СЕКЦИЯ «АКТУАЛЬНЫЕ ВОПРОСЫ В ОБЛАСТИ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ, ИНФОРМАТИКИ И ЭЛЕКТРОННОЙ ЭКОНОМИКИ (НА ИНОСТРАННЫХ ЯЗЫКАХ)»

THE IMPACT OF THE PANDEMIC ON DIGITAL SOCIETY

Akulich N. P.

Belarusian State University of Informatics and Radioelectronics, Minsk, Republic of Belarus

Baranovskaya E.V. – Senior Lecturer

Annotation. The article reveals the impact of the COVID -19 pandemic on digital society, and how various technologies and innovations are used in some spheres of our everyday life.

Keywords. COVID-19 pandemic, digital landscape, "lockdowns", "mask mandates", "social distancing", self-isolation, online medical supply, e- commerce, distance learning, quarantine, IT services, behavior patterns, digital society, work place, closure, education institutions, online learning, online store, food delivery, offline purchases, public health facility, public health landscape, chatbot, virtualized patient care, pandemic preparedness.

Only a little over a year has passed, and the global digital landscape is already very different from what we have seen before. And it continues to change without slowing down. This time last year, concepts such as "lockdowns", "mask mandates" and "social distancing" were unknown to most of us. Today they are a part of our everyday language as the COVID-19 pandemic continues to impact all aspects of our lives.

The COVID-19 pandemic has resulted in over 4.5 million confirmed cases and over 300,000 deaths globally [1]. It has also sparked fears of an impending economic crisis and recession. Social distancing, self-isolation and travel restrictions have led to a reduced workforce across all economic sectors and have caused a loss of many work places. Schools have closed down, and the need for ordinary commodities and manufactured products has decreased. In contrast, the need for on-line medical supplies, e-commerce, distance learning, telecommuting have significantly increased. The new digital habits have been developed during the quarantine, and have led to significant increase in digital activity.

As the pandemic persists, certain behavior patterns are observed all around the world now. This an exceptional situation might bring us to absolutely new realities [1]. Let's take a closer look at some of them.

Due to the limitations of the pandemic, hundreds of millions of people began to work from home, and many experts predicted the death of office work. Though, it might be that the rumors about the death of the office are somewhat exaggerated. Only a part of Internet users worldwide expect to work from home more

often after the pandemic than before the coronavirus [2]. But, this figure might differ significantly from country to country. However, as in many aspects of our digital society, this change in behavior hardly indicates an unambiguous trend. In fact, the restrictions have helped many people and businesses figure out how to adapt work from home to their needs, but once the need for social distancing subsides, many will work from public spaces because of their own volition or out of necessity. Thus, most likely, we will work from different places. Our work place will be there where it is more convenient or where there is free Wi-Fi. This will have important implications for brands, especially in the B2B space. For example, the demand for products and services that help people work more efficiently and productively from home (e.g. office chairs, computer monitors, group communication platforms, secure remote connections, and so on), will continue in the next few months. With the consolidation and development of habits that are formed when working from home, new commercial opportunities also appear. They may be different in different countries with different cultural settings [2].

The COVID-19 pandemic has affected educational systems worldwide, leading to the near-total closures of schools, universities and colleges. Most governments have decided to temporarily close them in an attempt to reduce the spread of COVID-19 and millions of learners have been affected [3]. But educational institutions of all levels have scrambled to find creative solutions to teaching students online, in-person but socially distant, or in a hybrid format. Online learning has become a critical lifeline for education, as institutions seek to minimize the potential for community transmission. Distance learning programmes and open educational applications and platforms are widely used actually to reach learners remotely and limit the disruption of education. Technology can enable teachers and students to access specialized materials well beyond textbooks, in multiple formats and in ways that can bridge time and space [3]. Due to the COVID-19 pandemic, many schools across the world conduct classes via videotelephony software such as Zoom, Google Classroom and/or Google Meet. Humans respond to crises in different ways. When they face an uncertain problem or risky situation over which we have no control, they tend to try whatever they can to feel like we have some control. Global spread of COVID-19 has been accompanied by a lot of uncertainty and contradictory information. When people are hearing different pieces of advice from multiple sources, they have a greater instinct to over-, rather than under-, prepare.

As it was officially declared a pandemic by the World Health Organization in 2020, people responded by stocking up. They bought out medical supplies like hand sanitizer and masks and household essentials like toilet paper and bread. Soon, both brick-and-mortar and online stores were struggling to keep up with demand, and price gouging for supplies became rampant. But despite all these concerns about the availability of certain products, after a while people simply began to use online stores for their needs much more often than before, because it is convenient and safer during the pandemic, and the result is the same as offline purchases. The demand for food delivery has also increased. Many stores have started to adapt to online services and it does not depend on the type of product. Perhaps we are seeing the moment when online surpasses offline in some ways and it is ok, but we should also remember that without offline there will no online, they are directly connected [4].

As far as everyone knows COVID-19 is a newly-identified infectious disease that has rapidly spread throughout the world with rising fatalities. The virus's blend of lethality and transmissibility have challenged officials and exposed critical limitations of the traditional public health care facilities. However, IT has answered the call for a new form of public health that illustrates opportunities for enhanced agility, scale, and responsiveness. New technological innovations have helped transform the public health landscape with new and refined capabilities. Chatbot and virtualized patient care offer a mechanism to triage and distribute care at scale. Artificial intelligence and high-performance computing have accelerated research into understanding the virus and developing targeted therapeutics to treat infection and prevent transmission. New mobile contact tracing protocols that preserve patient privacy and civil liberties are being developed in response to public concerns, creating new opportunities for privacy-sensitive technologies that aid efforts to prevent and control outbreaks [5].

To sum up, the COVID-19 pandemic has highlighted technology's importance to all spheres of our life, including pandemic preparedness. Future multi-stakeholder collaborations, including those with technology organizations, are needed to facilitate progress in overcoming the current pandemic, and setting the stage for improved pandemic preparedness in the future. We should consider technology's role and continue to seek opportunities to develop and improve them. They save our time (the most valuable resource today), and also prevent us from appearing in some places without necessity, not getting infected ourselves and not infecting others.

References:

1. The digital quarantine [Electronic resource]. - Access mode: https://medium.com/etermax-brand-gamification/the-digital-quarantine-5c48f1e21bcf.

2. How COVID-19 changed the Internet and us – Social networks and Online Retail after the pandemic [Electronic resource]. –Access mode: https://www.web-canape.ru/business/kak-covid-19-izmenil-internet-i-nas-statistika-interneta-i-socsetej-poslepandemii/.

3. Impact of the COVID-19 pandemic on education [Electronic resource]. -Access mode: https://en.wikipedia.org/wiki/Impact_of_the_COVID-19_pandemic_on_education#Online_learning.

57-я научная конференция аспирантов, магистрантов и студентов БГУИР, 2021 г

4. The Pandemic's Impact on the State of Online Shopping Worlwide [Electronic resource]. –Access mode: https://www.getfeedback.com/resources/cx/the-pandemics-impact-on-the-state-of-online-shopping-worldwide/.
5. Population Health Management Vol. 23, No. 5 Original Articles, Free Access, the Essential Role of Technology in the Public Battle Against COVID-19 [Electronic resource]. –Access mode: https://www.liebertpub.com/doi/10.1089/POP.2020.0187.