Recent scandals and changes in corporate governance requirements are increasing stakeholder expectations for senior executives and boards of directors to effectively manage all risks that exist across an organization. As these expectations are increasing, so are the volume and complexity of risks facing most enterprises. In response, many organizations are embracing a new enterprise risk management (ERM) paradigm that views risks holistically on a portfolio basis across an enterprise.
Enterprise risk management differs from the more traditional approach, frequently described as the “silo” or “stovepipe” approach, where risks are often managed in isolation. An ERM approach seeks to strategically consider the interactive effects of various risk events with the goal of balancing an enterprise’s entire portfolio of risks to be within the stakeholders’ appetite or tolerance for risk. ERM takes an enterprise-wide focus by strategically looking at risks in a coordinated, consistent manner. The ultimate goal is to ensure that the value of the enterprise is preserved and even enhanced.

Executives first learning about ERM often share an initial concern that it requires implementation of a separate new system or infrastructure, but most ERM adopters argue that infrastructures already in place can often be leveraged efficiently. For example, the balanced scorecard, a widely known strategic performance measurement system, can be leveraged to support an ERM view of risk management. With an emphasis on continuous improvement, the balanced scorecard is the most common strategy-based performance management system in place today and is widely used to link an organization’s mission and strategy to performance measures and strategically aligned initiatives. Because it takes an enterprise-wide approach, it provides an excellent platform that can easily be enhanced to focus on risk management as part of performance measurement evaluations.

Balanced scorecards measure an organization’s progress toward achieving strategic goals, while ERM helps company leaders think through positive and negative factors that can affect the achievement of their goals. The combination strengthens the likelihood of achieving strategic objectives. Thus, the two go hand in hand.

**ON ONE HAND: ERM**

The ERM approach to risk management began to emerge in the late 1990s. Early adopters recognized that changes in technology, globalization, corporate financing, and numerous other risk drivers were increasing the complexity and volume of risks. They also began to realize that traditional approaches were no longer effective ways to identify, assess, and respond to the growing array of risks across a complex enterprise.

Now ERM has become a hot topic, representing more than just another management fad. In fact, as Patrick Stroh wrote in the July 2005 *Strategic Finance* article “Enterprise Risk Management at UnitedHealth Group”: “ERM is quickly becoming the new minimum standard, and it may well be the key to survival for many companies.” It offers significant opportunity for competitive advantage, providing value well beyond mere compliance with regulatory expectations.

This shift in risk management trends led the Committee of Sponsoring Organizations of the Treadway Commission (COSO) to develop a conceptual framework for enterprise risk management. *Enterprise Risk Management—Integrated Framework*, released in September 2004, defines enterprise risk management as follows:

> Enterprise risk management is a process, effected by an entity’s board of directors, management, and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.

A core element of ERM is that risks and strategy are aligned. As management examines various strategic alternatives, it also evaluates them to determine the impact on the enterprise’s total risk profile. Once strategy choices are made, management identifies risk responses, assigns accountabilities, and monitors implementations in a coordinated and integrated approach to ensure the objectives are met. Thus, ERM is integral to strategic planning and performance assessment.

**ON THE OTHER: BALANCED SCORECARDS**

A generic balanced scorecard translates an organization’s overall mission and strategy into specific, measurable operational and performance metrics across four perspectives:

- **Learning and Growth for Employees,**
- **Internal Business Processes,**
- **Customer Satisfaction,** and
- **Financial Performance.**

These four perspectives are designed to be integrated to achieve the enterprise’s vision and strategy. Learning and growth objectives are designed to enhance employee competencies and strategic awareness so that internal business processes are consistent with desired objectives. Better performance of internal business processes should lead to greater customer satisfaction, which then leads to improved financial performance, enabling the achievement of an entity’s goals and objectives based on financial performance (see Figure 1).

A balanced scorecard provides an integrated, comprehensive performance measurement tool that reflects mea-
sures deemed critical to the success of a company’s strategy. In essence, it “balances” both financial and nonfinancial objectives in an integrated manner, ultimately increasing the likelihood that overall strategic objectives are achieved.

The balanced scorecard helps tie individual responsibilities to the enterprise’s strategy by defining specific strategic responses across multiple perspectives and monitoring the implementation of those responses through financial and nonfinancial performance measures. Moreover, integrating performance measures across the four perspectives reinforces the importance of achieving objectives at each level.

Linking these performance measures helps individuals perform in a manner that supports the enterprise’s overall strategy since their performance is measured against specific objectives. Thus, balanced scorecards are designed to take a holistic view of the enterprise across multiple perspectives, capturing information about performance to ensure that individuals implement responses consistent with the overall strategic mission.

**COMMON GROUND**

ERM and balanced scorecard systems share many elements. As a result, a balanced scorecard system that is already implemented may provide a unique platform for an enterprise to leverage an existing infrastructure to reap the benefits of ERM.

Here’s a look at some of the common elements of balanced scorecards and ERM:

**Focus on Strategy.** Both ERM and balanced scorecards are linked to strategy with the objective of increasing the likelihood that the enterprise’s overall strategy is ultimately achieved.

**Holistic Perspective.** They approach strategy at the enterprise-wide level by viewing performance measurement and risks, respectively, on a holistic basis across the enterprise.

**Emphasis on Interrelationships.** They emphasize an integrated strategic approach.

**Top-Down Emphasis.** For both to work effectively, they must be driven from the top of the organization. Without an effective “tone at the top,” they may fail.

**Desire for Consistency.** Both pursue a balanced and consistent approach across multiple dimensions of an enterprise that are managed by numerous individuals with different responsibilities and experiences.

**Focus on Accountabilities.** Both focus on individual accountability.

**Continuous Nature.** Both are designed to be ongoing, continuous processes. Balanced scorecards pursue continuous improvement, and ERM constantly evaluates and monitors new risks.

**MAKING IT WORK**

Let’s take a look at how to cost effectively leverage an existing balanced scorecard system to provide a framework for managing risk holistically across an enterprise, facilitating an ERM approach to risk management.

Most balanced scorecard systems translate the organization’s overall mission and strategy into operational objectives and performance metrics across the four perspectives. Specific goals and related performance measurements are identified for each perspective. We use supply chain management as an example.

Supply chain management plays an important role in the managerial framework of most companies because it generally encompasses activities associated with the flow of materials and information from raw materials to the end user (customer). Companies manage their supply chains in numerous ways, including outsourcing, bare-bones inventory levels (Just-in-Time systems), and sophisticated information system networks. A disruption anywhere along the supply chain can have a direct effect on a company’s ability to continue operations and supply products/services to the market.
Increasing globalization and lengthy supply chains escalate risk. Disruptions can arise from numerous internal and external sources, such as natural disasters, labor disputes, supplier bankruptcy, IT system breakdowns, capacity problems, and terrorism. Poorly managed disruptions can interrupt or delay material, information, and cash flow, leading to significant risks.

Balanced scorecards are often used to manage an organization as a connected enterprise, and many people argue that they are perfectly suited for supply chain management since a supply chain can extend from suppliers’ suppliers to customers’ customers. That, combined with the nature and extent of risks that can affect an enterprise through its supply chain, increases the significance of illustrating how balanced scorecards can be leveraged into ERM. For example, in Figure 2 under Learning and Growth, goals and performance measurements related to supply chain management emphasize learning and growth objectives for employees, such as “to increase employee identification of potential supply chain disruptions” and “comparisons of actual disruptions.”

The enterprise goals for individuals relate to increasing product and process innovation and improving information flows among employees and external parties. The performance of individuals within the organization is measured using the metrics identified in the Measures section. Similar goals and measures are created for the Internal Business Processes, Customer Satisfaction, and Financial Performance perspectives. As these goals are achieved, the benefits flow through to the customers, who ultimately increase the financial success of the enterprise.

An enterprise can easily include additional risk management aspects in both the goals and measurement components of the balanced scorecard. The scorecard can be enhanced by including goals and objectives for risk management and by capturing performance-based risk metrics.

In Figure 3, explicitly focused risk objectives and accountabilities can be incorporated into the balanced scorecard performance measurement system, which then integrates risk management with performance measurement. The example includes Enterprise Risk Management Components in each box representing the four balanced scorecard perspectives.

The Enterprise Risk Management Components section in each box includes three risk-focused goals and three risk-related performance measures. These could be included in the balanced scorecard to create performance incentives for effective enterprise risk management. Here are some examples.

**Learning and Growth for Employees.** A challenge for any risk management system is ensuring that all employees embrace a common set of definitions and perspectives. Depending on an employee’s background or training, the concepts of “risk” and “risk management” may vary, so one core objective of ERM is to bring a consistent and clearly defined approach to risk management to all employees. As a result, training objectives and performance measures related to learning and education about risk management can be added to this perspective of the balanced scorecard.

**Individual Business Processes.** While risks can arise from external forces, they also arise from internal business processes, such as supply chain processes. Thus, ERM requires that individuals throughout an organization identify, assess, respond to, and monitor risks throughout all business processes, not just financial ones. As a result, risk objectives and measurement are easily linked. Goals related to acceptable ranges or variations of risks within a business process and related risk performance metrics can easily be integrated into this perspective.

**Customer Satisfaction.** The balanced scorecard system is designed to help individuals within the organization focus on customer satisfaction, which in turn should improve financial performance. Many organizations focus on key operational risks, but they often ignore or fail to adequately consider risks related to strategy, markets, and reputation, all of which may affect or be affected by customer satisfaction. The customer satisfaction perspective provides an easy link to the management of risks related to strategy, market, and reputation. Risk goals related to customers, markets, and reputation fit naturally into this component.

**Financial Performance.** The possible responses to a single risk can include varying costs and benefits. Any risk management system has to consider the costs of responding to risks relative to its benefits. Thus, the cost/benefit analysis of risk management is critical to successful ERM. The financial performance perspective of the balanced scorecard provides the natural connection for ERM cost/benefit analysis of responses.

**Hand in Hand**

Leveraging balanced scorecards into ERM actually strengthens the scope of management’s focus on broader sets of risks. Many ERM practices today have focused on Sarbanes-Oxley compliance, with fewer focusing on strategic, market, and reputation risks. Leveraging balanced scorecards into ERM will broaden the scope by explicitly linking risk management to strategic perfor-
mance measurement.

The integration of ERM also strengthens the balanced scorecard process. As the balanced scorecard captures more information about risk management objectives and performance measures, people become more aware of risks and the need for managing those risks, so learning and growth are enhanced.

A stronger perspective about risk management issues should ultimately lead to improved internal business processes by eliminating or reducing risk exposures within key business processes. That, in turn, should improve customer satisfaction and financial performance. Thus, in the end, while balanced scorecards can be used to benefit ERM, the integration can allow ERM to bolster balanced scorecard effectiveness, too.

As businesses evolve, the profile of risks will continue to grow in complexity and volume. Business leaders must adopt an effective tool for managing the portfolio of risks

Figure 2: Example of a Balanced Scorecard Framework for Supply Chain Management

<table>
<thead>
<tr>
<th>LEARNING AND GROWTH FOR EMPLOYEES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GOALS:</strong></td>
</tr>
<tr>
<td>◆ To increase employee “ownership” of the supply chain process</td>
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<tr>
<td>◆ To improve information flows across stages of the supply chain</td>
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<tr>
<td>◆ To increase employee identification of advanced potential supply chain disruptions</td>
</tr>
<tr>
<td><strong>MEASURES:</strong></td>
</tr>
<tr>
<td>◆ Employee survey scores about ownership and responsibility for assigned supply chain processes</td>
</tr>
<tr>
<td>◆ Changes in information reports and frequency of reports across partners in the supply chain</td>
</tr>
<tr>
<td>◆ Comparisons of actual disruptions to extent of advanced reports about drivers of potential disruptions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INTERNAL BUSINESS PROCESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GOALS:</strong></td>
</tr>
<tr>
<td>◆ To reduce waste generated across the supply chain</td>
</tr>
<tr>
<td>◆ To shorten the time from start to finish across the supply chain</td>
</tr>
<tr>
<td>◆ To achieve unit cost reductions</td>
</tr>
<tr>
<td><strong>MEASURES:</strong></td>
</tr>
<tr>
<td>◆ Pounds of product/scrap sent for disposal</td>
</tr>
<tr>
<td>◆ Length of time from purchase of raw material to delivery of product/service to customer</td>
</tr>
<tr>
<td>◆ Unit costs per product/service delivered and percentage of supply chain target costs achieved</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>CUSTOMER SATISFACTION</th>
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<tbody>
<tr>
<td><strong>GOALS:</strong></td>
</tr>
<tr>
<td>◆ To improve product/service quality</td>
</tr>
<tr>
<td>◆ To improve timeliness of product/service delivery</td>
</tr>
<tr>
<td>◆ To improve customer perception of value</td>
</tr>
<tr>
<td><strong>MEASURES:</strong></td>
</tr>
<tr>
<td>◆ Number of customer contact points in the supply chain</td>
</tr>
<tr>
<td>◆ Length of time from customer order to customer delivery</td>
</tr>
<tr>
<td>◆ Customer scores about product/service value</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>FINANCIAL PERFORMANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GOALS:</strong></td>
</tr>
<tr>
<td>◆ To obtain higher profit margins</td>
</tr>
<tr>
<td>◆ To improve cash flows</td>
</tr>
<tr>
<td>◆ To generate revenue growth</td>
</tr>
<tr>
<td><strong>MEASURES:</strong></td>
</tr>
<tr>
<td>◆ Profit margin by supply chain partner</td>
</tr>
<tr>
<td>◆ Net cash generated through the supply chain</td>
</tr>
<tr>
<td>◆ Increase in number of customers and sales per customer</td>
</tr>
<tr>
<td>◆ Percentage annual return on supply chain assets</td>
</tr>
</tbody>
</table>
to meet growing stakeholder expectations for effective risk management. An already existing performance measurement infrastructure—the balanced scorecard—can be leveraged to provide an enterprise-wide view of risk objectives and performance. The balanced scorecard’s focus on measuring progress toward achieving strategic objectives and ERM’s emphasis on addressing positive and negative factors potentially affecting the accomplishment of those objectives make their combination a natural fit for success.

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CUSTOMER SATISFACTION

To achieve our vision, how should we appear to our customers?

**GOALS:**
- To improve product/service quality
- To improve timeliness of product/service delivery
- To improve customer perception of value

**MEASURES:**
- Number of customer contact points in the supply chain
- Length of time from customer order to customer delivery
- Customer scores about product/service value

**Enterprise Risk Management Components**

**RISK-RELATED GOALS:**
- To reduce customer defections
- To monitor threats to product/service reputation
- To increase customer feedback about market threats about product and service delivery

**RISK-RELATED MEASURES:**
- Number of customers retained
- Extent of negative coverage in business press about product and service quality
- Number of completed customer surveys about product/service delivery comparisons to other providers in the market

FINANCIAL PERFORMANCE

To succeed financially, how should we appear to our shareholders?

**GOALS:**
- To obtain higher profit margins
- To improve cash flows
- To generate revenue growth

**MEASURES:**
- Profit margin by supply chain partner
- Net cash generated through the supply chain
- Increase in number of customers and sales per customer
- Percentage annual return on supply chain assets

**Enterprise Risk Management Components**

**RISK-RELATED GOALS:**
- To reduce threats due to price competition
- To reduce cost overruns
- To reduce costs incurred outside the supply chain that are due to supply chain processes

**RISK-RELATED MEASURES:**
- Number of customer defections attributed to price
- Extent of surcharges paid, holding costs incurred, or overtime charges applied to the supply chain
- Extent of warranty claims incurred, legal costs paid, and sales returns processed due to product/service issues

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www.erm.ncsu.edu). A COSO board member, he served on the advisory council that developed COSO’s Enterprise Risk Management—Integrated Framework. You can reach him at (919) 515-6064 or mark_beasley@ncsu.edu. Al Chen, Ph.D., teaches managerial accounting in the MBA and accounting programs. Karen Nunez, CMA, Ph.D., is an assistant professor teaching managerial accounting in the MBA and accounting programs. She was previously a management accountant at Pillsbury and PepsiCo. Associate Professor Lorraine Wright, Ph.D., serves on the board of directors of a major healthcare system.

Balanced scorecards and enterprise risk management are topics at IMA’s Annual Conference June 17–21. For details, visit www.imaconference.org.