

БАШИНСЬКАІрина Олександрівна
i.bash@ukr.net

УДК 338.242

**THE IMPACT OF CURRENT TRENDS IN
THE GLOBAL INDUSTRY ON THE STUFF
OF THE ENTERPRISE****ТРУХАЧОВА**Софія Леонідівна
sonya79624@gmail.comк.е.н., доцент, Одеський
національний політехнічний
університет**ВПЛИВ СУЧАСНИХ ТЕНДЕНЦІЙ
РОЗВИТКУ СВІТОВОЇ ПРОМИСЛОВОСТІ
НА ПЕРСОНАЛ ПІДПРИЄМСТВА**студент, Одеський національний
політехнічний університет**BASHYNSKA Iryna Oleksandrivna** – PhD in Economics, Associate Professor, Odesa National Polytechnic University**TRUKHACHOVA Sofiia Leonidivna** – student, Odesa National Polytechnic University

Introduction. Modern world leaders are already actively preparing for a new era – the Fourth Industrial Revolution, which is based on the concept of fully networked and adaptive production with intelligent systems. However, in order to use the full potential of it, changes in the labor market are needed in accordance with changing requirements and, since it is people who are the key success factors.

Purpose. The purpose of the article is to study the impact of Fourth Industrial Revolution in the global industry on the staff of the enterprise.

Results. The universal nature of the new industrial model proposed by the Fourth Industrial Revolution, opens up the opportunity for a new industrial revolution, as a result of which the Fourth Industrial Revolution will become a new global industrial milestone and a standard for the development of the real sector of the economy all over the world. The future is for superprofessional skills and abilities. These skills are universal and important for specialists in various industries. Mastering them allows the employee to increase the efficiency of professional activity in industry, and also makes it possible to move between sectors, while maintaining his relevance. The FIR will affect absolutely all industries, but our research is devoted to new professions in the industry. Accordingly, through the prism of industry, we will consider changes in the professions. The most significant changes are expected in robotics and engineering. The following occupations are expected: Industrial robotics designer, Designer ergonomist, Operator of multifunctional robotic systems, Engineer composer, Home robots' designer, Medical robots' designer, Child robot's designer and Robots neuro-interface designer. At the intersection of management and production may cause such professions: Production coordinator in distributed communities, Trendvotcher / Forsyter, Cross-cultural communication manager, Moderator user communities, Online sales manager.

Conclusion. The Fourth industrial revolution will substantially change all spheres of life, including professional ones. As the study showed, the future of interdisciplinary professions. Employees get many benefits and comfort with a new way of working, but learning will be needed during a professional life, so the company needs strong partners. For a successful path to FIR, there are a variety of opportunities for lifelong learning and organization of work that contributes to learning. Both professional and academic training require a continuous dialogue between industry, politics and society to constantly evolve and adapt.

* * *

Вступ. Сучасні світові лідери вже активно готуються до нової ери – Четвертої промислової революції, яка базується на концепції повністю мережевого та адаптивного виробництва з інтелектуальними системами. Однак, щоб використувати весь її потенціал, потрібні зміни на ринку праці відповідно до мінливих вимог, оскільки саме люди є ключовими факторами успіху.

Метою статті є вивчення впливу Четвертої промислової революції у світовій промисловості на персонал підприємства.

Результати. Універсальний характер нової промислової моделі, запропонованої Четвертою промисловою революцією, відкриває можливість для нової промислової революції, в результаті якої Четверта промислова революція стане новою глобальною промисловою віхою і стандартом для розвитку реальної промислової революції у секторі економіки в усьому світі. Майбутнє за надпрофесійними навичками і здібностями. Ці навички є універсальними і важливими для фахівців різних галузей. Освоєння їх дозволяє працівникам підвищити ефективність професійної діяльності в промисловості, а також дає можливість переходити між секторами, зберігаючи при цьому свою актуальність. ЧПР вплине абсолютно на всі галузі, але наші дослідження присвячені новим професіям у промисловості. Відповідно, через призму промисловості ми будемо розглядати зміни в професіях. Найбільш значні зміни очікуються в робототехніці і машинобудуванні. Очікується поява наступних професій: дизайнер промислової робототехніки, конструктор ергономіст, оператор багатофункціональних робототехнічних систем, інженер-комполитор, дизайнер домашнього робота, дизайнер медичних роботів, проектувальник дитячої робототехніки і дизайнер нейроінтерфейсів роботів. На перетині управління і виробництва можуть виникнути такі професії: координатор виробництва в розподілених спільнотах, форсайтер, менеджер міжкультурної комунікації, модератор спільнот користувачів, онлайн-менеджер продажів.

Висновок. Четверта промислова революція суттєво змінить всі сфери життя, у тому числі й професійну. Як показало дослідження, майбутнє міждисциплінарних професій. Працівники отримують багато переваг і комфорту з новим способом роботи, але навчання буде необхідним протягом професійного життя, тому підприємство потребує сильних партнерів. Для успішного шляху до ЧПР існує безліч можливостей для навчання протягом усього життя та організації роботи, що сприяє навчанню. Професійна та академічна підготовка вимагають постійного діалогу між промисловістю, політикою та суспільством, щоб постійно розвиватися та адаптуватися.

Keywords: Fourth industrial revolution, stuff, superprofessional skills, robotics, engineering

Ключові слова: Четверта індустріальна революція, персонал, надпрофесійні навички, робототехніка, машинобудування

INTRODUCTION

As we mentioned in previous research [1-4] we live in the era of the Third Industrial (or Digital) Revolution, but modern world leaders are already actively preparing for a new era – the Fourth Industrial Revolution, which is based on the concept of fully networked and adaptive production with intelligent systems. However, in order to use the full potential of the FIR, changes in the labor market are needed in accordance with changing requirements and, as a result, in the concepts of education, since it is people who are the key success factors.

The **PURPOSE of the ARTICLE** is to study the impact of ‘Fourth Industrial Revolution’ in the global industry on the staff of the enterprise.

RESEARCH METHODS

Methodological and informational basis of work are scientific works, materials of periodicals, Internet resources.

RESULTS

The Fourth Industrial Revolution, which is considered as an industry, has the potential to change the existing technological regime. The universal nature of the new industrial model proposed by the Fourth Industrial Revolution, opens up the opportunity for a new industrial revolution, as a result of which the Fourth Industrial Revolution will become a new global industrial milestone and a standard for the development of the real sector of the economy all over the world.

Superprofessional skills and abilities. These skills are universal and important for specialists in various industries. Mastering them allows the employee to increase the efficiency of professional activity in industry, and also makes it possible to move between sectors, while maintaining his relevance. Below is a list of some super-professional skills that have been noted by employers as the most important for employees of the future. It:

- Systems thinking (the ability to identify complex systems and work with them. Including systems engineering).

- Interdisciplinary communication skills (understanding of technologies, processes and market situation in various related and non-related industries).

- Ability to manage projects and processes.

- Programming IT solutions / Managing complex automated complexes / Working with artificial intelligence.

- Client-oriented, ability to work with customer needs.

- Multilingual and multiculturalism (fluency in English and knowledge of a second language, understanding of the national and cultural context of the partner countries, understanding of the specifics of working in industries in other countries).

- Ability to work with teams, groups and individuals.

- Work in high uncertainty mode and quickly change the conditions of tasks (the ability to quickly make decisions, respond to changes in working conditions, the ability to allocate resources and manage their time).

- Ability to artistic creativity, the presence of a developed aesthetic taste.

- Lean manufacturing.

All these qualities will be highly appreciated and paid

during the Fourth Industrial Revolution. It will affect absolutely all industries, but our research is devoted to new professions in the industry. Accordingly, through the prism of industry, we will consider changes in the professions.

The most significant changes are expected in robotics and engineering.

Robotics and engineering. Now there is a revival of interest in robotics, associated with a sharp reduction in the production technology of robots. According to a Cisco study, the number of home robots in cities doubles every 9 months. In the 2020s, robots will become a familiar part of the interior of an apartment and urban spaces – it is very likely that this will be one of the most rapidly developing industries. In industry (including mechanical engineering), an active introduction of new-generation robotic complexes is being carried out, capable of flexibly adjusting to the necessary tasks and learning in the course of work. In developed countries, and after them in Ukraine, plants appear that are automated by 90 % or more. Robots will actively replace people in routine (pattern) work, pushing them into the sphere of creative work.

Industrial robotics designer. Specialist engaged in the design of robotic production devices (for operations such as painting, welding, packaging, stamping), production logistics devices, such as loaders, conveyors, manipulators, as well as robotic systems from such devices, for example, automated factories.

Designer ergonomist. Specialist in the management and maintenance of robotic systems in complex and dangerous industries and when working with hard-to-reach or micro-objects.

Operator of multifunctional robotic systems. Specialist designing robotized systems taking into account the ergonomic requirements of users, based on their physical and mental characteristics.

Engineer composer. Specialist engaged in the selection of composite materials for the production of parts, mechanisms, connecting elements of robotic devices with specified characteristics, including using 3D printing.

Home robots' designer. Specialist engaged in the development and programming of home robots (e.g., a nurse-robot, cleaning robot, robot-laundress, gardener-robot, dog-walking robot, etc.) that facilitate housekeeping. Such robots are integrated with other elements of the smart home, they have freedom of movement and can perform complex homework.

Medical robots' designer. Specialist in the design of biocompatible robotic complexes and cyber-devices for the medicine and biotechnology industry (e.g., surgeon-robot, diagnostic robots, cyber-prostheses, etc.).

Child robot's designer. Specialist who develops children's toys, games, gadgets and various mechanized consumer goods based on programmable robots, taking into account the psycho-physiological characteristics of children of different ages.

Robots neurointerface designer. A specialist designing control systems for industrial and combat robots through neural interfaces by individual operators and distributed teams.

In the field of engineering in the Ukrainian market there are companies with years of experience (from 25 to 90 years), who have grown up on the technologies of the military-industrial complex of the USSR. Most of these companies produce traditional machines and equipment with limited "intellectual" functionality. The global start of the development of robotics fell on the period of decline of the Ukrainian industry, so the majority of companies in the field of robotics are representatives of the largest foreign concerns and enterprises that implement the development of enterprises in various industries of Ukraine and have their own training centers in the territory.

Management. As in the industrial sector, there is a revolution in the field of management associated with the introduction of automated solutions. Previously, management systems looked like pyramids with multiple levels of middle management, now pyramids are becoming "flat", employees are increasingly delegated, freedom of decision-making is increasing, and some companies are experimenting with work without superiors. The main management tasks in the future will be the search for mechanisms of distributed control: opportunities to form, coordinate and evaluate distributed mobile teams of specialists for specific projects. In the 2020s, the role of non-hierarchical organizations (for example, independent producer communities) will increase, which will coordinate their sales, production, equipment and human capital investment plans through the Network.

At the intersection of management and production may cause such professions:

Production coordinator in distributed communities. A professional who consolidates an order and organizes the work of independent teams working within the industry community to develop, manufacture and assemble a product to the requirements of the client. In fact, it is the director of production for a community of several independent producers.

Trendvotcher / Forsyter. Specialist, tracking the emergence of new trends in different sectors of the economy, public life, politics and culture, compiling reports on the impact of new trends on customer needs. On the far horizon, the ability to work with images of the future will become the universal competence of any managers.

Cross-cultural communication manager. Specialist accompanying the company's document management in foreign languages, controlling key meanings (e.g., when choosing marketing slogans), teaching employees how to convey meanings in foreign languages, as well as cultural peculiarities when negotiating with foreign partners. Ad-

vises company management on doing business in other countries.

Moderator user communities. A specialist who organizes online communities of users accompanies a dialogue with the developers of the company's products for the development of a product line, maintains their loyalty (for example, organizes contests, etc.). This is one of the most important professional marketers in the near future.

Online sales manager. A specialist who, in offline companies, develops mechanisms for promoting goods through the Internet, organizes marketing campaigns on the Internet, accompanies the company's own online stores or works with partners to improve services for customers (e.g., delivery speed).

As the analysis shows, the future belongs to interdisciplinary occupations. Moreover, the development of society and technology is so rapid that employees will need to learn (improve and expand skills) all the time.

CONCLUSION

The Fourth industrial revolution will substantially change all spheres of life, including professional ones. As the study showed, the future of interdisciplinary professions. Employees get many benefits and comfort with a new way of working, but learning will be needed during a professional life, so the company needs strong partners. For a successful path to FIR, there are a variety of opportunities for lifelong learning and organization of work that contributes to learning. Both professional and academic training and training require a continuous dialogue between industry, politics and society to constantly evolve and adapt.

References

1. Bashynska I., Homoniuk H. *Influence of modern tendencies of development of world industry on economic safety of enterprise. Economics. Finances. Law. Kyiv, 2019. №2'2019. pp. 4-6*
2. Bashynska I. *Informing staff and company management about threats and risks of information security. Problems of social and economic development of business: Collection of scientific articles. Montreal: Publishing house «BREEZE», 2014. Vol. 2. pp. 256-258 (in Ukrainian)*
3. Filyppova S.V., Saadzhan V.A. *Modernization of machine-building enterprises: the choice of parameters and quality indicators. Economics: realities of time. Scientific Journal. 2014. № 6 (16). pp. 21-27. URL: <http://economics.opu.ua/files/archive/2014/n6.html>*
4. Filyppova S.V., Taran G.V. *Potential of machinebuilding of Ukraine: progress trends. Economics: realities of time. Scientific Journal. 2016. № 4 (26). pp 50-59. URL: <https://economics.opu.ua/files/archive/2016/No4/50.pdf>*