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STUDY OF LABOR MARKET DEMAND AT THE END OF THE COVID-19 FIFTH WAVE IN GYŐR-MOSON-SOPRON COUNTY OF HUNGARY

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ABSTRACT

The labor market has been struggling with excess demand for several years – in part due to the "one million new jobs" program announced in 2011. Although the labor market is growing strongly, it suffers from structural problems. There are more than ten thousand job advertisements on Hungarian job portals, although in March 2022, coinciding with the curfew, a significant part of companies decided to stop their recruitment procedures or reduce the number of vacancies. And 44% of them also reduced the number of their employees. In the waning phase of the fifth wave of the pandemic, we conducted an exploratory study on the most popular job portal about what kind of job ads job seekers can find today. In our study, we present the research results and trends of job ads in Győr-Moson-Sopron County. We highlight the most important general aspects and show how the company can be made more attractive for job seekers.

Keywords: labor market, demand, fifth wave of COVID-19, Hungary, job portal

ABSZTRAKT

A munkaerőpiac több éve küzd a túlkereslettel – részben a 2011-ben meghirdetett „egymillió új munkahely” programnak köszönhetően. A munkaerőpiac bár erősen növekszik, strukturális problémákkal küzd. Több mint tízezer álláshirdetés található a magyar állásportálokon, holott 2022 márciusában, a kijárási tilalmmal egy időben a cégek jelentős része úgy döntött, hogy leállítja toborzási eljárásait, vagy csökkenti a betöltetlen állások számát. 44%-uk pedig létszámát is csökkentette. A világjárvány ötödik hullámának enyhülő szakaszában a legnépszerűbb állásportálon feltáró vizsgálatot végeztünk arról, hogy ma milyen álláshirdetéseket találhatnak az álláskeresők. Tanulmányunkban a Győr-Moson-Sopron megyei álláshirdetések kutatási eredményeit és trendjeit mutatjuk be. Kiemeljük a legfontosabb általános szempontokat, és bemutatjuk, hogyan tehető a cég vonzóbbá az álláskereső számára.

Kulcsszavak: munkerőpiac, kereslet, COVID-19 ötödik hulláma, Magyarország, állásportálok

1. Introduction

Before COVID-19, both global and local labor markets were undergoing major transformations, such as automation and technological changes, globalization, demographic changes. All of these have transformed the geography of jobs, the local skills in demand, and the size and composition of the local workforce.

COVID-19 has reshaped the way of thinking about the future of work, the way of looking at it, and the alternative measures. Governments at all levels must step up and adjust their responses accordingly. The COVID-19 pandemic has slowed down social and economic processes and activities, including the labor market. The previously considered innovations had to be repositioned (Kurucz – Kovács, 2019). The classic efficiency improvement methods could have been good choice of reengineering the operations, but we used to recognized different impacts (Kurucz – Tüttö, 2019). It also negatively affected employment and the unemployed. Because, in the case of the latter, their availability or job search opportunities have decreased, thereby partially or completely ousting them from the labor market.

The consequences affect all areas of society and the economy. In what follows, we focus on the main characteristics that can be observed on the labor market within the economy. Highlighting changes in the geography of jobs, skills in demand and the size and composition of the local workforce.

Győr-Moson-Sopron County is an administrative county in north-western Hungary with total area of 4208km² and total population of 450 000. It is bordered by Slovakia, Austria and the counties of Komárom-Esztergom, Vas and Veszprém (RDV EGTC, 2022, Britannica, 2022). The two most important micro-regions are the Győr-Sopron and Győr-Hegyeshalom line, creating a vibrant economic environment. The industry plays a key role (e.g. vehicle manufacturing, metal processing, production of electronic equipments, chemical industry). There are many of large and dominant companies (e.g. Audi Hungária, Bos Automotive Products, SMR Automotive Mirror Technology Hungary, Rába Futómű, Heineken Hungária, E.O.N. North Transdanubia Electricity Service Ltd., Coca-Cola HBC Hungary, Győri Keksz). In addition to industry, tourism and gastronomic with wine culture is also important (RDV EGTC, 2022).

The reasons for choosing this county include, in addition to the primary territorial delimitation of our daily professional activities and the accessibility of companies, the easier exploitation of research results, and more efficient and effective monitoring of changes and developments. Based on one of Hungary's most popular job portals, we analyzed the job advertisements of Győr-Moson-Sopron County for June 7-11, 2022. We examined the 230 job advertisements in the sample in the light of competencies.

2. Research methodology

In our primary research, we looked for the answer to the question of how companies deal with the current labor shortage, what do they offer potential applicants in their job advertisements? Do those competency groups that become more important for companies during the pandemic period appear in the job advertisement? Or do companies keep posting the same old job ads that are already in the account over and over again?

In order to answer these questions, we examined one of Hungary's most popular job portals, which even today has more than 17,000 job offers. In our sample, in the county of Győr-Moson-Sopron, approx. out of 900 job advertisements, we examined those that were published or updated between June 7-11, 2022. During this period, 262 job advertisements were posted or updated on the site, of which we finally examined 230 job advertisements in our sample. There were two reasons for the exclusion:

- on the one hand, 18 job advertisements were student jobs for the summer period, which we have now excluded from the research, as they are independent of the pandemic period, the necessary competencies were not indicated in them, so we would not have received an answer to our research question,
- on the other hand, 14 job advertisements were excluded because, in their case, "work that can be done from anywhere" was marked in the filters, but in the job advertisement itself, contrary to this, mandatory on-site work was indicated.

Among the job advertisements of Győr-Moson-Sopron county, a strong inequality can be observed in favor of the county seat, Győr. 316 out of 900 job advertisements offer, that the place of work is clearly Győr, while in the case of the other two big cities of the county, the number of job advertisements is more modest: Sopron offers 55 jobs, while Mosonmagyaróvár offers 34 jobs for potential applicants. However, among the 230 job advertisements included in our sample, some form of alternative employment can be observed in a good number: in 23 job advertisements mention the possibility of a home office, in 40 job advertisements the work can be done from anywhere, and 14 job advertisements indicate flexible place of work.

The vast majority of job advertisements included in the sample are looking for applicants for intellectual work (157), while only 73 job advertisements are looking for physical employees.

Examining the areas of the advertised jobs, we can say that the biggest shortage, based on the job offers, is in the areas of Skilled work and Sales. Out of the 230 job advertisements included in the investigation, applicants are sought for the former in 48 and the latter in 44. Other areas with shortages based on the sample: Engineer (25), Auxiliary work (23), Logistics (17), Administration (16). These data partly explain why the number of alternative employment opportunities in the sample is so high, since a salesperson really does most of his work not at the site, but anywhere, be it a home office or a flexible workplace. At the same time, although the sample typically included advertisements targeting white-collar workers, the blue collar workers with the greatest shortage are typically manual jobs.

3. Labor market areas affected by the pandemic

During the analysis of the labor market, in addition to unemployment, work, changes in the geography of workplaces, and changes in skill requirements appear as top priorities.

The pandemic has resulted in the acceleration of digitization and automation. All this means additional pressure for those regions where the ratio of living labor workforce intensive, low value added jobs is relatively high. The companies have been forced for automation due to the lack of the high quality workforce. This trend can offer hidden, exploitable opportunities as well. In addition, the decentralization of workplaces can bring many positive impacts, such as the increasing popularity of remote work.

Previous waves of technological change have contributed to job polarization in almost all OECD regions. However, a polarized labor market can make local economies more vulnerable to various social, economic and other shocks (see COVID-19). Even before the pandemic, we could observe significant changes in the size and composition of the local workforce (Edvardsson - Durst, 2021). Between 2005 and 2018, working hours in OECD countries decreased by 30%. A shrinking and aging workforce is perhaps an even more pressing problem than the challenges caused by automation. COVID-19 does not cause a transformation in this in a dramatic way and form, but at the same time it affects the preferences of the population. All of this causes changes in the medium and long term in the possibilities of urban and rural places (OECD iLibrary, n.d.). Furthermore, an increased concentration of skilled workers can be observed, which is directed to the areas of the cities. In the previous decades, this was mostly typical of the highly qualified workforce (Eurostat 2021; Eurostat 2022)

In addition to skilled workers, it is necessary to mention the effects of migration, which is also concentrated in cities. The possible higher education of migrants can mean new skills for the given local labor market. All of this can even compensate for the shortcomings of the native population. At the same time, their labor market integration raises many questions and carries several challenges. Although the pandemic temporarily curbed the flow of migrant workers, it is necessary to conduct medium- and long-term observations regarding the impact of skills (Edvardsson - Durst 2021; Eurostat 2021; Eurostat 2022; Barhate et al. 2021; Barhate - Hirudayaraj 2021).

Knowing all of this, the question arises from both the employer and the employee side, how can they successfully adapt to the changed labor market conditions? Is it a compulsion to adapt, or is it a necessary good/bad acceptance? Get used to it or escape?

The pandemic has highlighted the important fact that even temporary reassignment of employees is very functional for certain jobs. During the first and second waves, the demand for this increased more and more. Until the third and fourth wave, the accepted implementation seemed almost natural.

The permanent recovery of economies with full employment and high-quality jobs requires redeployment of workers. Namely, from low-paid, low-skilled jobs to positions that require new, higher skills and more training (McKinsey - Company 2021; Barhate - Hirudayaraj 2021; Gunasekara et al. 2022).

Many questions are raised about high physical proximity, or the fate of jobs that require personal contact, as well as the effects of physical distancing.

The pandemic had a particularly severe impact on jobs that require a high degree of physical proximity and personal contact. Thinking primarily of waiters and shopkeepers. Based on the projections, many of the physical distancing practices used by consumers and businesses during the pandemic are likely to remain. Among consumers, this e.g. it was accompanied by an increase in online shopping, which they want to maintain even after the epidemic (Tyson - Lund 2021; Dzuka et al. 2021).

Especially during the first and second waves of the pandemic, the focus was on corporate survival. In the case of clerical jobs, telecommuting was a compromise solution in order to survive. Over time, the labor market actors accepted that it can be implemented not only in the case of the previously usual jobs (e.g. IT, call center). It can also be extended to work positions

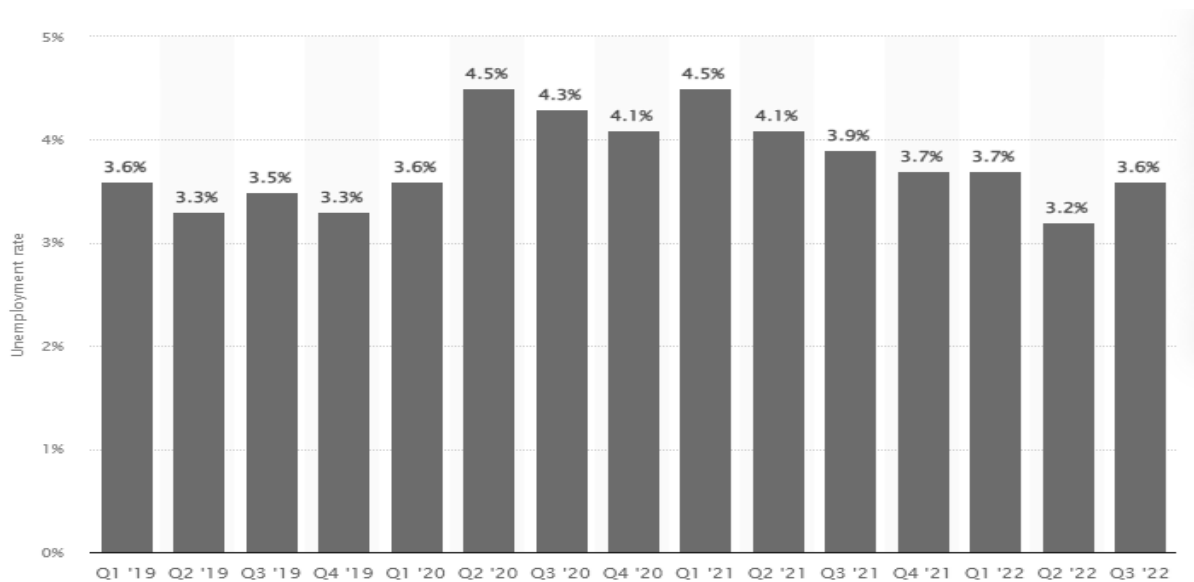
(e.g. in the form of hybrid remote work) under operational conditions, for which it has not even arisen as an alternative until now. However, the permanent transition would have far-reaching consequences for the locations of companies operating in cities and urban centers (office buildings) and their surroundings (e.g. shops, restaurants). In this way, a greater degree of remote work would certainly bring about a permanent change in terms of the geography of workplaces. And all of this significantly affects the migration of the workforce and talents, their acquisition and retention (Retzlaff, 2020, Tyson - Lund, 2021, Jackson, 2022).

3.1. Hungary's labor market during the Covid-19 pandemic (2019-2022)

Given the scope of the study, we would like to share information about Hungary's labor market that is closely related to our topic.

In August 2022, the average number of employed persons was 4 million 713 thousand, which is 34 thousand more than in 2021. The national employment rate was 74.6%, which is 1.1 percentage points higher compared to 2021 (KSH, 2022).

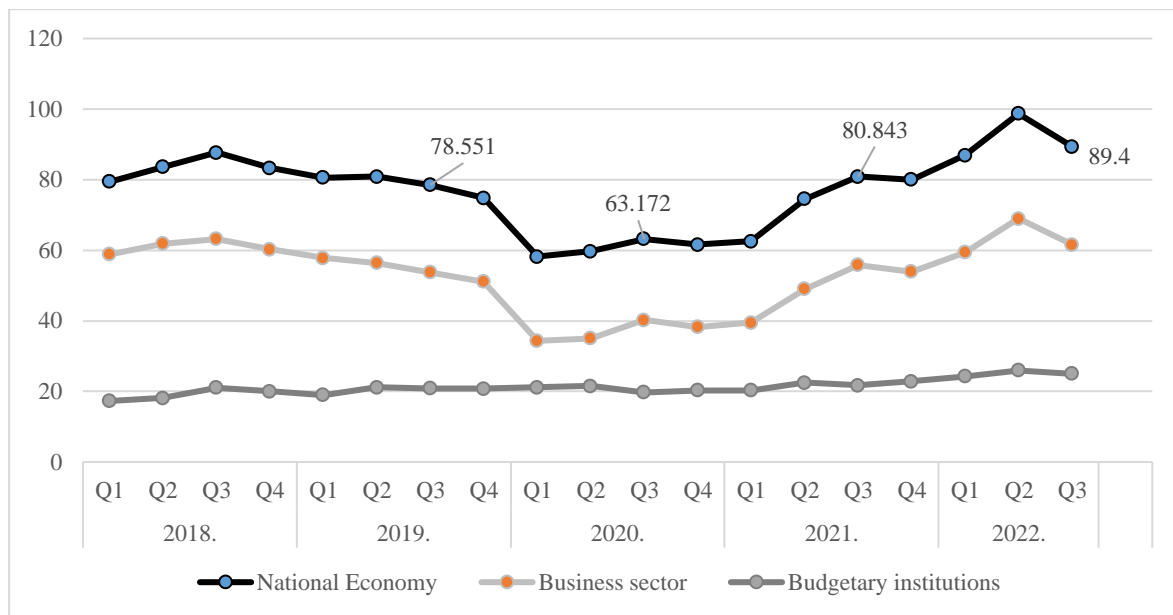
Figure 1. Quarterly unemployment rate in Hungary in 2019-2022



Source: Statista, 2022

In period 2019-2022 the unemployment rate in Hungary oscillated. As a consequence of COVID-19, the share of unemployed Hungarians between the ages of 15 to 74 years old peaked in the first quarter of 2021 at 4,5% (Statista, 2022). The rate decreased and totaled 3,4% in the fourth quarter of 2022, which is 0.7 percentage points lower compared to the same period of the previous year (KSH, 2022).

Figure 2. The number of vacant positions



Source: KSH, 2022

The potential workforce reserve in 2022 was 270,000 people, which is 69,000 people lower compared to 2021. At the end of the second quarter of 2022, the number of vacant positions was 32% higher compared to the same period of 2021 (KSH, 2022).

Hungary is in a fortunate position, as a group of specialists tried to monitor the impact of the waves of the coronavirus on the labor market during a special research. As well as what kind of COVID action plan the interviewed organizations are able and willing to develop in order to reduce the effects of the pandemic. This was the KoronaHR research and its three phases (number of interviewed organizations: 598) (Poór et al., 2021).

In each phase, the range of respondents changed. In addition, organizations reacted differently to individual coronavirus waves. Furthermore, the initial, peak and closing stages of the given wave can be experienced differently by the stakeholders. In light of the above, a direct comparison of the results of the three phases is not recommended.

The impact of the pandemic on jobs and competencies is directly related to the analysis we initiated. The decrease in staff differed during each wave of the coronavirus, as well as in the phases of the research. One of the main reasons for this is the state wage subsidy (coronavirus first and second wave). The catering job was among the first in all three phases, as were the sales and sales jobs.

The relevance of competences was reevaluated during the pandemic, it is necessary to adapt to other conditions and opportunities. According to Kópházi (2020), in times of economic crisis, employee competencies such as having digital and IT knowledge and using them confidently, assertive communication and conflict management, emotional intelligence and empathy, cooperation and teamwork, adaptability and stress management come to the fore ability. It can be seen that most of them are human competencies, the development of which is crucial for the competitiveness of organizations even outside of a pandemic.

With regard to Hungary, during the examined three waves of the pandemic, the main focal points of the evaluated competency groups gradually changed. During the first wave, there was an emphasis on digital competences, IT knowledge, and online technology. Until then, in the third wave, this skill group was only ranked 4th. It can be assumed that workers have acquired a routine over time. The situation is similar in the case of communication, assertiveness, and conflict management. At the same time, the competence of flexibility, quick adaptation and openness was ranked first during the third wave, from fourth and then second place obtained in previous waves. It can be seen that gradual progress has been made, which may also reflect adaptation to the stress and prolonged situation (Pató Gáborné Szűcs et al. 2021; Poór et al. 2021).

4. Results

In the course of our analysis, following the typical structure of job advertisements, we first examined the requirements placed on employees. We have grouped them according to expected experience, education and skills. In the case of the latter, we separately examined language skills, computer skills, driver's license and other - although in our case, of course, the most exciting and interesting - skills.

4.1. Main requested skills and competencies

Experience:

The 230 job advertisements we examined typically addressed applicants who were just starting their careers or had little experience. In 81 job advertisements, it was indicated that the applicant can be a career starter, and in 83 job advertisements, a minimum of 1 year of professional experience is required, which, however, is still considered a low level of experience. 17 job advertisements required a minimum of 2 years, 27 job advertisements required a minimum of 3 years, 3 job advertisements required a minimum of 4 years, and 19 job advertisements required a minimum of 5 years of professional experience.

Education:

Out of the 230 job advertisements examined, it can be said that 41 jobs do not require a degree, while in 53 job advertisements a high school diploma was indicated as a necessary requirement. In the case of 65 job advertisements, the applicant is expected to have a specialized education, and in only 28 job advertisements, higher education was indicated as a mandatory requirement for potential applicants. This also shows that having professional knowledge is a much higher expectation for applicants than either a diploma or many years of professional experience.

Language skill:

The job advertisements we examined are characterized by the fact that the vast majority of them do not require language skills. Of the 230 job advertisements, 154 did not indicate any knowledge of foreign languages. In the remaining 76 job advertisements, one foreign language was typically indicated. In the case of only 5 job advertisements, simultaneous knowledge of English and German is required. 44 job advertisements included the English language as a mandatory requirement, and 10 job advertisements included the German language. Probably due to the proximity of neighboring Slovakia, the Slovak language was expected in 15 job advertisements and the Ukrainian language in 1 job advertisement.

Computer skill:

Similar to language skills, computer skills are not a typical requirement for applicants. Of the 230 job advertisements we examined, 122 did not specify computer skills as a mandatory requirement for the applicant. In 88 job advertisements, knowledge of user-level Office is expected, while only 22 job advertisements indicated the expectation of knowledge of specific programs, be it SAP, CAD/CAM, EPLAN, etc., so typically in the fields of finance and engineering.

4.2. Other additional skills and abilities

The investigation in this area required a great deal of attention and quite a few correct interpretations from us during the examination. Because while most job portals use uniform names for the above categories in order to filter the job advertisements, the skills and other abilities field is characterized by the use of a diverse Hungarian dictionary of synonyms. Thus, during the processing of the data, in many cases we were faced with the fact that we cannot handle certain skills together, such as relationship-building and contact-keeping skills, or result-orientation and performance-orientation. In such questionable cases, the specific position helped us to decide what exactly the job advertising company or institution might have in mind. Striving for the most precise analysis possible, however, we separated almost 70 different skills, personality traits and other abilities in the 230 job advertisements we examined as you can see in the below Table 1.

Table 1. Case numbers of the research

Most common skills	Number of case:	Least common skills	Number of case:
Communication skills	91	Stress tolerant	6
Independence	84	Presentation skills	5
Problem-solving skills	59	Leadership skills	5
Precise	56	Empathic	5
Punctuality (time management)	39	Tolerance of monotony	5
Customer oriented	33	Kindness	5
Flexible	33	Ability to make decisions	5
Reliable	32	Success oriented	4
Teamwork	31	Good look	4
Organizational skills	29	Leadership authority	4
Determined/confident	25	Dexterity	4
Load capacity	23	Loyalty	4
Openness to learning	23	Conscientious	3
Responsible	23	Contact system	3
Systems approach	20	Helpfulness	3
Willingness to travel	19	Adaptable	3
Multiple shift work schedule	19	Patient	3
Proactivity	18	Design skills	2
Energetic/dynamic	18	A rule follower	2
Negotiation skills	17	Balanced	2
Interpersonal skills	15	Medical fitness	2

Results orientation	14	Ability to motivate	2
Cooperation	13	Task-oriented	2
Positive attitude	13	Customer friendly attitude	2
Vocation	12	Coordination skills	2
Demanding	12	A solution-seeking personality	2
Creativity	11	Purposeful	2
Structured thinking	10	Consistent with the company's core values	1
Commercial sense	10	Love of writing/ good drafting skills	1
Analytical ability	9	Tolerance	1
Stamina	9	Teaching ambition	1
Technical interest / orientation	9	Good people skills	1
Enthusiasm	8	A sense of beauty	1
Performance oriented	7	Orientation skills	1

Source: Own edition (2022)

The Hungarian culture is known to be individual in nature, so it is not surprising that the most common expectations for the applicant's personality and skills are the characteristics that ensure this individual success and individual performance. Although the communication skill, which is the most common requirement (appears in 91 job advertisements), tries to refute this somewhat, on closer reflection, the communication skill serves to support the individualistic personality characteristics that follow. After all, good communication skills are essential in order to demonstrate your openness, proactivity and other desirable attitudes, competencies. Independence appears in 84 cases, problem-solving skills in 59 cases, precision in 56 cases, accuracy in 39 cases, flexibility in 33 cases, reliability in 32 cases, organizational skills in 29 cases, self-confidence in 25 cases, while responsibility also appears in 23 job advertisements. Customer orientation (33) and teamwork (31) are mixed between these skills that encourage individual performance and represent individual success, as expectations belonging to the group of social skills.

On the other hand, the end of the list of required skills also contains some interesting things, which, however, can cause negative emotions in potential candidates and have a deterring effect. This includes tolerance of monotony, which appears in 5 job ads, good appearance as a condition in 4 job ads, leadership authority also in 4 job ads, good relationship system in 3 job ads. At the same time, in some cases we also encountered expectations for new skills, such as technical interest in 9 cases, loyalty in 4 cases and consistency with the company's core values in 1 case.

4.3. What the employers are offering?

After the expectations, we examined the factors that the advertising party offers to potential applicants against the many expectations. We investigated what incentives are used to capture the attention of job seekers in each job advertisement. Although it is well known that most jobseekers are interested in the specific salary, that is the primary decision-making factor, but at the same time other needs can also be addressed, and in many cases it is individual and subjective factors that arouse their interest and encourage them to apply for the job.

However, in 21 of the 230 job advertisements we examined, the advertiser did not write anything about what he could offer for the applicant. Only 18 cases indicated a specific salary.

The diversity of the Hungarian language is shown by the fact that in 140 cases the salary offered was described as competitive, outstanding, above average, high, attractive or even motivating. The advertising companies and institutions mentioned cafeteria benefits in 63 cases, 13th month salary in 19 cases and 14th month salary in 4 cases.

The incentives offered in addition to monetary benefits are expressed by advertisers in a variety of ways, as we have also observed in the case of skills. At the same time, most of these incentives do not seek to address a higher-level need. Long-term employment, which can be considered the most basic expectation, appears in 91 job advertisements, a stable background in 51 cases, registered work in 23 cases, and support for commuting to work in 61 cases. The advancement opportunity offered by the advertiser is also expressed in several places: development opportunity in 64 cases, learning opportunity in 51 cases and career opportunity in 23 cases appear as incentives. Job advertisements also mention the working conditions and social relations themselves: a good team in 53 cases, a family atmosphere in 26 cases and modern equipment in 24 cases await potential applicants. And we can't ignore the incentives that are so popular these days either: a company cell phone is mentioned in 33 cases, a company car in 33 cases and a company laptop in 17 cases in the job advertisements we examined. At the same time, incentives for professional self-realization were rarely encountered during the investigation - two exceptions in this regard are the promise of challenging and varied tasks in 22 cases, while participation in international projects appears in 14 cases. At the same time, the professional mentor system occurs only in 6 cases, professional independence in 3 cases, support for the realization of one's own vision in 1 case and the promise of professional fulfillment also in 1 case.

5. Conclusions, recommendations

Main features of labour market transformation: turbulent, continuous, especially after COVID-19. Both governments and HR professionals are expected to take a proactive approach in the future. The analysis of labour market indicators remains important, but the focus should be on reality testing.

This shift in skills needs has a significant message for both workers and employers. It is important that training focuses on competences that are becoming increasingly important and can be developed. Less important competences or competences that are not necessary should be approached with a lean approach. Another important area of investigation could be the transformation and change in the content of competences. After all, the needs for competences change, but the interpretation of the content of the same competences also changes and transforms. So, in addition to the rearrangement of the importance of competence replacement, there is also a kind of content transformation (Pató Gáborné Szűcs et al., 2021, Poór et al., 2021).

The short duration of the job-search allowance limits the work of the National Employment Service (NES), which provides services to help job seekers find a job. In the absence of other options, only wage-related benefits are a livelihood option for those concerned. The predominance of public employment makes it difficult to participate in labour market programmes. A further source of problems is the growing distance between vocational and adult training and employment policy. It would be advisable to implement complex development programmes with the involvement of individuals (Nagy – Hárs, 2021, 54.).

Future research directions include a focus group evaluation of some companies in the county on this topic. In addition, a case study analysis of some of the priority companies.

6. Summary

In responding to the future skill needs of companies, the rethinking of work itself, the workforce, and workplaces will appear as a primary consideration. And during decision-making, financing, the creation and maintenance of effective training systems, and income support become authoritative.

The rearrangement of the demands for competences carries an important message for both the employee and the employer side. Awareness of this contributes to efficient and effective cooperation in the future, to the meeting of demand and supply in the labor market.

Based on all of this, it can be said that the 230 job advertisements included in the investigation are in many cases written on the basis of each other, with many overlaps, but at the same time with even more deficiencies. It does not adapt to the changing expectations of the pandemic period. Companies and institutions primarily want to attract potential candidates with the help of monetary benefits, but at the same time, higher-level motivational factors are relegated to the background and are not even mentioned in the vast majority of job advertisements.

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