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MOVING ONLINE DUE TO PANDEMIC 2020

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Abstract

The 2020 pandemic has accelerated the transition of all spheres of public life to the Internet. Lockdown forced the decision to cease or act online. Over a short period of time, there has been a significant increase in the role of information and communication technologies (ICT) in the life of society. The study analyzes which areas and how they began to operate online and provides cases of the use of ICTs that seemed previously impossible (for example, weddings, graffiti, and protest rallies). Some areas of life have been more prepared for the transition online than others. Education, many spheres of activity related to the creation of an intellectual product (programming, design, finance, media, public service, etc.) moved online most smoothly. In some cases, only part of the staff switched to remote work. Even some presenters of big media companies broadcast from home. If the election rally went online, the implementation of e-democracy was rare. The field of culture and sports practically could not offer anything other than existing and earlier recordings of concerts and tours or online training sessions. However, collaboration platforms and diverse communications tools became everyday practices during the lockdown. Some social practice (classes, prom, wedding, work meetings, etc.) moved to multiuser video games. The lockdown not only forced the large-scale experiment surviving in an online environment that identifies development trends but also raised many new questions.

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1. Introduction

The 2020 year could be considered as a year of acceleration of transmission on the online environment. The pandemic of virus COVID19 forced most countries of the world to change the usual practice of existence to online ones. Today it is too early to take stock of the changes that have taken place and their consequences. However, trends can already be traced.

Information and communication technologies play a more and more important role in human life. But as usual, the progress towards informatization is rather slow and difficult, as it is necessary to overcome both technical difficulties and human resistance. But this year there was no choice. Every organization should decide or act online or don't act at all that in many cases means the liquidation.

So, the pandemic has impacted a dramatic increase in the use of digital practices in human life. Those areas of human activity that were most advanced in this direction received a powerful impetus. Those that were less prepared took serious steps in this direction.

Coeckelbergh (2020) writes that we were much too slow with digitalizing education, work, and other fields, and we should be damn lucky that we have all our digital tools to communicate and get information in times of lockdown: our lives literally depend on them.

2. Problem Statement

The abrupt rejection of interaction in the physical world vividly highlighted both the problems that hinder further immersion in the online environment and the possibilities and new solutions in this area. Although the first challenges faced by society were the technical maintenance of work, the speed of the Internet, the ability of services to support the increased load, our focus is not on the technical, but on the social dimension of changing.

3. Research Questions

The study examines what areas of human activity and to what extent were able to move to an online existence, how social practices have changed, and what new ways of using information and communication technologies have appeared.

4. Purpose of the Study

The study aims to determine what changes have occurred in different spheres of human activity in connection with the forced transition to online activities during the pandemic. Of particular interest are those areas in which it was traditionally considered impossible to use information and communication technologies.

5. Research Methods

The study analyzed the changes in various areas of society during the breakdown. More than 500 posts were found about online solutions to problems traditionally occurring outside the Internet and what were the precedents before the pandemic. Also, several hundred sites and representations in social

networks of various organizations (educational, cultural, state, etc.) were analyzed. The found material was classified, the main trends and consequences identified.

6. Findings

When the question arose either to act online or not to act at all, then all spheres tried to do everything possible to survive in the online environment. Human activity can be divided into 1) spheres, the level of development in which allowed the transition to an online existence, 2) where the leap was made, significantly moving the border of the possible, and 3) areas that were completely outside of online life.

Education, many spheres of activity related to the creation of an intellectual product (programming, design, finance, media, etc.) moved to the online mode, although not without losses and problems. Trade began to increase the Internet sector. Worldwide online distance learning proved the idea that education is the most advanced spiritual sphere (Bylieva et al., 2018). By 2020, there was a developed system of massive online open courses (Baranova et al., 2019; Evseeva et al., 2020), e-learning was used in universities around the world (Bylieva et al., 2019; Lan & Hew, 2020; Pokrovskaja et al., 2019), there were Internet portals specializing in school education, tools like Google class, Yandex textbook, electronic diaries, etc. have been developed. Ebner et al. (2020) assesses a high level of the e-learning readiness of Austrian universities by 7 categories (strategy, structure, technical systems, style and culture, staff, skills, «shared values»). Around 50% of students in China believed that the planned teaching objectives were fully attained and 46% for objectives basically attained during pandemic online education (Sun et al., 2020). But it doesn't mean that transition went smoothly. School closures have exacerbated inequalities in society, both due to unequal access to technology and the inability to look after children at home among the poor (Armitage & Nellums, 2020; Dunn et al., 2020). Other challenges were connected with high-stake assessments and graduation (Alawamleh, 2020), the lack of suitable courses and competencies of teachers (Zhang et al., 2020) and problems on pupils with special needs (Petretto et al., 2020).

In areas where a complete transition was impossible, part of the staff switched to remote work. For example, branch employees continued to work at the workplace in banks, while management, analysts, IT specialists, and marketers worked from home. In some TV companies, employees were broadcasting from home. Not all companies and not all TV programs decided to broadcast from the kitchen. For example, the TV channel "Russia 24" was brave enough. Even on the BBC, some radio and television broadcasts came from home, in some cases, some presenters were in the studio, others at home. Many producers did not have access to their usual software, so the teams used an online document-sharing service to write and edit scripts. A separate problem was children and animals that could appear on the air or create noise. Video communication violated the privacy of personal space, "guests" were people whom a person would not invite, and in some cases whom s/he does not know at all.

Online medicine has also increased its market presence. In a pandemic situation, telemedicine could help in a preliminary assessment of the condition of patients with respiratory symptoms - which may be early signs of Covid-19 (Hollander & Carr, 2020), but also partially replace the usual

consultations of a therapist, which were limited due to a lockdown. Online mental health services were also in demand (Liu et al., 2020).

Collaboration platforms and diverse communications tools became an everyday practice. Employees worldwide started experimenting and reflecting on emerging usage scenarios like “virtual morning teas” or “after work (social) zooming” (Richter, 2020). Some companies, especially those closely associated with information and communication technologies, have announced that they will forever allow employees to work remotely (for example, Twitter).

The sphere of e-democracy was not ready for a sharp transition, most of the elections and referendums scheduled for the first half of 2019 were postponed or cancelled. Despite the fact that the possibility of electronic expression of will has been considered since the 90s of the last century, today there is no universal solution that ensures reliability and safety. However, several countries have undertaken legislative changes to expand the possibilities for online voting. And in Russia, in some regions, in particular in Moscow, it was possible to choose the format of participation in the referendum on the Constitution at the end of June 2020 (online or at polling stations). Blockchain technology was used for electronic voting. In many American states, online voting opportunities began to be provided to certain categories of citizens (in Delaware and New Jersey residents with disabilities, in West Virginia - in addition, overseas residents, military service members). Such elements of political life as pre-election rallies involuntarily switched to online mode, which of course required a change in traditional methods and solutions. The online public service sector, which has reached a significant volume, became even wider during the breakdown. Even in Nepal, people can get the advantage of internet-based e-government services (Sharma, 2020).

The question arose about in what areas and to what extent video can replace real stay. Cultural objects such as theatres, concert halls, museums, exhibition centers, libraries, etc. tried to offer an online alternative, but it did not represent a significant substitute for offline existence. The same goes for tourism: the surge in interest in virtual tours and the positive consequences for the ecosystem can hardly be evidence that travel may move to a virtual format in the near future. The fitness industry's attempt to offer online workouts has had a very limited response. Developers and real estate agencies conducted virtual tours of the constructions, offered remote transactions. Although not everyone could decide to buy real estate in absentia, nevertheless the format turned out to be possible. Even Horse Island, off the coast of Ireland, was bought during the pandemic without seeing its acquisition "live".

However, in the field of culture, some areas have made significant progress. While traditional theatres and museums had little to add to the broadcast of virtual tours and old recordings, online live concerts have taken on a new level. Many artists have established options for joint performances using technological solutions that allow to synchronize and broadcast sound. Although such concerts could not be positioned as a substitute for live concerts, they found their advantages - the possibility of participation of artists and spectators who, due to geographical remoteness and other difficulties, would never have come together, and the viewers in the networks turned out to be significantly higher than people could actually gather at a concert of little-known performers.

Businesses have to master virtual leadership and lead the transaction chain into a virtual environment (Bekirogullari & Thambusamy, 2020). The previously emerging trend of delivering ready-

made food from restaurants made it possible to survive by mastering this way of working with customers. There are now food delivery services from virtual restaurants.

Let's consider several events that were hardly imagined online before the pandemic.

Wedding

A wedding is traditionally viewed as a festive event, including the preparation of dresses, cars, premises, state registration, and many guests. Due to the pandemic, mass gatherings became banned, as well as visits to offices to register a marriage.

Several regions have allowed online marriage registrations. The governor of New York permits New Yorkers to obtain a marriage license remotely and clerks to perform ceremonies via video conference. The number of allowed guests has become very small. And for example, in India instead of guests, there were smartphones, and tablets streaming live wedding ceremonies to numerous distant family and relatives.

However, there were also more original solutions than weddings via video conferencing. For example, the groom invited the bride to his island in the game *Animal Crossing: New Horizons* where he secretly decorated everything with flowers and hearts and gathered friends. Another wedding was held in *Final Fantasy XIV*. The bride prepared a guideline with pictures for guests who were not familiar with the game about how to create a game account and enter the wedding site after defeating enemies in the game. But some of the guests were killed by enemies on the way to the cathedral. For them and those who could not create an account the process was live-streamed on a broadcasting platform.

The first company to offer official marriage registration online was *WebWed Mobile*, founded in 2016. It offers legal marriage registration around the clock for citizens of any country. In this case, it does not even require that the bride and groom were in the same place. However, what was a very exotic option for special occasions has become much more popular thanks to the pandemic.

Protest rallies

What can be substituted for going outside to protest? Social media posts, video speeches, online debates are other forms of expression. But in April 2020, people found a virtual analogue of a street rally. With the help of a Yandex.Maps and Yandex.Navi, (Russian-made services similar to Google Map), where you can leave a comment about the traffic situation, people began to voice demands for the abolition of quarantine right next to the main squares. Soon there were so many messages that they completely closed the map (Figure 1). Many of the messages were humorous but people liked the idea and quickly spread online demonstrations in several cities (Rostov-on-Don, Yekaterinburg, Moscow, and Krasnoyarsk). Although the service deleted messages that were not related to traffic problems within a few hours, the print screens quickly spread across social networks.

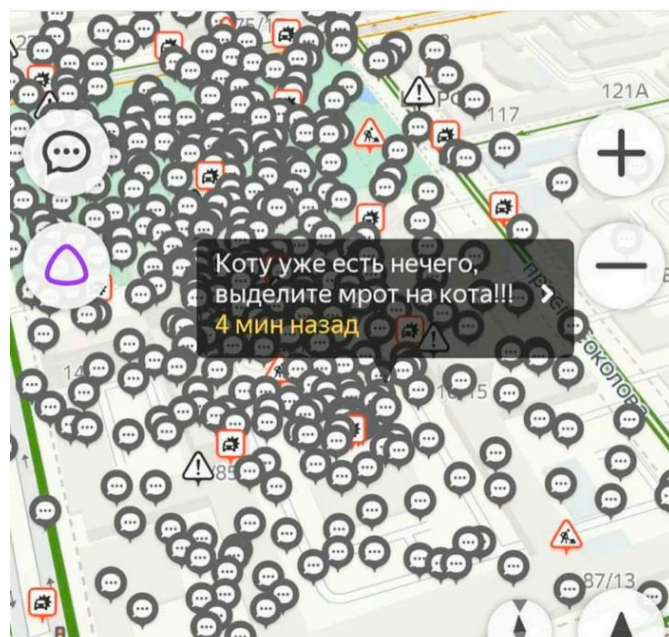


Figure 01. Online demonstration (the message «The cat has nothing to eat, give him a cash allowance»)

The backstory of online protests can be found in multiplayer games with open worlds. So in 1997, the MMORPG *Ultima Online* required a number of fixes in the game, gathering their characters in crowds in the nude. In 2005, disgruntled naked dwarfs gathered in the game *World of Warcraft*, there were so many of them that the game began to lag. In the next few years, there were several more riots of various characters in *World of Warcraft* and *Runescape*, but most often they ended in bans. Although in the game *EVE Online* in 2011 after the players overloaded the servers, paralyzing the economy, until the administration agreed to negotiate with the Star Management Council. However, all these activities seemed to be in-game problems. However, all these activities seemed to be in-game problems. But the IBM employees demanded from the management to pay the promised bonus from the IBM office in the *Second Life* game. In general, the *Second Life* game, as having numerous analogues of the organization of the physical world, quite often becomes a place of political conflicts.

Graffiti

It would seem that the authors of graffiti, with the ban on going out, had no choice but to postpone their creativity until the end of quarantine. But the artists decided to find their way out of the situation. A group of artists in St. Petersburg created online actual reworkings of famous paintings: they placed graffiti on the walls of houses in an online map of the city. The pictures can be seen through the street view on Google. Maps ”or using a [virtual tour](#) (Figure 2).



Figure 02. Online graffiti "At a distance" (exist only on Google map)

7. Conclusion

The possibility of various activities without leaving the computer, although not easily given to people, at the same time revealed such advantages as simultaneity - the ability to participate in events taking place in different places at almost the same time.

The progress towards the use of information and communication technologies as a result of the breakdown due to the coronavirus is not only an interesting phenomenon but also a key to understanding the further development of our society. Good experiences will be consolidated, and isolated cases of original use can create a basis for further changes.

Electronic communications ranging from traditional email to the video conferencing have penetrated almost every area of human interaction. In some cases, their application turned out to be quite creative. It seems that until 2020, no one thought of singing in the chorus in Zoom. It seems that in the field of communication, such heights have been reached that the online transition should not have any problems. But it isn't so easy. Osler, (2020) states that online interaction is not identical, neither as good as face-to-face interaction, but they could give the ability to perceive another, including the emotions. However, the concept of space, traditionally insignificant for the Internet, has a negative effect here. The separation of personal/home and work/business space has disappeared. Moreover, the lockdown raised the question of how ICT-mediated participation is similar to physical presence. From a superficial point of view, it might seem that technology mediation changes nothing. However, for example, it was obvious to everyone that watching a recording of a performance or a museum tour was not the same as being there, although it was better than nothing. There are also more complex technological solutions. In

Business Breakthrough University (Japan), diplomas were awarded to robots controlled from home by students. At the level of the face, the robot has a built-in tablet on which the student's image is broadcast. But the equivalence of such a replacement is also questionable.

Not only various communication and collaboration platforms but also other online services have expanded their areas of application. Multiplayer games have also become the "venue" for a variety of interactions from weddings to lectures. There are examples of using *Minecraft* for classes, for prom, *Red Dead Redemption* for working meetings around the fire, *Animal Crossing* and *Final Fantasy* for weddings. Although social life in virtual worlds is not a new phenomenon (an example of which is *Second Life*) but the expansion of social practices in video games is a very interesting trend.

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