises that peculiarities of the "financial logic of family enterprises" are not due to any lack of knowledge or technical financial skills but to the personal preferences of family businesses chief financial officer or other powerful family members. Non-financial objectives very often cited are among others (Westhead and Cowling 1997; Gallo et al. 2004): "the wish to pass over the business to the next family generation", "offering job opportunities to family members", "to ensure independent ownership of the business", "to maintain the financial independence of the family as well as of the business", "generated profit should remain in the business in order to secure the survival of the business".

In former socialist (communist) countries the research of family businesses is still in its infancy. Studies of family enterprises are scarce. One of the reasons is the fact, that private enterprises were outlawed during the era of a socialist economy. The social and economic changes in the Eastern Europe in the 1990s have created an opportunity for the rebirth of entrepreneurship and family business development. The industrial policy in transition countries has been focused on the development of a dynamic small and medium-sized enterprise sector. Several studies found that families provided critical resources and support to newly emerging enterprises in transition countries (McKibbin and Pistrui 1997; Poutziouris et al. 1997; Duh 2003). Even though earlier studies indicated that family businesses and owner-managed enterprises were at the forefront of socioeconomic transition in these countries, our understanding of the role of family businesses development is scarce. Very little is known about how family enterprises in transition countries are coping with their problems, for example with the succession problem, even though according to experience from established market economies it shall become a serious problem. Namely, owners/managers of family SMEs are often also their founders and are facing the absence of succession tradition. The institutional advisory and educational support is often absent as well.

Slovenia and Croatia became independent states after the collapse of the Socialist Federal Republic of Yugoslavia in 1990. They had similar government institutions, as well as the same legal and economic system. Slovenia, the country with only two million people, has entered European Union in May 2004, and is among the most advanced of all transition economies in Central and Eastern Europe.

In Croatia, as in other transition economies, the SME-sector started to develop with the possible prospect of establishing private enterprises. This happened at the beginning of the 1990s, and since then the share of small enterprises has increased by 370 percent. Many of these small enterprises are family ones, even though there are also medium and large family enterprises (Galetić 2002). Family enterprises have been recognized to have an im-

portant role in creating new jobs (Akstentijević and Bogović 2001).

The transition to the market economy from the former socialist economy with social and state ownership in Slovenia was closely associated with the development of SMEs – similarly to the other transition countries. The legal bases for the development of private SMEs were the Law on Enterprises (1988) and the Law on Craft (1988). The first law opened opportunities for the development of the private entrepreneurial sector, and the second law reduced obstacles for the development of the craft sector, especially limitations on employment in craft enterprises. Since the 1990s the number of SMEs increased dramatically; in 2002, the share of SMEs in the structure of all enterprises was 99.7 percent; 93.4 percent of all enterprises were micro enterprises, with up to nine employees (Rebernik et al. 2004). Based on results of two studies on family enterprises (Duh 2003; Vadnjaj 2005), it was estimated that between 40 and 50 per cent of all enterprises in Slovenia were family ones, majority of them were owned by first-generation owners.

Regarding the appropriate and operational definition of a family enterprise in transition countries, some research results (Duh and Tominc 2005) indicate that some special features of enterprises as well as the economic system should be taken into account. Namely, "ownership remaining within the family's second and later generations" is recognized as one of main elements that characterized family enterprise in developed market economies (Getz and Carlsen 2000). Therefore the generational criterion ("the enterprise is owned by second-generation or more family members") eliminates enterprises in the ownership of the first generation of owners (founding generation) from the group of family enterprises. The share of first generation family enterprises is very high in transition countries, since the entrepreneurial tradition in transition countries was broken after World War II, and the possibility of establishing private enterprises was opened in the early 1990s. The use of this criterion in the definition of a family enterprise in transition countries would eliminate a very important part of family enterprises from the research.

3 Business ethics in family businesses

The authors who focus on the problems of business ethics distinguish themselves primarily in their understanding of the fundamental instrument (and level) which would guide enterprises to their credible functioning as well as towards the awareness of such functioning as being the fundamental and only possible way for their success (Belak 2005). As Thommen (2004) claims, the credibility of an enterprise is the foundation and origin of enterprises' ethical behavior as well as their success. Further more different authors (Thommen 2003; Belak 2003) define ethics as one of the most important and equivalent success factors.

The family enterprise consists of two systems with different goals and functional motives which may be the ori-

gin of many conflicts. As such these conflicts can be found only in the system of a family enterprise. Several authors (Friz 2002; Duh 2003; Feldbauer 2003; Kadocsa 2003, Klein 2000a; Martin 2003) claim that many family enterprises experience crises or even go bankrupt because of the conflicts that family members face as being part of the family on one side and enterprise's stakeholders on the other. Despite the differences between these systems, several entrepreneurs think of "family ownership" as a business instrument and symbol of quality.

The family system is internally oriented (Duh 2003; Kajzer 1994), which decreases the possibility of change. Results of the STRATOS project (Donckels and Froehlich 1991), a comparative study of 1132 small and medium sized family and non-family enterprises, showed that the owners of family enterprises expressed the strong opinion that the management of their enterprises should remain in the hands of the family, the family tradition should be preserved, the enterprise should be managed as a family enterprise, and that the main goal should be the building and development of the enterprise in favour of the family interest.

On the other hand the system of an enterprise is based on economic motives, efficiency, and effectiveness. Its behavior is conscious and externally oriented – it strives for changes and uses these changes for its own growth and development.

The family is an intimate room where the culture of the family as well as of the broader environment is shaped, and where the first social relationships are formed, which differ from relationships with people outside the family circle. The process of family education and upbringing form the foundation for the focused expectations of every single family member upon which the trust and firmness of family relations are built. Furthermore the working motivation of family members is different. Considering these facts, we can say that the primary goal of a family enterprise is functional independence as a system. All these characteristics enable a family enterprise to maintain the economic power, development, respect and contentment of its stakeholders (Bogod and Leach 1999). The motive for functioning is what distinguishes a family enterprise from a non-family one. The family enterprise can achieve all the goals listed above only in the context of its needs and interests which are the consequence of certain phenomenon valuation (values).

The family system forms fundamental principles, values, and norms, which can be seen as the guidelines in setting the vision, mission and goals of such an enterprise. Because of the importance of family influence on the culture and ethics of a family enterprise system, it could be possible to observe and value the level of family influence on the ethics of a family enterprise. The ethical behavior of a family enterprise can be observed through its behavior towards the internal and external business environment. The ethical norms and behavior of an enterprise with family ownership and management (in most cases) derives from family ethical norms and behavior. We should look for the origin of family enterprise credibility

by observing a family. The functioning of a certain family enterprise follows the credibility (considering Thommen's concept of credibility 2003), which is based on the communicative, innovative and responsible functioning of that family. In this way family credibility is not only the origin of business credibility but also the foundation of the enterprise's existence and success.

4 Hypotheses

As already mentioned, the main purpose of our paper is to better understand the association between the degree of involvement of a family in ownership and management of a family enterprise and the business behaviour of a family enterprise in different business situations. With the purpose to encounter different levels of family involvement into the business and therefore also into the business decisions, three levels are analyzed:

1. The lowest degree of involvement is expected if owner/manager confirms only that the enterprise is perceived by her/him to be a family enterprise.
2. The middle degree of involvement is expected if owner/manager confirms, that the enterprise is perceived by her/him to be a family enterprise and that more than 50 percent of ordinary voting shares are owned by members of the largest single family group related by blood or marriage.
3. The high degree of involvement is expected if owner/manager confirms, that the enterprise is perceived by her/him to be a family enterprise and that more than 50 percent of ordinary voting shares are owned by members of the largest single family group related by blood or marriage and that one or more of the management team is drawn from the largest family group that owns the enterprise. Alternatively the high degree of involvement was expected also if the third condition is replaced by the condition, that more than 50 percent of the management team is drawn from the largest family group that owns the enterprise.

There is some evidence in the literature, as described earlier, that it may be expected, that family firms characterized by a high degree of family involvement differ from other firms regarding different aspects of business performance and decisions, while family firms characterized by a low level of family involvement do not («other firms» are firms, that are not characterized by any level of family involvement – non-family firms). Although there is also some evidence, described earlier in this chapter as well, that not solely the level of family involvement matters (for example also the generation of the family in charge), following two main research hypotheses are formed:

H1: Family firms characterized by a high degree of family involvement significantly differ from other firms regarding different aspects of business performance and decisions.

H2: Family firms characterized by a low degree of family involvement do not significantly differ from ot-

her firms regarding different aspects of business performance and decisions.

5 Data and methodology

The main data source for our study is a telephone survey among 350 SMEs in Slovenia. The survey took place in October 2004 in Slovenia. Respondents were owners of enterprises that they also helped to manage. The structure of the sample matched the most recent official data regarding the number of enterprises in regions in Slovenia, as well as the structure of enterprises by their principal industry activity (NACE codes) and by size measured by the number of employees.

Since 12 respondents did not answer all the questions referring to the characteristics of a family business, they were excluded from the analysis. In the next phase of collecting data we were looking for data on company performance. Those data were obtained from the database i-BON 2004/II CREDIT RATING where financial statements of companies are collected and stored. We could obtain data for 317 enterprises out of 338 in the sample. Consequently, 317 enterprises remain in the data set. As described in a previous chapter, three levels of family involvement in an enterprise were analyzed and compared with the group of non-family firms.

As previously pointed out, business decisions in family firms may be oriented towards different business goals as they are in non-family businesses, since personal preferences of powerful family members may be differently – financially or non-financially oriented. The present level of research allows us to study only few “quantitative” results of business decisions, namely financial performance:

- Total sales revenues (in €).
- Economic efficiency (in percent) (measured as total revenues to total expenses).
- Added value per employee (in €). The values of these three variables were obtained from the database i-BON 2004/II CREDIT RATING.
- Export orientation was measured with the following question: How many (jn share) of your clients live outside Slovenia?

Besides these variables an important aspect regarding the feeling of being independent in business decisions is the cooperation with large companies:

- Respondents were asked, if they cooperate on a permanent basis with large companies with 250 or more employees, rather than just buying their products or services. If they confirmed that they did not cooperate, respondents were asked if they agreed, that they did not cooperate because this could threaten the independent business decisions making of the business that they owned and managed.

For testing the differences between the two groups of enterprises, the t-test and χ^2 -test were used. The general criteria for accepting the hypothesis that differences exist

was the statistical significance at the 5 percent level ($p < 0.05$; two-tailed).

Different research reports indicate that enterprise demographics can overwhelm univariate studies and performance differences previously detected between family and non family enterprises may simply reflect »sample« rather than »real« performance differences (Westhead and Cowling 1997, Jorissen et al., 2005). As demographic control variables company size and company age were chosen:

- Size of a company. It was measured by the number of employees. Data were obtained from the database i-BON 2004/II CREDIT RATING.
- Age of a company. It was measured with the following question: What was the first year the owners received wages, profits or payments in kind? (Payments in kind refer to goods or services provided as payments for work rather than cash.) 50 enterprises out of total 317 in the sample did not answer this question.

6 Findings

6.1 The degree of family involvement in an enterprise

As already mentioned three degrees of the family involvement in an enterprise are observed:

- The lowest degree is observed if respondent – owner/manger – confirms only that the enterprise is perceived by her/him to be a family enterprise – **group A**.
- The middle degree is observed if respondent – owner/manager – confirms, that the enterprise is perceived by her/him to be a family enterprise *and* that more than 50 percent of ordinary voting shares are owned by members of the largest single family group related by blood or marriage – **group B**.
- The high degree of influence was expected if: respondent – owner/manager – confirms, that the enterprise is perceived by her/him to be a family enterprise *and* that more than 50 percent of ordinary voting shares are owned by members of the largest single family group related by blood or marriage *and* that *one or more of the management team* is drawn from the largest family group that owns the enterprise – **group C**. Alternatively the high degree of influence is expected also if the third condition is replaced by the condition, that *more than 50 percent of the management team* is drawn from the largest family group that owns the enterprise – **group D**.
- Other firms were characterized as non-family firms and were included into the **group NF**.

As it is presented in Table 1, there are only few differences between groups A, B and C. Almost all of N=168 firms, that belong to group A, are included also to group B (N=153) and also to group C (N=150), meaning that almost all of those respondents (owners/managers) that

Table 1: The number and the share of enterprises regarding different levels of family involvement

Group	Number	Sample proportion in percent	95% confidence interval
A	168	53.0	(47.5; 58.5)
B	153	48.3	(42.7; 53.8)
C	150	47.3	(41.8; 52.8)
D	98	30.9	(25.8; 36.0)
NF	149	47.0	(41.5; 52.5)

perceived firms as a family ones also belonged to the family that owned more than 50 percent of ordinary voting shares; at the same time *one or more of the management team* is drawn from the largest family group that owns the enterprise.

Therefore only two levels of family involvement were included into the further analysis: group A in comparison with the group NF and group D in comparison with the group NF.

6.2 Employment size and age

Research results on company size measured by the number of employees show that there are no significant differences between firms, that are perceived by owner/manager to be family ones and those that are not – groups A and NF, as presented in Table 2. Similarly, there are no significant differences between enterprises included in groups D and NF.

Table 2: Employment size and age of enterprises

Group	Employment size			Age		
	Value	t-statistics	p-value	Value	t-statistics	p-value
A	4.77	1.162 (A and NF)	0.246	11.31	1.773 (A and NF)	0.077
NF	3.41			9.56		
D	4.38	0.699 (D and NF)	0.485	12.41	2.454 (D and NF)	0.030

As already mentioned, age of a company was measured with the following question: *What was the first year the owners received wages, profits or payments in kind?* Enterprises that are characterized by a certain level of family involvement - groups A and group D - are on average older than enterprises in the group NF. The difference between group D and NF regarding the age of a company is also significant.

Even though family enterprises in Slovenia are on average older than non family ones, they are relatively young comparing to family enterprises in some other countries. For example, German family businesses are older than non family businesses and older than Slovenian ones. Of the businesses that were founded up to 1960 and were still around in 1996-97, more than 70 percent are still family businesses (Klein 2000b). On the other hand, Pistrucci and coauthors (2000) found in comparative study between East and West German SMEs that the vast majority (79 percent) of the East German enterprises surveyed were new start-ups, compared to 38 percent in the West.

6.3 Business performance

As already mentioned, the business performance was analyzed:

- Total sales revenues (in €).
- Economic efficiency (in percent) (measured as total revenues to total expenses).
- Added value per employee (in€). The values of these three variables were obtained from the database i-BON 2004/II CREDIT RATING

Export orientation was also analyzed – by the share of customers living outside Slovenia. Proportions of firms with more than 50 percent of customers living abroad in both groups were analyzed. Results are reported in Table 3.

In both cases results are similar, namely, groups A and D significantly differ from NF group only regarding the economic efficiency. There is no evidence, that the financial performance of firms with stronger family involvement (group D) is different than in firms where the family involvement is less strong (group A).

6.4 Cooperation with large companies

As results presented in Table 5 indicate, a higher proportion of firms that are perceived as family ones by the owner/manager (group A), cooperate with large companies, than it is found among firms, that are characterized as non-family ones.

Table 3: Total sales revenues, economic efficiency and added value per employee

Group	A	NF	D
Total sales revenue (in €) t = 1.993 p = 0.089 (A and NF) t = 1.419 p = 0.159 (D and NF)	408,476.9	141,082.4	444,615.8
Economic efficiency (in %) t = -2.658 p = 0.009 (A and NF) t = -2.766 p = 0.006 (D and NF)	106.4	126.4	104.9
Added value per employee (in €) t = 1.328 p = 0.185 (A and NF) t = 1.144 p = 0.255 (D and NF)	14,232.3	8,868.8	16,021.5
Proportion of firms with more than 50 percent of customers living abroad (in %) $\chi^2 = 0.04$ p = 0.840 (A and NF) $\chi^2 = 0.151$ p = 0.535 (D and NF)	10.7	9.4	7.1

Table 5: Cooperation with large companies

Group	Percentage of companies, that cooperate with large companies			Percentage of those that do not cooperate, because this would threaten their business independency		
	Value	χ^2 -statistics	p-value	Value	χ^2 -statistics	p-value
A	45.2 (A and NF)	8.350	0.004	22.0 (A and NF)	0.056	0.813
NF	28.9			24.5		
D	39.8 (D and NF)	2.714	0.099	20.7 (D and NF)	0.121	0.728

The difference in proportions of companies that cooperate with large companies in groups D and NF is significant at $p < 0.10$. On the other hand, the proportions of those that do not cooperate because this could threaten the independent business decisions making of the business that they own and manage, are not significantly different – between groups A and NF as well as groups D and NF. Nevertheless it is worth stressing that this reason is important for almost one quarter or firms that do not cooperate with large companies.

Overall findings suggest that hypothesis H1 is rejected and hypothesis H2 is not rejected. Therefore it seems, that enterprises, characterized by a high degree of family involvement do not differ significantly from the firms that are characterized as non-family ones, regarding the total sales revenues, economic efficiency, added value per employee, export orientation and cooperation with large companies. The same goes for firms characterized with a low degree of family involvement.

7 Conclusions

It is very likely, that in the present state of development of family firms and market economy in Slovenia, the degree of family involvement is not crucial for business behavior and business performance regarding the variables analyzed. As already mentioned, in the first generation firms, is-

suess of survival and growth may dominate business decisions and family involvement may be rather limited. As the enterprise matures, the family may turn its attention to support increasing number of siblings in a business (Gersick et al. 1997), and enterprises may focus on family objectives to a greater extent than previously (Dyer and Handler 1994). Since the majority of firms in groups A and D are the first (the founder) generation firms (83.7 percent in group A and 87.8 percent in group D), this may also be among reasons for no significant differences regarding analyzed business performance indicators, between firms, that are characterized by a certain level of family involvement and the firms that are not.

It was also established (Duh et al. 2007) that family and non-family firms (different levels of family involvement were analyzed) do not differ significantly regarding aspirations of entrepreneurs to grow their businesses, neither are the succession issues of great concern of entrepreneurs in Slovenian family businesses. It therefore seems that there are no significant differences between family and non-family firms regarding many issues in Slovenia.

Several extensions of our research are needed and possible; one being the analysis of impact of a generation of a family that is in charge, on the strength of family influences on the business behavior, as well as other factor that might influence business decisions in family businesses. Since the proportion of family businesses that are ow-

ned and managed by a second generation or more is rather small in Slovenia, their identification is not an easy task.

The present level of research allows us to study only few "quantitative" results of business decisions. As it was already mentioned in this paper, the performance of family businesses cannot be assessed by "hard" financial performance indicators alone – non-financial objectives, like "the wish to pass over the business to the next family generation", "offering job opportunities to family members", "to ensure independent ownership of the business", "to maintain the financial independence of the family as well as of the business", "generated profit should remain in the business in order to secure the survival of the business", may be of a greater importance in a family business. Therefore the extension of our research should also go in this direction.

From ethics perspective the research should strongly consider a family enterprise as two different systems that influence each other. The research cognitions described in the present paper show that 30.9 % of the observed enterprises face strong influence of the families through the ownership as well as management of the enterprise. Considering our previous discussion we could claim that norms and values shaped and formed within a family system would be overtaken also by an enterprise system, where a family has strong impact on the vision, mission and the goals of an enterprise. Considering the characteristics of the both family and enterprise systems we can state further research questions: Are the family enterprises less risk taking as non-family enterprises? Are family enterprises more ethically oriented as non-family ones? Are family enterprises more successful from non-family ones in long term? In order to answer these questions further research should observe separately core values, culture, philosophy, and ethics of a family as well as of an enterprise. This research approach would also show the influence that family has on an enterprise in a sense of non-financial or qualitative elements of family enterprises' success.

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Do Managers have Enough Quality Information for Decision-Making

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Modern complexity of management is associated with important decision making, confronting a great number of useless information. Selection of information – the choice of only quality, i.e. essential ones, is a big problem in managerial decision-making. Implementation of systemic approach i.e. systemic thinking can help dealing with it.

It is known that decision-making based only on intuition is insufficient, especially nowadays, in the time of global business. Therefore, managers have to operate with adequate knowledge capital. It is synergetic composition of inborn talents, feelings, abilities as well as gained knowledge and experiences. DNT put this capital knowledge into function of management decision-making, thus easier and holistic information management needed for quality and efficient and successful problem solving. It enables managers to be creative, co-operative and interdisciplinary. It opens possibilities for combination of theory and practice in the decision making processes, as presented in our contribution.

Quality, holistic management decision making, create competitive advantages. It can be proved by a practical example of decision making about preventive measures in the winter time (roads gritting and ploughing). Great importance of quality, timely and enough holistic information is presented with the model of Short Term Road Ice Prediction, which gives information for quality decision making.

Key words: requisite holism, management, decision-making, systemic thinking, road safety, combinatorial optimization, algorithm.

Vpliv informacij na kakovost managerskega odločanja

Povzetek: Sodobna kompleksnost managementa je povezana s sprejemanjem (bolj ali manj) pomembnih odločitev. Te so posledica velikega, mnogokrat (žal) neuporabnega števila informacij. Njihovo selekcioniranje – izbor samo tistih kakovostnih, tj. bistvenih za konkretno problematiko managerskega odločanje – je velik problem. Pri tem lahko pomaga sistemski pristop oz. sistemsko razmišljanje.

Vemo, da odločanje zgolj na intuiciji (pa naj bo ta še tako dobra), ni več dovolj, zlasti v času globalnega poslovanja. Zato morajo imeti managerji še ustrezen kapital vednosti in znanja. Ta je sinergijska kompozicija tako prirojenih talentov, čustev, sposobnosti kot tudi pridobljenih znanj in izkušenj. DNT ta kapital vednosti in znanja postavlja v funkcijo managementa odločanja, tj. za lažje in celovitejše obvladovanje informacij potrebnih za kakovostno, tj. učinkovito in uspešno razreševanje problemov. Pri tem managerjem omogoča, da zmorejo biti (bolj kot sicer) ustvarjalni, sodelovalni in interdisciplinarni. Pomeni, da znajo v procesih odločanja sinergijsko kombinirati teorijo in prakso, takšno, kot je npr. tematika našega članka.

Kakovost, tj. celovitost managerskih odločitev ustvarja konkurenčne prednosti. To lahko tudi potrdimo na praktičnem primeru odločanja o preventivnih (varnostnih) ukrepih v zimskem času (posipavanje in pluženje cest). Slednje kaže velik pomen kakovostnih, tj. pravočasnih in dovolj celovitih informacij za kakovostno odločanje, ki nam jih daje predstavljeni model Kratkoročna napoved nastanka poledice.

Ključne besede: potrebna celovitost, management, odločanje, sistemsko razmišljanje, varnost na cestah, kombinatorična optimizacija, algoritem

1 Introduction

A few decades ago the fathers of the Theory of Systems (L. von Bertalanffy, N. Wiener in Mulej, 2000 and before) saw the meaning of system theory in the development of theoretical approaches (general orientations), methodolo-

gies (knowledge about methods) and methods (way of treatment), to support the practice of systemic thinking in research and analysis processes (recognition of hidden essence) This was in preparation and decision implementation, considering the essence of this entangled phenomenon. Mankind would thus be able to think, make decisions,

and act holistically instead of one-sidedly, in an overly simplified or dangerously apparent holistic manner¹.

2 Process of quality (sufficiently holistic²) decision making in management

2.1 Problems of managerial decision-making

The quality of management depends on creative, dynamic, trained and development-oriented managers, who are eager for interdisciplinary co-operation, provided their way of thinking and decision making is as holistic as necessarily possible. Unfortunately, they do not have enough quality information at their disposal that would enable them to carry out such actions or sufficient information needed for solving more or less complex problem situations and make related decisions³. This is extremely important (see Rozman, 1993; Vila, 1994), as the aim of the information lies exactly in the risk reduction that affects each decision, because they are affecting the future. It is not difficult to prepare small amount of data. Difficult, if not impossible, is to prepare adequate and timely information for those who make decisions and take responsibility for them. On the other hand, waiting for information paralyses the decision-making process and related problem solving situations. The quality of information affects the level of risk, where decisions can be divided into decisions made in certainty, decisions made in risk and decisions made in uncertainty.

Decision-making in management (Tavčar 2002) includes routine, analytical and intuitive decision making. Nevertheless, it must be emphasized that routine decision making is done in a normative way (in line with the rules), whereas analytical decision making depends on the know-

ledge based on studying things in more complex circumstances. Intuitive⁴ decision-making is indirect decision making, or when all other possibilities denounce. It is derived from a decision maker's subconscious. From the viewpoint of different managerial levels, a large part of intuitive decision-making is done by the executive management and needs to be supported by appropriate human resource decision makers, i.e. talented, competent and development-oriented managers. At executive level, the percentage of intuitive decision making is sparse. There, the decision-making is managed by a "supervisor and in a normative manner. Overall, in executive management, the breakdown is as follows: 80 % intuitive, 16 % analytical and 4 % routine decision making. On the other hand, at managerial executive level 2 % is intuitive decision making while 35 % is analytical and 63 % is routine. Between these two extremes one can see the possible relationship of decision making to a particular managerial level. These relationships depend predominantly on the ongoing decision-making activities and their participants.

Here, it is assumed that due to lack of information and presence of one-sided information, a contemporary manager will often have to make decisions based on his or her intuition. This means his or her decision-making is intuitive⁵, and can be drastically improved through intuitive techniques and last but not least, although not scientifically proven, the way this affects his or her subconscious. In management or in the features of managing businesses or people inspiration, experience and the knowledge play a vital role when making decisions (see Kralj, 1997). All these managerial skills form the so called capital of knowledge and skills, accumulated in similar situations, where decisions had to be made. In the future this (accumulated) capital will mean a significant competitive advantage, as the management will already have a decision-making model at its disposal that will enable a faster and qualitative, i.e. holistic and therefore more sustainable management (of more and more complicated) decision-making processes.

¹ Due to one-sidedness that can easily be a result of over-specialisation, essential elements being neglected or overlooked in the choice making phase or when a particular managerial decision had already been considered.

² Holism as a term is easy to use but difficult to define (for example Bertalanffy, 1968 and before; Checkland, 1981; Schiemenz, 1984; Dyck, Mulej et al., 1998, 1999; Mulej, 1979; Mulej et al., 1992, Mulej et al., 2000; Mulej and Ženko, 2004, Rosi, 2004; Rosi, Mulej & Poščan, 2006 etc.). Holism encompasses everything, all elements and their relationships (connections, relations) that define the term. Naturally, it is impossible to include everything that is why such perfect (total) complexity is not possible, especially not in the working environment and in people's way of thinking as individuals without (inter-specialist) co-operation. At the same time it can be overloading as well. First though, a decision needs to be made as to what level of complexity is sufficient and necessary at the same time and hence suitable for discussion and analysis.

³ Decision-making and all relevant (human) activities have several meanings: to express will about the following: how it is to (have a right to) make a decision about one's life, work...//to give, have the final opinion or decision about something; management of a company, a person in charge, commission or an institution make such decisions...; to define the result of something; choice of alternative possibilities // to define, direct: something defined someone's destiny ; to make decisions in a way to reach a certain point through thinking, when a person wants to do something, make something happen: one after another they decided to help them; consciously, finding it hard to make a decision, be in a state, when a subject still dwells on making a decision about something etc. (Slovene dictionary SSKJ 1996)

⁴ Intuition means to grasp or sense the essence of something indirectly, independently of reason and analytical thinking, an inspiration: to give in to one's intuition, work and create using one's intuition, with intuition, to have a natural capacity for intuition. (SSKJ 1996)

⁵ In contemporary management the belief prevails that the majority of managerial decision-making processes (80%) are analytically based on scientific achievements. The practice of the most successful ones shows that their executive managers naively believe in their intuition and make decisions based on it (Kralj, 1997).

ses. (Rosi, 2004; Rosi, Lisec, Kramberger & Kramar, 2006).

When making decisions, managers use their intuition and knowledge in various combinations: first, lack of knowledge called for more intuition, later on it seemed that the only real path was just knowledge (Kralj 1997). It also turned out that in crisis situations, where fast actions need to be taken, inspiration was a successful means of decision-making process, especially as it was supported with already accumulated knowledge and experience. It often makes more sense to solve trivial problems using intuition as the cost of eventual damage proves to be drastically smaller.

However, intuition alone is not enough to make quality decisions. It is necessary to have enough knowledge and skills that are the result of various influences: (inborn and developed) emotions, talents and competences, education, environment, experiences and sometimes also luck. All this helps the managers to reach the necessary and adequately holistic decisions, which means that they are capable of considering all essential elements in the decision making process. Quality decisions are the result of systemic thinking such as DNT and their aim is to solve complex managerial problems.

2.2 Hierarchy and the process of managerial decision-making

In nature everything, including man, is subdued by constant changes, caused by interdependence between the constituent elements. In the process of changing, some things occur before others. The practice says that transfer steps of the process have greater influence than the later ones⁶. The same can be asserted for the managerial decision making process, where the hierarchy of priority decisions is well known. Upper levels define the aims of the decisions, whereas the lower levels implement them. This is the actual hierarchy of sequence and correlation⁷ of (alternative) decisions and activities, needed for its realisation. (Mulej, 2000; Rosi, 2004)

The managers' job for instance is not to impose their will but to build the early phases of the process chain, such as to make decisions when there are still too many alternatives, data and messages (unambiguous data) available and hence less meagre information (i.e. influential information that meet information needs). At this point, one needs to consider the numerous correlations, such as

the ones between the people at the same organisational and hierarchical level and the ones at different levels, as well as the ones between the events, processes, people in an organisation and its environment. Other than that, the data (could) be available, but there is no (relevant) information. The occurrence of various solutions or alternatives when making decisions means that the same problem can be solved in different ways. The alternative option does not only mean that a decision solves a problem and the other one does not, but that various solutions more or less successfully solve a problem or prevent that it occurs.

The many alternatives available for solving or preventing a problem from occurring call for a measure that could categorize the solutions into more or less successful ones and help us choose the most successful ones. The measure is usually the aim of a subject upon which the decision needs to be made and may differ based on the decision maker or giver and his or her interests (Rozman, 1993).

Here, the so called rationality of the decision making process is being assumed, which means that the person making a decision has all the information, knowledge and skills at his or her disposal needed for the analysis of problems and setting of priorities, the knowledge of measures needed for decision making and problem solving, that he or she can evaluate and foresee all their possible consequences. In practice such examples are rare (the same goes for the perfect holism). That is why in decision making we talk about the so called "restricted rationality" (lack of overview) that often does not provide optimal solutions. For this reason we must often settle for insufficient (single-minded) solutions. The managers can solve this problem through systemic thinking, such as for example dialectic network thinking⁸ (Rosi, 2004)

3 An example of tools for supporting managerial decision-making – short-term forecast for the occurrence of consequences

3.1 Starting points for supported decision-making

Today, numerous useful and applicable techniques, methods and tools offer support to decision making. Such

⁶ For example in mathematics such experience is expressed by Mark's chain, in ecology by ecological circle flows, in organisations by the circle flows known from the organisational cybernetics etc. (Mulej, 2000; Rosi, 2004).

⁷ According to the Laws of Hierarchy of Sequence and Correlation (Mulej, 2000, Rosi, 2004), in a man's working process and related solving of problematic situations the starting points are the most important. The practice of human life and working process shows that there are two (interdependent) subsystems of the starting points. The first one is independent from a man and thus an objective part of the starting points, the other one is subjective, built from the reason and emotional part of a man's personality

⁸ Dialectic network thinking can support a sufficient and necessary holistic way of thinking, decision-making and working when solving complex managerial problem situations, for dialectic systematism provides the ability to support and recognise the correlation of the participants of the solution process (from various, yet essential branches, professions, cultures). Based on these findings the managers can easily form (necessary and adequate) potential solutions that will ease their decision-making process.

methods can be based on mathematical models of individual problems or on so called fuzzy logic. As already mentioned, the decisions for wrongly identified problems are more harmful than useful as they give a (misleading) feeling that smart decisions are being made and problems are being solved. In order to avoid such mistakes managers can – if they are familiar with systemic thinking – integrate the knowledge and the power of experts from various fields. The results of such work can today turn into popular software tools that support the decision making processes. Next, we will describe and present the development of the tools that already exists as a prototype. Here, we have mainly focused on the results of our own tests (Kramberger, Lipičnik, Podbregar, 2005) and the already developed optimisation algorithms (Kramberger and Žerovnik, 2005; Kramberger and Žerovnik, 2006).

3.2 Introduction to the problem and its definition

Ploughing and gritting roads during the winter months is an important and costly activity. If in snowy conditions the roads are not ploughed or gritted in time, the road users are exposed to great dangers, traffic standstills can occur, that cause greater economic loss and “at best” can even lead to public disapproval. The optimisation of ploughing and road gritting can, as an occurrence of (more or less complicated) preventive activities, be viewed from two different angles: safety and economy. Safety calls for the most critical points of the road network to be gritted first. These are the points where glazing frost occurs first. From an economical point of view, all the roads are to be gritted in such a sequence that all the vehicles can take the most rational route.

The methods for predicting the occurrence of icing are to a great extent based on the temperature of the roadway, the air temperature and humidity (Schaffar and Hertl, 1995). Some are based only on one of the aforementioned physical quantities, whereas the others depend on the combination of them all. In 1994, Bogren, Gustavsson and Lindqvist presented a model of forecasting temperature changes of chosen road sections. The model is based on the characteristics of temperature oscillation of the roadway that the same authors and D.G Belk have already presented in 1988 and 1992 (Gustavsson and Bogren, 1988; Belk, 1992; Bogren, Gustavsson and Lindqvist, 1992).

The aforementioned models are based on the temperature data of the roadway to which the forecast refers to. They have found out and proven that the sample of the way temperature of the roadway is spread is recurrent. If a sufficient number of measurements and results are divided into three different categories based on the weather, a big correlation between the data series “was seen (Shao, Lister, Hart and Pearson, 1997; Shao and Lister, 1995).

In our research (Kramberger, 2003) it has been shown that this characteristic also refers to smaller samples. In this case, the correlation between the pairs of data series

for the measurements along individual points has been studied. Should the correlation between the series of data exist, then it may be assumed that the correlation between the data is from individual measure points from different time sequences.

3.3 The creation of the model

The basic aim for building this model was the fact that from the existing points one or two representative points that at best describe the temperatures on other measure points need to be determined. In order to define these two points mathematically, the following procedure will be described:

■ *The algorithm of the procedure*

- I. Calculate coefficient of determination for each among matched pairs of the data series.
- II. Calculate average coefficient of determination for the same independent x values.
- III. Mark the measuring spot with the highest average determination coefficient.
- IV. Calculate the regression lines $Y = a_0 + a_1X$, whereby the values should be measured at individual measurement spots, are the values measured at the reference spot with the highest determination coefficient (see No. II).
- V. Calculate the standard error for each regression line.
- VI. Bearing in mind the characteristics of the normal allocation and the estimated 68,26% confidence in the calculated results, check one or more test series, if the measured results can be found in the required interval.
- VII. Should the required interval, on average, have less than 68,26% of all values, then the reference spot was not well chosen or the correlation links were too weak.

Should the values calculated on the basis of the defined regression straight line not meet the expectations, we will try the multiple regression calculation. This way we get the regressive straight line in a three dimensional coordination system. Next, we slightly change the course of the algorithm.

■ *Modified algorithm*

- I. Of all measured spots three with, on average, the highest determination coefficient are chosen.
- II. For each trinity (x_1, x_2, y) of data series calculate determination coefficient.
- III. Calculate the average determination coefficient that was calculated with the same independent x values.
- VI. Mark the measured spot with the highest average determination coefficient.
- V. Calculate the regression lines $Y = a_0 + a_1X_1 + a_2X_2$, whereby the values should be measured at individual measurement spots, are the values measured at the re-



Figure 1: Measuring points in the area of Maribor

ference spot with the highest determination coefficient (see No. III).

- VI. Calculate the standard error for each regression line.
 VII. Bearing in mind the characteristics of the normal allocation and the estimated 68,26% confidence in the calculated results, check one or more test series, if the measured results can be found in the required interval.
 VIII. Should the required interval have approximately 68,26% of all values, then the measured spots are chosen as reference spots.

The model of temperature distribution of the runway at chosen measure points can be transferred by a linear regression function.

$$Y_j = a_{0j} + a_{1j}X_1 + a_{2j}X_2,$$

where Y_j means the calculated temperature value at j measure point, and a_{0j} , a_{1j} , a_{2j} mean the calculated regression coefficients for the j measure point. X_1 and X_2 represent the value measured at reference measure points. The quality of the estimated value is defined with the expected degree of confidence that is defines from the characteristics of normal distributions. By definition of the model we can trust the estimated data with a risk degree of 31,74 %

■ Experiment

In order to place the model into the real-life environment, in this case the road network, an extended experiment had to be undertaken. The basic idea of this experi-

ment was to collect the sufficient amount of data for a serious correlation and regression analysis. Given that the described characteristic is geographically bound (Shao, et. al, 1997; Kramberger, 2003), an adequate spot for the experiment had to be chosen first. It was furthermore one of the aims for the data to be representative for all the roads with different requirements that is why the measuring spots of various types were chosen: On bridges, remote and urban areas. The weather, too, represents certain restrictions. The majority of similar experiments have been undertaken separately, based on various weather types (Shao, et. al, 1997). This way, within the framework of individual types of weather, a stronger correlation link has been reached. In our experiment, the measurements belong to a single weather class, regardless of the weather type. Bearing in mind the assumption that the correlation as such is stronger within the certain types of weather, a sufficient correlation of data will - in our case - mean an even stronger correlation within the certain types of classes.

The measuring spots have been chosen based on the research findings (Kramberger, 2003) and experiences of local winter services from Maribor. The chosen measuring spots were all within the 100 km² area, comprising of the city centre, bridges across the river Drava, the hillside of Pohorje and the flat land of Dravsko Polje. The location can be seen in Figure 1.

The measuring spots in the table below are listed based on the data. The data, such as road temperatures were measured manually using the infrared thermometer CALEX ST-8818, with the accuracy of $\pm 1,5$ %, and separability of $0,1^\circ$ C.

■ *Measurements*

The measurements were carried out at dusk of the winter nights. The road temperature is at this time of the day the most stable. The radiation of the energy flow into the atmosphere had just finished, whereas the absorption and hence the warming-up of the road had not yet started. 24 measurement series in different weather conditions have been carried out in two years time. The measured temperatures can be seen in Table 1, the most accurate data from the measurements are listed in the appendices. Of the 24 data series, 20 were chosen randomly for the analysis, the other 4 were used for the test.

Table 1: Measured temperatures chosen for the calculation

spot	1	2	3	4	5	6	7
series							
1	-3,1	-3,0	-3,9	-3,7	-2,7	-3,0	-1,8
2	0,7	0,8	0,5	0,2	0,6	0,4	1,2
3	-1,4	-2,2	-5,2	-2,8	-7,0	-6,4	-5,4
4	7,4	5,7	4,5	4,8	4,8	4,8	4,7
5	-1,1	-1,9	-8,9	-6,7	-7,1	-5,5	-11,1
6	5,4	2,3	2,9	4,8	4,9	4,7	2,3
7	4,8	4,4	4,1	4,1	3,3	2,4	1,2
8	-4,2	-5,2	-11,3	-9,3	-8,8	-9,0	-8,1
9	1,4	-1,5	-5,8	-4,6	-2,9	-4,6	-5,7
10	3,4	0,4	-2,3	-0,9	-3,6	-1,4	-3,4
11	0,3	-3,9	-7,0	-6,9	-5,9	-6,5	-7,7
12	0,2	-4,0	-7,1	-7,1	-6,0	-6,6	-8,0
13	-4,1	-3,4	-16,0	-15,4	-14,8	-14,1	-14,5
14	-4,4	-3,3	-15,9	-15,3	-14,5	-13,9	-14,3
15	-2,9	-4,8	-11,3	-12,1	-12,3	-13,0	-12,1
16	-2,8	-4,9	-11,5	-12,2	-12,4	-13,3	-12,0
17	-6,1	-3,1	-16,1	-15,4	-17,7	-18,7	-15,6
18	-6,4	-3,4	-16,3	-15,4	-17,8	-18,6	-15,6
19	4,8	3,4	-0,1	-1,3	0,7	2,6	0,4
20	4,8	3,4	-0,1	-1,3	0,7	2,6	0,4

■ *Calculations*

The calculation was performed using software programme MS EXCEL 2003. The implemented functions for statistics analysis have also been used, most frequently

the spreadsheet function LINEST. All regression functions are shown in the Table below:

Table 2: Results from the chosen reference spot 1

Pair	r^2	$y = a_0 + a_1x$
1-2	0,76564474	$y = -1,07202735 + 0,7233684x$
1-3	0,85057048	$y = -6,08681022 + 1,5481751x$
1-4	0,81744667	$y = -5,559414012 + 1,5034469x$
1-5	0,84559900	$y = -5,656944181 + 1,6062107x$
1-6	0,84825892	$y = -5,820336617 + 1,6156669x$
1-7	0,78121902	$y = -5,744450533 + 1,3855851x$

From the calculation, the value t of the statistics and in comparison with the critical value t_c for the size of this pattern that amounts to 1.73, we can predict with a 2.5% risk that the calculated pattern correlation coefficient is not random and is significant to the entire population.

The data from the measured spot 1 are considered to be independent and are compared with the data from all other measured spots. The same calculations are done for all seven measured spots. All parameters and coefficients are calculated and regression equations are determined.

3.4 Test models

Given the measured data, a test model can be performed. The test is performed using the data from the series that have been put to the side for this test. The data is then implemented into the aforementioned regression equations and the estimated value $E(y)$ is calculated. The calculations are further shown in the graph. At this point, the trust interval for the assessment is taken into account, i.e. the measured temperature is with a 68,26% certainty within the interval $E(y) \pm S_{x,y}$.

From the results shown in Table 4 the value of the variable y for individual values x can be calculated. Apart from that, using the equation $E(y) \pm S_{x,y}$ the upper and lower boundary of the trust interval is calculated. The result is:

Table 3: Test calculation for the value of 3,4° C

Values 1						
I	measure.	calculated	measured	up.boundary	low. boundary	$S_{x,y}$
3,4	1	3,4	3,4	4,40	2,40	1
	2	1,4	3,2	4,90	1,50	1,70488993
	3	-0,8	2,1	4,86	-0,66	2,76437020
	4	-0,4	2	5,03	-1,03	3,02667877
	5	-0,2	3,7	6,62	0,78	2,92387224
	6	-0,3	3,7	6,61	0,79	2,91106738
	7	-1,0	4,1	7,22	0,98	3,12366632

The results can be presented graphically. We can see that over 68,26 % of the value falls outside the estimated intervals.

■ Calculation using a modified algorithm

To put the quality of the gained results to the test we must apply the modified algorithm. To this end some measuring spots will be chosen for which the multiple regression will be calculated. Using the function LINEST the equation of the multiple regression $Y = a_0 + a_1X_1 + a_2X_2$ is calculated for each measured spot separately depending on the pair of the chosen reference spots. The best way to choose the first pair of the reference spot seems to be the choice of the two spots with the highest average determi-

nation coefficient when calculating regression in the previous example. In our case these spots are 3 and 5. Their data do not depend on the variables X_1 and X_2 .

The line of the multiple regression now gains the following form:

$$Y = 3,194498653 + 0,31771627X_1 + 0,227150141X_2$$

The determination coefficient r^2 has in our case the value $r^2 = 0,856731431$, which means the strong correlation (regression) connectivity. Having performed the T-test, we can see that the t statistics is higher than the critical value t_c for this size of the sample that includes 20 statistical units. From this we can conclude that the determination coefficient r^2 is not coincidental and is valid for the entire population.

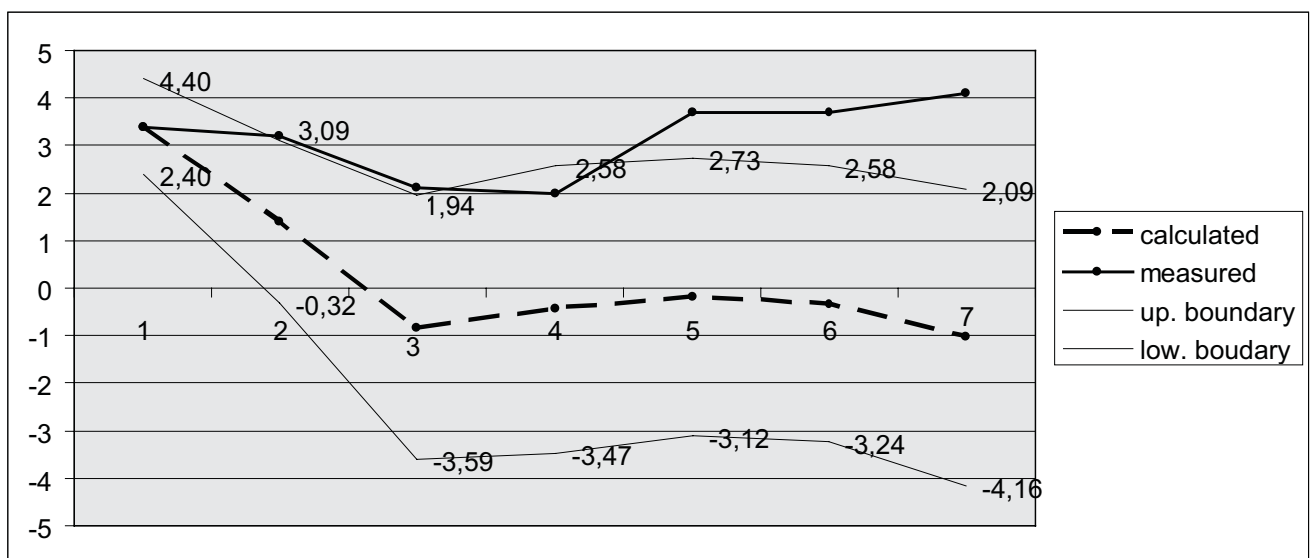


Figure 2: Graphical representation of the calculation for the value 3,4° C

The same calculations are applied for all trinities with referential spots 3 and 5. This way the following values of

determination coefficients and the following lines of multiple regression are gained:

Table 4: Regression equations for reference spots 3 and 5

trinities	r^2	$Y = a_0 + a_1X_1 + a_2X_2$
3,5-1	0,85673143	$y = 3,19449865 + 0,31771627x_1 + 0,22715014x_2$
3,5-2	0,71927159	$y = 1,55287141 + 0,61785402x_1 - 0,19822962x_2$
3,5-4	0,97759599	$y = 0,32842163 + 0,84198149x_1 + 0,13437422x_2$
3,5-6	0,96921455	$y = 0,03879351 + 0,37431781x_1 + 0,63353717x_2$
3,5-7	0,97007154	$y = -0,47779992 + 0,36177685x_1 + 0,54045819x_2$

It can be seen that determination coefficients are very high, T-tests also show us the relevance for the entire population, therefore we can assume that between the series of data there is a strong regression (correlation) connectivity.

3.5 Test of the modified model

This model can be testes using the measured data. Bearing this in mind, we can now calculate the intervals of trust with the chosen degree of trust. We will predict that the measured temperature with a 68,26% probability is within the interval . The gained results are the following:

Table 5: Test calculation for the values 2,1 and 3,7° C

	measure.	calculated	measured	up. boundary	low. boundary	Sx,x,y
x ₁ =2,1	1	4,85	3,4	6,51	3,19	1,6592060
x ₂ =3,7	2	3,42	3,2	5,34	1,50	1,9200563
	3	2,10	2,1	3,10	1,10	1,0000000
	4	3,73	2	4,82	2,61	1,0910535
	5	3,70	3,7	4,70	1,75	1,0000000
	6	2,75	3,7	4,10	1,40	1,3492276
	7	2,00	4,1	3,18	0,81	1,1888138

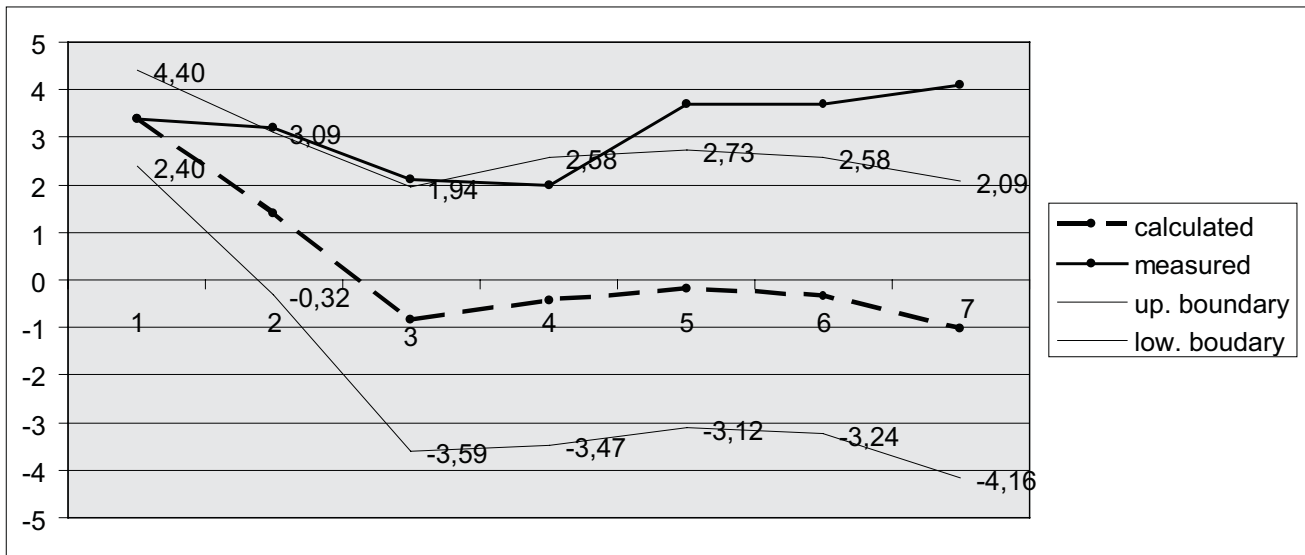


Figure 3: The results for the values 2,1 and 3,7°C are shown graphically

The results are shown in Figure 3.

The graph from Figure 3 shows that two out of seven values deviate slightly from the interval. However, based on the set demands this is still a pretty good result. Targeted 68,26 % reliability has in this case been reached, as 5 out of 7 makes exactly 71,43 %. A similar result has been obtained from the test series shown below (Figure 4).

Here, only two values deviate from the demanded interval, that is why the demand for 68,36 % reliability has been met.

3.6 Selection of the reference spot

Measures, calculations and statistic tests have shown that there is a strong linear correlation between the temperatures of some measured spots. Determination coefficients and regression lines of an ordinary and multiple regressions have been calculated and analysed. This way, the assumption has been proven that, based on the temperature of the roadway, it is possible to assume the temperature at other measured spots in the road network.

The analysis has shown that the multiple regression provides the best results. For referential spots it is best to consider the spots with the highest average determination

coefficient and the lowest average standard estimation mistake.

In our example these are the measure spots 3 and 5. With the constant temperature measures of the roadway on the spots 3 and 5 the temperature development on the other chosen spots in the road network.

4 Application of the model in a decision making process

In winter the road users face a very interesting phenomenon. During minor weather changes and moderate air temperature deviations the road conditions may drastically alter within a very short period of time. Most unpredictable are the circumstances at 0°C, when the water transforms from one aggregate state into another. In such circumstances the water on the roadway turns into ice, the adherence coefficient is drastically reduced and the occurrence of accidents increases. Apart from the appropriate winter equipment and technical motor vehicle roadworthiness, the optimal organisation of winter services seems like the only solution to the problem that could provide the in-time gritting of critical road sections befo-

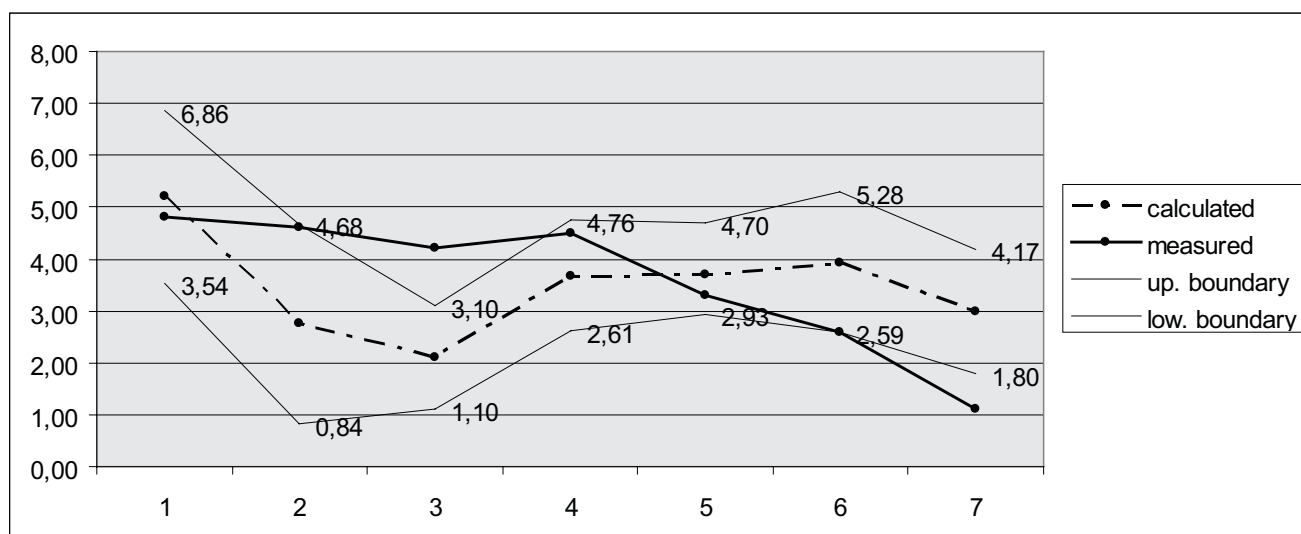


Figure 4: shows the results of the calculation for the following data series – for values 4,2 and 3,3° C.

re they would freeze. Such work must not create high costs and must not damage the environment.

The organisation of winter services in our case gritting of iced road sections, must be tackled using at least three aspects. First, aspect of safety calls for the most critical points to be gritted first, if possible before the icing even occurs. From the economical point of view, all roads are to be gritted so as to enable the most rational route, if possible before the icing even occurs. The environmental point of view demands the gritting of roads to occur as rarely as possible, and only if necessary.

The described problem of optimal organisation of gritting the iced road sections can be further divided into two problems that, at least at the beginning, need to be analysed separately. The first problem refers to setting of the place and time, where the icing is most likely to occur first. The second problem represents an optimal organisation that will take all the aforementioned viewpoints into account.

In the majority of cases the local authorities with the inferred costs are facing difficult problems, for which the constant lack of time and data seems very common for quality decision making when setting the appropriate time for necessary actions. One of their main assignments is preventive gritting of roads that already have glazed or are expected to glaze. Due to increased traffic safety and cost reduction road gritting needs to be planned in advance. In most cases, for example in Slovenia and elsewhere, this is still done manually, with a pencil and a map, often based on the knowledge of the local environment and the experience of operators and drivers that are in charge of this job.

Our model enables the opposite. By applying the model in real environment, on the road network of a specific area, through measuring and analysing quantitatively enough information is gathered to carry out a detailed qualitative analysis of the problem. This way we can determine all potentially dangerous spots within a chosen area. These potentially dangerous spots are not determined by experience but supported by numerous data and qualitative analysis. Such data on dangerous spots are better, more accurate and more reliable.

Furthermore, based on the matrix equation:

$$\begin{bmatrix} y_1 \\ y_2 \\ \cdot \\ \cdot \\ y_j \end{bmatrix} = \begin{bmatrix} a_{11} & a_{21} \\ a_{12} & a_{22} \\ \cdot & \cdot \\ \cdot & \cdot \\ a_{1j} & a_{2j} \end{bmatrix} \cdot \begin{bmatrix} x_1 \\ x_2 \end{bmatrix} + \begin{bmatrix} a_{01} \\ a_{02} \\ \cdot \\ \cdot \\ a_{0j} \end{bmatrix}$$

where y_j are the measured temperatures on the reference spots, a_{ij} is the matrix of estimated temperature at other measured spots and a_{0j} are regression coefficients calculated based on quantitative analysis, from the data of two measured spots, the constant temperature changes on calculated reference spots⁹ enable us, to predict the development of temperatures at other measured spots.

Winter services that would use this model when making decisions about the time and organisation of gritting tasks would do the following:

- when air temperatures fall to about 3°C, the operator or the appropriate software would observe the development of the temperature on the roadway at reference spots with the help of the built-in sensor;

⁹ Dangerous spots are the spots on which the glazing occurs first. The reasons can be geographical, such as the vicinity of a river, sea or mountains or can depend on the number of inhabitants, the traffic and the like.

- the mathematical model would enable us in each moment to predict the development of temperatures at other measures spots. Such data would provide us with the exact time at which glazing starts on the coldest spots. At the same time we know the temperatures of the roadway at other spots and can thus determine the time continuation of spots where the glazing will occur first.
- At this moment the operator gains two key details to make the right decision: the data about how urgent it is to begin the activity and the information about where this activity should take place first. This way, the route can be constituted that would meet the conditions about the fastest possible gritting of dangerous spots and the economical conditions¹⁰.

5 Findings

For an effective and successful management of organisational and business systems in today's contemporary time, there are many (managerial) theoretical and practical advice, techniques, tools and methods and the like at disposal. Our model of the short-term prediction of glazing occurrence is also a part of them. On the one hand the model provides the managers of winter services with valuable information on the glazing at critical spots and on the other hand improves the safety of all road users.

This procedure enables us, to choose one or more representative spots from all observed spots on a closed road network. From the data about the temperature measured on those spots we can calculate, using the certain probability from regression equations:

$$Y = a_0 + a_1 X_1 + a_2 X_2,$$

the expected temperature values for individual measured spots. This enables us to know when and where the glazing will occur and helps us to react easier, faster and better. Using various functions such information enable us to model and organise winter service operations efficiently, when using the procedure described in chapter 4.

Based on the findings we can conclude that managers should by no means underestimate the contemporary difficulties they are facing in their everyday work. The quality of their decisions depends on the synergy effect of their intuition as well as on knowledge and skills, supported by our tools that need to be directed into a creative systemic thinking and (co)-operation when solving complex problems, typical for an applicative model of a short-term prediction of glazing occurrence.

Here, the knowledge and use of systemic thinking enables the managers to be able to integrate the theory into practice in the so called continuous interdependent dynamic process. These (everyday) processes cause problematic complex decision-making situations that, in most

cases, can no longer be solved holistically and thus well enough with the outdated methods.

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¹⁰ Naturally this does not have to be done manually. For this purpose a number of algorithms have been developed to search for shortest possible routes using various price functions. Two of them are analysed in (Kramberger and Žerovnik, 2005; Kramberger and Žerovnik, 2006).

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Monitoring of Quality Costs in the Croatian Hotel Industry

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The implementation of a quality cost system in hotel industry management accounting enables an increase in competitiveness in the race to provide a better service adjusted to the needs of the guests. In order to be able to manage quality costs for the purpose of reducing the costs of non-quality, it is necessary to ensure a methodological basis for monitoring and assessment of the effects of managerial decisions on investments into total quality management systems, as well as get insight in the amount and structure of quality costs. The purpose of this survey, carried out in 2002, was to find out to what degree the preconditions for the implementation of quality cost accounting as part of management accounting, a subsystem of the management information system, have been ensured in the Croatian hotel industry. We conducted an extensive survey that included 41 business systems, i.e. 140 hotels (31.1% of the total number of hotels in Croatia). The sample included hoteliers from all more significant tourist destinations in Istria, Kvarner Region, Dalmatia, Zagreb and continental Croatia, thus ensuring a geographically balanced account of the observed area.

Key words: quality costs, management accounting, TQM, hotel industry, USALI, ABC, TC.

Spremljanje stroškov, povezanih s kakovostjo, v hrvaškem hotelirstvu

Uvajanje sistema stroškov, povezanih s kakovostjo, v upravljavsko računovodstvo hotelirske industrije, omogoča povečanje konkurenčnosti v bitki za zagotavljanje boljših storitev gostom. Vendar, da bi lahko upravljali s stroški s ciljem zniževanja tistih, ki so povezani z neakovostnimi storitvami, pa je potrebno zagotoviti metodološko osnovo za spremljanje in oceno učinkov managerskih odločitev glede investicij v vseh sistemih kakovostnega managementa, kot tudi vpogled v vsoto in strukturo stroškov, ki so povezani s kakovostjo. Cilj te raziskave, izvedene leta 2002, je bil, da se ugotovi, do katere stopnje so zagotovljeni predpogoji za uvedbo stroškovnega računovodstva, povezanega s kakovostjo, kot dela upravljavskega računovodstva in podsistema managementa informacijskega sistema v hrvaški hotelirski industriji. Raziskava je bila obsežna in je vključevala 41 poslovnih sistemov, tj. 140 hotelov, kar je 31% vseh hotelov na Hrvaškem. Vzorec je vključeval hotele iz vseh pomembnejših turističnih destinacij Istre, Kvarnerja, Dalmacije, Zagreba in kontinentalne Hrvaške, s čimer je bila zagotovljena zemljepisna uravnoteženost raziskovanega področja.

Ključne besede: stroški, povezani s kakovostjo, upravljavsko računovodstvo, TQM, hotelirska industrija, USALI, ABC, TC.

1 Introduction

The purpose of this paper is to present the results of the survey that produced answers to the following questions:

- Are quality costs monitored and presented in the Croatian hotel industry?
- How do Croatian hoteliers perceive quality and in which way do they collect guest comments and opinions (through surveys, serviexpress, interviews, welcome cocktails, book of impressions, congratulations cards etc.)?
- Do they monitor information by responsibility centers?

- Do they prepare reports on costs and income of responsibility centers using the USALI?
- Do they use the activity-based costing or target costing method in the preparation of quality cost information?

2 Quality Cost Accounting as Part of Internal Business Accounting

One of the main postulates of TQM is to offer the buyer the best quality/price ratio possible. Total Quality Management (TQM) is a system for continuous improvement of the quality of products and services, i.e. continu-

ous improvement of the quality of the entire business. It is defined as follows (Avelini Holjevac, 2002:38-39):

- TQM is a system ensuring improvement, increase in flexibility, effectiveness and efficiency of business.
- TQM strives to ensure and create such conditions in which all employees can work together to achieve a single goal with maximum effectiveness and efficiency, i.e. to make a product or provide a service when, where and how the buyer and customer so wish and expect the first and every other time.
- TQM is based on the concept of continuous enhancement and improvement of processes, permanent quality and teamwork, all of which leads to continuous improvement.

Starting from the premise that *the one who manages costs, manages the business results* (Avelini Holjevac, 2000:14), we come to the conclusion that it is very important to ensure a relevant methodological basis to include costs arising from managerial decisions to invest in the total quality management system into business accounts. Therefore, quality costs must be identified and included in the accounts since such information is necessary in the quality system management process.

When speaking about quality costs, it should be emphasized that we are not referring only to the costs of the Quality Department (service, division or similar), but primarily to the costs related to establishing, securing and improving the quality level or those related to the need to repeat certain activities due to lower quality.

The estimation of the amount of the costs arising from investments in quality and those incurred on account of non-quality is an important factor in quality management and the foundation for estimation and assessment of total business performance.

Only when measurable, quality costs enable the management to make decisions on value-based information. As they represent instruments for measuring and control

of the financial effects of TQM, the need arises to use an analytical approach in the first phase of classifying and recording the same for the purpose of ensuring the pre-conditions for the implementation of a quality cost reporting system.

2.1 Classification of Quality Costs

Quality costs are costs related to TQM and they include:

- (a) costs related to investments in better quality, and
- (b) costs incurred due to non-quality.

Quality costs represent the total amount needed to spend in order to create a product or service in accordance with quality standards. Research shows that in many business systems it is necessary to invest for this purpose 3-4% of the total realization (Peršić, 1999:135). Unlike these, the costs incurred due to non-quality appear when a business process goes awry, when the errors have already occurred, regardless of whether the effects have reached the customer or not. It is estimated that such costs account for 30-40% of total quality costs in many business systems, even though it would be wise to reduce them to a reasonable percentage of about 5-10% (Peršić 2000:139)

Operational quality costs are incurred in the process of production and provision of services. During these processes, all preventive measures must be taken in order to adjust the existing product portfolio to market demands in accordance with contemporary trends. The costs of such preventive measures fall under **quality costs**. It is also necessary to monitor the costs arising from deviations from the desired quality, i.e. **costs of non-quality**. *The nature of quality costs depends on specific features of activities (production or provision of services), and requires that such costs be identified and adequately included in internal accounts by type, origin and/or activity, and presented by cost bearers (Peršić, 2000:139).*

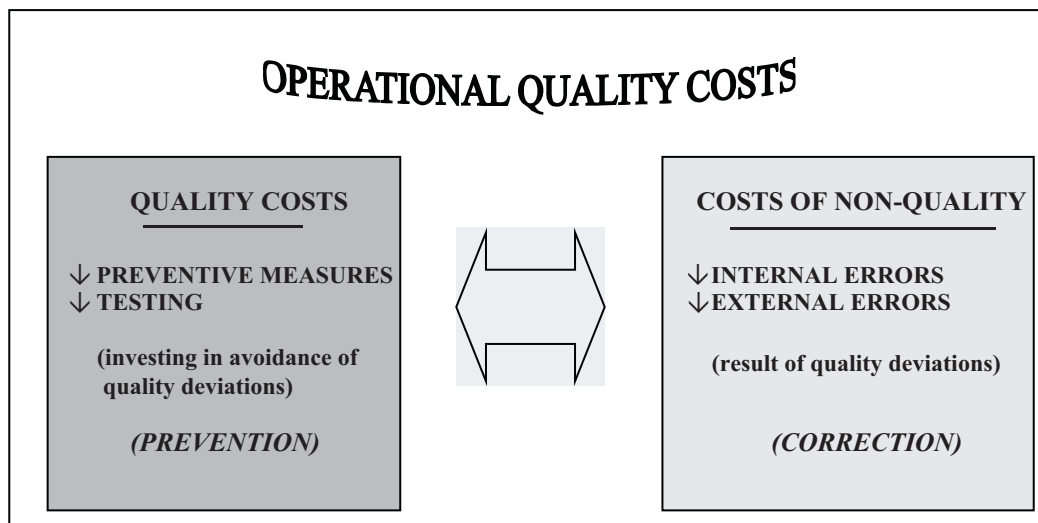


Figure 1: Operational Quality Costs (Source: Peršić 2000: 139)

Costs grouped in the above-mentioned way become preconditions for planning, monitoring and improvement of the quality management system. The necessity of quality cost monitoring arises also from the mere structure of the quality cost system that consists of the following processes (Arsovski, 2002:38)

- development of a quality cost model in line with the concrete organization,
- definition of procedures and policies for:
- planning of financial resources (including quality costs and a budget for corrective measures),
- ensuring financial resources,
- monitoring and control of the flow of financial resources,

- analysis of deviations and management activities and corrective measures,
- method of reporting and periodical rechecking,
- development of a quality cost implementation model,
- identification of key factors affecting quality costs,
- definition of the quality improvement project,
- assessment of financial effects of the introduction of the quality system.

For the purpose of determining the present situation concerning the quality cost classification in the Croatian hotel industry we divided the offered quality costs into two basic groups and sub-groups. The interviewees were supposed to mark those that are included in their accounts or some other records.

Table 1: Quality Costs in Croatian Hotel Industry Accounting (Source: Analysis by the author)

No.		Description	No. of interviewees	%
I. Prevention Costs				
1.	Quality costs	Reference books	31	84
2.		Plants	28	68
3.		Travel expenses for visits the purpose of which is to get to know the competition	27	66
4.		Flowers in the reception area	24	59
5.		Supplier analysis	23	56
6.		Gifts for guests	21	51
7.		Rewards for workers	20	49
8.		Visits to competing business entities	19	46
9.		Flowers in rooms	19	46
10.		Education in quality assurance	16	39
11.		Activities in cooperation with suppliers	14	34
12.		Costs related to quality assessment in the selection of suppliers	11	27
13.		Costs related to the checking of suppliers' activities in the process of their selection	10	24
14.		Costs related to quality planning	9	22
15.		Costs related to new product launches	9	22
16.		Pillow sweets	7	17
17.		Costs related to supplier consultation	3	7
II. Testing Costs				
1.		Hotel managers' stays at hotels to get familiar with products and services	15	37
2.		Costs related to determining the quality of products bought through inspection upon reception	14	34
3.		Lab testing	8	20
4.		Costs of stock testing	7	17
5.		Cost of quality AUDIT (independent assessment)	5	12
6.		Cost of quality AUDIT (independent check)	4	10
7.		Supervision (specialized organizations)	4	10
8.		Costs related to <i>no name</i> guests	3	7
9.		Materials and supplies necessary to perform control	1	2
III. Costs arising due to internal errors (low-quality product or service as yet not affecting the guest)				
1.		Reduced selling prices due to low quality	14	34
2.		Repeated services (cleaning, towels) if the first-time service proved not good	12	29
3.		Loss of earnings due to low quality	5	12
4.		Junk due to quality deviations	3	7
5.		Repeated control and testing	3	7
IV. Costs arising due to external errors (low-quality product or service already affecting the guest)				
1.	Costs of non-quality	Discounts due to guest complaints	29	71
2.		Free services	26	63
3.		Subsequently determined expenses (complaints from previous years)	14	34
4.		Discounts to guests on the spot	9	22
5.		Discounts to tour operators for defaults in the fulfillment of contracts	5	12

The research results show that Croatian hoteliers have recognized the importance of quality cost monitoring, and that there are analytical preconditions for creating a quality cost monitoring system. The hoteliers believe that by increasing their investments in quality and reducing all those costs incurred due to non-quality they are moving closer to achieving business success *...because every monetary unit or work hour used to produce non-usable products... can at the same time be used to produce better products or improve the existing products or business processes (Peršić, 2000:138).*

As far as **quality costs** are concerned, more than 50% of the interviewees recognized the costs related to visits to competing business systems, supplier analyses, reference books, flowers in rooms and the reception area, plants, gifts for guests, rewards for workers and study visits.

When speaking about **costs of non-quality**, more than 50% of the interviewees recognized two types of costs, i.e. discounts awarded to guests due to defaults in the provision of agreed or advertized services (free service due to non-quality) and discounts arising from low-quality service complaints.

Quality costs are investments in better quality and results of non-quality expressed as values, which means that it is necessary to ensure a methodological basis for monitoring and assessing the effects of managerial decisions on the amount and structure of quality costs. From the total number of interviewees, as many as 90 recognized quality costs and expressed their willingness to keep records of the same in their accounts. Regardless of the fact that most business systems that participated in the survey did not have a quality system, they did however recognize quality costs (50% of the interviewees) such as: visits to competing business systems, supplier relations, reference books, plants and flowers, gifts for guests, rewards for workers and guests, and study travel. More than 50% of the interviewees recognized non-quality costs such as discounts and free services due to guest complaints.

In order to be efficient, the process of continuous quality improvement must include all segments of a business system, which is one of TQM's main guidelines: *...inclusion of all employees, customer orientation, benchmarking and continuous improvement (Buble, 2000:44).*

Cross-functional teams, presupposing horizontal communication between functions and departments and including suppliers and buyers, are formed for the purpose of implementation of the mentioned process. The so-formed teams are coordinated by a central team whose members *...become responsible moderators selected from the lines of sub-team leaders, which ensures close coordination within the framework of objectives of the parts and of the whole (Peršić, 2000:184).* Such a form of organization creates a new organizational culture in which bureaucratic forms of control by specialized services are replaced by a system in which all employees bear responsibility. Cross-functional teams are responsible for ensuring compliance with high quality standards, and not for ensuring short-term profit.

For Croatia, the results of the survey show that 57% of the interviewees already implemented tasks for improvement and development of a quality system in their organizational structure. In 9% of the cases such tasks were entrusted with special Quality Departments. Here it must be emphasized that the interviewees had multiple-choice questions. No one stated under *Other* that the improvement and development of a quality system was entrusted with cross-functional teams.

2.2 Keeping Records of Quality Costs

By keeping records of quality costs, management accounting enables managers to enhance the quality of products and services, which is a precondition for the reduction of costs arising from customer dissatisfaction or shortcomings discovered before the guests had a chance to encounter them (costs of non-quality), and therefore the total costs as well.

Table 2: What is the purpose of keeping records of and monitoring quality costs? (Source: Analysis by the author)

No.	Description	No. of interviewees	%
1.	Adjustment to the needs and wishes of buyers	29	71
2.	Contribution to the improvement of quality of the organization and system as a whole	22	54
3.	Adjustment to the regulations on categorization	20	49
4.	Identification and elimination of causes of costs of non-quality	19	46
5.	Employee incentives to achieve better quality	18	44
6.	Raising the level of awareness about the interdependency of production and sales	13	32
7.	Meeting the ISO 1400 ff., HACCP and other standards	9	22
8.	Elimination of bottlenecks	9	22
9.	Assessing the contribution of particular programs to business performance	9	22
10.	Factors in the development of personnel, especially management personnel	9	22
11.	Contribution to the level of reporting in the business system	8	20
12.	Finding and sanctioning those responsible for non-quality	6	15
13.	The only measurable form of assessment of TQM's effects	4	10
14.	No response	6	15

In management accounting, the quality cost reporting method must be adjusted to the demands of the management, so that the management could assume the responsibility and influence the satisfaction of guests and thus bring about a reduction of costs of non-quality.

Information related to quality costs represent a resource, *input*, in the management information system. *Quality cost reduction enables increase in profits without increasing the sales, buying new equipment or hiring new people (Crosby, 1989:98).*

Table 3: Do you keep records, monitor and present data significant in determining the costs of quality in any way?
(Source: Analysis by the author)

No.	Description	ACCOMMODATION SERVICES		FOOD PREPARATION SERVICES		FOOD AND BEVERAGE SERVICES		OTHER TOURISM SERVICES		AUXILIAR, ADDITIONAL AND ADMINISTRATIVE SERVICES	
		No. of interviewees	%	No. of interviewees	%	No. of interviewees	%	No. of interviewees	%	No. of interviewees	%
1.	Survey	26	63		0		0	21	51	6	15
2.	Magazine	21	51		0		0		0		0
3.	Plan	26	63	23	56	21	51	23	56	18	44
4.	Research by external agencies	7	17		0		0		0		0
5.	Statistics	28	68	19	46	21	51		54	15	37
6.	Reports	26	63	26	63	28	68	22	56	20	49
7.	Check lists	12	29	10	24	11	27	23	12	3	7
8.	VIP client check lists	11	27	7	17	8	20	5	15	1	2
9.	Serviexpress	8	20	6	15	9	22	6	20	2	5
10.	Top 10 clients list	7	17		0		0	8	2	1	2
11.	Program for guests – entertainment & other activities	9	22	9	22	8	20	1	15	3	7
12.	Reservation procedure	21	51		0		0	6	0		0
13.	Procedure for a la carte program, theme nights, decorations		0	19	46	19	46		0		0
14.	Show cutting/cooking procedure		0	9	22	9	22		0		0
15.	Room service procedure		0		0	13	32		0		0
16.	Mini bar procedure		0		0	15	37		0		0
17.	Hygiene standards		0	25	61		0		0		0
18.	Kitchen work safety procedure		0	21	51	17	41		0		0
19.	Buffet/table setting procedure		0		0	17	41		0		0
20.	Entertainment program		0		0		0	19	46		0
21.	Supplier research		0	16	39		0		0		0
22.	Restaurant work safety procedure		0		0	1	2		0		0
23.	Other		0	2	5	1	2		0		0
	Total no. of documents	202	25	192	24,2	198	25	134	16,9	69	8,7

Although 49% of Croatian hoteliers consider that the purpose of keeping records of and monitoring quality costs is to meet the regulations on categorization, 71% of the interviewees believe that adjustment to the needs and wishes of buyers is the purpose of the afore-mentioned. The second most frequent answer selected by 54% of the interviewees is that the purpose of keeping records of and monitoring quality costs is in that it contributes to the improvement of quality of the organization and system as a whole. Unfortunately, only 10% of the interviewees actually see that the purpose of keeping records of and monitoring quality costs lies in the fact that it represents the only measurable method for assessing TQM's effects. Insufficient familiarity with the term, content and role of quality costs in a business system is the biggest obstacle and the fundamental reason why this subject is not approached to in a more serious manner. One of the reasons is also the insufficient investment in education, especially education in the field of quality.

2.3 Reporting about Quality Costs

The quality cost management system is based on information grouped into reports in order to enable continuous monitoring and comparison with real results. The goal is to present *as current and fresh as possible* data that enable making short-term decisions whereby... *quality costs must be analyzed separately and the preparation of reports must be based on such criteria that represent the preconditions for quality cost measuring* (Peršić, 2000:157). In the quality cost management system management accounting has a central role that consists of establishing preconditions for reporting. Quality cost accounting as a subsystem of management accounting must make possible the monitoring of quality costs by type, activity and all segments, depending on the specific features of tourism services. From 41 interviewees only 6 answered that documents concerning the quality cost monitoring system existed in their business system.

Quality cost management presupposes measurability of quality costs, identification of the causes of their occur-

rence and possibilities for their improvement. Therefore, the quality management system must include continuous testing (checking) of a) internal processes in order to find possibilities for improvement; b) of suppliers that are also a very important factor of internal processes in the circle of achieving quality; and c) of buyers whose needs are our guiding light. The survey covered the methods of keeping records of, monitoring and presenting data significant in determining quality costs.

Most reports are prepared with regards to accommodation (25%) and food and beverage services (24%). 17% reports are related to other services, and only 9% to auxiliary, additional and administrative services. As far as structure is concerned, we are mainly speaking of statistical data, elements of various reports and procedures, whereas there are not too many guest surveys. The results of surveys carried out by external agencies or data concerning supplier perceptions are used to a very small degree as well. The above-mentioned indicates a need to direct more attention to demands of guests and business partners, as it is a known fact that the product and service portfolio must be adjusted to their needs. The investments in the modification of the product and service offer and the effects of such modifications on possible errors are neglected.

Guest (customer) surveys in the field of accommodation services are carried out in the case of 63% of the interviewees, and 51% of the interviewees carry out surveys in other fields as well. The above-mentioned data lead to a conclusion that there is still a high percentage of hotel systems in Croatia that have not recognized the importance of customer surveys in all segments of their offer.

The above-mentioned indicates a need to dedicate more attention to the segment of quality assurance costs, i.e. the costs of preventive (avoidance of possible errors) and corrective measures (the consequence of adjustment to standards).

In the case of 33 interviewees (81%) customer survey results affect the improvement of the quality of service, employee motivation system and increase in business results. The goals achieved by carrying out customer surveys are numerous, e.g. obtaining feedback about hotel guest impressions, removing shortcomings noticed by guests, mutual satisfaction, focusing on low grades (e.g. ecology, beach cleanliness, environment etc.), working on the weak points identified by the survey, developing the offer and enhancing the service.

In the case of 3 interviewees customer survey results do not affect the improvement of the quality of service, employee motivation system and increase in business results (due to the financial situation which does not enable the same). Although this is only a small number of interviewees, this still indicates that there are such business systems that have not recognized the importance of customer surveys and the possibilities in which the information obtained from customers may be used. In the case of 5 interviewees customer surveys are not carried out at all, but they do keep track of the surveys carried out by

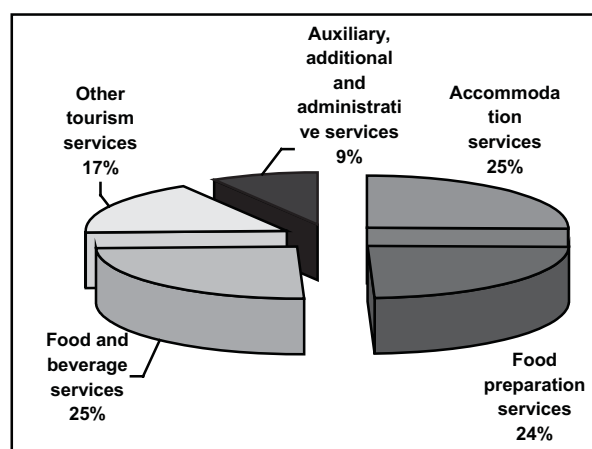


Chart 1: Quality Cost Monitoring Structure By Departments
(Source: Table 3)

external agencies and are doing everything that is in their power to satisfy their guests. They also said they would try to carry out a survey.

3 Reporting Standards in the Field of Accounting in the Croatian Hotel Industry

The USAH¹, as the forerunner of the USALI², was originally established in 1926 by the Hotel Association of New York City. Since then, the system has been revised several times. *The ninth revised edition of the USALI meets the demands of hotel managers for a unique system for classification, organization and presentation of data expressed as values in a clearly defined system for reporting about externally comparable internal results (Peršić, 2003:1).* The standard reporting system is used in all hotel companies that wish to compare their results because it ensures transparency of information concerning the business results realized by particular responsibility centers called departments, and allows cross-comparison of internally realized results with regards to particular activities within particular companies. According to the USALI reporting standards, profit responsibility centers are those departments that generate income. Those are (*Uniform System of Accounts for the Lodging Industry, 1996: 31 – 144*):

Report no.	Report name
1	– Rooms
2	– Food
3	– Beverages
4	– Telecommunications
5	– Garage and Parking
6	– Golf Course
7	– Golf Pro Shop
8	– Guest Laundry
9	– Health Center
10	– Swimming Pool
11	– Tennis
12	– Tennis Pro Shop
13	– Other Operated Departments
14	– Rentals and Other Income
28	– House Landry
	– Statement for Gaming Operations
	– Casino Department

Responsibility centers, also recognized as cost centers, belong to shared overhead departments the costs of which must be covered by the income from regular activity:

15	– Administrative and General Affairs
16	– Human Resources
17	– Information System
18	– Security
19	– Marketing

19 a	– Franchise Fees
20	– Transportation
21	– Property Operation and Maintenance
22	– Utility Costs
23	– Management Fees
24	– Rent, Property Taxes and Insurance
25	– Interest Expense
26	– Depreciation and Amortization
27	– Income Taxes
29	– Salaries and Wages
30	– Payroll Taxes and Employee Benefits

The 32 envisaged internal reports have been adjusted to specific conditions in the hotel industry and must comply with the principles of responsibility, controllability and accountability. Responsibility is the main principle of making internal reports for each particular responsibility center. In order to be able to include such data into the accounts adequately, the costs must first be classified as fixed or variable and assigned to a certain cost center, and monitoring of interdependency of particular internal income and expenses must be ensured. In order to enable the preparation of such reports, an internal account by responsibility must be formulated (responsibility accounting). The primary task of the mentioned reports is to present income, expenses and particular results for a defined reporting period. The reports based on the USALI enable transparency and consistency of data contained in reports, which further enables detection of deviations and their points of origin, as well as proposing measures for their elimination or removal of bottlenecks that have caused them.

Management accounting represents a necessary precondition for ensuring appropriate data that are the subject of reporting in the USALI. 29% of the interviewees base their internal reporting completely on the USALI, 29% base their internal reporting partly on the USALI, and 20% intend to implement the Uniform System of Accounts in the Lodging Industry. 5% of the interviewees are not familiar with the meaning of the term USALI, and 2% do not intend to base their reporting on the said system. The survey showed an increase in the number of Croatian hotel systems that base their internal accounting completely on the USALI in comparison with the results from the 2001 survey when there were only 27.5% such systems (*Turčić, 2001:100*).

A four-level internal system of accounts is a precondition for business monitoring. Its task is to shape goal-oriented standard reports based on the USALI that are necessary for making quality managerial decisions. The preparation of relevant reports at all hierarchical levels will only be possible once the cost monitoring is associated with particular activities in a system of accounts.

¹ Uniform System of Accounts for Hotels

² Uniform System of Accounts for the Lodging Industry

Table 4: Do you have a four-level internal system of accounts based on the USALI? (Source: Analysis by the author)

No.	Description	No. of interviewees	%
1.	Level 1 – legal entity within a complex business system, chain, corporation	16	39
2.	Level 2 – segments as responsibility centers	22	54
3.	Level 3 – synthetic accounts of assets, capital, expenses and income	24	59
4.	Level 4 – analytical accounts, codes, specific features of the activity in question	27	66
5.	Other	1	2
6.	No response	8	20

Business systems using the USALI envisaged in most cases (66%) the possibility of monitoring up to the fourth level, i.e. analytical accounts were grouped according to specific features of the activity in question. This information leads us to conclude that in the Croatian hotel industry the preconditions for inclusion of quality cost reporting into the existing internal reporting system have been realized. This is necessary because contemporary business operations of hotel companies require modernization of the information system to include all relevant information concerning business quality and quality costs, thus enabling the management to see the real situation for the purpose of making timely decisions.

The fact that as many as 95% of the interviewees wish to find room in their systems of accounts for quality cost monitoring, mainly at the level of cost centers (41%), is encouraging. Quality costs that are already included in the system of accounts are: flowers, plants, free services, employee education, study travel, management education, music, entertainment & animation, decoration, gifts for partners, welcome drinks, professional magazines, reference books, gifts for guests, rewards for workers, discounts due to complaints, quality testing, tastings, transportation of hotel guests, activities in cooperation with suppliers, standardization of materials, groceries, small supplies and equipment, space decoration, arrangements, professional advancement and specialization, discounts, compensations, costs of court proceedings, subsequently established errors, bonus services, sponsorships...

In the case of 10% of the surveyed business systems the user of reports on quality costs is senior management. Middle management is the user in the case of 21% of the surveyed business systems, whereas in the case of 10% of the surveyed business systems the reports reach low management as well. Compared to the results of the surveys

carried out in 1997 (Peršić and Ilić, 1998:141) and 2001 (Turčić, 2001:99) the obtained results indicate a positive trend. More to the point, in 1997 internal accounting data in most cases did not reach low management, middle management used them in 13% of the cases, whereas senior management used such information in 82% of the cases. The 2001 survey showed that reporting was directed at low management as well (9.3%). Middle management was the user of accounting reports in 24.9% of the cases, whereas senior management used such reports in 65% of the cases. Research shows that the number of users of internal accounting information on lower levels is increasing. This result is relevant for the quality cost accounting because quality costs occur in processes and activities, and all employees are invited to participate in the reduction of the same.

In order to react as promptly as possible in case of deviations, the intention is that the data included in the reports be as current and fresh as possible. The situation in Croatian hotel business systems that have already implemented a quality cost reporting system indicates a need to reorganize such systems with the aim of achieving an increase in the preparation of reports on a daily basis. Quality cost reporting is mainly done on a monthly basis. This result was obtained from the previous surveys as well in which the reporting was done on a monthly basis in the case of 85% of the interviewees (Turčić, 2001:79).

In order to react as promptly as possible in case of more serious deviations, the intention is to shorten the reporting deadlines in order to get as current and fresh data as possible. Therefore, even such business systems that have implemented a quality reporting system in accordance with the ISO standards should try to report on the quality costs on a daily basis.

Table 5: Do you have a quality cost reporting system? (Source: Analysis by the author)

No.	Description	No. of interviewees	%
1.	Number of interviewees that answered yes	9	22
Quality cost reporting levels			
1.	At the level of cost centers	5	12
2.	Only at the level of the business system as a whole	4	10
3.	At the level of responsibility centers	4	10
4.	At the level of particular activities	1	2
5.	Other	0	0

In spite of the possibility to separate from the start certain relevant amounts regarding quality and non-quality costs in certain analytical accounts, such costs are not shaped in most business systems. From 22% of the business systems that have introduced the quality cost reporting 12% monitor such costs at the level of cost centers, only 2% at the level of activities, while the others prepare the reports at the level of the business system as a whole or at the level of responsibility centers. This confirms that our accounting is in the second development phase and that what follows is the introduction of activity-based accounting.

The advantage of transparent business operations is the inclusion of all employees in the process of making decisions and determining responsibility at all levels. The task of management accounting is therefore to allow that all report users at all levels receive relevant information. Our next question was related to finding out the actual users of reports in Croatian hotel companies that have a quality cost reporting system.

4 The Role of the ABC and TC Methods in the Preparation of Quality Cost Reports in Croatia

The existing internal accounting system in the Croatian hotel industry does not meet the requirements for quality cost monitoring since the cost center is the lowest level at which internal results are monitored. Therefore, upgrading of the existing internal accounting systems presupposes introduction of activity-based accounting, thus creating the basis for allocation of all direct and general costs. Activity Based Costing (ABC) is an accounting method based on activities, i.e. processes. The ABC method is very significant in that segment because it ensures an increase in process efficiency. According to this method, all costs that can be associated with a product unit are presented

as direct costs on such products, i.e. cost bearers, and all general costs are first classified by activities, i.e. processes in which they occurred, where they are also broken down into sub-processes. In this way the costs of the Quality Department are allocated to cost bearers. The ABC method should be used in order to avoid traditional allocating methods using the non-allocated (in terms of percentage) cost (indirect costs, the hidden part of the iceberg) keys.

Target Costing (TC) is a method of target cost accounting with respect to new products. The target cost is the maximum cost that can be incurred on a market-oriented product, and is determined through a continuous process of comparing the costs of products, business processes or total operating costs against the best in the market related by type of activity and product structure (Peršić, 2000:143). Target costing represents a structural approach to determining costs necessary to make a product of a specific quality in order for it to generate the desired level of profitability, along with the expected selling prices (Bahtijarević-Šiber and Sikavica, 2001:60).

In contemporary market races the one who survives is the one who is ready to continuously improve its performance in the environment of an increasingly stronger competition and increasingly demanding customers. The best method for improving the competitive position is benchmarking. Benchmarking is a method that gives us the answers to the following questions: What makes a market leader? Why aren't we market leaders? How to get in line with the market leader? Where do we stand in relation to our competition? *The most efficient way to determine effective changes is to learn from others. In order to succeed we must find out why certain individuals or companies function better than us and try to learn how to get in line with them or even excel. We learn from those who are willing to share their knowledge with us. ...Benchmarking is not a substitute for a strategy, it per se does not enhance business operations; it is however the most efficient way of realizing your own goal, which is*

Table 6: Do you benchmark your results against related business systems in your environment or competition (benchmarking method)? (Source: Analysis by the author)

No.	Description	No. of interviewees	%
1.	Number of interviewees that answered yes	34	83
<i>Compared data</i>			
1.	Realized overnights	32	78
2.	Selling prices	27	66
3.	Operating income	24	59
4.	Total income	24	59
5.	Total expenses	20	49
6.	Operating costs	19	46
7.	Gross operating profit	17	41
8.	Results by general indicators	14	34
9.	Gross profit rate	13	32
10.	Cost structure	11	27
11.	Fixed costs	10	24
12.	Variable costs	7	17
13.	Results by indicators according to the USALI	6	15

business success. (Renko Nataša, et al, 1999:2). Benchmarking can be carried out in various fields; therefore it is one of the most significant concepts of total quality management.

Only 5% of the interviewees answered that they used the advantages of the target costing method, although as many as 81% of business systems believe this method to be useful and wish to adjust their product and service costs to the solvent demand, i.e. to the level of competition selling prices.

According to this survey, 41% of hoteliers determine gross operating profit at the level of responsibility centers; however still prevailing is the comparison of realized overnights (78%) and selling prices (66%).

Although there still exist business systems that rate the importance of benchmarking with low grades (30% rated the importance with a grade under 7), 32% of Croatian hotel business systems rated the importance with grade 8, 10% with grade 9, and 20% with grade 10. A high percentage of business systems (62%) in the Croatian hotel industry recognize the importance of benchmarking against the best competing business system, which indicates the raising of the level of awareness concerning the importance of improving own business performance and thus ensuring greater satisfaction of guests.

5 Conclusion

On the basis of the survey we can conclude the following:

- The results of the survey show that in internal systems of accounts of Croatian hoteliers there is room for upgrading such systems to include quality cost monitoring.
- Insufficient investments in education and insufficiently developed information systems represent the largest obstacle and are the main reason why the implementation of quality cost accounting is not systematically approached to as part of management accounting.
- The USALI has been completely or partly implemented by more than 50% of the interviewees, whereas 20% intend to implement it soon, which is quite significant for the further development of the quality accounting system and its improvement. 66% of the business systems that base their reports on the USALI monitor the results up to the fourth level in their internal accounts, and that exactly is the space where the so far still insufficiently developed quality cost system could be implemented.
- The lowest level at which the quality costs are monitored in the Croatian hotel industry are the cost centers.
- The development of accounting in the Croatian hotel industry should be directed to the application of the activity-based costing (ABC) and target costing (TC) methods, the preconditions for a standardized approach to quality cost accounting concerning costs

incurred in connection with business processes and activities.

- Accounting ensures premises for identification, monitoring and reporting about quality costs in the Croatian hotel industry but it has not been sufficiently applied in practice as yet.

From the above-mentioned we can make a general conclusion that business improvement through the application of the TQM principle obligates management to ensure a methodological basis on the level of responsibility centers for monitoring, classification, grouping and presentation of quality costs based on relevant theories and practical experiences. 71% of Croatian hoteliers have recognized this importance; they see the purpose of keeping records and monitoring of costs of quality in the process of adjustment to the needs and wishes of customers. Quality cost reporting is part of the information system modernization process. In the management information system, relevant information concerning the quality of business and costs of quality represent input information allowing the management to see the real situation for the purpose of reaching business decisions in a timely fashion in order to position their particular business system better in relation to its competition.

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Družbena odgovornost trajnostnega podjetja¹

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Delovanje družbe je odvisno od ravni odgovornosti njenih organizacij, še posebej podjetij kot najvplivnejših institucij sodobne družbe. Podjetja lahko zahteve sodobne družbe izpolnijo, kadar delovanje temelji na trajnostnem razvoju. Prispevek razpravlja o dveh tezah: (1) kako trajnostno delovanje podjetij vpliva na celovito družbeno odgovornost; (2) trajnostna etika ima osrednjo vlogo in pomen za doseganje družbene odgovornosti podjetja in s tem celotne družbene odgovornosti.

Ključne besede: družbena odgovornost, etika, etika soodvisnosti, družbena odgovornost podjetja, trajnostna etika, trajnostno podjetje.

1 Družbena odgovornost trajnostnega podjetja

Številni primeri iz poslovne prakse dokazujejo, da organizacije ne izpolnjujejo vedno pričakovanj svojega okolja. Hkrati pa moderne organizacije poskušajo zadovoljiti celoto različnih potreb in zahtev (npr. zakonske, tržne, okoljske itd) notranjega in zunanjega okolja (WCED, 1998; Mulej idr., 2004; Potočan, 2004).

Kako lahko pojasnimo razlike med pričakovano in dejansko odgovornostjo organizacij do okolja? Družbeno odgovornost (DO) lahko najsplošneje opredelimo kot obveznost človeštva, da uresničuje skupne cilje družbe (Cooper in Vargas, 2004; Brandon in Lombardi, 2005).

V teoriji in praksi so znane številne obravnave, ki različno opredeljujejo pojem in obseg DO (Laurent, 2003; Brandon in Lombardi, 2005; Jennings, 2005)

Večina avtorjev tega področja je enotnega mnenja, da proces njenega razvoja vključuje pet faz in sicer: maksimiranje koristi, pooblaščenje, aktivizem, sprejetje DO in sodobno razumevanje DO (Daft, 2003; Potočan in Mulej, 2003; Beauchamp in Bowie, 2004):

- maksimiziranje koristi: obravnava DO v času industrijske revolucije, npr. John Locke, Adam Smith itd.;
- management zaupanja: faza v delovanju vlad in managerjev na področju DO, ki je bila določena predvsem z interesi lastnikov; obravnava DO v ZDA v tri-

desetih letih prejšnjega stoletja po veliki gospodarski krizi;

- faza aktivizma: faza se začne v zgodnjih šestdesetih letih in vključuje številna gibanja, katerih aktivnosti so bile usmerjene na posamezne dejavnike DO (npr. človeške pravice, varstvo okolja, pravice potrošnikov);
- faza sprejetja DO: temelji na predpostavki, da predstavljajo sodobne organizacije osrednje in najvplivnejše institucije moderne družbe, zato morajo prevzeti DO za svoje delovanje;
- moderno razumevanje DO, ki temelji na sprejetju obveze za celovito DO delovanja, ki omogoča sprejemanje odločitev in izvedbo akcij, ki bodo zagotavljale hkratno in usklajeno uresničevanje interesov skupnosti in organizacij.

Temeljni cilji izvajanja DO v organizaciji so predvsem: ekonomski cilji, izpolnjevanje zakonskih obveznosti ter doseganje etičnih ciljev in celovite družbene odgovornosti.

Znani so različni pristopi za izvajanje DO, in sicer: zadržani, obrambni, prilagoditveni in proaktivni:

- zadržani pristop predstavlja odziv organizacije na družbene zahteve, pri čemer organizacija zanika svojo odgovornost za uresničevanje potreb in zahtev skupnosti;
- obrambni pristop priznava obvezo za etično vedenje; člani organizacij upoštevajo zakone in svoje delovanje dosledno usklajujejo z zakonskimi zahtevami;

¹ Prispevek temelji na raziskovalnem programu »Od institucionalne k stvarni tranziciji«, ki ga financira Agencija za raziskovalno dejavnost Republike Slovenije v času od 2004 do 2007.

- prilagoditveni pristop priznava potrebo po podpori DO; subjekti organizacije poskušajo z odgovornim delovanjem zagotoviti uravnoteženo uresničevanje različnih interesov organizacije;
- proaktivni pristop temelji na aktivnem prizadevanju za uresničevanje DO; subjekti organizacije poskušajo oblikovati DO vedenje, spoznati (interese in) potrebe različnih skupin in uporabiti vire organizacije za doseganje uravnoteženih ciljev delovanja.

DO je mogoče razumeti na osnovi celovite preučitve vseh ravni in področij delovanja družbe. V okviru te problematike se bomo v nadaljevanju osredotočili na predstavitve družbene odgovornosti podjetij (DOP) (Potočan, 2000; Potočan in Mulej, 2003; Potočan, 2005).

DOP lahko najsplošneje opredelimo kot odgovornost vseh subjektov poslovanja (predvsem lastnikov in managerjev) za oblikovanje in izvajanje akcij, ki so usmerjene v uresničevanje celote potreb in interesov:

1. okolja podjetja (tj. naravnega, socialnega, družbenega) in
2. podjetja samega (tj. notranjih interesov).

Na drugi strani lahko DOP razumemo tudi kot obveznost, da subjekti poslovanja svoje delovanje izvajajo v skladu z zakonodajo in v skladu z veljavnimi vrednostmi in cilji okolja (vseh pomembnih okolij).

Poznana so različna razumevanja vloge in pomena DOP za poslovanje (Leipziger, 2003; Kotler in Lee, 2005). V literaturi in praksi sta poznana dve osnovi gledanja in sicer:

1. omejeni pogled (npr. Milton Friedman) temelji na izhodišču, da mora biti delovanje legalno, vendar ne več kot to; socialna odgovornost namreč povzroča stroške in povišanje končne cene blaga;
2. neomejeni pogled, ki opredeljuje poslovanje kot pomemben del delovanja družbe, ki ima na družbo velik vpliv; zato so gospodarski subjekti soodgovorni za razvoj družbe.

Pomembnejša poznana izhodišča za obravnavo DOP so npr. (Potočan in Mulej, 2003; Potočan, 2005):

- Davisov model DO: splošni model DO je zasnoval Keith Davis, v njem pa navaja 5 izhodišč, ki predstavljajo, zakaj in kako podjetja sprejemajo obveznosti za izvajanje ustreznih akcij;
- opredelitev in upoštevanje področij DOP: takšen pristop predpostavlja, da je DOP vključena v vsa področja poslovanja (npr. proizvodnje, marketinga, socialnih aktivnosti, ekoloških aktivnosti, delovnih razmerij, varstva in zdravja zaposlenih);
- celovito razumevanje pomena in vloge DOP v doseganju rezultatov poslovanja: DOP lahko na poslovanje vpliva posredno ali neposredno.

Raziskave delovanja in rezultatov podjetij, ki so vodilna na področju DO (npr. Levi Strauss, Polaroid, Dayton, Hudson) dokazujejo, da je mogoče opredeliti:

- določeno neposredno povezavo med DO in dobičkom,
- posredno povezavo med DOP in rastjo poslovanja podjetja in
- da višja raven DOP vpliva na izboljšanje imidža, kar posledično omogoča izboljšanje rezultatov poslovanja.

Načelo DOP je tesno povezano z obvezno podjetja, da deluje v skladu s konceptom trajnostnega razvoja (TR).

Podjetje deluje trajnostno, kadar s TR zagotavlja zadostno celovitost svojega delovanja s hkratnim doseganjem ekonomskih, socialnih, okoljskih in etičnih kriterijev (Potočan, 2004, 2005).

Podjetje je torej lahko uspešno, če razume (in s svojim delovanjem izvaja) poslovne trende na temelju: (1) trajnostnega razvoja, (2) primerne (trajnostne) etike in (3) razumevanja vpliva etike trajnostnega podjetja na DOP.

2 Vloga in pomen TR za podjetje

Pogoji za delovanje podjetij so se v zadnjih 100 letih hitro in pomembno spreminjali (Bolwijn, Kumpe, 1990; Ečimovič idr., 2002; Potočan, Mulej, 2003). Dosedanji ekonomski

Tabela 1: Od oskrbnega do trajnostnega podjetja

Dekada	Tržne in družbene zahteve	Kako podjetje zadovoljuje zahteve	Tip podjetja
1950	Izpolnjevanje poveljnih pogojev	Oskrba česarkoli	Oskrbeno podjetje
1960	Ustrezna cena (po oceni strank)	Notranja učinkovitost, tj. management stroškov	Učinkovito podjetje
1970	Ustrezna cena X ² kakovost (po oceni strank)	Učinkovitost X tehnična in komercialna kakovost, tj. man. kakovosti	Kakovostno podjetje
1980	Ustrezna cena X kakovost X obseg (po oceni strank)	Učinkovitost X tehnična in komercialna kakovost X fleksibilnost	Fleksibilno podjetje
1990	Ustrezna cena X kakovost X obseg X originalnost (po oceni strank)	Učinkovitost X tehnična in komercialna kakovost X fleksibilnost X inovativnost	Inovativno podjetje
2000	Ustrezna cena X kakovost X obseg X originalnost X prispevek k TR (po oceni strank)	Učinkovitost X tehnična in komercialna kakovost X fleksibilnost X inovativnost X TR	Trajnostno podjetje

² Znak X označuje soodvisnost. Originalna tabela (Bolwijn, Kumpe, 1990) ne vključuje znaka X, ampak znak +. Za nas znak + ne označuje soodvisnosti, ker so elementi v tem primeru samo sešteti. Naše izkušnje dokazujejo, da seštevek elementov praviloma predstavlja poenostavitev in ne upošteva potrebne celovitosti. Originalna tabela tudi ne vključuje obdobja 1950 in 2000.

razvoj je razdelil človeštvo na 20 % razvitih in 80 % nerazvitih (Dyck, Mulej, 1998; Mulej, 2000).

Takšno razliko je povzročil predvsem pristop k inovativnosti, tj. inovacijski paradoks. Tisti, ki najbolj potrebujejo inovativnost, so najmanj inovativni in tudi najmanj podpirajo podjetniško vedenje (Mulej, 2000; Daft, 2003; Trevino, Nelson, 2004). Proces globalizacije te razlike samo še povečuje (Cooper, Vargas, 2004; Mulej idr., 2004; EU, 2005).

Z odločitvijo najvišjega političnega telesa človeštva, tj. Organizacije združenih narodov, je bila leta 1992 sprejela odločitev, da je TR primerno izhodišče za delovanje vseh organizacij družbe. Človeštvo lahko z njegovo izvedbo zagotovi potrebno ravnovesje med uresničevanjem ekonomskih in okoljskih ciljev (Umpleby, 2002; EU, 2005). V nasprotnem primeru bo dobiček (kot enostranski in kratkoročni cilj delovanja) zmanjšal možnosti za dolgoročno doseganje obstoja in razvoja človeštva.

Predvidevanja, odločitve in akcije vseh človeških aktivnosti (še posebej podjetij) morajo zato vključevati TR kot nujen pogoj za preživetje in razvoj človeštva. Delovanje podjetij je bilo v dosedanjem razvoju usmerjeno na doseganje različnih ciljev, kot prikazuje tabela 1 (Bolwiyn, Kump, 1990, Potočan, Mulej, 2003).

Sodobno trajnostno podjetje lahko navedene cilje doseže s celovitim razumevanjem realnosti in z upoštevanjem večine (pomembnih) potreb članov družbe.

V teoriji in praksi še ne poznamo modela poslovanja, ki bi v celoti zagotavljal potrebno harmonizacijo in ciljno usmeritev zelenega razvoja. Model TR predstavlja možno rešitev, ki omogoča podjetjem dovolj celovito uresničevanje (večine) pomembnih ciljev človeštva.

Na temelju različnih teoretičnih spoznanj in naših izkušenj iz poslovne prakse lahko oblikujemo splošno opredelitev trajnostnega podjetja (Potočan, 2000; Potočan, Mulej, 2003; Potočan, 2005). Najsplošneje lahko kot trajnostno opredelimo podjetje, ki poskuša s svojim delovanjem (v največji možni meri) dosegati sinergijsko celoto ekonomskih, socialnih, etičnih in ekoloških ciljev.

Njegovo delovanje je usmerjeno v zadovoljevanje potreb in zahtev na različnih ravneh, kot so:

- raven podjetja,
- raven njegovega ožjega okolja (družbeno okolje) in
- raven njegovega širšega okolja (globalno okolje).

Za vrednotenje delovanja trajnostnega podjetja je treba oblikovati tudi sistem kriterijev za vrednotenje doseganja ciljev na posameznih ravneh delovanja.

Delovanje trajnostnega podjetja je pomembno odvisno (tudi) od etike delovanja (in vedenja) njegovih udeležencev. V poglavju 3 zato predstavljamo izbrana izhodišča in značilnosti etike trajnostnega podjetja.

3 Etika trajnostnega podjetja

Etika trajnostnega podjetja predstavlja soodvisno celoto (izbranih) pomembnih vidikov delovanja podjetja. Zakaj je etika pomembna za celotno človeško delovanje in še posebej za delovanje podjetij?

Etika je predvsem občutek, čeprav jo lahko opredelimo tudi kot posledico delovanja levega dela možganov oz. kot rezultat človekove razumnosti/znanja/talenta. Omogoča nam razlikovati, kaj je prav in kaj narobe (Ulrich, 1997; Singer, 1999; Jennings, 2005).

Empirični raziskovalci obravnavajo etiko kot sinergijo vedenja v okviru skupnosti. V dovolj dolgem obdobju etika vpliva na oblikovanje prevladujočega vedenja, tj. moralnih pravil, kot naslednjega formalnega koraka (Singer, 1999). Moralna pravila sooblikujejo kulturo (v skupini, delih organizacije, celotni organizaciji, regiji, socialnih skupinah itd.).

S tem torej tisto, kar je bilo naprej posamična lastnost, postane objektivizirano, del pogojev za delovanje posameznika (tj. širših zahtev okolja do posameznika). Na ta način etika vstopa v posameznikova izhodišča in vpliva na njegovo zaznavanje, določitev njegovih prioritet in delovanja. Za človeške aktivnosti je zato etika (vsaj) enako pomembna kot strokovno znanje, izkušnje, kreativnost in sodelovanje.

Na podlagi navedenega lahko predpostavimo, da obstaja sinergijska povezanost in soodvisnost med individualnimi vrednotami, kulturo, etiko in normami (gl. sliko 1) (Mulej, 1979; Mulej, Kajzer, 1998; Mulej, 2000; Potočan, 2000; Potočan, Mulej, 2003).

Kakšna pa je povezava med etiko in trajnostnim razvojem? Trajnosten razvoj, kot ga je definirala Organizacija združenih narodov (WCED, 1987; Potočan, 2004, 2005), temelji na spoznanju o soodvisnosti razvoja in trajnosti, ki naj omogoči (in zagotovi) zadostno celovito skrb za človeško naravno okolje, ter spoznanju, da je potrebno ustrezno vedenje človeštva, ki mora upoštevati (predvsem) potrebe in zahteve celotnega človeštva.

To pomeni, da etika soodvisnosti predstavlja osnovni in nujen pogoj za dovolj celovito (razumevanje in) izvajanje TR na vseh ravneh človeškega delovanja (Bertalanffy,

Individualne vrednote (odvisne od znanja)	↔	Kultura = vrednote, ki jih delijo mnogi, navede znotraj socialne skupine
↕		↕
Norme = predpisane vrednote o tem, kaj je prav in kaj narobe v socialni skupini	↔	Etika = prevladujoče vrednote o tem, kaj je prav in kaj narobe v socialni skupini

Slika 1: Soodvisnost vrednot, kulture, etike in norm

1968; Mulej, 2000; Potočan, Mulej, 2003). Razvoj človeštva v zadnjih desetletjih je zapostavljal načela TR, zato želi Organizacija združenih narodov kot najvišji politični organ človeštva vplivati na ustrežnejše ravnanje vseh subjektov človeškega delovanja. To še posebej velja za podjetja, saj lahko njihovo enostransko delovanje povzroči nepopravljivo škodo in pomembno omeji možnosti za prihodnji obstoj in razvoj celotnega človeštva.

Podjetja zato potrebujejo radikalno inovacijo stila managementa, tj. etike delovanja in vedenja vseh pomembnih subjektov poslovanja, da bi delovala trajnostno.

Prav tako celotno človeštvo potrebuje spremembo etike, ki bo v večji meri zadovoljevala potrebe in zahteve sodobnega okolja in v tem okviru trajnostnega razvoja. Pri tem lahko izhaja samo iz etike sodvisnosti kot osnovnega (in edinega možnega) pogoja za inovativno preoblikovanje delovanja vseh svojih subjektov človeštva.

4 Pomen etike trajnostnega podjetja za celovito DO

Trajnostno podjetje poskuša postati kar se da verodostojno in zaupanja vredno na temelju zanesljivosti svojega delovanja, inovativnosti, celovite skrbi za kupce, zagotavljanja originalnosti, skrbi za okolje ter prizadevanja za socialno in etično delovanje.

Trenutna spoznanja o trajnostnem podjetju (in njegovi trajnostni etiki) ter o njegovem vplivu na celovito družbeno odgovornost nam omogočajo razumeti in preučiti:

- povezave med posameznimi etikami (njihovimi vrstami, tipi in oblikami) v okviru posameznega trajnostnega podjetja,
- povezave med trajnostnim podjetjem (z določeno etiko) in možnimi (in/ali dejanskimi) rezultati njegovega delovanja,
- povezave med posameznimi rezultati delovanja trajnostnega podjetja in DO.

Manj pa so raziskana področja:

- različnih možnih obravnav trajnostnega podjetja (v okviru posameznih možnih vrst, tipov in oblik trajnostnega podjetja),
- vloge in pomena različnih etik v delovanju trajnostnega podjetja,
- vpliva (posameznih vrst, tipov in oblik) trajnostnega podjetja na DOP,
- vpliva posameznih (vrst, tipov in oblik) trajnostnega podjetja na celovito DO,
- vpliva posameznih etik trajnostnega podjetja na DOP,
- vpliva posameznih etik trajnostnega podjetja na celovito DO.

Omenjena vprašanja so tudi osnova za prihodnje raziskave izbranih izhodišč TR, značilnosti TR, njegove trajnostne etike in vpliva trajnostne etike na DOP in celovito DO.

5 Sklep

Dolgoročni obstoj in razvoj družbe sta odvisna od ustrezne DO delovanja vseh subjektov družbe. V njenem okviru ima osrednjo vlogo DOP kot najvplivnejša skupina sodobnih organizacij.

Podjetja lahko izpolnjujejo sodobne ekonomske pogoje s temeljitim inoviranjem svojega delovanja na temelju izvajanja koncepta TR in z oblikovanjem ustrezne trajnostne etike delovanja podjetja.

Delovanje podjetij je pomembno odvisno od etičnosti njihovih udeležencev (predvsem lastnikov in managerjev), ki s svojimi odločitvami (posredno in neposredno) vplivajo tudi na celoten razvoj družbe. Etika trajnostnega delovanja zagotavlja, da podjetje dosega potrebno ravnotežje med lastnimi interesi in večino (pomembnih) interesov okolja, torej DO.

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Vpliv neformalne oblike izobraževanja na kariero

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V času po osamosvojitvi Slovenije se je ustanovilo veliko različnih mladinskih organizacij. Tako je moč ugotoviti, da je mladinsko delo doživelo velik napredek, opazen pa je tudi porast ponudbe neformalnega izobraževanja. V prihodnosti bo potrebno doseči še večjo razpoznavnost neformalnega izobraževanja in mu pripisati večji pomen, kot ga ima danes. Država in lokalne oblasti bodo morale prepoznati neformalno izobraževanje kot pomemben element, ki ima korist tako za državljane, kot za državo samo. S tem bo potrebno finančno bolj podpreti programe, saj le to lahko omogoča brezplačno oz. cenejše izobraževanje in s tem širšo dostopnost. Povzamem lahko, da večji del posameznikov prepoznava neformalno izobraževanje kot zelo pomembno za svoje delovanje na poklicnem ali osebnem področju, ter s tem pripravljenost za nadaljnje izobraževanje v prihodnje. Znanja, spretnosti in izkušnje, ki si jih posameznik pridobi z neformalnim izobraževanjem ter osebne kvalitete, ki jih pri tem razvije, so lahko tudi pomemben dejavnik pri izbiri kandidata za delovno mesto.

Ključne besede: indeks neformalnega izobraževanja, kariera, neformalno izobraževanje, osebni razvoj, vseživljenjsko učenje

1 Uvod

1.1 Proučevanje tržnih in družbenih potreb

Dejstvo je, da so v dandanašnjem času globalizacije, kapitalizma, nenehnih sprememb na področju znanosti ter t. i. »tehnološke vojne« med poslovnimi sistemi zahteve trga neizprosne. V času, ko nas vsi podrejajo t. i. evropskim normam, evropskemu denarju, evropski miselnosti in nas hkrati zapirajo v evropske meje, pa nikakor ne smemo pozabiti, da smo tudi mladi del neke razvite družbe in upravičeni do svojih misli, svojih idealov in zahtev, ki nam bodo omogočili, da v kvalitetnih pogojih uspešno končamo študij in si pridobimo izkušnje, s pomočjo katerih bomo lahko že jutri prav mi usmerjali t. i. evropske norme, oblikovali evropski denar, evropsko miselnost in evropske meje.

Sestanek Evropskega sveta v Lizboni marca 2000 je pomenil odločilen korak za politiko in dejavnost Evropske unije. Njegovi sklepi potrjujejo, da je Evropa nedvomno prestopila v obdobje znanja, z vsem, kar ta termin pomeni za kulturno, ekonomsko in družbeno življenje. Vzor-

ci življenja, učenja in dela se hitro spreminjajo. To ne pomeni samo tega, da se morajo posamezniki prilagajati, temveč da se morajo spremeniti tudi utečeni načini opravljanja stvari. Sklepi Evropskega sveta v Lizboni potrjujejo, da mora premik k vseživljenjskemu učenju spremljati tudi uspešen prehod v gospodarstvo in družbo, ki temeljita na znanju. Zato so evropski sistemi izobraževanja in usposabljanja v sami srčiki prihajajočih sprememb. Zaključki Evropskega sveta vabijo »članice, Svet in Evropsko komisijo, da v okviru svojih pristojnosti identificirajo koherentne strategije in praktične ukrepe ob upoštevanju spodbujanja vseživljenjskega učenja za vse«. ¹ Memorandum prevzema ugotovitve Evropskega sveta iz Lizbone in Sveta iz Feire pri uvajanju vseživljenjskega učenja. Njegov namen je spodbuditi vseevropsko diskusijo o vseobsežni strategiji pri uvajanju vseživljenjskega učenja na individualni in institucionalni ravni ter na vseh področjih javnega in zasebnega življenja. Evropska komisija in njene članice so v okviru Evropske strategije zaposlovanja opredelile vseživljenjsko učenje kot »namerno učno aktivnost, ki teče s ciljem, da se izboljšajo znanje, spretnosti in veščine«. ² To je definicija, ki je bila uporabljena v memorandumu kot izhodišče za nadaljnjo diskusijo in aktiv-

¹ Zaključki Evropskega sveta v Lizboni (2000), odstavek 33.

² Pobudo za Evropsko strategijo zaposlovanja je novembra 1997 dal svet predsednikov držav v Luksemburgu. Strategija je za vse države članice vzpostavila sistem spremljanja in poročanja, ki temelji na Priporočilih zaposlovanja, ki se letno preverijo in revidirajo. Strategija zaposlovanja temelji na štirih stebrih: zaposljivost, podjetništvo, prilagodljivost in enake možnosti.

nosti, pri katerih ima neformalna oblika izobraževanja prav posebno mesto.

1.2 Opredelitev problema

Neformalno izobraževanje je integralni del koncepta vseživljenjskega izobraževanja in nedvomno ena izmed ključnih usmeritev izobraževanja za 21. stoletje ter odgovor na izzive, ki jih prinašajo hitre spremembe sveta. Pri Svetu Evrope ima status »top priority«, kar pomeni, da zahteva takojšnjo akcijo. Slednje dejstvo je bilo tudi moje poglavito vodilo ter hkrati izhodišče za bolj razširjen vpogled v izjemno aktualno problematiko na območju Republike Slovenije; skozi teoretične osnove in na podlagi izvedene obširne raziskave med delodajalci na eni strani ter zaposlitvenimi agencijami in ponudniki neformalnega izobraževanja na drugi strani, sem poskušal odkriti vplive, ki učinkujejo na razvoj posameznikove kariere. Ker pa je Slovenija polnopravna članica Evropske unije, pomeni prosti pretok delovne sile med vsemi državami članicami izjemno pomembno področje, saj je človeški kapital s tem postal eden najpomembnejših dejavnikov vsakega sistema in odločilnega pomena pri razvoju kariere posameznika. Iz slednjega dejstva izhaja v nadaljevanu moja osredotočenost na dani problem.

2 Ideja o vseživljenjskem učenju nekoč in danes

2.1 Memorandum o vseživljenjskem učenju

Vseživljenjsko učenje ni več samo en vidik izobraževanja in usposabljanja; postati mora vodilno načelo za ponudbo in udeležbo v celotnem kontinuumu učnih vsebin. V prihajajočem desetletju mora udeležiti to vizijo. Vsi tisti, ki živimo v Evropi, bi, brez izjeme, morali imeti enake možnosti, da se prilagodimo zahtevam družbenega in gospodarskega življenja in da aktivno sodelujemo pri oblikovanju evropske prihodnosti.

Posledice takih temeljnih sprememb in praks zaslužijo in upravičujejo razprave, ki so tu predlagane. Države članice, ki so odgovorne za svoje sisteme izobraževanja in usposabljanja, bi morale te razprave voditi. Prav tako bi morale razprave potekati znotraj držav članic, in ne samo na ravni Evropske unije. Vseživljenjsko učenje zadeva prihodnost vsakogar na čisto poseben način. Razprava bi se morala odvijati kar se da blizu državljanom. Jeseni 2001 je Komisija pripravila poročilo, ki je temeljilo na tej razpravi. Poročilo je bilo pripravljeno v okviru nove odprte metode sodelovanja, o kateri so se dogovorili na sestanku Evropskega sveta v Lizboni.³

Udejanjanje vseživljenjskega učenja v praksi pomeni, da vsi učinkovito delamo skupaj, in sicer kot posamezniki

in v organizaciji. Zakaj je ta razprava tako nujna? Zakaj je udejanjanje vseživljenjskega učenja v praksi največja prioriteta v Evropski uniji? Za to sta dva pomembna razloga:

- Evropa se je premaknila proti družbi in gospodarstvu, ki temeljita na znanju. Bolj kot kadarkoli prej postaja dostop do najnovejših informacij in znanja, skupaj z motivacijo in spretnostmi, da to pametno uporabljáš za dobrobit sebe in skupnosti kot celote, ključ za krepitev evropske tekmovalnosti in izboljšanja zaposljivosti ter prilagodljivosti delovne sile in
- današnji Evropejci živimo v zapletenem družbenem in političnem svetu. Bolj kot kadarkoli poprej si posamezniki želimo načrtovati svoja življenja; od nas se pričakuje, da bomo aktivno prispevali k družbi ter živeli pozitivno s kulturnimi, etničnimi in lingvističnimi razlikami. Izobraževanje v najširšem pomenu pa je ključ do učenja in razumevanja, kako se spoprijeti s temi izzivi.

Dva enako pomembna cilja vseživljenjskega učenja: pospeševanje aktivnega državljanstva in zaposljivosti. Dokument ponuja v razpravo šest ključnih sporočil:

- temeljne spretnosti za vse;
- večja vlaganja v človeške vire;
- inovacije v poučevanju in učenju;
- vrednotenje učenja;
- premislek o usmerjanju in svetovanju in
- pripeljimo učenje bliže domu.

2.2 Poročilo EAEA (European Association for the Education of Adults) o vseživljenjskem učenju v Evropi

Po vsem svetu se z vedno večjo naglico spreminjajo ekonomska, tehnološka, socialna in kulturna okolja. Globalni trgi, nove tehnologije, spreminjajoči se družinski vzorci in naraščajoča geografska mobilnost zahtevajo nove veščine, znanje in fleksibilnost. Na konferenci Evropskega sveta v Lizboni (marca 2000) so zaključili, da se lahko z izzivi sprememb uspešno spopademo z nenehnim, vseživljenjskim učenjem. Zaključki predsedstva navajajo, da je na začetku 21. stoletja vseživljenjsko učenje bistvenega pomena za razvoj državljanstva, socialne kohezije in zaposlovanja. Nacionalne vlade, transnacionalna in internacionalna telesa, kot so: EU, OECD in UNESCO, menijo, da je vseživljenjsko učenje nujno za ekonomsko, demokratično in socialno dobrobit ter za razvoj družb, organizacij in posameznikov.

³ Zaključki Evropskega sveta v Lizboni (2000), 37. odstavek.

3 Formalno in neformalno izobraževanje

3.1 Osnovni pojmi

Človek zadovoljuje svoje potrebe z delom. Dela premišljeno in se pri tem zaveda, da dela. O delu razmišlja. Brez populacije, temelječe na nenehnem izobraževanju, postane ideja o povezovanju vseh narodov v skupno ekonomijo, povsem nična (Jarvis, 1999, 195).

Na prvi pogled vsi vemo, kaj mislimo z besedama »formalno« in »neformalno« izobraževanje. Preprosto: formalno izobraževanje se dogaja v šoli, neformalno pa v ustanovah zunaj nje. Ko pa se v termina poglobimo, naletimo na nekatere težave. Definicije formalnega izobraževanja so vsebinsko gledano dokaj jasne in složne med seboj, zato jih je lažje opredeliti. Razlikujejo se le po tem, da izpostavijo različne elemente formalnega izobraževanja. Sicer pa so vse teorije učenja v procesih uporabne zgolj takrat, ko so usmerjene k njenemu bistvu ter s strani učiteljev predstavljene družbi kot nujno pomembne za njihov razvoj (Knowles, Elwood Holton III., in Swanson, 1998).

Unesco je najprej predložil zelo poenostavljeno opredelitev. Formalno izobraževanje so »izobraževalni programi, ki zahtevajo vpis in registracijo učencev« (Jelenc, 1994). Pri tem naj bi uradni list in registracija označevala visoko stopnjo organiziranosti izobraževanja. Beseda »vpis« je nekoliko nerodna, saj jo uporabljamo tako za vključitev npr. na univerzo kot formalno obliko kakor tudi za vključitev npr. v kuharski tečaj kot neformalno obliko. Zato so kasnejše opredelitve kot merilo formalnosti jemale konec izobraževalnega procesa, in ne začetek. Tako je formalno izobraževanje postalo »izobraževanje, ki naj privede do neke vrste uradno formalno potrjenih

izobraževalnih rezultatov, kot so dosežena stopnja izobrazbe, diploma ali poklicna kvalifikacija« (Jelenc, 1994).

V novejših dokumentih se pojavlja predvsem splošno sprejeta Unescova definicija, ki formalno izobraževanje definira kot »hierarhično strukturiran, kronološko stopnjsko normiran izobraževalni sistem, ki poteka vse od primarnih do terciarnih institucij« (YMCA in drugi, 2001).

3.2 Uveljavitev obeh oblik izobraževanja

Da bi se udeleženec izobraževanja trajno naučil vsebin, mora za to vložiti določen trud in energijo. Govorimo o tako imenovanem domačem delu. Domače delo udeležencev izobraževanja je temelj uspeha izobraževanja tako otrok, mladostnikov kot odraslih. To kažejo številne empirične raziskave kot tudi izkušnje. Predstavitev t.i. treninga za nadaljnje izobraževanje odraslih pomeni ključen korak v procesu približevanja tega pojma širši družbi (Jarvis, 2004).

Na aktivno vključevanje v družbo ne vpliva samo **formalno izobraževanje**, ampak tudi **neformalno izobraževanje**. Splošno neformalno izobraževanje izhaja iz človekovih osebnih potreb in ni povezano s posameznikovo poklicno ali družbeno vlogo. Zajema izobraževanje za individualne potrebe umetnosti, zgodovine, filozofije, za prosti čas, za družbene vloge, za družbeno blaginjo, za varstvo okolja, za mir in zdravje. To učenje omogoča ljudem, da delujejo kot politična sila in postanejo aktivni soudeleženci v družbenih procesih za individualno in skupno blaginjo. Andragogi imenujejo takšno učenje »learning to become and learning to belong«.

Splošno izobraževanje je na stopnji osnovne šole in delno srednje šole. Strokovno izobraževanje se pojavlja po končani osnovni šoli, ki je lahko strokovno - poklicno, srednje strokovno, višje in visoko. Nadaljevanje strokovnega izobraževanja je univerzitetno izobraževanje, ki je

Tabela 1: Izdatki za izobraževalne ustanove po ravneh izobraževanja (v milijonih SIT), Slovenija, 1995 – 2003
(Vir: Statistični Urad Republike Slovenije)

Leto	Ravni izobraževanja					
	Skupaj	predšolsko izobraževanje	osnovnošolsko izobraževanje	srednješolsko izobraževanje	terciarno izobraževanje	Nerazporejeno po ravneh
1995	148.048	18.641	65.376	31.513	32.384	134
1996	170.435	18.580	77.652	38.841	35.212	150
1997	189.675	19.190	89.786	43.005	37.533	161
1998	209.943	22.176	99.344	47.157	41.099	167
1999	232.022	24.021	106.601	50.857	50.325	218
2000	260.300	27.659	119.438	55.795	57.199	209
2001	296.657	35.290	132.827	66.048	62.322	169
2002	335.115	39.108	154.321	72.223	69.290	173
2003	367.095	39.717	170.936	78.681	77.488	273

bolj usmerjeno v znanstvena raziskovanja. Razlika med visokošolskim in univerzitetnim izobraževanjem je v tem, da je visokošolsko izobraževanje usmerjeno v poklic (za uporabo znanja), univerzitetno pa v ustvarjanje novega znanja. Dosežek formalnega izobraževanja je izobrazba (vrsta in stopnja izobrazbe) in izobraženost. Izobraženost ni formalnoppravna kategorija, ampak kakovosten pojav, ko nekdo resnično usvoji neko znanje. Za učenje slabo motiviran učenec mobilizira pri izobraževanju le manjši del svojih sposobnosti, uči se le v tolikšni meri, kolikor mu to še ne pomeni kakšnega napora. Dela le z delom svojih možganov. Mi pa vemo, da izobraževanje vedno pomeni določen napor, ki ga učenec mora premagati, če hoče doseči primeren učni uspeh (Krajnc, 1982).

Neformalno združevanje zlasti učencev ima dostikrat lahko ugodne učinke na uspešnost izobraževanja (Ferjan, 2005).

3.3 Finančni vidik formalnega in neformalnega izobraževanja

Ne glede na vrsto ter obliko izobraževanja lahko kaj hitro ugotovimo, da so učinki slednjih v širših družbenih procesih zelo pozitivni. In prav glede na dejstvo, da je področje izobraževanja izredno kompleksno ter pomembno področje, je povsem nesporno pričakovati, da je vsled naštetega urejeno tudi področje zagotavljanja finančnih sredstev. Iz statističnih podatkov je razvidno, da se je v zadnjem desetletju delež javnih izdatkov za formalno stopnjsko izobraževanje po ravneh izobraževanja na področju Slovenije izrazilo povečal (*Tabela 1*). Na drugi strani pa opazamo, da se večajo tudi potrebna sredstva iz zakona o temeljnih razvojnih programih na področju izobraževanja in znanosti izobraževanja odraslih (*Tabela 2*).

Tabela 2: Projekcija porabe sredstev (v milijonih SIT) iz zakona o temeljnih razvojnih programih na področju izobraževanja in znanosti izobraževanja odraslih (Vir: Statistični Urad Republike Slovenije)

I. SPLOŠNO NEFORMALNO IZOBRAŽEVANJE							
Leto	2003	2004	2005	2006	2007	2008	SKUPAJ
Število vključenih	475.904	489.901	503.898	517.895	531.892	531.892	
Delež vključenih odraslih 25+ (v %)	34	35	36	37	38	38	
Potrebna sredstva	1784,6	1837,1	1889,6	1942,1	1994,6	1994,6	9448,1
Od tega sredstva iz proračuna	303,1	267,3	257,4	239,5	260,2	280,1	1607,6

3.4 Razlike med formalnim in neformalnim izobraževanjem

Svet Evrope in Direktorat za mladino in šport RS (2004) navajata razlike med formalnim in neformalnim izobraževanjem, kot jih prikazuje tabela 3.

Formalno izobraževanja Neformalno izobraževanja
Uporabljene učne metode Metode, ki podpirajo hierarhičen odnos med »lastnikom znanja« in učenci. Interaktiven odnos med učenci in okoljem, učenje z delovanjem, vrstniško izobraževanje in mentorstvo. **Vsebine** Splošne, določajo jih izobraževalne institucije. Določajo jih učenci. Niso definirane vnaprej. **Priznavanje** Po navadi ob koncu izobraževanja na podlagi preverjanja znanja. Merila postavljajo institucije. Ni priznavanja, vendar se ponekod upošteva (npr. za vpis na univerzo na Finskem). **Dolžina** Po navadi od 6. do 18. leta in do 10 let študija. Vseživljenjsko. **Močne točke** Obvezno za vse (po navadi do 16. leta). Pogosto brezplačno. Priznavanje. Dostopno v vsakem življenjskem obdobju. »Druga priložnost« za mlade z manj priložnostmi. **Šibke točke** Pogosto ga je treba dopolnjevati z dodatnimi znanji. Ni prilagojeno vsem. Težave s priz-

navanjem v drugih okoljih (npr. drugih državah). Niso identificirane.

4 Konkretizacija neformalnega izobraževanja

4.1 Neformalno učenje kot instrument za doseganje večje družbene enakosti in pravičnosti

Neformalno izobraževanje pripomore k uresničitvi ideje, da ima vsak človek pravico do izobraževanja in s tem do boljšega položaja v družbi. To je sicer teoretično zagotovljeno z zapisom v različnih zakonskih aktih, a v realnosti je slika včasih drugačna. Možnost vključenosti v izobraževanja je toliko bolj pomembna zato, ker je s tem velikokrat povezana tudi naša zaposljivost, aktivnost v sferi civilne družbe, osebni razvoj in še številne druge kate-

Tabela 3: Navedbe Evropskega sveta in Evropske komisije o razlikah izobraževanja

	Formalno izobraževanja	Neformalno izobraževanja
Uporabljene učne metode	Metode, ki podpirajo hierarhičen odnos med »lastnikom znanja« in učenci.	Interaktiven odnos med učenci in okoljem, učenje z delovanjem, vrstniško izobraževanje in mentorstvo.
Vsebine	Splošne, določajo jih izobraževalne institucije.	Določajo jih učenci. Niso definirane vnaprej.
Priznavanje	Po navadi ob koncu izobraževanja na podlagi preverjanja znanja. Merila postavljajo institucije.	Ni priznavanja, vendar se ponekod upošteva (npr. za vpis na univerzo na Finskem).
Dolžina	Po navadi od 6. do 18. leta in do 10 let študija.	Vseživljenjsko.
Močne točke	Obvezno za vse (po navadi do 16. leta). Pogosto brezplačno. Priznavanje.	Dostopno v vsakem življenjskem obdobju. »Druga priložnost« za mlade z manj priložnostmi.
Šibke točke	Pogosto ga je treba dopolnjevati z dodatnimi znanji. Ni prilagojeno vsem. Težave s priznavanjem v drugih okoljih (npr. drugih državah).	Niso identificirane.

gorije. Na tej točki bi razložili le pet kategorij, ki jih v literaturi najpogosteje navajajo, in sicer:

- neformalno učenje promovira vseživljenjsko učenje;
- neformalno učenje promovira osebnostni razvoj;
- neformalno učenje promovira večjo zaposljivost;
- neformalno učenje promovira aktivno državljanstvo, civilno družbo in demokracijo in
- neformalno učenje promovira mir in integrirano Evropo.

4.2 Prednosti neformalnega izobraževanja

- V neformalno izobraževanje vstopajo motivirani posamezniki.
- V neformalnem izobraževanju lažje uveljavljamo vodenje brez prisile.
- Tudi učitelji v formalnem izobraževanju so vodeni s prisilo.
- Neformalno izobraževanja je bolj pisano na kožo procesnemu načrtovanju kurikulumu.
- Razvrednotenje strokovne usposobljenosti učitelja.
- Neformalno izobraževanje na področju vrednot.

4.3 Metoda študije primera

V prejšnjih poglavjih smo videli, da kakovostno formalno in neformalno izobraževanje poteka po istih didaktičnih priporočilih. Kakovost sem skušal tudi opredeliti in nastal je seznam nekaj meril. Pod drobnogled sem vzel dve prijetni izobraževalni izkušnji iz svoje preteklosti. Tipično izkušnjo formalnega izobraževanja (pouk geografije v srednji šoli) in tipično izkušnjo neformalnega izobraževanja (dan na skavtskem potovalnem taboru). Izkušnji sem primerjal z vidika prej določenih meril kakovosti.

V obeh primerih sem opazoval čim bolj povprečno dogajanje, in ne ekstremnega. Obakrat sem bil sam prisoten kot udeleženec, vendar s starostno razliko dveh let. Poglejmo si kratek opis obeh izkušenj, nato pa še primerjavo meril kakovosti (tabela 4).

Formalno izobraževanje: gimnazijski pouk geografije

Učiteljica v petdesetih letih je dve uri v tednu odpredavala snov celotnemu razredu. Za približno polovico razreda so bila predavanja zanimiva. Izrazita večina uencev si je snov zapisovala. Vmes so se sem in tja razvili kakšni pogovori. Preverjanje znanja je potekalo v obliki spraševanja za ocene in vmesnih vprašanj za utrjevanje, ki so bila neocenjena.

Neformalno izobraževanje: potovalni tabor skavtov

Skupina 14 članov, starih od 17 do 21 let, in dva voditelja na enotedenskem poletnem pohodu od Idrije do Nove Gorice. Pot jih vodi skozi vasi, gozdove, po travnikih, mimo naravnih in kulturnih znamenitosti. Vsak dan se ustavljajo na različnih krajih. Program je vezan na značilnosti kraja (ponekod je kraj daleč od poseljenosti), duhovna komponenta pa je na temo »graditeljki« in skuša v mladih spodbuditi odgovornost za gradnjo svojega življenja. Del programa vsak dan pripravi eden ali dva udeleženci, duhovni del pa voditelja.

5 Analiza stanja neformalne oblike izobraževanja v Sloveniji

5.1 Raziskava med študenti

Delni vpogled v stanje neformalnega izobraževanja v Sloveniji smo dobili z raziskavo, ki so jo izvedli na društvu

Tabela 4: Metoda študije primera formalnega in neformalnega izobraževanja

Merilo kakovosti	Izkušnja formalnega izobraževanja	Izkušnja neformalnega izobraževanja
Učitelj je avtoriteta, a ne vir znanja.	Učiteljica je avtoriteto gradila na temelju svoje osebnosti in na šolskem redu. Po navadi je bila ona vir znanja. Pri razlagi pa si je pomagala z določenimi vprašanji učencem.	Voditelji so predstavljali avtoriteto zaradi predhodnih skupnih doživetij skupine, izkušenj, osebne motiviranosti. Priprava tabora je bila razdeljena po dnevih in vsakdo je en dan predstavljal vir znanja. Eden od voditeljev je moral sredi tabora oditi domov zaradi obveznosti.
Odnosi (zaupanje, dobra komunikacija)	Učiteljica je komunikacijo vzpostavila s tistim delom razreda, ki ga je snov zanimala. Za tiste je bila zanimiva, čeprav je večino časa govorila ona. Po globokem zaupanju niti ni bilo potrebe.	V skupini 14 ljudi ni vsak z vsakim imel razvitega odnosa globokega zaupanja, komunikacija pa je bila izrazito večsmerna. Zaupanje je vladalo do te mere, da je bilo opaziti posojanje pripomočkov med seboj, in nekaj jih je postalo »skupna last«. Odnosi so se krepili skozi preizkušnje na poti.
Uporabnost učnih vsebin za učence	Glede na to, da si velika večina srednješolcev želi potovanje, je bila snov kar uporabna oziroma vsaj »v kontekstu« z življenji posameznikov. Veliko podatkov ni uporabnih, a so za marsikoga zanimivi.	Duhovne vsebine pripravi eden od voditeljev. Vsebine, ki so vezane na kraj hoje, pa vsak dan pripravi drug član. Te so vedno v kontekstu življenja udeležencev, a ne vedno neposredno uporabne. Neposredno pa so uporabne večšine preživetja v naravi, saj brez njih enostavno ne bi preživeli.
Količina kakovostnega dela	Učiteljica predava rutinsko in je kakovost posebej ne izziva. Učenci, ki se želijo snov naučiti, se jo naučijo dobro, vendar ne kakovostno (minimum za 5). Ostali pač slabše.	Nekateri izmed udeležencev se pri pripravi svojega dne zelo potrudijo in vložijo vanj zelo veliko časa. Drugi delajo tik pred zdajci (morda celo na potovalnem taboru samem) in delo ni tako kakovostno izvedeno.
Vrednotenje	O samoevalvaciji učiteljice ali njeni evalvaciji v kolektivu nimam podatkov. Z učenci poteka le vrednotenje znanja (spraševanje).	Vsakodnevno vrednotenje, ki ga opravi celotna skupina, in za tem še vrednotenje voditeljev. Vrednoti se dogajanje v dnevu (vsebine) in medsebojne odnose.
Ustvarjalno učenje	Humor, referati, način poučevanja je bolj ali manj pričakovan.	Zelo velika pestrost načinov dela. Pestrost stilov vodenja posameznih dni. Pogosto kratkoročna sprememba načrta zaradi vedno spremenljivih razmer na poti.
Upoštevanje vseživljenjskega učenja	Vključevanje znanja učencev v razlago preko diskusij.	Skupina je skupaj 24 ur na dan. Vključevanje znanja posameznikov preko priprave vsebin. Tabor deluje tudi kot osnova za nadaljnjo rast skupine.

Mladinski ceh za potrebe projekta Nefiks – neformalni indeks izobraževanja (Mladinski ceh, 2005). Na vzorcu 440 mladih, pretežno študentov, so skušali dobiti vpogled v to, kakšne izkušnje imajo z neformalnim izobraževanjem. Anketo so izvedli na prireditvi Študentska arena. Več pripravljenosti za sodelovanje v anketi so pokazale študentke (67 %) kot študentje (33 %).

Anketa je pokazala, da se je več kot 80 % anketiranih že izobraževalo izven rednega šolskega sistema. 66 % vprašanih je odgovorilo, da vedo, kaj je »neformalno izobraževanje«, medtem ko jih 26 % v to ni bilo povsem prepričanih, 7 % ljudi pa je priznalo, da jim sam pojem ni poznan. Skoraj tretjini vprašanih torej neformalno izobraževanje ni bilo poznano, zato so njihovi odgovori lahko nekoliko vprašljivi.

Več kot polovica mladih je mnenja, da se premalo dodatno izobražujejo. Med tečaji, ki so se jih že udeležili, pa najpogosteje naštevajo jezikovne, plesne, računalniške tečaje in prostovoljno delo. Zanimivi so bili tudi odgovori na vprašanja, kakšna znanja so si mladi pridobili skozi neformalno izobraževanje. Tu so dobili presenetljivo število odgovorov, ki kažejo na raznolikost programov in predvsem pozitivne učinke izobraževanja. S kakovostno ravni-jo izobraževanj je bila velika večina (81 %) zelo zadovoljna. Večina (več kot 90 %) zelo pozitivno ocenjuje tudi vpliv, ki ga je imelo neformalno izobraževanje na izobli-

kovanje osebnosti. Kljub pretežno dobrim izkušnjam večine pa je udeležba odvisna predvsem od cen tečajev. V anketi so skušali tudi ugotoviti, kako mladi ocenjujejo šolski sistem. 68 % jih je menilo, da je zadovoljiv, četrtnina ga ocenjuje z besedo »slab«. Stopnja formalne izobrazbe je po mnenju večine še zmerom ključnega pomena za zaposlitev, nekateri delodajalci pa že upoštevajo tudi obštudijsko pridobljeno znanje. Le 17 % vprašanih je namreč dejalo, da delodajalci tega ne upoštevajo.

Iz rezultatov raziskave lahko sklepam, da je interes za neformalno izobraževanje mladih v Sloveniji velik. Pogrešam pa institucijo, ki bi mladim služila kot servis oziroma informacijsko središče za pridobivanje informacij o izobraževalnih programih neformalnega izobraževanja in aktivnostih, ki se odvijajo v mladinskih organizacijah. Programe bi lahko evidentirali in raziskovali njihovo primerljivost. Za potrebe izobraževanja odraslih to nalogo dobro opravlja Andragoški center.

5.2 Raziskava med izvajalci neformalnega izobraževanja

V okviru projekta Mednarodno krožišče, katerega nosilec je bil Mladinski center Brežice, je imel Zavod Center za informiranje, sodelovanje in razvoj nevladnih organizacij – CNVOS nalogo, da naredi analizo ponudbe in povpraševanja o neformalnem izobraževanju, katere cilj je bil izdelati kvalitetno ponudbo neformalnega izobraževanja, ki bi se izvajala kasneje v MC Brežice, ki bi imel vlogo mladinskega izobraževalnega središča (Zavod Center za informiranje, sodelovanje in razvoj nevladnih organizacij, Mladinski center Brežice, 2006). Pri rezultatih analize nas je zanimalo predvsem, kakšno je stanje neformalnega izobraževanja v Sloveniji, kakšna je ponudba in kakšne so potrebe, s katerimi se srečujejo ljudje pri svojem delu. Na podlagi analize sem prišel do pomembnih zaključkov, ki vam jih bom predstavili v nadaljevanju. Cilj analize je bil ugotoviti stanje neformalnega izobraževanja v dotičnih regijah ter izboljšati ponudbo in dvigniti kvaliteto neformalnega izobraževanja.

V analizo je bilo vključenih 107 izvajalcev neformalne oblike izobraževanja, od katerih je bilo 46 % moških in 54 % žensk. Po starosti je bilo največ anketirancev starih od 19 do 29 let (32 %), kmalu za njimi, s samo 1 % razlike, od 30 do 39 let (31 %), od 40 do 49 let je bilo najmanj anketirancev (16 %), od 50 let in več pa jih je bilo več (21 %). Aktivnost v nevladnih organizacijah je glede na starost največja do 40. leta, potem nekoliko upade in ponovno naraste od 50. leta naprej. To si lahko razlagam tako, da se starejši prebivalci Slovenije v času upokojitve ponovno vključujejo v delo v neprofitnem sektorju. Naj še dodam mnenje, da bi se dalo ta segment prebivalstva precej bolje izkoristiti, pri čemer bi bile koristi obojestranske (situacija WIN-WIN).

V analizo je bilo vključenih 7 regij Slovenije, v prihodnosti pa je cilj razširiti analizo na vso Slovenijo, da bo tako še bolj natančna in kredibilna. Največ anketirancev je imelo, glede na stopnjo izobrazbe, višjo šolo ali univer-

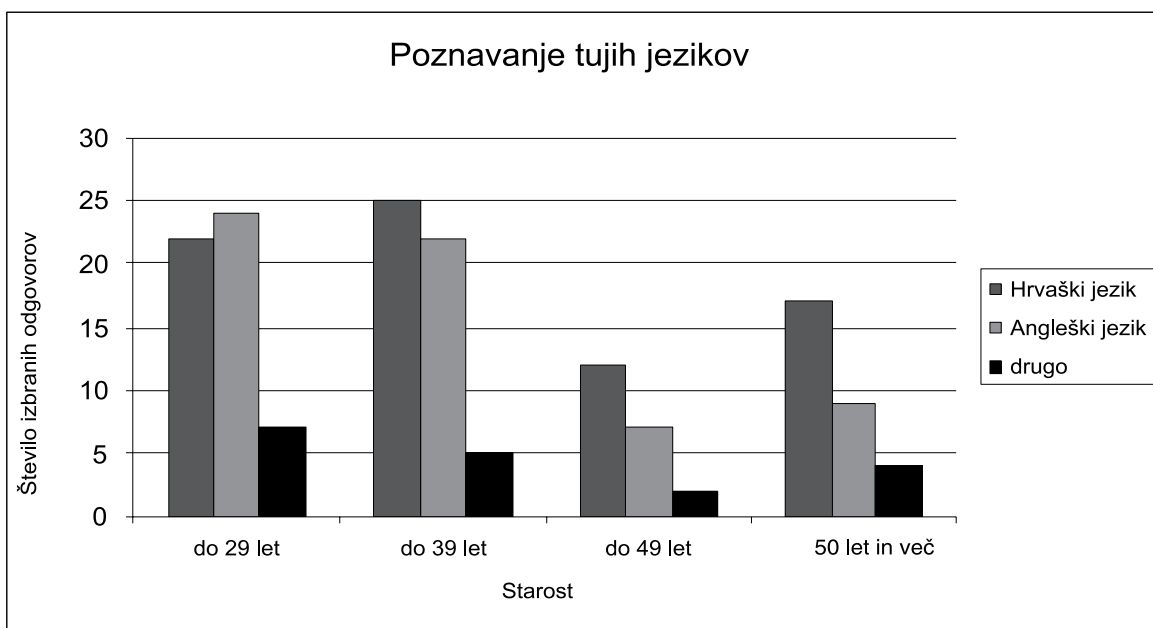
zo (50 %), sledila jim je srednješolska izobrazba (28 %), nato magisterij ali doktorat (16 %) in na koncu osnovna šola (6 %).

Področje delovanja nevladnih organizacij, ki so bile vključene v analizo, je bilo sledeče: izobraževanje, usposabljanje in raziskovanje (14 %), sociala/humanitarnost (14 %) in delo z mladimi (14 %) so dosegli isto vrednost odstotka, sledijo kultura in umetnost (12 %), človekove pravice (7 %), zagovorništvo, demokracija (6 %), razvoj podeželja, varstvo okolja in kulturna dediščina/etnologija si delijo delež (5 %), gospodarstvo in turizem (4 %), enakopravnost med spoloma (3 %), zdravstvo (3 %), politika zaposlovanja (3 %), strokovna združenja (2 %), verska in duhovna organizacija (2 %) ter drugo 2 (%).

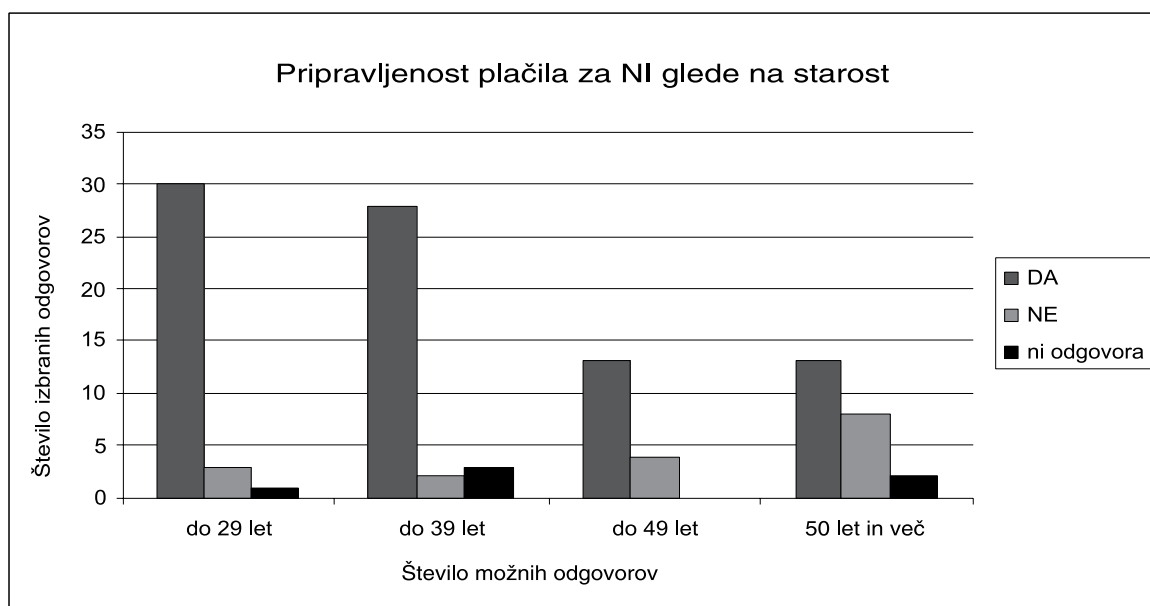
Rezultati so pokazali, da velik del nevladnih organizacij tudi sam organizira neformalno izobraževanje (80 %). Razloga za organizacije, ki ne ponujajo neformalnega izobraževanja (20 %), ne morem opredeliti, saj nimajo nekega skupnega indikatorja. Se pa razlog po vsej verjetnosti nahaja v pomanjkanju kadrov in sredstev. Največji del neformalnega izobraževanja se izvaja v Podravju (21 %), sledita jugovzhodna Slovenija in savinjska regija (16 %), obalno-kraška regija (15 %), Pomurje (12 %), spodnjeposavska regija (11 %) in nazadnje notranjsko-kraška regija (9 %). Vodilna regija, od vključenih v raziskavo, je tako Podravje, spodnjeposavska regija pa kar precej zaostaja, zato je to prednost za namen ustanovitve centra za neformalno izobraževanje v Brežicah.

Za ciljno skupino izobraževanj imajo organizacije največkrat svoje člane (37 %), sledijo nevladne organizacije (26 %), javni sektor (14 %) in privatni sektor (8 %). 15 % odgovorov se je nanašalo na druge ciljne skupine, med katerimi so bile najpogostejše: mladi, šole/učitelji, občanke in občani, zaposleni, velikokrat pa so dodali, da so izobraževanja namenjena širši zainteresirani javnosti.

Najpogostejša področja, na katerih organizacije nudijo neformalno izobraževanje, so: komunikacija in skupinsko delo (11 %), prostovoljstvo (10 %) in socialna vključenost (8 %), najmanj pa nudijo izobraževanje na področju dela z žrtvami nasilja (1 %), razvoja javnih politik in zagovorništva (1 %) ter meditacije (1 %). Ostale teme so še: demokracija, človekove pravice in pravice manjšin (6 %), vodenje organizacije (6 %), medkulturno učenje (6 %), evropsko/aktivno državljanstvo in participacija (5 %), računalništvo (5 %), izgradnja partnerstev, mrež in koalicij (5 %), finančni in programski menedžment (4 %), odnosi z javnostmi/PR (4 %), regionalno povezovanje in partnerstvo na projektih za EU (4 %), mreženje na regionalnem nivoju (4 %), učenje tujih jezikov (4 %), razvoj lokalnih skupnosti in razvoj podeželja (4 %), strokovno usposabljanje marginaliziranih skupin (3 %), javno-privatno partnerstvo (2 %), finance, ekonomski razvoj društva (2 %). Nekaj anketirancev (4 %) je navedlo druga področja neformalnega izobraževanja, ki v anketi niso bila navedena: fotografija, mentorstvo, izobraževanje za trajnostni razvoj, težave invalidov in njihove pravice, pravice oseb z motnjami v duševnem razvoju, iskanje zaposlitve, likovne delavnice in drugo. Največ organizacij prireja izobraževanja v lastnih prostorih (40 %), sledijo jim: šolski prostori



Slika 1: Prikaz stanja poznavanja tujih jezikov



Slika 2: Prikaz stanja pripravljenosti plačila za neformalno izobraževanje glede na starost

(16 %), občinski prostori (14 %), na odprtem (12 %), cerkveni prostori (6 %). Druge prostore za izobraževanja uporablja 12 % anketirancev, najpogosteje pa so navedli: v prostorih drugih organizacij, v najetih prostorih in v prostorih uporabnikov izobraževanja.

Pri analizi sem ugotovil, da velik del anketirancev pripisuje neformalnemu izobraževanju veliko pomembnost, saj je najvišjo oceno (5) pomembnosti le-tega dodelilo 63 %, eno nižjo (4) pa 27 % anketirancev, pomeni pa jim vse-

življenjsko učenje, osebno rast, nadgradnjo osebnih sposobnosti in dvig kvalitete dela. Najnižji delež mu pripisuje pomen, kot je nujnost za delovanje (7 %). 90 % anketirancev se je že udeležilo neformalnega izobraževanja, predvsem pa je šlo za področje menedžmenta, učenje tujih jezikov, projektno delo in komunikacijo. Zaradi velike pomembnosti neformalnega izobraževanja se tako name-rava v prihodnosti neformalno izobraževati kar 92 % anketirancev. Področje zanimanja pa je predvsem usmerjeno

v vodenje organizacije, komunikacijo in skupinsko delo, učenje tujih jezikov in socialno vključenost. Več podatkov sledi v nadaljevanju, saj je to eden izmed ključnih kazalcev za nadaljnjo ponudbo izobraževanja.

Za lažje načrtovanje neformalnega izobraževanja je bilo v vprašalnik vključeno tudi vprašanje o terminu, ki bi bil za udeležence najbolj primeren. Največji del anketirancev (35 %) je odgovoril, da jim najbolj ustreza enkratno izobraževanje v času 2 do 3 dni preko vikenda; sledijo: 20 % za izobraževanje v času 2 do 3 dni med tednom (delavniki), 19 % za enkratno, poldnevno izobraževanje (delavnik ali vikend), 15 % za dolgoročno izobraževanje, ki bi potekalo več mesecev, preko sklopov izobraževanj (3 do 5 dni), 7 % pa se je pripravljeno izobraževati enkratno, intenzivno, kar bi potekalo v času do enega meseca. Kot dodatne možnosti so navedli še: enotedensko izobraževanje med poletnimi počitnicami, ves dan v soboto in e-izobraževanje.

Izobraževanje je pripravljeno plačati 78 % anketirancev (Slika 2), največkrat iz sredstev samofinanciranja ali iz projektov. Izobraževanje lahko za vse poteka v slovenskem jeziku, velik del v hrvaškem (76 anketirancev) in angleškem (62 anketirancev). Delež drugih tujih jezikov je zelo nizek.

6 Analiza vpliva neformalne oblike izobraževanja na razvoj kariere posameznika

6.1 Analiza vpliva s strani delodajalcev

Druga raziskava je potekala v mesecu juniju in juliju 2006, njen nosilec sem bil sam (Volf, 2006), in je zajemala dva pomembna segmenta: delodajalce in zaposlitvene agenci-

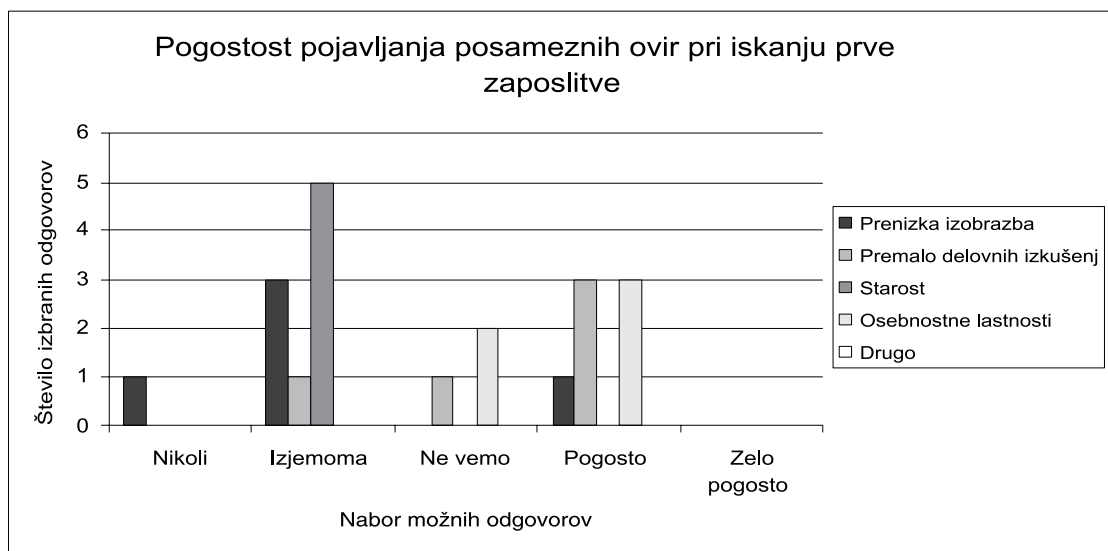
je. Pri vzorcu delodajalcev me je najbolj zanimalo, kakšen je vpliv neformalnega izobraževanja na zaposlitvene možnosti ter na razvoj kariere posameznika. V ta namen sem izbral 5 večjih slovenskih poslovnih sistemov z različnih področij dejavnosti, in sicer: storitvene (trgovinska, bančniška, časopisna in založniška) ter proizvodne (farmacevtsko-kemijska in gumarska). Naj omenim, da gre za večja slovenska podjetja, in sicer: DELO, d. d., KRKA, d. d., Mercator, d. d., NLB, d. d., in Sava Tires, d. o. o., ki zaposlujejo preko 21.000 ljudi in ustvarijo preko 625 mrd. SIT letnega prometa.

Glede na zajeti vzorec je imelo podjetje Mercator, d. d., daleč največje število zaposlenih (11450). Nato so sledili Krka, d. d., Novo Mesto (3978), NLB, d. d., Ljubljana (3558), Sava Tires, d. o. o., (1600) in DELO, d. d., (388). Naj omenim tudi, da se je pri številu zaposlenih upoštevalo tudi število zaposlenih v tujini.

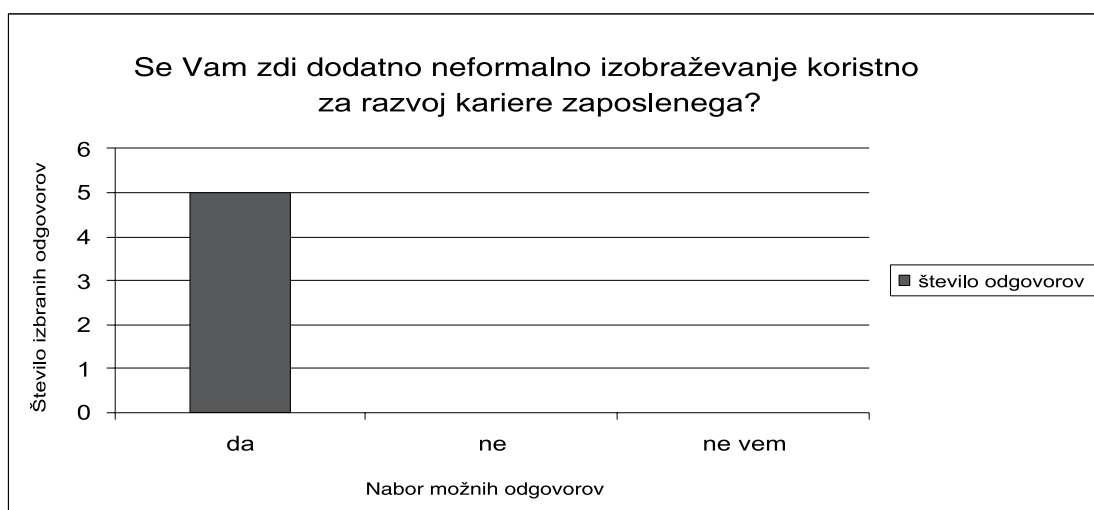
Zelo zanimiv podatek je tudi letno število prošenj za zaposlitev v letu 2005. Največ prošenj za zaposlitev je prejelo podjetje Mercator, d. d., (5000), temu sta sledila NLB, d. d., Ljubljana (2070) in DELO, d. d., (360). Če pa pogledamo odstotni znesek števila prošenj glede na število zaposlenih, je vrstni red povsem drugačen, in sicer s koeficientom: DELO, d. d., 0,74/zaposlenega, NLB, d. d., Ljubljana 0,58/zaposlenega in Mercator, d. d., 0,44/zaposlenega.

V skupnem vzorcu izbranih podjetij je bilo največ zaposlenih starih od 36 do 50 let (49,24 %), nato od 26 do 35 let (27,1 %), sledi starost 51 let ali več (16,42 %) ter najmanj delež za starost 16 do 25 let (7,24 %).

Zelo zanimiva je tudi izobrazbena struktura zaposlenih, ki sem jo dobil v skupnem vzorcu podjetij. Daleč največ zaposlenih (51,88 %) ima zaključeno srednjo splošno ali strokovno šolo. Temu sledi dodiplomska izobrazba (24,2 %), potem nižja ali srednja poklicna šola (10,02 %), nato osnovna šola ali manj (7,7 %) ter podiplomska izobrazba (6,2 %).



Slika 3: Prikaz stanja pogostosti pojavljanja posameznih ovir pri iskanju prve zaposlitve



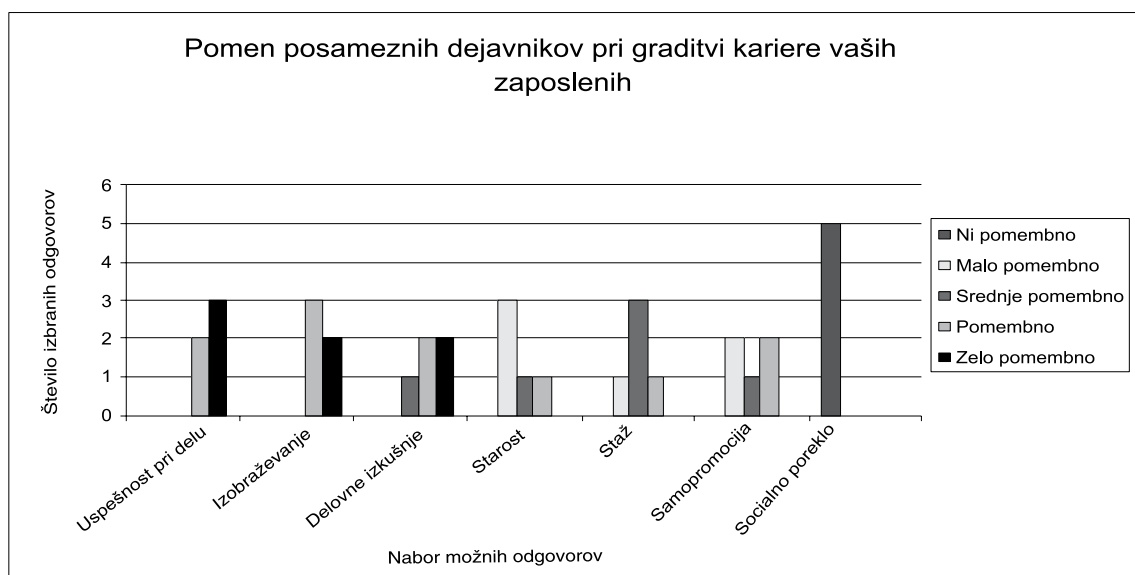
Slika 4: Koristnost dodatnega neformalnega izobraževanja zaposlenih za razvoj kariere

Iz skupnega vzorca sem dobil tudi odgovore glede eventualnega pojavljanja posameznih ovir pri iskanju prve zaposlitve (Slika 3). Kot najbolj pogoste ovire so delodajalci navedli premalo delovnih izkušenj in osebnostne lastnosti, kot najmanj pa starost iskalca zaposlitve ter prenizko izobrazbo.

Pri vprašanju o koristnosti dodatnega neformalnega izobraževanja za podjetje so si bili prav vsi delodajalci enotni, kar nakazuje na dobro osveščenost delodajalcev o širših prednostih in koristih neformalne oblike izobraževanja. Prav tako so bili enotni odgovori vseh izbranih delodajalcev pri vprašanju o koristnosti dodatnega neformalnega izobraževanja pri razvoju kariere posameznika (Slika 4). Kot ponudniki dela na trgu delovne sile torej prepoznajo neformalno obliko izobraževanja kot enega

pomembnejših elementov pri graditvi kariere posameznika.

Zelo zanimive rezultate sem dobil pri vprašanju o povprečnem številu ur, porabljenem za potrebe neformalnega izobraževanja na zaposlenega v letu 2005. Krepko največ ur namenijo v podjetju DELO, d. d., (80 ur), temu sledi podjetje Sava Tires, d. o. o., (55, 2 uri), nato KRKA, d. d., Novo Mesto (35 ur) ter Mercator, d. d., (12 ur). Podatka za podjetje NLB, d. d., Ljubljana nismo zabeležili. Če pa govorimo o stroških, namenjenih za neformalno izobraževanje zaposlenih v letu 2005, daleč največ sredstev namenja podjetje KRKA, d. d., Novo Mesto (190.000 SIT), nato podjetje DELO, d. d., (80.000 SIT), Sava Tires, d. o. o., (18.500 SIT) ter Mercator, d. d., (8.761 SIT). Podatka za podjetje NLB, d. d., Ljubljana spet nismo zabeležili.



Slika 5: Prikaz stanja pomembnosti posameznih dejavnikov pri graditvi kariere zaposlenih

Dokaj zanimivi so tudi rezultati o pomenu posameznih dejavnikov pri graditvi kariere zaposlenih (Slika 5). Kot najbolj pomemben dejavnik sta se pokazala uspešnost pri delu ter dodatno izobraževanje, kot najmanj pomemben dejavnik pa se je pokazala samopromocija zaposlenih ter njihova starost. Zelo enotne odgovore sem dobil pri vprašanju o zaposlitvenih možnostih oseb z večjim neformalnim znanjem, kjer se vsi delodajalci strinjajo, da imajo glede na njihove izkušnje osebe z večjim neformalnim znanjem boljše zaposlitvene možnosti.

Zelo enotne odgovore sem dobil tudi pri vprašanju o vplivu vrednotenja in beleženja neformalnega izobraževanja na zaposlitvene možnosti, kjer se vsi delodajalci strinjajo, da bi glede na njihovo mnenje vrednotenje in beleženje neformalnega izobraževanja povečalo zaposlitvene možnosti.

6.2 Analiza vpliva s strani zaposlitvenih agencij

Pri drugem vzorcu pa me je zanimal bolj strukturiran vpogled v zaposlitvene dejavnike na področju upravljanja s človeškimi viri. V ta namen je v anketi sodelovalo 5 večjih slovenskih zaposlitvenih agencij, katerih osnovna dejavnost je zagotavljanje virov na področju upravljanja s človeškimi viri. V sam vzorec sem izbral sledeče: ADECCO H. R., d. o. o., Atama, d. o. o., I. S. S., d. o. o., Manpower, d. o. o., ter Mojedelo, d. o. o., spletni marketing.

V skupnem vzorcu izbranih agencij je bilo največ iskalcev zaposlitve starih od 26 do 35 let (39 %), nato od 16 do 25 let (30 %), sledi starost 36 do 50 let (19 %), najmanj jih je v starosti 51 let ali več (12 %).

Zelo zanimiva je izobrazbena struktura iskalcev zaposlitve v izbranih zaposlitvenih agencijah (Graf 6). Največ iskalcev zaposlitve (26 %) ima dodiplomsko izobrazbo. Temu sledi srednja splošna ali strokovna šola (25 %),

potem osnovna šola ali manj (24 %), nato nižja ali srednja poklicna šola (16 %) ter podiplomska izobrazba (9 %).

Iz skupnega vzorca glede eventualnega pojavljanja posameznih ovir pri iskanju prve zaposlitve sem dobil dokaj identične odgovore kot pri delodajalcih. Kot najbolj pogoste ovire so zaposlitvene agencije navedle premalo delovnih izkušenj in osebnostne lastnosti, kot najmanj pa starost iskalca zaposlitve ter prenizko izobrazbo. Velika večina (80 %) sodelujočih zaposlitvenih agencij v anketi je mnenja, da je neformalno izobraževanje v Sloveniji dovolj dobro razvito oz. dostopno širši družbi.

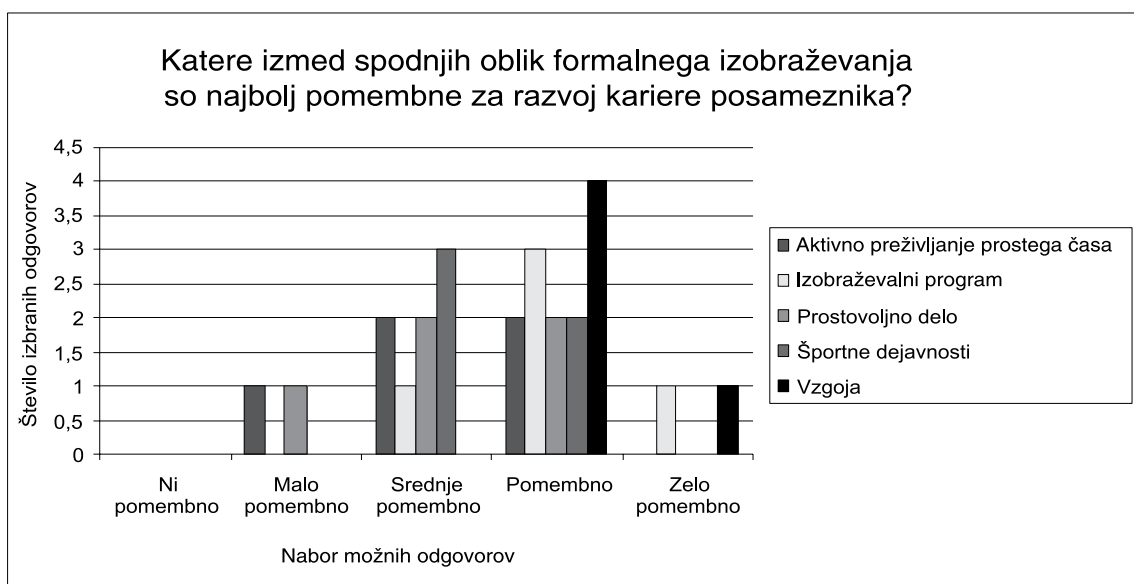
Iz danih odgovorov sem ugotovil, da je večina (60 %) zaposlitvenih agencij mnenja, da brezplačen dostop do neformalnega izobraževanja ni smiseln. Vzroke za to gre verjetno pripisati prav motivaciji posameznika ter njegovi samoiniciativnosti po dodatnem neformalnem izobraževanju, ki bi bila v primeru brezplačnosti bistveno manj intenzivna.

Prav tako sem ugotovil, da je velika večina (80 %) sodelujočih zaposlitvenih agencij v anketi mnenja, da je neformalna oblika izobraževanja pomembna za razvoj kariere posameznika. Tudi pri zaposlitvenih agencijah kot enih boljših poznavalcev stanja na trgu delovne sile ugotavljam, da prepoznajo neformalno obliko izobraževanja kot enega pomembnejših elementov pri graditvi kariere posameznika. Zelo zanimive rezultate sem dobil tudi pri vprašanju o pomenu posameznih dejavnikov pri graditvi kariere zaposlenih. Kot najbolj pomemben segment je velika večina izbrala osebnostne lastnosti ter delovne izkušnje, kot najmanj pomemben pa socialno poreklo.

Zelo enotne odgovore sem dobil pri vprašanju o zaposlitvenih možnostih oseb z večjim neformalnim znanjem, kjer se vsi sodelujoči strinjajo, da imajo glede na njihove izkušnje osebe z večjim neformalnim znanjem boljše zaposlitvene možnosti. Dokaj enotne odgovore sem dobil tudi pri vprašanju o vplivu vrednotenja in beleženja neformalnega izobraževanja na zaposlitvene možnosti, kjer se velika večina (80 %) sodelujočih strinja, da bi po



Slika 6: Prikaz stanja izobrazbene strukture iskalcev zaposlitve (v %) v zaposlitvenih agencijah, zajetih v vzorec



Slika 7: Pomembnost različnih oblik neformalnega izobraževanja pri razvoju kariere

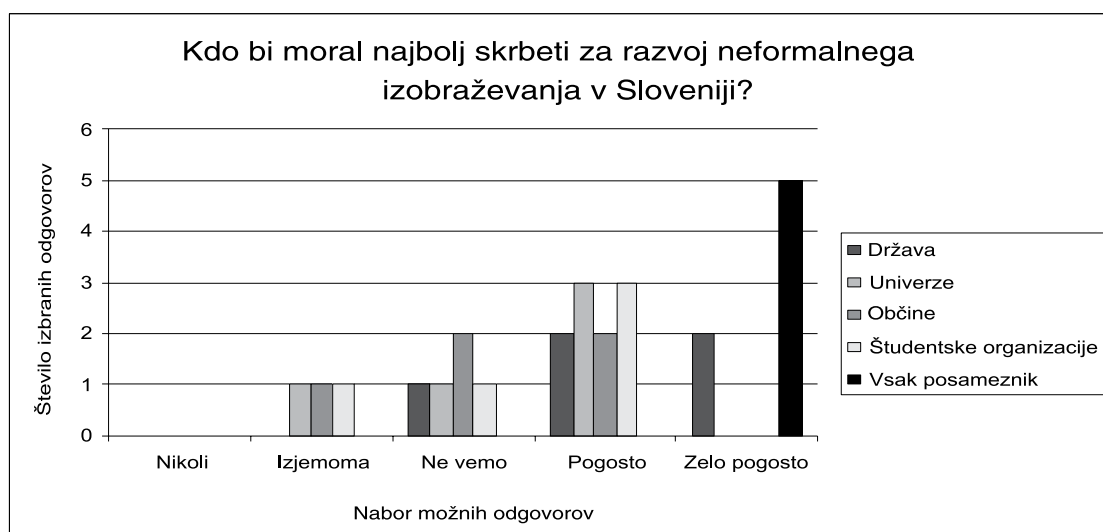
njihovem mnenju vrednotenje in beleženje neformalnega izobraževanja povečalo zaposlitvene možnosti.

Zanimive so tudi ugotovitve o pomembnosti posameznih dejavnosti neformalnega izobraževanja pri razvoju kariere posameznika (Slika 7). Kot najbolj pomembna dejavnost sta se pokazala vzgoja (80 %) in izobraževalni programi, kot malo pomembna pa aktivno preživljanje prostega časa in prostovoljno delo.

Pri zadnjem vprašanju sem poskušal ugotoviti, kdo bi moral po njihovem mnenju najbolj skrbeti za razvoj neformalnega izobraževanja v Sloveniji (Slika 8). Rezultati so pokazali enotno mnenje, da bi moral najbolj od vsega skrbeti vsak posameznik sam, temu sledijo študentske organizacije in univerze, na zadnjem mestu so pa občine.

7 Zaključek

Vseživljenjsko učenje ni več samo en vidik izobraževanja in usposabljanja; ugotavljam, da mora postati vodilno načelo za ponudbo in udeležbo v celotnem kontinuumu učnih vsebin. V prihajajočem desetletju mora udeležiti to vizijo. Vsi tisti, ki živimo v Evropi, bi, brez izjeme, morali imeti enake možnosti, da se prilagodimo zahtevam družbenega in gospodarskega življenja in da aktivno sodelujemo pri oblikovanju evropske prihodnosti. Vsako izobraževanje je namerno in ima značaj dela, kar izhaja iz dela in je v delo usmerjeno, poleg tega je dejavnost, ki je pomembna za razvoj in obstoj družbe, ki se razvija na vseh področjih človekovega delovanja, ter proces, v katerem



Slika 8: Skrbništvo pri razvoju neformalnega izobraževanja v Sloveniji

eno stanje vedno prehaja v novo stanje – iz neznanega v znano in obratno. V razvitih družbah postaja izobraževanje življenjsko. To pomeni, da se ljudje izobražujejo v vseh življenjskih obdobjih, od otroštva do pozne starosti. Izobraževanje poteka predvsem zaradi potreb dela, ob koncu aktivne proizvodne dobe pa zaradi boljše kvalitete življenja.

O učinkovitosti neformalnega izobraževanja lahko navedem zelo pogost pojav, ko množica mladih in odraslih, ki so izpadli iz formalnega izobraževanja, preko vključenosti v neformalno izobraževanje razvije svoje potrebne kompetence, da postanejo v življenju kljub temu uspešni ali vsaj veliko uspešnejši, kot bi bili sicer (t. i. drop-outs). Po drugi strani pa – zakaj imajo mnogi programi neformalnega izobraževanja za svoj glavni cilj prav vključitev posameznika nazaj v formalno izobraževanje? Kakorkoli že, ko govorim o neformalnem izobraževanju, ne morem mimo projekta Neformalni indeks izobraževanja – NEFIKS. Podlaga za slovenski projekt Nefiks je finski model RASB (Recreational Activity Study Book (RASB)). Prilagojen je slovenskim razmeram in izvaja ga neprofitna organizacija Mladinski ceh v sodelovanju s finsko Mladinsko akademijo, začeli so ga razvijati leta 1999 in predstavlja enega najmočnejših vzvodov pri priznavanju neformalne oblike izobraževanja v družbi in zaposlovanju mladih.

Vsak človek se ukvarja z vprašanji svojega razvoja pred vstopom v šolo, v času, ko se odloča za vrsto šolanja ali izobraževanja in ko premišljuje, kakšen poklic bo izbral, kaj bi rad delal v življenju in kaj bi rad postal. Kasneje se sprašuje o možnostih razvoja v okviru delovne dobe, delovne organizacije ter družbenega in širšega strokovnega delovanja. In še kasneje, kaj bo delal po končani delovni dobi. Osebni razvoj je v precejšnji meri prepleten s procesom delovne kariere. Vendar ko govorim o delovni karieri, mislim predvsem na delo in delovne naloge, ki jih je opravljal posameznik, jih opravlja ali jih bo opravljal v prihodnje. Delovna kariera je tesno povezana s poklicno oziroma strokovno kariero, predvsem pa z doseženimi rezultati. Slednji se nanašajo na sam začetek dela, prek raznih delovnih zadolžitvev do upokojitve, včasih pa še prek. Skozi raziskovalni del sem tudi ugotovil, da je vpliv neformalne oblike izobraževanja na razvoj kariere posameznika izjemno velik, pri tem velja premo sorazmerna zakonitost.

Za oblikovanje, načrtovanje in realizacijo posameznikove kariere pa morata biti zainteresirana tako posameznik kot tudi organizacija, saj tako drug drugemu omogočata preživetje. Tiste organizacije, ki so posameznikove kariere podredile svojemu napredku in posameznike prikršale za užitek in koristi, ki jih prinaša občutek napredovanja, so kaj hitro izgubile večino ljudi. Nasprotno pa so organizacije, ki so svojo kariero gradile na karieri zaposlenih, hitro prehitele konkurenco. Naj bo ob mojih zaključnih razmišljanjih slednji stavek tudi osnovno vodilo vseh nas, ki nam ni vseeno, kakšen bo naš skupni jutri.

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Peter Volf je že od samega vpisa na Fakulteto za organizacijske vede pri študiju dokazoval nadpovprečno ustvarjalne ter organizacijske rezultate. Študij na Visokošolskem strokovnem programu je zaključil zelo hitro, saj je vse izpitne obveznosti opravil v prvih izpitnih rokih ter leta 2002 diplomiral z zaključno oceno odlično (10). V času študija je kot edini študent v zgodovini fakultete pridobil Zoisovo štipendijo. V letu 2006 je diplomiral na Univerzitetnem študijskem programu z oceno odlično (10). Polega izjemnih študijskih uspehov je skozi celoten proces študija deloval v mnogih organih Univerze v Mariboru, vodstvu Fakultete za organizacijske vede, različnih mladinskih interesnih združenjih, študentskih organizacijah, društvih, klubih, ter na področju časopisno-založniške dejavnosti, kjer je glavni in odgovorni urednik časopisa Organon.

Uravnoteženo upravljanje ključnih dejavnikov uspeha pri prevzemih in združitvah

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Empirične študije kažejo, da več kot polovica vseh prevzemov ni realizirala postavljenih ciljev in je celo izgubila del svoje vrednosti. V razpravi predlagamo nov pristop za uspešne prevzeme, ki vodi skozi koncept uravnoteženega upravljanja mehkih in trdih dejavnikov uspeha. Med trde dejavnike uspeha uvrščamo profesionalno izveden skrbni pregled, realno ocenjene potencialne z dodano vrednostjo (združevanje zdravih poslovnih jeder) v prevzemnem in ciljnem podjetju ter dober načrt po-prevzemne integracije z njegovo hitro implementacijo. Ocenjevanje prevzemnih tarč in prevzemnih učinkov izključno na osnovi finančnih kazalnikov ni dovolj, upoštevati je potrebno tudi človeški dejavnik ter notranje in zunanje poslovne odnose in jih oceniti s nefinančnimi kazalniki. Med mehke dejavnike uspeha pri prevzemih uvrščamo novo »sestavljeno« organizacijsko kulturo, ozaveščene in inovativne ljudi (voditelji) ter ustrezno in pravočasno komuniciranje z javnostmi. Pomemben je dober poslovni rezultat in uspešen prevzem je tisti, ki dolgoročno ustvarja dodano vrednost in pričakovani učinek »ena plus ena je več kot dve«.

Ključne besede: prevzemi in združitve, uravnoteženo upravljanje, mehki dejavniki uspeha, trdi dejavniki uspeha

1 Uvod

Mnoge empirične raziskave kažejo, da več kot polovica vseh prevzemov ni zgodba o uspehu. Bridka realnost prevzemov je, da jih je le približno 20-odstotkov res uspešnih (Bruner, 2004). Kar 55 do 77-odstotkov vseh prevzemov in združitvev ne izpolni finančnih obljub danih ob njihovi objavi in kar 40-odstotkov vseh čezmejnih kapital-skih povezovanj se izkaže za izgubo (Carleton in Lineberry, 2004). Skoraj dve tretjini združenih podjetij izgubi del svojega tržnega deleža v prvem kvartalu skupnega delovanja, v tretjem kvartalu skupnega delovanja izgubi svoj tržni delež že 90-odstotkov združenih podjetij (Harding in Rouse, 2007). V prvih osmih mesecih po združitvi se zmanjša produktivnost v združenih podjetjih celo do 50-odstotkov (Huang in Kleiner, 2004).

V prevzemnih procesih, včasih kar prevzemnih bitkah, se izgublja velike vsote denarja in delničarska vrednost. Tudi naš poslovni prostor pri tem ni izjema. Vrednost prevzemov v svetovnem merilu dosega oz. presega 1 bilijon evrov letno (Weston in Weaver, 2001); naša ocena je, da bo vrednost prevzemov tudi v bodoče dosegala vsaj te vrednosti. Iz analize podatkov empiričnih študij, študije obsegov prevzemov in študije (ne)uspešnosti prevzemov, lahko sklepamo, da bodo ob tako visoki stopnji neuspeha izvedenih prevzemov letno izgubljene milijarde evrov. Večina empiričnih raziskav skoraj izključno obravnava finančne posledice in le redke poizkušajo poi-

skati vzroke za neuspeh. Obstoječa literatura pa praviloma navaja recepte za uspeh v obliki ukrepov, ki naj bi jim sledila prevzemna podjetja.

Prevzemi in združitve (p)ostajajo tudi pri nas integralni del strategije rasti podjetij. Tradicionalno mišljenje, doma in v tujini, še vedno postavlja v ospredje ciljno podjetje, tako imenovane prevzemne tarče. Prevzemne tarče se izberejo v procesu sejanja primernih kandidatov za prevzem in se skrbno pregledajo. Kriteriji za izbiro so praviloma finančni in le redko tudi nefinančni. Pogosto so kot motiv navedeni strateški razlogi (Kesič, 2007), predvsem kadar je potrebno upravičiti visoko prevzemno ceno, ki praviloma vključuje prevzemno premijo. V Združenih državah je le-ta v devetdesetih letih znašala v povprečju kar 40-odstotkov (Weston in Weaver, 2001).

Trdimo, da se mora v središče postaviti prevzemno podjetje. Prevzemno podjetje mora dobro poznati svoje prednosti in slabosti preden prične s prevzemnimi procesi, če želi povečati verjetnost uspešnega prevzema. Pri prevzemih se povezujeta dve različni (edinstveni) organizaciji, pri čemer ni izziv različnost ampak upravljanje le-te. Poudarek mora biti na uravnoteženem upravljanju ključnih človeških in finančnih resursov organizacije, kar je pogoj za ustvarjanje trajnostne rasti in dobrih dolgoročnih rezultatov. Z neuravnoteženim upravljanjem se sicer lahko doseže kratkoročne cilje v posameznih primerih, sicer pa se tovrstni pristop ne priporoča.

2 Uravnoteženo upravljanje dejavnikov uspeha pri prevzemih in združitvah

Agregatni učinki prevzemov so poznani, postavlja pa se vprašanje zakaj so posamezni prevzemi bolj uspešni od drugih? Katere aktivnosti in dejavniki so pomembni za uspeh?

Poiskati moramo prave vzroke za neuspeh, predvsem pa predlagamo drugačen pristop. Trdimo, da je pomemben dejavnik uspeha pri prevzemih uravnoteženo upravljanje ključnih dejavnikov uspeha. Zagovarjamo koncept uravnoteženega upravljanja „ekonomskega“ kapitala in „človeškega“ kapitala. Mnogi menedžerji ga še vedno ne uporabljajo v praksi, raje sledijo obstoječi „dobri praksi“ in uspešnost merijo izključno s finančnimi kazalniki.

Izbira prevzemne tarče izključno na osnovi finančnih kriterijev ni več zadostna, potrebno je oceniti tudi človeški faktor. T.i. mehki dejavniki so enako pomembni za uspeh kot trdi dejavniki, saj združujejo ekonomsko logiko poslovnega uspeha in socialnega kapitala. Navkljub tem spoznanjem, pa človeški dejavnik zavzema drugo mesto pomembnosti, v ospredju so še vedno izrazito komercialni in finančni vidiki (Huang in Kleiner, 2004).

Vsak prevzem je edinstven poslovni dogodek zaradi različnosti prevzemnega in ciljnega podjetja. Številni aktualni poslovni primeri nas učijo, da pri vsakem prevzemu pride posledično do večjih organizacijskih sprememb, ki vplivajo na nadaljnji razvoj prevzetega podjetja, zato je uravnoteženo upravljanje različnosti ključ do uspeha.

Večino tržne vrednosti sodobne organizacije predstavljajo ljudje, njihova znanja in veščine (mehki dejavniki), in ne več gotovina, stavbe in stroji (trdi dejavniki). Neopredmeteni kapital, ki ga sestavljajo človeški, strukturni, socialni in organizacijski kapital, bo v prihodnosti še pridobival na pomenu v odnosu na »ekonomski« kapital. Obstoječi prevzemni modeli se ne posvečajo dovolj ljudem, njihovem vedenju, vrednotam in novi organizacijski kulturi. V prevzemnih procesih se zapostavlja človeški kapital in je vsa pozornost usmerjena v finančni rezultat, kar lahko omogoči kratkoročne učinke; pomemben pa je organizacijski uspeh na dolgi rok, ki pa ni možen brez upoštevanja in s tem povezave obojega – poslovnega uspeha in človeškega kapitala merjenega v kvantitativnem in kvalitativnem smislu, s finančnimi in nefinančnimi kazalniki uspeha.

KLJUČNI DEJAVNIKI USPEHA	
TRDI DEJAVNIKI USPEHA	MEHKI DEJAVNIKI USPEHA
NAČRT POPREVZEMNE INTEGRACIJE	ORGANIZACIJSKA KULTURA
SKRBNI PREGLED	VODITELJI
POTENCIALI Z DODANO VREDNOSTJO	KOMUNIKACIJA

Slika 1: Ključni dejavniki uspeha pri prevzemih in združitvah

3 Trdi dejavniki uspeha

Med trde dejavnike uspeha štejemo tiste prevzemne aktivnosti, ki v ospredje postavljajo analizo stanja v podjetju tarči, predvsem finančno analizo, identificiranje potencialov z dodano vrednostjo in možnost njihove realizacije v poprevzemnem obdobju (finančni učinki). Poudarek je na tistih dejavnikih uspeha, ki jih lahko merimo (kvantificiramo) in posamezne učinke med seboj primerjamo. Zaradi možnosti merjenja in primerjave (npr. s kazalniki) se jim v praksi praviloma daje večja, v posameznih primerih celo izključna, pozornost. Uspešnost prevzemih procesov pa ne zavisi le od količine denarja, temveč tudi od ljudi (Harding in Rouse, 2007). V praksi seveda ne obstaja jasna ločnica med »trdim« in »mehkim«, temveč se obe kvaliteti pogosto prepletata in dopolnjujeta; med trde dejavnike uspeha v naši razpravi uvrščamo tiste, ki dajejo večji poudarek finančnim in merljivim učinkom, med mehke dejavnike uspeha pa težje merljiv človeški dejavnik s svojimi odnosi, talenti in znanji.

3.1 Načrt poprevzemne integracije

Dobro in pravočasno pripravljen načrt integracije je temeljni pogoj za uspešno izvedbo integracije prevzetega podjetja. Integracijski proces je sestavljen iz dveh faz: načrtovanja v pred-prevzemnem obdobju in implementacije v po-prevzemnem obdobju. Za prvo fazo, pripravo načrta integracije, je ključni dejavnik uspeha temeljitost, za drugo, implementacijo načrta, pa hitrost. Študije procesov povezovanja podjetij nas učijo, da je proces prevzemanja in integracije edinstven za posamezno povezavo, saj se posamezna podjetja med seboj razlikujejo (Carleton in Lineberry, 2004). Težave pri izvedbi pa so si mnogokrat zelo podobne in se lahko razvrstijo v posamezne sklope. Managerji pogosto odlašajo z odločitvami ali pa so omejeni v njihovem sprejemanju; integracija zastane in produktivnost pade (Harding in Rouse, 2007).

Strategija za uspešno integracijo vključuje pravilo, da se mora ohraniti vse, kar je dobrega v prevzetem podjetju, in dodati tisto, kar dela boljše prevzemno podjetje, da bi preskočili v novo kvaliteto – strateško skladnost obeh podjetij. Integracija ne pomeni preprostega zlitja obeh podjetij, temveč domišljeno in ustvarjalno povezovanje virov, organizacijskih kultur, sistemov, struktur in procesov. Potrebno je ciljno vodenje procesov, v katere mora biti vključeno čim več zaposlenih in vodstvo prevzemnega podjetja. Potrebno je tudi aktivno vključiti zaposlene in vodstvo prevzetega podjetja in sicer na enakopravni, participativni osnovi. Z vidika vzpostavljenih notranjih poslovnih (poprevzemnih) odnosov je ključno sodelovanje; ni ločevanja na naše in njihove, ekipe delujejo po postavljenih pravilih integracije. V praksi preizkušena integracijska pravila so:

- integracijski proces se začne s pripravo pred formalnim koncem transakcije,
- integracijski proces naj poteka hitro, načrtovane spremembe naj se izvedejo čim prej,

- komuniciranje naj poteka z vsemi interesnimi javnostmi,
- izpolnijo naj se dane obljube in zagotovila, brez zavažanj,
- imenuje naj se vodja integracijskega procesa, ki je odgovoren za rezultate,
- postavijo naj se realni cilji,
- različna presenečenja, nasprotovanje ali celo odpor so sestavni del procesa.

Navedena »zlata pravila« naj prevzemna podjetja vključijo v svoj strateški načrt integracije, ki ga pripravijo že v pred-prevzemni fazi. *Uspešen prevzem se začne ustvarjati že v pred-prevzemnem obdobju.*

3.2 Skrbni pregled

Prevzemno podjetje v procesu skrbnega pregleda išče relevantne odgovore na svoja vprašanja (kaj in kje) glede podjetja tarče in poskuša pridobiti čim več informacij o stanju v ciljnem podjetju in na podlagi le-teh oceni njegov bodoči potencial za rast in razvoj. Posamezni poslovni segmenti se med seboj prepletajo in med njimi ni jasne ločnice, pomembno je, da se skrbni pregled organizira tako, da se pregledajo vsa področja poslovanja. Skrbni pregled ni naključno zbiranje podatkov, temveč strokovno iskanje informacij in odgovorov na vnaprej pripravljen seznam vprašanj o podjetju. Pregled poslovanja, ki se vodi s skrbnostjo dobrega gospodarstvenika in dobi vso podporo in potrebne resurse, poda celovito sliko o podjetju, o njegovi dejanski moči in slabostih. Glavni nameni pridobivanja informacij v skrbnem pregledu so:

- sprejetje informirane odločitve,
- oblikovanje jamstev in zagotovil v pogodbah,
- odkrivanje skritih napak, obveznosti in pasti.

Nemalokrat pregledi poslovanja razkrijejo skrite obveznosti in nevarne pasti (t.i. okostnjake) v podjetjih tarčah in vodijo bodisi k prekinitvi pogajanj zaradi prevelikih tveganj za prevzemno podjetje ali pa spremenijo strukturo transakcije. *Skrbni pregled naj bo resnično skrben.*

3.3 Potenciali z dodano vrednostjo (sinergije)

Prevzemni tim strokovnjakov mora natančno oceniti pričakovane pozitivne učinke na poslovanje po prevzemu, finančni strokovnjaki pa to upoštevati pri določanju vrednosti ciljnega podjetja. Sinergije se torej morajo pretvoriti v izboljšanje rezultatov poslovanja, kar pomeni, da morajo biti ocenjene realno, da se v današnjem konkurenčnem okolju tudi realizirajo (Sirower, 1997). Vrednost novega podjetja po združitvi je večja od vrednosti posameznih podjetij pred združitvijo, kar tudi pomeni, da se skupaj ustvarja večji pozitivni denarni tok, kot bi ga ustvarili posamezni podjetji. Pričakuje se učinek »dva plus dva je pet«, kar pojasnjuje pričakovanje prevzemnika, da bo poslovanje prevzetega podjetja pod novim lastnikom ustvarilo določene pozitivne učinke, tako v prodajnem kot v stroškovnem segmentu (Bruner, 2004). Kupec pogosto

vnaprej plača prevzemno premijo za pričakovane sinergijske učinke; pri zaključenem prevzemu je izplačana prevzemna premija dejstvo, pričakovani denarni tokovi v predvidenem roku povračila pa se morajo šele udejanjiti.

Pričakovani sinergijski učinki ne smejo biti opredeljeni ohlapno kot »strateška postavka«. Potenciali z dodano vrednostjo morajo biti ocenjeni realno (in ne optimistično), izboljšave in povečanje inkrementov pa opredeljene v merljivih enotah. Previsoko ocenjene sinergije povzročijo nerealna pričakovanja in precenjenost ciljnega podjetja, kar poimenujemo sinergijska past (Sirower, 1997). Ustvarjanje dodane vrednosti je najboljšo merilo sinergij, zato se primernost tarče oceni na osnovi zdravih poslovnih jeder, ki se v kombinaciji dveh ali več podjetij še okrepijo. *Sinergije v povezavi dveh ali več podjetij se realizirajo in s tem ustvarja dodana vrednost, če jačamo obstoječe potencialne z dodano vrednostjo, dodajamo nove potencialne z dodano vrednostjo in dezinvestiramo šibke potencialne, ki ne ustvarjajo dodane vrednosti.*

4 Mehki dejavniki uspeha

Materialni viri in kapital sta ključna dejavnika v t.i. stari in novi ekonomiji; v t.i. inovativni ekonomiji pa postaja zmagovalni dejavnik intelektualni kapital, to je človek s svojimi talenti, znanji in odnosi. Rdeča nit sprememb je trend k mehkim vrednotam.

V središče prevzemnega dogajanja postavljamo človeka in skupine, zato zagovarjamo participativni model, saj pomaga angažirati intelektualni kapital in pozitivno energijo prevzemnega okolja ter jo usmerja na zelene poslovne cilje.

4.1 Organizacijska kultura

Strategija podjetja so ljudje in njihove vrednote; organizacijska kultura je to »kar smo« in ne »kaj imamo«. Razlike v organizacijski kulturi se pogosto navajajo kot glavni vzrok za neuspešen prevzem; če se ne najde ali ne želi poiškati pravega vzroka, potem so ravno kulturne razlike priročen »grešni kozel« za razlago neuspeha (Carleton in Linnberry, 2004).

Premagovanje kulturnih razlik je zdaleč najtežavnejši del povezan z združitvijo ali pripojitvijo (Habeck et al., 2000). Z vidika vzpostavitve medčloveških odnosov je pomembno premagati logiko »zmagovalca« v procesu. Običajen človeški odziv na spremembe se prične z odklanjanjem, strahom, jezo in žalostjo, preden se spremembo (nastalo skozi prevzem) sprejme in ji postanemo naklonjeni. To moramo upoštevati tudi v prevzemnih procesih, kjer je prisoten strah za službo in vpliv; posebej kadar obstaja negotovost glede stroškovnih sinergij, ki so postale sinonim za odpuščanja. V prevzemnih procesih ni zmagovalcev in ni poražencev, sovražno tekmovalni odnos »naši – vaši« mora nadomestiti medsebojno spoštovanje in sodelovanje. Prevlada kulture prevzemnega podjetja, kot najprimernejši pristop za kulturno integracijo, se v praksi ni izkazala kot uspešna; bolj kot prevlada ene kulture, se

je uveljavilo sestavljanje (nove) kulture iz predhodno ločenih kultur. Kulturno integracijo je mogoče obvladati in je kritična za uspeh vsake združitve (Habech et al., 2000; Carleton in Lineberry, 2004). *Upoštevajte razlike v organizacijskih kulturah in lokalne posebnosti, takoj po prevzemu predstavite novo »sestavljeno« organizacijsko kulturo.*

4.2 Voditelji (človeški kapital)

Posel smo ljudje, zato v središče prevzemnega dogajanja postavljamo človeka in skupine. Zagovarjamo participativni model, saj pomaga angažirati intelektualni kapital in pozitivno energijo prevzemnega okolja ter jo usmerja na zelene poslovne cilje. Človeški kapital igra, poleg finančnih virov, najpomembnejšo vlogo v sodobni organizaciji in postaja najpomembnejši vir in dejavnik uspeha v 21. stoletju. Pri prevzemnih procesih to pomeni angažiranje širšega kroga ljudi, ki neposredno vodijo do ciljno usmerjenih rešitev.

Za uveljavljanje sprememb, od preobrazbe do vodenja novega združenega podjetja, je pomembno vodstvo na najvišji ravni. Vodstvo utira pot spremembam, zato v potrebni kritični masi strateško mislečih posameznikov v prvi vrsti vidimo voditelje in vodstveni sloj prevzemnega podjetja. »Vodstvo je najnujnejša prednostna naloga po končani združitvi. Hitreje ko združena družba postavi svoje vodstvo – tako da sklene kompromise, čim bolj zmanjša ali prepreči napake in čim bolj izkoristi razpoložljivo nadarjenost in znanje – hitreje bo lahko ta družba izkoristila možnosti za rast, ki so povezane z vizijo enega posla« (Habech et al., 2000). Ker so pri prevzemnih procesih pogoste menjave ali odhodi vodstva, ne sme priti do praznine in negotovosti; nameravana menjava vodstvene ekipe mora biti hitra in odločna.

Sposobnost sprejemanja dobrih odločitev o zaposlenih in novem vodstvu predstavlja enega zadnjih zanesljivih virov konkurenčne prednosti, saj ga le malo organizacij resnično obvlada. To največje premoženje podjetja se še vedno slabo razume, ne zna se ga meriti in še slabše se z njim upravlja. *Vključite voditelje - zmagovalce.*

4.3 Komunikacija

Komuniciranje kot dvosmerni proces med udeleženci, je tisto, ki spremembe ozavešči, utemelji in omogoči njihovo implementacijo v vsakodnevni praksi. Skladnost med dejanskim (prevzemnim) vedenjem podjetja in njegovim komuniciranjem – poenostavljeno rečeno enačaj med besedami in dejanji – je jamstvo, da bo med udeleženci v prevzemnem procesu vzpostavljeno zaupanje.

Najosnovnejša opredelitev konteksta komuniciranja vključuje odnose z interno javnostjo (zaposlenimi) in odnose z eksterno javnostjo oz. deležniki (vlagatelji, kupci, konkurenti, dobavitelji, mediji, država, mednarodne ustanove, vplivne skupine, širša javnost, ipd.). Običajno je organiziranost služb, ki se znotraj prevzemnega podjetja ukvarjajo s komuniciranjem, razdeljena na del, ki se pos-

veča tržnemu komuniciranju in del, ki skrbi za odnose z javnostmi. Sistematično in dosledno komuniciranje uporablja ustrezna komunikacijska orodja, skrbno načrtuje vsebine in izbira primerne medije; v organiziranem okolju so kompetence in odgovornosti natančno določene, poslovne strategije se prevajajo v komunikacijske (Godina Košir, 2006). Odnosi med udeleženci v prevzemnih procesih odločilno vplivajo na komuniciranje - tisto, ki ga je moč nadzorovati in usmerjati - kot tudi na neformalno, na katerega nosilci komunikacij nimajo neposrednega vpliva. V dobro organiziranem in transparentnem okolju se odpre prostor za dialog; komuniciranje, tako interno kot eksterno, postane bolj odprto in dovzetno za povratni tok, za izmenjavo informacij, mnenj, izkušenj, znanj. Za doseganje ciljev v »sestavljeno« podjetju je pomembno, da komunikatorji prepričajo udeležence v vizijo podjetja in da le-ti delajo v smeri njene uresničitve. Pomembno je, da se izpolnijo dane obljube in zagotovila; da se ne zavaja. Ključna je proaktivnost in prevzem pobude; tudi »nekomunikacija« pošilja sporočila. *Komunikacijski cilji morajo biti jasni in razumljivi; »zlato pravilo« preskušeno v praksi je sledeče: komunikacija, komunikacija in ponovno komunikacija z vsemi interesnimi javnostmi z jasnimi, natančnimi in pravočasnimi sporočili.*

5 Empirična raziskava

5.1 Opis vzorca in zbiranje podatkov

Empirična raziskava (Bertoncelj in Kovač, 2007) temelji na vprašalniku. Vprašalnik je bil razdeljen skupno 20 izbranim prevzemnim podjetjem z več kot 250 zaposlenimi in prihodki nad 1 milijardo SIT v času zaključenega prevzema ali združitve v časovnem obdobju med 1997 in 2005. Vrnjeno je bilo 12 izpolnjenih vprašalnikov, kar predstavlja 60-odstotno stopnjo odziva. Raziskava temelji na raziskovalnem vzorcu 25 prevzemov in združitvev. V raziskavo niso bile vključene finančne institucije.

V izbranih podjetjih so bili narejeni intervjuji z vodstvom ali vodji prevzemnih projektov; v približno dveh tretjinah izbranih podjetij, ki so vrnila izpolnjen vprašalnik, je bilo vodstvo ali projektni vodja vključeno v prevzemni proces od samega začetka in so bili seznanjeni s strateškimi dejavniki, ki so vodili k odločitvi za prevzem ali združitvev. Srečanja so omogočila pridobitev dodatnih informacij in pojasnil iz prve roke.

Vrnjeni vprašalniki omogočajo oceno uspešnosti prevzemov in združitvev v slovenskem prostoru in preverjanje vpliva (pomembnosti) ključnih dejavnikov uspeha z vidika vodstev prevzemnih podjetij. Uporabljena je bila metoda standardizirane Likertove lestvice in sicer v razponu od v celoti nedoseženo (1) do v celoti doseženo (5).

Dvanajstih prevzemnih podjetij je ocenilo svojo celotno uspešnost v prevzemnih procesih glede na uresničitev postavljenih ciljev. Prav tako je ocenilo pomembnost vsakega posameznega trdega in mehkega dejavnika uspeha za uspešen prevzem ali združitvev z vidika prevzemnega podjetja.

Ocenjujemo, da smo z intervjuji zmanjšali možnost ex-post racionalizacije s strani vodstev prevzemnih podjetij in s tem dajanje višjih ocen za celokupno uspešnost ali večje pomembnosti predvsem mehkim dejavnikom uspeha kot je to bilo dejansko v samem prevzemnem procesu.

Naša raziskava ima vrsto omejitev. Raziskovalni vzorec je omejen le na dvanajst prevzemnih podjetij oz. petindvajset prevzemov in združitve ter eno post-tranzicijsko ekonomijo. Naše ocene delno temeljijo na metodi intervjuja.

5.2 Merjenje uspešnosti prevzemov in združitve

Vodstvo prevzemnih podjetij je bilo vprašano, kako ocenjuje uspešnost zaključenih prevzemov ali združitve z vidika realizacije postavljenih prevzemnih ciljev (Preglednica 1). Uspešnost posameznega prevzema ali združitve z vidika stopnje realizacije postavljenih prevzemnih ciljev je bilo možno oceniti v razponu od v celoti nedoseženo (1), v glavnem nedoseženo (2), delno doseženo (3), v glavnem doseženo (4) in v celoti doseženo (5).

Preglednica 1: Realizacija postavljenih prevzemnih ciljev

Realizacija postavljenih prevzemnih ciljev					Povprečna vrednost	Standardna deviacija
v glavnem nedoseženo			v celoti doseženo			
1	2	3	4	5		
Število odgovorov (n = 25)						
2	3	5	9	6	3,56	1,2274

Preglednica 2: Pomembnost ključnih dejavnikov uspeha

	Pomembnost ključnih dejavnikov uspeha					Povprečna vrednost	Standardna deviacija	
	pomeni najmanj		pomeni največ					
	1	2	3	4	5			
Število odgovorov (n = 12)								
Trdi dejavniki								
Skrbni pregled	0	0	1	6	5	4,33	0,6513	
Načrt poprevzemne integracij	0	0	1	7	4	4,25	0,6215	
Sinergije	0	0	4	4	4	4,00	0,8528	
Mehki dejavniki								
Voditelji	0	1	0	5	6	4,33	0,8876	
Organizacijska kultura	0	1	2	6	3	3,92	0,9003	
Komunikacija	0	3	1	5	3	3,67	1,1547	

Rezultati raziskave kažejo, da je stopnja realizacije postavljenih prevzemnih ciljev kot merilo uspešnosti ocenjena s povprečno vrednostjo 3,56. Slovenski prevzemniki svojo uspešnost ocenjujejo z oceno »delno doseženo«. Rezultat naše empirične raziskave je primerljiv z rezultati empiričnih raziskav za prevzemna podjetja v Združenih državah (Marks in Mirvis, 1998; Bijlsma-Frankema, 2001; Schreder in Self, 2003; Huang in Kleiner, 2004).

5.3 Merjenje pomembnosti ključnih dejavnikov uspeha

Vodstvo prevzemnih podjetij je bilo vprašano kako ocenjujejo pomembnost posameznih trdih in mehkih dejavnikov za uspešen prevzem ali združitve (Preglednica 2). Pomembnost posameznega trdega ali mehkega dejavnika je

bilo možno oceniti v razponu od pomeni najmanj (1) do pomeni največ (5).

Rezultati raziskave kažejo, da prevzemna podjetja različno ocenjujejo pomembnost posameznih trdih in mehkih dejavnikov uspeha. Vsa prevzemna podjetja pa ocenjujejo, da so tako trdi kot mehki dejavniki pomembni za izvedbo uspešnega prevzema ali združitve.

Rezultati raziskave tudi kažejo, da so trdi dejavniki uspeha (njihova povprečna vrednost je 4,19) ocenjeni kot bolj pomembni za povečanje uspešnosti prevzemnih procesov kot mehki dejavniki uspeha (njihova povprečna vrednost je 3,97).

Pri primerjavi povprečij vrednosti dejavnikov uspeha se pokaže, da slovenska prevzemna podjetja dajejo največji poudarek skrbnemu pregledu podjetja tarče v predprevzemnem obdobju in človeškemu dejavniku (managerjem – voditeljem). Oba dejavnika uspeha, trdi in mehki, sta dobila visoko oceno 4,33. Slovenski managerji prev-

zemnih podjetij ju ocenjujejo kot kritična dejavnika za uspešen prevzem ali združitvev.

Preostala trda dejavnika, kvaliteten načrt poprevzemne integracije in njegova hitra implementacija ter identifikacija potencialov z dodano vrednostjo (sinergije) sta ocenjena kot zelo pomembna dejavnika za uspešno izvedbo prevzemov in združitvev. Mehka dejavnika, organizacijska kultura in komunikacija, sta bila ocenjena kot pomembna (njuna povprečna vrednost je 3,80) za uspešno izvedbo prevzemov in združitvev, vendar jima slovenski managerji posvečajo manjšo pozornost kot trdim dejavnikom.

Posledice naših izsledkov so pomembne tako za managerje kot za raziskovalce. Upamo, da smo prikazali uvodni korak k empiričnemu razumevanju ključnih dejavnikov za povečanje uspešnosti prevzemnih procesov, ki zapolnjuje praznino v obstoječi literaturi. Prihodnje raziskave bi morale zaobjeti še širše območje (vključiti več držav) in se predvsem usmeriti v večje število dejavnikov uspeha, tako mehkih kot trdih.

6 Zaključek

Pri prevzemih in združitvah se bodo v svetovnem merilu izgubile milijarde evrov, saj empirične študije kažejo, da je trenutna stopnja neuspeha vsaj 50-odstotkov. In to kljub dobrim namenom in jasni ekonomski logiki v pretežnem deležu transakcij, podprtih s podrobnimi analizami in natančnimi izračuni.

Izgubljene milijarde evrov in na tisoče izgubljenih delovnih mest zaradi prevzemnih zgodb o neuspehu zahtevajo drugačen pristop k izvajanju prevzemnih procesov. Integriran pristop, ki vključuje hkratno in uravnoteženo upravljanje trdih in mehkih dejavnikov uspeha predstavlja nov pristop za večanje delničarske vrednosti skozi uspešne prevzeme.

Integrirani pristop mora upoštevati, da se uspešen prevzem naredi že v pred-prevzemnem obdobju, da mora biti skrbni pregled resnično skrben in da se sinergije v povezavi dveh ali več podjetij realizirajo le, če jačamo obstoječe potenciale z dodano vrednostjo, dodajamo nove potenciale z dodano vrednostjo in dezinvestiramo šibke potenciale, ki ne ustvarjajo dodane vrednosti. Upoštevati mora tudi razlike v organizacijskih kulturah in lokalne posebnosti, vključiti voditelje – zmagovalce in voditi jasno komunikacijo z vsemi interesnimi javnostmi z natančnimi in pravočasnimi sporočili.

V današnji, vedno bolj holistični ekonomiji, stopajo v ospredje mehki dejavniki uspeha, to je človek s svojimi znanji, talenti in odnosi. Ocenjevanje prevzemnih učinkov izključno na osnovi finančnih kazalnikov ni dovolj, upoštevati je potrebno tudi človeški dejavnik.–

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Tržno-komunikacijski kanali in spletne storitve v slovenskih potovalnih agencijah

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Prispevek prikazuje rezultate v novembru 2005 zaključene raziskave, s katero smo ugotavljali, kako slovenske potovalne agencije uporabljajo tržno-komunikacijske kanale in spletne storitve. Z uporabo vprašalnika na spletu in v pisni obliki smo izvedli anketo med vsemi potovalnimi agencijami v Sloveniji, ki so registrirane za dejavnost I 63.300 potovalne agencije. Na naš naslov je prispelo skupno 74 izpolnenih anketnih vprašalnikov, kar pomeni 29% vseh potovalnih agencij. Eden izmed rezultatov raziskave kaže, podobno kot za grške in turške potovalne agencije, da tudi slovenske potovalne agencije najbolj zaupajo v učinkovitost ustnega priporočila. Šele na drugem mestu je uporaba spletnih storitev. Multivariatna faktorska analiza je potrdila, da sta uporaba tržno-komunikacijskega kanala in vsebina spletne strani značilno povezani z velikostjo potovalne agencije.

Ključne besede: potovalne agencije, uporaba Interneta, komunikacijski kanali, trženjski kanali, Slovenija

1 Uvod

Pojav Interneta v devetdesetih letih prejšnjega stoletja in razvoj spletnih storitev so ključno vplivali na organizacijo, prenos in shranjevanje informacij ter na tržno-komunikacijske in prodajne kanale podjetij in drugih uporabnikov. Klasične tržno-komunikacijske kanale, kot sta tiskani mediji in televizijsko oglaševanje postopoma, a vztrajno nadomeščajo različne oblike spletnih storitev: spletne strani, elektronsko sporočanje, on-line rezervacije in druge oblike internetnih storitev. Z namenom poenostavitve organizacije poslovanja, znižanja operativnih stroškov poslovanja in povečanja konkurenčnosti se v podjetjih vse bolj uveljavlja uporaba Interneta kot temeljne informacijske in tržno-komunikacijske infrastrukture ter nove prodajne poti. Učinkovita uporaba spletnih strani se je izkazala kot ključna konkurenčna prednost podjetij, še posebej v turizmu in s turizmom povezanimi dejavnostmi kot so potovanja, hotelirstvo in potovalne agencije.

Danes je težko najti področje dejavnosti, kjer ni prisotna uporaba Interneta (Lyman in Varian, 2003). V dejavnostih, ki so intenzivno vključene v globalno poslovanje in v širša družbeno gospodarska dogajanja, je uporaba spletnih strani kot komunikacijskega in tržnega orodja nepogrešljiva. Potovalne agencije in turistične organizacije se v veliki meri štejejo med dejavnosti, ki so močno vključene v globalno poslovanje in trženje (Werthner in Klein, 1999; O'Connor, 2002; Gursoy in McCleary, 2004). Zato je v tej industriji uporaba Interneta med najbolj pogosto uporabljenimi komunikacijsko-tržnimi kanali (Buhalis, 2003).

Število uporabnikov Interneta in različnih spletnih storitev je v zadnjih letih silovito naraslo. Uporaba svetovnega spleta je pogosto uporabljen pokazatelj, ki je tesno povezan s splošno ravniyo gospodarske razvitosti, razvitanostjo izobraževanja in usposobljenostjo prebivalstva za njegovo uporabo. Uporaba Interneta kot komunikacijskega in tržnega kanala pa odraža tudi vključenost določene dejavnosti v mednarodne poslovne tokove. Turistične in potovalne organizacije poslujejo na globalnih trgih, kjer je Internet prevladal, kot ključni dejavnik konkurenčnosti pri trženju, tržnem komuniciranju, organizaciji in poslovanju (Buhalis, 2003; Özturan in Roney, 2004).

Namen naše raziskave je ugotoviti uporabo Interneta kot informacijskega, komunikacijskega in tržnega orodja med slovenskimi potovalnimi agencijami s pomočjo vprašalnika, ki sta ga uporabila Özturan in Roney (2004) na primeru Turčije. Z njunim predhodnim dovoljenjem smo vprašalnik iz njunega članka prevedli v slovenščino. Raziskava med slovenskimi potovalnimi agencijami je potekala med aprilom in novembrom 2005. Seznam 255-tih podjetij, registriranih za dejavnost potovalnih agencij, I 63.300 po standardni klasifikaciji dejavnosti (GZS, 2005), smo pridobili iz PIRS (2005). Za isto leto 2005 SURS (2006b) navaja 238 potovalnih agencij v Sloveniji. Rezultati anketnega vprašalnika za Slovenijo omogočajo primerjavo s podobnimi rezultati, ki sta jih ugotovila Özturan in Roney (2004) za turške potovalne agencije. Pridobili smo tudi rezultate podobne raziskave v Grčiji (Vrana in Zafirooulos, 2006), ki jih prav tako uporabljamo za primerjave.

Nadaljevanje prispevka je razdeljeno na tri dele. Najprej na kratko prikažemo uporabo svetovnega spleta kot

vse bolj razširjenega tržno-komunikacijskega in prodajnega orodja in navajamo nekatere ugotovitve o uporabi spletnih storitev med potovalnimi agencijami v Turčiji in v Grčiji. V nadaljevanju prikazemo rezultate lastno izvedenih anket o podjetjih in o anketiranih, ki so vključeni v naš prikaz potovalnih agencij v Sloveniji. Posebno pozornost namenjamo prikazu in analizi rezultatov, ki se nanašajo na uporabo spletnih strani kot marketinško-komunikacijskega kanala in njihovemu vplivu na prodajne kanale med potovalnimi agencijami v Sloveniji. S pomočjo multivariatne analize z metodo glavnih komponent prikazemo ugotovitve o povezanosti uporabe tržno-komunikacijskih in informacijskih kanalov z velikostjo slovenskih potovalnih agencij. Z faktorsko analizo podrobneje analiziramo skupne dejavnike, ki vplivajo na vsebine spletne strani slovenskih potovalnih agencij. V zadnjem delu prispevka izvedemo temeljne ugotovitve o tržno-komunikacijskih kanalih in spletnih storitvah ter njihovem pomenu za organizacijo in poslovanje slovenskih potovalnih agencij. Podamo tudi smernice za nadaljnje raziskovanje.

2 Internet kot tržno-komunikacijsko in prodajno orodje potovalnih agencij

SURS (2006a:10) ugotavlja, da 'delež podjetij, ki imajo dostop do Interneta, se ne more več zelo povečati, saj ga v veliki meri imajo že vsa (slovenska) podjetja'. Nekaj splošno primerljivih podatkov o uporabi Interneta in komunikacijske tehnologije v Sloveniji navajata tudi Bojnec in Kribel (2005). V letu 2003 je 36% tujcev, ki je obiskalo Slovenijo iz turističnih ali poslovnih motivov, iskalo podatke o Sloveniji preko spleta, znotraj tega 67% splošne informacije, 22% je rezerviralo ležišča in 4% je izvršilo plačilo preko tega medija. Posebne raziskave, ki bi prikazala razširjenost uporabe svetovnega spleta kot tržno-komunikacijskega kanala in prodajnega orodja potovalnih agencij z izjemo prispevka Loborec (2006) s podatki iz leta 2002, doslej nismo zasledili. Nekaj splošnih vtisov, kako Slovenci občutimo naše potovalne agencije, bralec lahko najde tudi v Miklavčič (2005). Pregled, kako lahko Internet prispeva k uspešnosti turistične industrije, pa najdemo v Pavlica (2003).

Za primerjavo najprej na kratko prikazemo rezultate podobne raziskave med potovalnimi agencijami, ki je bila izvedena v Turčiji (Özturan in Roney, 2004). Pri tem velja posebej poudariti, da gre za uporabo primerljivega anketnega vprašalnika in primerljive metodologije izvedbe in obdelave ankete. V splošnem velja, da so si slovenske in turške potovalne agencije bolj podobne, kot to velja za primerjavo med slovenskim in turškim gospodarstvom in družbo. Kljub temu, da na področju poslovanja potovalnih agencij ugotavljamo več podobnosti, obstajajo tudi nekatere razlike, ki bi jih lahko pojasnili z različnimi stopnjami razvitosti gospodarstva in izobraževanja ter kulturnimi in socialnimi razlikami med državama, ki v določeni meri vplivajo tudi na razlike v uporabi komunikacijskih in tržnih pristopov pri potovalnih agencijah. Velja poudariti, da je turški turizem doživljal izjemen razcvet v zadnjih le-

tih, saj se Turčija po turističnih prilivih uvršča med osem največjih turističnih destinacij na svetu.

Temeljna ugotovitev raziskave o tržno-komunikacijskih in prodajnih kanalih v turških potovalnih agencijah je, da se promocija in trženje potovalnih in turističnih proizvodov preko Interneta povečuje. Kljub temu, da Internet v Turčiji daje dodatne možnosti tržnega komuniciranja, ki dopolnjujejo obstoječe tržne, komunikacijske in oglaševalske kanale, je bil v letu 2003 poudarek na tradicionalnih tržno-komunikacijskih kanalih kot so mediji in telefon. Možnosti uporabe Interneta še niso bile učinkovito izkoriščene. Bolj pogosto se Internet uporablja za elektronsko pošto. Svetovni splet se le poredko uporablja za interaktivno Internetno trženje. Potovalne agencije manj pogosto iščejo nove stranke preko spletnih strani. Bolj pogosto zagotavljajo informacije glede različnih potovanj, ki jih ponujajo za stalne in potencialne stranke. Pomemben vir informacij so ustna, od ust-do-ust sporočila. Poudarjen pa je tudi pomen osebnih obiskov in socialnih interakcij, ki so kulturna specifičnost in se odvijajo v potovalnih agencijah, ki zaenkrat zmanjšujejo uporabo svetovnega spleta in virtualne skupnosti.

3 Rezultati raziskave med slovenskimi potovalnimi agencijami

Naš metodološki pristop in uporabljene metode zbiranja in obdelave podatkov za Slovenijo so primerljivi z Özturan in Roney (2004) za Turčijo. Vprašalnik, ki je bil uporabljen med turškimi potovalnimi agencijami, je bil preveden v slovenski jezik in smo ga prilagodili za Internetno aplikacijo (glej v Kribel, 2005). Anketiranje med slovenskimi potovalnimi agencijami je bilo izvedeno v treh fazah. V prvem krogu smo odgovore na anketni vprašalnik zbirali preko spletne aplikacije. Na zadnjem zaslonu izpolnjevanja anketnega vprašalnika je uporabnik s pritiskom na gumb "pošlji" poslal izpolnjen anketni vprašalnik preko elektronske pošte. Na naš elektronski naslov je prispelo 11 v celoti izpolnjenih anketnih vprašalnikov, ki smo jih s posebnim programom prelihi iz priponke v MS Excel preglednico. V drugem krogu smo potovalne agencije povabili k izpolnjevanju anketnega vprašalnika preko strokovne revije Turizem, kjer smo pojasnili namen raziskave. V tretjem krogu smo anketni vprašalnik s pojasnili o izpolnjevanju vtaknili v poštno ovojnico s predplačilom poštnine in povratnim naslovom. Skupno smo poslali 260 anketnih vprašalnikov. Do sredine novembra 2005 je prispelo 63 izpolnjenih odgovorov po pošti. Skupaj smo tako preko elektronske pošte in preko pošte dobili 74 vrnjenih izpolnjenih anketnih vprašalnikov. Nekaj naslovov podjetij je bilo napačnih ali neobstojećih in jih tudi z uporabo telefonskega imenika nismo uspeli najti. Glede na število potovalnih agencij v Sloveniji (SURS 2006b) ocenjujemo, da smo v uspešno zaključene anketne vprašalnike zajeli 29% slovenskih potovalnih agencij. To kaže, da je podatkovni vzorec reprezentativen in da so potovalne agencije vprašalnik sprejele z zanimanjem. Obdelava anketnih vprašalnikov je bila izdelana po segmentih o anketiranih

(spol in starost, izobrazba anketiranih, računalniške izkušnje anketiranih in položaj anketiranih) in o anketiranem podjetju (kraj poslovanja potovalne agencije, pravni status, starost in velikost podjetja) ter o uporabi spletnih strani in drugih oblik internetnih storitev kot tržno-komunikacijskih kanalov in njihovih vplivih na prodajo. Posebno pozornost namenjamo predstavitvi rezultatov multivariatne analize s pomočjo metode glavnih komponent in zlasti z faktorsko analizo.

3.1 Podatki o anketiranih

Po spolu je med izpolnjevalci anketnega vprašalnika 62% žensk in 38% moških. V tem primeru se pokaže zelo pomembna razlika med potovalnimi agencijami v Sloveniji in v Turčiji, kjer je razmerje v nasprotni smeri: 40% žensk in 60% moških. Glede na starost anketiranih v slovenskih potovalnih agencijah ugotavljamo, da med zaposlenimi prevladujejo mlajši. Več kot polovica (51%) se uvršča v starostno skupino med 30 in 49 letom starosti in 22% je starejših od 50 let. Najbolj značilni starostni skupini za Turčijo sta naslednji: 48% je mlajših od 30 let in 49% je starih od 30 do 49 let. Turške potovalne agencije zaposlujejo samo 2% starejših od 50 let, medtem ko je ta odstotek za Slovenijo 22%. Te razlike bi se verjetno dalo pripisati mlajši starostno demografski strukturi turškega prebivalstva ter družbeno-socialnim in kulturnim razlikam, z bolj tradicionalnim družbenim odnosom do zaposlovanja žensk v potovalnih agencijah v Turčiji.

Med anketiranimi v slovenskih potovalnih agencijah prevladujejo visoko in univerzitetno izobraženi, saj jih ima 72% vsaj univerzitetno diplomu, v primerjavi z 63,3% v Turčiji. Poleg tega je delež z zaključeno srednjo šolo relativno nizek (2,5% v Sloveniji). Dva izmed izpolnjevalcev anketnega vprašalnika v slovenskih potovalnih agencijah imata magistrski ali doktorski naziv, podobno v Turčiji 3,3%. Ti podatki o izobrazbeni ravni in sestavi anketiranih v potovalnih agencijah so razmeroma ugodni, zato ni presenetljivo, da večina (91%) anketiranih v slovenskih potovalnih agencijah smatra, da ima večletne računalniške izkušnje.

Zanimiva je tudi primerjava o položaju anketiranih, ki jih imajo v potovalnih agencijah. Zaradi visokega deleža majhnih podjetij med slovenskimi potovalnimi agencijami je okrog 62% odgovorilo, da zasedajo direktorski položaj: 48% je izvršnih direktorjev in 14% je direktorjev za trženje ali prodaje. Le dva izpolnjevalca anketnega vprašalnika sta strokovnjaka za informacijske tehnologije. To kaže, da so strokovnjaki na področju informacijske tehnologije le redko prisotni med vodilnimi menedžerji v slovenskih potovalnih agencijah.

3.2 Podatki o potovalnih agencijah

Anketa o potovalnih agencijah v Turčiji je pokazala na njihovo koncentracijo v velikih mestih in najbolj znanih turističnih krajih (Özturan in Roney, 2004). Za Slovenijo velja nekoliko večja krajevna razpršenost: 23% potoval-

nih agencij je iz Ljubljane, medtem ko drugi slovenski kraji posamezno ne presegajo dveh odstotkov vseh odgovorov v vzorcu.

Največ slovenskih potovalnih agencij (57%) ima pravno obliko družbe z omejeno odgovornostjo. Nekaj podobnega velja za turške (59,3%). Nadalje so potovalne agencije pomembne za ustvarjanje samostojnih zaposlitvev, saj je v slovenskem vzorcu 24% samostojnih podjetnikov. Le sedem odstotkov potovalnih agencij v slovenskem vzorcu predstavljajo delniške družbe z najdaljšo tradicijo, kar precej odstopa od turških podatkov (36%). Precejšnje število slovenskih potovalnih agencij je bilo ustanovljenih po deregulaciji gospodarstva v začetku devetdesetih let prejšnjega stoletja z lažjimi možnostmi ustanovitve podjetij in njihovega vstopa v poslovanje. To potrjujejo tudi podatki o starosti slovenskih potovalnih agencij. Večina slovenskih potovalnih agencij je mlajših od trideset let. Znotraj te skupine potovalnih agencij je njihova distribucija naslednja: 37% potovalnih agencij je mlajših od desetih let in 52% potovalnih agencij je starih med deset in dvajset let. Zanimivo je, da je bilo najstarejše podjetje, ki se ukvarja s potovalno dejavnostjo ustanovljeno konec dvajsetih letih prejšnjega stoletja, oziroma takoj po prvi svetovni vojni. Kot smo pričakovali, med potovalnimi agencijami prevladujejo majhna in srednje velika podjetja, saj 74,3% anketirancev meni, da dela v potovalni agenciji majhne velikosti (79,4% v turških), 19% jih dela v srednje velikem podjetju in preostali (štiri podjetja) so uvrstila svoje potovalne agencije med velika podjetja.

3.3 Uporaba Interneta in spletnih storitev v potovalnih agencijah

Za razliko od Turčije, kjer je 65% potovalnih agencij imelo svojo spletno stran (Özturan in Roney, 2004), je bilo prisotnih na svetovnem spletu 85% slovenskih potovalnih agencij. Večina (74%) slovenskih potovalnih agencij je imelo domačo spletno stran več kot dve leti. Glede na višjo stopnjo gospodarske razvitosti Slovenije v primerjavi s Turčijo, je razlika pričakovana. Ker se uporaba Interneta v novejšem času še naprej povečuje, je ob času pisanja razširjenost uporabe Interneta v vseh treh državah (Slovenija, Turčija in Grčija) verjetno še večja.

3.3.1 Tržno-komunikacijski kanali

Slovenske potovalne agencije smo povprašali, kako pogosto uporabljajo posamezen tržno-komunikacijski kanal. Pri tem so bile podane štiri možnosti za odgovor: nikoli, redko, pogosto in vedno. Tabela 1 povzema rezultate odgovorov na omenjeno vprašanje, pri čemer vsote v odstotkih odstopajo od celote zaradi zaokrožitvenih napak. Najbolj pogosto in/ali vedno uporabljeni tržno-komunikacijski kanali so svetovni splet, elektronska pošta, ustno priporočilo, telefon, drugi potovalni operaterji in potovalne agencije ter oglasna deska. Med najmanj pogosto, ki vključuje nikoli in redko, uporabljenimi tržno-komunikacijskimi kanali so dodatki k reviji, TV in revije. Vmes med

tema dvema ekstremoma je uporaba radia in dnevniki ter delno katalogi in brošure. Med drugimi mediji so izpolnjevalci največkrat omenili zgoščenko oziroma CD-ploščo.

Posebej zanimivo in pomembno je razlikovanje med dvema prevladujočima specifičnima skupinama medijev, to je med klasičnimi in sodobnejšimi mediji. Kot sodobnejši mediji so vključeni zlasti elektronski kanali. V pri-

merjavi z raziskavo izvedeno v Turčiji je zanimiva primerjava glede uporabe televizije in ustnih priporočil kot tržno-komunikacijskih kanalov. Slovenske potovalne agencije le izjemoma koristijo oglaševanje preko klasičnih tržno-komunikacijskih medijev, medtem ko pri svojem delu pogosto uporabljajo oglasno desko, telefon in ustna sporočila, kar velja tudi za turške potovalne agencije.

Tabela 1: Uporaba tržno-komunikacijskih kanalov v slovenskih potovalnih agencijah v letu 2005 (v %)
(Vir: Rezultati lastno izvedene ankete med potovalnimi agencijami).

Tržno-komunikacijski kanal	nikoli	redko	pogosto	vedno	N*
TV	44,6	36,5	12,2	6,8	74
Radio	21,6	40,5	27,0	10,8	74
Dnevniki	17,8	43,8	23,3	15,1	73
Revije	36,6	40,8	16,9	5,6	71
Katalogi	23,3	28,8	21,9	26,0	73
Brošure	26,4	19,4	30,6	23,6	72
Dodatki reviji	45,2	39,7	12,3	2,7	73
Oglasna deska	26,0	20,5	11,0	42,5	73
Telefon	17,8	11,0	26,0	45,2	73
Splet	9,5	8,1	10,8	71,6	74
Elektronska pošta	5,4	12,2	13,5	68,9	74
Drugi operater	16,4	20,5	28,8	34,2	73
Druga agencija	9,5	21,6	29,7	39,2	74
Ustno priporočilo	1,4	2,7	39,7	56,2	73

* N – število odgovorov.

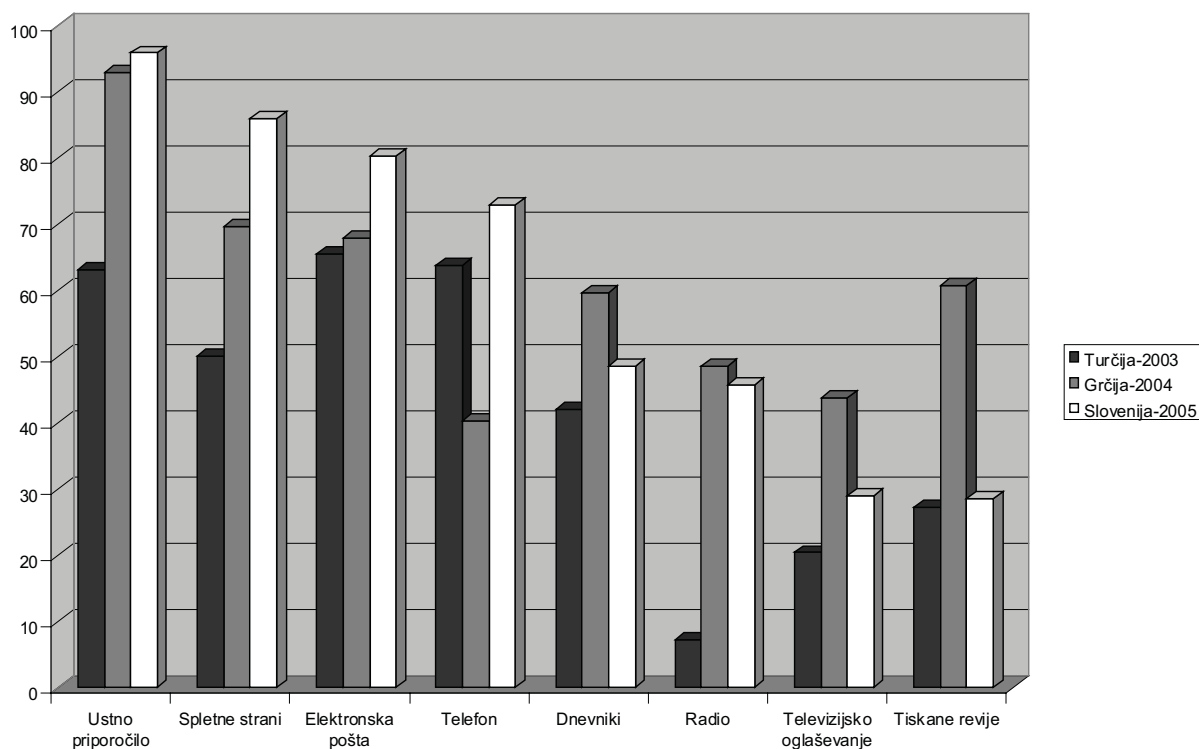
3.3.2 Vpliv tržno-komunikacijskih kanalov na prodajo

Na vprašanje o vplivu posameznih tržno-komunikacijskih kanalov na prodajo je 44,9% slovenskih potovalnih agencij prepričanih, da oglaševanje preko televizije nima večjega vpliva na kupce. Prav tako dodatek v neki reviji nima bistvenega vpliva na prodajo (42,6%) in tudi obširen oglas v reviji ima majhen učinek na prodajo (42,9%). Učinek radijskega oglaševanja je zmeren (35,7%). Posebej velik pomen pri prodaji ima ustno priporočilo (63,9%), elektronska pošta (53,5%) in svetovni splet (50,7%).

Izbrali samo najbolj pogosto uporabljane tržno-komunikacijske kanale in prišteli ocene učinkovitosti v odstotkih. Na primer, 18,8% slovenskih potovalnih agencij meni, da ima TV oglaševanje zmeren učinek na prodajo, medtem ko jih 10,1% meni, da je tako oglaševanje visoko učinkovito. V tem primeru smo vpliv tega tržno-komunikacijskega kanala ocenili z vsoto 28,9%. Pomemben je odstotek potovalnih agencij, ki posamezen tržno-komunikacijski kanal ocenjuje kot zmerno ali visoko učinkovit v prodaji. Podobno smo storili z grškimi in turškimi podatki. Rezultati so prikazani v sliki 1. Štirje tržno-komunikacijski kanali, kot so ustno priporočilo, elektronska pošta, svetovni splet in telefon imajo v vseh treh analiziranih državah zmeren in velik pomen. Na drugi strani gre za sku-

pino tržno-komunikacijskih kanalov, ki so brez ali imajo majhen vpliv na prodajo, kot so TV, dodatki v revijah in same revije. Med obema skupinama tržno-komunikacijskih kanalov so oglaševanje preko radia, dnevnikov, oglasne deske in drugih potovalnih operaterjev, kjer so dobljene ocene med analiziranimi državami precej različne.

Na podatkih slovenskih potovalnih agencij smo z multivariatno analizo in uporabo metode glavnih komponent in Obliminovo rotacijo z Kaiserjevo normalizacijo našli dve komponenti, ki povezujeta uporabo tržno-komunikacijskih kanalov z velikostjo potovalne agencije (Kribel in Bojnec, 2006). Dobljeni dve komponenti skupno pojasnujeta 49,7% skupne variance in imata medsebojno korelacijo 0,416. Prva komponenta vključuje tiskane kataloge, priloge k revijam, telefonske komunikacije, splet, elektronsko pošto in druge tur-operaterje. Glede na nizko utež velikosti podjetja tej komponenti pripisujemo pomen majhnih potovalnih agencij, ki običajno ne zmorejo razmeroma dragih klasičnih oglaševalskih kanalov. Komponenta z visoko utežjo pri veliki ali največji velikosti agencije pa ima visoke uteži pri televizijskem oglaševanju, radijskih oddajah, dnevnem časopisu in revijah, kar pomeni, da velike potovalne agencije pogosteje segajo po dražjih tržno-komunikacijskih kanalih.



Slika 1: Primerjava vpliva tržno-komunikacijskih kanalov na prodajo (Vir: Lastni izračuni iz lastno izvedene ankete za Slovenijo, iz podatkov Özturan in Roney (2004) za Turčijo ter Vrana in Zafiropoulos (2006) za Grčijo.)

3.3.3 Vsebina spletnih strani kot tržno-komunikacijsko in prodajno orodje

Zaradi večje gospodarske razvitosti Slovenije v primerjavi s Turčijo ima 85% slovenskih potovalnih agencij svojo domačo spletno stran, za razliko od turških potovalnih agencij, kjer ima le 65% svojo spletno predstavitev. Kljub temu pa se spletne vsebine konceptualno precej skladajo, kar kaže korelacijski koeficient (0,911) za povezanost rezultatov za turške in slovenske potovalne agencije. Največja razlika (21%) je na področju cen, saj turške potovalne agencije redkeje navajajo cene svojih potovalnih in turističnih paketov na spletu.

S pomočjo factorske analize (Costello in Osborne, 2005; Hutcheson in Sofroniou, 1999) smo ugotavljali skupne faktorje in njihove uteži, ki v največji meri pojasnjujejo varianco in jih je možno smiselno interpretirati. Pri obdelavi podatkov za slovenske potovalne agencije smo najprej izločili tri anketne vprašalnike, kjer je bilo ugotovljeno preveč manjkajočih podatkov. S poskušanjem smo prišli do najbolj razumljivih skupnih faktorjev preko metode največjega verjetja (tabela 2), kjer vsi trije faktorji skupaj pojasnjujejo 43,8% skupne variance: prvi faktor 15,9%, drugi faktor 11,6% in tretji faktor 16,3%.

Prvi faktor lahko pojasnimo z večjimi potovalnimi agencijami, ki praviloma omogočajo rezervacije in rezervacijske informacije. Žal so rezervacije praviloma izvede-

ne preko elektronske pošte. Velike potovalne agencije neredo prikazujejo povezave do tujih spletnih strani (negativni predznak). Tudi manjše potovalne agencije (glej faktor 2) težijo k ohranjanju svojega sistema za rezerviranje, vendar imajo takšne potovalne agencije veliko povezanost do podobnih spletnih strani. Tretji faktor vključuje srednje velike potovalne agencije. Največji poudarek pri tej skupini potovalnih agencij je na potovanjih in paketih iz njihove ponudbe, kjer obvezno navajajo tudi ceno. Zdi se, da je to značilni tip slovenske potovalne agencije, ki skrbi za kakovostno ponudbo po najbolj dostopni ceni.

4 Sklep

Oglaševanje preko tradicionalnih medijev, kot so televizija, radio in dnevno časopisje, postaja iz dneva v dan vse manj odmevno. To je konsistentno z ugotovitvami Kotlerja (2005), ki meni, da je učinkovitost televizijskega oglaševanja vse nižja, saj nekatere skupine potrošnikov vse manj časa preživijo ob gledanju televizije, ki jo vse bolj nadomešča svetovni splet. Študija, ki sta jo izvedla Lyman in Varian (2003) prav tako ugotavlja strmo naraščanje uporabe Interneta kot informacijskega, komunikacijskega in trženjskega kanala. Slovenska potovalna in s tem turistična ponudba se takim težnjam prilagajata, vendar še vedno z določenim nezaupanjem. Zaposleni v potovalnih

Tabela 2: Matrika faktorjeva vsebine spletnih strani za slovenske potovalne agencije (Vir: Lastni izračuni iz podatkov lastno izvedene ankete med potovalnimi agencijami.)

	Faktorji		
	1	2	3
Velikost podjetja	0,375	-0,067	0,273
Podatki o potovanjih, ki so v prodaji	-0,039	0,116	0,789
Informacije o različnih turističnih destinacijah	0,347	0,247	0,393
Kontaktne podatki o potovalni agenciji	0,212	0,354	0,376
Vizualni podatki, fotografije, geografske karte in podobno	-0,040	0,310	0,323
Rezervacijske informacije	0,793	0,608	-0,001
Informacije o cenah	0,161	0,134	0,723
Drugo promocijsko gradivo	0,013	0,312	-0,075
Včlanjenost v združenja	0,059	0,059	-0,022
Povezave na podobne spletne strani	-0,793	0,609	0,000

Ekstrakcijska metoda: največjega verjetja. ^a 3 ekstrakcijski faktorji. 9 potrebnih iteracij.

agencijah so izkazali zlasti visoko zaupanje v tržno učinkovitost ustnega priporočila.

Primerjava potovalnih agencij med Slovenijo, Grčijo in Turčijo kaže, da so različna raven gospodarske razvosti, različne družbene in kulturne navade in vključenost gospodarstva v mednarodne tokove dejavniki, ki vplivajo na določene razlike v tržno-komunikacijskih in prodajnih kanalih v potovalnih agencijah. Velika večina (74,3%) slovenskih potovalnih agencij se je sama razvrstila med majhna podjetja, ki so precej dinamična, kar je bilo ugotovljeno med izvajanjem anketnega vprašalnika, ki je potrdila precejšnjo dinamičnost v spreminjanju in usihanju poštnih naslovov posameznih potovalnih agencij.

Faktorska analiza na primeru slovenskih potovalnih agencij je pokazala, da srednje velike potovalne agencije poskušajo vsebino svojih spletnih strani prilagoditi najbolj ugodni ponudbi s skrbjo za kakovostno ponudbo po najbolj dostopni ceni, vendar je takih agencij le 19%. V to skupino bi v določeni meri lahko dodatno uvrstili nekatere manjše potovalne agencije. Sklepamo lahko, da med manjšimi potovalnimi agencijami delujejo dinamične zakonitosti proste konkurence z tržno dinamiko pri vstopanju in izstopanju, zaposlovanju in prilagajanju na tržne zakonitosti.

Spletne storitve in druge oblike internetnih storitev pomembno vplivajo na spreminjanje tržno-komunikacijskih kanalov v potovalnih agencijah, na samo trženje potovalnih storitev in s tem tudi turističnih destinacij. Medtem ko je konkurenca na ravni posameznih potovalnih agencijah zaželena, so skupni nastopi na nacionalni ravni pri trženju in promociji turističnih lepot posebej pomembni, kar je eno od področij za nadaljnje raziskovanje. Med pomembnimi področji za nadaljnje raziskovanje je tudi analiziranje mnenj uporabnikov o spletnih straneh in o drugih oblikah internetnih storitev z namenom, da bi se preverile in pridobile povratne informacije o kakovosti, verodostojnosti, informativnosti, uporabnosti, učinkovitosti in vsečnosti spletnih strani in drugih oblik internetnih storitev potovalnih agencij.

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Okvirni postopek za večkriterijsko odločanje

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V članku prikazujemo okvirni postopek za večkriterijsko odločanje z uporabo različnih metod, ki temeljijo na določanju uteži. Oblikovali smo ga na osnovi ugotovitev avtorjev tovrstnih metod, da odločevalci niso vedno odlično racionalni in potrebujejo sistematične postopke za podporo odločanju, izkušeni strokovnjaki v praksi o njihovi primernosti in primerjav postopkov za uporabo posameznih večkriterijskih metod. Sistematični postopek po korakih smo uporabili za reševanje pomembnih kompleksnih odločitvenih problemov na mikro ravni (ocenjevanje bonitete, okoljsko usmerjeno poslovno odločanje, procesni benchmarking, izbira naložb) in tudi na makro ravni (merjenje globaliziranosti narodnih gospodarstev). Opisani postopek, ki dobro podpira potrebno in zadostno celovitost, je mogoče prilagoditi posebnostim odločitvenega problema.

Ključne besede: večkriterijsko odločanje, pristop po korakih, sistematični postopki, kompleksnost

1 Uvod

Številne pomembne odločitve v praksi pogosto sprejemamo brez podpore metodologij za odločanje. Celo uporaba dobro definiranih klasičnih kvantitativnih postopkov lahko namreč ovira učinkovito odločanje, na primer zaradi tega, ker je verjetnosti težko oceniti, ker v dani situaciji domneve ne veljajo, ali pa jih ne moremo ustrezno preveriti. Poleg tega teorije odločanja, predvsem teorija iger, temeljijo na domnevi, da je odločevalec vedno popolnoma racionalen. Zato je Raiffa (1994) predlagal novo, t.i. preskriptivno usmeritev pri odločanju: namesto da bi ljudi obravnavali kot odlično racionalne posameznike, je potrebno razviti sistematične postopke odločanja za podporo pametnim odločitvam. Le-ti naj temeljijo na kombiniranju normativnih teorij in kognitivnih vidikov ter vidikov vedenja, ki so sestavni del odločanja v praksi.

Po Omladičevi (2002: 11) z opredelitvijo problema odločanja odgovarjamo na vprašanje, o čem odločevalec odloča. Odločitveni problem označuje razlika med trenutnim in želenim stanjem in vsaj dve alternativni (Grünig in Kühn, 2005:7), ki sta lahko možnosti, opciji, dejavnosti ali kandidata za dosego želenega stanja. Po Grünigu in Kühnu (2005:7) lahko probleme rešujemo na več načinov: intuitivno, rutinsko - z upoštevanjem v preteklosti uporabljenih postopkov, nadalje z brezpogojnim sprejemanjem strokovnih predlogov, z naključno izbiro ali na teme-

lju sistematičnega racionalnega razmišljanja, podprtega z relevantnimi informacijami. Pri slednjem načinu lahko odločevalec meri vrednosti alternativ bodisi po posameznem kriteriju bodisi po več kriterijih hkrati. Upoštevajoč preskriptivno usmeritev pri odločanju prikazujemo v članku okvirni postopek za večkriterijsko odločanje. Postopek odločanja lahko definiramo kot sistem pravil za zagotovitev in analiziranje informacij, ki jih lahko uporabimo za reševanje določenega tipa odločitvenega problema (Grünig in Kühn, 2005:44). Nekatere prednosti sistematičnega postopka pred intuitivnim so: možnost uporabe za več odločitvenih problemov¹, lažje zajemanje različnih nalog odločanja ter izboljševanje kakovosti odločitev z razlikovanjem med dejanskim znanjem in subjektivnimi ocenami in z izboljšano uporabo znanja udeležencev. Vendar pri tem opozarjamo, da sistematični postopki ne morejo nadomestiti pomanjkljivega znanja ali omejenih sposobnosti udeleženca. Zato pripisujemo veliko vlogo tudi odločevalski logiki, heurističnim principom, informacijam in praktičnim izkušnjam.

Zaradi kompleksnosti problemov² se v članku ukvarjamo s postopki za celovito reševanje problemov s pomočjo metod za večkriterijsko odločanje. Le-te so se v zadnjih desetletjih izkazale za izjemno praktično uporabne pri reševanju tovrstnih problemov. Tudi v slovenskem prostoru je precej uspešnih praktičnih aplikacij, na primer (Bohanec, Rajkovič, 1999) in primeri, opisani v četrtem

¹ Pri tem ne mislimo le na reševanje istega ali podobnih problemov v različnih okoljih, temveč tudi na več različnih konkretnih problemov v smislu različnih aplikativnih področij ter na individualno in skupinsko odločanje.

poglavju. Pri tem se ne ukvarjamo z numeričnim ocenjevanjem in dokazovanjem, katera tovrstna metoda je primerna za uporabo v določenem primeru (kot npr. Triantaphyllou, 2000), pač pa sledimo izkušnjam strokovnjakov v praksi, ki so pri reševanju praktičnih problemov primerjali različne metode in izbrali njim najustreznejšo glede na število odločevalcev, njihovo sposobnost izražanja sodb o pomembnosti kriterijev in preferencah do alternativ, njihovo sposobnost, da se soočijo s sodbami drugih, glede na vrsto kriterijev in obstoječo podatkovno bazo o alternativah glede na posamezne kriterije.

2 Postopki odločanja

Splošni pristop analize odločanja, ki ima osnove v aksiomih utemeljiteljev teorije iger Johna von Neumanna in Oskarja Morgensterna (npr. von Neumann in Morgenstern, 1953), lahko uokvirimo v štiri korake: strukturiranje problema, presojanje verjetnosti možnih izidov, določanje koristnosti možnih izidov ter ocenjevanje alternativ in izbiranje strategij.

Številni teksti se osredotočajo na zadnji korak reševanja kompleksnih problemov, to je na ocenjevanje alternativ in izbiranje strategij, ki je bistven za analizo odločanja³. Vendar je to v praksi navadno lažji del reševanja, ki ne zagotavlja povsem zadostne analize takšnih problemov. Grünig in Kühn (2005) s splošnim hevrističnim postopkom za reševanje kompleksnih odločitvenih problemov dopolnjujeta matematične pristope z osredotočanjem na prve tri korake z raziskavo in analizo problema, razvojem alternativ in ocenjevanjem njihovih posledic. Naloge sta razporedila v korake, ki tvorijo njun splošni hevristični postopek odločanja: raziskovanje odločitvenega problema; analiziranje problema odločanje; razvoj vsaj dveh alternativ; definiranje kriterijev odločanja; ocenjevanje, kako določiti posledice in po potrebi predvideti možne scenarije; določanje posledic alternativ; ugotavljanje globalnih posledic alternativ in končno odločanje (Grünig in Kühn, 2005:66). Pri njunem splošnem hevrističnem postopku (Grünig in Kühn, 2005:66) si koraki linearno sledijo, od zadnjega koraka do razvoja alternativ pa vodi tudi povratna zveza. Podobne postopke s povratnimi zvezami obravnavamo tudi v okviru kvantitativnih pristopov za odločanje, in sicer pri analizi odločanja s poudarkom na večkriterijskem odločanju.

Proces večkriterijskega odločanja uresničujemo od identifikacije problema in strukturiranja le-tega, gradnje modela in njegove uporabe za informiranje in vzpodbujanje razmišljanja do izdelave načrta dejavnosti za reševanje problema (Belton in Stewart, 2002: 6). Belton in Ste-

wart (2002: 6) predvidevata tudi vračanje iz vsake naslednje v predhodno fazo.

Koraki večkriterijskega odločanja o kompleksnih problemih se razlikujejo tudi glede na uporabljene metode odločanja. V članku se omejujemo na obravnavo izboljšanih nadgradenj ene najbolj uporabnih (in tudi uporabljenih) skupin metod večkriterijskega odločanja - teorije večatributne vrednosti ali koristi (Multiattribute Value - Utility - Theory - MAVT ali MAUT) (Belton in Stewart, 2002; Vincke, 1992), ki temeljijo na prisojanju pomembnosti in s tem uteži kriterijem. Od poznih šestdesetih let prejšnjega stoletja so skupino metod izboljševali ne le znanstveniki psiholoških, tehničnih, managerskih in matematičnih ved, pač pa tudi strokovnjaki v managerski, ekonomski, okoljski in drugi praksi. Upoštevali so težave pri uporabi celovitejših modelov v praksi in jo izpopolnili v metodo SMART (Simplified Multi-Attribute Rating Approach) in druge pristope (na primer SWING, SMARTER), ki so podprti z računalniškimi programi. Temeljni koraki metode SMART so naslednji (Goodwin in Wright, 1991): identifikacija odločevalca, ki je lahko individualen ali skupinski; identifikacija alternativ; identifikacija kriterijev, ki so relevantni za odločitveni problem (pri tem lahko uporabimo drevo kriterijev); merjenje vrednosti alternativ glede na vsak kriterij (neposredno merjenje, vrednostne funkcije); določanje uteži vsakega kriterija; računanje agregiranih vrednosti alternativ glede na vse kriterije; časna odločitev; izvajanje analiz občutljivosti glede na spremembe uteži kriterijev. Po široki uporabnosti se odlikuje tudi dobro desetletje kasneje razvita metoda analitičnega hierarhičnega procesa (Analytic Hierarchy Process - AHP) (Saaty, 1980). Najpomembnejše naloge metode AHP, ki so strukturiranje celovitosti, merjenje na razmerni skali in sinteza, različni uporabniki zajemajo v različno število korakov. Avtor metode Saaty (1999: 94-95) postopek obravnavanja kompleksnih problemov razčlenjuje v naslednje korake: definiranje problema in specifikiranje zelenih izidov; strukturiranje hierarhije; konstruiranje matrike vplivov elementov nižje ravni (alternativ ali kriterijev) na element na višji ravni (kriterij) s primerjavami po parih; združevanje in usklajevanje sodb odločevalcev pri skupinskem odločanju; računanje prioritet in sprotno preverjanje doslednosti; predhodne tri korake je potrebno izvesti za vse ravni hierarhije; zadnja koraka sta sinteza in merjenje doslednosti.

² Po Muleju in Potočanu (2006) se kompleksnost nanaša na vse pojave, ki so zapleteni zaradi odnosov med svojimi sestavinami. Kompleksnost odločitvenih problemov v tem članku se odraža v kompleksni strukturi, pri čemer izražene sodbe o pomembnosti (bolj ali manj konfliktnih) kriterijev in o preferencah do alternativ vplivajo na končne vrednosti alternativ. Pri tem so kriteriji pogosto kakovostni in ne le količinski. Kompleksnost odločitvenih problemov, ki jih obravnavamo, izvira tudi iz možnega velikega števila alternativ in vključenosti odločevalcev različnih strokovnih področij pri njihovem reševanju.

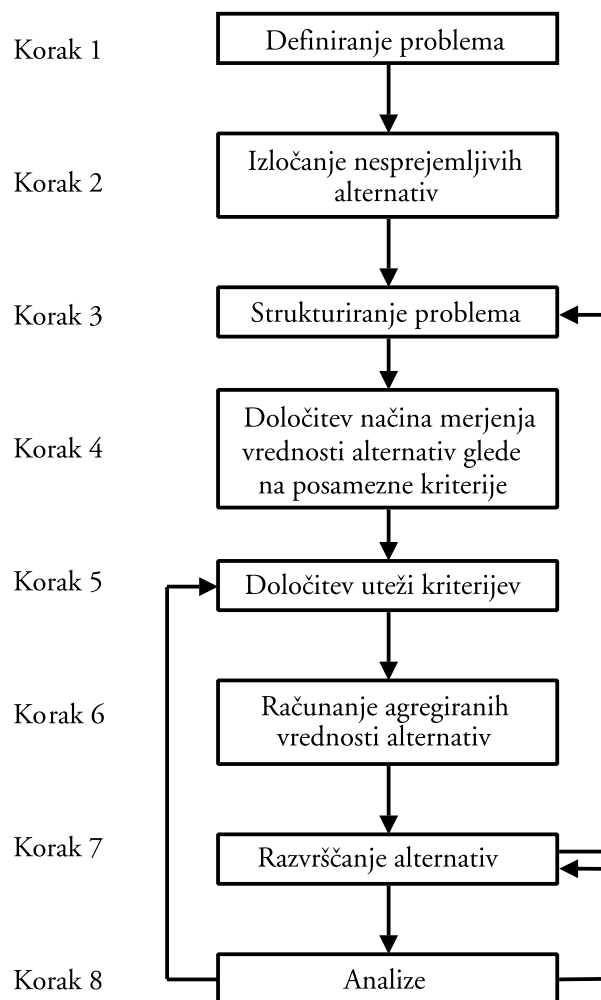
³ Angleško Decision Analysis, slovensko tudi odločitvena analiza.

3 Koraki okvirnega postopka za večkriterijsko odločanje

Pri gradnji okvirnega postopka za večkriterijsko odločanje izhajamo iz ugotovitev teoretikov – avtorjev raznih metod za večkriterijsko odločanje, ugotovitev strokovnjakov v praksi, s katerimi smo sodelovali pri uporabi teh metod v okviru različnih projektov⁴, in lastnih izkušenj. Okvirni postopek smo oblikovali za odločanje predvsem s podporo (v smislu poenostavitev za uporabo) iz-

boljšanih metod teorije večatributne vrednosti ali koristnosti in metode analitičnega hierarhičnega procesa. Za njegovo uporabo mora odločevalec poznati nekatere osnovne pojme analize odločanja po več kriterijih hkrati⁵. Le-ti so razumljivo razloženi tudi v slovenski literaturi, npr. v (Omladič, 2002; Čančer, 2003).

Faze obravnavanja odločitvenih problemov smo za skupino metod, ki temeljijo na relativni pomembnosti vsakega kriterija in smo jih v praksi tudi uporabljali, vsebinsko zajeli z naslednjimi koraki, razvidnimi s slike 1.



Slika 1: Koraki okvirnega postopka za večkriterijsko odločanje z metodami z določanjem uteži

⁴ Med njimi TRP Inovativno podjetje v tranziciji, CRP Konkurenčnost Slovenije 2001-2006: Vzpostavitev modela za spremljanje globalne konkurenčnosti slovenskega gospodarstva.

⁵ Med njimi v nadaljevanju omenjamo npr. intervalske in razmerne skale; z uporabo prvih izražamo sodbe, za koliko je neka alternativa boljša ali slabša od druge oz. za koliko je kriterij pomembnejši ali manj pomemben od primerjanega kriterija; z uporabo drugih izražamo sodbe, kolikokrat je neka alternativa boljša ali slabša od druge oz. kolikokrat je kriterij pomembnejši ali manj pomemben od drugega kriterija. Podrobnejša razlaga je na primer v (Čančer, 2003).

Korak 1: Definiranje problema

Problem zaznamo, ga opišemo in opredelimo možne kriterije in alternative. Pri razvoju alternativ lahko uporabimo nekatere metode ustvarjalnega razmišljanja, na primer morfološko analizo in viharjenje, ki pa jih pogosteje uporabljamo pred postopkom odločanja (Čančer in Mulej, 2006).

Korak 2: Izločanje nesprejemljivih alternativ

Določimo zahteve, ki jih morajo izpolnjevati alternative. Pretehtamo vse razpoložljive alternative. Tiste, ki zahtev ne izpolnjujejo, so nesprejemljive, zato jih izločimo⁶.

Korak 3: Strukturiranje problema

Problem večkriterijskega odločanja prikažemo v obliki drevesa kriterijev. Problem lahko strukturiramo od alternativ navzgor proti morebitnim podkriterijem, kriterijem in globalnemu cilju, ali od globalnega cilja navzdol proti kriterijem, morebitnim podkriterijem in alternativam. Prvi pristop uporabimo, kadar poudarjamo alternative, drugi pa, kadar poudarjamo kriterije. Pri strukturiranju problema moramo upoštevati zakon potrebne in zadostne celovitosti⁷ (Mulej in Kajzer, 1998).

Korak 4: Določitev načina merjenja vrednosti alternativ glede na posamezne kriterije

Merjenje lahko opravimo s primerjavami po parih, neposredno ali z vrednostnimi funkcijami – podrobnejšo razlago najdemo na primer v (Čančer, 2003), primere pa v (Čančer in Baticeli, 2006). Pri tem naj sodelujejo strokovnjaki ustreznih področij⁸.

Korak 5: Določitev uteži kriterijev

Z utežmi izražamo relativno pomembnost kriterijev. Lahko jih določimo z uporabo metod, na primer na osnovi intervalske (metodi SWING in SMART) ali razmerne skale (metoda AHP), ali pa jih določimo neposredno.

Korak 6: Računanje agregiranih vrednosti alternativ

Agregirana (tudi končna, skupna, sestavljena) vrednost posamezne alternative je vsota tehtanih vrednosti alternative glede na posamezne kriterije.

Korak 7: Razvrščanje alternativ

Z razvrstitvijo alternativ lahko izberemo najprimernejšo alternativo, ki ima najvišjo agregirano vrednost, izločimo najslabšo alternativo, ki ima najnižjo vrednost, ali

pa alternative glede na agregirane vrednosti med sabo primerjamo. Če imajo alternative zelo podobno agregirano vrednost, modelu dodamo še kak kriterij ali pa izberemo tisto alternativo, ki je glede na najpomembnejši kriterij najboljša. Pri tem nam so nam lahko v pomoč analize občutljivosti iz naslednjega koraka.

Korak 8: Analize

Na podlagi ugotovitev, katera alternativa je najboljša ali najslabša glede na posamezni kriterij, lahko ugotovljamo ključne prednosti in slabosti posamezne alternative. To nam omogoča, da ugotovimo, katerim kriterijem moramo spreminjati uteži, da bi analizirali stabilnost končnih vrednosti alternativ. Z analizo občutljivosti lahko ugotovljamo spreminjanje vrednosti in vrstnega reda alternativ glede na spremembe uteži kriterijev. To nam omogoča, da ugotovimo stabilnost rezultata in izboljšamo podlage za sprejetje končne odločitve.

4 Praktični primeri: posebnosti in uporabnost obravnavanega postopka

Oblikovani okvirni postopek za večkriterijsko odločanje smo uporabili v praktičnih primerih v Sloveniji v okviru različnih raziskovalnih projektov, in sicer:

- na mikro ravni za podporo poslovnih odločitev pri več ocenjevanjih bonitete, okoljsko usmerjenem poslovnem odločanju, benchmarkingu poslovnih procesov, investicijah v proizvodno tehnologijo, informacijskih sistemov, in
- na makro ravni za podporo vodenju nacionalne politike pri merjenju globaliziranosti narodnega gospodarstva.

V nadaljevanju opisujemo okvirni postopek za večkriterijsko odločanje o primernosti naložbe v sodobno proizvodno tehnologijo ter njeno uporabo, uporabnost in posebnosti v izbranih praktičnih primerih.

4.1 Presojanje naložbe v proizvodno tehnologijo

K reševanju realnega problema izbire najustreznejše alternative za pridobitev modelnih kompletov v slovenski

⁶ Nekaterih alternativ namreč ne moremo presojati po vseh kriterijih; tipičen primer je ocenjevanje bonitete poslovnih partnerjev, pri čemer banke nudijo drugačne poslovne izkaze kot podjetja, zato njihove vrednosti ne moremo meriti po istih kriterijih kot vrednosti podjetij. Nadalje imajo nekatere alternative nesprejemljive lastnosti, na primer prekoračeno vsebnost škodljivih komponent, zaradi česar jih izločimo.

⁷ Po Muleju in Potočanu namreč kompleksnost sodobne naravne, tehnično-tehnološke in družbene stvarnosti z dialektičnim sistemom zajemamo na ravni zadostne in potrebne celovitosti (Mulej, Potočan, 2006: 46). O ravni zadostne in potrebne celovitosti pa odločajo odločevalci.

⁸ Pri merjenju vrednosti alternativ glede na okoljske kriterije naj sodelujejo ekologi, glede na stroške ekonomisti, glede na kakovost tehnologij, informatiki...

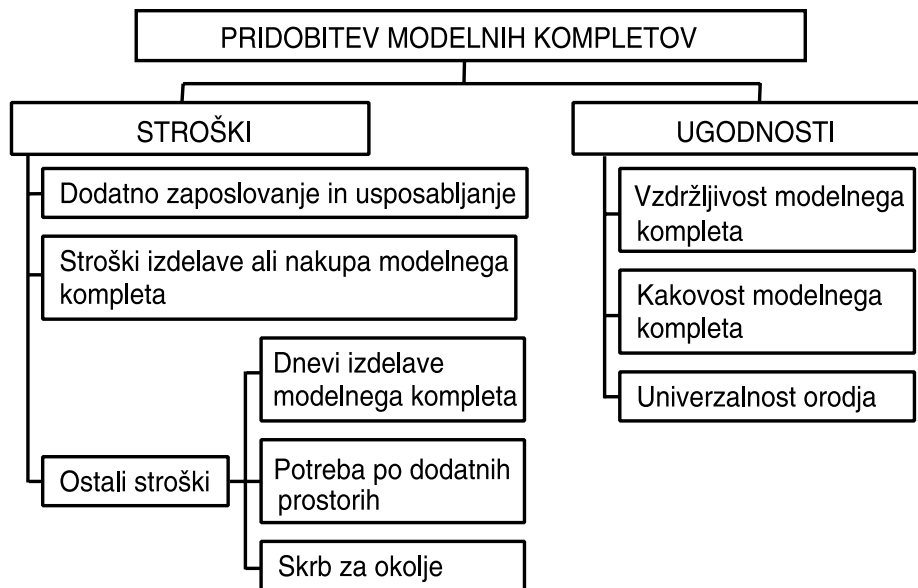
livarni so zaposleni pristopili po korakih obravnavanega okvirnega postopka za večkriterijsko odločanje⁹:

Korak 1: V livarni potrebujejo ustrezen modelni komplet za izdelavo vsake različne serije ulitkov. Do sedaj so le-te naročali pri zunanjih dobaviteljih –usposobljenih modelnih mizarjih. Modelne komplete bi jim lahko dobavljali tudi sami kupci ulitkov. Proučujejo tudi naložbo v sodobni računalniško vodeni obdelovalni center. Modelne komplete bi lahko izdelovali tudi v lastni modelni delavnici, ki je opremljena s klasičnimi mizarškimi orodji. V prvem koraku so definirali problem: pridobitev modelnih kompletov. Strokovnjaki, zaposleni v livarni, so določili naslednje kriterije: stroški izdelave ali nakupa modelnega

kompleta, vzdržljivost modelnega kompleta, kakovost modelnega kompleta, univerzalnost orodja, dodatno zaposlovanje in usposabljanje, dnevi izdelave modelnega kompleta, potreba po dodatnih prostorih in skrb za okolje.

Korak 2: Ker so tehnologi v livarni presodili, da kakovost modelnih kompletov, dobljena od samih kupcev ulitkov, ne bi bila ustrezna, to alternativo eliminiramo. Preostale alternative za pridobitev modelnih kompletov so: nakup pri dobaviteljih – modelnih mizarjih, naložba v sodobno tehnologijo izdelave modelov in ureditev lastne modelne delavnice.

Korak 3: Drevo kriterijev je razvidno s slike 2.



Slika 2: Drevo kriterijev za pridobitev modelnih kompletov

Korak 4: Pri merjenju vrednosti alternativ glede na kriterije na najnižji ravni so zaposleni strokovnjaki imeli rajši primerjanje po parih pred neposrednim vnašanjem podatkov in uporabo vrednostnih funkcij. Primerjanje po parih so uporabili za merjenje vrednosti alternativ glede na kriterije ugodnosti; glede na 'vzdržljivost modelnega kompleta' so na primer presodili, da je 'naložba v sodobno tehnologijo izdelave modelov' ekstremno primernejša kot 'nakup pri dobaviteljih – modelnih mizarjih', slednja alternativa pa je enako primerna kot 'ureditev lastne modelne delavnice'. Numerične ocene pri kriterijih 'potreba po dodatnih prostorih' in 'skrb za okolje' so vnesli nepo-

sredno. Vrednosti alternativ glede na ostale kriterije so merili z vrednostnimi funkcijami.

Korak 5: Z intervjuji in vprašalniki so strokovnjaki, zaposleni v livarni, izrazili sodbe o pomembnosti kriterijev. Pomembnost podkriterijev glede na kriterij 'ostali stroški' so določili neposredno, pomembnosti ostalih kriterijev pa s primerjavami po parih glede na nadkriterije.

Korak 6: V koraku sinteze dobljene končne vrednosti alternativ so razvidne s slike 3.

⁹Pri tem so uporabili računalniški program Expert Choice (Expert Choice, Inc., 2006), ki je uporaben predvsem za metodo AHP. Za temeljne prednosti tega programa so spoznali naslednje: oblikovanje drevesa kriterijev; verbalni, numerični in grafični način primerjav po parih za določitev uteži kriterijev in merjenje vrednosti alternativ; računanje agregiranih vrednosti alternativ in več načinov analize občutljivosti. Podpira tudi merjenje vrednosti alternativ z vrednostnimi funkcijami ter neposredno merjenje vrednosti alternativ in določitev uteži kriterijev.

Nakup pri dobaviteljih – modelnih mizarjih	0,242	██████████
Naložba v sodobno tehnologijo izdelave modelov	0,468	████████████████████
Ureditev lastne modelne delavnice	0,290	████████████████

Slika 3: Končne vrednosti alternativ za pridobitev modelnih kompletov

Korak 7: Iz slike 3 je tudi razvidno, da je najugodnejša alternativa 'naložba v sodobno tehnologijo izdelave modelov', sledi 'ureditev lastne modelne delavnice', medtem ko se je 'nakup pri dobaviteljih - modelnih mizarjih' izkazal za najmanj ugodno alternativo.

Korak 8: Z analizami občutljivosti ugotovimo, da z manjšimi spremembami uteži ne vplivamo na spremembo alternative na prvem mestu.

Alternativo z najvišjo agregirano vrednostjo so odločevalci upoštevali kot najustreznejšo pri sprejetju končne odločitve.

4.2 Ocenjevanje bonitete

Razčlenili smo proces ocenjevanja bonitete poslovnih partnerjev, ki ga opravlja podjetje samo (t.i. interni rating). Pri preizkušanju uporabnosti postopka za ocenjevanje bonitete v malem slovenskem svetovalnem podjetju (Čančer et al., 2003) smo ugotovili, da mora vključevati korake v tem članku obravnavanega okvirnega postopka za večkriterijsko odločanje: definicija problema (izbira poslovnih partnerjev z internim ratingom), izločanje nesprejemljivih alternativ (banke in zavarovalnice imajo drugačne izkaze uspeha, zato jih izločimo), strukturiranje problema (izgradnja modela v obliki drevesa kakovostnih in kolikostnih kriterijev, ki so podrobneje opredeljeni v (Čančer et al., 2003)), izražanje sodb o pomembnosti kriterijev¹⁰ in izražanje preferenc do alternativ, sinteza in analiza občutljivosti z verifikacijo. Ker so pri ocenjevanju bonitete vse pomembnejši kakovostni dejavniki, smo uporabili metodo AHP. Na osnovi končnih vrednosti alternativ in analize rezultatov so odločevalci ugotovili, da morajo razmisliti o nadaljnjem sodelovanju z enim od poslovnih partnerjev (Čančer et al., 2003).

4.3 Okoljsko usmerjeno poslovno odločanje

Zgradili smo model za izbiro med okoljsko usmerjenimi poslovnimi procesi z vključenimi možnostmi integriranega varstva okolja in naložb v okolju prijazno tehnologijo glede na več kriterijev (ekonomski kriteriji, okoljski kriteriji, vpliv na dobro ime firme, tržne priložnosti). Pri tem

smo upoštevali posebnosti poslovnih procesov v vzorčnem srednje velikem podjetju predelovalne industrije, preference odločevalcev, njihove sodbe o pomembnosti kriterijev, in tudi raziskovalne izide o okoljskem managementu v vzorčnem podjetju in izide ekoloških bilanc. Ugotovimo lahko, da je metoda AHP primerna za reševanje tega problema, vendar le skupaj z drugimi metodami odločanja in optimizacije (scenariji, simulacije, linearna mešana celoštevilska optimizacija) (Čančer, 2004). Primerjave po parih smo uporabili ne le pri ocenjevanju pomembnosti kriterijev v koraku 5, pač pa tudi pri določanju kriterijev v korakih 1 in 3 in pri računanju podatkov za različne poslovne procese - alternative za korak 4 (Čančer, 2004).

4.4 Procesni benchmarking

Postopek okoljsko usmerjenega poslovnega večkriterijskega odločanja smo nadgradili z metodo za benchmarking okoljsko usmerjenih poslovnih procesov. Postopek benchmarkinga lahko vključuje različne dejavnosti (glej na primer Dey, 2002). Postopek, uporabljen v naši študiji (Čančer, 2005), vključuje naslednje dejavnosti:

- **Definiranje kritičnih dejavnikov uspeha poslovnega procesa – kriterijev.** V obravnavanem okvirnem postopku je zajeto v okviru definiranja in strukturiranja problema.
- **Definiranje poslovnih procesov, ki naj jih vključimo v analizo – alternativ.** V okvirnem postopku je zajeto v okviru definiranja problema, eliminiranja neustreznih alternativ in strukturiranja problema.
- **Analiziranje, da bi določili prednosti in slabosti.** Ta dejavnost zajema določitev načina merjenja alternativ glede na posamezne kriterije, določitev uteži, računanje agregiranih vrednosti alternativ in njihovo razvrščanje ter analizo občutljivosti.
- **Predlogi za izboljšave.** Temeljijo naj na vrednostih alternativ po posameznem kriteriju.

V tej raziskavi smo uporabili metodo AHP za določanje kritičnih dejavnikov uspeha, za izgradnjo hierarhičnega modela, za izražanje sodb o kritičnih dejavnikih uspeha, za pridobitev agregiranih vrednosti okoljsko usmerje-

¹⁰ Posebno pozornost smo namenili ocenjevanju pomembnosti kriterijev, pri čemer smo prikazali postopek za izboljšanje odločevalčeve doslednosti pri izražanju sodb o pomembnosti kriterijev in o preferencah do alternativ (Čančer in Knez-Riedl, 2005).

nih poslovnih procesov in za analiziranje občutljivosti teh izidov.

4.5 Izbira informacijskih sistemov

Obravnavani postopek za večkriterijsko odločanje so managerji in končni uporabniki uspešno uporabili pri reševanju realnega problema izbire nadaljnjega razvoja informacijskega sistema v velikem slovenskem podjetju (Čančer in Baticeli, 2006). Pri definiranju problema so določili alternative s presojanjem dostopnosti, varnosti podatkov, časa uvedbe ter ustreznosti vmesnikov in integracije, kot je opisano v (Čančer in Baticeli, 2006). Hierarhija kriterijev vključuje tako kolikostne kot kakovostne dejavnike; sodbe o njihovi pomembnosti kriterijev so individualno podali bodoči uporabniki in odločevalci. V okviru skupinskega odločanja pa so se soočili s sodbami drugih udeležencev; na usklajevalnem sestanku so kritično in argumentirano uskladili izražene sodbe in določili končne jakosti pomembnosti kriterijev. V tej aplikaciji so metodi za določanje uteži SMART in SWING ocenili kot primerni zaradi zadostne informacijske podlage in sposobnosti ter pripravljenosti odločevalcev in uporabnikov za sodelovanje.

4.6 Merjenje in analiziranje globaliziranosti narodnih gospodarstev

Na makro nivoju smo razvili večkriterijsko metodo za merjenje in analiziranje globaliziranosti narodnih gospodarstev z namenom, da bi ugotovili in proučili njihov položaj in potencialne (Čančer et al., 2006). Metoda vključuje nekatere prednosti AHP, pri čemer poudarjamo strukturiranje modela in izražanje sodb o pomembnosti kriterijev. Pri uporabi te metodologije za merjenje globalizacije narodnih gospodarstev smo ugotovili, da mora vključevati naslednje korake: **definiranje problema, strukturiranje modela, zbiranje podatkov in merjenje, izražanje prioritete, preoblikovanje modela in preračunavanje uteži** (če strokovnjaki s področja mednarodne menjave izražajo sodbe v večnivojskem modelu, ki ga zaradi zajetja vseh podatkov želimo preoblikovati v enonivojski model), **sin-teza** in **analiza občutljivosti** za ugotavljanje stabilnosti modela in za ugotavljanje ključnih dejavnikov uspeha in področij, kjer je potrebno izvajati ukrepe ekonomske politike.

5 Zaključek

Predlagani okvirni postopek za večkriterijsko odločanje na osnovi metod z določanjem uteži lahko uporabimo tako na mikro kot tudi na makro ravni za reševanje pomembnih kompleksnih odločitvenih problemov. S sistematičnim pristopom po korakih lahko kvantitativne metode bolj samostojno uporabljajo tudi odločevalci v praksi. S tem v smislu systemskega razmišljanja presežemo tradicionalne analitične postopke operacijskih raziskav, saj predlagani postopek za večkriterijsko odločanje omogoča

vključevanje odvisnosti, ki so hierarhično strukturirane, in zelo dobro podpira potrebno in zadostno celovitost. V prvem koraku dopušča tudi uporabo metod za ustvarjalno razmišljanje, na primer za generiranje večjega števila alternativ.

Prednost predlaganega okvirnega postopka je v tem, da mu je mogoče slediti pri uporabi različnih računalniško podprtih metod večkriterijskega odločanja, ki temeljijo na določanju uteži. Z določanjem pomembnosti kriterijev v vseh izbranih primerih in s pomočjo omenjenega postopka za izboljšanje doslednosti so odločevalci izboljšali svoje razumevanje odnosov med kriteriji in njihovega pomena, razumevanje delov problema in problema kot celote. S tem zmanjšujemo nevarnost pretirane subjektivnosti pri izražanju sodb o pomembnosti kriterijev in o preferencah do alternativ; predvsem na makro ravni velja namreč subjektivnost za temeljno slabost obravnavanih metod za večkriterijsko odločanje. Prednost opisanega okvirnega postopka je predvsem v tem, da pomaga pri sistematičnem odločanju v problemih izbire, na primer proizvodne tehnologije, proizvodnih procesov in informacijskih sistemov. Pri tem je potrebno in mogoče proces večkriterijskega odločanja prilagoditi obravnavanemu problemu (korake opisanega okvirnega postopka smo na primer vgradili v postopek procesnega benchmarkinga) in preferencam, sposobnostim ter možnostim odločevalca (model lahko s kriteriji in z alternativami dograjujejo odločevalci sami, pri zahtevnejših prestrukturiranih modela, na primer pri zmanjševanju števila nivojev kriterijev, pa naj sodelujejo strokovnjaki analize odločanja).

Predstavljeni postopek zahteva ustvarjalno sodelovanje med specializiranimi strokovnjaki različnih področij, kar vodi k celovitosti. Prednost postopka je tudi njegova primernost za skupinsko odločanje. Povzemamo ugotovitve pri izbiri informacijskih sistemov sodelujočih strokovnjakov: informatikov, ekonomistov in organizatorjev, da je končni rezultat in s tem sprejeta odločitev le toliko dobra, kolikor kakovostno, odgovorno in nepristransko odločevalci pristopijo k reševanju kompleksnega problema po opisanih korakih.

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Vesna Čančer je docentka za kvantitativne ekonomske analize na Ekonomsko-poslovni fakulteti Univerze v Mariboru. Na EPF je nosilka 5 dodiplomskih predmetov in sodeluje pri izvedbi 3 predmetov podiplomskega študija. Raziskovalno se ukvarja z analizo odločanja, predvsem z metodami za odločanje po več kriterijih hkrati, ki jih uspešno razvija na področjih poslovnih procesov, systemskega razmišljanja oziroma celovitega reševanja problemov in ocenjevanja bonitete ter tudi na makroekonomskem področju. Je avtorica več deset znanstvenih in strokovnih prispevkov, objavljenih v knjigah, mednarodnih in domačih revijah ter v zbornikih referatov predvsem mednarodnih konferenc. Je avtorica učbenika za analizo odločanja in več študijskih gradiv. Sodelovala je pri različnih nacionalnih projektih in pri izvedbi mednarodnih znanstvenih konferenc.

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Evaluating Logistics Suppliers in the Slovenian Market

This paper focuses on logistics performance of companies in the Slovenian market. The research is analysing the point of view of managers in production, trade and services oriented companies about their logistics needs. Specifically, we examined their perception of different characteristics of a logistics provider and their evaluation in the process of outsourcing. There are few logistics functions that have been outsourced.

This paper presents the outsourcing process with of outsourcing characteristics. The authors also identify elements of a successful outsourcing strategy, basing their conclusions on the research on the sample of 150 the biggest Slovenian companies.

The authors will intend to answer the following question in the research: Which indicators do customers use to evaluate their suppliers? It would be expected that in purchase decision processes, customers give strong consideration to the resources and the competence of the supplier as criteria to provide higher quality and more reliable and efficient transportation of goods.

One of the aims of research will be to measure the perception of respondents about the different characteristics of logistics provider. Within any organization, there will be differences of opinion about key buying factors, their importance, and how well the company performs on each factor.

Key words: Logistical services, Outsourcing, Logistical provider, Logistics

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Some Aspects of Business Ethics in Family Enterprises in Sloveni

At the most basic level a family enterprise may be defined as an enterprise, which is controlled by members of a sin-

gle family. But family enterprises are not homogenous. They vary in terms of degrees of family involvement. The research cognitions described in the present paper show that 30,9 % of the observed enterprises face strong influence of the families through the ownership as well as management of the enterprise.

The main purpose of our paper is therefore to better understand the association between the degree of involvement of a family in ownership and management of a family enterprise and the business behavior of family enterprise in different business situations. The main data source for our paper is the survey of 350 SMEs in Slovenia.

Overall findings suggest that enterprises, characterized by a high degree of family involvement do not differ significantly from the firms that are characterized as non-family ones, regarding the total sales revenues, economic efficiency, value added per employee, export orientation and cooperation with large companies. The same goes for firms characterized with a low degree of family involvement. It is very likely, that in the present state of development of family firms and market economy in Slovenia, the degree of family involvement is not crucial for business behavior and business performance regarding the variables analyzed. Several extensions of our research are also proposed.

Key words: Business ethics, Family enterprises

**Tomaž Kramberger,
Bojan Rosi**

Do Managers have Enough Quality Information for Decision-Making

Modern complexity of management is associated with important decision making, confronting a great number of useless information. Selection of information – the choice of only quality, i.e. essential ones, is a big problem in managerial decision-making. Implementation of systemic approach i.e. systemic thinking can help dealing with it.

It is known that decision-making based only on intuition is insufficient, especially nowadays, in the time of global business. Therefore, managers have to operate with adequate knowledge capital. It

is synergetic composition of inborn talents, feelings, abilities as well as gained knowledge and experiences. DNT put this capital knowledge into function of management decision-making, thus easier and holistic information management needed for quality and efficient and successful problem solving. It enables managers to be creative, co-operative and interdisciplinary. It opens possibilities for combination of theory and practice in the decision making processes, as presented in our contribution.

Quality, holistic management decision making, create competitive advantages. It can be proved by a practical example of decision making about preventive measures in the winter time (roads gritting and ploughing). Great importance of quality, timely and enough holistic information is presented with the model of Short Term Road Ice Prediction, which gives information for quality decision making.

Key words: requisite holism, management, decision-making, systemic thinking, road safety, combinatorial optimization, algorithm.

Tatiana Zanini Gavrančić

Monitoring of Quality Costs in the Croatian Hotel Industry

The implementation of a quality cost system in hotel industry management accounting enables an increase in competitiveness in the race to provide a better service adjusted to the needs of the guests. In order to be able to manage quality costs for the purpose of reducing the costs of non-quality, it is necessary to ensure a methodological basis for monitoring and assessment of the effects of managerial decisions on investments into total quality management systems, as well as get insight in the amount and structure of quality costs. The purpose of this survey, carried out in 2002, was to find out to what degree the preconditions for the implementation of quality cost accounting as part of management accounting, a subsystem of the management information system, have been ensured in the Croatian hotel industry. We conducted an extensive survey that included 41 business systems, i.e. 140

hotels (31.1% of the total number of hotels in Croatia). The sample included hoteliers from all more significant tourist destinations in Istria, Kvarner Region, Dalmatia, Zagreb and continental Croatia, thus ensuring a geographically balanced account of the observed area.

Key words: quality costs, management accounting, TQM, hotel industry, USALI, ABC, TC.

**Vojko Potočan,
Matjaž Mulej**

Social Responsibility of Sustainable Enterprise

Society's working depends on the level of responsibility of all organizations, especially firms as crucial members of modern societies. Meeting society's demands for sustainable development makes firms modern. This contribution discusses two theses: (1) How does sustainable enterprise impact holistic social responsibility; (2) Sustainable ethics is crucial for enterprise's social responsibility resulting in general social responsibility.

Key words: ethics, ethics of interdependence, social responsibility, social responsibility of firm, sustainable ethics, sustainable enterprise.

Peter Volf

Impact of Informal Education on Career

Many different youth organizations have been created in the years after Slovenian independence. In my opinion this brings the development of youth work and growth of informal education offer. In the future the informal education will have to become more important and recognized by the state and local authorities. Financial support would enable free or cheaper education and its wider accessibility. Major part of individuals realizes the importance of informal education for their occupational and personal sphere and is willing to educate themselves in the future. Knowledge, skills and experience brought to us by informal educa-

tion and personal qualities can become an important factor at choosing the right person for the job.

Key words: informal-education index, career, informal education, personal development, all-life learning

Andrej Bertonec

Balanced Management of Key Success Factors in Mergers and Acquisitions

Empirical studies of acquired companies suggest that the objectives that drove the deal were met only half the time. We argue that a new approach toward successful acquisitions is needed, which leads us to the concept of balanced management of hard and soft success factors. Hard success factors are professional due diligence, realistic assessment of added value potentials (combination of strong business nuclei) in acquiring as well as target companies and detailed post-merger integration plan prepared already in the pre-deal phase and its speedy implementation. Soft success factors are equally important and combine the economic logic of corporate performance and social capital, measured in quantitative and qualitative terms. Soft success factors are new »combined« organizational culture, conscious and innovative employees (leaders), and efficient and consistent communication with all interest groups during M&A process. It is the organizational success that counts in the end, winning the game is largely a matter of maximizing the value by achieving »one plus one is more than two«.

Key words: mergers and acquisitions, balanced management, soft success factors, hard success factors

**Zvonko Kribel,
Stefan Bojnec**

Marketing-communication Channels and Internet Services in Slovenian Travel Agencies

This paper presents the results of the empirical study on use of marketing-

communication channels and on use of Internet services among Slovenian travel agencies. The study was completed in November 2005. Using a web application as well as self stamped written questionnaire we have conducted surveys among all travel agencies in Slovenia, which are registered for the business activity 63.300 – travel agencies. We have received 74 completed answers, which represent 29 percent response rate. The surveys' results show that Slovenian travel agencies, like Greek and Turkish travel agencies base their marketing-communications efficiency on word-of-mouth followed by various web services. The multivariate factor analysis confirms that use of various marketing-communication channels and web contains depend significantly on the size of the travelling agency.

Key words: travel agencies, use of Internet, communication channels, marketing channels, Slovenia

Vesna Čančer

A Prame Procedure for Multi-criteria Decision-making

This paper introduces a frame procedure for multi-criteria decision-making by using the group of methods, based on assigning weights. We have developed it by utilizing the conclusions of several authors regarding the absence of decision makers' perfect rationality and the need to support decision-making by systematic procedures, and the conclusions of experts in practice regarding the suitability of different multi-criteria methods. The described procedures for decision analysis were taken into consideration, as well. A systematic step-by-step approach was used in complex problem-solving on the micro level (creditworthiness assessment, environmentally oriented business decision-making, process benchmarking, choice of investments) and on the macro level (measuring the globalization of national economies), as well. The described procedure, which is well supportive of requisite holism, can be adapted to the decision problem's particularities.

Keywords: multi-criteria decision-making, step-by-step approach, systematic procedures, complexity

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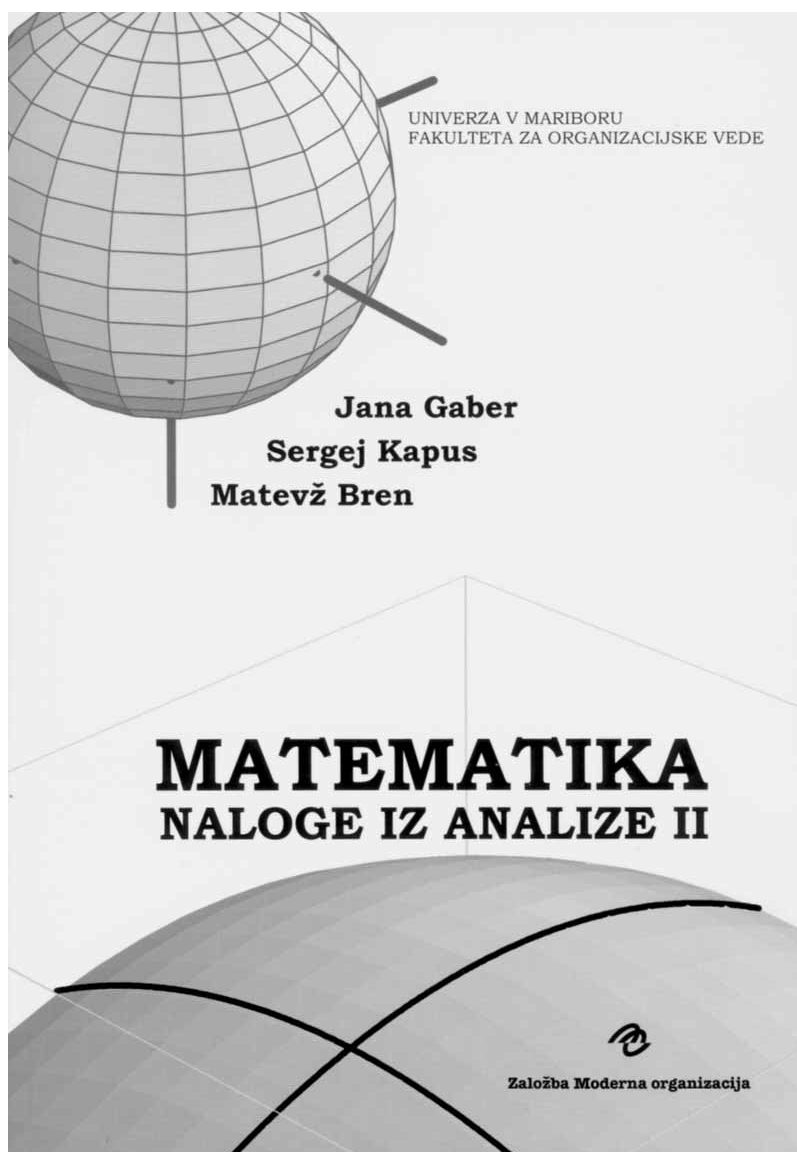
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Multivariatne statistične metode

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