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IMPACT OF THE INFORMATION TECHNOLOGY BUSINESS
ON FUTURE EDUCATIONAL SYSTEM

The article considers what, we live in a fast changing world. Technologies change so quickly that it was incredible even ten years ago. This is especially true for information technologies. Internet has radically changed the world, turned it into a smaller, transparent, global – virtual space. We hear the news from anywhere in the world in seconds. Of course, all of this influences the educational system. Challenges towards education are constantly changing. While the one's knowledge of university had been following him for decades at earlier times and did not change, the situation for today's graduates have significantly changed. The information received at the university should be constantly updated by young people and give priority to self-development. School and higher education should be designed in a way to help young people develop memory, creative thinking, desire for innovations and ability of self-development. This is not a simple thing. The goal of the research is to find ways to improve higher education in order to develop creative thinking of young people. Studies prove that the universities of the world that are focused on innovative teaching methods are far more successful during the process of teaching the new generation. As a result, we receive highly skilled manpower and developed labor market. The findings made on the basis of the study showed that in order to overcome unemployment the priority should be given to a private sector, which will assume high social responsibility for each individual. Development of intellectual capital is the most important factor for enhancing the standard of living and overcoming poverty. In this way the country will become much stronger and the society will develop. The results and recommendations presented within the study will substantially improve the rational, reasonable use of new technologies in learning process. Research and its outcomes are important for both cases such as finding ways to improve the higher education and for government and non –government sector and wide public.

Keywords: artificial intellect, information technologies, education of the future, global world, frictional and structural unemployment, employment.

ВПЛИВ БІЗНЕСУ ІНФОРМАЦІЙНИХ ТЕХНОЛОГІЙ
НА МАЙБУТНЮ ОСВІТНЮ СИСТЕМУ

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У статті проаналізовано, що інтернет радикально змінив світ, перетворивши його на менший, прозорий, глобальний – віртуальний простір. Технології змінюються досить швидко. Особливо це стосується інформаційних технологій. Звичайно, все це впливає на освітню систему. Інформація, отримана в університеті, повинна постійно оновлюватися та надавати пріоритет саморозвитку. Школа та вища освіта повинні бути розроблені таким чином, щоб допомогти молоді розвивати пам'ять, творче мислення, бажання до інновацій та здатність до саморозвитку. Пошук шляхів вдосконалення вищої освіти – це мета розвитку творчого мислення молоді. Дослідження доводять, що університети світу, орієнтовані на інноваційні методи навчання, мають набагато більший успіх у процесі навчання нового покоління. В результаті ми отримуємо висококваліфіковану робочу силу та розвинений ринок праці. Результати, зроблені на підставі дослідження, показали, що для подолання безробіття слід надавати пріоритети приватному сектору, який буде нести високу соціальну відповідальність за

кожного. Розвиток інтелектуального капіталу є найважливішим фактором підвищення рівня життя та подолання бідності. Таким чином країна стане набагато сильнішою, а суспільство розвиватиметься. Результати та рекомендації, представлені в рамках дослідження, суттєво покращать раціональне використання нових технологій у процесі навчання. Дослідження та їх результати важливі для таких випадків як пошук шляхів вдосконалення вищої освіти, так і для державного та недержавного сектору та широкої громадськості.

Ключові слова: штучний інтелект, інформаційні технології, освіта майбутнього, світ, структурне безробіття, зайнятість.

Formulation of the problem: to find ways to improve higher education in order to develop creative thinking of young people. Studies prove that the universities of the world that are focused on innovative teaching methods are far more successful during the process of teaching the new generation. As a result, we receive highly skilled manpower and developed labor market.

Analysis of recent research and publications. Works by foreign and Georgian authors and internet resources have been processed, progressive ideas of Voltaire, Didro, Russo, Montesquieu, Kant, Hegel and others, Ling Dong, Lun Han [5] et al. During the research process were used methods of analysis, synthesis, logical thniking and quantitative research. The last step was to make conclusions from the information obtained.

The subject of the research is the current and expected changes in the educational system. We live in a fast changing world. Technologies change so quickly that it was incredible even ten years ago. This is especially true for information technologies. Internet has radically changed the world, turned it into a smaller, transparent, global – virtual space. We hear the news from anywhere in the world in seconds. Of course, all of this influences the educational system.

Challenges towards education are constantly changing. While the one's knowledge of university had been following him for decades at earlier times and did not change, the situation for today's graduates have significantly changed. The information received at the university should be constantly updated by young people and give priority to self – development. However, the concept that learning is not needed or that we can get new information on the internet, or why we need high education and things like that, is incorrect. The main objective of higher education is to help young people develop memory, creative thinking, desire for innovations and the ability of self – development.

If we look at the labor market of Georgia, unemployment exceeds 12,7% according to the data of the National Statistics Office, but NDI indicates to a higher rate. There are many hard – working people who would like to find a suitable job but they do not have either relevant qualification or there are not work places. Frictional as well as structural unemployment increases which sets as heavy burden on the population. The part of the population below the absolute poverty line is 20.1% which is too high for such a small country.

In order to overcome unemployment, the priority should be given to a private sector, which will assume high social responsibility for each individual. Development of intellectual capital is the most important factor for enhancing the level of living and overcoming the poverty. In this way the country will become much stronger and the society will develop.

Europe has always been distinguished for its care about eduction. The darkness of ignorance is still illuminated by the progressive ideas of Voltaire, Diedro, Russo, Montesquieu, Kant, Hegel and others for the Europeans. They put human in the centre of the universe and consider the knowledge and mind as the most valuable ones. The author of the American Declaration of Independence, Thomas Jefferson, also shared the same view when he said that a nation could never be both ignorant and free. The development of mankind is based solely on knowledge (education). Knowledge is an essential and unlimited resource of its progress. The old Chinese proverb also says this: "If your plan is for one year plant rice, if your plan is for ten years plant trees, if your plan is for one hundred years educate mankind".

It is important to develop the creative – cognitive thinking exactly in order to reduce structural unemployment. The main focus should be on learning the information technologies. In the future many fields will disappear but new jobs will emerge in other areas that will require retraining of people. Who will assume this responsibility, government or business? Of course, this must be done through the efforts of private business and with the support of government.

As for the future education, it is almost impossible to predict its image, just as John Rockfeller could not imagine the existance of antibiotics, cell phones or the internet. Abraham Lincoln knew nothing about cars, airplanes, radio or electric lights. Roosevelt could not even think of a copier or a tape recorder. John F. Kennedy would not even believe the existance of computers, DVDs and the internet...

New technologies create new markets and opportunities. Old industries always fail in fighting against new technologies. The US spends more than \$300 billion a year on research and development. Today, scientists are exploring a wide circle of new products and services ranging from solar power, electric vehicles, anti – tumor drugs to voice – controlled computers and genetic engineering.

"Cloud Computing" is the evolution of IT, development of the information market. It allows the perfect business model to be created with lower costs. To get into the system of the "cloud computing", it is enough to connect to the internet to enable the use of infrastructure and software services. "Cloud Computing" services can be accessed from anywhere with the use of different devices (laptops or Tablets). However, not all organizations are ready yet to accept such technologies and decisions.

Microsoft licensed "cloud computing" has been successfully introduced in Georgian Aviation Services Agency (GASA). This is office 365, including cloud repository "One Drive business" where technical maintenance work was carried out by the company "Syntax". This company also implemented the maintenance work of "cloud computing" in the Axis company, which was being carried out under the Memorandum of Cooperation with Microsoft. Through "One Drive business" it is possible to make files stored in electronic cloud repository accessible from anywhere in the world via internet.

Microsoft licensed cloud technologies allow companies to place the operative information on 2 continents in a secure cloud repository, which significantly reduces management costs and companies have more time to develop business. The necessary information is available to authorised employees. There are numerous control mechanisms that ensure network security and protection. These technologies are also being introduced to be applied in educational processes in the direction of e – learning development as well as for devices with different architecture and operating system [4, p. 68].

Despite huge guarantees offered by Microsoft and Google licensed "cloud technology", there are still risks. World experience has shown that there are some cases of cyber attacks during which traditional protection mechanisms are completely ineffective. Today, the world's experienced providers are constantly trying to identify risks and eliminate them.

Artificial intellect is constantly evolving. Elon Musk claims that the artificial intellect will be much smarter than the most intelligent person. Just as a chimpanzee cannot understand a human, so does a human cannot understand artificial intellect. In addition to a positive impact, Musk also sees a great danger for people. He says that he is currently workin on the microchips to link human brain to a computer. He gathered the neuroscientists from around the world in the laboratory of the university of California and invested $100 million in it. Many people are excited about the attempts of creating new technologies for linking brain to the computer. Once Plato dreamed: "I wish it was possible to transfer wisdom from one soul into another through the approach of two souls just like water is poured into an empty bowl out of the full one". This is the dream for the implementation of which Elon Musk is working. However, there are also skeptical people about this. According to Thomas Stieglitz, the representative of the department of microtechnology at the University of Freiburg, this idea is more likely a fantasy that the existing information can be loaded into a human brain through a microchip. He notes that psychological, medical and ethical – legal aspects are quite vague in this regard. Development of artificial intelligence can endanger human existance. But who knows?! Many fantasies have come true, have not they?....

But first of all the society needs the security of new technologies. There is some regulation for protecting the users in order to create a healthier, better quality of life. As Brian Tracy, the author of many bestsellers noted, 85% of human happiness comes from public relationships and only 15% brings professional success.

It is hard to imagine what will happen next. But one thing is clear, for a modern person it is important to develop the mind. However, this must not be achieved only through internet – technologies and gadgets. On the contrary, in some cases it is even harmful. In France, for example, school children were banned to use cell phones. Medicine has come to the conclusion that while modern gadgets develop the mind, they also supress it. Adolescents grew out of the habit of talking, interacting and prefer the virtual world. Their mind becomes lazy. Small children are not able to start speaking in time due to their early addiction to internet. Even the university students also find it difficult to speak and express their opinions consistently. Their ability of memory is decreased. Despite the fact that our mothers and fathers might not have used the taxts for

nothing learnt by heart at school but their mind was far more thained. As steel was tempered at high temperature, so did the human brain was trained by remembering different texts. Unfortunately, many ignore this. Opponents will say... but this is the reality.

Although the educational system of the future significantly changes professor's duty, i.e. they do not any longer have the evaluater's function, he will always remain as the "lighthouse" of the direction, an important consultant. For the student, direct dialogue with the professor, listening to the lecture or narrating the material, will become even more necessary and deep. Sometimes the student thinks that he understood the material correctly but in the dialogue it turns out that he could not comhrehend something competletly. Thus, in –depth analysis of the material requires a constant face to face dialogue between the student and the professor. It is possible to provide many similar examples related to this issue.

Just as the suggestions of ancient Greek philosophers such as Socrates, Plato, Aristotle, do not lose their actuality and they are still valuable today, so will be the advice of wise professors about knowledge in the future. Plato fairly believed that "naturally the human weapon is the consciousness", so, people differ from one another by natural intelligence, talent, thinking and energy. Obviously, this distinction cannot be replaced by Elon Musk's "brain microchips". Just as the invention of the book has created some "crutches" in human memory, microchips of the future are likely to play the role of such "crutches" and it will be in return for some danger. Physicians admit that the transplantation of such microchips in human brain can even cause brain swelling, but this is the event of the future... Excessive technologies can bring human back even to their original state, that is the epoch of Adam and Eva...

And now we have to think directly about the present. The ability of Georgia to play the role of a transit country has always attracted the attention of international community. Its geopoilitical and geoeconomic position is of international interest. The transit role of the country is certainly important for Georgia to participate in the globalization process. With the increase in freight, investments and flows of information, the quality of Georgia's integration with the world economy will also increase accordingly.

For a country with such small economy like Georgia, obtaining an international function in a difficult process of building the state is necessary not only economically but politically as well. The full functioning of the transport corridor also requires the development of other sectors such as telecommunications, energy, hotels, industrial and agricultural production and service sectors [3, pp. 31–34].

The size of the Georgian market is very small and the demand is mainly met by imports. Thus, the attractiveness of Georgia to the investors oriented on the size of the market is not so high. However, the interest in Georgia by foreign companies is increasing, as the country, with its location, is a kind of bridge which connects the most important regions of the world. These include Europe (population 495 million), Black Sea countries (population 243 million), Turkey (population 73 million), the Caucasus region (16 million). By investing in Georgia, foreign companies can serve the region's markets and strengthen their positions.

With the use of globalization and integration opportunities, countries are seeing more economic benefits than

facing difficulties. The fact is that the integration process is not going equally and in this process such countries are facing complications that are not integrated in global economy as fast as others. Recent studies show that the countries which managed to involve in the globalization process successfully, achieved the economic growth. Poverty rate in these countries is decreasing. And high inflation, unemployment, poverty, economic stagnation are typical of such countries, which are developing far from the world economic integration.

A new university project indicates to the high quality of Georgia's integration, which is planned in the city Kutaisi in cooperation with the Technical University of Munich that will turn this city into a university hub of a European standard. Georgian businessman and patronage Bidzina Ivanishvili invested one billion in this project. Foreign professors – teachers together with Georgian professors will deliver lectures to students at the new technological university.

The results and recommendations presented within the study will substantially improve the rational, reasonable use of new technologies in learning process.

Research and its outcomes are important for both cases such as finding ways to improve the higher education and for government and non –government sector and wide public.

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