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BY KAREN AVERY AND GARY LYNCH

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In 2008, at the height of the global recession, Hyundai Motor Company, like all other auto companies, was reeling from the sharp drop-off in vehicle sales. Fearful of losing their jobs and dismayed by the sudden plunge in the value of their homes, consumers were in no mood to consider big-ticket purchases that would take years to pay off. Most auto companies took on a defensive mind-set, reacting to the economic crisis by curtailing production and reducing future growth plans; some even filed for Chapter 11 bankruptcy protection.

Hyundai, however, had a different idea. After a probing analysis of what was motivating potential customers and what was holding them back, the automaker's management team came up with a program called Hyundai Assurance, which had a simple, compelling pitch: Buy a car from us and if you lose your job, we will buy it back with no negative effects on your credit score.

Within weeks of developing the idea, Hyundai had an ad ready to broadcast during an NFL championship game — and with that, the program took off. With a singular bit of creativity, Hyundai had demonstrated to potential customers that it had enough confidence, in spite of the uncertain economy, to offer consumers a hedge against hazard. Rather than succumbing to the recession, said John Krafcik, former Hyundai Motor America chief and currently CEO of Google's self-driv-

ing car program, Hyundai “leaned into market anxiety.”

Hyundai was able to navigate this difficult period because it confronted risk in a unique way. Rather than merely managing the risk of losing business in a downturn by reducing inventory, idling production lines, and laying off workers, the automaker designed a sales strategy that took direct aim at the volatility that risk produces.

We call this strategy the *uncertainty advantage*. It's an approach in which corporate leaders leverage disruptive change by making targeted, bold moves toward new market opportunities. Many companies confront risk with a tactical framework based on mitigating and managing the potential consequences (as in the common expression of passivity, “We'll manage”), but that approach might build bigger protective walls without guarding against the greatest risks — the ones that are unknown. The uncertainty advantage is something different: a strategy that compels managers to perceive the unknown as a market differentiator and an opportunity to unleash innovative solutions that appeal to customers, investors, strategic partners, regulators, and competitors. In short, it is a chance to go well beyond the typical meaning of risk management — that is, seeking ways to achieve the best of the worst outcomes — to create new and sustainable value out of confusion.

The idea that you can turn uncertainty to advan-

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tage has been around at least as long as Frank Knight's 1921 book *Risk, Uncertainty and Profit*, which established a theoretical framework. Knight, one of the founders of the neoclassical Chicago school of economics, defined uncertainty as the state of facing risks that can't be measured or foreseen. In other words, not only are you placing your assets at risk, but it's impossible to tell in advance how much risk you might be facing. He was, to be sure, describing the strategic terrain that every business occupies.

But according to Knight, this type of uncertainty is necessary for profit to exist. If you could know in advance how much risk you were facing, then so could your competitors. Any time you gained a competitive advantage, someone else could find a way to compete on the same ground. Thus, if you are a CEO or other creative leader seeking to put uncertainty to work as a strategy, you have to embrace a perspective like Knight's. There is no better source of profit than your ability to first identify the opportunity hidden in disruptive forces and then use it to differentiate your company from its competitors.

The specific uncertainty you face might come from turmoil in the market, as it did for Hyundai, or from a sudden crisis. Or it might simply be a potential peril that is considered part of the cost of doing business in your industry — until some insightful entrepreneur does a better job than competitors of finding out what's behind the uncertainty. In such cases, uncertainty becomes a precious asset instead of a liability.

**Turning Uncertainty into Value**

At a time when all businesses must be prepared for terrorism, cyber-attacks, failures of partners, natural catas-

trophes, accidents, environmental disasters, regulator activism, and market collapses, it's understandable that companies tend to focus not on embracing the unexpected, but on setting up safeguards against it. Typically, putting safeguards in place means empowering internal risk management departments to oversee large, expensive programs that use bureaucratic procedures and checklists aimed at avoiding the worst effects of unforeseen threats, complying with regulations designed to guard against undue risk taking, and fending off financial risk. All of these risk management strategies, which are intended to minimize losses, are easily replicated from one company to the next, and offer virtually no competitive upside.

Indeed, organizational risk management fails as a strategic weapon because it ignores the most pivotal facet of the business landscape: the market. Oriented as it is around compliance and rigid performance goals, a risk management program makes it more difficult to identify the unique opportunities offered by disarray and tumult.

In this environment, are your investments in managing risk primarily pointed inward, toward preserving organizational value? Or are they directed outward, toward the market? If you answered yes to the first question, then your company is neglecting the opportunities inherent in uncertainty. You can find a better way to differentiate yourself through the risks your company takes.

One of the authors of this article, Gary Lynch, saw firsthand how a company can develop habits of thought and action that enable it to benefit from the uncertainty advantage. He worked in the operations, technology, and risk strategy group at Chase Manhattan Bank from

1991 to 1995, just a few years after the savings and loan crisis in which more than a thousand banks had failed. A number of major banks were applying a new lens to risk, and Chase's leaders studied the uncertainties associated with various banking activities, including wholesale electronic banking and funds movement. Armed with stronger knowledge, they could introduce new products. The bank also built a platform through which sales, product development, and innovation staff could easily present management with information about risks in such areas as emerging markets, wholesale and private banking, and real estate, so that everyone involved could learn from one another and improve their investment or service strategies.

In more recent years, the banking industry has been preoccupied with keeping the financial system stable. Paradoxically, the havoc of the financial crisis was partly caused by the trading of derivative securities — a business originally developed as a hedge against market uncertainties. Derivative trading can add balance-sheet value, except when excessive trading creates a valuation bubble that eventually bursts. The uncertainty advantage is different; when pursuing it, you add value not through a steroid-like financial injection, but by using uncertainties to pump up the capabilities your company already has.

Our experiences with companies that use uncertainty to create an edge have shown us that the gains can be broken down into three broad categories.

**New revenue and growth opportunities.** Hyundai's no-risk automobile returns program demonstrated the sales potential in betting on uncertainty, but an even more ambitious gambit is still unfolding in the case of AstraZeneca in China. The past few years have been difficult for foreign pharmaceutical companies that do business in the world's largest market. The U.S. government has charged a number of companies with bribing doctors in violation of the U.S. Foreign Corrupt Practices Act. But when the Chinese government began a crackdown of its own, imposing a record penalty of nearly US\$500 million on GlaxoSmithKline in 2014, it looked like a clear sign to industry players that the ground rules for doing business there were shifting in

some way. In response, Western pharmaceutical companies in China began to, at best, proceed cautiously or, at worst, retreat. Assets were sold, layoffs were announced, full-scale reorganizations began, and forecasts were restated.

AstraZeneca took a different approach. It embarked on a strategic campaign to see what advantage could be gained from the uncertainty sown by the Chinese action.

To do this, AstraZeneca hired the best talent that its rivals had let go during the retrenchment, and used this brain trust of experts on the China market to analyze potential ways to profit from what lay ahead. In part as a result of this assessment, the company sought out channels through which it could cement stronger relationships with the Chinese government. In particular, it expanded a strategic alliance with the Chinese pharma manufacturer WuXi AppTec, investing more than \$150 million in new facilities that would support research in advanced biologic medicine, made from living cells. Biologics are the basis for many blockbuster drugs, and the Chinese government wanted to pursue this lucrative field more energetically.

The outcome of AstraZeneca's investments in such partnerships will be more evident as the Chinese pharma market matures. Like most other pharma companies doing business in China, it suffered a revenue decline in 2015 when the government-run health insurance funds in China lowered the prices they were willing to pay for drugs — but in the third quarter of 2016, AstraZeneca's sales in China were up about 10 percent, according to the company's earnings statement. Moreover, the company is on target to be a key player in the lucrative biologics sector as it grows.

**Greater return in the allocation of risk-focused resources, primarily derived from more effective targeting of time, management attention, and capital at uncertainties that could directly impact the business model.** Because risk management teams in most organizations serve as operational functionaries and not strategic facilitators, the onus is on business-side executives to redefine what risk analysis means. This idea was at the heart of a supplier evaluation that Rockwell Automation, an

industrial equipment manufacturer, began around 2007. To a degree, the firm's risk management efforts had always considered the possibility that suppliers of components or raw materials would be compromised by some unexpected event. But with thousands of companies in its network, Rockwell had made very little distinction between indispensable partners and lesser ones. Nor did management have a good grip on which partners carried the most risk and which were relatively safe from disruption — for example, from a natural catastrophe or a political or economic incident.

The company's leaders decided to change the situation by performing a thorough analysis. After identifying its most essential suppliers and rating them on a risk scale, Rockwell crafted a strategy to benefit from the volatility associated with some of these companies. After all, if the suppliers failed, Rockwell's whole value chain would suffer. Thus, Rockwell dedicated extensive resources — human and financial — to support these critical suppliers, forming close bonds with them for the first time.

The result was an unexpected advantage: an innovation loop. Frequent meetings and discussions about ways to improve operations and designs generated new ideas for products and components, efficiency, and scale. These ultimately enhanced both sides of the OEM/supplier equation. The effort ultimately transformed a fearful approach to risk into an open network of collaborative companies.

**Better, faster, and more accurate decision making, which results in more precise anticipation and response to market conditions and greater confidence and trust on the part of customers, investors, and regulators.** The third advantage that accrues to companies that use uncertainty to their benefit has to do with making decisions. To navigate uncertainty, leaders need deep insight into where the company's vulnerabilities are most severe. Often this information is hidden somewhere in the day-to-day operations that few CEOs take time to examine from their perch 5,000 feet above. For example, Honda Motors was taken by surprise in 2011 when the devastating tsunami in Japan and floods in Thailand interrupted the production of an inexpensive set of crit-

ical semiconductor components. Although Honda prides itself on the transparency of its supply chain and just-in-time inventory systems, company managers had overlooked the risks of losing access to these minute components. The interruption forced Honda to shut down close to 50 percent of its North American production for almost a full year.

Often, however, the catalyst in bringing this approach to life is a simple inquiry by a CEO or other senior executive — which then leads to a new awareness of potential profit. One example is the Trumpf Group, a large German machine tools manufacturer. The story began with a fire in a semiconductor plant owned by Philips Electronics in 2001, set off by a lightning bolt. The fire crippled production of computer chips for mobile phones — and although Ericsson, which relied on Philips for most of its chips, lost hundreds of millions in potential revenue and ended up getting out of the handset production business, competitor Nokia noticed the slowdown in supply even before it heard from Philips, and decided to speed up production from its other suppliers around the world.

Peter Leibinger, the CEO of Trumpf's laser technology and electronics unit, had that cautionary tale in mind in 2011 when he studied the potential threats surrounding the production of the laser diode. This inexpensive part was, and remains, the centerpiece of Trumpf's equipment. Continuously manufacturing it, with high-quality output, was a market differentiator for the firm. Any disruption in laser diode production would allow rivals to pick away at Trumpf's market share.

The immediate lesson from Nokia would have been to rely on multiple, redundant plants in different regions — but for Trumpf, which operates its own plants, that was a costly and inefficient solution that would impact profit margins. Another option would have been a backup plan to purchase laser diodes from a rival or third-party supplier. That, however, would diminish quality and Trumpf's reputation.

Leibinger, rather than simply accepting risk as a price of doing business, decided to look into the causes of uncertainty in laser diode production. It turned out

that, as is the case with many other senior executives, he was overlooking a basic risk near the bottom of the supply chain: A devastating electrical fire is the most likely reason for production in the laser diode factory to be interrupted. Hence, electricians with inadequate safety training represented the gravest risk to output. And in probing deeper, it became painfully clear to him that the staff in Trumpf's own laser diode factory lacked the critical skills needed to prevent a fire.

Once he learned where the uncertainty lay, Leibinger established a program to improve the training and recruiting procedures for electricians in the factories. This generated a series of benefits. Trumpf avoided tying up capital in redundant facilities or cutting into its margins with additional laser diode inventory. Meanwhile, Leibinger and other executives could turn their attention to growth strategies — expanding into China, for one thing — without fear of a production crisis, thus gaining a leg up on competitors.

### **From Theory to Practice**

If you want to do something similar in your own organization, you can start by conveying, through your actions and words, a clear and concise message to everyone in the organization. That message is that you are facing your uncertainties and using them to inspire innovation. People at every level of the organization, instead of fearing management reaction if they report a potential problem, need to believe they'll be rewarded if they let their managers know what might cause problems and contribute ideas for solutions or tactical alternatives. This demand for insights and ideas provides opportunities for the subject matter experts within the company. They become part of the growth agenda, and they offer their

best expertise because this is a practice that appeals to human nature; everyone wants to be included.

After you have settled on a growth path, the challenges continue. People throughout your company will need to work together to use the business's deepest capabilities, including knowledge and diverse talent, and its greatest competencies — such as data management and analytics, sensors, visualizing tools, product development, and branding skills — to bring your new approach to fruition. Promoting this kind of corporate culture isn't easy, but it can be done. It takes innovative leaders in senior positions who can steer their companies in creative, unorthodox directions.

This approach runs contrary to the mind-set of most risk managers, who have generally been charged with preserving the status quo. They will appreciate that the uncertainty advantage offers them a way to enhance their importance in the organization. But they may also be concerned about becoming marginalized if they don't think in terms of the strategic opportunities a risk might present. You will need to show them that they can only benefit by being more willing to think strategically.

In short, if you're a senior manager, you can't fully control risk within the parameters of competitive resources. It's a mistake to try. Rather, you should explore and make use of uncertainty. If you can take what is unforeseeable in the markets or unknown to your competitors and make it central to your strategic growth agenda, you will succeed at the expense of competitors who still regard risk and uncertainty as threats. +

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