

WHITEPAPER

Author

Charles Stewart,
Senior Director at Moody's Analytics
[http://www.moodyanalytics.com/
CharlesStewart](http://www.moodyanalytics.com/CharlesStewart)



Charles Stewart is a Senior Director at Moody's Analytics. He joined Moody's KVM in early 2006 from Barclays Bank PLC, where he worked in various capacities during his 28-year career there. Since joining Moody's, he has worked with banks and regulators around the world. Drawing on his knowledge of both theory and the realities of day-to-day practice, he has used his extensive risk management experience and his familiarity with many of the challenges associated with commercial and corporate banking to help financial institutions with the development of their risk management planning and strategies

Contact Us

For further information please contact: our customer service team:

Americas	+1.212.553.1653
Europe	+44.20.7772.5454
Asia-Pacific	+85.2.2916.1121
Japan	+81.3.5408.4100

Operational Efficiency: Strategic Imperative or Unrealistic Utopia?

Issues to consider when attempting to implement an effective ERM program.

In recent years, banks have invested in enterprise risk management (ERM), but have these investments been smart, operationally efficient and effective? The answer to this depends on whether they believe being operationally efficient is an unrealistic utopia, or whether they see it as a key building block for best practice ERM, and therefore a strategic imperative.

This article attempts to explain these two positions by outlining current drivers pushing banks toward more effective ERM investment, presenting key factors to consider when making an ERM business case, providing a benchmark for returns on ERM investments and detailing best practices for ERM implementation.

Banks Becoming Better Informed

As a consequence of the recent financial turmoil, banks have been investing in their management of risk, with a view to improving on what they have already, with better informed and timelier decision making. The question is, how much does this reflect an investment in best practice, or is there a higher standard for which banks should reasonably be striving?

The purpose of ERM is being better and more quickly informed about risks, and this is directly correlated with increasing operational efficiency and effectiveness. Examples of best practice ERM include the ability to monitor, in near real-time, the impact of day-to-day lending decisions being made by originators in a branch network or, alternatively, the cumulative effect of trading decisions being made on the trading floor, in aggregate, each day.

Such examples are about timely scrutiny, even on a systemized basis, of the extent to which concentrations are being built up - or whether industry or geography limits are being eroded too fast, or if pricing is too low or too high. Automated, or at least centralized, reporting enables these issues to be visible at the enterprise-wide level.

ERM Requires a Holistic Approach to Data Management

ERM is about a holistic approach to data management. Are large deals meeting the hurdle rates for different risk profiles, or is business for a particular segment meeting its targeted risk-adjusted returns? Likewise, can unusual, unintended or unacceptable risks be isolated and proactively managed? Are the right people discussing, monitoring and managing the various risks? How often is data reviewed and reported? Moreover, are the reports ready for analysis by senior management and at committee meetings, or do they provide an overwhelming quantity of data that executives are unlikely to assimilate?

Sadly, it is organizational design, and therefore operational ineffectiveness, that perpetuates and accommodates such inefficiencies.

The opposite of the holistic approach is effectively siloed, and one of the key obstacles to sound ERM is the management of risk in silos. Silos might be defined in terms of geography, line of business (e.g. wholesale vs. retail vs. corporate, etc.) or by type of risk (e.g. credit, market, operational, etc.). The end result is that data for the finance function and for risk management is often separated. As a consequence, data management for each of corporate and retail banking, or for country "A" and country "B," or for liquidity management and for credit risk management, happen on systems that do not talk to each other.

One only need look at the recent subprime crisis, which morphed into a liquidity crisis, and then a full-blown economic crisis, to understand how limitations in data availability across the enterprise frustrated the holistic management of individual firms. If banks had not been so siloed, and if their stress testing and planning capabilities had been more holistic (and sophisticated), we might have avoided much of the pain associated with the subprime crisis.

Risk managers and finance managers, and regulators, now realize that it is necessary to analyze the combined impact of different risks in order to understand the impact of possible scenarios on a bank's balance sheet and P&L.

Silos are perhaps inevitable for day-to-day, local operational purposes, but this approach to management of risks is inadequate for the organization as a whole. So the real, untapped opportunity, when it comes to operational effectiveness, is to address the separation of the organization's databases. Once a holistic view of key risk data has been achieved, banks can deliver material improvements in operational efficiency at the local level as well.

New Regulations are Driving Banks toward Holistic ERM

New regulations are forcing banks to become more holistic and are breaking down the organizational culture within many banks that perpetuate silos. For example, under Basel II, credit risk was typically managed by the risk department, and liquidity risk managed by the ALM/treasury department. Now, under Basel III, calculation of liquidity ratios requires data from both entities. The old way is no longer sustainable.

Similarly, the European Banking Authority's common regulatory reporting framework (COREP) will now be associated with its financial reporting framework (FINREP). This is a big challenge because of the differing requirements of COREP and FINREP reports; banks need a system that ensures COREP and FINREP remain consistent. Furthermore, reports must be fully auditable (drilling down to the granular data) on risk and finance data. On top of all that, reconciliation is key at each level.

Another example of regulations driving a holistic view of risk and finance data is the IFRS 9 rules on expected credit losses. Existing incurred loss models delay the recognition of credit losses and therefore delay the delivery of information to investors through financial statements. This undermined confidence in financial institutions during the financial crisis.

New standards will now use more "forward-looking" models to reflect expected losses. This means the accounting department may now need to look at credit risk models and adopt similar calculations, using similar sources of data and similar reporting tools.

Perhaps the most pressing example is that new requirements for enterprise-wide stress testing cannot easily be satisfied by the siloed approach, which typically forces banks to throw armies of people and huge technical resources at satisfying each external reporting obligation. These tactical solutions deliver one-off results, leaving the underlying problem unresolved.

Holistic ERM: A Top-down and Bottoms-up Commitment

The heart of a well-functioning, automated stress testing process is a single data repository in which the relevant risk and finance data required for regulatory stress tests is consolidated and readily available. With the key data layer element in place, the models, workflow tools and reporting modules can be layered on top. Once this structure is in place, banks are afforded a scalable and powerful capability to run and effectively report on a broad array of enterprise-wide stress tests in a timely and cost-efficient manner.



This same capability supports more than just stress testing - it also offers substantial insight to senior management about the bank's risk profile and potential opportunities. Therefore, it facilitates (consistently, across the organization) medium-term planning and annual budgeting, capital allocation and wider enterprise financial management.

Such ERM requires strategic and structural change, which typically requires a top-down commitment from the bank board. In addition to the board mandate, business units also need to see the benefits, and not just perceive this initiative as another change-management burden from on high; there has to be something in it for them.

Ideally, therefore, a major part of the business case will look at the underlying operational efficiency of the data management systems and processes used to inform the reporting, with a view to re-engineering those processes in a way that strips out cost, speeds up process and improves performance.

Of course, none of this works without good data, which brings us full circle back to the need to look at data at the bottom end and for the ERM framework to be underpinned by increasingly accurate, relevant and timely data.

Corporate Credit Origination: A Great Place to Start Holistic ERM

In most banks, the process for corporate credit origination is highly inefficient. As a result, origination workflow represents an excellent opportunity to gain both board commitment and business unit engagement on the topic of holistic data management.

The benefits of changing origination workflows are significant: one medium-sized bank calculated that for every \$1 invested, they saw a \$3 return. This was achieved through more consistent standards of credit analysis supported by more accurate data, leading to reduced calculation times and limited opportunities for human error, and accompanied by more efficient deployment of capital (and, therefore, increased returns on equity, increased shareholder value added and increased economic value added). Transparent governance and better audit trails were also enabled.

Ultimately, such process reengineering is about delivering centrally accessible data: e.g., risk data, volumes data, performance data, migration data and point-in-time data and trend analysis. Returns of three times the original investment are typical and potentially even understate the benefits. Certainly, when thinking in these terms, process reengineering really does begin to make a compelling business case.

Best Practices for Implementing Holistic ERM

It is easiest to implement a holistic data management system when some kind of existing governance framework is already up and running, which can be improved through an iterative process that makes the framework more robust over time. The best practices for implementation include the following:

1. *Be programmatic.* This sort of project needs the discipline of a change management program, with route maps, governance, etc., planned out over time.
2. *Articulate a risk culture statement.* A clear statement shapes the context for the changes required. For example, "risk" is not just a function, or department, or something for the people with risk in their title. It is something for which everyone in the organization should have personal responsibility, from the operational risks run by tellers, to daily credit risk decisions being taken by relationship and credit teams, to trading activity undertaken by the market facing teams, to the strategic decisions being taken by the board.
3. *Formulate a risk appetite statement.* This provides the boundaries, or limits, within which risk across the enterprise is to be governed and managed.
4. *Conduct integrated risk management ("IRM") training.* Addressing the "soft" side of ERM ensures that employee attitudes, values and behaviors are aligned with the wider framework being developed. For example, the risk department should not be seen as the enemy by the line of business, but as partners and enablers, providing checks and balances that help to ensure an environment in which the business can flourish.

Siloed ERM is Not Sustainable

This article has focused on the benefits of holistic ERM. However, the costs associated with remaining in a siloed should also be remembered. If a bank continues to leverage information from data in silos - and to respond to the internal and regulator requests in a tactical manner, reactively, and on an ad hoc basis - it could face the following problems:

- » Performance of everyday data capture, analysis and reporting tasks will require combining information from multiple databases and models across different business lines and geographies, while using different technologies.
- » Each time there is a new regulation or new internal requirement, compliance will require the development of a solution from scratch; it cannot simply be satisfied "at the click of a button."
- » Extra effort would be required to check that each group is meeting the spectrum of policies and adhering equally to the strategies being set by the center, making it much harder to consolidate reports at an entity level.

- » The creation of operational inefficiencies due to a lack of risk data-based business intelligence will lead to disproportionate cost increases, which, in turn, will undermine capacity for growth.
- » The effort required to address all of the above will come at the expense of sustainable growth.

A Strategic Imperative

For banks to sustain desired levels of growth, they must make it a strategic imperative to achieve operational efficiency within risk, finance and treasury departments, ensuring these teams have the data, models, tools and analytics that they need to fulfil their responsibilities efficiently and effectively. This will require consistent, well-informed policies, and governance providing the right checks and balances.

Holistic ERM, as discussed earlier, aligns these constituents and ensures they are empowered with the data and analytics they need to report both internally and externally; moreover, it does so in as close to real time as possible.

Multiple strategic, economic and regulatory drivers are currently forcing change within banks that will help banks to realize the vision of holistic ERM. Achieving this vision will require considerable planning and substantial investment, but it is well worth the effort. Raising the standard of the firm's ERM framework takes advantage of established advances in risk management practices, particularly by (1) moving from a siloed to a holistic view of risk; and (2) increasing the focus on data and its management.

The business case for holistic ERM leverages automation and systemization, but is also about enabling higher standards of governance to mitigate the consequences of black-swan events. Once operations have been optimized with appropriate automation, total costs of ownership of the new enterprise risk management system will go down. Striving to be more operationally efficient is entirely realistic and, indeed, for those organizations with ambitions for maintaining or improving their position, a strategic imperative.

© 2014 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved. CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. ("MIS") AND ITS AFFILIATES ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND CREDIT RATINGS AND RESEARCH PUBLICATIONS PUBLISHED BY MOODY'S ("MOODY'S PUBLICATIONS") MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS FOR RETAIL INVESTORS TO CONSIDER MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS IN MAKING ANY INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

MIS, a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MIS have, prior to assignment of any rating, agreed to pay to MIS for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody's.com under the heading "Shareholder Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

For Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail clients. It would be dangerous for "retail clients" to make any investment decision based on MOODY'S credit rating. If in doubt you should contact your financial or other professional adviser.