

**Karpushina Ekaterina**

**Year 2**

**Institute of Economics, Management and Law**

**Department of Economics**

**Profile: Economic of business**

**Professor: Irina Igorevna Vorontsova**

### *Coronavirus as a kick for innovative technologies evolution*

*In fact, at the heart of any creative search, discovery, innovation is a mess.  
The new can only be born out of chaos – out of an unexpected discrepancy  
with the familiar.*

*Pavel Valeryevich Durov*

I consider that the appearance of any innovation in the world has always been associated with sweeping changes in a social structure of society, with political stand-off between countries, or with someone's desire to top their profit by reducing production costs. I guess at a global scale the emergence of innovative technologies is the consequence of a country's policy that intended to gain the world's recognition. For example, in the 18th century, England strived for an economic recovery in order to outpace competitors in the world market. This was the impetus for the invention of the steam engine. The introduction of the new invention allowed England to produce more goods than any other country in Europe. Another example of the appearance of innovative technologies can be given from the history of the 20th century. Political stand-off between two opposing alliances of countries in Europe led to the World War I. Each of the alliances wanted to win, so they needed to have several advantages. Such conditions usually give rise to the rapid development of innovative technologies. Each subsequent war models new methods of commanding and new types of weapon. This is what definitely happened during the World War I. The leading country's factories began to produce everything necessary for the front. So the factories adopted new production technologies. Moreover, tanks were invented and appeared on the battlefield for the first time. The fleet of aircraft expanded significantly. Initially, they were used only as scouts, but later began to perform combat tasks. That was the innovation in the field of commanding. The planes did not have stationary weapons, so pilots used their personal weapons. After a while, a machine gun appeared. It was a development in innovative technologies. Furthermore, no one used chemical weapon before the World War I. In connection with its spread, a gas mask was invented. So we exposed that the national

confrontations of countries in the past were the impetus for the development of innovative technologies. And despite the fact that the development of weapons is not a positive invention, in my opinion, it can become the mainstay of the economy of a particular country that is ready to export such weapon.

In the modern world, not only national, but also global problems of humanity still remain the main trigger for creating innovative technologies. Anyway there can be not only destructive inventions and technologies but also positive ones. In 2020 COVID-19 swept the world. Because of its rapid proliferation and limited time to take certain measures the world's authorities could not act efficiently, in addition to this it was the first time they faced such a situation. I consider these conditions have stimulated the modernization of the management system and boosted the appearance of new innovative technologies. It is important to note that innovative technologies are not only new approaches or ideas in the field of invention and technology. Innovative technologies are also the creation of new methods of labor organization and management in any sphere of life. As an example I want to investigate what kind of innovative technologies have appeared in Russia since people faced the pandemic.

Even at the time of the most severe quarantine restrictions only 34% of companies were able to work in the remote mode. This means that more than 65% of the population constantly needed protective equipment: masks, gloves, antiseptics, etc. For this reason, most of the companies in the country had to switch specialty very quickly. Thus, private clothing factories temporarily reduced production of their main products, replaced it by production of protective equipment: masks for sale to the public and specialized scrub sets for medical personnel. This was an innovation in the field of management and production, because firms that had never previously adopted such production technology and did not have the appropriate equipment switched its specialty.

Due to the fact that the bulk of the population had to work away from home during the pandemic, the Russian authorities were obliged to provide measures for the safe movement of citizens. Thus, there appeared a special system of passes that allow people to go to the stores and medical institutions, visit a country house. Thanks to such electronic passes, the Russian authorities were able to reduce the number of people outside. Another innovation in the field of management was the introduction of an expanded contactless payment system in the capital and remote regions. In public transport, citizens could pay only by transport cards.

The food service industry and online stores have reached their peak of innovative growth thanks to the advent of contactless delivery. Due to the closure of shopping malls and private stores, people had to order things online. As an example, according to statistics, the turnover of the online store Wildberries in April-June 2020 soared by 123% compared with the same period a year ago. Since

cafes, restaurants, bars, etc. were closed, in order not to go bankrupt during the pandemic, eateries signed contracts with such food delivery services as "Delivery Club", "Яндекс.Еда" and the like. Also they actively upgraded their own websites so that consumers could order food to home or to work without any problems.

The vast majority of companies stopped holding weekly scheduled meetings to discuss prospective operations face to face. Thus, «Zoom» and similar programs made it possible for employers to keep in touch with employees working remotely. Holding such online meetings has become another innovation with the corporate authorities and has had a positive impact on their activities.

In a nutshell, we see that many companies faced huge financial problems during the coronavirus pandemic. However, these financial difficulties have led to the development of innovative technologies in the field of management and organization of new working methods. Public administration and private companies have undergone great external and internal changes as a result of innovative introductions. In general, I believe that such modernizations were necessary both for the political system and for the country's economy.