

JOB MISMATCH: THE PHENOMENON OF OVERSKILLED EMPLOYEES AS A RESULT OF POOR MANAGERIAL COMPETENCES*

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Abstract. Businesses in current era are challenged by many sustainability issues, where one extremely important is regarding labor market and HR transformation. In this article we have looked at the aspects of human capital which are necessary for long term sustainability, and that is the relation between the workplace design and the skills and abilities of the employees. The paper presents the views and opinions of various authors and the results of several research articles on skill and educational mismatch to highlight the importance of proper job design. The article also presents the results of own research of 200 Slovak companies focused on changes in HRM under the influence of ongoing changes. The main findings are the differences in skills and educational mismatch between countries, which have also been analyzed from the point of view of trust in management and quality of management as well as the involvement of line managers and HR departments in recruitment, selection and employee assessment processes. From the point of view of Slovak Republic, findings are presented which contradict the generally discussed topic of educational mismatch and point to the insufficient design of the workplaces and the related low utilization of the human capital potential in the country.

Keywords: skill mismatch; job design; human resources; education mismatch

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Introduction

The most significant trend of the last decades, as well as for the next decade, has been the digitization of the world of work as an essential accompaniment to the Fourth Industrial Revolution. In connection with the emergence of Industry 4.0, it is mainly expected to have a significant impact on human resources, changes in the requirements for their structure, development and efficient use (Nováková, R. et al. 2017a; Wojcak, E. et al. 2018; Stachová, K. et al. 2019). A significant impact on employment, education, development and requalification of workers is expected from the social point of view. Attention of strategic challenges in management and development of human capital (Oborilová, A. 2011), as well as organizations and countries, is drawn on trends in the development of new working skills developed in coordination with physical and information technology elements and analyzed in the light of the expected structural changes (automation) and the increase in basic of literacy requirements (Hecklaua, Galeitzkea, Flachsa, Kohlb 2016; Dušak, M. et al. 2017; Nováková, R. et al. 2017b). The development of human capital requires to be addressed in the context of the need to adapt to the challenges related to the development of Industry 4.0 and to develop the skills that reflect these demands across all generations active on the labor market. Slovakia can be ranked among the countries with the highest proportion of jobs at risk of automation (OECD 2018) as with the arrival of Industry 4.0, there are massive changes in the structure of jobs. Given that the forthcoming 4th industrial revolution is only at its initial stage, it is the direct responsibility of basic scientific research to evaluate ongoing changes, to highlight timeliness and possible impacts.

In this context, many researchers are focused on what may be the new HR approaches and trends that will create higher pressure on HR and broader scope of responsibilities (Plaskoff, 2017, Baran et al. 2018, Ulrich, 2016, KPMG 2018) in order to cope with Industry 4.0 changes. However HR and their role in organization has yet had different shapes and forms depending not only on individual company specifics or industries, but also country and culture related specifics. As Ulrich (2016) pointed out, the main purpose of HR is to deliver business value. The business value which is nowadays highly sought is talent (Allen, Ulrich 2013) through internal sources or on the labor market. Talented employee that fits the job design is today perceived as hard to find on the labor market, on the other hand the collocation of job mismatch is used more and more often when speaking about the actual and potential employees. Job mismatch on the labor market is although mostly seen in the association with country policies and interventions or interested organizations and parties (McGuinness et al. 2017), however we see a lack of insight of the role of HR practices and its development stage on this topic in academic research. As the literature is highly inclined towards the need of HR transformation with the respect to Industry 4.0 challenges, we aim to uncover the possible effects of HR involvement and role on job mismatch. The need to research this topic is highly driven by the increased perception of existing job mismatch in Europe, and its negative effects on the economy (Mavromaras et al. 2013, OECD 2015, Bennet and McGuinness 2019, European Commission 2017). In this article we focus on comparing a variety of researches on the topic of job mismatch, with the further analyzed example of Slovak Republic.

1. Literature review

Overeducation and overskilling

Many research articles as well as policy statements in recent times have been focused on overeducation and overskilling in the context of the situation on labor markets, pointing to the fact that labor force abilities and knowledge supply and employer's demand are not in balance. However, studies have shown each term refers to different phenomena. (McGuinness & Byrne, 2014; Mavromaras et al., 2010, Green & amp; Zhu, 2010). McGuiness defines overeducation as a condition of having a level of education higher than that required to adequately perform a specific job (McGuiness, 2006). Overeducation however does not have to directly take into account the level of individual skills of the employee, so the term overskilling speaks more directly about the abilities and skills of employees. O'Leary describes overskilling as a measure of under-use in the labor market, which is more representative and more robust then overeducation (O'Leary et al., 2009). The topic of intensity and

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adequacy of knowledge and skills of employees is currently in focus of many researchers as well as the companies themselves. Most often, situation such as overskilled or underskilled (undereducated) employee are of high interest. It should be pointed out that while being overskilled has more of negative impacts, according to Sequeda et al. being underskilled at the job entry could be seen as positive, from the point of view of utilization of further learning and education investments. It is indisputable that internal and external education systems and development programs are the key to solving the situation of having underskilled employees. Many researchers point out that employee education and employee knowledge are key to maintaining the competitiveness of the organization (Lorincová, Potkány, 2016; Hitka et al., 2018, Joniaková et al., 2017).

On the other hand negative effects of overeducation or overskilling may result in opposite situation, meaning decrease in individual and organizational performance which can lead to endangering future competitive positions. From the point of view of individual employee Dolton and Vignoles point out negative effects associated with lower wage compared to other employees with the same qualification who are matched at their job (Dolton, Vignoles, 2000). Other authors complement these effects with lower job satisfaction, lower productivity, higher stress at job, lower creativity and so on (Korpi, Tåhlin, 2009, Montt, 2017).

According to several authors, employees who posses wide range or specific skills and/or are well educated for their work position are more likely to feel engaged and satisfied at the job when challenged at work, having resourceful environment, being recognized for achievements and encouraged to use fully their knowledge and skills (Rich et al., 2010, Xanthopoulou et al., 2009, Kampf et al., 2017, Hitka et al. 2015). In the context of the range of tasks that employees perform, Layear and Gibbs discuss the effect of narrowly defined jobs on the person-job fit. In centralized organizations with functional organization structures based on units and subunits the job designed tend to be more narrow, closely related to knowledge and skills needed only for specific subunit and thus are more suitable for narrowly skilled employees (Lazear and Gibbs, 2009). On the other hand many innovative and high performing organization show that decentralized decision-making leads to increase in employee performance (Rajan and Wulf, 2006). These corresponds with the process management approach, which keeps the focus on processes, not on individual activities. The main principle of organization on a process management approach is not based upon the principle of labor division, but on the principle of integration of activities into integrated processes. (Oborilová, 2013) The process model is based on a relatively large organizational structure that allows the operational teams to be defined. In a process-oriented organizational structure, process teams with considerable autonomy work on the basis of the enterprise's business principle. (Papulová, Gažová, 2015)

Various imbalances in work environment whether it is the shortage of skills or overskilling is referred to as skills mismatch. Skill mismatch occurs when the supply and demand of skills do not fit each other in any direction (Cappelli, 2015). Current research state in the topic of employee mismatch shows, that most surveys focus on skill gaps and individual characteristics, training practices or recruitment practices (e.g. continuing vocational training survey, CVTS; UK employer skill survey; European company survey, ECS), however the role of management and managerial skills and its effect has not had enough attention in the research.

Several authors highlight the importance of organizational part in employee mismatch and the deficiency in knowledge given the personnel policies and their impact on employee mismatch and skill utilization (Cedefop, 2012; Oyer and Schaefer, 2011, Jankelová et al., 2017). Perceived overskilling or overqualification of an employee may not rise only from wrong selection of the employee. Another point of view on overskilled and overqualified employees rises from the opportunities and positive effects of surplus knowledge and skills of the employee. These however must be utilized in order to provide the company additional benefits. This concerns the job design perspective, while some authors state that the emergent issue of overqualification is clearly the result of poor or inadequate job design (Fine and Nevo, 2011, Erdogan et al. 2011).

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Job design and skill utilization

Many authors based on their research have clearly stated that person-job fit plays a critical role in organizational effectiveness because the fit increases employee's satisfaction which lead to higher commitment to the organization. (Hambleton et al., 2000, Lauver and Kristof-Brown, 2001, Hackman, Oldham 1975). These characteristic also imply the outcome of higher employee engagement in the organization.

Job design can be understood as a human resource management tool that describes the content on person's work tasks, activities, responsibilities and their organization in the context of achieving expected individual, group and organizational outcomes (Grant & Parker, 2009, Durai, 2010). According to Tims and Bakker the traditional approach to job design was up-bottom based on managerial responsibility to design employee jobs (Tims and Bakker, 2010). This approach has been confronted with current specifics of work and organizational environment, which are specific with the context of high intensity and dynamism of changes as in the external environment of the organization, also in the internal environment, meaning job requirements or task intensity and complexity.

Some authors discuss the extend of employees involvement in their job design, arguing that their proactivity in so called job crafting may result in beneficial cooperation with management in order to provide the employee a satisfactory job, tasks and responsibilities (Fuller, Marler and Hester, 2006; Tims and Bakker, 2010; Parker & Collins, 2010; Poór et al. 2018) This cooperation leads to matching the needs and abilities (skills) with the opportunities and demands from the company environment. In the context of satisfactory utilization of employee skills is often spoken its impact on employee creativity (Lin and Liu 2012; Zhou and Hoever 2014; Coelho and Augusto, 2010).

The need for a more free and open organization, where employees are given room for self-realization, cooperation and the application of entrepreneurial practices within the organization, is emphasized in the approach referred to as intrapreneurship. Several empirical studies show the important role of intrapreneurship for organizations. (Kubišová, M., Holienka, M. 2016)

Intrapreneurial climate helps to create a workforce that can maintain its competitiveness and promote a culture conducive to high achievement. It brings a lot of advantages to employees as well, mainly independence and flexibility (Zeldes, 2013). Stopford and Baden Fuller (Stopford, 1994) emphasize five characteristics of intrapreneurial environment, namely proactiveness, learning ability, team orientation, learning capability and willingness to improve. What is more, intrapreneurial organizations promote teamwork of various specialists and support competitive rivalry (Holienka, Kubišová, 2014). Holienka and Kubišová highlight, that building the intrapreneurial environment can be very challenging especially for larger companies.

According to results of study by Tims et al., the predefined tasks in job definition do not leave the room for employees to best fit their characteristics to the job. Instead of designed jobs for employees, the authors argue, employees should also search for opportunities how to use their own abilities and skills in the best possible way (Tims et al., 2015).

Following the literature gap in the interconnections between perceived overeducation or overskilling in the context of HR, and the current state of knowledge, the findings of our article call for intensifying and extending this researched area.

2. Research methods

The aim of this article is to analyze the possible impact of HR management and its practices on job mismatch based on extensive research of secondary data analyzing mismatch specifics for European countries. Based on the analysis we present the relations between mismatch and quality and reliability of managerial work and competencies. Within secondary data we collected and analyzed results from several studies and surveys from OECD data, PIAAC (The Programme for the International Assessment of Adult Competencies survey),

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International Executive survey, Global Competitiveness report and European Company Survey. These surveys present wide country range results which provides us possibilities to understand the effects and relations in the topic of mismatch on cross-country level. This allows us to detect dependencies that may affect the reason for the issue of job mismatch in general, thus the results of our study may be beneficial for all countries within this context.

The research was complemented with our own primary research that is in line with world and European studies and further specifies the current issues of employees in the question of employment and job changes. Own research data were collected in 2018 as a part of a research project. Research tool used was a questionnaire which was directly distributed to HR managers of companies in Slovakia. Research sample consists of 217 questionnairs distributed to Slovak companies of which 200 where complete. From the research sample 116 companies represented industry sectors, 58 sectors of services and 26 from other sectors. The research sample was also categorized based on company maturity, while for the purpose of our research we compared group of 58 starting and growing companies and 142 mature companies. The sample group consisted of 74 SMEs and 126 large companies.

The main research question was focused on the reasons for changes in job positions, being "What in your company affects the most the changes in job positions (changes in work content)". Respondents could choose from following options, while they could select all fitting answers (YES/NO):

- Change of strategic priorities / objectives;
- Growth of the organization;
- Change in processes / business activities;
- Change in business model of the company;
- Automatization/digitalization;
- Change in the quality or structure of school graduate profiles;
- Problems filling specific expert positions;
- Change in laws or business environment;
- Nothing.

For the statistical evaluation of research results on the sample of 200 Slovak companies we used Chi squared test of independence to determine the significance of differences among sample groups (sector, maturity, size of company). We further calculated Phi coefficient to present the extent of relation between examined variables. The statistical significance was set at level p<0.05. Both statistical tests are suitable for analysis of qualitative data in our research. Fort the research purposes we chose to analyse Slovak companies, while Slovakia ranks among countries with the lowest level of retaining and attracting talented employees while ranks highly in perceived overeducation. Throught the complementary analysis we aim to identify whether the attitude towards job design is uniform or the differences occur at different business categories.

3. Research results

In the Science and Policy Report of European Commission focused on occupational mismatch in Europe, the authors presented PIAAC dataset (collected by OECD) analysis based on computing 21 mismatch measures or indicators. Based on the variables the type of mismatch was divided into educational mismatch and skill mismatch. Educational mismatch variables were focused on the education level of individual while skill mismatch variables focused on the levels of numeracy and literacy and their utilization. The survey assessed working age adults (16-65) in 24 countries, excluding students or in internship adults, with the final sample size around 55,000 respondents. (Filsi, et al. 2014). The figure 1 presents percentage of matched individuals, skill mismatch and educational mismatch in 17 EU countries.

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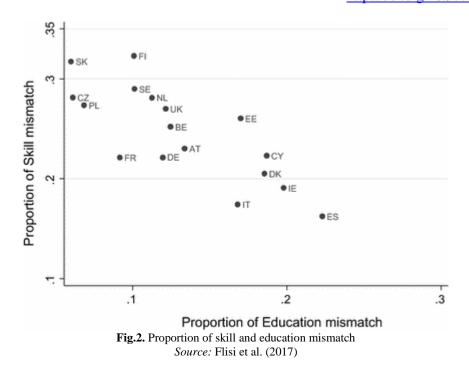
| Country | Matched | Severely mismatched | skill mismatch Over skilled | education mismatch Over educated | Mixed |
|-------------------|---------|---------------------|--------------------------------|-------------------------------------|-------|
| Austria | 0.383 | 0.079 | 0.184 | 0.287 | 0.067 |
| Belgium | 0.324 | 0.080 | 0.207 | 0.307 | 0.082 |
| Cyprus | 0.398 | 0.094 | 0.176 | 0.280 | 0.051 |
| Czech Republic | 0.396 | 0.075 | 0.193 | 0.253 | 0.083 |
| Denmark | 0.326 | 0.097 | 0.180 | 0.313 | 0.084 |
| Estonia | 0.302 | 0.098 | 0.165 | 0.349 | 0.087 |
| Finland | 0.362 | 0.088 | 0.251 | 0.210 | 0.089 |
| France | 0.296 | 0.062 | 0.129 | 0.431 | 0.083 |
| Germany | 0.394 | 0.079 | 0.155 | 0.293 | 0.079 |
| Ireland | 0.326 | 0.099 | 0.129 | 0.379 | 0.067 |
| Italy | 0.501 | 0.034 | 0.116 | 0.319 | 0.030 |
| Netherlands | 0.380 | 0.076 | 0.249 | 0.223 | 0.073 |
| Poland | 0.447 | 0.050 | 0.169 | 0.276 | 0.058 |
| Slovak Republic | 0.393 | 0.064 | 0.247 | 0.222 | 0.075 |
| Spain | 0.349 | 0.076 | 0.102 | 0.416 | 0.057 |
| Sweden | 0.374 | 0.096 | 0.217 | 0.227 | 0.085 |
| United Kingdom | 0.324 | 0.080 | 0.164 | 0.345 | 0.088 |
| EU17 (unweighted) | 0.369 | 0.078 | 0.178 | 0.301 | 0.072 |

Fig. 1. Percentage of individuals in different typologies of job mismatch Source: Flisi et al. (2014)

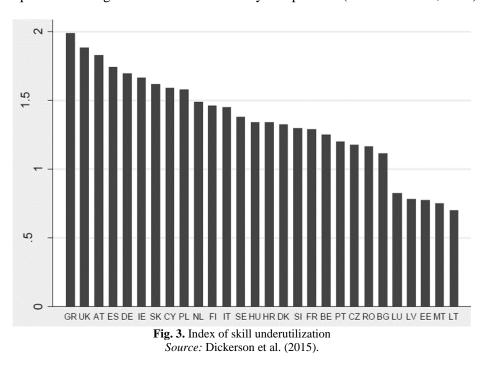
In the figure 1 we have observed several important results. The countries surveyed may be divided into two groups. First group achieves higher percentage of overskilled compared to overeducated. In this group Finland (25.1 per cent), Netherlands (24.9 per cent) and Slovak Republic (24.7 per cent) have the highest percentage of overskilled individuals compared to other countries. The second group consists of countries where there is more overeducated individuals then overskilled. In this group the highest percentage of overeducated can be observed in France (43.1 per cent), Spain (41.6 per cent) followed by Ireland (37.9 per cent) and Estonia or United Kingdom. Interestingly when the country achieved high percentage in one type of mismatch it has achieved a low percentage in the other. When we look at Slovak Republic, Finland or Netherlands they all have the lowest percentage in education mismatch. The same pattern can be observed in France, Spain or Ireland where they achieve the lowest percentage in skill mismatch.

Figure 2 presents the position of countries based on the proportion of skill mismatch and education mismatch. Similarities can be observed in a group of Slovak, Czech and Polish respondents, where they all have much higher proportion of overskilled individuals then overeducated. Contrast may by Spain, Ireland or Italy which have the lowest proportion of skill mismatch compared to education mismatch.

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Similarly to the question of skill mismatch we looked at the results of study by Dickerson et al. based on the dataset of European Skills and Jobs Survey (ESJS) carried out by Cedefop (2012). Based on the data, authors have developed an index of skill underutilization which ranges from 0 to 5 (5 meaning skills are a lot higher than required). Figure 3 presents average indexes in cross country comparison. (Dickerson et al, 2015)

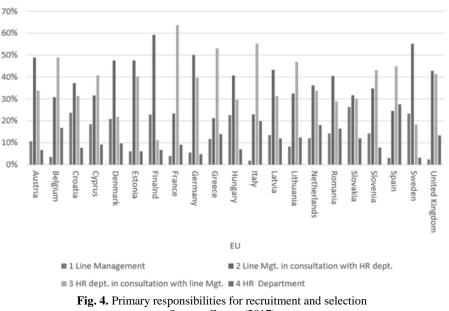


Compared to previous results presented in Figure 1, we may observe some disparities in the context of skill mismatch. These disparities may be a result of different survey question, whilst in the analysis by Flisi et al. the

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final percentages where computed by adding several indexes (in skill mismatch mainly focused on literacy and numeracy), in Dickerson et al. study where used specific question of perceiving skill utilization of an individual at the job, based on the main question ""Overall, how would you best describe your skills in relation to what is required to do your job?" However when we look at results of Finland, Netherlands and Slovak Republic (achieving highest percentages in skill mismatch in Figure 1), we can see that also in the study of Dickerson et al. they rate above average index, Slovak Republic ranking as seventh highest skill underutilization. In this study rank very high United Kingdom, Spain or Ireland which have high percentage of overeducation, thus individuals from these countries may also perceive that their skills are not adequately utilized.

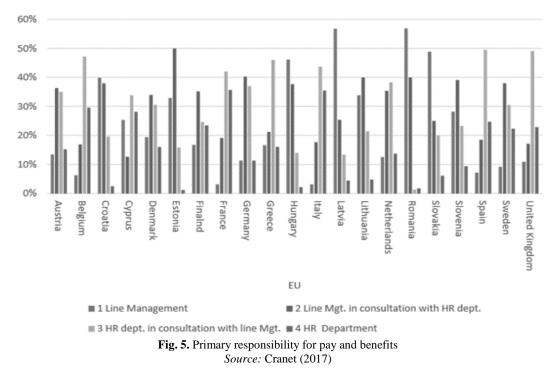
Based on the literature review we further focused on examining management role within the complex question of job mismatch and the possible connections. Using results of Cranfield Network on International Strategic Human Resource Management (Cranet) we looked at the results of study presented in International Executive Report 2017. The survey was conducted in 2014/2015 on 35 countries and more than 6000 respondents (mostly HR managers). The survey was focused on analyzing HR practices and activities. Figure 4 presents the differences among countries surveyed in the question of responsibilities of management in recruitment and selection.



Source: Cranet (2017)

These results show interesting differences between countries, especially in comparison of the role of line management versus HR management. While line management alone has the primary responsibility for recruitment and selection mostly in Slovak republic, Croatia, Sweden, Finland or Hungary it has the lowest in United Kingdom, Spain, Italy or France. On the other hand HR department is most responsible for recruitment and selection in Spain, Italy, Netherlands, and Belgium. In developed and high performing, strongly innovative countries (based on Innovation Scoreboard) the most often possibility was line management in consultation with HR department. This was however not very often in countries like Spain, Greece, Italy, France or even Slovak Republic. Further in Figure 5 we looked at primary responsibility for pay and benefits and the differences among countries.

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The highest contrast can be observed also in the option of line management having the primary responsibility for pay and benefits. It is most common in Romania, Latvia, Slovak Republic and Hungary. Solely HR department is responsible for pay and benefits mainly in Italy, France, Belgium or Cyprus. Yet in high performing, innovative countries such Germany, Austria, Sweden, Netherlands, Denmark or Finland it leans more towards the combination of both managements.

From the comparison of mismatch either skill or educational we can see that most countries that are on the edge with responsibilities of solely HR or solely Line management tend to have on or other extreme very high – skill or education mismatch in mismatch reports.

Further we looked at result of The Global Competitiveness Report 2016-2017 published by World Economic Forum. We looked at selected indicator of "Reliance on professional management" where respondents answered to the question "In your country, who holds senior management positions in companies? [1 = usually relatives or friends without regard to merit; 7 = mostly professional managers chosen for merit and qualifications] (The Global Competitiveness Report 2016-2017). Results of selected countries are presented in Table 1.

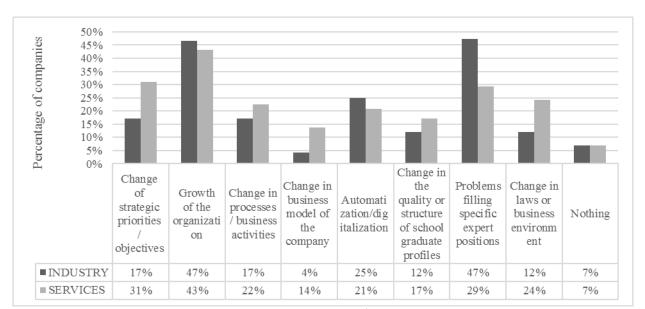
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| | value | rank/138 |
|-----------------|-------|----------|
| Finland | 6.3 | 1 |
| Sweden | 6.3 | 2 |
| Netherlands | 6.2 | 6 |
| Ireland | 6.2 | 7 |
| Switzerland | 6.1 | 8 |
| Germany | 5.7 | 15 |
| Austria | 5.5 | 23 |
| France | 5.5 | 22 |
| Estonia | 5.3 | 27 |
| Czech republic | 5.3 | 29 |
| Spain | 4.7 | 37 |
| Slovak Republic | 4.5 | 52 |
| Poland | 4.3 | 64 |
| Italy | 3.7 | 102 |
| Hungary | 3.6 | 108 |

Tab. 1. Reliance on professional management according to Global Competitiveness Report

Source: The Global Competitiveness Report 2016-2017

While this question is focused on senior management solely it may give us a glance at the situation in selected countries. While the trust in quality of management is very high in innovative countries (ranked as innovation leaders and strong innovators in European Innovation scoreboard), it is much worse in countries like Spain, Slovak Republic, Poland, Italy or Hungary (which rank as moderate innovators). In the context of our article, the quality of management based on true capabilities and qualification may strongly impact the way employee skills are utilized as well as the percentage of job-person fit. If in these countries managers tend to have these positions regardless to merit it may have large effects on the quality of their decision making in the context of business prosperity and long term sustainability. To complement the understanding why managers decide to change job positions we looked at the sample of 200 Slovak companies. Table 2 shows the distribution of answers of companies among industry sectors and sectors of services.



Tab. 2. Percentage comparison of companies from industry and services in reasons for change in job positions

Source: own processing

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As a main reasons that affect changes in job positions see most Slovak companies the growth of the organization, where there is not seen a large difference between industry and services. For industry however is important factor at the same level "Problems filling specific expert positions" which is observably more than among services. For services it was in case of more 31 per cent the change of strategic priorities/objectives followed by problems filling specific expert position and changes in laws or business environment. The least companies saw change in business model or change in the quality or structure of school graduate profiles as the reason for job position changes. Following table 3 presents statistical results of analyzing differences between industry and services.

| | Industry | Services | Chi square | p value | Phi coefficient |
|--|----------|----------|---------------|---------|--------------------|
| Change of strategic priorities / objectives | 17% | 31% | 4.31 | 0.04* | +0.16 |
| Growth of the organization | 47% | 43% | 0.19 | 0.66 | -0.03 |
| Change in processes / business activities | 17% | 22% | 0.67 | 0.41 | +0.06 |
| Change in business model of the company | 4% | 14% | 5.03 | 0.03* | +0.17 |
| Automatization/digitalization | 25% | 21% | 0.4 | 0.53 | -0.05 |
| Change in the quality or structure of school graduate profiles | 12% | 17% | 0.87 | 0.35 | +0.07 |
| Problems filling specific expert positions | 47% | 29% | 5.22 | 0.02* | -0.17 |
| Change in laws or business environment | 12% | 24% | 4.17 | 0.04* | +0.15 |
| Nothing | 7% | 7% | 0 | 1 | 0 |

Tab. 3. Statistical results of comparison between industry and services

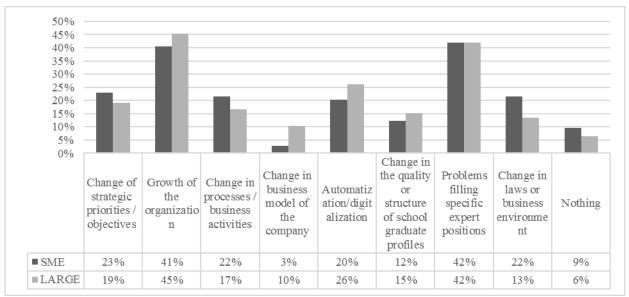
Source: own processing

Significant differences were observed only in four options. Companies in the sectors of services see a reason of change in strategic priorities/objectives significantly more for change in job positions than companies in industries, as well as change in business model and change in laws or business environment. On the other hand companies in industry see significantly more the problems in filling specific expert positions as a reason for change in job positions than companies in services with the difference being 18 per cent.

To see if the differences occur also on the basis of the firm size we have compared SMEs and large companies as well, presented in Table 4. Significant difference was found in the question of change in business model, where large companies see this as a reason for changes in job positions significantly more than SMEs (chi-square statistic is 3.8966 with p-value 0.048385). Interestingly, while problems in filling specific expert positions are often a reason for change in job positions there is no difference between SMEs and large companies.

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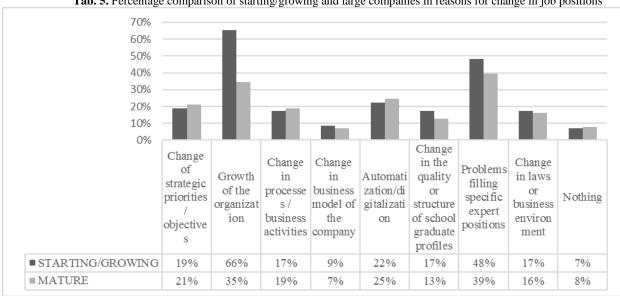
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Tab. 4. Percentage comparison of SMEs and large companies in reasons for change in job positions

Source: own processing

When looking at behavior on the basis maturity level of companies statistically significant difference (Chi square 16.11, p value <0.0001, Phi 0.28) was found only in option growth of organization as the reason for changes in job positions, where starting/growing companies perceive this by 29 per cent more than mature companies. Percentage comparison are presented in table 5.



Tab. 5. Percentage comparison of starting/growing and large companies in reasons for change in job positions

Source: own processing

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Discussion

Presented results of educational and skill mismatch as well as the role of line and HR management and reliance on management quality show several differences between countries. It must be taken into account, that there is not only one factor that influences the state of mismatch and each country specifics may result in higher differentiation of these factors among countries. We have focused our attention on the role of management and its possible influence on the phenomenon of skill or educational mismatch. We have observed that countries like Slovak Republic, Finland, Netherlands or Sweden have similarly higher percentage of overskilled individuals rather than overeducated. Finland and Slovakia are similarly sized countries based on population, with Sweden and Netherlands having higher population but still being middle sized. On contrary countries which have larger proportion of overeducated individuals are mostly very large (by number of inhabitants) such France, Italy, Spain or United Kingdom. The similarity between France, Italy and Spain may be seen in the lower proactivity and very high youth unemployment rates that can affect the perceived phenomenon of over education.

While Slovak Republic seem to be similar to Finland, Sweden or Netherland in mismatch statistics it is markedly lagging in the innovation performance of the economy. Finland, Sweden and Netherlands, all having more overskilled individuals are the Europe's strongest innovators, but Slovakia ranks very much behind. According to macroeconomic indicators, Slovakia has been one of the fastest growing economies in recent 15 years, yet it has not moved in the innovation performance compared to other countries. With these information and high percentage of overskilled individuals the role of management and their capabilities must be questioned. Our assumptions are supported by the intensity of involvement of HR managers into development of business strategy presented in Figure 6 as well as the approach to decision-making on daily tasks presented in Figure 7.

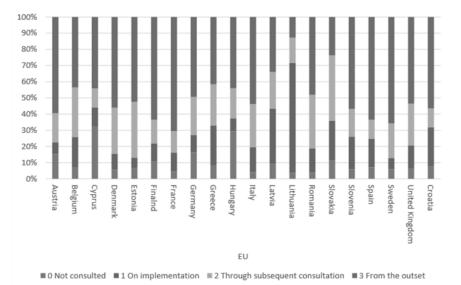
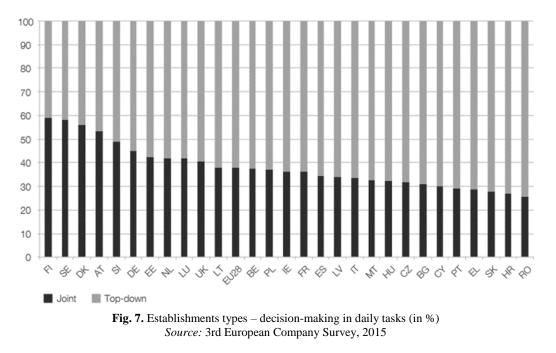


Fig. 6. Stage at which the person responsible for personnel/HR is involved in development of business strategy Source: Cranet (2017)

These studies clearly present that while in Finland or Sweden HR is involved to development of business strategy from the outset in more than 60 per cent of companies, in Slovakia in less than 25 per cent. Similarly joint decision-making in daily tasks is most often in Finland, Sweden or Denmark (most innovative countries) but it is almost the least in Slovak Republic. For Romania, Croatia and Slovak Republic is top-down the most common way of decision-making in daily tasks.

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Slovak economy is specific with the large number of foreign investors than enhance the economy. In the expansion of activities of companies and foreign investors and in the development of the companies that come to Slovakia, the top-down approach and the involvement of only the line managers lead to skills mismatch. Despite that we have been among the fastest growing economies in the last 15 years, we are not lining up in innovation. Employees recruited do not fit their jobs perfectly and cannot fully use their potential. The creation of a business strategy does not take into account HR which results in the fact that potential of the human capital is not used from the beginning.

The fact that the problem is not in the education is also confirmed by the state, where Slovak Republic attracted many foreign companies and also dramatically decreased its unemployment from more than 18 per cent in 2004 to 6.6 per cent in 8/2018. Weststar (Weststar, 2009) confirms our premise and suggests that attention should be shifted away from education reform towards considering the impact of workplace or job design. Similarly according to OECD study outcomes "a competitive and open business environment that favors the adoption of superior managerial practices is associated with lower skill mismatch"(McGowan and Andrews, 2015). The importance of skill utilization is not only from the point of view of general economic and innovation performance. Appropriate skill utilization is a motivating factor for an individual and perfect job match leads to increase in one's creative, satisfaction as well as performance. Thus work that is experienced as motivating and meaningful by employees is found to also contribute to the organization's core (Steger, Dik, & Duffy, 2012).

Based on study by Qunitiny, no significant relationship between skill mismatch and firm size was found which is in line with findings of our research, where no significant difference was found in the question of problems in finding specialists and experts for work position between SMEs and large companies. Quintini further suggests that better human resource policies at large firms can make it possible to transfer their workers to better matches inside the firm, lowering mismatch (Quintini, 2011).

It is especially important for foreign investors to question the traditional job design characteristic. While Slovak employees are often underutilized it is up to the employers to review their current processes coming from top management to HR and create an organizational structure and culture that allows individuals to co-create their jobs and fully utilize their skills. This is especially important because of the fact that Slovak Republic performs extremely low in the ability to either attract or retain talent, as presented in Table 6. This means that not only is

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Slovak Republic not able to attract skilled and talented workforce from foreign countries, Slovak companies are not even able to retain the talented, which results in migration of talent to foreign countries.

| | Country capacity to retain talent | | Country capacity to attract talent | |
|-----------------|-----------------------------------|----------|------------------------------------|----------|
| | value | rank/138 | value | rank/138 |
| Switzerland | 6.1 | 1 | 6.3 | 1 |
| Germany | 4.8 | 17 | 16 | 4.7 |
| Austria | 4.6 | 24 | 4.0 | 34 |
| Czech republic | 3.6 | 59 | 3.3 | 70 |
| Slovak Republic | 2.6 | 123 | 2.0 | 132 |

 Tab. 6. Country comparison in capacity to retain and attract talent

Source: The Global Competitiveness Report 2016-2017

The cheap labor force and the low level of higher education of the population in the past could still have an impact on the attitude towards Slovak employees. This approach is though highly outdated and may result in increase in gap between high performing economies and Slovak Republic especially in the era of dynamic changes in environment due to impact of Fourth Industrial Revolution. Workplaces should be reformed in order to create better job-person match and provide employees with adequate levels of autonomy, control and responsibility on individual as well as team level. To gain the sustainability of skill utilization it must go hand in hand with education as on the country level as on company level in form of lifelong learning. Importance of education to create individuals with expert skills is supported by our findings where more than 40 per cent of Slovak companies find difficulties to fill specific expert positions.

Conclusion

The problem of job mismatch is the result of poor adaptability of companies to long-term changes and transformations in their economies. Choosing and recruiting staff to fill specific positions has historically accelerated the involvement of line managers in these processes, which based on our findings led to generate skill mismatch. Line managers tend to search candidates for a job based on education, previous experiences, and practical skills, while modern human resource management trends emphasize the importance of transferable capabilities that the modern education system also focuses on. This is also evidenced by the results of our research, which point to this problem mainly from the point of view of the industry for which the occupation of niche positions is specific. In the job positions of services that are more widely described and with the broader range of usability capabilities, the problem is not so big. Education mismatch occurs in countries where was an increase in educational level of population or high unemployment, which did not force companies to adapt to changes. In reflection to ongoing transformation of business environment driven by disruptive changes, this topic calls to follow examples, where countries have already successfully implemented changes in internal HRM processes.

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