Enterprise risk management (ERM) has become a top priority for corporate boards and management over the past two decades. What many skeptics initially considered a passing fad has evolved into a global standard and regulatory requirement for managing risk.

Recent surveys indicate that ERM has replaced accounting issues as the top board agenda item, while chief risk officer (CRO) appointments and ERM initiatives have become commonplace at complex, risk-intensive organizations. Regulators have also set aggressive minimum standards in statutes and rules, such as Sarbanes-Oxley, Dodd-Frank, Solvency II, Basel III, and ORSA.

Beyond regulatory compliance, ERM has produced business benefits—one of the first empirical studies showed firms that have implemented ERM enjoy an average 16.5% premium in market valuation.¹

The power of sustainability in driving growth transcends industries and geographic regions. For example:

- According to its 2012 Our Global Impact update, industrial and financial conglomerate GE invested nearly $2 billion in research and development for sustainability innovation. Concurrently, its ecomagination products generated some $25 billion in revenue.²
- Consumer products giant Procter & Gamble surpassed its goal of $50 billion in cumulative sales of Sustainable Innovation Products by $2 billion in 2012.³
- German power and healthcare conglomerate Siemens reported revenue from its Environmental Portfolio Report 2013 equal to 43% of total sales.⁴
- Unilever, the Anglo-Dutch consumer products group, has rooted its entire growth strategy in the principles of sustainability. As a result, between 2008 and 2012 Unilever increased sales by 30%, beating its major competitors.⁵

These companies are growing because they embrace sustainability and position themselves as good corporate citizens. In fact, companies that downplay or ignore sustainability run a serious risk—sooner or later, they are likely to encounter avoidable problems with regulators, investors, or
non-governmental organizations, or inflict lasting damage to their reputation because of questionable operating practices.

A prime example of how dangerous it can be for organizations to ignore sustainability is the regulatory and public image backlash experienced by large banks after the financial crisis in 2008. While major financial institutions had enjoyed an image of security and reliability, the fallout from the financial crisis undermined decades of this positive reputation.

Even in light of this shifting public image, the industry has been slow to change. Some institutions have encountered problems since the crisis and admitted that individuals within their ranks were continuing to conduct the risky and sometimes illegal practices that contributed to the crisis. All of this has left the reputation of an entire industry marred in a way that institutions are still working to overcome. Fair or not, the public perception was that banks had undermined consumer trust—an asset essential to their sustainability.

Manufacturers are at risk, too. A prime example is the well-documented circumstance of Hindustan Coca-Cola Beverages (HCCB), a subsidiary of The Coca-Cola Company. After the fallout around the water usage of several India-based bottling plants that impacted production, The Coca-Cola Company adjusted its thinking to acknowledge how critical a role sustainability plays in business strategy.

Similarly, when PepsiCo came under fire 10 years ago for excessive water usage in India, the company launched a program to achieve “positive water balance”—saving more water than it uses through sustainable agriculture initiatives, recycling, and recovery. In its Corporate Citizenship Report 2010/11, PepsiCo India reported 10.143 million liters of water saved vs. 5.826 million liters used in 2010. In effect, PepsiCo’s production remained uninterrupted as the company silenced critics and mitigated a business risk through its sustainability initiatives.

Investors have come to recognize the value of sustainability, as well. In a June 2012 green paper, DB Climate Change Advisors, a Deutsche Bank unit, reported that, without exception, academic studies find companies with high ratings for corporate social responsibility (CSR) and environmental, social, and governance factors (ESG) enjoy a lower cost of capital for debt and equity. High CSR and ESG scores are also strongly correlated to superior corporate financial performance by both accounting and market measures.

Companies that integrate sustainability into their ERM program will likely outperform their peers by every measure and enhance their stature as model corporate citizens.

To enjoy these advantages, however, companies must do more than make empty gestures. When sustainability first emerged as a management concern in the early 1990s—about the same time as ERM—it was a far cry from what was to come. Early policy statements did well to address environmental stewardship but fell short of establishing numerical targets and metrics for success. A modern sustainability policy is both broader in scope yet more focused—incorporating quantifiable objectives and target dates for employee health and safety, environment, corporate governance, shareholder relations, and community outreach.

An emerging trend among sustainability leaders takes the concept one step further—to strive for a net positive impact. For example, BT, the U.K. telecommunications service provider, estimated that in 2013, its total carbon emissions roughly matched the emissions its products and services helped customers avoid. By 2020, BT aims to help customers reduce carbon emissions by at least three times that amount.

Footwear and apparel manufacturer Nike has developed a new method for making running shoes that cuts waste by about 80% compared to traditional methods. Additionally, they developed a new waterless dyeing process that could eliminate up to 5% of its total water usage. Initiatives like these illustrate how sustainability can be a win-win proposition that contributes to both a company’s success and desirable societal goals.

Although many companies now recognize how important sustainability is, few have yet to incorporate it in their ERM frameworks. However, as illustrated above, sustainability does involve significant strategic, business, and operational risks.

The rest of this paper explains how to integrate sustainability into the Lam ERM framework:

- **Governance and policy**—How should the board and management be organized to provide effective risk governance and oversight? What policies should be established to communicate expectations and risk tolerance levels?
- **Risk assessment and quantification**—How should the company make more informed, risk-based business decisions?
- **Risk management**—What strategies should the company implement to optimize its risk/return profile?
- **Reporting, monitoring, and feedback**—How should board and management reports be structured to provide effective monitoring of risk, including objective feedback loops?

**GOVERNANCE AND POLICY**

A good governance structure conveys the message that sustainability matters to senior management and the
board of directors. Excellence starts at board level, with a committee to set policy and monitor progress toward tangible sustainability goals—a structure used at major companies across multiple industries.

A 2014 study by the Sustainability Investment Institute found 277 companies in the Standard & Poor's 500 Index that monitor sustainability at the board level. Of these, 32% charge the public affairs committee with responsibility, and 34% rely on the governance and nominating committee. Only 11% designate the audit or risk committees, a choice that implies a significant opportunity to integrate sustainability and ERM. Policy implementation is delegated to an operating council of senior managers who handle day-to-day sustainability efforts—the council may also establish smaller working groups to tackle specific topics.

A good governance structure conveys the message that sustainability matters to senior management and the board of directors.

A key component of ERM is a risk appetite statement that clearly defines specific metrics and risk tolerance levels for the core risks faced by the organization. In this regard, an effective sustainability policy sets numerical goals with target dates where appropriate—for example, a commitment to reduce total carbon dioxide emissions from the 2012 level 30% by no later than 2020. This example highlights the details critical to a successful policy:

- How the company will achieve the savings (e.g., changing its fuel mix, emissions scrubbing, switching to a hybrid vehicle fleet)
- How much the initiative will cost
- How the company will monitor progress
- Who will review progress internally
- Which outside entity will conduct independent monitoring and to whom that entity will report

The policy should establish a purpose related to the business, too. A water reduction target may be a top priority for The Coca-Cola Company or PepsiCo, but not for a bank.

For example, Standard Chartered, the London-based emerging markets bank, has embedded sustainability in its business strategy.

In a foreword to a 2010 report The Social and Economic Impact of Standard Chartered Ghana the group chief executive wrote:

“If anyone needed convincing on the importance of taking a sustainable approach to business, then the extraordinary dislocation and disruption in financial markets over the last couple of years provided dramatic proof.”

The sustainability section of the report did cover the environmental impact, but its primary focus was on banking competencies—access to financial services in an underdeveloped country, responsible sales practices, credit card fraud, anti-money laundering, and lending policies:

“Standard Chartered believes that the decisions it makes around who and what it finances can have an impact on the long-term viability of its business model as well as the sustainable economic development of its host markets. The bank’s approach to sustainable finance includes managing the social and environmental risks associated with its lending decisions, as well as seizing the opportunities presented by the growth in the renewable energy and environmental finance sector.”

A bank may still strive to reduce its environmental footprint, but it has not embraced sustainability unless the policy tackles existential issues for its core businesses, including governance, ethical behavior, and avoiding excessive risk.

Once a goal is set, the company must pursue the implications through its entire business operations, including third-party entities. To illustrate, a carbon dioxide emissions reduction target affects logistics, the supply chain, transport policy, manufacturing policy, air travel, premises management (e.g., HVAC, lighting, furniture, carpet purchases), etc.

Data collection alone poses a challenge—companies must adopt technologies to capture data across risk and sustainability domains, and throughout their supply chain. Companies cannot cheat their way to targets through outsourcing, either. They must engage third-party vendors in the process and be willing to change vendors if the current ones refuse to cooperate.

Goals should be tailored to each company’s specific business even though this makes it difficult to compare results at different companies. Consider that L’Oreal is aiming to cut water consumption by 60% where The Coca-Cola Company aims to cut water consumption 20% by 2020—these goals reveal how common sustainability issues must be viewed as relative to every company. L’Oreal does not
count the relatively modest amount of water used as a raw material in its water footprint—only water used in washing vessels and other manufacturing processes. The Coca-Cola Company does count water used as a raw material—its goal would be meaningless if it did not. If both companies achieve their objectives, which has delivered the better performance?

Sustainability committees looking for best practices or examples among peer companies must take such nuances into account.

**RISK ASSESSMENT**

Whenever possible, companies should assess and measure risks to facilitate monitoring of progress. Suppose a company set a target for the year 2020 in 2012—what percentage of that target has it achieved in 2014? If the answer is less than 25%, why, and how does it affect the probability of meeting the target on time? Negative goals—zero hazardous waste spills, for example—cannot be measured this way. The company must rely on incident reporting, but it should also establish a mechanism to escalate problems up the risk hierarchy to trigger remedial action.

A significant obstacle to effective ERM derives from different perceptions of risk within the company. The CFO may focus on risks that affect financial performance and future growth, and the head of operations would focus on health, safety, environmental, and manufacturing risks. Meanwhile, the head of procurement would focus on supply chain risks, including child labor and conflict minerals. Finally, the head of human resources would focus on risks relating to diversity, resource management, and training.

Companies must break down these silos to establish an enterprise-wide risk assessment. Only then can they establish appropriate priorities for risk management and avoid potential duplication of risk mitigation strategies. A holistic view enables risk managers to identify offsetting risks that reduce net exposure and may obviate the need for hedging or insurance in whole or in part.

To facilitate ERM, the key players should meet at least quarterly to share their concerns and discuss enterprise-wide, cross-discipline solutions. Each unit should prepare a risk control self-assessment (RCSA), setting out the probability and severity of key risks, what risk controls exist, and how effective they are. Risk managers use RCSAs to develop risk mitigation strategies appropriate for the company as a whole. By adding new pieces, sustainability simply completes the risk management puzzle—it does not require separate or special treatment.

**RISK MANAGEMENT**

Assessment is only the first step—a company cannot manage a risk until it has determined how much of that risk it is willing to bear. It needs to make business decisions within the context of a risk appetite statement, prepared by risk professionals but reviewed and approved by the board. The statement spells out quantitative limits applicable across the entire company. For example, a financial institution may commit to make socially beneficial impact investments, like microfinance or community development loans of a minimum fixed dollar amount or a target percentage of its portfolio.

**Assessment is only the first step—a company cannot manage a risk until it has determined how much of that risk it is willing to bear.**

Once risk appetite is defined, risk managers can prioritize the risks they need to mitigate and how best to achieve the desired result. Community outreach is often the starting point in risk mitigation because many jurisdictions require a renewable license to operate. The decision to renew rests with local politicians, who must answer to the populations they govern. Licensing may represent a barrier to entry, as western retailers have discovered during their ongoing negotiations with local authorities to obtain operating permits for potentially lucrative markets in emerging nations.

Companies must factor the cost of maintaining licenses, including overcoming barriers to entry and license-related community outreach, into pricing decisions to ensure they receive adequate compensation for the risks they assume. For risks transferred to third parties through insurance, hedging, or alternative risk transfer mechanisms, pricing must reflect the associated costs. Companies typically transfer a risk if the amount would otherwise exceed their appetite for that risk, or if a third party is willing to assume the risk at a cost lower than the company’s own cost of capital.

In the sustainability context, risk transfer demands an intense focus on the supply chain, including indirect sources. For example, a consumer products company is at risk not only for the ingredients it purchases, but also the supply chain behind those ingredients. If child labor is used to gather saffron for a chemical company that makes a yellow pigment sold to a branded food manufacturer, the media would pounce on the consumer products company. No matter how infinitesimal the quantity of pigment in the end product, reporters would target a household name rather than an
anonymous ingredient manufacturer the public has never heard of. Justified or not, these types of stories rarely provide credit for post-exposure remedies.

**DATA MANAGEMENT, REPORTING, MONITORING, AND FEEDBACK**

Risk and sustainability data are complex and distributed throughout an organization. To report effectively on a regular basis, companies must invest in technology that aids in the collection, analysis, and management of risk, financial performance, and sustainability data. Furthermore, technology must allow for easy linkage of data across these disciplines in real time.

Companies need to embrace sustainability with the same cultural commitment required for successful ERM. The emphasis must come from the top, infuse the business model, and work its way into everything the company does.

**CONCLUSION**

Sustainability has become an important business objective for leading companies because it supports their ability to grow and prosper over the long run. The modern corporation owes a fiduciary duty to its shareholders but cannot succeed without taking into account the interests of other key stakeholders.

Companies must back up principles with action. If a supplier cannot assure a retailer that conflict minerals were not used in the manufacturing or packaging of a product, a retailer can threaten to drop the product or the supplier. A mining company may lose its license to operate unless it fosters good relations with local communities affected by its operations.

Even regulators have begun to embrace sustainability. In the United States, the Office of the Comptroller of the Currency and the Federal Reserve Board now requires bank examiners to look for appropriate and sustainable remediation to risk management deficiencies. A quick fix or one-time improvement will no longer suffice.

Sustainability leaders recognize a symbiotic relationship between the market for their products and their roles in society at large. In fact, a company today ignores societal relations at its own peril. The non-renewal of a single license to operate could have devastating consequences. Integrating sustainability into ERM puts companies in control of their destinies, enabling them to be proactive and forestall stakeholder pressures that might otherwise pose a threat to existing operations or future growth.

**ABOUT THE AUTHORS**

**James Lam**

With over 25 years of risk management experience, Lam is often cited as being the first Chief Risk Officer. An early advocate for enterprise risk management, he served as Partner of Oliver Wyman, Founder and President of ERisk, Chief Risk Officer of Fidelity Investments, and Chief Risk Officer of GE Capital Market Services.

Lam is currently the president of James Lam & Associates, a leading risk management consulting firm. In addition, he is a member of the Board of Directors of E*TRADE Financial.
Corporation where he was named Chair of the Risk Oversight Committee. Lam also serves as a Senior Advisor for Workiva.

Lam’s many accolades include receiving the inaugural Risk Manager of the Year Award from the Global Association of Risk Professionals in 1997. Additionally, he was named one of the “100 Most Influential People in Finance” three times by *Treasury & Risk Management* magazine.

After receiving his BBA from Baruch College and graduating summa cum laude, Lam completed his MBA with honors at UCLA. In addition to lecturing at Harvard Business School, he has taught courses in risk management at Babson College and Hult International Business School.

Francis Quinn

Francis Quinn is the Director of Sustainability Technologies at Workiva. Quinn began his career as a research fellow at the Japanese Ministry of International Trade and Industry. In 1996, he joined L’Oreal Group as a researcher in biomimetic and composite polymers. Quinn later led the integration of The Body Shop into L’Oreal and built the company’s global sustainable growth strategy as director of sustainable development.

Quinn’s inventions have earned him more than 30 patents. He has written or contributed to five books and authored several white papers on sustainable development, CSR strategies, and policies on competing in international markets. He has also published original research on sustainable innovation, including nanotechnologies, biomimetic polymers, and technological risk.

Quinn has been recognized internationally by his peers, professional associations, academic institutions, news outlets, international groups, and non-governmental organizations. Quinn received his Ph.D. in physics from Trinity College Dublin.

ABOUT WORKIVA

Workiva, formerly WebFilings, is a leading provider of complex business reporting solutions and is used by more than 60 percent of the Fortune 500. The company’s Wdesk cloud-based product platform brings ease and control to compliance, management, risk, and sustainability reporting. If you create complex business reports, then you need Wdesk. It combines documents, spreadsheets, and presentations that link your critical business data in one place. Information stays up to date and secure. You have complete control. And you don’t even need IT to get started. It’s simply the easiest and fastest way to get complex business reports done. See what we can do for you at [workiva.com](http://workiva.com).

REFERENCES


