

IMD Faculty

Christos Cabolis
*Adjunct Professor of
Economics and Chief
Economist, IMD World
Competitiveness Center*

Tawfik Jelassi
*Professor of Strategy and
Technology Management*

Omar Toulan
*Professor of Strategy and
International Management*

Research & Development

Anouk Lavoie-Orlick
Research Associate

This article, based on a Discovery Event, provides a macro perspective on detecting opportunities and threats to allow companies to embrace radical change to stay relevant, as well as firm-level strategies to explore and innovate.

Discovery Events are exclusively available to members of IMD's Corporate Learning Network. To find out more, go to www.imd.org/clin

How to avoid being blindsided by disruption: Six lessons for farsighted strategy



Disruption has become a catch-all term to describe how nimble digital newcomers are displacing industry titans, but disruption is about more than technology: It reflects deep changes in the social, economic and business landscapes. For example, access to arable land will increasingly become a prickly issue as global warming alters the weather patterns that enable farmers to grow food. Much of today's productive farmland will become prone to drought or floods, forcing people to cultivate other areas. And which continent boasts the most arable land? The answer is Africa. Interestingly, Africa is the only region in the world that will grow substantially in terms of population, while keeping a wide, youthful base in its demographic pyramid. As this article shows, some companies have combined these insights to pursue the opportunities they may afford.

Being farsighted is both a wellspring of new opportunities and a buffer against disruption. The six lessons presented here reflect the need for business leaders to widen their field of analysis – to think of domino effects and embrace macro perspectives when they build their company strategy. For business leaders, these six lessons are also a way to develop a new sort of antennae – a data-driven focus to pick up both strong and weak signals of change in the environment.

Using country competitiveness as a strategy lens

The first step to adopting a more “macro” lens for strategy is to compare how countries compete to provide the best economic ecosystems. This is important because the public and private sectors are increasingly intertwined and interdependent. Many crucial challenges – such as artificial intelligence (AI) and climate change – will in fact [require a co-creation approach involving all sectors](#). Understanding economic ecosystems is also important because it's not just multinationals that are buffeted by macroeconomic forces – both global and local firms are impacted.

IMD has been measuring national competitiveness on a yearly basis for more than 30 years, based on four factors: government efficiency, economic performance, infrastructure and business efficiency. Measuring competitiveness is about creating benchmarks for progress – it reflects how (and how successfully) countries foster an environment in which enterprises generate sustainable value creation. This then translates into economic growth, jobs, increased welfare and, ultimately, increased prosperity for citizens. [The top five economies in the 2018 competitiveness rankings](#) – the United States of America, Hong Kong, Singapore, the Netherlands and Switzerland – demonstrate, by their diversity, that countries can adopt different models and cultivate contrasting strengths to become competitive.

Business leaders can leverage competitiveness data to make big decisions, such as moving corporate headquarters to a new location. Dyson, the home appliance company, recently relocated from the United Kingdom to Singapore. Beyond corporate tax rates and access to the Asian market, Dyson's decision [has been linked to Singapore's top](#)

Transparency is a key driver of competitive economies. It is a way to decrease complexity and it is good for business ecosystems as a whole.

By reshaping the industry landscape, disruption clears space for new and innovative solutions.

ranking as an innovative work environment with a highly qualified talent pool.

More broadly, using competitiveness as a strategy lens reveals the value of embracing certain virtues, like transparency, [open-ness](#) and accountability. The data shows that transparency is a key driver of competitive economies. Transparency is a way to decrease complexity and it is good for business ecosystems as a whole. In effect, many vital issues – including labor productivity, [digital readiness](#), governance and [gender equality](#) – can be better understood and benchmarked using global competitiveness data.

Mapping out domino effects

What can disruption teach us about complex patterns of cause and effect? The word “disruption” comes from the Latin *disruptionem* (meaning “a breaking apart”), and radical changes in industry can indeed have destructive effects. In retail, for example, the advent of e-commerce has destroyed billions in market value for traditional retailers. The value of Sears, JCPenney and Kohl’s has plummeted, whereas Amazon’s market value has increased almost 2,000% over the same decade.

At face value, this is simply a transfer of value from offline to online. Yet the digital disruption of retail breaks with previous market logic because, for the first time, there is a disconnect between overall economic growth – which is positive – and the number of retail outlets – which is collapsing. By choosing to shop online, customers are triggering a chain reaction in the retail ecosystem and beyond. Brick-and-mortar stores are the first casualty. Massive store closures then set off a domino effect: Employees are laid off, suppliers lose business and commercial property landlords no longer collect rent. Closures also impact nearby stores (in malls and city centers). As a result, municipal revenues go down, urban development is halted and communities lose their vibrant downtown shopping streets. In short, disruption generates not just first-order effects, but also second-order effects that

ripple through the system and create unforeseen costs to society.

By reshaping the industry landscape, however, disruption also clears space for new and innovative solutions. Think of autonomous vehicles: 10 years in the future, driverless cars may be the norm. What changes can we predict? More free space in cities, empty parking lots? Also, since commuting will be more pleasant when people can work or relax during the ride, people will be able to live farther away from their workplaces. All these changes will impact the property market and influence real-estate development. A leap of the imagination can also uncover second-order effects in the hospitality and transportation industries. Driverless cars equipped with beds may become an attractive option for business travelers who want to be picked up at home at 21:00 in Milan, sleep on the road, and arrive directly in downtown Amsterdam the next morning for a meeting.

Capturing new value from demographic shifts

One of the biggest shifts the world will see in the next 100 years is a rapidly aging population. In 2100, there will be roughly 3 billion people aged 60 and older (out of 11 billion, according to United Nations projections). Life expectancy is set to increase. At the same time, birth rates are falling. This trend is already visible: Several countries, including [Spain](#) and [Japan](#), have become “demographic time bombs” as fertility rates drop below replacement levels and elderly people live longer. The panic about birth rates has even stimulated the inventiveness of the private sector in countries like Denmark to look for creative solutions to encourage couples to have children, like the tongue-in-cheek “[Do it for Denmark](#)” campaign. Of all the regions of the world, Africa is the only region that is expected to maintain a strong population growth rate (2.5%, compared with Asia’s 0.06% and Europe’s negative growth of -0.1%).

The disruption of demographics poses a major problem because our current quality

of life depends on the means of production, which in turn depends on the active labor force. And [according to economic research](#), every 10% increase in the fraction of the state population that is aged 60 and above is associated with a 5.5% decrease in economic growth. Countries like China will have difficulty coping with a changing demographic pyramid.

But with a graying population comes a silver lining, in the form of new business opportunities. Although Japan's elderly population is [shrinking the country's gross domestic product \(GDP\)](#), this demographic shift also brings [investment opportunities](#), including the development of high-tech solutions like robots to help care for the aged, app-based home monitoring systems and telemedicine. Thanks to its large and high-quality dataset of national medical information, Japan can also become a leader in mining big data for healthcare insights. Today, companies are already combining this data with AI to develop AI-powered care management platforms. Another silver lining in the future demographic disruption is that health and wellness spending per child goes up when couples have fewer children. And China's overall spending on health and wellness will spike in the coming decades.

Avoiding the success trap: How to keep exploring

Many companies fall into the trap of success: Lulled into a false sense of security by their good results, they neglect to invest in the future. This leaves them vulnerable to new, tech-savvy competitors. Since the year 2000, half of Fortune 500 companies have disappeared because of digital disruption, according to Accenture. Even leading technology companies can be blindsided. When Amazon first launched its corporate IT services with cloud-based computing, IBM and Microsoft's reaction was denial and dismissal. They believed cloud-based services could never provide the necessary security, reliability and privacy. What the incumbents failed to grasp was that people do not buy *product attributes*, they buy *customer benefits*. Cloud-based services were incredibly practical. This

allowed Amazon (originally a bookseller!) to overtake industry stalwarts and become the market leader.

Here, the underlying challenge is corporate renewal – to invest in innovation while continuing to run the current business. It is a balancing act between the short term and the long term. Companies that excel at capturing value from their current business focus on “exploitation” – operational efficiency, profit margins and incremental enhancements. In contrast, firms that pursue novel ideas and business models favor “exploration” – entrepreneurial initiatives, growth and radical innovation. One way to bridge the gap between these two approaches is to adopt an ambidextrous model, wherein the firm creates a parallel organization devoted to exploration and renewal. By having independence and being insulated from day-to-day business, this exploratory unit can develop disruptive innovations. Thanks to these innovation breakthroughs, the company can reinvent itself over time.

Creating a 20-year strategy runway

The capacity to detect long-term trends is a skill that Peter Brabeck-Letmathe brought to the table as former CEO of Nestlé. Although in the early 2000s his board members balked at the thought of moving away from focusing only on the food business, Brabeck gradually started laying the groundwork for a [new vision](#): Nestlé as a nutrition, health and wellness company. This allowed the Swiss-based multinational to start acquiring and partnering with clinical wellness firms, as well as developing innovative in-house solutions to growing global health problems.

The first of these health problems is obesity. The paradox of today's world is that one-third of the global population will soon be obese while 1 billion people are undernourished. In response to the worsening obesity situation, Nestlé has focused on the problematic role of sugar in the modern diet. To start with, the company has decreased the amount of sugar in its products by 30% and has also

The paradox of today's world is that one-third of the global population will soon be obese while 1 billion people are undernourished.

In an age of disruption, incremental change does not prepare companies for the future. Firms need the courage to embrace radical change to renew themselves and stay relevant.

reformulated many of its products to banish trans fats and sodium. Its R&D department has also invented an entirely new form of sugar. Based on an innovative chemical structure, this fast-dissolving sugar gives the same impression of sweetness in the mouth while reducing the amount of sugar in food by 40 to 50%.

Another focus for Nestlé is educating consumers about nutrition. In Japan, Nestlé has launched a [nutrition app](#) that leverages AI and data from home-testing DNA kits to create personalized diets. In collaboration with Samsung, Nestlé is also exploring how digital sensor technologies can be combined with nutrition science. The goal is to create a digital health platform providing recommendations around healthy diets as well as lifestyle and fitness.

Here, it is important to highlight the Nestlé management team's farsighted strategy for renewing a traditional core business. By detecting – and then acting on – emerging trends, CEO Peter Brabeck-Letmathe built a 20-year runway for strategic renewal.

Using data to reinvent the value chain

Like Nestlé, [OCP](#) has a long company history. This state-owned Moroccan company was founded in 1920 to mine the country's vast reserves of phosphate. Historically, OCP focused almost exclusively on extraction. Given that Morocco holds more than 50% of the world's phosphate reserves, which translates to a time frame of over 100 years for extraction (compared with oil's expected 50-year time frame, for example), this seemed like a solid strategy. However, as commodity prices for phosphate stagnated, OCP began losing money on its mining operations. This forced the company to explore new paths.

As part of its strategic renewal, OCP considered the future of farming as well as technological and macroeconomic trends. What put OCP in a strong position was that Morocco could play a key role in the world's food supply, since modern agriculture relies on phosphate as one of the three essential

ingredients in fertilizer, along with nitrogen and potassium. Moreover, OCP's location in Morocco served as a gateway to the African continent, which contains the most arable land in the world and is expected to lead global population growth in the next 80 years. What hindered OCP was its relative lack of expertise in anything beyond mining and industrial plants.

As it launched its new strategy, OCP decided to put sustainable agriculture at the core of its vision. It developed a new business based on customized fertilizers: Using agricultural data and predictive analytics, the firm started producing customized mixes for farmers. To accomplish this, the company built new digital capabilities, including taking and processing detailed pictures of farmland. OCP also hired agronomists to work directly with farmers and develop solutions that help them optimize crop yields. As part of its new strategy to boost Africa's agricultural potential, it also worked with partners to facilitate financing for farmers and improve their access to markets. In short, OCP used technology, data and analytics to reinvent its value chain and extend it far beyond the company's industrial core.

Conclusion

In an age of disruption, incremental change does not prepare companies for the future. Firms need the courage to embrace radical change to renew themselves and stay relevant. The first three approaches presented here – using country competitiveness as a strategy lens, mapping out domino effects and capturing value from demographic shifts – offer a macro perspective on detecting opportunities and threats. The last three approaches – avoiding the success trap, creating a 20-year strategy runway and using data to reinvent the value chain – focus on firm-level strategies to explore and innovate. Of course, companies cannot reinvent themselves constantly or they risk exhaustion. But by adopting a farsighted strategy mindset, business leaders can avoid being blindsided by disruption.