

The Impact of Training on Organizational Outcomes in the CEE Region – Focus on Hungary, Serbia, Slovenia and Slovakia

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Abstract: In the knowledge-based society the permanent training and development of each individual is the premise of subsistence and development. In the period of global competition and radical economic changes human resources and their intellectual capital have become a vital resource for organizations. Employees' competence, knowledge, skills and experience have to contribute to the company's organizational performances. Only the companies investing in the continual updating of the knowledge and development of the skills of their employees can be successful on the long term. The aim of the human resource management, especially its training and development function is to help companies in the process of systematical organizational knowledge acquisition.

The purpose of this paper is to analyze the companies' training practice and its influence on the organisational performances in Central and Eastern Europe. The importance, extensiveness and effectiveness of training practice and its influence on the companies' outcomes in total 633 companies in Hungary, Serbia, Slovenia and Slovakia is analyzed based on the data of Cranet research network from 2008/2010 research period.

The results show that in the examined four CEE countries companies on average spend 4-9 days yearly and about 4% of payroll costs on teaching and development of their employees. The most popular techniques to evaluate the effectiveness of training are: feedback from the manager, meeting the objectives, employee reaction immediately after the training. The findings prove that more developed and effective training practice contributes to better organizational performances. The results can provide good benchmark for HR practitioners from CEE region in designing their new region- and country-specific training approaches.

Keywords: training, organizational performances, Central and Eastern Europe, Cranet

1 Introduction

Tregaskis and Heraty (2012) underline that the development of a national competitive capability strongly depends on organizational learning processes. Grossman and Salas (2011) claim that as the nature of work changes, employees are increasingly required to develop a wide, mutable set of skills that are essential to the success of their organizations. Effective management of the acquisition and training of human capital is thus an important key to organizational success.

Leković and Šušnjar (2010) note that training includes all those activities, which enable, make easier and accelerate knowledge acquisition necessary for successful business activity. On the other side, Armstrong (2007) defines development as the growth or realization of a person's ability and potential through the provision of learning and educational experiences.

Heraty and Morely (1998) underline that a training policy reflects the organisation's philosophy towards employee development and governs the priorities, standards and scope of its training activities. According to Salas, et al. (2012) training and development activities allow organizations to adapt, compete, excel, innovate, produce, be safe, improve service, and reach goals.

Tharenou, Saks and Moore (2007) state that training is positively related to human resource outcomes and organizational performance but is only very weakly related to financial outcomes. The relationship between training and firm's performances may be mediated by employees' attitudes and human capital. Furthermore, training appears to be more strongly related to organizational outcomes when it is matched with key contextual factors such as organization capital intensity and business strategy, in support of the contingency perspective.

Tharenou, Saks and Moore (2007) underline that in general, training has been conceptualized and measured in four main ways: by absolute measures (e.g., amount of training employees receive), proportional measures (e.g., percentage of workers trained), content measures (e.g., type of training provided), and emphasis measures (e.g., perceived importance of training to the organization). Within the categories, measurement of training has varied. Poor et al. (2012) analysed training practice in CEE countries based on the following indicators: *importance* of T&D expressed by the ratio of the annual training budget in the total payroll costs, *extensiveness* of T&D function, characterized by annual training days per year among different type of employees and the *effectiveness* aspect of T&D described by the most often used techniques for evaluating the T&D function.

2 Training in Central and Eastern Europe

Central and Eastern Europe is not well described in the HRM literature, there has been relatively limited specialised and systematic research dedicated to HRM in this region.

Kuzlauskaite et al. (2013) emphasize that a comparative study of HRM patterns in the CEE region is relevant and necessary from both national and international perspective. Comparative studies on training practice of CEE region may give a useful overview of the expenditures in training purposes, most popular training methods, days spent on training for different employee categories and about the evaluation methods. Besides the possibility to diagnose the main trends in the training practice in the CEE region, the experience of more developed CEE countries may be very valuable for countries with less developed training activities, too

With the change of regime in 1989, the ownership and the structure of **Hungarian** society were gradually changed. Today, Hungary is a fully developed market economy. Customer orientation has become crucial to the business world. With the spread of globalization foreign language proficiency has become a necessity for success. Overwhelming majority of the Hungarian society belongs to Jewish-Christian culture. Csath (2006) states that in Hungary there is a political, cultural, economic and social environment in which people are discouraged from engaging in wider learning and development activities inside and outside organizations. Richbell, Szerb and Vitai (2010) find that the overall low level of training, especially in small and micro firms, could be one of the reasons for the limited competitiveness of SMEs in Hungary. As the majority of owners - managers do not perceive problems in their current skill levels, it is not surprising that the commitment to training seems to be low. Karoliny, Farkas, Poór (2009) similarly stress that there are a rather high proportion of Hungarian organisations that spend relatively very little on employee development. In the phase of defining training needs the role of line manager is crucial, but the design of the training is in the competence of the HR department.

Leković and Šušnjar (2010) claim that in **Serbia** the majority of HRM responsibilities (staffing, compensation, training) are in the line managers' authority, but the main responsibility for these HRM issues is, indeed, in the hands of top managers. Based on Cranet data Slavic, Susnjar, and Poór (2012) claim that in Serbia about 60% of HR directors have a place on the Board of Directors. But it is presumably not a sign of the high significance of HRM, but the result of a functional organizational structure of the majority of the examined companies. The senior HR managers in Serbia are recruited from internal sources; they are usually HR professionals from the HRM department promoted to this position. In the majority of Serbian companies line managers are primarily responsible for main HR decisions. They make decisions about recruitment and selection,

compensation and training and development, as well, alone, even without consultation with the HR managers.

Letiche (1998) states that in **Slovakia** human resources are not viewed in a manner which transcended profit maximization. The survey data of Takei and Ito (2007) show the main problems in Slovakian HRM: poor communication system, unclear and unfair performance appraisal and poor coaching. The research results of Blstakova (2010) show that the importance of performance appraisal is quite stable in Slovak organizations and proves no improvement in this HRM area over the last decade. But Slovak managers slowly began to understand the urgency of systematically composed HRM activities. Based on the survey data on the human resource management practice of the Slovakian subsidiaries of foreign companies authors Volosin et al. (2012) point out the similar key business issues and trends Slovakian HRM managers have to face with. They are following: efficiency improvement, company development, distribution development and company reorganization.

Svetlik et al. (2010) claim that foreign companies coming to **Slovenia** have largely contributed to the spreading of modern human resource management practice. HRM experts have become real partners to company managers. The modern HRM techniques used in market economies are widely used in Slovenian companies. Further development is expected in the field of job analysis and evaluation processes. Svetlik, Kohont and Farkas (2011) stress out that in Slovenia HRM has a strategic role and it in the same time contributes to the increase of company efficiency and employee satisfaction. External service providers are mainly used in the field of training and development.

3 Research methodology

In our research we used the Cranet data from research period 2008/10. This international organization under the patronate of the Cranfield School of Management from UK organizes comparative researches on the policies and practices of human resource management, using a standardized questionnaire. The survey is undertaken approximately every four years. The purpose of the research is to provide high quality data for academics, public and private sector organizations, as well as HRM students, and to create new knowledge about human resource management practice in different countries of the world. The survey covers the following areas: HR departments and HR strategy, recruitment policies, pay and benefits, training and appraisal, working arrangements and flex-time, industrial relations and employee communication.

¹ <http://www.cranet.org>

In our current research we focused on the training practice of four CEE countries, which participated in the Cranet 2008/10 research: Hungary, Serbia, Slovakia and Slovenia. The sample consisted of total 633 companies. The respondents of the CEE sample were made of companies mainly from manufacturing and service sector in private ownership, with less than 1000 employees.

The first table presents the structure of our sample.

	Frequency	Percent
Hungary	139	22
Serbia	50	8
Slovakia	225	35
Slovenia	219	35
Total	633	100,0

Table 1
Sample of countries involved in the research
Source: Authors' own research

The same portion (35%) of examined companies is from Slovakia and Slovenia. About 20% of the interviewed HR managers were from Hungary, while only 8% of them employed in Serbian companies.

The purpose of this work is to analyse the companies' training practice and its influence on the organisational performances Hungary, Serbia, Slovakia and Slovenia.

The research data were processed by SPSS software version 21 and MS Office EXCEL program. For statistical analysis descriptive statistics and non-parametric tests (Spearman's correlation, Mann-Whitney test, and chi square test) were used. Authors used non parametric statistical tests since there was no evidence of the normality of distribution in the research sample (according the values of the Kolmogorov-Smirnov test ($p \neq 0.200$) and the Shapiro-Wilk test ($p < 0.05$)).

Based on the literature review we formed the following hypotheses:

- Ho: The use of more developed training practice contributes to better organizational performances.
- H1: The *importance* of training practice expressed by the ratio of the annual training budget in the total payroll costs has a statistically significant influence on companies' organizational performances expressed by service quality, productivity, profitability and rate of innovations.
- H2: The *extensiveness* of training practice expressed by the annual training days per year among different type of employees has a statistically significant influence on companies' organizational performances expressed by service quality, productivity, profitability and rate of innovations.

H3: The *effectiveness* of training practice expressed by the systematic evaluation of training has a statistically significant influence on companies' organizational performances expressed by service quality, productivity, profitability and rate of innovations.

4 Results

The importance of training and development in the surveyed companies can be presented through the analysis of the proportion of organizations' annual payroll costs spent on training. Table 2 shows the obtained data.

Country	Percentage of annual payroll costs spent on training
Hungary	4,12
Serbia	2,64
Slovakia	4,83
Slovenia	3,55
Total	4,02

Table 2
The portion of annual payroll costs spent on training
Source: Authors' own research

In the examined four countries companies on average spend about 4% of their annual payroll costs on training. The higher proportion of annual payroll costs are spent on training in Slovakia (4,8%), while in Serbia companies spend less than 3% of their annual payroll costs for this purpose.

To test the H1, i.e. the correlation between the importance of training expressed by the percentage of annual payroll costs and the organisations' outcomes expressed by service quality, productivity, profitability and rate of innovations, statistical analysis has done. The results are presented in table 3.

Spearman's rho		Percentage of annual payroll costs spent on training	Rating of service quality	Rating of level of productivity	Rating of profitability	Rating of rate of innovation
Percentage of annual payroll costs spent on training	Coefficient	1,000				
	Sig. (2-tailed)	.				
Rating of service quality	Coefficient	,076	1,000			
	Sig. (2-tailed)	,180	.			
Rating of level of productivity	Coefficient	,127*	,454**	1,000		
	Sig. (2-tailed)	,025	,000	.		
Rating of profitability	Coefficient	,062	,417**	,619**	1,000	
	Sig. (2-tailed)	,281	,000	,000	.	
Rating of innovation	Coefficient	,111	,442**	,360**	,408**	1,000
	Sig. (2-tailed)	,055	,000	,000	,000	.
*. Correlation is significant at the 0.05 level (2-tailed).						
**. Correlation is significant at the 0.01 level (2-tailed).						

Table 3

Correlation test for the exploration of the importance of training practice

Source: Authors' own research

From table 3 it is obvious that there is a statistically significant positive weak correlation only between the percentage of the annual payroll costs spent on training practice and productivity ($r=0.127$; $p=0.025$). For the ratings of rate of innovation, profitability and service quality authors have not found any significant correlation with the percentage of the annual payroll costs spent on training.

The *extensiveness* of the training practice was expressed by the by annual training days per year for different employees categories. The obtained data are summarized in table 4.

Country	Days per year training for management	Days per year training for professional	Days per year training for clerical	Days per year training for manual
Hungary	6,81	6,63	3,53	1,98
Serbia	11,50	8,16	6,13	1,76
Slovakia	10,11	10,45	7,10	5,50
Slovenia	7,97	7,26	3,89	6,25
Total	8,56	8,14	4,96	4,59

Table 4

The average days spent on training for different employee categories

Source: Authors' own research

In the examined four CEE countries managers get the most extensive training, on average almost 9 days per year. The educational opportunities of the professional

staff are a little bit moderate, on average about 8 days. Clerical employees and manual workers on average spend less than 5 days on training programs per year. Among the analyzed CEE countries, the training programs are the most extensive in Slovakia.

To test the H2, the correlation between the extensiveness of training expressed by the average days spent on training for different employee categories and the organisations' outcomes expressed by service quality, productivity, profitability and rate of innovations was examined. The data are presented in table 5.

		Rating of service quality	Rating of level of productivity	Rating of profitability	Rating of rate of innovation
Days per year training for management	Correlation Coefficient	,079	,151**	,181**	,126*
	Sig. (2-tailed)	,109	,002	,000	,012
Days per year training for professional	Correlation Coefficient	,097*	,070	,094	,129**
	Sig. (2-tailed)	,045	,155	,060	,010
Days per year training for clerical	Correlation Coefficient	,018	,059	,116*	,116*
	Sig. (2-tailed)	,713	,233	,020	,021
Days per year training for manual	Correlation Coefficient	,034	,103*	,102	,083
	Sig. (2-tailed)	,512	,049	,055	,117

Table 5
 Correlation test for the exploration of the extensiveness of training practice
 Source: Authors' own research

The data from table 5 point out the existence of the statistically significant positive weak correlations among the days per year training for different types of workers and companies' performances. The statistical analysis show statistically significant positive weak correlations between the days spent on training for managers and rating of productivity ($r=0.151$, $p=0.002$), rating of profitability ($r=0.181$; $p=0.000$), and rating of innovation ($r=0.126$; $p=0.012$). Also, significant positive weak correlation was detected between the days per year of training for professionals and the rating of innovation ($r=0.129$; $p=0.010$). Besides, a statistically significant positive weak correlations were determined between the days spent on training for clericals and the rating of profitability ($r=0.116$; $p=0.020$) and the rating of innovation ($r=0.116$; $p=0.021$). In the case of manuals, statistically significant positive weak correlation was found between the days of their training per year and the rating of productivity ($r=0.103$; $p=0.049$).

The *effectiveness* of training practice was expressed by the different methods of systematic evaluation of training. The data for examined four countries are represented in table 6.

State	Total number of days	Meeting object.	Reaction eval. immed. after training	Job perform. immed. after training	Job perform. some months after training	Feed-back from line manag.	Feed-back from empl.	ROI
Hungary	52,0	86,3	86,3	28,0	30,0	90,0	90,0	20,4
Serbia	45,5	83,3	69,2	57,1	50,0	84,6	72,7	27,3
Slovakia	56,8	75,9	72,9	27,1	36,8	82,0	76,5	16,5
Slovenia	78,6	86,8	79,2	22,7	37,5	87,7	87,9	15,3
Total	63,2	81,8	77,2	27,2	36,5	85,4	82,7	17,2

Table 6

The percentages of the usage of different evaluation techniques

Source: Authors' own research

Most popular methods to evaluate training effectiveness in the examined CEE region are the feedback from the line manager, the feedback from employees involved in training program and meeting the objectives. The method of the return on investment (ROI) is used the less. Companies in Hungary, Serbia, Slovenia and Slovakia use similar techniques to evaluate the effectiveness of training. There is no significant difference among the popularity of different evaluation techniques among the examined countries.

To test the H3, the correlation between the effectiveness of training practice expressed by the systematic evaluation of training programs and the organisations' outcomes expressed by service quality, productivity, profitability and rate of innovations was examined. The data of the statistical analysis are presented in table 7 and 8.

	Systematical training evaluation	N	Mean Rank	Sum of Ranks
Rating of service quality	No	265	249,42	66095,50
	Yes	292	305,85	89307,50
	Total	557		
Rating of level of productivity	No	253	237,27	60029,50
	Yes	283	296,42	83886,50
	Total	536		
Rating of profitabiliy	No	247	223,68	55249,00
	Yes	279	298,75	83352,00
	Total	526		
Rating of rate of innovation	No	247	239,61	59184,50
	Yes	280	285,51	79943,50
	Total	527		

Table 7
Exploration of the effectiveness of training practice
Source: Authors' own research

Test Statistics ^a				
	Rating of service quality	Rating of level of productivity	Rating of profitabiliy	Rating of rate of innovation
Mann-Whitney U	30850,500	27898,500	24621,000	28556,500
Wilcoxon W	66095,500	60029,500	55249,000	59184,500
Z	-4,619	-4,755	-6,034	-3,679
Asymp. Sig. (2-tailed)	,000	,000	,000	,000

a. Grouping Variable: Do you systematically evaluate the effectiveness of your training?

Table 8
Mann-Whitney U test for the exploration of the effectiveness of training practice
Source: Authors' own research

From tables 7 and 8 it is obvious that organizations that systematically evaluate the effectiveness of their training practices have higher ratings of all observed organizational performances (mean ranks are higher for the organizations that perform systematic evaluation of the effectiveness of training practices). These differences are statistically significant ($p < 0.05$). If organization systematically evaluate the effectiveness of their training the mean rank in the case of service quality (MR=305.85) is higher than in companies where the effectiveness of the training is not systematically evaluated (MR=249.42). These differences are statistically significant according to table of Mann-Whitney tests ($p < 0.000$). In the case of productivity, the mean rank is 296.42 when organization systematically evaluates effectiveness of training and 237.27 if they do not perform evaluation.

These differences are also statistically significant according to table of Mann-Whitney tests ($p < 0.000$). Similarly, in the case of rating the profitability the obtained data of $MR = 298.75$ if there is evaluation and $MR = 223.68$ if organizations do not evaluate training show that differences are statistically significant ($p < 0.000$). In the case of the rate of innovation ($MR = 285.51$ when organizations evaluate training and $MR = 239.61$ when not), differences are significant ($p < 0.000$), too.

Based on the above described research results it can be concluded that the hypotheses about training practice in the CEE region and its influence the organisational outcomes were partially proved:

H1 on the *importance* of training practice expressed by the ratio of the annual training budget in the total payroll costs was **not proved**. Only one performance measure is in correlation with training costs. There is a statistically significant positive weak correlation only between the percentage of the annual payroll costs spent on training practice and productivity

H2 on the *extensiveness* of training practice **was partially proved**. Statistically significant weak positive correlations was found between the days per training for managers and the rating of productivity, profitability and the rate of innovations; the days of training for professionals and the rate of innovations; the days per training for clerical and profitability; and the days per training for manual workers and productivity.

H3 on the *effectiveness* of training practice **was proved** as there are statistically significant differences between companies that perform systematic evaluation of training and all analyzed organisational performances (quality, productivity, profitability and rate of innovations).

To summarize our finding it can be stated that **H₀ was proved**, as the development of training practice moderately contributes to better organisational performances expressed by service quality, productivity, profitability and rate of innovations in the CEE region.

Conclusions and limitations

In the competitive and globalized world a highly- or multi-skilled, competent labor force becomes vital factor of reaching the organizations' triple-level objectives. Organizations have to focus on different on-site and off-site training programs for all employee categories. It falls within the HRM department's cognizance to analyze the need, design – and sometimes - to execute the training and finally to evaluate different training programs.

In this paper the authors focused on the training activity of companies from four CEE countries: Hungary, Serbia, Slovakia and Slovenia based on the Cranet research data from 2008/10. The archetype companies from these CEE countries spend between two and five percentages of their annual payroll costs on training, on average 4%. On average the employees spend between 2 and 11 days on training in these four countries. Central European managers and professional staff on average spend about 8 days on training, while in the case of clerical and manual workers it is on average about 5 days. The most popular training evaluation methods are feedback from manager, feedback from employees and meeting the objectives.

The *importance* of training expressed by the percentage of annual payroll costs spent on training do not significantly influence organizational outcomes expressed by productivity, profitability, service quality and rate on innovations. *The extensiveness* of training expressed by the training days per year for different employee categories partly influences the companies' performances. Training *effectiveness* has a weak positive influence on the organizational outcomes in the examined four CEE countries.

The practical implication of the work besides that it briefly presents the training practice in Hungary, Slovenia, Slovakia and Serbia is that the results prove that investment into the development of companies' training practice have a weak positive influence on organisational performances expressed by service quality, productivity, profitability and rate of innovations.

According to the authors, the main limitation of the research paper is the sample used in the Cranet methodology. The data are not country-representative; there are heterogenic samples of analysed countries according to the size, industry, market-orientation of the analysed companies. But among others Karoliny, Farkas, Poór (2009) emphasize that despite the limitations of the survey methods, and the methodological constrains, the Cranet network's surveys are providing large-scale empirical data since 1990. Doing so, it contributes meaningfully both to the description and understanding of the developments of HRM practices in a continuously growing number of countries and to the theoretical developments in Comparative Human Resource Management.

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