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# The Future of Risk Management

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Risk-taking is a necessary part of any worthy pursuit. In business management, we strive to make the best decisions we can, incorporating our experiences, strategic discussions, anticipated costs, and the needs of our customers. Perhaps surprising to some, business management and risk management are both pursuing the same goals. The future of risk management depends upon the successful integration of those pursuits so that such a statement is no longer surprising to anyone.

Today for nearly all organizations, risk information is becoming more sophisticated and more readily available, with data, analytics, and digital tools to harness them. Still, an even more valuable future seems in sight.

## From Today Forward

By fostering a positive embrace of risk-taking by boards and across organizations, we will realize the potential of risk management. This mindset requires a mental progression from viewing risk as the potential for loss or even just one that describes risk as uncertainty. We seek to move to a routine where we treat risk as an ordinary input to the business decision-making process akin to customer preferences, labor costs, market share, and other standard business metrics. Appreciation of the breadth of the impact this will have comes when we deeply consider how risk-taking might impact the trust that various stakeholders – investors, credit providers, customers, employees, and regulators, for example – have in the organization, in both positive and negative ways. These are the providers of essential capital to the firm and their view, their expectations – their trust in us – will guide the cost of that capital in nearly every transaction we undertake. Higher trust translates into a lower cost of all forms of the precious capital we need in our businesses.

We both envision that an examination of risk-taking and its impact on trust will be far more directly incorporated into the day-to-day management decisions made by employees – a strong presence as a metric central to all organizational decision-making. An ultimate hope is that risks can be managed holistically on an enterprise-wide basis where management and systems monitor, validate, protect, and adjust levels of capital 'adequate' to the risks of the business. That ensuing cost of capital can then be transparent as line-item costs, allocated by business unit, by new product, or – in the case of financial institutions – by loan, trade, or portfolio.

We consider several factors that remain as challenges to the overall vision and suggest how to continue the progress forward with educated risk-taking.

## Translating Unknown Risks

Encountering unknown risks can create crises. After a crisis is over, though, the only thing people will remember are the judgment calls that leaders made and the outcomes of those decisions. Nobody will give credit for their good intentions. So, our future in risk management must formalize thoughtful, disciplined, orderly processes that include collective wisdom and a powerful, laser focus on getting decisions right. Data and context are essential to this success, especially in the use of data to convert as many unknown risks into known risks as we can. The future of risk management will demand that we build tools to understand stress points better, the cost of taking risks, how risks amplify well beyond their first-order impacts, and the trade-offs of any given strategy. With these, we can make better business decisions – maximizing the value of the real options that all firms have in their portfolio.

## Resiliency Planning

As we experience the disruptions and human losses of the current pandemic – which was not an unknown risk – or as we examine the massive disruptions from large-scale cybersecurity breaches that targeted highly sensitive data before and continue even now, a greater focus on contingency planning is inevitable.

Many firms recently discovered they had insufficient resiliency planning, had not anticipated critical aspects of the current disruption, or had no plans at all. Subsequently, they also discovered a breach of trust between them, their employees, and their customers, which has cost those firms dearly.

In the past, one form of resiliency planning centered on the establishment and maintenance of back-up work sites for employees to use in case of an emergency. Both of us have experience activating these physical "hot sites" during the minutes, hours, and days immediately following the 9/11 attacks, and therefore understand their value. In a pandemic or even a regional outbreak like the avian flu, however, people may not be willing or even allowed to leave the safety of their homes to report to work. This condition renders such off-site facilities useless. Sometimes done ad hoc, the solution activated during this pandemic has been to move the work home or to other regions. For example, problems emerging in one geographic location were mitigated by moving the work to employee residences, other cities, or even other countries. This adaptation has only been possible because of the thoughtful resiliency planning at the heart of the Internet. In other words, today's hot sites have become virtual – built via communication networks, where someone had already been thinking about resiliency. While this makes companies more adaptable, it also increases cyber risks and makes digital integrity an even higher priority.

Managing risk like this is not without cost. To be effectively incorporated into business decision-making, that cost must be transparently allocated. Reporting and allocating these expenses as part of the standard business decision making process are ways in which we start to see how an organization communicates the cost of risk-taking to a business unit – or to a project – thereby incorporating it into everyday activities.

Given recent experiences, a forward-looking risk management approach will incorporate this concept of building redundancy and efficient alternatives into supply lines and processing alternatives too. For example, companies can have multiple Cloud providers and eventually be able to move work with the flip of a switch, so to speak. But the costs for this resiliency must also be transparent and available to the business decision-makers, ex ante. Our future of risk management sees this as both necessary and inevitable.

## Risk and the Unanticipated Impact of Efficiency

In the current pandemic, many business leaders were caught off-guard by the vulnerability inadvertently generated through their unrelenting drive for efficiency and through political economies' embrace of comparative advantage. In the most efficient, just-in-time model, there are no excess inventories to count on in case of a disruption in the supply chain. Companies that built extreme efficiencies into their operations were, therefore, more vulnerable to shortages. Political economies that no longer had the infrastructure to address other shortages - essential medicines, protective gear, etc. - found that the value of positive diplomatic relationships with those to whom the comparative advantage was ceded became clearer. These experiences during the pandemic show us that it is not just in financial products that the cost of poorly understood risk-taking may be hidden, deferred, or not accounted for.

Risk management in the future will undoubtedly be utilized in this decision-making process to determine what vulnerabilities are acceptable to an organization and which challenges are no longer just a question of managing uncertainty – they become questions of survival. The thought process will switch from asking, "Are the costs reasonable for the risks I am assuming?" to one where we decide whether a risk is one we are just not willing to assume. A robust and integrated risk management function will help us to evaluate if the protections we have in place are adequate to avoid serious harm and whether increases in efficiency offset the cost of mitigating that risk.

## Forward-facing Techniques

Risk management and business planning are forward-looking, in the realms of both potential gain and loss. The future of risk management will give our organization more exceptional senses to detect changes in that forward environment.

Our organizations and our economies are complex systems consisting of interdependent networks of people and resources – not unlike the complex systems in the human body. Your five human senses receive stimuli and convey data to your brain to spot potential dangers and anticipate problems. Additionally, autonomous – consider them empowered – agents in your body like white blood cells, act even when the brain has not been directed to respond. These forward-looking senses, coupled with your historical memory – which helps you predict potential outcomes based on past experiences and helps you plan possible responses, and these autonomous agents, continuously monitor your immediate environment to alert you to potential danger or to prompt you to act to address it – sometimes without you even noticing. As another example, the smell of smoke or the heat of an approaching fire tells you how imminent and how severe your risk is of being harmed by the fire. The sharper your senses, the quicker your body can react to protect itself.

Our organization's risk management systems can be charged and empowered to continuously scan for and sense potential negative surprises ahead, determining how serious they are to our business, and providing effective mechanisms to respond quickly. That's also part of our resiliency.

But we cannot be satisfied with just having senses that react to a potential loss. Fear of loss puts our brains into a fight-or-flight mode if we are not prepared. When this happens, the slow, thoughtful, and strategic parts of our brain shut down so that all our capacities focus on survival. It is substantially better is for us to be thinking forward about how the future might be different – in both positive and negative ways – than for that which we have planned. When risk management is about shining light onto the future, it can contribute mightily to the reduction in fear – making business leaders more successful in their pursuit of goals.

Forward-looking risk management is already in place in a technology that many of us consider desirable. We expectantly anticipate a future where our cars safely drive us without human intervention. They will, and already do to some extent, operate autonomously by using multiple forward-looking sensors, including Lidar, stereoscopic cameras, and sonar, enhanced by artificial intelligence systems. This combination of "senses" projects an efficient and safe path forward for the vehicle.

Looking back in time, radar was a likewise game-changing technology upon its introduction. Using historical performance – not unlike your body's historical memory – radar allows its users to see forward. This technology projects outcomes, like the path and speed of an approaching threat, or even whether a lovely sunny day is coming so you can plan for good things. You already use radar in your daily planning, often without thinking about it. And we envision a time when the use of risk inputs is similarly unremarkable, and even more valuable.

Risk management can use traditional historical experiences in the same way that radar does: using forward-looking projections to adjust historical performance to predict future outcomes better. Like with the technology behind driverless cars, the senses of our future risk management will sharpen an organization's future vision to predict more accurately and to plan future results. We do not suggest that the future can be completely quantified in the same way a driverless car estimates the future position of a pedestrian. Rather, this forward look at risk, acceptance of deviations from expectations, in combination with the adaptability of resiliency planning, gets to the heart of successful strategic business planning and the future of risk management.

## Professionalizing Risk Management

Over the past thirty-five years of modern risk management, we have seen it move from an arena of experimentation, with some costly lessons, to a full-blown profession. Still, we believe the future of risk management is that it will become even more professionalized.

Financial risk managers already have certification programs like the PRM and FRM. Actuaries – who engage in risk management in many fields like insurance – are required to pass multiple examinations before they can call themselves actuaries. Any kind of certification like this raises the fiduciary expectations for these professionals. We note that before anyone certifies the accuracy of financial statements, represents someone in a court of law, or estimates a company's pension liabilities, they need to demonstrate the command of the subject matter, sometimes to be licensed, and always to adhere to written professional standards.

Licenses may then someday be required for certain risk managers to practice their work. As an example, the mutual fund industry is one in which one of every four Americans has a stake. There is broad vested interest that risk in this arena be managed well. Like actuaries who work on insurance products, risk managers who engage in risk oversight in the mutual fund arena may be required to have demonstrated high levels of specific risk management proficiency - validated by exam or even licensure. Failing this, one could argue that their employers all falling short on their fiduciary standards.

## The Future of Risk Governance at the Board Level

Regulators in some industries require boards to have a risk committee chaired by an independent director. Back in 2010, David R. Koenig wrote that board-level risk committees were becoming a fiduciary expectation. Since that time, guidance from organizations like the Directors and Chief Risk Officers group (the DCRO), on whose governance councils both of us have served, makes it much easier for directors to have models of best practice risk governance and to learn from their experienced peers.

Soon, it will be an expectation that one director has real risk management expertise – something the DCRO calls a Qualified Risk Director. As cyber risk continues to grow, it too will become increasingly necessary to have experience in the governance of this exposure. The US Senate (SB 592) and House (HR 1731) are considering legislation that would direct the SEC to issue final rules for listed companies to disclose whether they have cyber risk expertise among board members or what they are doing to address that lack of expertise.

## Conclusion

In the future, risk management will no longer be something separate from proper business management. All organizations have goals and objectives they pursue. Whether incorporating market share, the cost of borrowing, market preference studies, or any other business intelligence, our forward decision-making improves when the data provided is professional, insightful, and designed to help us. Risk management conducted in this manner will thus transform into a cornerstone of corporate governance and business strategy. It will become fully integrated into executive decisions, organizational structures, and corporate cultures. And that will be to the benefit of all.

**David X Martin** is a former chief risk officer, a published author and subject matter expert on fiduciary responsibilities. His professional experience includes leadership roles with Citibank and AllianceBernstein, advisory work for the FBI and SEC, and senior advisory roles for large, complex and global companies. He is a visionary leader known for creating and building premier risk and fiduciary organizations. David is an expert witness in high level risk and cybersecurity cases, is an Adjunct Professor at NYU Graduate School of Business, a member of the Sanctions Subcommittee of the US Department of State's Advisory Committee on International Economy Policy, and a Special Counselor to the Center for Financial Stability on emerging risks. His numerous articles, books, speaking engagements and Board of Director experience can be viewed through his website.

**David R. Koenig** is the author of both Governance Reimagined: Organizational Design, Risk, and Value Creation (2012, 2018) and The Board Member's Guide to Risk (May 2020). He spent the first half of his career building firmwide and portfolio-specific risk management programs for multiple companies. As the founder of The Directors and Chief Risk Officers group (the DCRO) – a global collaborative of c-suite and board members focused on risk governance and one of the founders of The Professional Risk Managers International Association, his work over the past twenty years has focused on establishing and implementing global best practices for risk governance at the board level and the general practices of risk management. He serves on the Editorial Board of the Journal of Risk Management in Financial Institutions and on the Executive Advisory Board of the Center for Advancing Corporate Performance. David's concept, "Risk Capital as Commons - Distributive and Networked Governance," was one of the winners of the inaugural M-Prize for management innovation, and he is a recipient of The Higher Standard Award, the top industry recognition given by the Professional Risk Managers International Association. You can read more about David on his website.