DIGITAL TRANSFORMATION IMPACT ON JOBS AFTER COVID-19 PANDEMIC

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Abstract
Digital transformation (DT) is a change in the business model of the company by applying new digital technologies. New digital technologies related to the application of automation, robotics, artificial intelligence and contemporary information and communication technology (ICT). The consequence of the application of DT will be the replacement of routine tasks with automation, which is controlled by artificial intelligence. Greater flexibility and efficiency of work will be achieved in terms of place of work, time of work and ways of engaging people. The changes will be felt by all companies, regardless of size or activity. Due to that, DT will also change the labour requirements. Automation of routine jobs will lead to large layoffs. Many professions will almost disappear as the technology they worked with becomes obsolete. It is envisaged to create new job profiles following the requirements of new technologies. Since the application of DT requires new skills and knowledge, it is necessary to educate workers and managers to successfully apply new technologies.

Key words: *digital transformation, COVID-19 pandemic, automation, artificial intelligence, jobs*

JEL Classification: O15; O33; J24; J44; J62

I. INTRODUCTION

The fourth (IV) industrial revolution has enabled many devices to be transformed into "smart devices" that connect via the Internet. Digital transformation (further in the text DT) is considered to be the biggest cause of global changes in labour requirements and needs. It will lead to the automation of a large number of processes with the help of automation, robotics and artificial intelligence. The changes due to the digital transformation will apply to the entire range of companies, from micro to international corporations, to the private and public sector, especially in the area of administrative affairs. Although all industries will feel the consequences, not every industry will have the same proportions. Processes in organizations that are the biggest candidates for automation can vary from industry to industry. In part, this is already the result of applied projects from digital transformation, because it is a process that lasts and has its stages of development. There are types of processes that are the biggest candidates for digital transformation. Candidates for automation, for now, are structured and semi-structured processes. One thing is for sure, that this is an irreversible process with an uncertain result for human civilization.

In the first phases of automation, the workforce will be largely replaced by routine work. As a consequence, almost all experts in this field agree that there will be a significant layoff of labour. Their work will be taken over by automated devices and robots controlled by artificial intelligence. As for layoffs, forecasts for the next ten years range from about a quarter (McKinsey Global Institute, 2021) to those extremely pessimistic about half of the jobs. The biggest impact of layoffs will be felt in the most industrialized countries in the world. The cost of labour in the most developed countries is significantly higher than in developing countries. There are different opinions on whether the loss of jobs will replace new employments due to the creation of new job profiles, according to the further development needs of the fourth industrial revolution.

II. OBJECTIVES AND RESEARCH METHODOLOGY

This paper aims to determine the impact of digital transformation on changing needs for the types of work that people do. As a data source for this research was previous results of research conducted by international development organizations and consulting companies involved in the digital transformation process. For this research, data were collected and used by analyzing the content of various reports, websites, and website documents.

III. DIGITAL TRANSFORMATION

According to (The Enterprisers Project, 2021, p. 2) digital transformation is the integration of various digital technologies in all areas of business. By changing the business model, the company creates and delivers value to its customers. It represents several aspects of organizational change in the company. The cultural aspect of change requires that organizations, not only be satisfied with the current state of affairs but that they constantly explore and experiment, accepting occasional failures. The digital transformation will take place (The Enterprisers Project, 2021) in all types of industries and business enterprises, regardless of their size.

As key elements of the digital transformation in the report (The Enterprisers Project, 2021, p. 6) that change the business model are:

- Gaining user experience;
- Operational efficiency;
- Culture and leadership;
- Development and improvement of the workforce to work with new technology;
- Integration of digital technologies.

According to (European Commission, 2019), digital transformation will achieve its effects in three segments:

- Digitization of production. The application of new technologies will drastically change the way products and services are created. The new production method increases flexibility, quality and is adapted to the requirements of a personalized customer.
- Digitization of work. Many jobs can be done through a variety of remote access collaboration platforms. Each individual can offer their services globally over the network, citing their place, skills, availability, price, as well as the evaluation of their work by the user.
- Changes in government perceptions, attitudes and policies, creating policy measures that affect work and employment in the digital transformation. Government policy measures the shape and guides digital transformation.

Digital transformation is an ongoing process. It depends largely on the condition, resources and goals of each company individually. That is why it can be said that it represents an almost unique path for each company individually. There may be periods when the whole process seems to have slowed down or even stopped. Performance indicators play a key role in monitoring progress along this path. The process itself faces some challenges posed by change (The Enterprisers Project, 2021). According to (Fujitsu, 2018), and insufficiently trained workforce is cited as one of the most significant reasons for slowing down the implementation of digital transformation projects in all phases.

According to the International Data Corporation (IDC, 2020), the global digital transformation of the world continues to grow during 2020, despite the pandemic of the COVID-19 virus. It is estimated that the costs of global investment in digital technology in 2020, increase by 10.4% compared to 2019. It will reach the value of 1.3 billion dollars. Although this is a slower growth rate compared to 17.9% in the previous year, it represents a significant increase in investment despite the decline in economic activity in the world. The report states that despite the COVID-19 pandemic, the digital transformation of the world is continuing. The industries that have invested the least in digital technologies have also shown the biggest decline in the economy. The United States will remain the largest geographic market for investment in new digital technologies and will account for almost one-third of world consumption.

IV. AUTOMATION AND ARTIFICIAL INTELLIGENCE

Automation brings many benefits according to (McKinsey, 2019, p. 2), which include, as the most significant:

- Remote insight into operation mode, improvement and performance prediction.
- Fast service delivery; service processes are reduced to real-time required for execution without the

downtime and waiting.

- Large range of flexibility and capabilities; possibility to work 24 hours a week throughout the year or on request.
- Improved quality of execution; new work technology for based automation of routine jobs performed in collaboration of humans and machines.
- Increase savings and productivity; concerning the workforce, automation brings savings of 20% and more.

The report (McKinsey, 2019, p. 2) states that not all automation projects have always yielded the expected results, so only 55% of organizations believe in the success of automation. Many stated that the realization of such projects turned out to be much more difficult than expected. That is why you should not expect successes that will take place overnight. Despite the progress in the development of artificial intelligence, automation and robotics are still quite far from the successful realization of human cognitive activities, abstract and tacit reasoning and registration of emotions. Automation best replaces regular or routine daily tasks, almost without error in implementation, concerning the human workforce.

The term artificial intelligence (AI) is most often associated with deep learning technologies used by artificial neural networks, but traditional machine learning methods are also widely used in practice. Machine learning, based on a large number of interactions, can modify the algorithm so that the level of accuracy of the obtained decisions ranges from over 70% to over 90%. We are also working on artificial intelligence, which will define the algorithm based on a sample of time series.

From the (McKinsey, 2019) point of view, robot development are trends such as well-known stationary robots, non-human robots, fully automated drones. Planning the adoption of robotic technology varies from industry to industry ranging from 23% to 37% of the number of companies surveyed. We should not lose sight of the fact that new digital technologies will provide products and services that have a higher value for customers at lower costs. The drop in income of companies that sell obsolete products will put them in a situation to think about switching to new technology.

V. PLANNED BUSINESS ACTIVITIES OF DIGITAL TRANSFORMATION

According to research conducted by (Fujitsu, 2018), companies that are already working online are implementing or intending to digitally transform in 97% of cases. On the other hand, companies that do not work online only in 67% of cases intend to initiate digital transformation. The main motives for initiating the digital transformation are the increase in business efficiency and cost reduction. Business growth was cited as a secondary motive. The primary, secondary, and tertiary reasons for introducing DT may vary from activity to activity. According to the same source (Fujitsu, 2018), sectors and activities as the main forces driving digital transformation, whether they have already implemented it or intend to do so, are financed in 89% of cases, production 69%, transport 67%, retail 62% and health care 60%. Each of these activities has its motives.

VI. TECHNOLOGIES LIKELY TO BE ADOPTED

The main technological forces of the fourth industrial revolution that are affecting change are listed in the report (World Economic Forum, 2018) and include high-speed mobile internet, development of artificial intelligence, adoption of Big Data analytics, cloud technology. Summarizing the technological trends in the IT industry and their impact on the business of organizations (IDC Future Scape, 2021) lists the following trends that will affect the business:

- Accelerate the destruction of the existing mode of operation.
- Strategy innovation.
- New normality; envisages the adoption of flexible business and operational models, based on innovation and experimentation; acceptance and failure in attempts.
- Artificial intelligence is becoming ubiquitous; further development of higher levels of a data-driven organization.
- Geopolitical risk; social and economic global problems will escalate.
- Rethinking globalization; destructive movements affect the elasticity of the economy and society.
- Digital platforms; an environment that grows in its scope of activities and representation.
- Crisis of trust; arose as a result of growing expectations on the one hand and the other hand resource limitations, climate change, crises, stratification of the population, etc.
- Redefining customer engagement; a requirement to develop security, safety and a sustainable digital experience.
- Digital division of labour; imperative for networking organizations and individuals.

- Work transformation; changes in the way teams, skills and leadership function.
- Development of the concept of a learning organization; one of the key competitive advantages of organizations in the future.

Another source, (World Economic Forum, 2020, p.27) indicate that technologies likely to be adopted, according to the respondents' view (figure 1), are:

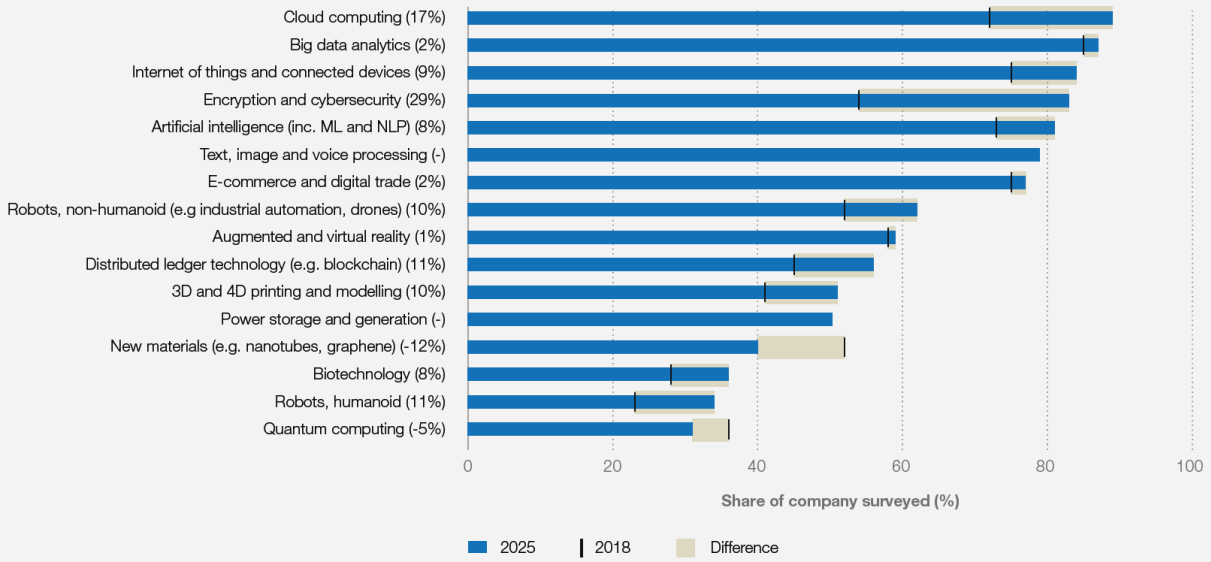

Figure 1. Technologies are likely to be adopted by 2025 (by the share of companies surveyed).
Source (World Economic Forum, 2020, p. 27)

VII. DIGITAL TRANSFORMATION EFFECTS ON THE LABOUR FORCE

According to (Change, 2021), the adoption of new technologies, during the fourth industrial revolution, led to the disappearance of many traditional jobs, but also the emergence of new occupations that until recently could not even be imagined system. There is no doubt that the fourth industrial revolution will affect all industries and human civilization as a whole. The report predicts that devices will be smarter in the relatively near future thanks to artificial intelligence. Due to the collection of a large amount of data from the IoT, they will be able to make decisions independently. This technological scenario of the future is relatively certain, but its impact on human civilization is uncertain. Estimates range from very positive to those that predict the disappearance of human civilization.

According to (European Economic and Social Committee, 2017, p.37) due to the application of DT, the work environment becomes much more flexible. Such an environment can bring mutual benefits to employers and employees alike. The benefits are related to increasing autonomy, productivity, improving the establishment of a personal balance between work and life while reducing costs.

Flexibility according to the same source is reflected in its three segments:

- Places of work execution. Information and communication technologies (ICT) enable certain (for example, office) jobs to be performed from any location that has the Internet. The location may change over time.
- Execution time. Working hours are no longer limited to office hours. Execution of work is usually defined by the deadline for the execution of work so that it is left to the executor (or team) to organize independently.
- Flexible forms of employee engagement. Although traditional forms of employment are still relevant today following the laws of the countries, the possibilities and needs of employers are moving in the direction of new forms of employment. According to (Euroufound, 2020), its research report lists nine forms of employee engagement that are present in EU countries.

In 2020, in response to the COVID-19 pandemic and the slowdown of the economy, it accelerated DT and introduced more mass work via the Internet remote access (World Economic Forum, 2020, p. 14). According to the importance for the company, workers are divided into three categories: 1) necessary workers, 2) workers who will work through remote access, 3) labour force that will be hired as needed or fired. All three categories of workers are faced with new work practices regardless of which category they fall into. A retraining and training program is planned for them to adapt to the new requirements. In his report (Wired & Deloitte Digital, 2019) he states that digital transformation requires a whole spectrum, in a creative way of integrated skills. Skills related to

innovation, human resources, digital technologies, leadership and risk management.

VIII. OCCUPATION WITH A HIGH PROBABILITY OF AUTOMATION

It is estimated (McKinsey, 2019) that about 60% of occupations have at least 30% of activities that are suitable for automation. Predictable physical activities have 81% automation capabilities, data processing 69%, and data collection 64% potential automation capabilities.

The results related to the dismissal of workers are also related to the level of development of the country. Countries with a higher level of development will have higher layoffs. In those countries, there is a higher DT and IT equipment, but those countries also have a higher price of labour. In underdeveloped countries, there will be an economic assessment of whether to hire large investments in automation (and robotics) or to hire cheap labour for routine jobs. So in the case of underdeveloped countries, the lowest labour cost for the simplest jobs will determine the decision to invest in automation. Practically, after the pandemic, the whole process of DT in developed countries continues, while in non-developed countries it is only in the initial stages of implementation.

In Europe, there is a decline in the share of employment of medium-skilled labour (OECD, 2020) as a result of reduced inflows of younger labour. This can be partly explained as a consequence of demographic changes and changes in the education of young people. A typical individual who used to be a highly educated worker is now in a position to work in jobs with lower skill requirements. Many vocational training programs conducted in higher vocational education prepare students for jobs with intermediate skills that prepare for jobs with structural change and automation risk. Workers with a medium level of skills are also among the middle paid workers. There is a polarization of the workforce, which appears as a trend in the period before the pandemic. Due to globalization, automation, the share of middle-skilled jobs is declining in most countries. In contrast, the demand for workers with primarily high and somewhat less with low levels of skills is growing.

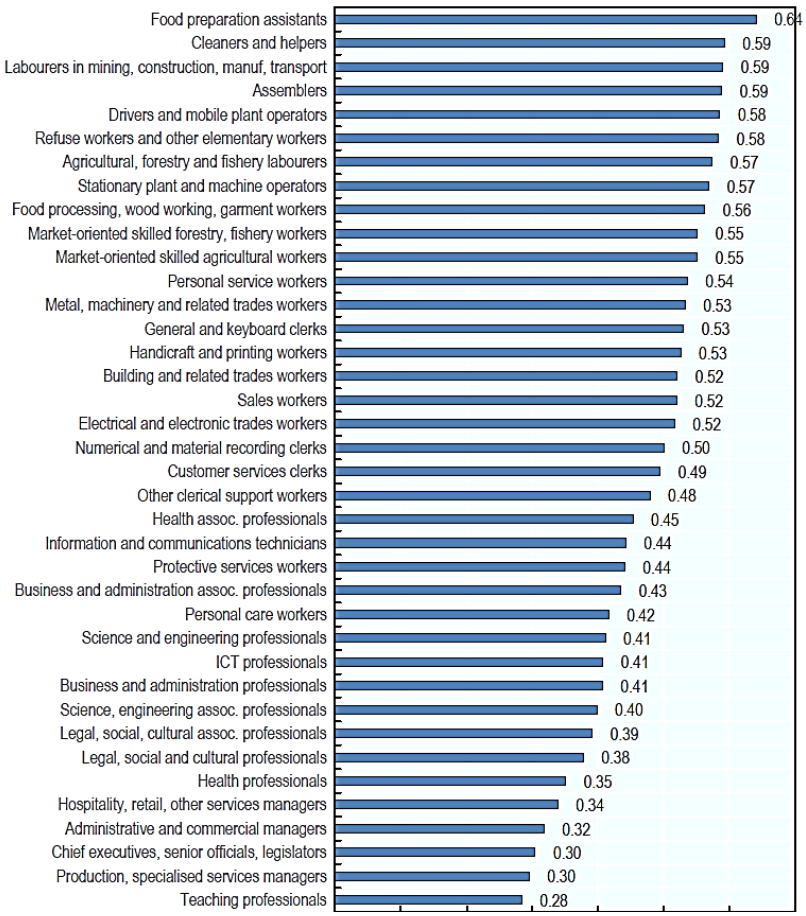

Figure 2. Mean probability of automation by occupation.

Source (Nedelkoska & Quintini, 2018, p. 51)

The problem of workers with lower-paid jobs (European Economic and Social Committee, 2017, p. 14) is often with lower levels of education. They do routine and physical jobs that are in many cases candidates for automation. Therefore, these workers will most likely lose their jobs in the coming years. It is stated that 40% of lower-educated workers are at risk of losing their jobs. In contrast, only 5% of workers with higher education have

the same level of risk.

According to a report (Fujitsu, 2018) based on a survey conducted on 1,536 CEOs and decision-makers in large and medium-sized companies, of various industries from 16 countries, the main drivers of digital transformation are in the activities of finance, production and health, transport and retail. The diagram of figure 2 shows the mean value of the occupation probability distribution that will be automated. If we look at the activities in finance and retail, 30% of digital transformation projects have given successful results. Also, 25% of projects have been successfully implemented in the transport sector. This is followed by production with 21% and health with 14%. As a result of the project success research, it is stated that six factors determine the success of digital transformation projects. Success factors are leadership, people, flexibility, business integration and ecosystem and value created from data.

A study conducted by the McKinsey Global Institute (2021), states that the pandemic and the acquired experiences of distance working influenced the continuation of the trend of digital transformation in the world. The way of doing business underwent major changes during the crisis, which directly affected the labour market. Primarily, some of the jobs and meetings are done via the Internet remotely. In the short term, many employees have faced reductions or even job losses. To adapt to the situation, people changed jobs, accepted jobs from home. In the long run, about 25% in developed countries and 10% in less developed countries may have to switch to new types of hybrid businesses due to the application of DT in the coming years. They include part of the work from home and the rest of the work in companies, mostly on office jobs. In this way, the pandemic tested the need for physical contact in the process of work. The results of the research indicate that jobs with a higher index of physical contact may experience a greater transformation after the end of the pandemic. This is not the only factor that will decide. Three trends have been defined that will be present after the pandemic. The first trend is distance working and virtual meetings will continue. Not with the intensity that was during the pandemic, but significantly higher than before the pandemic. Another trend is that the adoption of automation and artificial intelligence in e-commerce, e-delivery, etc. will start faster. They are during 2020, increased five times compared to the previous period. The third trend refers to the use of automation, robotics and artificial intelligence in production and warehouses. Introducing, more and more customer self-service as a daily routine. These changes will be maintained at 70% of racial strength in developed countries, 60% in China and about 40% in India. This may affect the decline in demand for lower-paid and educated labour.

IX. TREND AND CHANGE IN JOB DEMAND

Workforce requirements are changing with the application of digital transformations even in areas that will not be covered by automation in the first wave. New technology requires knowledge that is related to the adoption of new technologies but also a higher level of complexity.

To create and maintain a competitive advantage, according to the research (CBRE, 2014, p.2) and according to the attitudes of the respondents are: retaining the most talented workers (18%), innovative thinking (12%), ability to adapt to changing circumstances (12%), ability to adapt on new technologies (8%), acceptance of organizational vision, culture and values (6%) The report states that employees want to work with intelligent associates, interesting and well-paid projects, giving individuals the opportunity for individual creativity, providing employees, in addition to money, a sense of accomplishing common goals.

According to (McKinsey Global Institute, 2017) DT will make some jobs almost disappear. Automation will make 60% of occupations contain at least 30% of activities that can be automated. On the other hand, the report states that new occupations and jobs that did not even exist before will be created. Lists in Table 1, according to the source (World Economic Forum, 2020, p.30), indicate that jobs for which labour market demand is growing and declining by an estimated 2030. The same report states that almost 50% of work activities have technical capabilities to be automated. Several factors will affect that by 2030, only a third of business activities are automated.

The decline in demand for certain jobs is mainly caused by automation (Table 1). On the other hand, the growth in demand for new occupations is the result of the application of new technologies. The demand for labour will be related to the levels of development of the country, but also the levels of economic activities in the future (Table 1).

Table 1. Top 20 job roles in increasing and decreasing demand across industries

Increasing demand		Decreasing demand	
1	Data Analysts and Scientists	1	Data Entry Clerks
2	AI and Machine Learning Specialists	2	Administrative and Executive Secretaries
3	Big Data Specialists	3	Accounting, Bookkeeping and Payroll Clerks
4	Digital Marketing and Strategy Specialists	4	Accountants and Auditors

5	Process Automation Specialists	5	Assembly and Factory Workers
6	Business Development Professionals	6	Business Services and Administration Managers
7	Digital Transformation Specialists	7	Client Information and Customer Service Workers
8	Information Security Analysts	8	General and Operations Managers
9	Software and Applications Developers	9	Mechanics and Machinery Repairers
10	Internet of Things Specialists	10	Material-Recording and Stock-Keeping Clerks
11	Project Managers	11	Financial Analysts
12	Business Services and Administration Managers	12	Postal Service Clerks
13	Database and Network Professionals	13	Sales Rep., Wholesale and Manuf., Tech. and Sci. Products
14	Robotics Engineers	14	Relationship Managers
15	Strategic Advisors	15	Bank Tellers and Related Clerks
16	Management and Organization Analysts	16	Door-To-Door Sales, News and Street Vendors
17	Fin. Tech. Engineers	17	Electronics and Telecoms Installers and Repairers
18	Mechanics and Machinery Repairers	18	Human Resources Specialists
19	Organizational Development Specialists	19	Training and Development Specialists
20	Risk Management Specialists	20	Construction Laborers

Source (World Economic Forum, 2020, p. 30)

According to the way of hiring labour and to the time worked in remote access (remote) (CBRE, 2021) for the Asia-Pacific region, it states that companies accepted this up to 10% of working time. It is estimated that due to the positive experiences during the pandemic by 2025. This percentage will increase on average to at least 50%. In this way, despite the existence of the office, hybrid jobs for the workforce are envisaged. Remote work has its numerous shortcomings, lack of adequate housing, large households. The report states that they need to adopt policies to support their workforce so that they can invest in solutions that support distance working. Such kind of work must include coverage of key risks for companies.

X. CONCLUSION

New digital technologies are accelerating and offering better control over routine jobs that people perform with almost negligible execution errors. Their working hours can be 24 hours throughout the year or on request. Automation and robots can work in working conditions that are almost unimaginable for humans. These are jobs with high temperatures, the toxicity of the material they work with, noise, pressure (underwater robots), a large range of loads or forces that can be achieved and great precision in performing work operations.

Digital transformation is a way to change the business model of communication, creating and delivering value to the customer using automation, robotics and artificial intelligence. The changes apply to all companies and activities. Digitization will be applied in both the private and public sectors. There are certain differences in industries and processes within an organization that are conducive to digital transformation. It is estimated that about half of the processes can be subject to digital transformation in organizations.

DT influences the change of the business model of the company. It changes the way companies communicate, create, and deliver their value to their customers. Personalization of the customer and tracking his "path" during the life cycle of the purchase (customer journey) allows companies to apply a higher level of marketing and achieve greater customer satisfaction, which certainly reflects on customer loyalty and revenue.

For companies, the choice to enter the digital transformation is related to market survival. For the governments of the countries, that is one big problem that will arise due to high unemployment. One part of the problem is the lack of a skilled workforce to work in the new conditions. The other part of the problem is creating a policy of what to do with those people who will lose their jobs. The education system must adapt to new conditions and ways of working.

Almost all companies that already deliver their products and services online intend to launch or are already in the implementation phase of digital transformation projects. This indicates that digital transformation is the next logical step if one wants to maintain a competitive position in the market. The primary motives for introducing digital transformation are to increase efficiency and reduce business costs. Business growth is seen as another criterion.

The COVID-19 pandemic and the decline of the world economy have slowed down investment projects in digital transformation. On the other hand, despite the decline, they left the biggest decline on the companies that invested the least in digital transformation. Due to the crisis due to the pandemic and distance working, many companies have realized the inevitability and possibilities offered by new technologies.

The use of new technologies allows for work flexibility but requires a new approach to management. It establishes more requirements for the knowledge and skills that the workforce must-have for the expected effects to be achieved. That is why training of both managers and employees is necessary.

If we look at the forecasts on the labour market until 2030, about a quarter of occupations will decrease or even disappear in some developed countries due to automation. The workforce doing these jobs will be forced to

seek other jobs and retraining. Existing jobs will require some training to work with new technologies. There will also be some new occupations in line with the needs of the application and use of new digital technologies. Therefore, it is expected to create a sustainable policy that will on the one hand support DT and on the other hand help employees to fit into the new requirements and create adequate skills needed to work in the new conditions.

Each of the previous industrial revolutions had multiplier effects. The development of new technologies has changed the way we work, the organization itself and ultimately the society as a whole. The industrial revolutions almost as a rule had losers and a smaller layer of people who achieved great benefits. The great stratification of people influenced the reduction of the middle class of the population and the creation of great social disorders. Such social tensions have resulted in the growth of conflicts that have ultimately resulted in many radical changes in human history. From today's perspective, it is difficult to estimate all the social effects that digitalization will have in the world.

XI. REFERENCES

1. CBRE. (2014). Fast Foward 2030: The Future of Work and the Workplace.
2. CBRE. (2021). The Future of Work: Reseting Asia PacificC Office Strategy. CBRE.
3. CHANGE. (2021). How Will the Fourth Industrial Revolution Impact the Future of Work? From CHANGE: https://www.changerecruitmentgroup.com/knowledge-centre/how-will-the-fourth-industrial-revolution-impact-the-future-of-work#:~:text=In%20addition%20to%20new%20roles,specialist%20contractors%20or%20remote%20workers.&text=It%20can%20allow%20them%20to,reach%
4. European Commission. (2019). The Digitalisation of Future Work and Employment: Possible impact and policy responses. From EU SCIENCE HUB: https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/digitalisation-future-work-and-employment-possible-impact-and-policy-responses
5. European Economic and Social Committee. (2017). Impact of digitalisation and the on-demand economy on labour markets and the consequences for employment and industrial relations. European Economic and Social Committee.
6. Euroufound. (2020). New forms of employment: 2020 update. Euroufound.
7. Fujitsu. (2018). Global Digital Transformation Survey Report 2018. Fujitsu.
8. IDC Future Scape. (2021). IDC FutureScape: Worwild IT Industry 2021 Predictions. From IDC: https://www.idc.com/getdoc.jsp?containerId=US46942020
9. IDC. (2020). Worldwide Digital Transformation Spending Guide. From IDC: https://www.idc.com/getdoc.jsp?containerId=prUS46377220
10. McKinsey. (2019). Driving impact at scale from automation and AI. McKinsey.
11. McKInsey Global Institute. (2017). Jobs Lost, Jobs Gained: Workforce Transitions in a Time of Automation. McKinsey Global Institute.
12. McKinsey Global Institute. (2021). The future of work after COVID-19. McKinsey Global Institute.
13. Nedelkoska, L., & Quintini, G. (2018). OECD Social, Employment and Migration Working Papers No 202: Automation, skills use. From OECD: https://www.oecd-ilibrary.org/employment/automation-skills-use-and-training_2e2f4eea-en
14. OECD. (2020). OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis. OECD.
15. The Enterprisers Project. (2021). What is digital transformation? From The Enterprisers Project: https://enterprisersproject.com/tags/digital-transformation
16. Wired & Deloitte Digital. (2019). Digital transformation: A Primer. From Wired: https://www.wired.com/brandlab/2019/10/deloittedigital-connecting-digital-age/
17. World Economic Forum. (2018). The Future of Jobs Report 2018. World Economic Forum.
18. World Economic Forum. (2020). The Future of Jobs Report 2020. World Economic Forum.