KREM, 2024, 1(1003): 5-29 ISSN 1898-6447 e-ISSN 2545-3238 https://doi.org/10.15678/KREM.2024.1003.0101

A Practical Paradigm Shift in Human Resource Management

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Suggested citation: Poór, J., Tóth, A., & Kálmán, B. G. (2024). A Practical Paradigm Shift in Human Resource Management. Krakow Review of Economics and Management / Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie, 1(1003), 5–29. https://doi.org/10.15678/KREM.2024.1003.0101

ABSTRACT

Objective: The paradigm shift taking place in the science of human resource management has resulted in numerous changes in the theory. This process was significantly accelerated by the COVID-19 pandemic. This study shows how new knowledge appears in everyday practice in the countries of Central and Eastern Europe (Austria, Bulgaria, Bosnia and Herzegovina, Czech Republic, Hungary, Romania and Slovakia).

Research Design & Methods: Statistical processing of the data collected in a questionnaire survey shows how conservative crisis management is complemented by measures based on the new approaches organisations are using. In addition to the comparison between individual countries, the study also focuses on the size of the company as a factor determining crisis management decisions. It also examines the validity of general principles such as equal opportunity and difference management, both of which are people-centric principles.

Findings: The results of the survey show that the companies already understand modern theoretical knowledge. Despite this, among the practical measures, conservative responses such as layoffs or wage freezes are still used predominantly. The study draws attention to the need to speed up practical changes and implement the theory in practice.

Implications/Recommendations: The modern understanding and interpretation of HR is not alien or remote from the organisations that responded to our survey. Nonetheless, their implementation of modern HR concepts has been relatively slow.

Contribution: We set out to create an international database that can serve as a basis for future research. We also show that the effect of the HR paradigm shift can already be demonstrated in practice, even if the uptake has been slow. Although the attachment to the past is strong, forward-looking crisis management measures that replace previous restrictive solutions are becoming more and more widespread. We hope our study helps modern crisis management in HR take stronger root.

Article type: original article.

Keywords: human resource management, paradigm shift, crisis management, people-centeredness, COVID-19, Central and Eastern Europe.

JEL Classification: J10, J24, J50.

1. Introduction

The credit crisis of 2008, Industry 4.0 and the 2020 COVID-19 pandemic have changed the labour market to such an extent that traditional, proven methods of human resource management (HRM) no longer apply (Cseh-Papp *et al.*, 2017a, 2017b; Pató-Szűcs *et al.*, 2021). That is why the HR paradigm is also changing, with greater emphasis now being placed on considering the needs of the employees (Hegedűs, 2012; Kőmüves, Hopp & Szabó-Szentgróti, 2022). While the theoretical background for dealing with the problems is already available, the practical implementation is a much slower process. In our research, we examined this duality as it plays out at the economic organisations of Central and Eastern Europe and neighbouring countries. The aim of the research was, using a nationwide sample and a wide range of methodologies, to examine, analyse and present how organisations responded to the HR solutions used during the COVID-19 crisis.

2. Theoretical Background

The global financial crisis of 2007–2009 could be traced to missteps in finance, so the main task of solving it fell to regulators and financial officers (CFOs). COVID-19, on the other hand, impacted human resources and was therefore addressed by capable and flexible HR managers (CHROs) (Economist, 2020). The primary goal of HR professionals and experts was to increase employee

morale, motivation and commitment (Kőmüves, Poór & Karácsony, 2022). In the absence of such measures, negative outcomes (dissatisfaction, lower work performance, turnover) would surely have emerged (Nutsubidze & Schmidt, 2021). Human resource practices vary from country to country (Walter, 2023), the digitalisation process (Hegedűs, 2020) and other factors. Practical measures taken in the hotel sector, which was severely affected by the crisis, were examined by Agarwal (2021). The pandemic affected economic sectors and groups of employees to differing extents, highlighting the need for crisis management strategies to consider these differences. Particularly the industrial sector, retail, and hospitality industries were significantly impacted, making the pandemic a relevant factor in the HRM paradigm shift in the development and retraining of employee skills (Mura et al., 2022a). Supply chain issues and the responses to these challenges prompted manufacturing companies to fundamentally rethink their strategies, including more effectively addressing consumer needs and minimising the damages caused by the pandemic. Reconfiguring their business and human resource strategies to align with market expectations, these firms implemented adaptive measures to respond to challenges related to HR and operational activities (Mura et al., 2022b).

Training and development, employer flexibility, the promotion of work-life balance and social support, intra-organisational communication and the introduction of home office were the leading responses to the crisis.

The pandemic also brought the area of socially responsible HRM (SRHRM – socially responsible HRM) to the fore, with psychological and social support factoring prominently and significantly helping to mitigate the impact of high-impact events (He *et al.*, 2021). The development and spread of SRHRM clearly illustrates the paradigm shift taking place in HRM, the essence of which is that the employees are no longer treated as mere workforce, but as human beings, with the approach becoming more holistic. This shift is seen in a paper by Ngoc *et al.* (2021) on the state of affairs at Vietnamese companies. According to their findings, even before the epidemic companies were increasing their emphasis on health protection and hygiene improvements and the use of positive psychology. This was supplemented during the lockdown with bonuses and allowances to boost employee welfare. After the first wave of the pandemic, talent management and renewed performance management took on a prominent role (Kőmüves *et al.*, 2022).

Half a century before the pandemic, the importance of human capital increased significantly in the 1960s. Schultz (1961) theorised that economic growth can only progress if physical capital and human capital develop together. On the other hand, countries that do not have adequate human capital cannot effectively manage physical capital. Schultz (1961) also found that human capital is the factor that most limits growth. That is, starting from a certain level of economic development, increasing the amount of money spent on growth stimulates economic growth with

increasingly worse efficiency, while the development of human capital accelerates it. Schultz's theory is supported by Fogel's findings (Fogel, 1994), which showed that in the long term, there is a direct correlation between a population's improved health and its competitiveness. The role of HRM has changed considerably over the past 200 years. Scientific HRM got its start early in the twentieth century (Fayol, 1916; Taylor, 1919), and several paradigm shifts have occurred since then. After József Galamb introduced the assembly line in the Ford car factory in 1913, Ford's management saw the worker almost as a spare part (Derksen, 2014). The drastic change in technology, the increase in organisational size and the strengthening of the trade union movement led to the establishment of personnel departments in larger organisations (companies and state bureaucracies alike) (Ivancevich & Glueck, 1986). An organisation's size affects satisfaction and motivation as well (Berke & Kőműves, 2016). Up until the 1960s, these departments mostly dealt with personnel administration and trade union affairs mainly involving manual workers in developed capitalist countries (Foulkes, 1975). Another turning point occurred after the Second World War, with the administrative nature coming to the fore of HR (Torrington & Hall, 1987). Today, besides the traditional welfare, administrative and interest-reconciling nature of HR, change management, active business partners and consultants all play a role (Malatyinszki, 2009, 2015; Torrington et al., 2014; Ulrich, 2014). Furthermore, in the years before the COVID crisis, a number of trends – the paying of well-being bonuses or the spread of home-office and homework – began to unfold, becoming clearly visible only during the global pandemic.

During the COVID-19 crisis, HRM became one of the main tools of organisational support (Szabó *et al.*, 2021). The practice of strategic HRM came to the fore (Ichsan *et al.*, 2020). HRM responded to the crisis by supporting staff to update their skills for teleworking, establishing flexible working hours and adopting less stringent performance management rules (Gigauri, 2021). HRM found different solutions to problems in this period, depending of the firm's ownership structure (Pató-Szűcs *et al.*, 2022). Gigauri (2020) also examined the impact of the pandemic on HRM, focusing on digitisation and work-life balance. She found that telecommuting also has a negative side, as many workers tend to do their work outside of working hours, which can lead to family problems (Malatyinszki, 2020a, 2020b). Therefore, the role of communication between management and employees becomes particularly important. Similar results have been reported by other authors, who highlight the need to transform HRM policy. Alongside this transformation, employees becoming more involved in decision-making further suggests a paradigm shift is afoot (Mwita, 2020; Ton, Hammerl & Szabó-Szentgróti, 2023).

Balawi and Wachira (2021) analysed the practice of Hungarian multinational companies from the perspective of international HRM. They found that globalisation, the growth of generational differences, and a focus on innovation and sustain-

ability are the most significant challenges the HR departments of multinational companies face. They also discovered that the Hungarian organisations improved their inner communication system, started to apply non-traditional forms of employment and redesigned their job analysis systems (Kőmüves *et al.*, 2021).

3. Methodology

3.1. Sample and Data Collections

For our research, we used data gathered by questionnaire survey conducted by the KoronaHR team (of which we were members) during 2020-2021. The "KoronaHR" research group was established in Hungary in May 2020 with the participation of researchers from eleven Hungarian and one foreign universities and with the support of numerous non-profit civil organisations. During the three waves of the COVID-19 epidemic, we conducted four projects – three Hungarian and one international. Bulgarian, Bosnian, Austrian, Romanian and Slovak researchers joined their Hungarian counterparts in the latter study. The questionnaire covered the Central European region and related countries and contains both closed and open questions. For the closed questions, we asked the respondents to mark the most typical answers from the pre-formulated answers that largely cover the topics of the study. For the open questions, we examined the opinions of the respondents. The surveys were conducted in June, November and March 2020. The questionnaire could be completed either online or on paper. A total of 1,047 organisations from seven countries responded. The distribution of the sample by country is shown in Table 1, and the distribution by company size is shown in Table 4. Both tables are described in the Results section.

3.2. Preparation of Data

We did not use the entire questionnaire for the research, but selected three groups of solution management principles (strategies) from the questions and statements of the questionnaire:

I. Future-oriented

This section contains statements that see the solution to the crisis situation in expanding, developing, and enhancing competitiveness:

- improving organisational efficiency,
- presenting new technologies and procedures,
- targeting new markets,
- reorganising business areas,
- strengthening the supply chain,

- more effective/renewed marketing,
- reducing labour demand with automation/technical solutions.

II. Conservative

Statements representing the restrictive crisis management solutions that were previously used, almost "reflexively":

- postponing purchases and expenses,
- general cost reductions,
- dismissing employees,
- terminating strategic investment,
- terminating innovation projects,
- reducing communication costs,
- freezing hiring,
- reducing working hours,
- licensing/managing home offices,
- downsizing temporary employees,
- freezing payments,
- reducing wages,
- reducing fringe benefits.

III. Human-centric

These measures deal with the challenges of the crisis in a progressive manner, according to the human- and workforce-oriented principles of the new HR paradigm (group III/a):

- reducing the risk of the pandemic through training,
- reducing labour demand through training and development,
- supporting personal development,
- developing social, mental and family support,
- labour relations, participation, involvement,
- managing retention;

and some more general principles are also included in the HR toolbox (group III/b):

- generation management,
- equality of opportunity,
- diversity management.

The answers to the questions used were placed in our own database and processed with statistical methods using MS-Excel and Jamovi 2.3.21 software.

We examined the extent to which each solution management principle appeared for each respondent. To determine this, we aggregated the scores of the questions corresponding to the given group. Given that each group of questions did not contain the same number of questions, the results obtained by aggregation were normalised to a value between 0 and 1 for comparability. We calculated the scores in two

ways – by adding them up for each respondent and creating our own index of HR performance, or, second, by creating three ranges (1, 2, 3) between the minimum and maximum values of the total scores for each group of questions according to the intensity of crisis management:

- 1. Hardly applies the given principle in crisis management.
- 2. Applies the principle, but not as a typical solution.
- 3. Intensively applies the principle among the solution options.

3.3. Contingency Tables

We then looked for an answer to the question of how often the organisations of the countries included in the study use each strategy. For this purpose, we performed contingency table analyses for each strategy, with two variables – the country and frequency of application of each strategy. In the next step we examined the same questions for another variable, company size, also using contingency tables. Then, based on the results of the marginal distributions, we summarised our results on the frequency of application of individual crisis management strategies by country and company ownership structure.

3.4. Analysis of Variance

In the next step, we looked at how HR performance developed in each country. For this purpose, we first examined the normality of the sample using the Shapiro-Wilk test. Based on the results of the test, we performed a non-parametric analysis of variance (Kruskal-Wallis test). Rather than the generally accepted Dunn's test, Dwass-Steel-Critchlow-Fligner pairwise comparisons (DSCF) were used as a *post-hoc* test to reveal differences. The reason for this is that the Bonferoni correction is not included by default, so according to its developers, we get a more realistic result (Dunn, 1964; Douglas & Michael, 1991). Our obtained results were then summarised in another cross table, which, for improved clarity, was represented in diagramme form. Here we have shown how common the use of certain HR strategies is in the countries under analysis.

3.5. Cluster Analysis

Next, we examined whether there are any general characteristics or trends in HR that apply regardless of the companies' nationality, size, ownership structure or income. For this purpose, we performed a *K*-means cluster analysis based on the four HR strategies. After graphically representing the cluster centres, we set up a sequence of development in the evolution of HR paradigms – from conservative strategy to future-oriented thinking to human-centric approach. We then examined the proportion of respondents in each cluster. We did this in order to determine

where the HR paradigm shift, which has been taking place in theory for more than a decade, is in practice.

4. Results

4.1. Contingency Tables

First, we examined the distribution of the sample based on how intensively the given responding organisation applies the four crisis management strategies (Tables 1, 3, 5 and 6).

We determined that 16% of non-Hungarian companies think it is very important to focus on the future, while only 9% of Hungarian respondents said the same. This type of strategy is used by a quarter of the Bulgarian companies and almost a third of the Bosnian ones. The latter result is somewhat overshadowed by the fact that only 11 responses were received from Bosnia and Herzegovina. In addition to the Hungarian (n = 398) and Bulgarian (n = 108) samples, more than a hundred respondents work at Romanian (n = 188) and Slovakian (n = 232) companies. According to 19% of the companies in Romania and 11% of the respondents in Slovakia, "future orientation" is of prime importance if the company is to successfully recover from the crisis. These rates are higher than in Hungary, leading to the conclusion that Hungarian HR professionals in practice apply the least modern theoretical foundations (Table 1).

Table 1. Assessment of the Importance of "Future-oriented" HR Solutions

	FutureOriented_int_group				
Country	barely (%)	moderately (%)	expressly (%)	total (n)	
Bulgaria	12	65	23	108	
Bosnia and Herzegovina	13	58	29	38	
Czech Republic	27	55	18	11	
Austria	22	69	8	72	
Hungary	29	62	9	398	
Romania	11	70	19	188	
Slovakia	32	57	11	232	
Total	24	63	13	1,047	
$\chi^2 = 62.9, df = 12, p < 0.001$					

Source: the authors.

While future orientation (investments, developments) was found to be an intensively applied strategy in 13% of the companies, conservative solutions (downsizing,

cost reductions) were considered particularly important by slightly less, at 10%. Less than 5% viewed the application of people-centric responses and general humanitarian principles as a priority. If we examine whether the respondents consider each strategic option important, at least in principle, we get the following result:

- 76% choose future orientation (63% moderately, 13% expressly, Table 1),
- -72% think conservative tools are important (62% moderately, 10% expressly, Table 3),
- -50% think in terms of human-centered HR (46% moderately, 4% expressly, Table 5),
- also deals with general human rights 7% (5% moderately, 2% expressly, Table 6).

Grouping the respondents based on ownership reveals no significant difference between the future orientation of state-owned, domestic and foreign privately owned companies (Table 2). All of them have between 10–15% of companies investing significantly even in the crisis and applying measures to increase competitiveness. In terms of company size, 14% of respondents, regardless of the number of employees, saw the principle of "future orientation" as a priority. The main difference was found among those who barely use a future-oriented approach. Every fourth company with less than 250 employees (or 73% of the sample) viewed this option as a priority, while only 20% of those employing more than 250 people (27% of the sample) chose this option. However, this result is not significant.

FutureOriented_int_group Company Size barely (%) expressly (%) moderately (%) total (n) 1-250 persons 24 62 14 708 Over 250 persons 19 14 264 68 $\chi^2 = 12.2, df = 10, p = 0.273$

Table 2. Assessment of the Importance of "Future Orientation" by Size of Company

Notes: The companies were divided into 6 groups based on their size by number of employees. These groups are shown in Table 4. Table 2 summarises the results in two size categories, but the chi-square, df and p values show the value of the 6-group study.

Source: the authors.

Table 3 shows the prevalence of conservative solutions. Only 7–17% of companies strongly prefer downsizing, restrictive, cost-cutting solutions. The only exception is the Bosnian respondents, where the rate still hovers over 40%. In other words, modern HR practice in Bosnia and Herzegovina, even at the level of acceptance of principles, is progressing more slowly than in other countries of the region. The situation is just the opposite in Slovakia, where more than 40% of companies apply

austerity measures in crisis management only to a very limited extent. Companies in Hungary and Slovakia opt for conservative strategies in crisis management the least (7% of companies in both countries).

Table 3. Prevalence of the Use of Conservative Solutions in Individual Countries

Country	Conservative_int-group				
Country	barely (%)	moderately (%)	expressly (%)	total (n)	
Bulgaria	12	74	14	108	
Bosnia and Herzegovina	5	53	42	38	
Czech Republic	25	67	8	12	
Austria	10	74	17	72	
Hungary	35	58	7	398	
Romania	16	71	12	188	
Slovakia	41	53	7	232	
Total	28	62	10	1,048	
$\chi^2 = 117, df = 12, p < 0.001$					

Source: the authors.

Table 4. Frequency of Conservative Crisis Management by Company Size

Company Siza		Conservative_int-group				
Company Size	barely (%)	moderately (%)	expressly (%)	total (n)		
1–9 persons	36	56	8	289		
10–49 persons	30	61	9	227		
50–250 persons	19	68	13	192		
251–500 persons	14	74	12	94		
501–2,000 persons	12	72	16	90		
Over 2,000 persons	9	73	19	80		
Total	25	64	11	972		
$\chi^2 = 56$, $df = 10$, $p < 0.001$						

Source: the authors.

The analysis according to ownership structure returned similar results. The most noteworthy finding is that restrictive crisis management is least preferred by companies in the non-profit sector (7%), compared to 10% of other companies. Finally, larger companies are more inclined to use conservative strategies (Table 4). This is perhaps because in small companies, where almost everyone knows everyone,

human aspects are more important than in large companies, where management may dismiss people they may never even have met in person.

Human-centered solutions are strongly preferred by an average of only 4% of companies in all of the countries except for Bosnia and Herzegovina, where the rate is 24% (Table 5).

Table 5. Frequency of Choosing Human-centered Crisis Management by Country

Country	HumanCentric_int_group				
Country	barely (%)	moderately (%)	expressly (%)	total (n)	
Bulgaria	40	52	8	108	
Bosnia and Herzegovina	34	42	24	38	
Czech Republic	55	45	0	11	
Austria	43	53	4	72	
Hungary	61	37	2	398	
Romania	35	64	2	188	
Slovakia	53	44	3	232	
Total	50	46	4	1,047	
$\chi^2 = 99.8, df = 12, p < 0.001$					

Source: the authors.

Remember, Bosnia and Herzegovina also had the highest number of companies that strongly support both future orientation and conservative crisis management, a fact most likely attributable to the small number of items in the Bosnian sample (n = 38). The 0% result of the Czech sample, which also has a small number of items, can be interpreted with similar significance.

When examined according to ownership, the crisis management strategy that relies on the workforce as a person is most commonly used in non-profit organisations, though this result is not significant. Nevertheless, as a possible explanation, we posit that such organisations are not profit-oriented, and usually provide some kind of community service, making them by definition more people-oriented. Similar to the form of ownership, the breakdown by company size did not yield significant results. Nevertheless, it is interesting to note that the smallest organisations are not the most people-oriented, even though their "everyone knows everyone" nature might lead one to assume that they would be. From the sample of respondents, enterprises employing 50–250 people proved to have the most people-oriented approach, while those employing less than 10 people were the least people-oriented. There are several possible explanations for this. One is that they lack significant

reserves, so even a short-term recession forces them to take more drastic measures. Moreover, such micro-enterprises are often family-based, which effectively rules out workforce downsizing. In any case, it is not humanitarian measures that leads their thinking, but financial responsibility.

The fourth group of measures we examined is general principles. This includes measures that apply the most general human rights in the field of HR. This could be another aspect in the evolution of the new HR paradigm. That is, it would be if these principles were not so infrequently used, at least by the companies we examined (Table 6).

Table 6. The Contingency Table of General Human Rights in HR

Country	Common_int_group				
Country	barely (%)	moderately (%)	expressly (%)	total (n)	
Bulgaria	88	6	6	108	
Bosnia and Herzegovina	92	5	3	38	
Czech Republic	100	0	0	12	
Austria	89	6	6	72	
Hungary	96	3	1	398	
Romania	87	9	4	188	
Slovakia	94	4	1	232	
Total	93	5	2	1,048	
$\chi^2 = 28.9, df = 12, p = 0.004$					

Source: the authors.

Although the result is significant – considering the previous results in Bosnia and Herzegovina – we only evaluated the results of the groups with more than one hundred elements from the table. What they have in common is that in more than 85% of the companies, the HR professionals deal only moderately with these general legal principles. However, a slight north-south separation can be observed: on average, every twentieth company in Bulgaria and Romania considers general rights, while in Hungary and Slovakia, further north, the number was a low as one in 100. The analysis according to ownership did not yield significant results, but we would highlight that, paradoxically, none of the non-profit organisations (which make up 3% of the entire sample) pay even average attention to these rights.

Table 7 was prepared based on the contingency tables' marginal distributions of the application of each strategy per country.

93

5

2

Strategy	Importance	Number of Respondents	% of the Full Sample
Future-oriented	little	249	24
	average	659	63
	great	140	13
Conservative	little	290	28
	average	649	62
	great	109	10
Human-centric	little	527	50
	average	482	46
	great	39	4

973 51

24

Table 7. The Frequency of the Solution Strategies in the Entire Sample

little

average

great

Source: the authors.

Common principles

Table 7 illustrates that the companies do not only use only one crisis-management strategy, but combinations of the four strategies in different proportions. Primarily, conservative and future-oriented answer options are mixed in almost equal proportions. The human-centered approach, meanwhile, is much less emphasised, especially in the application of general principles.

4.2. Analysis of Variance

Table 8 shows the results of the normality test before examining the evolution of HR performance.

Table 8. Results of the Sample Normality Test

Test of Normality	Result
Shapiro-Wilk W	0.955
Shapiro-Wilk p	< 0.001

Source: the authors.

Based on this, we performed the Kruskal-Wallis test to find the answer, the result of which can be seen in Table 9.

Table 9. HR performance of examined countries

Variable	χ^2	df	p	ϵ^2
HR_performance	131	6	< 0.001	0.132

Source: the authors.

The results indicate that the performance of HR activities varies significantly by country. Based on the DSCF test (Wilcoxon rank sum test statistic, the *p*-value and Fig. 1) we can draw the following conclusions.

Table 10. Results of the post-hoc Test of HR Performance

Pairwise Comparisons – HR_performance					
Country 1	Country 2	W	p		
Bulgaria	Hungary	-12.082	< 0.001		
Bulgaria	Romania	-4.215	0.046		
Bulgaria	Slovakia	-9.131	< 0.001		
Bosnia and Herzegovina	Austria	-4.452	0.027		
Bosnia and Herzegovina	Hungary	-8.213	< 0.001		
Bosnia and Herzegovina	Romania	-4.587	0.020		
Bosnia and Herzegovina	Slovakia	-7.158	< 0.001		
Czech Republic	Hungary	-4.268	0.041		
Austria	Hungary	-6.560	< 0.001		
Austria	Slovakia	-4.311	0.037		
Hungary	Romania	9.962	< 0.001		
Romania	Slovakia	-6.602	< 0.001		

Source: the authors.

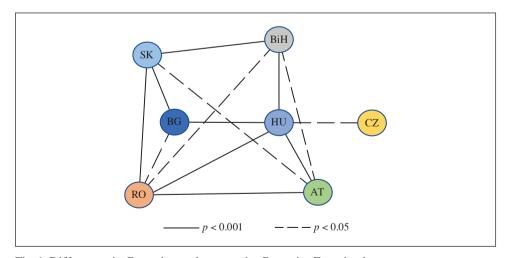


Fig. 1. Differences in Commitment between the Countries Examined

Notes: BiH – Bosnia and Herzegovina, SK – Slovakia, BG – Bulgaria, HU – Hungary, CZ – Czech

Republic, RO – Romania, AT – Austria.

Source: the authors.

Table 10 shows that there is a significant difference between all of the countries – in fact, in half of the cases the significance value is p < 0.001. The graphical representation of DSCF results (Fig. 1) shows our results in an even clearer light.

The Czech Republic is typical in the region for HR performance: with the exception of Hungary, it does not significantly differ in performance from other countries. On the other hand, Hungary's performance differs significantly from that of all other countries except Slovakia. Based on the performance according to the index score, we examined the proportion of each strategy occurring in companies from different countries.

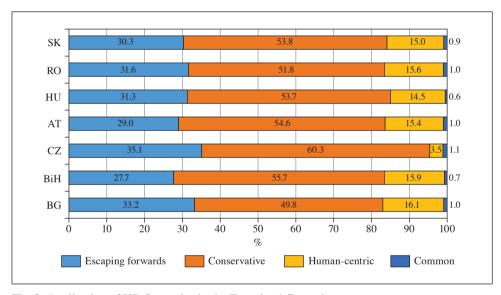


Fig. 2. Application of HR Strategies in the Examined Countries

Notes: Same as for Figure 1.

Source: the authors.

As Figure 2 shows, the ratio of conservative and future-oriented strategies is the highest among HR solutions. This clearly illustrates that HR is never single-focused, but applies several strategies side by side. At the same time, the fact that modern, human-centered solutions in Czech companies play only a third of the role that they do at companies in other countries paints a somewhat gloomier portrait of the HR style of Czech companies. Figure 3 shows the results of the *K*-means cluster analysis investigating the results of HR trends.

The four typical types of measures resulted in a total of six clusters. Three of these (Balanced-1, Balanced-2, and Balanced-3) show similar cluster centroids that differ only slightly from each other, so we collectively call them Balanced. This includes

652 respondents, or almost two-thirds of the entire sample (62.2%). However, the three additional clusters show different characteristics from each other and from the Balanced clusters. Among these, Forward lookings has the largest number of elements (n = 170). This cluster follows the modern HR paradigm and views crisis as an opportunity to achieve a better positions in the future (i.e. it develops even during a crisis). It is also important for the companies in this group to preserve human capital and the knowledge and experience accumulated in it.

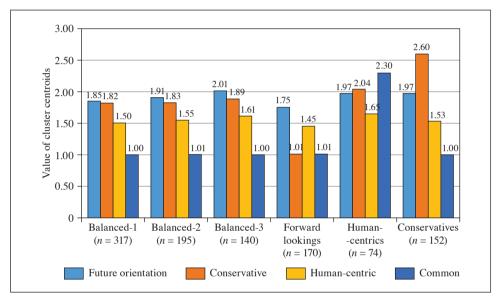


Fig. 3. HR Strategy Clusters of the Companies Participating in the Research Source: the authors.

Based on the number of items, the next group is the Conservatives (n = 152). When faced with crisis, it is typical of long-standing HR practitioners to react with restrictive measures, including staff reductions, wage freezes and cost minimisation to deal with the crisis. Distrustful of the new paradigm, they eschew modern measures – even as a test – along with other crisis management methods. Finally, the sixth cluster (Human-centric), which is the smallest in terms of number of elements (n = 74), includes companies that are specifically human-centric and, in addition, apply forward-looking and conservative solutions in a similar proportion to the other companies.

Since our entire sample includes respondents from seven countries, we examined how the companies in each country are organised into clusters, and present our results in table form. The four clusters that we found when examining the entire sample are distributed differently in across the countries. Table 11 shows the number of responding companies belonging to each cluster broken down by country.

	Clusters of HR Strategy (Number of Respondents)				
Country	Conservatives	Balanced	Forward lookings	Human- -centrics	Total
Austria	31	41	0	0	72
Bosnia and Hercegovina	25	13	0	0	38
Bulgaria	41	57	0	10	108
Czech Republic	6	5	0	0	11
Hungary	117	143	138	0	398
Romania	64	105	0	19	188
Slovakia	77	70	85	0	232
Total	361 (34%)	434 (41%)	223 (21%)	29 (3%)	1,047 (100%)

Source: the authors.

The order of the clusters in the table also indicates the correspondence to the degrees of a continuum leading from conservative to human-centric solutions. The number of respondents belonging to each grade clearly shows where the long-mentioned and established paradigm shift in the field of HR stands in practice today (Fig. 4).

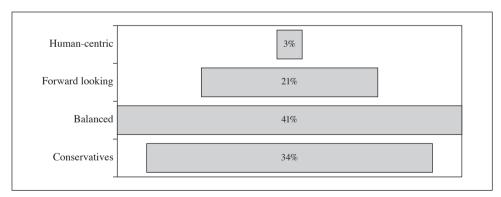


Fig. 4. The "Age Pyramid" of HR Strategies

Source: the authors.

We used the term "age pyramid" in Figure 4 because it visually resembles the age distribution graph (population pyramid or age structure diagramme) of popu-

lation statistics. It differs from the age pyramid only in that the diagramme in the article shows the older, traditional strategies in the lower part of the graph and the increasingly newer solutions above them.

Based on the "relatively old-age pyramid", the practical implementation of the HR paradigm shift has largely passed the initial phase and is currently in the balanced phase. However, even the proportion of non-variables is relatively significant. One fifth of the sample has already reached the point where they see and treat a crisis primarily as an opportunity. However, only 3% of the respondents carried out the paradigm shift in practice. All this clearly indicates that the process has started and is progressing. One of the biggest challenges for HR professionals is precisely this: in a crisis, to handle problems in such a way that, relying on methods that may not yet have been proven in practice, they find a mutually beneficial (win-win) solution for everyone involved.

5. Discussion and Conclusion

Ehnert introduced the concept of sustainable HR development back in 2014 (Ehnert, 2014). Two years earlier, she had stated that decisions and actions related to such development could no longer be postponed (Ehnert & Harry, 2012). This is important because the role of the human factor had long been neglected in HRM (Greenwood, 2013). According to our results, even today only 15% of the companies in the countries we examined use a human-centric HR approach. So, whether Ehnert's position has blossomed is questionable: ten years have already passed since she published her findings.

Back in 2001, Zaugg, Blum, and Thom (2001) concluded that future-oriented thinking is the cornerstone of sustainable HRM. In our sample, all of the job-saving measures were evaluated by the respondents as future-oriented, human-centric measures. However, according to the literature, not all methods are effective. For example, Mariappanadar and Kramar (2014) showed that teleworking and a shortened working week both have a negative effect on employees, including increased absences and sick leave. Flexible working hours and working from home had no such effect.

Although human-centric HR-policy emerged in earnest only about ten years ago, work-life balance has been discussed in the literature for at least twenty (Zaugg, Blum & Thom, 2001). Such balance factors in an employee's overall health, which in turn is the basis of performance expectations. Nissan (2017) addressed the issue well, suggesting that companies provide extensive employee support including a Work-Life Balance Park, home work programme, super-flextime work schedule and childcare bring provided within the company. In our sample too, the development of social, mental and family support played a major role among the human-centric measures companies had taken. To cite just one interesting finding

from our study: Bulgarian and Romanian companies use human-centric solutions more widely (Table 11).

In the case of Romania, this can be explained by the specific development dynamics of HR. At the beginning of the 2000s, HR was still somewhat widely dismissed by economists (Constantin, Pop & Stoica-Constantin, 2006). During the pandemic, however, its importance grew (Raducan, Cristache & Matis, 2020). Its rapid development was accompanied by the spread of a new paradigm, with consultancy and recruiting becoming widespread (Clutch, 2023). Of the two methods, training is more people-centric than talent acquisition, because it reduces employee turnover (Becker, 2011).

The history of HR development in Bulgaria was similar. Anastassova and Purcell (1995) also report that the legacy of communism and culturally fixed customs and practices are huge obstacles to change. According to Vatchkova (2000), strategic management practices that are common in much of Europe were met with resistance in Bulgaria. However, the pandemic induced rapid development there as well: Zaharieva and Sylqa (2020) have reported on the use of advanced employer turnover practices.

Roughly 30% of the companies we surveyed use future-oriented solutions to manage a crisis, but only less than 1% of the entire sample was included in the cluster of respondents who emphasised human-centric measures. Also, the proportion of the anti-discriminatory common human principles approach in the companies' crisis management packages was 0.5–1% (Fig. 2). However, according to Ehnert, Harry and Zink (2014), sustainable HRM requires not only the elimination of discrimination, but that the further step of encouraging diversity within the workforce be taken. Classic HR followed a "just in time" (Sugimori *et al.*, 1977) strategy to workforce management. A workforce with strong quantitative skills, self-discipline, and a multiskilled, group-oriented approach is necessary for the successful implementation of just-in-time (JIT) (Deshpande, Golhar & Stamm, 1994). The creation of such a workforce has received less attention in the JIT literature.

However, this path is no longer a solution to today's problems. A human-centric approach is based on fair treatment akin to that formulated by Järlström, Saru and Vanhala (2018), who maintained that "rules, responsibilities, and rights are intended to be the same for everyone throughout an organisation" (Järlström, Saru & Vanhala, 2018, p. 7). However, a diversified human resources policy – one that looks at employees differently and individually based on age, gender or ethnicity (Janssens & Zanoni, 2005) – is even more valuable than uniformity.

In summary, most of the companies that responded to our survey are aware of modern HR practices. However, putting principles into practice is a slow process. This is not an unexpected result. As in all sciences, a paradigm shift is a revolu-

tionary change in HR, so it comes as little surprise that practice lags behind theory. During the pandemic, government experts clearly saw this, and introduced a number of subsidies aimed at bolstering human resources. During our international research conducted during COVID-19, While we asked questions about HR practices for our study, the answers we received reflected on both HR practice and theory.

In this study, we have examined the extent to which the theoretical paradigm shift in human resource management, which has been occurring for more than a decade, is being realised in practice. Extending our research to seven countries in Central and Eastern Europe, we sought to create an international database that can serve as a basis for future research. We have shown that the effect of the HR paradigm shift is already demonstrable in practice. Although the attachment to the past is strong, forward-looking crisis management measures that replace previous restrictive solutions are becoming more and more widespread.

Authors' Contribution

The authors' individual contribution is as follows: Each contributed a third.

Conflict of Interest

The authors declare no conflict of interest.

References

Agarwal, P. (2021). Shattered but Smiling: Human Resource Management and the Wellbeing of Hotel Employees during COVID-19. *International Journal of Hospitality Management*, 93, Article 102765. https://doi.org/10.1016/j.ijhm.2020.102765

Anastassova, L., & Purcell, K. (1995). Human Resource Management in the Bulgarian Hotel Industry: From Command to Empowerment? *International Journal of Hospitality Management*, *14*(2), 171–185. https://doi.org/10.1016/0278-4319(95)00020-D

Balawi, A., & Wachira, E. W. (2021). HRM Practices on Foreign-owned Companies in Hungary. *Modern Management Review*, 26(4), 7–24. https://doi.org/10.7862/rz.2021.mmr.21

Becker, W. S. (2011). Are You Leading a Socially Responsible and Sustainable Human Resource Function? *People & Strategy*, *34*(1), 14–23. Retrieved from: https://www.academia.edu/1558480/Are_you_leading_a_socially_responsible_and_sustainable_human_resource_function (accessed: 3.12.2023).

Berke, S., & Kőműves, Z. (2016). Satisfaction, Motivation and Personality Types by Sales Leaders in SME Sector: A Pilot Study. In: A. Csata, E. B. Bíborka, G. Fejér-Király, O. György, J. Kassay, B. Nagy, L. J. Tánczos (Eds), *Challenges in the Carpathian Basin. Integration and modernization opportunities on the edges of Europe: 13th Annual International Conference on Economics and Business* (pp. 1–16). Kolozsvár, Románia: Risoprint 1.

Clutch. (2023). *Top HR Services in Romania – 2023 Reviews*. Retrieved from: https://clutch.co/ro/hr (accessed: 5.01.2024).

Constantin, T., Pop, D., & Stoica-Constantin, A. (2006). Romanian Managers and Human Resource Management. *Journal of Organizational Change Management*, 19(6), 760–765. https://doi.org/10.1108/09534810610708413

Cseh-Papp, I., Szabó, K., Schwarczová, L., & Hajós, L. (2017a). Očakávania a predstavy "z" generation of univerzitných studentoven od trhu práce. *Acta Oeconomica Universitatis Selve*, *6*(1), 23–38.

Cseh-Papp, I., Varga, E., Szabó, K., Szira, Z., & Hajós, L. (2017b). The Appearance of a New Generation on the Labor Market. *Annals of Faculty of Engineering Hunedoara: International Journal of Engineering*, 15(1), 123–130.

Derksen, M. (2014). Turning Men into Machines? Scientific Management, Industrial Psychology, and the "Human Factor". *Journal of the History of the Behavioral Sciences*, 50(2), 148–165. https://doi.org/10.1002/jhbs.21650

Deshpande, S. P., Golhar, D. Y., & Stamm, C. L. (1994). Human Resource Management in the Just-in-Time Environment. *Production Planning & Control*, *5*(4), 372–380. https://doi.org/10.1080/09537289408919508

Douglas, C. E., & Michael, F. A. (1991). On Distribution-free Multiple Comparisons in the One-way Analysis of Variance. *Communications in Statistics – Theory and Methods*, 20(1), 127–139. https://doi.org/10.1080/03610929108830487

Dunn, O. J. (1964). Multiple Comparisons Using Rank Sums. *Technometrics*, *6*(3), 241–252. https://doi.org/10.1080/00401706.1964.10490181

Economist. (2020). The Coronavirus Crisis Thrusts Corporate HR Chiefs into the Spotlight. *The Economist*. Retrieved from: https://www.economist.com/business/2020/03/24/the-coronavirus-crisis-thrusts-corporate-hr-chiefs-into-the-spotlight (accessed: 8.10.2023).

Ehnert, I. (2014). Paradox as a Lens for Theorizing Sustainable HRM: Mapping and Coping with Paradoxes and Tensions. In: I. Ehnert, W. Harry, K. J. Zink (Eds), *Sustainability and Human Resource Management* (pp. 247–271). Springer.

Ehnert, I., & Harry, W. (2012). Recent Developments and Future Prospects on Sustainable Human Resource Management: Introduction to the Special Issue. *Management Revue*, 23(3), 221–238. https://doi.org/10.5771/0935-9915-2012-3-221

Ehnert, I., Harry, W., & Zink, K. J. (Eds). (2014). Sustainability and Human Resource Management: Developing Sustainable Business Organizations. Springer.

Fayol, H. (1916). General and Industrial Management. Ravenio Books.

Fogel, R. W. (1994). Economic Growth, Population Theory, and Physiology: The Bearing of Long-term Processes on the Making of Economic Policy (NBER Working Paper No. 4638). National Bureau of Economic Research. https://doi.org/10.3386/w4638

Foulkes, K. F. (1975). The Expanding Role of the Personnel Function. *Harvard Business Review*, 53(2), 71–84.

Gigauri, I. (2020). Effects of COVID-19 on Human Resource Management from the Perspective of Digitalization and Work-life-balance. *International Journal of Innovative Technologies in Economy*, 4(31). https://doi.org/10.31435/rsglobal_ijite/30092020/7148

Gigauri, I. (2021). Organizational Support to HRM in Times of the COVID-19 Pandemic Crisis. *European Journal of Marketing and Economics*, 4(1), 16–30. https://doi.org/10.26417/492dnl43d

Greenwood, M. (2013). Ethical Analyses of HRM: A Review and Research Agenda. *Journal of Business Ethics*, 114(2), 355–366. https://doi.org/10.1007/s10551-012-1354-y

He, J., Mao, Y., Morrison, A. M., & Coca-Stefaniak, J. A. (2021). On Being Warm and Friendly: The Effect of Socially Responsible Human Resource Management on Employee Fears of the Threats of COVID-19. *International Journal of Contemporary Hospitality Management*, 33(1), 346–366. https://doi.org/10.1108/IJCHM-04-2020-0300

Hegedűs, H. (2012). Paradigmaváltás a humánerőforrás gazdálkodásban. In: J. Poór, M. Karoliny, C. Berde, S. Takács (Eds), *Átalakuló emberi erőforrás menedzsment* (pp. 418–429). Complex Kiadó.

Hegedűs, H. (2020). The Impact of Digital Transformation on the World of Work and on Human Resource Management. *Hadtudomány*, *30*, 146–153.

Ichsan, R. N., Khaeruman, Santosa, S., Shara, Y., & Liriwati, F. Y. (2020). Investigation of Strategic Human Resource Management Practices in Business after COVID-19 Disruption. *PalArch's Journal of Archaeology of Egypt/Egyptology*, *17*(7), 13098–13010. Retrieved from: https://archives.palarch.nl/index.php/jae/article/view/5059 (accessed: 27.11.2023).

Ivancevich, J. M., & Glueck, F. W. (1986). Foundations of Personnel/Human Resource Management. BPI Irwin.

Janssens, M., & Zanoni, P. (2005). Many Diversities for Many Services: Theorizing Diversity (Management) in Service Companies. *Human Relations*, *58*(3), 311–340. https://doi.org/10.1177/0018726705053424

Järlström, M., Saru, E., & Vanhala, S. (2018). Sustainable Human Resource Management with Salience of Stakeholders: A Top Management Perspective. *Journal of Business Ethics*, 152(3), 703–724. https://doi.org/10.1007/s10551-016-3310-8

Kőmüves, Z., Grotte, J., Hollósy-Vadász, G., & Jenei, S. (2021). A pandémia által teremtett szervezeti szintű lehetőségek észlelése különös tekintettel a hr vonatkozásában bekövetkezett változásokra. In: J. Poór, K. Dajnoki, Á. Jarjabka, G. S. B. Pató, S. Szabó, K. Szabó, A. Tóth (Eds), Koronavírus-válság kihívások és HR-válaszok első-második-harmadik hullám összehasonlítása (pp. 63–68). MATE.

Kőmüves, Z., Hopp, A., & Szabó-Szentgróti, G. (2022). Generációs különbségek és motiváció az élelmiszeriparban. *Studia Mundi – Economica*, 9(2), 37–48. http://doi.org/10.18531/Studia.Mundi.2022.09.02.37-48

Kőmüves, Z., Poór, J., & Karácsony, P. (2022). Vezetői motiváció a munkaerő-megtartás szolgálatában, különös tekintettel a dél-dunántúli régió kis és középvállalkozásaira. *Marketing és Menedzsment*, 56(2), 72–82. https://doi.org/10.15170/MM.2022.56.02.07

Kőmüves, Z., Szabó, S., Szabó-Szentgróti, G., & Hollósy, V. G. (2022) Munkaerő-gazdálkodási körkép a dél-dunántúli régióban a pandémia idején. *Modern Geográfia*, *17*(3), 13–27. https://doi.org/10.15170/MG.2022.17.03.02

Malatyinszki, S. (2009). A válság hatása az emberi erőforrásokra. *Körös Tanulmányok*, 12, 65–72.

Malatyinszki, S. (2015). A menedzsment és az értékek. *Tudásmenedzsment*, *16*(1), 51–55. Retrieved from: http://epa.oszk.hu/02700/02750/00037/pdf/EPA02750_tudasmenedzsment_2015_01_051-055.pdf (accessed: 4.04.2023).

Malatyinszki, S. (2020a). *A digitális oktatás megélése*. ResearchGate, 1–8. EFOP-3.4.4-16-2017-00001. https://doi.org/10.13140/RG.2.2.36400.38408

Malatyinszki, S. (2020b). Experiencing Digital Education by Educators and Parents. ResearchGate. Retrieved from: https://www.researchgate.net/publication/342378259_Experiencing_digital_education_by_educators_and_parents (accessed: 4.04.2023).

Mariappanadar, S., & Kramar, R. (2014). Sustainable HRM: The Synthesis Effect of High Performance Work Systems on Organisational Performance and Employee Harm. *Asia-Pacific Journal of Business Administration*, *6*(3), 206–224. https://doi.org/10.1108/APJBA-03-2014-0039

Mura, L., Barcziová, A., Bálintová, M., Jenei, S., Molnár, S., & Módosné Szalai, S. (2022a). Economic Measures to Recover the Area of Entrepreneurship: A Comparative Analysis Slovakia–Hungary. *Scientific Bulletin of Uzhhorod University*. *Series Economics*, 2(60), 15–26. https://doi.org/10.24144/2409-6857.2022.2(60).15-26

Mura, L., Barcziová, A., Bálintová, M., Jenei, S., Molnár, S., & Módosné Szalai, S. (2022b). The Effects of the COVID-19 Pandemic on Unemployment in Slovakia and Hungary. *Vadyba Journal of Management*, 38(1), 25–35. https://doi.org/10.38104/vadyba.2022.1.03

Mwita, K. (2020). Effects of Corona Virus Pandemic (COVID-19) on Selected Human Resource Management Practices in Tanzania. *East African Journal of Social and Applied Sciences*, 2(2), 252–259.

Ngoc Su, D., Luc Tra, D., Thi Huynh, H. M., Nguyen, H. H. T., & O'Mahony, B. (2021). Enhancing Resilience in the COVID-19 Crisis: Lessons from Human Resource Management Practices in Vietnam. *Current Issues in Tourism*, 24(22), 3189–3205. https://doi.org/10.1080/13683500.2020.1863930

Nissan. (2017). Sustainability Report 2017. Nissan Motor Company. Retrieved from: https://www.nissan-global.com/EN/DOCUMENT/PDF/SR/2017/SR17_E_All.pdf (accessed: 13.12.2023).

Nutsubidze, N., & Schmidt, D. A. (2021). Rethinking the Role of HRM during COVID-19 Pandemic Era: Case of Kuwait. *Review of Socio-Economic Perspectives*, 6(1), 1–12. https://doi.org/10.19275/RSEP103

Pató-Szűcs, B., Dajnoki, K., Kovács, K., Kőműves, Z. S., Grotte, J., Szabó, S., Kunos, I., Metszősy, G., Hegedűs, H., Karácsony, P., & Poór, J. (2021). HR's Response to the Challenges Caused by the Coronavirus Epidemic. *Budapest Management Review*, *52*(8–9), 2–17. https://doi.org/10.14267/VEZTUD.2021.09.01

Pató-Szűcs, B., Grotte, J., Poór, J., & Hollósy-Vadász, G. (2022). A COVID harmadik hullámára adott HR válaszok, különböző tulajdonosi háttér esetén. *Új Munkaügyi Szemle*, *3*(1), 15–26.

Raducan, M., Cristache, N., & Matis, C. (2020). The Role of Human Resource Management in Romanian Pre-university Education during the COVID-19 Pandemic. *Proceedings of the International Management Conference*, *14*(1), 881–886. Retrieved from: https://ideas.repec.org//a/rom/mancon/v14y2020i1p881-886.html (accessed: 15.11.2023).

Schultz, T. W. (1961). Investment in Human Capital. *The American Economic Review*, *51*(1), 1–17. Retrieved from: https://www.ssc.wisc.edu/~walker/wp/wp-content/uploads/2012/04/schultz61.pdf (accessed: 6.12.2023).

Sugimori, Y., Kusunoki, K., Cho, F., & Uchikawa, S. (1977). Toyota Production System and Kanban System Materialization of Just-in-Time and Respect-for-Human System. *International Journal of Production Research*, *15*(6), 553–564. https://doi.org/10.1080/00207547708943149

Szabó, K., Szabó-Szentgróti, G., Kőműves, Z. S., & Poór, J. (2021). Koronavírus-válság kihívások és HR válaszok – Magyarország – nemzetközi tapasztalatok 2020–2021. Wolters Kluwer.

Taylor, F. W. (1919). *The Principles of Scientific Management*. Harper & Brothers. Retrieved from: https://dspace.gipe.ac.in/xmlui/bitstream/handle/10973/41111/GIPE-191173.pdf? sequence=3 (accessed: 7.11.2023).

Ton, A. D., Hammerl, L., & Szabó-Szentgróti, G. (2023). Factors of Cross-functional Team Coopetition: A Systematic Literature Review. *Performance Improvement Quarterly*, *36*(1), 27–40. http://doi.org/10.56811/PIQ-21-0037

Torrington, D., & Hall, L. (1987). *Personnel Management: A New Approach*. Prentice-Hall. Retrieved from: https://books.google.hu/books/about/Personnel_Management.html?id=WmZoQgAACAAJ&redir_esc=y (accessed: 3.12.2023).

Torrington, D., Hall, L., Taylor, S., & Atkinson, C. (2014). *Human Resource Management*. Pearson Education Limited.

Ulrich, D. (2014). The Future Targets or Outcomes of HR Work. Individuals, Organizations and Leadership. *Human Resource Development International*, *17*(1), 1–9. http://doi.org/10.1080/13678868.2013.825144

Vatchkova, E. (2000). Human Resource Management in Bulgaria: Hot Problems during the Transition to a Market Economy. In: C. Brewster, W. Mayrhofer, M. Morley (Eds), *New Challenges for European Human Resource Management* (pp. 267–279). Macmillan Press Ltd. Retrieved from: http://ndl.ethernet.edu.et/bitstream/123456789/51266/1/50%202000. pdf#page=284 (accessed: 4.01.2024).

Walter, V. (2023). Külföldi munkaerő alkalmazása. In: J. Poór, G. Szabó-Szentgróti, G. Hollósy-Vadász, Z. Kőmüves (Eds), *Szakemberhiány, munkaerő-megtartás és robo-tizáció: Problémák és megoldások: Mezőgazdasági szervezetek* (pp. 30–35). Magyar Agrár- és Élettudományi Egyetem.

Zaharieva, G., & Sylqa, D. (2020). Personnel Turnover Management Practices in Bulgaria and Kosovo Enterprises. *Narodnostopanski archiv*, 2, 30–42. Retrieved from: https://www.ceeol.com/search/article-detail?id=959197 (accessed: 5.12.2023).

Zaugg, R., Blum, A., & Thom, N. (2001). Sustainability in Human Resource Management. Institute for Organisation and Human Resource Management, University of Bern, Swiss Federal Office of Personnel. Retrieved from: https://www.researchgate.net/profile/Norbert-Thom/publication/276906300_Sustainability_in_Human_Resource_Management/links/555b312b08ae6943a87945bd/Sustainability-in-Human-Resource-Management.pdf (accessed: 7.11.2023).