CHANGING ASPECTS OF WORK IN THE ERA OF GLOBALIZATION: ARTIFICIAL BRAIN AND MULTICULTURALISM AT A WORKING PLACE

OLENA IANYTSKA

Assistant-professor and PhD student in Rivne State Unversity for Humanities
olena.ianytska@hotmail.com
Ukraine

"Coming together is the beginning.
Keeping together is progress.
Working together is success."
Henry Ford

Summary

Globalization is a reformulation of social space in which the global and local are constantly interacting with one another. It became the reality of human being, it touches in different ways al the countries in the world. The globalised society is related to multilingualism, multiculturalisme, it provokes social, cultural and labour changes. Globalization is as hybridization and cultural homogenization. Work market reflects completely the global strategies. This paper deals with two major changing aspects of work : artificial brain and multiculturalism. Artificial intelligence is applied when machines mimics cognitive functions related to human mind, such as "learning" and "problem solving". Positive and negative effects of this phenomena will be examined in this paper. Another changing aspect of work in the era of globalization is diversity. It encompasses race, gender, ethnic group, age, personality, cognitive style, tenure, organizational function, education, background and more. Organizations employing a diverse workforce can supply a greater variety of solutions to problems in service, sourcing, and allocation of resources. As the economy becomes increasingly global, our workforce becomes increasingly diverse. Organizational success and competitiveness will depend on the ability to manage diversity in the workplace effectively.

1. Artificial brain as a stimulus to work, create and develop

Globalization represents a set of transformations in the contemporary world that are having profound impacts on the nature of labour markets and work. However, most social scientific analysis in this area has focused on changes to labour markets as emerging consequences of the developing global economy. In this paper we'll dis-cover two main changing aspects in the global work market : artificial brain and multiculturalism. Scientists are convinced that artificial intelligence will be created in coming decades and it will change life on Earth. Some re-searches think that we will live in an utopian world, in which machines will help humanity fight disease, poverty and even death. Others are persuaded that machines might eradicate humankind once and for all. So what will the future be like? How can we manage development of machines and future of human beings? Nowadays this type of intelligence is widely used in medicine, education, business, automotive industry and other spheres. The main benefits of using artificial intelligence in medicine are possibilities to avoid monotonous tasks, eliminate human errors, decrease medical costs, overcome mobility challenges, offer superior visualization, and provide comfort. In education artificial intelligence allows to improve learning and teaching practices on the basis of the mass of data, resources, results etc. This type of intelligence is useful not only for teachers and pupils but also for parents in choosing the right strategies for communicating with their kids. Artificial intelligence or brain is at the forefront of the scientific research right now.

Let's consider positive and negative effects of artificial intelligence.

Dr. Hugo de Garis (2010), assistant director of the Artificial Brains Lab in China's Xiamen University, has deeply analyzed the question and described its possible future. In 1996 the scientist predicted that the industry of artifi-cial brains will be as big as the oil industry but in 2009 he moved that prediction to 2030. In every case, artificial intelligence is really well-developed now, its power is huge. The best known example of artificial brain is Google, which gets better, more intelligent and gives people the answers that they really want when they go searching. The industry of artificial brain is a very big industry and it's progressively developing everywhere. All major research programs are artificial brains. All researches are convinced that we will see the growth of artificial brain companies in 2020 and they will become even bigger than the major artificial intelligence companies now like Google, Microsoft and Apple. They are commonly presented in Europe and America and worth hundreds of millions of dollars. The same programs are constantly progressing in China, although China Brain Project is happening a little bit slower than researches anticipated. Many different industries will use artificial brains technology. If people do

succeed and create artificial intelligence, it might be the last thing that we have to invent. Dr. Hugo de Garis (2010) thinks that once artificial brain reaches human level of intelligence, artificial brain designers will start designing themselves, it could be the last thing we invent.

According to scientific data this type of intellect will be trillions of times smarter than humans. Artificial brain will be thinking a lot faster than we do, because they will think at the speed of the light and human being are only able to think at chemical speed, which is about 100m a second, million time slower, it will be able to change the architecture in milliseconds. Artificial intelligence can have virtually unlimited memory, its potential is just enormous, it will be related to Internet. For instance, human being is the most intelligent of all creatures in the world. No one is really controlling a market of artificial intelligence nowadays, it's an open market. We might have an "IQ gap" in 2020s- that's the difference in intelligence levels between human levels and machine levels. Additionally, artificial intelligence will make an effort to solve the problems of humanity.

Ray Kurzweil (2013), the Google engineering, director predicts a tech utopia with the dawn of AI, and he's convinced that artlect will help end disease, eradicate poverty, find ways to deal with scarce resources. We have two ways optimistic and pessimistic, the truth is always in the middle.

There will be different wonderful things that future artificial intelligence may be able to do, for example to end aging, nanorobots, robots the size of molecules, programmed to kill aging cells and replace them with young ones, or to kill off cancer cell. We can get rid of disease, we can get rid of aging, but machines may also decide to kill us. So, the potential is so vast that it's very difficult for us, as humans, to predict where they will go. Artificial intelligence will allow to create artificial organs, robotic prosthetics, people will use AI a way to enhance their own brains. Artlect is already well-developed and serve people, it's adding components to our brain, enhancing our brain. It helps us to translate and learn foreign languages. We're able to think faster and have a direct contact to the Internet. Artificial brain will occupy a very important place in the future. As a result, machines will not replace us, they will encourage us to develop.

During all history of humanity we created instruments that helped us to do the things quicker, better, cheaper. However we always had to direct these instruments; to tell them exactly what to do in order to attain the necessary aims. Modern instruments of digital design are directed by clicks of mouse. At first there is an idea in a head, then you incarnate it on a paper, approximately like that we have developed every thing during all history. Artificial brain uses algorithms for the study of whole sets of decisions, you specify the aims and limitations and allow the computer to generate projects for you. Some people think we can lose workplaces because of computers and robots, but this statement isn't true, artificial brain makes us more creative and free and we evaluate from "an operator" to " facilitator" and to " tutor". In the global era, it is no longer needed to be operator of instrument, a man is free and becomes a facilitator; he begins to work jointly with a computer above creation of the most ideal project. Taking into account the variety of possibilities, we can choose, what project conforms most to the requirements from the point of view of structure, weight, forms etc. Many scientists agree that time when an instrument will teach us has come.

We can find many examples of artificial intelligence and evolution of our relationships with machines. For example, the English-speaking users of Gmail could not notice that the system began to offer them rapid answers for some letters. For example: "Thank you for your help ". "Pleasant journey". "Yes, I got your letter" etc. Using these answers generated by a computer, a man plays a role of facilitator. People that program these answers play role of tutors. There are many tools of artificial intelligence used in business such as Google Translate API, such giants as Facebook, Microsoft have created tools for recognizing faces etc. In forthcoming years we will see many examples of these new roles of facilitator and tutor. The most important question remains: what aims and values would we like to pass to our machines?

Stephen Hawking (1998), Bill Gates (1999) and Elon Musk (2015) have one common idea. All of them are afraid of apocalypse with participation of artificial intelligence. It is a hypothetical scenario according to which the artificial intelligence becomes the dominant form of life on Earth. It can provoke the revolt of machines which will decide to destroy humanity. This scenery might be realistic, but the majority of scientists think that human kind must be more afraid of loosing jobs because of machines. Achievements in the field of artificial intelligence and automation can result in lose of the workplaces - they will be taken away by machines. Only in the USA over 250 000 robots execute the work intended for people. In Asia and post-soviet space robots technologies are developing very quickly. And numbers grow annually. Not only workers worry that machines will take away work; the experts of articial intelligence experience it too. Andrew Yan -Tak Ng (1998) from a Google Brain Project and main scientist Baidu (Chinese equivalent of Google) expressed a disturbance in connection with the danger of development of artificial intelligence. Artificial brain will do better than anyone else. Bill Gates (1999) thinks that by the end 2030's, home robot industry will be the biggest in the world. Many people will use robots at home and at work in 2020s and they will be commonplace by 2030. This will have double effect. On the one hand this will facilitate work and on the other hand it will cancel the occupation and might create war between humans who want to support evolution of machines and those who want to limit it.

In the 21st century people should find the correct utility of artificial intelligence and let it be the next stage in evolution.

2. Multicultural environment at work

Multiculturalism is another current topic of work in the global era. Diversity of the world is reflected in the diversity at work. In multinational environment, employees can develop cultural awareness. It's evident that today's world is becoming more and more global as well as the marketplace, multiculturalism in the workplace will certainly grow. This fact has got a double effect, but in general it provides many advantages that help company prosper. Although the transition to a multicultural workplace could be difficult for workers and their employers, these difficulties are related to an acclimation. We'll first analyze positive aspects of multiculturalism.

It certainly creates a sense of cultural awareness among workers. Employees get used to others' ideas and points of view, they learn to think differently and find different solutions for a problem. In this case a worker begins to think about the narrowness of his world view and how it affects his ability to think and solve problems. Multiculturalism gives all workers a possibility to create new ideas, solve problems, develop new solutions based on their own cultural background, experience and other qualifications. In this environment, new and innovative solutions can be reached.

- Companies with diverse workers may benefit from a larger social network and generate an interest for products and services in many ethnic groups. Diversity at workplace develops tolerance towards other nations, cooperation between people and allows to reach a compromise when differences exist. Employees of different cultures may not only coexist, but also thrive. Multiculturalism can stimulate curiosity and encourage workers to learn more about others' cultures, lead to a lifelong or a short-term pursuit of learning. Josh Greenberg (2013) argues that workplace diversity refers to the variety of differences between people in an organization. That sounds simple, but diversity encompasses race, gender, ethnic group, age, personality, cognitive style, tenure, organizational function, education, background and more. Different global organizations and companies recognize the necessity to act and spend resources on managing diversity in the workplace. Employees from diverse backgrounds develop their individual talents and experiences in suggesting ideas and adapting to fluctuating markets and customer demands. Multiculturalism is related to the global enterprise. Work in a global era involves resulting in higher productivity, profit, and return on investment. From the other side multiculturalism creates many challenges at the workplace.

At first, cultural and linguistic barriers must be overcome, ineffective communication can result in lack of teamwork and low morale. Some employees may resist to change, you may here "we've always done it this way", they won't accept new ideas and progress. Diversity at a workplace should be successfully managed and assessed.

Each company should implement a strategy that permeates every department and function of the organization. It is also necessary to implement diversity workplace plan, leaders and managers must incorporate diversity policies into every aspect of the organization's function and purpose. Every organization must decide what changes need to be made in order to implement a diversity plan.

As the economy becomes increasingly global, our workforce becomes increasingly diverse. Organizational success and competitiveness will depend on the ability to manage diversity in the workplace effectively. Evaluate organiza-tion's diversity policies and plan for the future. As the 21st century is considered to be the century of Asia and Africa, according to the numbers of population living there we will feel the diversity around us. Multicultural teams can increase the efficiency and success of work.

It is possible to distinguish five most typical problems which are related to multiculturalism :

1. Management of a cultural variety, distinctions and conflicts.
2. Management of the questions related to co-ordination and control.
3. Attempt to solve a problem of geographical sparseness of command members.
4. Optimization of maintenance of communication.
5. Increase of unity and its maintenance.

Managers from different countries, probably, will understand and solve these problems differently, will see different ways of decision of strategic questions, because they have already their own look on it, on the estimation of strategic possibilities, strengths and weaknesses.

Christopher Early (2002) understands a cross-cultural competence as an individual ability to adapt oneself in a new cultural environment. A good and well-qualified manager in a global company should master cultural information and communicate effectively with people of different background.

The main task in the era of globalization is to preserve work. Globalization accelerates our capacity and we should apply a forward-looking strategy in order to succeed at macro and micro-levels. In this increasingly competitive environment we should embrace new realities and integrate ourselves across institutional, geographical, and indus-trial borders. Artificial intelligence and multicultural aspects will be developing in this interconnected and evolving global landscape. As we are moving from Fordism to Post-Fordism and from Industrialism to Post-Industrialism, the new work market prevails many changes under globalization and implies many changes to the nature of work and organization.

BIBLIOGRAPHY

ABE, H. and WISEMAN, R. (1983) A cross-cultural Confirmation of the Dimensions of Intercultural Effectiveness, *International Journal of Intercultural Relations* 7, 53-67.

Andrew Y. Ng (1997) Preventing «Overfitting» of Cross-Validation data in *Proceedings of the Fourteenth International Conference on Machine Learning,* p.245-253.

DE GARIS, H. (2005). *The Artilect War: Cosmists vs. Terrans: A Bitter Controversy Concerning Whether Humanity Should Build Godlike Massively Intelligent Machines*. ETC Publications.

DE GARIS, H. (2010). *Multis and Monos: What the Multicultured Can Teach the Monocultured: Towards the Creation of a Global State*. ETC Publications.

DE GARIS, Hugo (2010). *Artificial Brains : An Evolved Neural Net Module Approach.* World Scientific.

EARLY P.C. and GIBSON C.B. (2002) *Multicultural work teams: a new perspective*. New Jersey: Lawrence Erlbaum Assosiates.

GATES, B. (1999) *Business @ the Speed of Thought*. [Online] Pearson Education Limited. Available from: http://sanluisrey.edu.co/web2016/guiasEstudiantes/Ingles/Business_at_the_Speed_of_Thougt_level_6G11.pdf [Accessed: 24th August 2016].

GREENBERG, J. (2013) *Diversity in the Workplace: Benefits, Challenges and Solutions.* [Online] Available from: http://www.multiculturaladvantage.com/recruit/diversity/diversity-in-the-workplace-benefits-challenges-solutions. asp [Accessed: 24th August 2016].

KURZWEIL, R (2013). *How to Create a Mind: The Secret of Human Thought Revealed*. Penguin Books.

KURZWEIL, R (2000). *The Age of Spiritual Machines*. Penguin Books.

HAWKINS, S., (1998). *A brief history of time: From the big bang to black holes*, Bantam Doubleday Dell Publishers.

MUSK, E (2015) : *Tesla, SpaceX, and the Quest for a Fantastic Future* (Biography written by Ashlee Vance). Ecco.