NANO TOOLS FOR LEADERS®

THREE STEPS BUSINESSES CAN TAKE TO EASE THE COVID-19 CRISIS USING TECHNOLOGY

Nano Tools for Leaders® are fast, effective leadership tools that you can learn and start using in less than 15 minutes — with the potential to significantly impact your success as a leader and the engagement and productivity of the people you lead.

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THE GOAL:

Identify new uses for major technologies that will change the way societies deal with the pandemic and how companies play a role in the recovery.

NANO TOOL

The challenges posed by COVID-19 require the use of many different kinds of tools to contain the pandemic, help organizations survive, and prepare the economy for the eventual recovery. In addition to social distancing and sheltering in place, technologies such as robotics, big data, the internet of things, and the blockchain—which have captured the imagination of companies, governments, and other organizations over the last two decades—can be deployed to help contain the virus.

These technologies can identify outbreaks and hotspots more quickly, track compliance by the population with containment policies, and find treatments and a vaccine. Robotics can be used to handle the most dangerous tasks at testing sites and hospitals alike, without exposing health care professionals to the virus.

When it comes to helping firms cope with some of the consequences of the pandemic, technology can not only help with teleworking, but also ease problems along the supply chain in product development, production, and delivery.

The economic recovery requires companies and other types of organizations to be ready to reactivate their operations right after containment policies and governmental stimulus packages have their intended effects.

ACTION STEPS

1. Identify and anticipate needs. Entrepreneurs and business leaders need to better understand the problems that health authorities and health care organizations are facing, especially the bottlenecks, so they can determine how best they can respond. For example, scarcity of parts and components for assembling respirators and other life-sustaining equipment can be addressed at least in part through 3D printing. Lack of funding by some organizations engaged in health care and general support for the most vulnerable populations can be obtained through crowdfunding. And the quest for a cure can be advanced through big data applications, crowdsourcing, and supercomputing.
2. **Provide solutions, not products.** Companies need to provide the health care sector and other organizations under stress with integrated solutions as opposed to specific products. Hardware, software, human operators, and organizational processes must come together to offer solutions. For instance, while the risk of exposing health care personnel to infection can be mitigated with the use of robotics, hospitals and testing facilities need not just the hardware and software but also the trained personnel and the protocols to adjust organizational processes.

3. **Learn through trial and error.** In the midst of a pandemic, there is precious little time to develop the “best” or the “perfect” solution to a problem. Entrepreneurs and companies need to be much more willing to make bets and to launch solutions that are good enough, hoping that experience and trial-and-error will lead to improvements in real time. For example, virtual reality applications are still in their infancy, but they can help deliver more health care services remotely, especially those unrelated to COVID-19 that require no hospitalization, so that facilities are not overwhelmed.

**HOW BUSINESSES CAN USE IT**

1. Crises are sobering events that bring much pain and suffering. But they are also opportunities for reconsidering what works and doesn’t work, and how things can be done better. The shortcomings of established ways of doing things become more readily apparent when the system comes under stress. Take some time now to identify the pressure points swiftly and think about new ways of getting things done, especially through the use of technology.

2. It typically takes a long period of time to persuade people and companies to switch to a new technology because of the dictum, “If it ain’t broke, why fix it?” The operational strains caused by crises invite experimentation with new ideas and approaches. Consider new technologies you may have once thought to be too expensive or too complex to implement.

3. In the midst of a crisis, companies and other organizations need to put in place a “machine for innovating” so that they can find new, refreshing ways of using technologies to their and society’s advantage.

**ADDITIONAL RESOURCES**

- “How Next-Generation Information Technologies Tackled COVID-19 in China,” *World Economic Forum*, April 8, 2020. Reveals how China actively leveraged digital technologies such as artificial intelligence (AI), big data, cloud computing, blockchain, and 5G, and how companies made their algorithms publicly available, researchers shared data, and firms increased access to key videocasting tools for educators and remote workers.

- “Triage in a Pandemic: Can AI Help Ration Access to Care?” *Knowledge@Wharton* podcast, March 27, 2020. Explores the likely impact of care rationing in the absence of the best possible information on decision quality, patients, and care providers, and considers the potential benefits of artificial intelligence (AI) in guiding decisions about how care can be rationed.

- Mauro Guillén directs Wharton Executive Education’s *Global CEO Program* and teaches in the *Advanced Management Program* and *Executive Development Program*, among many others.

**ABOUT NANO TOOLS:**

*Nano Tools for Leaders®* was conceived and developed by Deb Giffen, MCC, director of Custom Programs at Wharton Executive Education. *Nano Tools for Leaders®* is a collaboration between joint sponsors Wharton Executive Education and Wharton’s Center for Leadership and Change Management. This collaboration is led by Professors Michael Useem and John Paul MacDuffie.