Ready for a post-coronavirus world? It's time to think about change!

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The coronavirus is a stark reminder of the profound impact environmental change can have on business. The havor the pandemic is wreaking on societies, economies, and businesses around the globe will take years to repair. However, all environmental changes, including those as devastating as the coronavirus pandemic, also create new business opportunities. Did you know that half of the companies on the 2019 Fortune 500 list were founded during an economic downturn? Or that many of today's unicorns including Airbnb, Slack, and Uber are children of the Global Financial Crisis of 2008?

The reason is that all environmental changes throw the economy out of balance. This imbalance creates new demand and releases resources from their previous use. This is true not just for pandemics but also for technological advances as well as regulatory, demographic, socio-cultural, macroeconomic, political, and natural-environmental changes. And often these changes are interlinked. The policy response to the coronavirus crisis creates as much new opportunity as the pandemic itself.

Knowing what change is happening, how it affects businesses, and what to do about it is crucial for businesses not only to survive change but also to turn it into benefit. Most businesses implement workarounds in the current crisis, aiming to return their normal operations afterwards. Some, however, recognize and act on the opportunities the change brings.

We develop a framework for entrepreneurs and managers to identify, assess, and respond to environmental change and the opportunities it presents. Our framework differs from extant management frameworks such as PESTEL, five forces, or megatrends by (1) focusing exclusively on the opportunities environmental change provides, and (2) providing clear step-by-step guidelines for identifying, assessing, and responding to change. Our framework is based on our insights gained from synthesizing decades of academic studies and working with various businesses from small start-ups to large ASX listed enterprises. It builds on our theory that we already published in leading academic journals.

Benefitting from change

Examples of firms that emerged or benefitted from change are abundant throughout history. The temperance movement of the early 1900s led not only to the demise of breweries and distilleries, but also to a soft drink boom. Coca Cola, Dr. Pepper, Pepsi-Cola, and Moxie realized the opportunity presented and emerged as clear beneficiaries of social

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pressure and eventually legal dictum against alcohol. They realized that people needed alternative drinks for socializing, as meal supplements, or items of relaxation and reward. They realized demand patters would change. They also anticipated that premises, machinery, and human relevant knowledge and skills would become available at bargain rates as breweries and distilleries shut down.ⁱⁱ

History repeats. When the coronavirus made facemasks a hot commodity, businesses including Vogmask, Airpop, and Respro offering premium facemasks for everyday use saw a huge spike in demand without much need for strategic action. However, passively cashing in on the windfall does not reap the full potential of change. Many facemask companies quickly sold out and could not benefit further from the increased demand when their supply chains shut down. By contrast, Respilon, another provider of premium facemasks, found ways to continue manufacturing and put new face masks in its online shop on a daily basis. And it continued to sell out in a matter of seconds every single day.

What managers need to know

1st Identifying and preparing for change

To be able to leverage change and not get overrun by it, you first need to identify what change is taking place or about to do so. While the coronavirus pandemic has already led to some obvious changes in terms of how societies and economies work, its full effect has not yet unfolded. Additional technological, regulatory, socio-cultural, macroeconomic, or political, changes are likely to follow that create opportunities, too. For example, after Russia annexed the Crimea in 2014, western countries-imposed sanctions and Russia retaliated by imposing import bans on products from western countries. These political changes prevented Russians from consuming many western products including of cheese, which created a vacuum that savvy Russian entrepreneurs were keen to fill. Today, Russia has a flourishing cheese industry where none existed before.

Not all change is created equal and offers the same opportunities. When having identified change, it is thus important to understand its characteristics.

First, the scope of environmental change determines its business potential. Scope affects temporal, sectoral, geographic, or socio-demographic reach. For example, local natural disasters such as the Australian bushfires, or industry- or country-specific regulations such as the Sarbanes—Oxley Act, affect only a limited number of regions and industry sectors. By contrast, technological advances like artificial intelligence and pandemics like the one currently caused by the coronavirus affect most industry sectors globally. Figure 1 illustrates scope differences of some well-known changes.



Figure 1. Scope differences of well-known environmental changes

Second, environmental changes can have different onset. To benefit from change you need to understand how fast you need to act and for how long your window of opportunity stays open. For example, population aging is predictable whereas the recent US-China trade war unfolded in a rather sudden and unpredictable manner. Moreover, megatrends like the move toward sustainability develop gradually whereas natural disasters and virus outbreaks happen suddenly. What type of change can your business handle? Think of the coronavirus crisis, which first simmered slowly to then rather suddenly spread across the globe. Some businesses saw the early indicators and accordingly adjusted inventories and prepared for remote work. Others ignored the warning signs and ultimately got surprised by it. Even when change is predictable, its development may still be sudden and require swift actions. With few exceptions, governments and businesses were ill-prepared for the coronavirus pandemic, even if experts had warned since years that a lethal pandemic was likely to happen. Figure 2 illustrates onset differences of some well-known changes.

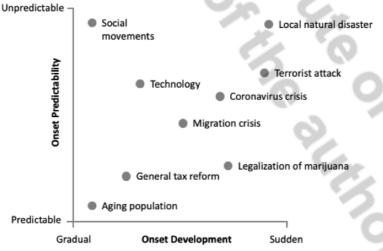


Figure 2. Onset differences of well-known environmental changes

Third, the potential of environmental change differs in detectability and actionability. Some effects of changes are obvious and can be exploited by almost anyone, whereas others

require specialized knowledge or extraordinary creativity. For example, many can easily provide support services such as food deliveries during the coronavirus crisis, but very few can exploit the potential of new gene sequencing technologies that might help to predict who is at risk to get infected. Changes that require scarce skills and resources for their detection and/or exploitation usually provide more potential to the few can act on them. The rise and fall of the vast number of bike-sharing start-ups illustrates a case where the only barrier for exploitation seemed to be the access to sufficient amounts of funding. Where is your business' change-exploiting edge?

2ndUnderstanding how change can work for you

Each change provides opportunities through specific mechanisms. To benefit from change, you need to understand what these mechanisms are. Table 1 lists mechanisms pertaining to demand, supply, and value capture. Importantly, some mechanisms require lateral thinking and thought experiments. That scuba diving masks can be used as substitutes during the current shortage of medical ventilators is obvious to most only after others have pointed it out.

Table 1. Examples of change mechanisms

Mechanism	Explanation	Examples
Compression	Allows businesses to do things faster	3D-printing and digital prototyping technologies considerably shorten development and manufacturing times
Conservation	Allows businesses to do things cheaper	Virtual collaboration tools reduce the need for physical office space; online recordings reduce the time required to repeat lectures
Expansion	Provides businesses with more input or demand	The global financial crisis increased workforce availability; the coronavirus crisis increased demand for sanitary items
Substitution	Allows businesses to replace one input with another, or makes customers replace one market offering with another	Crowdfunding allows businesses to get credits from non-bank lenders; robots allow hospitals to replace human cleaners; pandemics cause endconsumers to switch from normal to drive-in cinemas and from fresh to frozen food
Combination	Allows businesses to integrate other market offerings with their own to increase its value	Delivery services add grocery deliveries to their portfolio; surveillance camera providers add temperature monitoring capabilities; smart home devices connect with third party voice assistants
Generation	Provides businesses a foundation to create entirely new products and services, functionalities, processes, or business models	Online repositories provide software source code to build on; drones allow to deliver anywhere; cashier-less store technology enables touchless checkouts; ubiquitous smartphones enable on-demand business models

Uncertainty reduction	Reduces the uncertainty of business decisions either for a business itself or its customers	Blockchains reduce uncertainty of business exchanges; online payment solutions reduce online shoppers' uncertainty
Legitimation	Increases the acceptance of a business and/or its offering be it in terms of legality or society	Marijuana legalization unlocked entirely new market offerings; veganism led to the acceptance of purely plant-based food
Enclosing	Increases businesses' ability to capture the loyalty of buyers and the value it creates	Online platforms allow businesses to create value via network effects

3th Acting on change

Lastly, once you have identified what changes are already happening or going to happen and how they unfold, it is important to understand how exactly you can act on them. This requires you to evaluate whether change will allow you to shape your market offering, your organization, or the processes you engage in.

First, change might allow you to adapt your existing products/services or to introduce entirely new ones. SenseTime, a provider of building access control technology, realized that the coronavirus crisis expanded the demand for spotting people with elevated body temperature. Accordingly, they combined thermal imaging sensors with their existing face recognition cameras to cater to these demands. When considering opportunities of change for your products/services, consider how your existing customers' needs change, which new needs you could serve for new customers, and how.

Second, change might allow you to adjust your organization. For example, the coronavirus crisis has triggered an unprecedented shift of businesses toward remote work literally overnight. While some businesses will get back to business as usual once the crisis is over, others will see it as an opportunity to strategically reshape their legacy cultures, institutions, and asset bases. For example, Ctrip, an online travel booking portal, already experimented with remote work before the crisis. They realized that their call center employees were 13% more productive when working from home. When considering the opportunities of change for your organization, think about which behavioral and structural changes are possible and desirable; which of your current assets, resources, and competencies can be changed and how; and which new assets, resources, and competencies become available.

Third, change might allow you to modify existing processes or introduce new ones. For example, HTC Sweden, a flooring systems company, cut the number of physical prototypes from five to one with digital prototyping. Considering that your employees might have spare time due to the current lack of economic activity, it might be a good time to leverage technological advances and to make your processes more efficient. Digital prototyping enables you to continue prototyping despite the current constraints, and the same may apply to other technologies enhancing other processes. Think about which of your processes can be modified, replaced, or eliminated and which new processes you could introduce to benefit from change.

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