

CHANGING PARADIGMS IN HR MANAGEMENT

or the impact of the COVID epidemic on the individual and the organisation
– a theoretical overview

Mátyás Gulya

Abstract

When reviewing the literature, one can find the basic idea that there is something good in every bad thing, i.e. “negative events can also have a positive effect”. I would like to examine this idea in the field of HR management, because the new behaviours and ways of working “learned” during the Covid period will live on in society after the pandemic is gone. Digitization processes were forced to accelerate in connection with the epidemic, making companies reconsider their production and service processes at the local level as well. A significant number of professional studies deal with the analysis of post-Covid social symptoms, mainly its impact on the economy and society.

The appearance of the pandemic in 2020 immediately changed the daily operation of the economy and “reformed” the behaviour, attitude and future life of the actors. Society’s attitude has changed, and as a social response to this, preferences have changed in terms of shopping baskets, as well as attitudes to work and life.

This paper examines the “necessary” paradigm shift of HR management from the perspective of adapting to the post-Covid symptoms of the 21st century. The question is whether the adaptation will succeed and whether the process can end with mutual benefits.

Keywords: HR management, paradigm shift, post-covid

JEL: D69, I39

Introduction

My doctoral thesis focuses on the post-crisis situation of tourism, its restart, i.e. what happened in different destinations with different attractions, besides the most efficient use of resources. An essential factor in the study is the examination of man as a “human resource” underwent significant changes during and after Covid in terms of health, mental, attitudes, attitudes to work and life. The subject of the present work is the paradigm shift in HR management.

Literature review of the topic

At the onset of the pandemic, international organisations produced estimates of the expected social and economic damage. The International Labour Organisation predicted between 160 and 515 million job losses by the end of 2020 (ILO, 2020). The World Trade Organisation predicted a 12-32% fall in trade (OECD, 2020). The Organisation for Economic Co-operation and Development predicted a 33% fall in consumer spending (WTO, 2020). The most conservative estimates, based on a complete shutdown and sustained scaled-back reproduction, predicted a fall in GDP of at least 1%, the more pessimistic ones by double digits. The actual figure, as it was predictable, fell between the two extreme scenarios: the global GDP decline in 2020 was 4.2 per cent (OECD,

2020). This was partly determined by the extent of the shutdowns around April and partly by the timing and extent of the restart of the national economies (Tóth – Kálmán, 2021).

In the light of the numbers, there was a need to move. Taking into account the projected figures, there was a need to prepare for mitigating expected losses and for a post-pandemic reset. The authors of the article formulated their questions and research objectives based on the Hungarian National Crown HR Research Project (Poór et al., 2020). The research was about the changes in corporate strategy and human management procedures caused by the COVID-19 virus, and about rethinking the work of management and human resource professionals. The most significant changes in the activities of human resource management were found in recruitment, selection, competency management and human resource support activities (Imbeah et al, 2020, Jenei – Módosné, 2021).

The effects and after-effects of pandemics are particularly important because they affect human capital, i.e. people's health, which has a direct impact on the change of economic processes. Mitigating the negative effects, or even turning them into positive ones, is therefore particularly important. In this context, the role of human resource management is particularly appreciated, because the solutions to the problems that have emerged are very diverse, with different solutions being appropriate for different sectors and areas and depending on the scale of the response required. Critical considerations of the resource and capability-based theory have focused primarily on the long-term sustainability of competitive advantage (McGrath, 2013), while the “fundamental inflexibility” of fundamental capabilities has been highlighted as a key issue, and the difficulties of applying VRIO methodology in practice (Armstrong – Shimizu, 2007). It is important to note, however, that in response to these critical remarks, the concept of a “strategy based on dynamic capabilities” (Zollo – Winter, 2002) emerged as a quasi-evolution of this strategic paradigm, linking the source of gaining and maintaining competitive advantage to organisational capabilities, to higher-level routines that enable an organisation to integrate, build and reconfigure its competences in response to rapidly changing environmental demands, supporting adaptation and change.

Change and the circumstances that trigger it

The change started almost immediately after Covid's emergence, but did not end when the crisis was over. If we were not to consider the solutions, we could say that the economic problems caused by the pandemic require money first and foremost. This is, of course, essential, but one of the highest returns in terms of efficiency is the resources devoted to protecting and developing human capital. It is no coincidence that the measures taken are primarily aimed at protecting health and jobs (MTI, 2020a, 2020b), both at government and company level.

In the current research, Hungarian experts have processed the experience of the second phase of the epidemic. During both the spring and autumn waves, a large-scale company-level survey was conducted on the topic (Poór et al., 2020). The research reports show that, in addition to the usual measures, new solutions have emerged and even taken centre stage, which HR professionals have adapted specifically to the epidemic as a root cause.

In the second phase of the epidemic, in which the lessons learned from the first phase were used to restart business operations, health prevention measures were of primary importance. The introduction of work-at-home orders is linked to the epidemic closure, but personal social care, which came third, clearly marks a paradigm shift in the field of HR in Hungary. Previously, this cost and staff reduction measures were considered a classic response to a crisis. The change was probably also fuelled by the realisation that the coronavirus epidemic had given HR professionals a number

of new tasks. Employees became more cautious and developed fears of losing income and jobs, of being infected at work and of being forced to work from home more frequently. In the latter case, working from home was one of the viable ways for companies to continue working, but interestingly, surveys have shown that it did not lead to a strengthening of family ties, but made it more difficult to separate work and private life (Tóth – Kálmán, 2021). Other researches have highlighted the benefits of this for employers, as there is a demonstrable increase in the workload of employees, especially among subordinates (Baska, 2020).

During the crisis, employees were traumatised, they had to learn how to cope with the complexity of things, adapt to new working conditions and needed appropriate communication and support. The epidemic made organisations rethink their strategies. The development of internal communication is essential in the life of any organisation, as it reduces uncertainty about the future of the organisation and the role of the employee. Businesses spent much of the pandemic period trying to adapt to the extraordinary circumstances. Although the first months of 2022 were still challenging for the health care sector in the fight against Covid, the advent of the vaccine brought hope for overcoming the epidemic (Kőműves et al., 2023). The appearance of the vaccines was the turning point where the necessary measures to recover had to be taken and prepare for the start of the recovery.

Adapting to change

György Gonda explains in his essay that in our century, constant change and the need to adapt to it have become a “natural” state for organisations and companies. For managers, managing change has become a fundamental, almost primary, knowledge and daily task, alongside the necessary exercise of emotional intelligence. It is not only middle and senior managers who are faced with new challenges, but also companies as entities, most of which have so far in the 21st century still operated with the approaches, business philosophies and methods typical of the second half of the last century. To use a Darwinian analogy, only those organisations and companies that are able to adapt continuously to economic-political, legal, environmental, financial and other changes will be able to cope, and survive crises (Gonda, 2023).

Over the past two decades of the 21st century, financial, economic, growth, political and other crises have hit us in quick succession (pandemics, Russia-Ukraine war), so it is no coincidence that management experts believe that one of the keys to successful management today is equipping companies with the ability to manage change. This capability had been necessary before the pandemic already, but today change that one has to adapt to is almost constant. A change in the minds and methods of managers is also needed to manage change. Numerous surveys and research show that the majority of companies are still operating on the basis of twentieth century management principles and objectives in a new environment where these are outdated.

Trends of change

Crisis management

The primary impact of employers’ actions in the Covid crisis was on workers. The majority of employees accepted this, but the employment changes affecting their financial situation were harder for individuals to bear. In Hungary, the loss of income was felt most by those living in large cities,

those with lower qualifications and workers over 40. The decrease in income was due to job losses and the company's cost-cutting strategy (Tárki, 2020). If human resources management views employees as number, only and takes the necessary measures to maintain management without regard for humanity, it may, in our own experience, lose the loyalty of employees, for which it has previously invested considerable resources.

Some crisis-handling techniques for crisis management are as follows:

- stopping the drying up of funds,
- cost reduction,
- revenue measures,
- debt rescheduling,
- seeking professional investors,
- personnel and organisational changes (Roóz – Heidrich, 2020).

A study of the published literature further clarifies the picture, showing that there is a diversity of solutions. It is not possible to say which is the more effective instrument, as the impact varies from one organisation to another depending on which one is used and to what extent, but this is the responsibility of the manager.

Changing HR and leadership trends as a result of Covid

The epidemic changed work processes in almost all sectors, and had a major impact on human resources as well. Deloitte surveyed the HR trends of companies in selected countries and compared them to the global trend (Figure 1). The full survey was based on the opinions of nearly 9,000 respondents from 119 countries. At the time the survey was conducted, in 2020, the global trend was wellbeing at the top of the list, closely followed by remuneration. Retraining, belonging and super team were the categories that closed the ranking as less important preferences. It is important to note that there were some countries where the trends showed significant divergence from global trends.

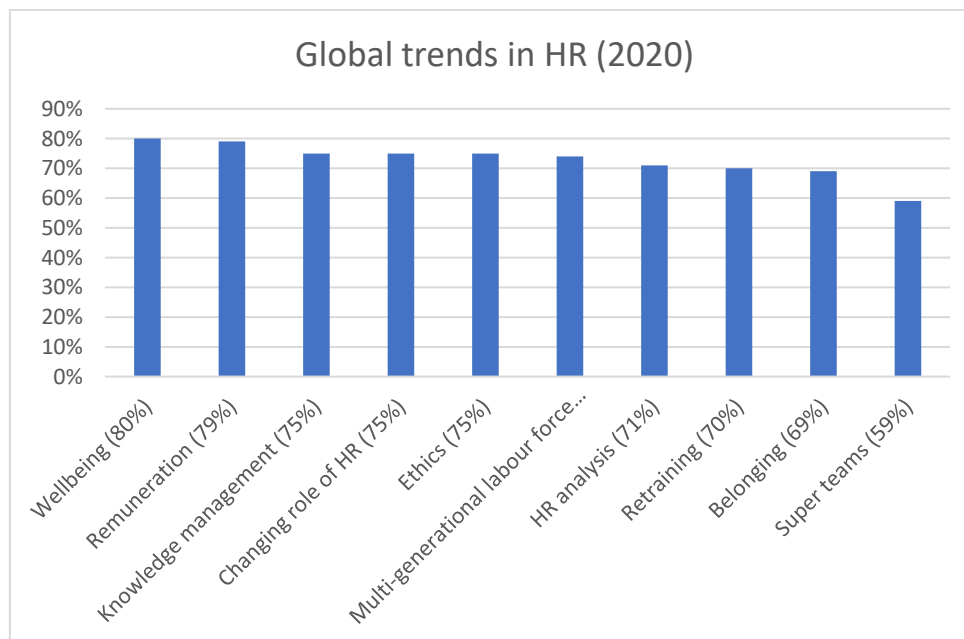


Figure 1. Global trends in HR (2020)

Source: based on Deloitte survey (2020), own ed.

However, the pandemic has changed the way people think and see things, so the trends that used to be in place have changed. Corporate human resource management has faced a number of challenges since the onset of the coronavirus crisis, such as time management, retention of the labour force, incentives, career planning, working from home, coordinating health measures, human resource development, and in some cases managing internal communication. The prolongation of the pandemic situation and the organisational adaptation to the crisis have increasingly led to change being defined as an opportunity by labour market actors in each country.

For management, it is important to have the right people in the right place to achieve good performance in the long term. To do this, it is important to know what employees think and feel, and to assess what they are afraid of and what they find difficult. A human-centred approach is now a priority in HR. In a time of crisis, the priority is not long-term corporate strategies and team building, but prompt events and solutions. In times of crisis, questions by the employees need to be answered and uncertainty reduced. Employees need HR support to continue to perform well and remain motivated.

When the epidemic was defeated, we thought we were back to normality, back to the life we had had before the appearance of the virus. The question is whether it is really our goal. Things that people got used to during a short period of time can have a positive content, such as a change in working habits. Compulsory home working did not only contain negatives, but also forward-looking factors. It saves both the employee and the company time spent travelling to and from the office; it also offers the possibility of more flexible time and work schedules, but the potential future risks of the initial positives should not be overlooked. Consideration should also be given to the lack of possibilities to motivate employees, the risk of household distractions, the frustration coming from isolation or loneliness, and the loss of a sense of belonging to the company and its culture. Some authors argue outright that theoreticians and practitioners need to look for specialist solutions to recover from the Covid pandemic. Authors dealing with the hotel industry wish to draw the attention of professionals in the pandemic to the following main areas: artificial intelligence and robotics, and health protection and health care (Jiang & Wen 2020). A study conducted in Hungary, also looking at the tourism sector, observed that employees' autonomy and responsibility are increasing, which requires a different type of leadership and management from the organisation (Bujdosó-Szűcs, 2012). The development of these competences could be a key issue in the coming period, which is of key importance at the company and organisational level (Kőműves et. al., 2023).

The initial shock and sense of crisis was followed by a solution-focused organisational culture and action, with more and more organisations recognising that the emergency had not only a negative side. As the research report "Recovery, Re-opening, Growth" points out, the viral outbreak has triggered innovation as well, primarily for economic development. Technological developments have been accommodated in the practices of organisations, together with research and development dynamics, the need for robotisation and digital competences, and the drastic transformation of work systems (Poór et al., 2022). At this stage, it can be said that the importance of the previous HR strategy has been further enhanced, as the key to solutions is to restore the right human resources (Figure 2).



Figure 2. The importance of HR strategy

Source: HVG, 2021

New processes

The future strategy of companies, compared to the situation before the pandemic, is based on two main pillars: on the one hand, teleworking and increasing flexibility, on the other hand. Both professional organisations and public opinion expect further support for teleworking. In Slovakia, for example, the percentage of companies that allowed only minimal or no teleworking for employees fell from 64% before the epidemic to 15% after the epidemic. The restrictions adopted in the context of the epidemic have provided a unique opportunity for companies to reconsider the way they work. While internet-based technologies provide a platform for changing the way people work, organisations must also recognise that rethinking work means building a culture in which people see meaning in their work, are given opportunities to learn and develop, and become resilient to unpredictable events.

The 2023 survey of the HR trends was done by the K&H Group, in which six trends in the labour market that will play a dominant role were identified (Figure 3). As can be seen in the figure, the role of wages remains the most important, and the retention of key employees is of particular importance. The future will be increasingly digital, the spread of which has been accelerated by the epidemic.



Figure 3. HR trends for 2023-AS

Source: Market and Profit, 2022

The prerequisite for the successful operation of a reopening, for long-term development, is seen by the management level in preparing employees for future technologies such as digitalisation and robotisation, and in developing a system of effective cooperation. All this has increased the importance of HR organisations, which are now more involved than ever in the development and implementation of organisational strategy. Process transformation has become a necessity as digitalisation has taken hold and repeatable activities have become automated (Žákovič, 2021).

Companies have done this by considering the following five factors:

- Focus on sustainability – pioneering solutions for sustainable development,
- Switching to cloud-based solutions – the foundation for growth and stability, so that organisations can be part of the fastest evolving IT ecosystem of the 21st century,
- Acceleration – with the advance of robotics, digitalisation and artificial intelligence, organisations need to identify internal and external labour market needs in a timely manner,
- Focus on core people – the importance of man as human capital increased during the pandemic, and the most important factor became the maximum commitment of core people to the management of the company,
- Purpose-driven operation – a transparent, motivated, innovative organisational culture, agility and the ability to adapt flexibly and quickly to change (McKinsey, 2021).

The research, published in HR Pulse – “The Future of HR in the New Reality”, was conducted with nearly 1,300 HR leaders from 59 countries. The responding organisations represented more than 30 sectors, with nearly half of the companies employing more than 5,000 people, and the rest employing more than 1,000 people. According to the respondents, the pandemic situation brought the role of HR organisations and HR leaders to the forefront, as the success of their work played a significant role in managing the crisis (KPMG, 2020). In the opinion of 60% of HR executives and 79% of company leaders, the HR function needs to undergo a complete transformation to adapt to the ever-changing situations. According to the research, responding organisations already include some organisations that are consciously focusing on the issues of the future (Kõmüves, et al., 2022).

A typical example of new changes in HR is the selection of new employees in the online space or the onboarding and adaptation of employees, which in some industries and companies is already fully virtual. The use of artificial intelligence in HR is also a new trend. Instead of the headhunting companies used in the past, various algorithms are now used to search and screen individuals for a position. Of course, these always work according to predefined rules. The assessment of qualifications and general aptitude will no longer be the task of humans, but of artificial intelligence (Šimún, 2021). Search automation is a technique, but the expectations are not set by machines but by HR professionals.

As regards employment systems, it can be seen that, on the one hand, the importance of certain jobs has increased on the labour market and, on the other hand, labour shortages are growing dynamically. At the same time, the number of new positions in low-skilled jobs has not decreased. In the wake of the pandemic, a number of HR measures have been put in place in organisations which are not only applicable in a new pandemic period, but also effective in maintaining a good level of employment in a re-opening period. Examples include hybrid working, online communication (meetings, conferences, contracting, interviewing, training, education), enhanced health measures, increased automation and digitalisation, flexible working hours (Austen et al., 2021).

New leadership trends and employee competences

When developing an HR management strategy, we cannot ignore the changing general management trends. Based on the responses of more than 300 respondents to a survey by the Institute of Management Sciences, the 15 most frequently occurring of 121 different characteristics are shown in Figure 4. Flexibility was the most frequently mentioned trait, appearing 31 times, while commitment appeared in only a third of the cases, 11 times. Respondents described the leader as open-minded, development-oriented, able to renew, decisive expert with high emotional intelligence.

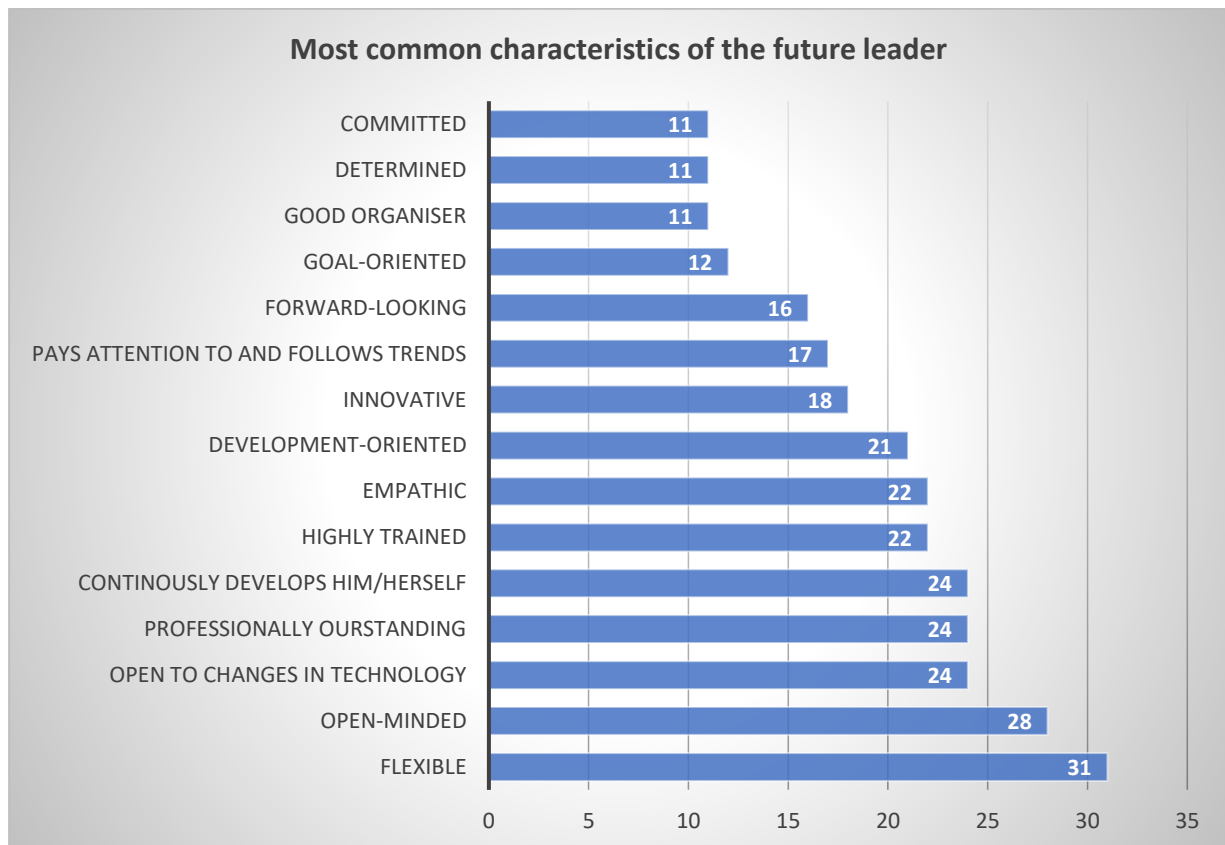


Figure 4. Most common characteristics of the future leader

Source: Institute of Management, 2022

According to the survey, one of the most important qualities of the future leader is flexibility and openness, which are essential to succeed in our ever-changing environment. It is noticeable that as regards past leadership characteristics, being a good organiser, decisive and committed are traits at the bottom of the list.

Taking into account the guidelines, the good practice of Hungarian organisations has seen a wave of change resulting from renewal after the recovery from the crisis, offering a myriad of solutions for corporate and institutional management (Poór et al., 2022).

Based on the World Economic Forum's report "The Future of the Job Market", Kránitz explains in his paper that workers need to acquire new competences, driven not only by the emergence of Covid but also by the spread of automated processes (Kránitz 2021). The figure below lists the most important competences expected in the world of work (Figure 5).



Figure 5. TOP 10 competencies expected of employees

Source: Kránitz, 2021

It is essential for workers to adapt to change, which can be achieved through continuous learning and skills development. The pandemic has reinforced the need for change, which was partly a demand even before Covid.

Conclusions and proposals

Recent socio-economic changes have, not surprisingly, generated a number of new situations for which we were not previously prepared. However, experience has shown that flexible (innovative) organisations, able to adapt to changing environments and needs, can emerge victorious from these often seemingly hopeless situations. Recovery from crises cannot be regarded as a routine task, and management cannot be given a scenario to manage the recovery. There are models and successful examples, but the responsibility for their application rests with the individual decision of professional managers. Management must develop specific and effective solutions taking into account local and regional factors. HR management's present and future research can help in managing change.

All corporate human resources management has had to deal with a number of challenges since the outbreak of the coronavirus crisis. These include improving time management, retention of employees, renewal of incentive schemes, career planning, working from home, incorporating health precautions into working patterns, human resource development and, in some cases, managing internal communications. Organisations that keep in mind the natural human needs and necessities of their employees in times of crisis, such as security, stability and predictability, are on the right track.

In summary, it remains true that a satisfied and happy employee is the most effective advocate for the company. In order to successfully achieve this goal, alongside the presence of AI, human resources must be in the centre again in the future. The trends are constantly changing in line with the current issues.

References

- Armstrong, C. - Shimizu, K. (2007): Review of Approaches to Empirical Research on the Resource-Based View of the Firm, *Journal of Management*, 33(6), pp. 959-986
- Arnold Tóth - Botond Kálmán (2021) *New Labour Review* Vol. II No.2, 2021/4, The role of human resource management in addressing the impact of covid-19 on earnings
- Austen, A. - Kremmydas, E. & Szczepanik, M. (2021). HR Activities Amidst Covid-19 Pandemic across Levels of Analysis, *Annales Universitatis Mariae Curie-Sklodowska, sectio H - Oeconomia*, Vol. 55, No. 2.
- Baska, M. (2020): Half of managers fear staff are burning out because of Covid-19, report finds. *People Management*. Retrieved 05. 03. 2024. Source: <https://www.peoplemanagement.co.uk/news/articles/half-of-managers-fear-staff-are-burning-out-because-of-covid-19>
- Bujdosó, Z.; Szűcs, Cs (2012): A new way of gastronomic tourism:beer tourism *Acta Turistica* 6 (1), 5-20
- Deloitte (2020): 2020 Global Human Capital Trends Report. Deloitte. Retrieved: 15. 02. 2024. Source: <https://www2.deloitte.com/cn/en/pages/human-capital/articles/global-human-capital-trends-2020.html>
- Gonda Gy. (2023) Leadership in the 21st century - The secrets of fit companies. The business website. Retrieved 27. 12. 2023. From: <https://azuzlet.hu/vezetes-a-21-szazadban-a-fitt-vallalatok-titkai/>
- HRPOVER (2023): these 6 HR trends will dominate the labour market in 2023. *Hrpower* website. Retrieved: 22. 03. 2024. Source: <https://hrpwr.hu/cikk/ez-a-6-hr-trend-fogja-uralni-a-munkaeropiacot-2023-ban>
- HVG (2021): Why is HR strategy important and what makes it good? HVG. Retrieved 10. 01. 2024. Source: https://hvg.hu/brandcontent/20210622_Miert_fontos_hogy_ne_csak_a_vallalatnak_hanem_a_HR_is_having_a_strategy_NEXON
- ILO (2020). ILO Monitor: COVID-19 and the world of work. Sixth edition (pp. 1-25) [ILO Monitor]. International Labour Organization. Retrieved 09. 03. 2024. Source: https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/briefingnote/wcms_755910.pdf
- Imbeah, N. - Khademi-Vidra, A.- Bujdosó, Z. (2020): Assessment Of Tourists' Perceptions On Safety At The Cape Coast Tourist Destination In Ghana *Geojournal Of Tourism And Geosites* 28(1)217-231. <http://dx.doi.org/10.30892/gtg.28117-464>
- Institute of Management (2022): The Future of Organisation and Management Research Fast Track Report – 2022. <http://dx.doi.org/10.14267/978-963-503-929-6>
- Jenei Szonja - Módosné Szalai Szilvia (2021): *New Labour Review* Vol. II 2021/2 No.53, The impact of the coronavirus epidemic on different areas of human resource management in 2020.
- Jiang, Y. - Wen, J. (2020): Effects of Covid19 on hotel marketing and management: a perspective article. *International Journal of Contemporary Hospitality Management*, 32(8), 2563-2573.

- Kórmüves Zsolt Sándor - Dajnoki Krisztina - Pató Gáborné dr. Szűcs Beáta- Poór József -Szabó Katalin - Szabó-Szentgróti Gábor - Szabó Szilvia, 2023, Recovery - Re-opening - Growth post-covid syndrome and uncertain situation management aspects
- KPMG (2020). HR Pulse 2020 - The future of HR in the new reality. KPMG International, October 2020, p. 24. Retrieved 20. 02. 2024. Source: <https://assets.kpmg/content/dam/kpmg/xx/pdf/2020/10/the-future-of-hr-in-the-new-reality.pdf>
- Kránitz É. (2024): What will be the 10 most important competences in the future? Leadership development website. Retrieved: 12. 03. 2024. From: <https://vezetofejlesztes.hu /legfontosabb-kompetencia/>
- Market profit (2023): What should we look out for as employers in 2023? Marketprofit website. Retrieved 30. 01. 2024. From: <https://piacesprofit.hu/cikkek/gazdasag/mire-figyeljunk-munkalattokent-2023-ban.html>
- Mcgrath, R. (2013): The End of Competitive Advantage: How to Keep Your Strategy Moving as Fast as Your Business, Harvard Business Review Press
- Mckinsey Global Insitute (2021): The postpandemic economy-The future of workafter Covid-19. Retrieved: 28. 12. 2023. Source: <https://www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-after-covid-19>
- MTI (2020a): almost 10,000 companies have taken advantage of the job protection wage subsidy. HR portal. Retrieved: 25. 03. 2024. Source: <https://www.hrportal.hu/c/majdnem-10-ezer-vallalattette-igenybe-a-munkahelyvedelmi-bertamogatast-20200526.html>
- MTI (2020b): thousands of applications for job protection wage subsidies are received every day. HR Portal. Retrieved: 25. 03. 2024. Source: <https://www.hrportal.hu/hr/naponta-tobb-ezer-kerelem-erkezik-a-munkahelyvedelmi-bertamogatasra-20200619.html>
- OECD (2020a):OECD Economic Outlook, Volume 2020 Issue 1: Pleriminally version. Retrieved: 18. 03. 2024. Source: <https://doi.org/10.1787/0d1d1e2e-en>
- OECD (2020b):Coronavirus (COVID-19): SME Policy Responses (p. 169) [Global Report]. Retrieved: 18. 03. 2024. Source: https://read.oecd-ilibrary.org/view/?ref=119_119680-di6h3qgi4x&title=Covid-19_SME_Policy_Responses
- Poór J. - Balogh G.ábor - Dajnoki Krisztina - Karoliny Mártonné - Kun András István - Szabó Szilvia (2020): Coronavirus Crisis Challenges and HR Responses, Hungary 2020. Research Report. The first evaluation of the first phase of the HR crisis assessment.
- Poór J. - Dajnoki K. - Szabó Sz. - Módosné Szalai Sz. & Jenei Sz. (eds.) (2022): Recovery - Re-opening - Growth Expected changes in corporate/institutional governance and management in the shadow of the Crown virus. Gödöllő, Hungarian University of Agricultural and Life Sciences
- Roóz J. - Heidrich B. (2013). In the authors' private publication, Own ed.
- Šimún, P. (2021): SúčasnÉ trendy v riadení ľudských zdrojov: toto nezanedbajte. Podnikajte, Own ed.
- Tárki (2020): Economic and social consequences of the coronavirus epidemic. Downloaded: 06. 11. 2023. Source: <https://tarki.hu/index.php/koronavirus-jarvany-gazdasagi-es-tarsadalmi-kovetkezmenei>.
- WTO (2020): Trade falls steeply in first half of 2020. World Trade Organization. Retrieved: 25. 06. 2021. Source: https://www.wto.org/english/news_e/pres20_e/pr858_e.htm
- Žákovič, M. (2021): 5 najväčších trendov v oblasti ľudských zdrojov pre rok 2021. Podnikajte
- Zollo, M. - Winter, S. G. (2002): Deliberate Learning and the Evolution of Dynamic Capabilities, Organization Science, 13(3), pp. 339-351

Author

Mátyás Gulya
PhD Student
Doctoral School of Economic and Regional Sciences,
Hungarian University of Agriculture and Life Sciences
gulya.matyas@stud.uni-mate.hu

A műre a Creative Commons 4.0 standard licenc alábbi típusa vonatkozik: [CC-BY-NC-ND-4.0.](https://creativecommons.org/licenses/by-nc-nd/4.0/)

