

In December 2005, the University of California's Department of Risk Management was renamed Risk Services, reflecting a new, broader approach to identifying and managing risk using an enterprise-wide approach. By identifying and analyzing the full cost of risk, the university was able to develop strategic plans for reducing costs and freeing up resources that could then be used for meeting the university's mission goals of teaching, research, and public services. Approaching risk from a strategic standpoint has helped reduce the chances of loss, create greater financial stability, and protect the university's resources.

The overall strategy was to develop a data warehouse that could manage all the risk information being collected by the groups, existing programs, and initiatives throughout the system. This data was to be used with the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework to analyze processes, risks, and con-

trols system-wide. (COSO, which is sponsored by five major professional associations, develops frameworks and guidance on enterprise risk management, internal control, and fraud deterrence.) A key objective was to examine the university's total cost of risk for potentially negative consequences or missed opportunities.

One of the major functions of the Office of Risk Services is to develop and implement a system-wide enter-

prise risk management (ERM) program for identifying risks, implementing risk controls, and selecting proper risk responses. The university's campuses and medical centers all have different operational needs and different needs for defining and classifying their data. Faculty, staff, and students need to be able to identify and manage the risks associated with their activities in ways that align with the university's mission.

# REDUCING THE COST OF RISK

All programs and costs associated with the University of California's ERM program are funded by an internal premium that is determined by independent actuaries. Insurance premium dollars totaling \$20 million a year are shifted to loss-prevention and loss-control activities, and the university has used that money to reduce the cost of risk by \$493 million since the program started in fiscal 2003.

The university created a data repository for risk and controls related information, known as the enterprise risk management information system (ERMIS), to determine exactly where its limited resources should be deployed. The objectives for this system include the following:

- 1. Improved quantitative analysis capabilities.
- 2. Improved analytical and reporting capabilities.
- 3. Support for leading risk governance and compliance processes.
- 4. System-wide visibility, with local flexibility.
- 5. Scalability without additional burden on university staff.

The university's ERMIS is based on customized web-based business intelligence software that helps quantify and track pre-defined key performance indicators (KPIs). Deployed in February 2009, the application has been configured to inte-

grate claims data (losses), corporate data (exposures), and other information sources in an effort to create a centralized data management environment

The Office of Risk Services also provides additional users with access to ERMIS, based on requests, and demand has been high. Once users are granted access, the system makes location-specific data available, in conjunction with enterprise trends on user privileges. This practice has helped

improve the university's understanding of risks and ability to manage their associated costs throughout the organization. In December of 2010, there were 152 authorized users, and as of December 2011, there were 198 authorized users at UCOP and 295 authorized users at the campuses and medical centers, totaling over 493 users.

The University of California defines the cost of risk as the total costs (losses, risk control costs, financing costs, and administration costs) associated with the risk management function. The point of this is to determine whether the total costs of the risk management function are increasing, decreasing, or remaining constant as a function of the business's economic activity. After quantitative measurements have been derived, it becomes possible to compare the cost of risk of a business unit with that of its peer groups. Knowing the cost of

risk allows business units to focus on the areas of operation that will have the greatest long-term effects on their total costs for risk management.

ALL TYPES OF RISK, SYSTEM-WIDE

The University of California's ERM program provides the framework for identifying and evaluating the major

risks facing the university, leading to an appropriate risk treatment. The ERM information system gives campus stakeholders at multiple levels the critical information they need when making effective and timely business decisions. It can define, highlight, and predict risk and trends, allowing managers to intervene before problems arise.

The ERM program and information system (ERMIS) provide easy-to-use tools, including risk assessments, a risk maturity work plan, and an ERM maturity model. The university first used these programs with its hazard risks, but now they cut across all types of risks within the University of California system, including operational, compliance, financial, reputational, human capital, communication, and strategic risks.

The university's ERMIS reduces workload by eliminating redundancies in preparing numerous reports and automating performance and certification documentation of internal controls that are critical to the university's annual financial audit. ERMIS enables easy, efficient sharing of analyses and information across multiple locations.

The University of California's website is continuously enhanced with new tools to help managers at all levels identify, assess, and manage risk. In addition to ERMIS, these tools include:

- UC Action, which makes monitoring controls that are established in response to a specific incident more efficient through continuous monitoring and automated follow up.
- UC Tracker, which helps users review and document key financial controls related to preparing the university's financial statements.
- UC Ready, an award-winning mission continuity tool that allows all departments throughout the university to develop plans to ensure the continuation of operations.

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- ERM Maturity Level Model, which provides a framework for campuses and medical centers to plan ERM programs and measure and monitor their progress.
- Risk assessment workbooks, which help users make risk assessments at each University of California location.
- UC Risk Services website and webinars, and a Risk Summit meeting, which provide educational materials and system-wide training.
- Innovative loss-prevention and loss control programs such as Be Smart About Safety, which applies to general liability, and the Workers Compensation program; 6% Prescription, a premium rebate program for the professional medical and hospital liability program; the Employment Practices Improvement Committee; and the Integrated Safety and Environmental Management, and Emergency Management programs.
- Risk Management Leadership Council, Occupational Health Physicians, and other system-wide groups supported by the risk services department.
- Risk financing strategies and new insurance products that further the university's mission, including the University's Construction Insurance Program; UC TRIPS, which provides travel insurance and travel services; Campus Connexions, which provides insurance to student and support groups; and Cyber Coverage, which is focused on implementing best practices.

### **SAVING MONEY**

Preventing just one claim can save a department, campus, or medical center a significant amount of money, and these savings can be seen exponentially across the University of California System. The estimated total cost of risk decreased significantly, to \$13.31 per \$1,000 of the operating budget in fiscal 2010, from \$18.46 per \$1,000 in fiscal 2003.

In the fiscal 2010, the university's ERM program reduced the system's overall cost of risk by more than \$80 million. These savings are based on the university's overall cost of risk associated with both hazard and other strategic, operational, financial, and reputational risks.

The University of California has collected a large amount of data on hazard risks, which can be used to monitor the savings and value the ERM program provides. The annual direct cost of the university's hazard risks is more than \$250 million. The data also include all miscellaneous premiums, claims administration for local and external operations, and safety expenses associated with risks. To allow for comparisons by year, the total cost of risk has been stated as an amount per \$1,000 of system-wide operating budget.

In addition, studies by the Occupational Safety and Health Administration (OSHA) and the American Society of Safety Engineers (ASSE) estimate that the ratio of indirect costs to direct costs can range from 1:1 or 2:1, and sometimes more. The true cost of these hazard risks could exceed \$500 million, meaning that reducing the cost of risk by 1 percent would save the University of California \$5 million.

The university system's cost of risk has a variety of components, the largest being self-insured claims — approximately two thirds of the annual total, in fact, based on a recent analysis. The remaining third of the cost of risk goes toward claims administration and loss control and loss prevention programs, as well as excess insurance premiums to cover the cost of individual claims above the university's risk retention level.

There are many ways to quantify the annual cost of self-insured losses. The University of California used the original estimates of ultimate losses for each year, an approach that has several advantages. First, ultimate losses have been fully developed to reflect their final estimated value, as opposed to raw incurred or paid-to-date amounts. Second, the original ultimate estimates figures will not change from one cost of risk study to the next, allowing for more consistent comparison. Finally, the estimate for each program year is comparable, as each estimate was made after one year of development.

Investing in claims administration, loss prevention, and loss control has been a successful strategy. The University of California's *Be Smart About Safety* program, for instance, has had a substantial affect, ultimately lowering the actuarial estimates of ultimate losses as well as the total cost of risk.

## **S&P CREDIT RATING SAVES \$10 MILLION**

The University of California's ability to borrow is crucial to its success. In 2008, the university's debt totaled more than \$10 billion. The ratings given by credit rating agencies such as

## **How ERM Works**

ERM improves an organization's strategic decision making by producing a broad range of risk information that goes beyond operational and hazard risks (such as workers compensation, general liability, employment practice liability, professional liability, auto liability, and property) and incorporates strategic, financial, compliance, legal, environmental, reputational, and technology risks. ERM helps officials make better decisions that can make their organizations less vulnerable to failure and better equipped to survive changes in their internal and external environment.

There is a basic six-step approach to developing and implementing an ERM program within an organization:

- I. Risk Identification. Take inventory of all risks in the organization and tie them to the organization's strategic goals.
- 2. **Risk Assessment.** Determine risk events, their causes, and their potential financial impact on the organization.
- 3. **Risk Analysis.** Examine the interrelationship of risks both within and outside the organization.
- 4. **Risk Controls.** Implement risk controls and risk responses to the risks within the organization.
- 5. **Monitoring the Program.** Track risk information from the ERM program.
- Evaluating the Program. Ascertain the ERM program's strengths and weaknesses in furthering the organization's strategic goals.

Moody's and Standard & Poor's (S&P) are a key factor affecting the cost of borrowing, and both of these agencies now explicitly look at an organization's approach to managing enterprise or holistic risk when developing ratings.

S&P has recognized the University of California for its ERM program, saying, "The UC has implemented a system-wide enterprise risk management information system, which, in our opinion, is a credit strength." Standard & Poor's gave the university a higher rating because of its proactive approach to ERM, which in turn lowered the interest rate the university pays on its debt load by 0.1 percent — representing more than \$10 million in savings.



Standard & Poor's focuses on two widely accepted aspects of ERM when assessing an organization's efforts at implementing an ERM approach: risk management culture and strategic risk management. When assessing risk management culture, rating agencies look at the risk management framework or structure currently in use, asking how risk is currently identified, measured, and managed. They also consider:

- The role of staff responsible for risk management and reporting lines is there a chief risk officer on staff, and if so, how long has he or she held that position?
- Internal and external risk management communication
   has the organization communicated frequently and
  effectively among agencies and departments about risk
  within the organization?

■ Broad risk management policies and metrics for success-

- ful risk management—what is the organization's track record on handling risk? What benchmarks are
- dling risk? What benchmarks are available for the organization or its industry sector?
- The influence of risk management on budgeting and management compensation do decision makers have an economic incentive to ensure that ERM is successful?

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In assessing strategic risk management, rating agencies consider:

- 1. Management's view of the most consequential risks the firm faces, their likelihood, and their potential effect on credit — has management issued a formal statement about which risks the organization can tolerate and which it cannot?
- 2. How often these top risks are identified, and how they are updated how well do the organization's executives understand ERM's role in determining which risks currently have the most financial impact on the organization?
- 3. The influence of risk sensitivity on liability management and financial decisions does the executive management team understand the litigation trends affecting their lines of business, and do they seek appropriate risk treatments (such as purchasing adequate insurance coverage)?
- 4. The role of risk management in decision making are risk management considerations consistently taken into account in all organization-wide decisions?

### **CONCLUSIONS**

Organizations that adopt an enterprise view of risk often do so because it offers value through better awareness and control of risks, improved resource efficiency, and enhanced ability to take additional risk. Organizations that have implemented successful ERM frameworks often achieve improved consistency in risk management practices and better response to escalating corporate governance requirements, regulatory pressure, capital availability and cost, capital deployment, and market pressure through improved understanding of risk treatment options. The University of California has saved millions of dollars in costs through its ERM program, and ERM has the potential to save or avoid millions more by reducing

the cost of risk and protecting the university's mission goals.

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