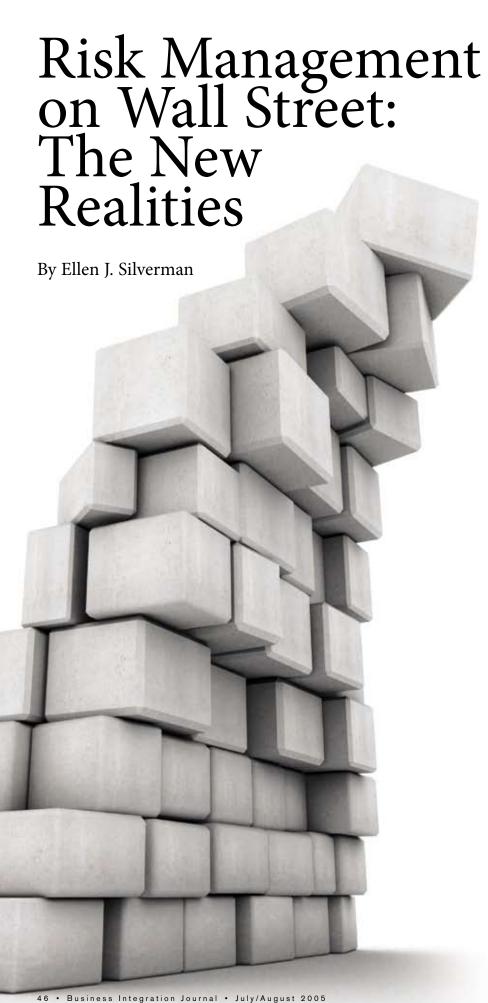


Risk Management on Wall Street: The New Realities BY ELLEN J. SILVERMAN





The 2005 technology agenda for financial firms will focus on the rising bar of regulatory compliance. The new realities of Sarbanes-Oxley and Basel II compliance will require systems modifications and rewrites to properly book, account for, and manage the inherent risks in financial transactions.

The Regulations

The Sarbanes-Oxley (SOX) Act of 2002 is the most significant audit and corporate governance reform in recent history. With the act's requirement of certification, auditability and disclosure, information security will have to be more attentive to the new requirements necessitated by audit departments.

Among the major provisions of the act are: criminal and civil penalties for securities violations, certification of internal audit work by external auditors, and increased disclosure regarding executive compensation, insider trading, and financial statements.

The goal of SOX is to restore investor confidence in the financial reporting of public companies and to hold an organization's officers personally responsible for any misrepresentations. The focus on management accountability has a significant impact on IT, as the internal controls that produce financial statements are enforced primarily by information security tools and techniques. When the CEO and CFO sign off on the organization's annual report, they are implicitly stating that the organization's financial systems have the appropriate controls in place to produce accurate and reliable financial statements. Noncompliance, a missed deadline, or a material weakness reported in internal controls will certainly and significantly harm a company's shareholder value, an executive's career, and many business relationships.

The Basel I Capital Accord was developed in 1988 and focuses on the total amount of bank capital that's vital in reducing the risk of bank insolvency. Basel I served the banking sector for more than 10 years, but the recent operational risk failures in financial institutions have accentuated the dangers of poor risk management. This led to the establishment of Basel II, a new accord that has a more risk-sensitive framework. Basel II offers a variety of options in addition to the standard approach to measuring risk. These require strategizing risk management for the entire enterprise, building huge data warehouses, and performing complex calculations. It's an understatement to say that meeting compliance under Basel II has posed great challenges for banks and financial institutions.

Basel II Calls for Robust Data Architecture and Improved Data Management Capabilities

According to Peter Vinella, CEO of PVA International Inc., a New York City-based consultancy that provides strategic and management consulting services and software solutions to toptier global financial services firms, the Basel II Accord represents a significant expansion of credit risk management aspects of the earlier Accords and establishes operational risk management on par with both credit and market risk management. "The credit risk provisions of Basel II are significantly more quantitative than those in the 1988 version, Vinella says. "Banks may adopt one of three methods for computing their Capital Adequacy Requirement (CAR). The most computationally advanced method, the advanced internal ratingsbased approach, offers the lowest CAR, but requires significant modeling of future default and lost-atdefault expectations. These methods are computationally advanced and require significant database architectures and data management capabilities.

"Additionally, Basel II requires new capital charges for repossession and securities lending activities," Vinella says. "With the growth of the hedge fund industry and the parallel growth in prime brokerage, repo and securities lending activity are at an all-time high. A necessary requirement for safely engaging in these types of transactions is comprehensive collateral management. Collateral, securities, and other assets must be priced in real-time to correctly assess margin exposure and executed in such a way to keep the prime broker commercially competitive in terms of the lending rates it offers to hedge funds. Needless to say, this also requires significant database architectures and data management capabilities as well as fast pricing and risk exposure calculations."

Embedding Risk Management Function Into Core Business Processes

While banks are progressing well in meeting Basel II requirements, many questions still remain: Will they really have their data organized to meet the new regulatory demands? How do the bank's preparations compare against those of its peers? And how can they

move from mere compliance to turning risk management—including credit risk, market risk, and operational risk—into a source of value for the enterprise?

A successful Basel II implementation requires the ability to take an enterprise view of business events across multiple systems and deliver data of the highest quality to the Basel II-compliant solution. Only after these issues are resolved can the enterprise achieve real compliance with the new Accord and use the Basel II solution to deliver ROI and long-term business value. Banks and third-party software suppliers have been working hard to develop a range of tools to deal with different aspects of operational risk. Many banks and system vendors have made strides in developing individual tools. But, to provide consistent and meaningful results, these tools must be integrated. Organizations treating compliance as a mere business formality are unlikely to reap the real benefits.

Another trend in risk management is the move to Enterprise Risk Management (ERM), which attempts to capture information regarding all risks facing a financial institution and place them within a single context to illustrate its effect on the institution's balance sheet in the form of economic capital. However, ERM is complicated by the fact it doesn't encompass all the risks facing the typical financial institution such as credit, market, operational, liquidity, balance sheet, or geopolitical. Moreover, the data for such calculations isn't maintained in a single data store and the ways ERM can be presented are in the formative stages.

Kristin Lovejoy, CTO of Consul Risk Management, a leading provider of mainframe administration and audit products, believes it's essential to look at user behavior and data access to determine what actually occurred. "Sarbanes-Oxley will require quick action to demonstrate one is protecting the transparency, accountability, and integrity of financial information. But what can one do to actually monitor all disparate financial data and demonstrate compliance? People work in a protected and secure manner but are inhibited in their ability to get the job done. One must comply with external and internal mandates without inhibiting business performance."

Therefore, while effective technology is an indispensable tool of risk management, it's insufficient by itself. Companies must also have a robust

risk culture. That means embedding the riskmanagement function into their core business processes. It means that risk managers must be partners in riskreturn discussions. And it means that companies must place a high value on the ability to integrate sophisticated IT systems with sound business judgment.

Data Standardization

Risk management is also driving the trend toward data standardization. Jeffrey Brashear, managing director of BearingPoint, a leading management consulting firm, explained in a recent interview in Waters magazine that "data standardization should drive down complexity, which should make the lives of people in risk management areas much easier. Data standardization will also contribute greatly to data quality, which is a significant issue that most people in risk organizations face. Not only is it difficult to aggregate the information you need to do the risk calculations and assessments, but do you trust that the quality of the information you're working with is of high caliber? In addition, the cost of getting the data infrastructure in place that's necessary to do the risk job should go down, and this will make it easier to get things done."

Data standardization also requires expanding data models and metadata definitions to include attributes such as privacy preferences, security concerns, and entitlements. "That's part of standardization that isn't happening today. There is also a concern that data standardization alone doesn't help solve data privacy and data security problems, because what we think we need to do is enhance data models that are in place today. The metadata definitions need to include entitlements, data privacy preferences, and customer preferences inside the data model itself." bij

About the Author

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