УДК 34:004

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LAW AND INNOVATION: DIGITAL REALITY IN BELARUS AND FOREIGN COUNTRIES

Introduction. People's way of life has been influenced by the way technology has been developing. To keep up with rapidly changing environment is necessary to update awareness what innovations come out.

There is personal experience of the author in application of digital services in the sphere of education to start with, and then, how digitalization relates to other fields and corresponds to the Law.

The aim of this article is to describe how digital reality is represented in Belarus on a specific example; to create a general notion about implementation of virtual reality in foreign countries; to emphasize the influence of the legal system in Belarus on innovations developing.

Main part. In the beginning of this spring 5 teenagers from Belarus including me were admitted to the international project "We do democracy". It was held by coaches based in Copenhagen in Denmark and gathered the youth from Sweden, Estonia and Belarus. It offers educational sessions during three months to clarify the meaning of Democracy in everyday life.

The majority consider democracy relating only to people engaged in politics or voting. On the contrary, every one of us participates in democratic processes every day. They are empathy to other people, curiosity, disagreement, compromise. Democracy reflects integration with other people and have in an impact on our contribution to the society, now and here.

Initially it was supposed to carry out the project in Copenhagen (there is no need saying how much I was enthusiastic to set out to this place for such a period of time). And out of the blue the coronavirus brought out and all of the plans were turned down. As a result, eye-to-eye interaction came to online training course, which was possible by means of creating digital reality.

Participants were given home tasks to study on the email. The platform Zoom was used for virtual meeting. It was real new digital reality where we evaluate solutions, devise best practices, create mind maps, not on paper but on the screen. Technology gave us remote support: foreign couches kept in touch with us online, so it was possible to ask them any questions at any time.

Lectures were recorded in the form of video, a text document with the help of voice-enabled features (voice to text conversion).

Digital services immerse us in studies lowering time, risk of spreading the corona and cost required for participants to reach the Copenhagen (picture 1).

Picture 1 — Opportunities provided by Digital services

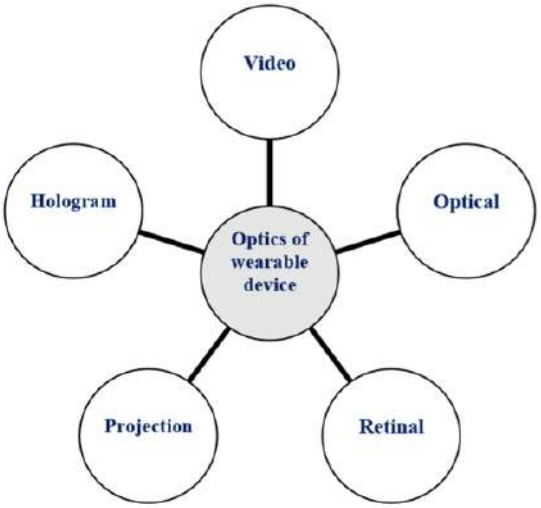
As for other European countries and the USA, they move forward updating digital reality to virtual.

Virtual Reality, VR for short, blends real-world environment and digitally-created content, where both environments can interact with each other. The tool that provides this innovation is "Virtual glasses". It connects individuals remotely and enable them to view the same data and interact with it.

Smart glass is one of the intelligent and innovative computing device developed in recent years.

VR is superior to standard video because the former suggests remote guidance and works as "See-What-I-See".

The information is visualized with the help of optics (picture 2). Without the use of optics it would be impossible to experience the augmented reality features.



Picture 2 — Augmented reality optical features of smart glass in visualizing the information.

It helps educators to learn and teach the subject with real-world experience computer-generated environment. Smart glass wearers can see the real world matters with a possibility of superimposing (picture 3).

Smart glasses proven to be one of the modern computing devices that unite the humans and machines with the help of information and communication technology (picture 4).

Recently, smart glasses have been used only in the medical and gaming spheres. However, updating the features of smart glasses contributes its services in other fields. If explore the possible application of the device in the education sector, the impact seems to be significant (picture 5).

Picture 3 — The usage in Physics classrooms. The digital tween

Picture 4 — Typical Devices for Augmented Reality

Picture 5 — Why is VR superior to classical way of teaching

Typical applications of wearable smart glass in education include the augmented reality, documentation of lecture, on-site report preparation, recording lectures as videos, capturing essential points as images.

Classic teaching methods convey content to students according to the instructor's preferred style of learning. VR experiences access all the senses.

As far as other fields are concerned, VR promote repetition and retention new skills which require constant practice. VR options offer, easily generated environments that allow the repetition and variation. It does matter during surgical operations, or in the need of strategizing a response to an enemy attack on the fly.

Smart glasses eliminate risk which firefighters face at the dangerous situations. Virtual hologram allows firefighters examine all cases how to respond in dangerous situations without risking their lives. VR experiences can build extreme environments and situations, allowing users to test and learn without severe consequences.

What is more, these digital innovations reduce training budget and equipment longevity. Heavy equipment doesn't have to be brought to a special training location, or suffer wear and tear as numerous trainees learn how to operate it.

Probably, it makes sense to call for the government to take innovations used under the control of the legal system. The legal system as facilitator adopt diverse processes to the digital environment effectively. It accumulated recourses to promote innovations.

In case of "accidents" and "wrongs" the government might apply the legal measures to solve the problem. Public groups could turn to executives with complains concerning Virtual Reality implementation and could rely on their assistance.

As for its it constraining aspect the law sets limitations and defines channels what activities must take place.

The first thought comes to mind "does not is good when the government care about the quality of the resources we get?" Constraining aspect of Law in education prevents from activities which are not in the government's interests.

Speaking for my project "We do democracy", it would be under consideration to held if the organization depended on the government solution. Because Belarusian notion about "Democracy" differentiates from one of other European countries. Although democracy is about active life position, the government could see danger in spreading the topic.

So, it cuts back on the quantity of knowledge the youth could gain to broaden their cultural horizons.

For the time being Belarusian government is putting huge sources to create the necessary conditions for the speedy development of the IT industry. The key action for it was making the Decree of the President of the Republic of Belarus of December 21, 2017 № 8

The Decree accurse to be revolutionary. There are reflected all of the prerequisites necessary for IT-industry development, high technology in general, businesses based on the blockchain (the technology used in cash transactions). Thanks to the Decree Belarus has become the first country in the world that implement Smart contract — a computer program to automatically control or document legally relevant events and actions according to the terms of a contract — in the Legal System.

Conclusion. Innovations concerning digital reality are always value for money. They contribute to time-and-money savings in long vision and improves development of IT-industries of diverse countries, so that many spheres of life are improving.

Digital Reality is represented at different levels in Belarus and foreign countries. Nevertheless, Belarus is moving forward to the brightest future, and development of digital innovation are supported by the Decree № 8 of the President.

However, it's necessary to examine the interfaces between the technology and law and take under consideration constraining aspect of Law. If we make innovations a part of the legal system, the legal system takes the control of the content.

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