



Pandemic and Technological Impotence



Governments' approach to nurturing and implementing innovation and technology ecosystem, in America and globally, has been flawed for several decades, and the COVID-19 pandemic exposed the far-reaching consequences of this.

You might also like: [COVID19 & Tech: Will Every Business Become Health Business?](#)

“Technology has failed the US and much of the rest of the world in its most important role: keeping us alive and healthy,” writes David Rotman in MIT Technology Review. He points out that despite the availability of such advanced technologies as artificial intelligence or genomic medicine, in the face of the pandemic authorities around the world have resorted to techniques from the Middle Ages, ie mass quarantines.

Rotman outlines several major areas, in which the technology failures have been most evident. One of them is testing. Polymerase chain reaction (PCR) has been around for over 30 years and COVID-19 genome was sequenced at the very early stages of the outbreak. Yet, authorities were unable to introduced population testing on a large scale, either due to bureaucratic obstacles or a lack of essential equipment, such as nasopharyngeal swabs. As a result, even those seriously ill could not get timely tested – and the situation has not improved much so far.

Another problematic area is scarcity and heterogeneity of epidemiologic data available to public health authorities and hospitals. Rotman stresses that while companies like Google or Amazon routinely use big data for commercial purposes, these available technologies are not being used to inform public health policies.

Incapability to provide health systems with much needed equipment, such as masks or ventilators, is yet another glaring failure in the US and elsewhere. Manufacturing facilities have been moved abroad, and with supply chains broken by the pandemic this led to substantial shortages in basic equipment. In theory, government could have led the industry through necessary innovations and manufacturing

adjustments, but the companies have been majorly left waiting for any centralised guidance.

The lack of government intervention, however, is only the tip of the iceberg. The problem is much larger, stemming from the erosion of the U.S. innovation ecosystem in the last decades. This ecosystem has been left to the open market, which prioritises more lucrative areas. At the same time, vital fields such as manufacturing, new materials, and vaccines and diagnostics have been neglected, Rotman notes saying that “there is almost no system of government direction, financial backing, or technical support for many critically important new technologies.”

Overall, the innovation drive has slowed down. Is it because there are no breakthrough inventions? Or because we still do not know how to efficiently use the technologies available, such as artificial intelligence? Or because high-risk research that often leads to major discoveries is usually government-funded and the funding has declined twofold since the mid-1960s?

Whatever those causes are, the inefficiency of the U.S. response to the challenges of the current pandemic has not resulted from a deliberate choice, Rotman argues, but from the general decline and deterioration in areas of innovation and manufacturing, which makes it impossible for a country to quickly adapt to a crisis.

Source: [MIT Technology Review](#)

Image credit: [peshkov](#) via [iStock](#)

Published on : Mon, 29 Jun 2020