



Effect of the 4th Industrial Revolution on Employability – Case of Albania

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Abstract: *The labor markets are undergoing significant changes as a result of the fourth industrial revolution's implementation in every sphere of the economy. One easy image may come to mind when you hear the term "digital economy": a robot employee, designed to perform specified tasks automatically. In any case, digitalizing employability entails more than just applying AI codes; it also entails raising performance standards, emphasizing soft skills among workers, eliminating low - and middle-level roles, and increasing demand for highly qualified workers.*

Albania has made significant strides toward economic digitalization. Numerous businesses, especially large ones, are spending money to advance the technologies they work with. Technological developments at the macro-economic and sectoral levels are fundamentally changing the work market and employability in our country, having a significant impact on both employers and employability

1. INTRODUCTION

Our manner of living and working has undergone a major change as a result of the technological revolution. The reaction to transformation is integrated and comprehensive, including all participants in the global policy, from the public and corporate sectors to academia and civil society, and is unlike anything humankind has ever encountered before. Since the middle of the 20th century, the Fourth Industrial Revolution has been occurring, and it is defined by a fusion of technologies that is obfuscating the distinctions between the physical and digital environments (Schwab, 2016). The Fourth Industrial Revolution is developing exponentially rather than linearly when compared to earlier ones. Additionally, technology is upending virtually every sector of the global labor market. With enormous processing, storage, and knowledge access capabilities brought forth by billions of people being connected via mobile devices, the possibilities are virtually limitless. Emerging technological advances in areas like artificial intelligence, robots, the Internet of Things, automated vehicles, quantum computing, etc. will extend these possibilities. Artificial intelligence has recently made impressive advancements. Artificial intelligence is already all around us in self-driving cars, drones, virtual assistants, and the matching of criteria that form the basis of investment or translation software. The labor markets in both developed and developing countries are undergoing profound change as a result of the fourth industrial revolution, which has caused an increase in the number of employees required in some economic sectors and/or a decrease in the number of employees in many traditional economic sectors. Digital technologies have made it possible to create more products and services with fewer employees, exposing employers to the risk of chronic unemployment. Digital technology's labor-saving effects quickly affect employment, but new job opportunities develop slowly. New labor markets are developed, assets are transferred between industries, business know-how is

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accumulated, and businesses are obliged to employ employees with new skills, particularly after COVID-19. While all of this takes time, companies were compelled to make quick adjustments during the Covid-19 pandemic.

Are all of these transformations brought about by the fourth industrial revolution beneficial to the labor market? To accelerate the creation of new job roles in the digital economy, investments in data and digital infrastructure are crucial. The adoption of cutting-edge digital technologies by businesses may also increase. For instance, the increased use of digital information in companies demands employees with high levels of planning, time management, critical thinking, leadership, and teamwork skills. However, the majority of job seekers do not seem to have these digital world abilities. Furthermore, it has been seen that people with the skills advance more quickly, which could lead to greater inequalities among a country's population. Additionally, experts argue that the rise of digital technology has increased the demand for hard and soft skills at all levels and decreased the necessity for conventional talents. Innovation, productivity, and employment development can all be sustained through encouraging investment in ICTs and related reforms. New markets will continue to expand with the help of policies that encourage market competition, foster entrepreneurship, assist the development of new products and services made possible by ICT, and advance professional and soft skills and competences. Helping people adjust to new occupations will minimize social costs and facilitate the adjustment. In the digital economy, it's more important than ever to have active labor market policies, income support, lifelong learning, and responsive educational systems ([World Economic Forum Annual Report, 2021-2022](#)).

2. EFFECTS OF THE 4TH INDUSTRIAL REVOLUTION ON ALBANIA'S EMPLOYABILITY

Employers in Albania were somehow compelled to experience the effects of the fourth industrial revolution during the epidemic. ICT is currently one of Albania's primary economic drivers ([Science, technology, R&D and innovation in Albania, 2020](#)). In Albania, businesses using computers for work purposes made up 99.0% of businesses with 10 or more employees in 2022, up from 98.5% in 2021 ([INSTAT, 2022](#)).

It has been noted that ICT and digitization processes aid in the modernization of the following processes:

Economic processes, through the establishment of start-ups, the growth of creative job activities, and an increase in productivity in the majority of Albania's economic sectors;

Social processes that support and facilitate social innovation by enhancing the services offered to the community and generating the common good;

Administrative and institutional operations are greatly simplified by e-government services, digital identity, enabling interagency interoperability, offering additional services online, and participation in decision-making by both citizens and companies ([AKSHI, 2022](#)).

New job vacancies brought on by digitization may reduce the unemployment rate, but they also seek highly skilled employers, including both professional backgrounds and soft skills. Even though growth in other economic sectors in Albania remained essentially stagnant, jobs were mostly produced in the ICT sector. Rising activity and employment rates, which are the highest

in the region at over 70% and 60%, respectively, also reflect these improvements ([Western Balkan Labor Market Trends, 2020](#)). Large skill gaps brought about by the fourth industrial revolution have negatively impacted company growth and job creation in Albanian companies, particularly for positions needing “new economy” and “non-routine” skills. Employers in companies that are innovative and connected to international markets use more “new economy” soft skills than employers in the local Small and Medium Enterprises operating in Albania. It is believed that these kinds of employers are more likely to use advanced computer skills and are more likely to be skilled in personal and organizing, and planning competences. On the other side, these companies face greater challenges in finding and recruiting workers with the necessary skills, whether for “routine” or “non-routine” jobs.

% of hiring firms that faced skills problems among employees

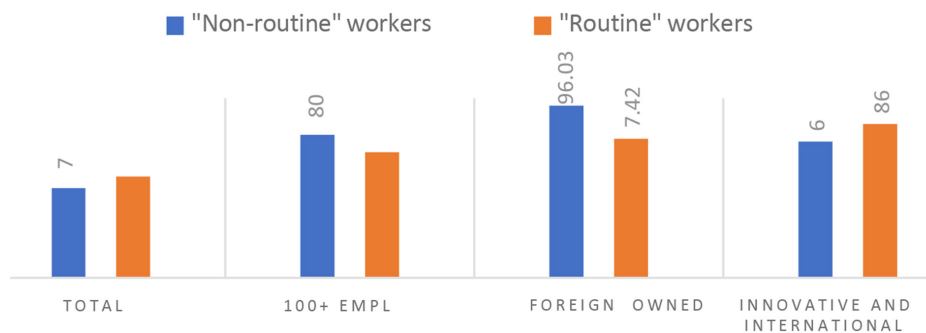


Figure 1. Skill gaps problems among the companies in Albania

Source: Authors, 2022.

Finally, the Fourth Industrial Revolution will alter both what we as job seekers do and who we are. Our feeling of privacy, ideas of ownership, how much time we spend working, how we establish relationships, and how we develop careers all of these things will be impacted. The possibilities are unlimited because they are only limited by our imagination.

Albanian children and young people must have the professional and soft skills they need to succeed in life and at work. While necessary but not sufficient for success in life, foundational skills, also known as deep learning skills, are those that lay the groundwork for future skill enhancements. These skills include communication (speaking, reading, and writing), numeracy, problem-solving, collaboration, interpersonal skills, and information access and processing.

Soft skills development is a lifelong process that starts in prenatal and is supported by appropriate stimulation, instruction, and training. Early skill-development interventions offer significant benefits because they help shape the brain in ways that will make learning and adapting in the future more successful. Professional skills are required to carry out particular tasks. As a result, they must be taught in upper secondary and postsecondary programs, and training should have to take place in close cooperation with companies. It is more likely that students will find a job and be able to adapt to the fourth and forthcoming industrial revolutions if they are better equipped in terms of both soft and professional skills.

Higher-order cognitive and socioemotional skills that will ensure employers' adaptability and upskilling/reskilling of skills throughout their employability are also developed through VET and higher education.

3. CONCLUSION

Technology is not an exogenous force that humans do not influence, and neither is the disruption it brings. In our daily choices as citizens, customers, and investors, we are all accountable for directing its progress. To shape the Fourth Industrial Revolution and steer it toward a future that represents our shared goals and values, we should use the chance and leverage we have.

It all comes down to people and values in the end. We need to prioritize and empower people in order to create a future that benefits us all. The Fourth Industrial Revolution may indeed have the ability to “robotize” humans and rob us of our hearts and soul in its gloomiest, dehumanized form. Nevertheless, it can also elevate humanity into a new collective and moral awareness based on a shared sense of destiny, as a complement to the best aspects of human nature—creativity, and empathy.

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