

Key Challenges and Best Practices for Basel II Implementation

Implementing Basel II with Oracle Reveleus
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Financial institutions want to ensure a successful and smooth Basel II implementation after a series of reworked investments in Basel II projects, errors being highlighted in Basel II computations by regulators, delays in regulatory submission, and time & cost overruns in Basel II projects:-

INTRODUCTION

In the four years since the Basel II accord was issued by BCBS (Basel Committee on Banking Supervision), the world banking business is facing a revolution. Risk management has taken centre stage again as a key factor in influencing how banks should run their business. However, the road to Basel II compliance is filled with challenges like multijurisdictional reporting, data intensive tasks, lack of internal IT resources and data transparency, to name a few.

This paper discusses these major implementation challenges and suggests some of the best practices that banks can adopt in their pursuit of Basel II compliance and offers recommendations to avoid the pitfalls.

OBSERVED CHALLENGES AND SOLUTIONS

The major challenges in Basel II implementation and best practices to address them are detailed below:

Multi-jurisdictional Reporting

Basel II is being implemented across the world and banks are required to compute capital adequacy ratios in accordance with the multiple capital adequacy guidelines as prescribed by the regulators in all countries in which they operate. These jurisdictional guidelines can differ with respect to implementation timelines and when local supervisory authorities have modified or detailed certain provisions given in Basel II. Most countries also require banks to compute capital adequacy ratios per applicable Basel I norms during Basel II transition period. Compliance with these regulations has resulted in considerable pressure on the banks.

An integrated comprehensive data warehouse with the ability to support various jurisdictional guidelines in a single Basel II solution is the key to achieve multijurisdictional capital adequacy computations in an optimal manner. A single Basel II solution will:

- leverage common rules across the various jurisdictions
- be more cost effective than having multiple solutions for individual jurisdictions

- result in shorter overall implementation time and costs
- be easier to maintain over the lifetime

An integrated data warehouse should provide data requirements for all the bank's jurisdictions. Best practice would be that the Basel solution should automatically choose the exposures and rules relevant for the user-defined jurisdiction.

Data Gap Analysis Study

Data represents a significant challenge for banks because Basel II is a particularly data-intensive solution. Basel II Pillar I requires data on credit risk, market risk and operational risk at varying levels of granularity. These challenges comprise issues associated with both data availability as well as quality.

The collection and storage of data is a crucial technological task of any Basel II implementation. To ensure that this critical task is successful, a detailed data-gap analysis study should be completed in the initial phases of the project. The gap analysis study involves comparing the data available in the bank's current systems with the data needed for Basel II implementation by business analysts. This will provide the additional data requirements over and above available data. Project leaders then need to implement the proper plans and resources for extracting the additional data. Banks embarking on Basel II implementation without this initial gap analysis study and parallel plans to enrich data should expect time and cost overruns as these gaps will ultimately present themselves.

Basel II needs to be seen as an opportunity to improve risk management rather than just regulatory compliance.

Data Quality Checks & GL Reconciliation

While the data gap analysis reveals the additional data requirements over and above the available data, data quality checks & GL reconciliation must focus on ensuring data completeness and integrity. These must answer the simple question – whether the data is complete in line with audited GL numbers; and meets Basel II data quality standards expected by supervisors and audit committees.

Thus Basel II solution must have:

- Integrated data-quality checks specific to risks, approaches, asset classes etc. along with flexibility for business users to define new ones for future internal and regulatory requirements
- GL reconciliation capabilities for ensuring data completeness (end-of-period or average balance) at various levels of granularities ((legal entity (Solo /Consolidated) , GL, Mapping Level, Currency) including passing adjustment entries along with complete audit trail

Comprehensive Approach

Another dilemma faced by project management at the onset of Basel II implementation is whether the bank should handle Credit Risk, Market Risk and Operational Risk through a single comprehensive solution. Experience has shown that banks having a fragmented stream of solutions to handle one or more parts of Basel II face considerable difficulties in synchronizing the data and computations.

Recently, many banks have initiated projects to replace the multiple tools being used for regulatory compliance including vendor packages, custom-built applications, tactical end-user tools and manual processes; with a single end-to-end solution.

A complete Basel II solution should ultimately cover:

- Multiple risk silos
- Multiple approaches
- Multiple portfolios
- Multiple asset classes

And should integrate the following capabilities:-

- A modeling framework
- Retail pooling
- Stress testing

Stress Testing

Stress Testing has been a part of both Pillar 1 and Pillar 2 requirements of the Basel Accord. Recently, Basel Committee on Banking Supervision has issued detailed “Principles for Sound Stress Testing practices and supervision” in May 2009. The recent financial crisis, regulatory pressure and market have emphasized the importance of a robust stress testing framework at the core of bank’s risk management and has resulted in regulators scrutinizing bank’s risk management practices more closely.

Traditionally, banks have been doing stress testing in a silo’d manner with the sole objective being compliance; they were unable to meet the emerging regulatory and internal requirements on stress testing. Therefore, banks across the world are scouting for stress testing solutions since a comprehensive and robust stress testing framework has not been a part of their Basel II solution.

Therefore it is vital that a robust stress testing framework be an integral part of a bank’s Basel II strategy to enable a bank to calculate capital requirements under alternative scenarios and plan appropriate management action. The integrated stress testing framework must enable the bank to apply multiple alternate types of shocks to variables and maintain a repository of scenarios that can be applied across all risks in an enterprise-wide manner. The framework should enable the banks to conduct sensitivity analysis or scenario analysis, stress historical scenarios or hypothetical scenarios, apply instantaneous or across time shocks and be extendable for ICAAP purposes for enterprise-wide stress testing.

Coverage for Pillar 2 and ICAAP

It has been our experience that banks have mainly focused on compliance with Pillar 1 & Pillar 3 during their initial Basel II compliance programs. Relatively less attention has been given to the four major principles of Pillar 2 including the important first principle, Internal Capital Adequacy Assessment Process (ICAAP). The recent financial crisis has highlighted the inadequacy of a “silo’d” approach to risk management, the significance of interplay between the various risks and the incomplete understanding of risks associated with structured products, highlighting the importance of this principle.

A bank’s Basel II strategy should therefore be comprehensive – covering all the three pillars of Basel II framework. The Basel II solution including the data model should minimally be extensible enough to support Pillar 2 and ICAAP requirements of risk identification, materiality assessment, risk quantification (economic capital for Credit Risk, Market Risk, Operational Risk, Business Risk, Liquidity Risk, Interest Rate Risk in Banking Book, Reputational Risk etc), risk aggregation and allocation, stress testing, capital planning, ICAAP reporting), when the bank is ready to implement this particular pillar.

Focus on the Long Term

A Basel II solution needs to be flexible enough to accommodate various approaches and also be able to accommodate future changes in regulations/reporting. The framework of the Basel II solution should be able to support ICAAP compliance (Pillar II of Basel II) and any future regulatory requirements beyond Basel II. Building a flexible framework for a Basel II solution requires deep domain knowledge, advanced technical expertise and wide experience in compliance space.

The flexibility criterion emphasizes the long term need of regulatory compliance rather than just a short term focus on immediate compliance requirements. The flexibility to easily change rules and define new reports within a Basel II solution ensures timely responsiveness to future regulatory changes and a lifetime cost of ownership that is by design, as low as possible.

Importance of Domain Expertise

The successful completion of a Basel II project in a bank requires skilled technical/functional resources and appropriate IT infrastructure that can provide quality data in a timely manner for Basel II. This is a significant challenge, especially in those banks which do not have an existing sophisticated risk management system in place and in the developing countries where there is a general lack of trained resources having expertise in design, documentation, implementation and monitoring of Basel II.

Rather than “reinventing the wheel,” a best practice approach for a bank would be to select an implementation partner and solution provider that has rich experience, deep domain expertise and a deep understanding of the various business and technological issues involved in Basel II implementation. Banks must seek vendors

that have implemented solutions in various (and multiple) jurisdictions and already have conceptual and practical knowledge of the design, procedures, processes, reporting and control mechanisms of Basel II. Established vendors with a global support-base are most suitable to execute Basel II projects in a timely and cost-effective manner.

Transparency, Auditability and Scalability

Any Basel II solution considered to be “best practice,” should be transparent and auditable. It should provide complete traceability of computed numbers down to the source data with the appropriate audit trail. Other than satisfying regulatory requirements, this is also desirable for internal purposes since the nature of business changes periodically.

A Basel II solution thus needs to be business-user friendly and should be able to support:

- new instruments and products
- increases in transactional volumes
- future mergers or acquisitions

Basel II solution must be able to handle new product initiatives as well as potential changes to the regulatory requirements of the bank.

Actionable Insights into Enterprise Risk

Basel II implementations require considerable effort, time and money. As such these implementations can deliver rich dividends to the business over and above helping the financial institution to achieve regulatory compliance. Many banks mistakenly treat business intelligence as a discrete management reporting initiative layered on top of the data and regulatory requirements of their Basel II project.

Best practice Basel II solutions can provide business intelligence and management reporting capabilities to top management and other decision making authorities within the bank. This 360° view of risk, inherent to the Basel II philosophy, can be enabled through an industry standard reporting framework capable of slicing/dicing, drill through, drill down, drill across, roll-ups, sorting & filtering of the related risk data. A comprehensive set of these analytical reports and charts should be available as a standard offering within a Basel II solution.

CONCLUSION

Basel II implementation is an opportunity for a bank to improve risk management and ultimately economic capital management. As stated above, there are many challenges along the way, including multijurisdictional reporting, data availability and quality, experienced IT resources, solution completeness, data transparency, solution scalability, flexibility and business intelligence.

Oracle Reveleus Basel II has been implemented in many major banks around the world and is well positioned to make any Basel II implementation a smooth and predictable journey. Oracle Reveleus has successfully met the needs of financial institutions of all sizes globally and can enable a bank's Basel II roadmap from the standardized approach to the more advanced approaches leading to ICAAP, stress testing and Economic Capital calculations.



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