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Risk Practice

When nothing is normal: Managing in extreme uncertainty

In this uniquely severe global crisis, leaders need new operating models to respond quickly to the rapidly shifting environment and sustain their organizations through the trials ahead.

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In normal times organizations face numerous uncertainties of varying consequence. Managers deal with challenges by relying on established structures and processes. These are designed to reduce uncertainty and support calculated bets to manage the residual risks. In a serious crisis, however, uncertainty can reach extreme levels, and the normal way of working becomes overstrained. At such times traditional management operating models rarely prove adequate, and organizations with inadequate processes can quickly find themselves facing existential threats.

Uncertainty can be measured in magnitude and duration. By both measures, the extreme uncertainty accompanying the public-health and economic damage created by the COVID-19 pandemic is unprecedented in modern memory. It should not be surprising, therefore, that organizations need a new management model to sustain operations under such conditions. The magnitude of the uncertainty organizations face in this crisis—defined partly by the frequency and extent of changes in information about it—means that this operating model must enable continuous learning and flexible responses as situations evolve. The duration of the crisis, furthermore, has already exceeded the early predictions of many analysts; business planners are now expecting to operate in crisis mode for an extended period. Leaders should therefore begin assembling the foundational elements of this operating model so that they can steer their organizations under conditions of extreme uncertainty.

Understanding extreme uncertainty

Due to the severity of this crisis, many organizations are in a struggle for their existence. An existential crisis puts at stake the organization's survival in recognizable form. Readers can probably call to mind numerous individual companies that faced such crises in the recent past. The crises may have been touched off by single catastrophic incidents or by series of failures; the sources are familiar—cyber breaches, financial malfeasance, improper business practices, safety failures, and natural or human-caused disasters. Effective action saved many; others spiraled downward.

Existential crises subject organizations to both extreme uncertainty and severe material consequences; they are often new and unfamiliar and can unfold quickly. In business terms, the present crisis more closely resembles economic crises of the past. In the financial crisis of 2008–09, for example, many organizations were simultaneously affected. Qualitatively, however, the present crisis is far more severe.

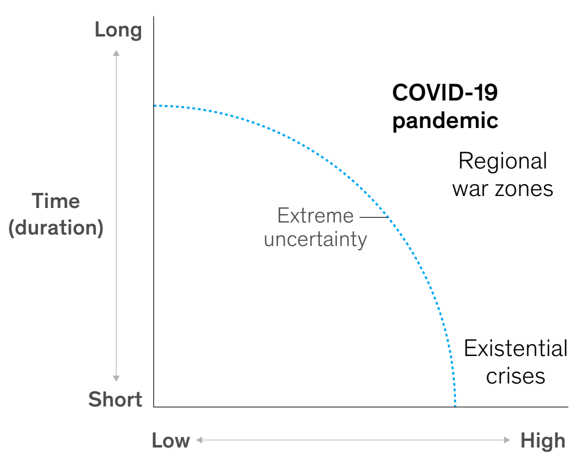
The COVID-19 pandemic and the resulting economic recession have affected most large organizations around the world. Managers continue to scramble to address rapidly developing changes in the public-health environment, public policy, and customer behavior. And then there is the economic uncertainty. The severity and speed of the crisis is reflected in the International Monetary Fund's (IMF) projections for US GDP growth. After an estimated GDP expansion of 2.2 percent in 2019 (year-on-year), the US economy, in the IMF's view, was expected to grow at a rate of 2.1 percent in 2020 (forecast of October 2019). With the onset of the pandemic, the IMF quickly shifted its estimate into contraction, of –5.9 percent in April 2020, revised to –8.0 percent in June. The latest estimate (October 2020) is less severe at –4.3 percent, but this would still be the worst result in many decades. The forecasting institution foresees the world economy shrinking at a rate of –4.4 percent in 2020, after having grown 2.8 percent in 2019 (estimate).[1]

[1] *World economic outlook*, October 2020: A long and difficult ascent, International Monetary Fund, October 2020, pp. 141–42, imf.org.

Uncertainty levels from recent global shocks do not approach those of the present COVID-19-triggered crisis. The IMF's GDP contraction forecast for 2020 is more than double the estimated contraction that took place in 2009, the worst year of the earlier global financial crisis. As measured by the Economic Policy Uncertainty Index, a metric developed jointly by researchers at several US business schools, uncertainty on a daily basis has been elevated for nearly 200 days' running. By contrast, commensurate uncertainty was experienced during the 2008–09 financial crisis a few times for a maximum of 27 consecutive days. The COVID-19 outbreak already accounts for seven of the ten highest-ever daily readings.[2] Crises such as Hurricane Katrina or the Fukushima Daiichi nuclear disaster cause high levels of uncertainty for individual communities or particular industries. Since the uncertainty is confined by industry or geography, the magnitude decreases steadily with time. In the present crisis, however, elevated uncertainty is globally pervasive, and events trigger compounding effects. The following exhibit conveys a range of crises and their corresponding levels of uncertainty.

Exhibit

Duration and magnitude of a crisis are important determinants of uncertainty.



Source: McKinsey analysis

Why existing operating models fail

Extreme uncertainty on a global scale is rare; however, existential crises at the organizational or community level are more frequent and thus provide lessons concerning which operating models succeed and fail during periods of uncertainty. Many organizations, including publicly traded companies, operate on an annual-planning cycle. Managers collectively decide on strategies, budgets, and operating plans once a year and then manage operations in accordance with those goals and cost limits. Between annual-planning cycles, amendments are few and usually minor. The assumptions shape how managers engage with each other: from the content of status reports to interdepartmental information sharing to the timing and structure of management meetings. Recently, some organizations have adopted more agile techniques to make planning more flexible and responsive to outcomes from pilots or trials. However, the approach is rarely deployed in the C-suite to manage the whole organization.

The COVID-19 crisis has undermined most of the assumptions of the traditional planning cycle. Existing management operating models are no longer supporting managers effectively in addressing the challenges this crisis presents. The revenue assumptions managers relied on for 2020, often worked out to two decimal points, are not relevant in an economy suddenly expected to suffer a historic contraction. Meticulously prepared status reports are now outdated before they reach senior managers. Managers seeking more up-to-date information discover that existing processes are too rigid for a timely response.

Managers thus find themselves working in ways unsuited to a highly uncertain environment. They know what they need: flexibility, the capability to act collectively, quickly, and across the whole organization as challenges arise. They need also to be able to work in this way over an extended period. Some organizations have therefore begun to experiment with new operating models that allow managers to work together. Some of the changes have been successful and others have failed.

[2] "US monthly EPU index," Economic Policy Uncertainty, policyuncertainty.com.

The COVID-19 operating environment requires that managers reexamine their collective thought processes and challenge their own assumptions.

Overcoming challenges

To increase the odds that a new operating model will be effective today, managers must ensure that it addresses the problems of operating under highly uncertain conditions. The COVID-19 operating environment requires that managers reexamine their collective thought processes and challenge their own assumptions. Failure to do so will create the risk of serious errors. Here are some of the pitfalls managers will likely encounter:

— *Optimism bias.* Since managers and their organizations have never seen anything like this crisis, existing heuristics learned from years of management might not apply. One common problem is that managers experience optimism bias, both individually and collectively. They will be inclined to bring forward the date of an expected revenue rebound or minimize the duration of expected business closure. Simply, managers cannot or will not believe how bad the situation could get, and the organization ends up planning for a much milder scenario than transpires.

— *Informational instability.* Information is unstable in the COVID-19 pandemic. Epidemiological data are constantly shifting: infection and mortality rates, the proportion of asymptomatic cases, the intensity and effectiveness of testing, the length of the infectious period, and the extent and duration of immunity after infection. The problem extends to poor or missing economic data whose reliability has been affected by the speed and severity of change. Conventional business strategy is most often based on assumptions about a probable course of events. In today's crisis, a single "most likely" planning scenario is unachievable. The sensitivity of statistical models to relatively small changes in assumptions on key variables creates even greater hazard. For example, projections of the rate of transmission of COVID-19 (R0) are central to forming a view on the likely impact of the disease: even a tiny uptick in the reproduction number can create a dramatic increase in the expected infection and mortality rates and radically change expectations of likely government measures and consumer behavior.

— *Wrong answer.* In addition to the instability of information, leaders must also be sensitive to the possibility that information they thought was clear and certain could turn out to be wrong. Managers cannot take their own assumptions as facts, since new information could emerge that invalidates them. Assumptions and understanding need to be regularly revisited and revised as necessary, as part of the organization's practice of continuous learning. The operating model must be able to absorb initial wrong answers and override them quickly; organizations can even encourage managers to look for opportunities to update assumptions.

— *Paralysis by analysis.* Confusing and ever-changing data can cause managers to delay decisions as they search for more analytical rigor. They may never find it, given the extent of the crisis we are in. Delayed decision making is not advisable in a crisis as fast moving and severe as the COVID-19 pandemic. Delay is in itself a decision, since taking no action has consequences—for example, a continued, unchecked spread of the virus. Managers should rather act on what they do know, and adapt their strategy as new information becomes available.

— *Organizational exhaustion.* In extreme uncertainty, organizations are usually unable to return to business as usual for a long time, sometimes years. This exposes managers and their teams to the risk of exhaustion in the face of constant and apparently never-ending change. A crisis may galvanize a company's senior managers and employees in its initial phase. But once that adrenaline fades, continuing uncertainty becomes enervating. At worst it can take a toll on managers' mental and physical health, causing major harm to organizational effectiveness, from a decline in responsiveness to a deterioration in the overall quality of work.

A suitable organizational structure

When determining how their organization should respond to extreme uncertainty, managers need to estimate the magnitude and expected duration of the crisis. At the onset, a timely and centralized organizational response—"crisis mode"—should be activated. Then leaders need to switch to an operating model that will be sustainable but appropriately reactive to continuing uncertainty over months or even years. A celebrated example is the way the New York City Fire Department handled the aftermath of the September 11 attacks. It had to shift its operating model from one based on immediate response to one that could handle continuing fires at the World Trade Center site and sustain recovery activities for months.

Activating crisis response

The earlier managers determine that they are in a crisis, the faster and more effectively organizations can respond. Effective response is enabled by several fundamental elements.

— *Early warning system.* A fundamental operating principle in normal times is for senior managers to develop an understanding of the kinds of events that might trigger a crisis. This will allow them to establish appropriate monitoring and early warning systems. Such systems can be likened to the Intergovernmental Oceanographic Commission's early warning systems, which rapidly relay data of approaching tsunamis to potentially affected communities.

— *Integrated nerve center.* Once an alarm has been triggered, leaders must have an organizational structure in which a common understanding of the crisis can be developed quickly and decisive actions taken with authority. Such a structure could be part of the organization's ready-made crisis-management plan, but leaders must prepare for the possibility that preconceived structures may be unsuitable in an existential crisis. They must therefore create a new operating model if the situation requires one. The organization needs an integrated nerve center to oversee a holistic crisis response. Within that structure, leadership must identify an inner core: a small group of managers who have the judgment and internal credibility to lead the response. Once identified, these leaders need to be given decision-making authority throughout the crisis, including the top-level support needed to make the "big bets." A recent example of rapid and radical response was the National Basketball Association's decision on March 11 to suspend play for the season. This action was one of the earliest high-profile operational changes taken in the United States in response to COVID-19.

— *Transparent operating principles.* At the outset managers need to define the high-level approach that will guide their actions during the crisis. The approach should be spelled out in a set of operating principles made available throughout the organization. These transparent principles will guide decision making throughout the crisis and provide standards against which management actions can be measured. One example of such transparency can be seen in Airbnb's response to the consequences of the pandemic for the company—a massive drop in revenue and significant layoffs. CEO Brian Chesky wrote an honest letter to the staff explaining in detail the measures being taken to ensure the company's survival and the ways in which the travel business was being reshaped in the crisis.

Operating in crisis mode: discover, design, execute

Rapidly moving events demand speedy decisions but also a wholesale change in the organization's managerial modus operandi. The operating cadence in which managers meet, discuss, and take action needs to match the evolution of the crisis. This does not imply a simple speedup of existing processes to accommodate the information needs of managers. Rather, it means creating entirely new procedures.

Extreme uncertainty turns an organization's operating imperatives on their heads. It demands continuous learning and constant review of assumptions. Instead of establishing a plan and ensuring the organization sticks to it, as in more normal times, managers must understand and respond continuously to dynamic and wrenching change. Rather than making periodic reviews of a static plan, they need to meet for iterative decision-making sessions structured around three imperatives: discover, design, execute. Managers must work together to diagnose the current situation, consider its practical implications, explore how it might evolve, and establish and execute appropriate actions.

The cycle of learning and redesign must recur with frequency sufficient to ensure that responses reflect the evolving situation. Managers must doggedly question established assumptions, especially the ideas adopted under conditions of extreme uncertainty. The organization cannot treat any assumptions as sacrosanct. Organizations should accept that they will be wrong and celebrate learning quickly from experience.

To make informed decisions, managers need specialized knowledge and should actively seek expert advice. Experts can contribute to better decisions by filling gaps in existing management knowledge. For example, managers need external advice—from epidemiologists—to assess the course of the COVID-19 pandemic. Likewise, civil society organizations can have experts who can provide valuable alternative perspectives on such important

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matters as racial bias, diversity, and the importance of female leaders. Internal expertise is also valuable in crisis times. Managers should reach deep into their own organization for frontline insights—such as those that a customer-service representative could provide on customer experience.

The organization should also systematically challenge proposed solutions. One established way to do this is to create a “red team” of experts to pressure test managers’ decisions, identifying potential weaknesses or overly optimistic assumptions. This type of exercise has been very successful in enabling more robust solutions. Leading companies, including Microsoft and IBM, perform regular exercises in which red teams test cybersecurity infrastructure, for example.

Unprecedented crises frequently require leadership to take unprecedented actions—bold, speedy actions that would feel risky in normal times. A historic case in point is Johnson & Johnson’s 1982 decision to recall 31 million bottles of the painkiller Tylenol after some product samples were found to have been laced with cyanide. The swift, decisive action saved this valuable product and enhanced the company’s reputation.

As they focus intensely on making fast practical decisions, managers must also be prepared to shift course if the situation changes. Actions, furthermore, need to be prioritized. First must come actions to mitigate the “worst case” scenarios for the organization. Low-cost (“no regrets”) actions can also be taken quickly, to address issues that could arise in any of several potential scenarios. In an existential crisis, managers must feel comfortable making conscious decisions and taking deliberate action. Otherwise, events will take their course, decisions will be made by default, and organizational control will be lost.

A sustainable model

The global COVID-19 pandemic is approaching its tenth month, a protracted period defined by extreme uncertainty. Depending on their industrial sector and geography, organizations have experienced different forms of uncertainty at different times over the course of the crisis—with falling consumer demand, supply-chain disruptions, inventory shortages, and shifting demand across channels. Today companies face economic instability as well as secondary incidents created by extreme uncertainty. To manage an extended recovery period, management structures and processes have to shift to a long-term, sustainable operating model.

One way of thinking about this problem is to imagine that a major fire strikes a company’s headquarters. Once the fire itself is extinguished, a different set of challenges emerges, from damage assessment to restarting operations. The shift from crisis mode to recovery of sustainable operations is more an evolution than a transformation. As it reshapes its overall strategy and goals, the organization needs to maintain its integrated nerve center, as crisis circumstances may require reactivation. However, the nerve center would no longer own day-to-day activities. Decisions and actions can increasingly return to their traditional owners such as business units. The operating cadence established in crisis mode will not return to normal, but it will likely moderate. Teams might scale back to meeting weekly from daily but need to maintain the flexibility to ramp back up as needed if something occurs.

The issues to monitor will change, but the importance of monitoring and early warning remains critical. In the COVID-19 crisis, for example, employees continue to work from home in many countries. For this reason, IT departments must remain extraordinarily vigilant in monitoring for cyberattacks. Furthermore, when the time comes for employees to return to their offices, testing and monitoring processes will have to be in place. When infection is detected, quarantine and treatment can thereby quickly follow. The experiences of Korea and China well illustrate the importance of country-level monitoring and quick response in the recovery of public health and the economy.

Whether operating in crisis mode or in recovery mode, leaders still need to prioritize actions. Resilient organizations should be able to begin looking for opportunities once the worst of the crisis is past. Our research indicates, for example, that more resilient companies shifted to M&A quickly after the 2008–09 financial crisis, using the cash saved during the crisis to purchase new assets.

Extreme uncertainty—defined in terms of novelty, magnitude, duration, and the rapid pace of change—generates a difficult operating environment for managers and organizations. The radically changed circumstances call for new forms of leadership, new ways of working, and new operating models. Crisis-tested managers will develop a tolerance of ambiguity, a quickened operating cadence, and a culture of constant refinement, review, and revision. Management structure and processes need to be adapted, too, as the crisis unfolds, to ensure the organization is sustainable and can take advantage of new opportunities.

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