Making Sense: The Impact of COVID-19 on Business and Innovation



A Guide to How Entrepreneurs and Businesses Are Responding to COVID-19

Presented by





COVID-19's Impact on Business

Unlike other viruses, such as the seasonal flu or common cold, the coronavirus, or COVID-19, is considered a "novel," or new, virus because humans have had little exposure to it. Hence, we don't have readily available treatments, like a vaccine, to prevent people from getting sick from COVID-19. As a result, the first line of defense against the disease is called "social distancing." This means people are being



encouraged not to be around other people unless it is necessary.

In many cities and states, officials require so-called "non-essential" businesses to either reduce their operations or close completely to promote social distancing. While these businesses are referred to as non-essential, it doesn't mean that they aren't important. But it does mean that their closure will help limit the spread of COVID-19.

Businesses affected include restaurants, which in many cases must close their dining areas, even

though they can still prepare food for delivery or take out. Others that must close completely include hair salons, clothing stores, and various retail establishments that don't offer what are considered "essential" products or services, such as food or medicine.

Due to these restrictions and closures, businesses large and small have had to release many of their employees. This means people who worked for these businesses lost their jobs either temporarily, through a <u>furlough</u>, or permanently, through a <u>layoff</u>. Many of these people are eligible for unemployment benefits, which means that they will receive some amount of money from the government to help pay basic expenses like rent, house payments, and food. The hope is that non-essential business closures will only last a few months and that people will be able to go back to work in the not-too-distant future.

How Government Is Responding

In response to COVID-19, the U.S. Congress passed the <u>Coronavirus Aid, Relief, and Economic Security (CARES) Act</u>. At \$2.2 trillion, it is the largest economic relief package in U.S. history. The goal of the CARES Act is to help businesses and individuals impacted by the economic downturn caused by COVID-19.

The CARES Act has benefits for individuals, including a one-time check from the government for between \$1,200 and \$2,400, depending on their eligibility and tax-filing



status. The act also makes changes to unemployment benefits that help filers receive more money from the government than they would under normal circumstances, and for a longer period.

For small businesses, CARES offers short-term loans that can help these businesses cover necessary expenses, such as rent, utilities, and operational costs, during COVID-19-related shutdowns. CARES also includes a payroll protection program where small businesses can use low-interest loans to keep employees instead of having to let



them go during the downturn. If businesses meet certain conditions during the coming months, the government may forgive some of these loans, meaning small businesses that qualify won't have to pay back the money they borrowed.

The Role of Business in Fighting COVID-19

Since the early 1990s, global trade has grown substantially. With the development of the Internet, changes in trade policy, and global competition, much of the world's manufacturing capacity has moved from more-expensive <u>developed economies</u>, such as the United States and Europe, to less-expensive <u>emerging economies</u> in Latin America and Asia, and especially China. As a result, the world now relies on "<u>global supply chains</u>." This means a product like a smartphone may have parts that were



manufactured in four or five different countries and assembled in another country.

In December of 2019, China reported its first cases of the disease in Wuhan, China, a region of the country involved with manufacturing. By January, China shut down all manufacturing in the region, as well as in surrounding areas, to contain the spread of COVID-19. This resulted in the largest drop on record of China's manufacturing activity. The decline in manufacturing in China and other

countries impacted by COVID-19, disruptions in transportation and shipping, and a spike in demand around the world for medical devices and supplies, has resulted in a strain in the global supply chain. As a result, there is a shortage of these materials in the



U.S. and other countries, making it more difficult for medical professionals in our country and others to fight COVID-19 effectively.

Businesses in the United States are stepping in and helping to find solutions to these shortages. Responses have included taking factories that manufacture automobiles and retooling them to make plastic face shields for doctors and nurses to use when working with sick patients. Other manufacturers that produce consumer goods, such as household appliances, are working on ways to make parts for ventilators and other medical devices in urgent demand. In California, engineers who might otherwise work

on drones or robotics, are helping to fix or improve ventilators needed to treat the sickest COVID-19 patients.

Large manufacturers of face masks, such as N95 respirators and surgical masks, have been asked to increase their production capacity for these urgently needed supplies. In addition to medical professionals, the construction industry uses N95 respirators. As



a result, construction companies that use these masks and hardware retailers that sell them have been donating their supplies to local hospitals and first responders.

One of the most significant challenges in fighting COVID-19 has been quickly identifying those who have the disease. There has been a shortage of medical testing for the virus, partly because there haven't been tests available to identify the virus rapidly, and the capacity of government agencies to run tests is limited. In response, medical testing companies have been developing tests that can determine the virus in a few hours instead of over several days. Additionally, private labs, which process most of the medical tests generally conducted in the country, are adapting their facilities to run large numbers of COVID-19 tests.

Innovation in the Face of Crisis

Despite the best efforts of business to overcome these shortages, demand still outweighs supply. As a result, many entrepreneurs are working to bring solutions to the table. One way to accomplish this is to increase the usage of some of the existing medical products. For instance, there are several startup companies that, before COVID-19, were developing technologies to sterilize medical masks. These companies are working with public health officials in communities most impacted by COVID-19, such as Boston and New York, to use these technologies. While these approaches are



still new, they hold the promise of allowing masks that were meant for one-time-use to be used up to 20 times.

Advanced manufacturing companies that work with 3D printers are also helping with the fight against COVID-19. These printers can quickly form plastic into adapters that can allow ventilators meant for one patient to support two or more patients simultaneously.



These printers can also create medical device replacement parts that might be hard to obtain due to parts shortages.

What Comes Next?

While there is no guarantee the economic impact of COVID-19 will be short-lived, that is undoubtedly the hope of many. With social distancing, the broader adoption of masks by the general public, good hygiene practices, and more available testing, the goal is to make COVID-19 more manageable until

a vaccine is available sometime in 2021. If that goal is met, it's possible businesses currently closed can be reopened in a few months with certain guidelines and restrictions in place.

In the long-term, history has shown that major events that impact the economy can result in long-term changes and <u>innovation</u>. For instance, following World War II, the world saw the widespread adoption of plastics, antibiotics, planned housing developments, interstate highways, jet transportation, and television. Many of these were in their infancy before the war. More recently, the years following the Great Recession saw the rise of gig-economy businesses such as Airbnb, Uber, and GrubHub, as well as a boom in financial technology, such as Apple Pay, Venmo, and Bitcoin.

Time will tell what innovations may result from our current situation. Opportunities are clear with the demand for video conferencing technology as a result of the surge of remote work. Challenges exist in terms of the limitations of the global supply chain to respond to fast-moving events. There may be a teenager on a laptop right now who will take the lessons learned from the response to COVID-19 and help shape all of our futures.