

An Introduction to Enterprise Risk Management: Beyond the Black Marble

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Introduction

Enterprise Risk Management (ERM), as its name suggests, can be a daunting undertaking requiring a significant commitment of resources, resulting in inevitable managerial conflict within an organization, at times, introducing new uncertainties and risk and leading to the ultimate transformation of a firm's entire business decision-making process. This is hardly the text from which to form an advertising campaign. Yet, ERM is quickly becoming a 'best practice' and the implementation of such will become an expectation of the global marketplace. For firms considering a near-term leap towards ERM, the following is an introduction to the concept, its ultimate rewards and some warnings about how to avoid failure.

The Goals of Enterprise Risk Management

In practice, the goals of enterprise risk management are no different from those of most managerial sciences. All executives, to the extent possible or practical, make business decisions that are intended to bring about the best returns for their firms, relative to the risks assumed to be assumed. Seeking to increase firm value through maximizing returns relative to risk is all that ERM does as well. So, if the admonition in the opening paragraph is valid and risk-based decision making is already the norm, why would anyone undertake the implementation of a formal Enterprise Risk Management program?

The truth is that ad-hoc risk-based decision making is more likely to be the norm at most firms. Through statistical and financial modeling, managerial discipline and the dissemination of knowledge, a formal ERM program improves the understanding of one's own business. In turn, this allows the better use of resources, the better understanding of the risks assumed when using those resources, ultimately allowing executives to make better managerial decisions. Contrary to what this might suggest, ERM is not simply the latest marginal improvement in management theory. Rather, ERM is a full transformation of how business is conducted. It's permanent, and it's better.

Risk, Risk Management, Risk Capital and Enterprise Risk Management

It may be helpful to make some distinctions between risk, which is generally viewed as a negative, risk management, which may be viewed as the combination of two negatives, risk capital calculation, which tries to ensure that a firm survives risk and ERM, which is a process that goes through all of these stages and beyond. Consider risk to be an undesirable outcome. If so, then risk management is the attempt to control or manage that which is undesirable. ERM while still attempting to control or manage risk goes an essential step further in taking risk capital calculations, an output of the risk management process, and getting the most out of the risk that is taken.

To illustrate, consider the classic statistical example of a cookie jar full of white and black marbles. If there is a penalty for drawing a black marble from the jar, the draw of a black marble is risk. Risk management seeks to understand the full penalty for drawing the black marble as well as the likelihood that such a draw will occur. Risk capital calculations assure that if you draw a black marble or perhaps several in a row, you will survive the events. ERM finds the best way to put your hand into the cookie jar, so to speak.

Essential Elements for Successful Enterprise Risk Management

So, ERM goes beyond worrying about the black marble and is, perhaps, best described as a managerial science that is supplemented by state of the art risk management and risk capital calculations to achieve a better outcome.

But, just desiring to implement ERM is not sufficient. In order to have a chance for a successful ERM implementation, a firm must first understand its own risk culture in relation to its desired growth path. That understanding needs to be well communicated throughout management. While the extent to which risk is

assumed is not often known, it is often relatively easy for a firm to communicate what its desired level of risk exposure is and may be even easier for it to describe its desired growth plans.

In order for ERM to have a chance at succeeding, senior management must be committed that the ultimate risk taken by the firm to achieve its growth goals will be consistent with the firm's stated or potential risk appetite and not vice versa. The building up to ERM, in the risk capital phase, is likely to provide answers that suggest some aspects of the current business approach are not in such compliance. When this is the case, and it is almost always true in at least some segment of the business, managerial conflict will erupt. This pushback is sometimes quite forceful and often quite difficult to assuage.

So, in order for ERM to succeed, there must be a complete and absolute commitment at the CEO level to back its results. Absent a full CEO commitment, the program is not likely to achieve sufficient momentum to overcome the inevitable internal resistance that is often seen very early in the process. If you're not there, don't start, yet.

If you are there, despite the massive computational efforts that will be involved never forget that ERM is a managerial science. As such, its success or failure will more likely be determined by the people who lead it than by the effectiveness of its supporting models. The leader of the ERM program, typically called the Chief Risk Officer (CRO), must display a rare mix of quantitative, managerial and interpersonal skills.

He or she must be a teacher, a disciplined leader, must have a keen sense for the art of risk management equal to the art of interpersonal management and a thorough understanding of the science that underlies both. This critical blend may be as important in the CRO as it is in the CEO. The ultimate job of the leader of the ERM program is to disseminate the skills that he or she brings to the company, inculcating the firm culture with the ERM discipline. This will not successfully be achieved if he or she is lacking in any of the above areas.

Finally, there are significant demands for technology in an ERM environment. Many technologies may exist already, like those employed in the management of production, customer fulfillment, relationship management, corporate infrastructure and financial risk management, to name just a few. The technological sophistication must ultimately match the desired appetite for risk at a firm, or be accounted for as risk in the risk capital calculation process of ERM. Understanding your firm's current technological resources and those that will be required can help you to be prepared for the impact that ERM may have on your operational support infrastructure.

An Example of a Framework to Use in Building to Enterprise Risk Management

Again, think of ERM as the next step of a process that goes from the assumption of risk, to the measurement and management of that risk, to risk capital calculation and eventually to the deployment of resources. Opening a business begets this process by the creation of risk, but what kind of guidance is there for the next two phases?

There is no substitute for being able to learn from a model that is already being publicly employed. Fortunately, many of the components of risk management and risk capital calculation are already being pushed to the banking system via the Basel II capital accord (www.bis.gov). In essence, this regulatory framework is trying to create the incentive for large multi-national banks to adopt internal processes that allow them to understand the risks that are being assumed by their business lines and to appropriately capitalize their banks to desired levels consistent with their respective risk-appetites. This addresses several of the readiness issues from the previous section.

It's very helpful to take the Basel II accord, which is founded on three key principles or 'pillars' and then translate those into internal mechanisms at an individual firm, bank or non-bank. The first is capital adequacy. Capital adequacy is the same as the risk capital calculation stages of ERM where a firm's risk-taking is made consistent with both its risk appetite and its ability to fund such risk.

The second pillar is independent centralized oversight. In an ERM framework, centralized oversight means a strong independent team, usually reporting to the CRO. This aspect of its job is to ensure that the systems and processes used within business lines to generate risk and risk measures are valid.

The third Basel II pillar is market discipline. In an internal ERM framework, market discipline results from management committee level disclosures and discussions of risk, risk management and the effective use of risk capital. Think of the firm as the owner of capital which it allocates to business lines who then 'own' the risk. The firm can make use of disclosures from a risk capital process to make better decisions on which lines are making the best use of its capital.

So, using these three pillars in building to an internal ERM process, we get closer to having the architecture in place to launch optimized risk taking.

Basel II also describes varying levels of sophistication in terms of measuring the components of the risk measurements. In general, these risk components are market risk, credit risk and operational risk. The details of the measurement processes behind these are beyond the scope of this article, but are widely available. If one opts to enter an ERM program, it should also be opting for the most sophisticated approaches to risk management and risk capital calculations described by Basel II.

Again, these types of risk affect all types of businesses, not just banks. Yet, Basel II gives us a good framework of reference for building the risk measurement, management and capital calculation phases of ERM.

Enterprise Risk Management and the Competitive Advantage

ERM, taking the pillars of a Basel II approach, then looks at the interaction of business lines, through dynamic, forward-looking scenarios, and seeks to structure a firm in a manner to maximize its performance relative to its risk appetite. Achieving this requires both an understanding of how business lines operate as well as how they interact with each other and their competitive space. The cost of drawing black marbles, the correlation of these draws and likelihood that draws will occur based on a business mix are all considered.

Take, for example, three separate and independent businesses, each capitalized to their stated risk appetites, equivalent to an A+ credit-quality. An ERM approach will recognize that the combination of these three businesses, in nearly all cases, will result in a reduced need for capital at the new "merged" entity to maintain an A+ rating. In other words, the three businesses are likely to be diversifying, if combined. This may not be enough, though, to warrant the merger.

ERM would analyze the likely impact on both revenues and capital to determine if the merger made sense. This would then lead to an analysis of what the optimal combination of the three businesses might be going forward, if any, and allocating risk-taking authority (risk capital) in such a fashion as to maximize the firm's anticipated risk-adjusted performance. It is quite conceivable that the three entities would produce a better risk-adjusted return for the merged entity if their sizes going forward were quite different. In other words, ERM helps to not only determine if a merger makes sense, but where the combined capital of the three entities is best deployed.

This is exactly the same analysis that is done at any business with multiple existing business lines. Again, the goals of ERM are no different than those of existing managerial sciences, but are a vast improvement because of the emphasis on improving the understanding of one's own business through modeling, discipline and education.

Key Elements to Success Revisited

To recap, the CEO must be fully and completely committed to the ERM process or it should not be started.

The firm must first identify, communicate and agree to reconcile its actual risk-taking to its desired risk appetite.

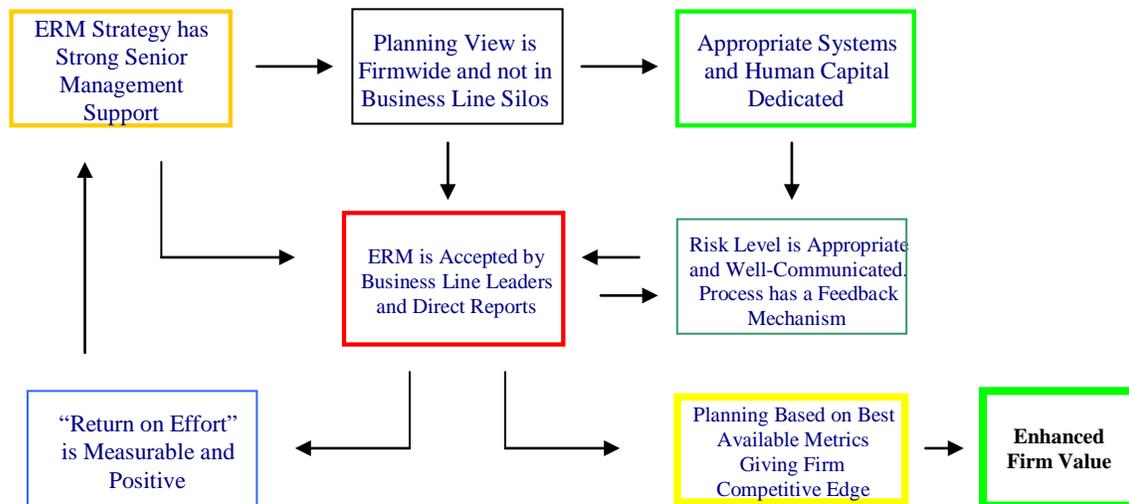
The hiring of the CRO should be given near-equal importance to that of the CEO and the CRO is to be an educator and disseminator of knowledge throughout the firm.

Internal managerial conflicts should be expected and should be expected to be substantial at times. The CEO must back the program.

The Basel II framework can be used to create the measures of risk, but is not enough to create the best usage of risk.

The Process

ERM is then a major part of the entire business planning process:



Conclusion

ERM is not a black box from which answers emerge. It is a discipline, where managerial decisions are made with enhanced information. They remain managerial decisions, subject to human error. But, ERM-influenced managerial decisions are vast improvements on any ad-hoc managerial styles. This is one reason why ERM is so rapidly being adopted.

ERM will transform the decision-making process of a business.

When ERM is successfully implemented, risk management is no longer a combination of two negatives and risk advocacy becomes the norm as the firm takes risk more confidently and more effectively, benefiting all involved.

About the Author

David R. Koenig is the current Chair of the Professional Risk Managers' International Association (PRMIA). He has nearly 20 years of experience in the financial markets, most recently as the Managing

Director of Market and Institutional Credit Risk Management for US Bancorp Piper Jaffray, Inc. He's built three risk management departments from the ground-up, implemented an enterprise risk management program for one of the largest mortgage companies in the United States, actively traded derivatives in notional transactions exceeding \$1 billion and has consulted with a variety of institutions on risk management and capital allocation practices. He has a Master's degree in Economics from Northwestern University in Evanston, IL, undergraduate degrees in Mathematics and Economics and a Certificate in Statistics from Miami University in Oxford, OH.