

Executive Summary  
July 9, 2008

Stanford Strategic Decision and Risk Management eBriefing

Executive eBriefing®

## Enterprise Risk Management: What Top Management Wants from Its ERM Program

Featuring:

**Carl Spetzler, Bob Mark, Girish Shirodkar, John Celona and Carissa Little**

Following is the summary of the Executive eBriefing covering:

- Why a top-down, value-driven perspective on ERM is necessary to understand and manage downside risks and upside value-creation uncertainty across an organization.
- Why boards, CEO's, and regulators are demanding ERM, and why it is difficult for traditional ERM programs to meet these needs.
- How a large infrastructure company successfully implemented a top-down, value-driven ERM program integrated from the back room to the boardroom.
- How ERM policy, infrastructure, and methodology combine to satisfy various constituencies and to efficiently integrate all components of risk on a portfolio basis.
- What the Stanford Center for Professional Development is offering to develop skills for implementing ERM.



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# Enterprise Risk Management: What Top Management Wants from Its ERM program

**Speakers:** **Carl Spetzler**, CEO, SDG; Program Director, Stanford Strategic Decision and Risk Management Certificate Program; Lecturer of Economics, Stanford Graduate School of Business  
**Bob Mark**, CEO, Black Diamond Risk; co-author of *Risk Management* and *The Essentials of Risk Management*; former CRO, Canadian Imperial Bank of Commerce (CBIC)  
**Girish Shirodkar**, Senior Engagement Manager, SDG  
**John Celona**, ERM Practice Manager, SDG  
**Carissa Little**, Senior Associate Director, Stanford Center for Professional Development

## Overview

Pressed by markets, regulators, rating agencies, and turmoil in the business environment and capital markets, ERM is at the top of the agenda for top management. But what does top management want from an ERM program?

Traditional, compliance- and audit-based approaches to ERM are good at identifying small-probability, high-consequence events which could threaten existing operations. However, the often larger uncertainties in value creation potential for new business opportunities fall outside the scope of traditional ERM. They require a different starting point with a different methodology.

Together, the downside potential from negative risks and the upside potential from new opportunities constitute the total uncertainty in the value of an enterprise. Thus, the starting point for value-driven ERM is the question: what is the value of the enterprise?

Understanding and managing the total uncertainty in the value of the enterprise is very difficult because the human intuition is not wired for making good decisions under uncertainty. However, methods and tools for doing so have been developed and successfully applied to large and small companies over the last four decades. These methods and tools furnish the foundation for a value-driven approach to ERM which meets management needs for credible,

proven, effective methods to manage downside risks and to create value for shareholders.

SDG and Stanford University have developed an effective certificate program addressing the components of value-driven ERM. The Stanford Strategic Decision and Risk Management (SDRM) Certificate Program supports professionals of all areas to develop the skills necessary for implementing a value-driven approach to ERM.

## Context

The speakers described why a top-down, value-driven approach to ERM is necessary to understand and manage upside potential as well as downside risk. They discussed the obstacles to incorporating clear thinking about risk and uncertainty into decision making, and the difficulties for effective and credible ERM implementation. A case study highlighted how a large and rapidly growing Asian conglomerate had overcome these to implement value-driven ERM throughout the organization. The speakers described the educational programs available at Stanford for value-driven risk management.

## Key Learnings

### **Value-driven ERM starts with shareholder value, which is fundamentally uncertain.**

ERM is on the agenda. Boards are demanding it, CEO's are asking for it, rating agencies are testing for it, and regulators are requiring it.

Boards and top management have both organizational and personal reasons to want ERM. They need to create and protect shareholder value, to meet investor expectations, to perform well relative to peers, and to do well relative to alternative investments. There are also personal risks due to compliance requirements and liability, plus avoiding the embarrassment of being surprised.

Traditional ERM approaches start by cataloging business processes, then listing "risks" (potential bad events) for each, then finally trying to rank those risks and develop mitigation plans for them.

This approach misses the value creation potential of understanding the uncertainty in business portfolio and development, and risks getting lost in the details. It also provides no easy way of integrating downside risks and upside uncertainty at the business portfolio level.

Value-driven ERM starts with a fundamentally different, top-down question: What is the enterprise worth?

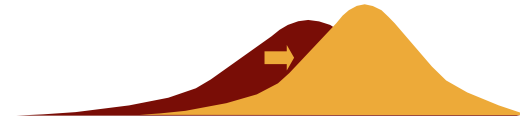
The answer depends: To Whom? When? And the answer is uncertain. However, this uncertainty can be expressed as a probability distribution on the value of the business, as illustrated below.



Taking this top-down, value driven approach avoids the pitfalls of traditional, risk-driven ERM by focusing on the overall uncertainty in the value of the business, rather than the downside risks in specific areas from specific events.

### **The job of management is to narrow the uncertainty in value (reducing risk) and to increase that value (creating value for shareholders).**

With this comprehensive understanding of downside risks and value-creation uncertainty, management's job becomes clear: to narrow the uncertainty in value (reducing the risk) and to increase that value (creating value for shareholders), as illustrated below.



Starting on the left-hand tail of the distribution (the downside risks), the CRO works strategically to protect the business from strategic risks, and operationally to install and oversee an ERM framework and assure a culture of accountability.

In the mainstream business functions (the middle of the distribution), the COO and BU leadership define and lead the strategic agenda for the portfolio of business operations and projects.

In the new business development area (the right-hand, upside tail), the CDO and CSO identify, seize, and protect new business opportunities.

A top-down, value-driven approach allows integrated, consistent, efficient management of risks and opportunities across C-level functional areas and across strategic and operational activities. It allows a single, consistent understanding of downside risks and upside potential, and efficient allocation of resources across value-protection activities (insurance, auditing, compliance, etc.) and value-creation activities (new businesses, initiatives in existing businesses, etc.) It allows management to do a better job of managing risks and creating value, thereby increasing shareholder value.

### **ERM is inherently difficult because intuition often gives the wrong answer when dealing with uncertainty.**

ERM requires making decisions involving risks. Should a risk be mitigated? How, and at what cost? Which of two potentially risky businesses should a company enter? And how do you know you have the right answer?

Unfortunately, people are not wired for making good intuitive decisions under uncertainty.

Multiple layers of problems get in the way. “Risk” has a negative connotation, and reality and people’s perceptions are often far apart. Suppose you are offered a free chance to win \$20 or nothing on calling the flip of a coin correctly. Is it worth accepting this offer? Is it risky?

The common understanding of risk is taking the chance of a big loss. Consequently, risk management becomes loss avoidance—not value creation. Most commonly, people do not like to take risks unless to avoid blame or liability, or compliance forces it, or because of pessimistic or risk averse tendencies. Facing or taking risks is often seen as a matter of courage rather than making a quality decision, and trying to include consideration of the upside potential only adds to the confusion. For all these reasons, it is helpful to talk in terms of uncertainty (downside *and* upside) rather than risk.

In addition, human nature plays tricks with us when dealing with uncertainty. Behaviorists have catalogued over two hundred varieties of faulty intuitive reasoning. They include:

- Misperceptions, such as selective memory;
- Motivational problems, such as wishful thinking or the sunk cost fallacy;
- Reasoning failings, such as overemphasizing confirming evidence;
- Personality traits, such as personal decision styles or comfort zones; and
- Group dynamics, such as conformity or premature harmony in a discussion.

Put all these together and reality and perception of uncertainty are often far apart. Making matters even worse, manipulating perceptions has risen to a fine

art, whether found in marketing, politics, legal argument, or the leadership of organizations. “Plausible deniability” makes ignorance a good defense, and people often seek to lay blame with hindsight.

As a result, seeking a good understanding of true risk is a real challenge and frequently not rewarded. Yet, that understanding is critical to effective ERM and even more so to value-driven ERM.

**Risk management faces a lack of understanding by the top and a credibility gap with the top.**

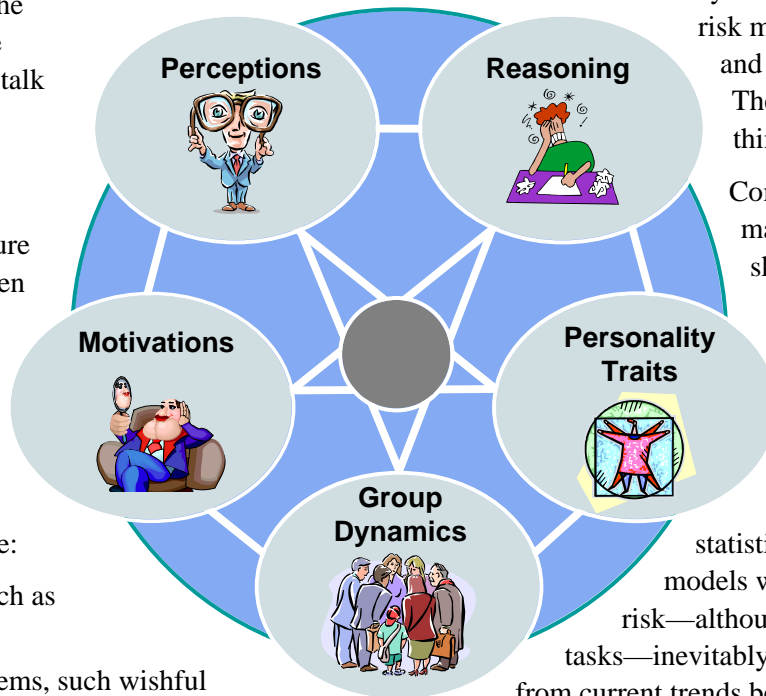
Given all these barriers to reasoning correctly about uncertainty, it is perhaps not surprising that risk management faces a lack of understanding by the top and a lack of credibility with the top. For starters, risk management is difficult, and the “top” are people, too. They are not wired for thinking about it, either.

Compounding this, there are many charlatans who claim skills they don’t have. Some overstate risks to scare. Others understate risks for profit. Many just don’t know any better.

Highly sophisticated statistics-based quantitative models which purport to capture risk—although very good for certain tasks—inevitably fail to predict departures from current trends because that would require data on future events which doesn’t yet exist.

Companies have experienced too many “thousand-year-floods” in a couple of decades. Obviously, the “quants” and their models are missing something.

Some object that numbers can’t be used to describe matters for which there is no supporting data, and use vague language instead. Unfortunately, it is worse to be exactly wrong than approximately right. Coupled with pressure from the compliance side, it becomes very difficult to capture the opportunities that good uncertainty management brings.



If you place yourself in the shoes of a corporate director, you want help but you are also very skeptical.

**Successful value-driven ERM implementation requires commitment at the board level and integration at all levels in an organization.**

Fortunately, there are examples of companies which have successfully implemented a top-down, value-driven approach to ERM. That success requires commitment at the board level and integration at all levels in an organization. One such example is the Asian conglomerate discussed in the eBriefing.

That company had a mix of operating businesses and new businesses being developed. Projects tended to have long gestation periods and required significant investments. As it grew, the company was entering new sectors and markets outside of their comfort zone, and the organization was becoming increasingly complex.

Traditional approaches to ERM were inadequate to meet the challenges the company faced. Audit-based, policing approaches were seen as negative and interfering with growth. The lack of a linkage to value didn't help with evaluating the many new opportunities the company faced. The lack of a common process, language, and outputs for risk management made it very difficult to discuss transparently the risk in new businesses, to handle different risk preferences among key players, and to delegate decision-making effectively.

The company's journey toward value-driven ERM began with a series of demonstration projects which established credibility and commitment with the Board and CEO. That led to an effort to design the

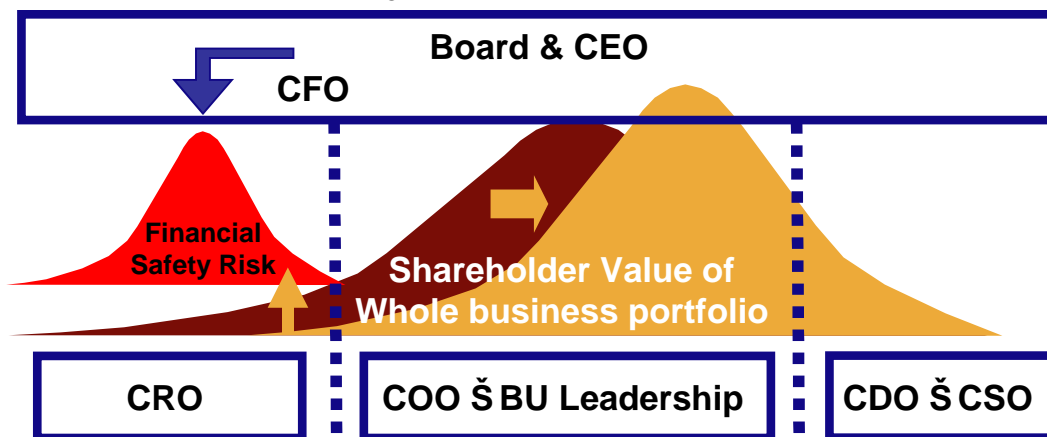
policies, infrastructure, and methodology needed to implement value-driven ERM throughout the organization. Significant efforts were made to ensure that business units and corporate used ERM to support their decisions.

The equal attention given to upside potential and downside protection led to a number of value creating measures which would not have come out of a traditional ERM approach. For example, the upside potential from more ready availability of key materials led to initiation of relationship programs with key suppliers. As another example, better development of end-product plans allowed optimization of plant design to reduce construction cost.

To finish its implementation of value-driven ERM, the roles and responsibilities of participants in the ERM process at all levels of the organization were clearly defined. In addition, risk dashboards were designed both to communicate the risks consistently and to support decisions on whether to hold, transfer, or mitigate specific risks.

In the end, the practical benefits of value-driven ERM ensured that it became an integral part of the decision-making process. Mandatory risk assessment of all investment decisions helped delimit known risk factors and to identify new ones. Quarterly risk bulletins ensured focus on key risk factors and monitoring of mitigation plans. Managers were provided specific guidance on acceptable risk levels as they developed plans.

Ultimately, value-driven ERM helped the company to execute and manage a more aggressive, diverse and profitable growth strategy than would otherwise have been possible.



## Biographies

### **Carl Spetzler**, Chief Executive Officer, SDG

Specializing in strategy development, business innovation, and strategic change management, Dr. Spetzler has developed creative business strategies for major financial institutions, capital-intensive companies, high-technology manufacturers, and systems businesses. Over the past 20 years, he has been a leader in designing an innovative strategy development process that helps corporate leaders cope with the lack of explicit strategic alternatives, deal with the complexities of uncertainty and risk over long time horizons, and achieve lasting change. Dr. Spetzler leads strategy assignments to redirect and restructure major US corporations and to create revolutionary new products and strategic alliances. He received an MBA and a PhD in economics and business administration and a BS in chemical engineering from the Illinois Institute of Technology.

### **Bob Mark**, President and CEO, Black Diamond Risk

At Black Diamond Risk, Dr. Mark provides corporate governance, risk management consulting, risk software tools and transaction services. He serves on several boards as well as on Checkpoint's investment committee. In 1998, he was awarded the Financial Risk Manager of the Year by the Global Association of Risk Professionals. He is Vice Chairperson of the Board of Professional Risk Managers' International Association. Dr. Mark was formerly Chief Risk Officer at the Canadian Imperial Bank of Canada and co-authored *Risk Management* and *The Essentials of Risk Management*. Dr. Mark received a Ph.D. from New York University's Graduate School of Engineering and Science and is currently a lecturer in Risk Management at the University of California, Berkeley.

### **Girish Shirodkar**, Senior Engagement Manager, SDG

Girish has broad consulting experience in various industries, including power, roads, construction, railways, urban infrastructure, agricommodities, pharmaceuticals, and consumer durables. His projects have spanned development of portfolio management and resource allocation strategy, business unit strategy, expansion strategy, and bidding strategy, as well as strategy implementation and organizational transformation. Girish was awarded a postgraduate diploma in management from the Indian Institute of Management, Ahmedabad, and a bachelors degree in mechanical engineering from the VJTI, Mumbai.

### **John Celona**, ERM Practice Manager, SDG.

Mr. Celona has applied decision and risk analysis in companies from A (automobiles) to Z (zinc mines) over the last three decades. In 1986, he co-authored *Decision Analysis for the Professional*, which is presently in its fourth edition. Mr. Celona received a B.S. in Industrial Engineering and Engineering Management from Stanford University and a J.D. from Hastings College of the Law. He is a member of the California Bar Association and clerked for the Supreme Court, State of Hawai'i.

### **Carissa Little**, Senior Associate Director, Stanford Center for Professional Development

Ms. Little works with the Stanford Online team, Stanford faculty, and Stanford's partners, IPSolutions and SDG, to package courses for online delivery—developing presentation wording, creating marketing strategies, and tying up the loose ends. She is also the program manager for the Investment Risk short course. Ms. Little has been with Stanford University for over five years in a number of capacities and worked in both industry and education before joining Stanford.