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## **Managing Financial Institutions beyond the Credit Crunch *a Compliance and Regulatory Systems Perspective***

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## About Simon Baker

Simon Baker joined Quadrant in April 2008 after 26 years in the banking industry. He spent the last seven years as Group Programme Director of the successful Lloyds TSB Basel II Programme. He brings to Quadrant and its clients unique insights into the complex issues of capital adequacy, regulation and compliance and shares some of them in this paper.

Following the difficulties that numbers of banks have experienced as a result of the troubles in the financial markets over the last year, Simon considers afresh the foundations that underpin an effective risk management framework. It is relevant especially to readers who are in the course of preparing or revising their Internal Capital Adequacy Assessment Process (ICAAP) document for consideration by their supervisors. Many of the principles considered here will have relevance in that discussion. The challenge facing the industry is to transform the way it manages risk and capital, and help to guard against the misadventures that have occurred recently.

Simon would be delighted to hear from readers of this paper, and would welcome the opportunity to bring his experience to bear in helping your organisation. Contact details are provided at the end of this paper.

## Introduction

It is not exaggerating to say that, from a Financial Institution's perspective, the "Credit Crunch" has changed everything, particularly in the areas of capital adequacy and regulatory compliance systems. As a result of the Credit Crunch and the Financial Crisis that has followed, the fundamental structural changes that are now taking place in the banking industry are generating a huge amount of additional workload for senior management, boards and regulators alike. The sheer scale of the changes that are happening is mind-boggling. However, there will come a time when the changes have their desired effect and the banking sector will take on "business as usual", not as it was, but in a very different shape. This different shape may well reflect a banking model that harks back to the days before capital markets took on such an important role in the creation of leverage in the system and also in the process that became known as "disintermediation". Disintermediation will have effectively been dramatically reversed with, it is to be hoped, a positive impact upon banks' ability to manage their core interest margin so as to improve profitability to recover the losses experienced.

This paper outlines some of the impacts that can be expected as well as suggesting approaches to solving them and the sort of help that financial organisations should expect from domain consultants and technology specialists to meet these challenges.

## Changes and Challenges

The regulatory (and now the State) spotlight will be on the banking sector in an even more intense way than in the past and banks' compliance with both existing and new regulations will be an increased burden, albeit desirable from the regulatory and broader stakeholder perspective.

These changes will stretch and challenge the capital adequacy and regulatory information strategies within banks and other FSIs. So what are the key short and medium term issues that organisations will have to address in this area?

- The Credit Crunch may have highlighted to some banks that the systems they developed in order to address Basel II/CRD needs might have been adequate as regulatory reporting solutions, but they did not and do not enable the necessary integration of data needed for risk management purposes;
- Through the ICAAP there is a need to calculate the overall capital requirement to cover all risk types and to demonstrate to supervisors that the organisation has adequate capital management processes;
- The new and increased regulation that emerges post Credit Crunch will need to be reviewed and acted upon by each organisation. It will lead to changes in business practices and changes in the information systems requirements to manage, monitor and demonstrate best practice and compliance across the business;
- While some organisations will disappear others will find themselves under new ownership through enforced or encouraged M&A activity.

To meet these challenges, organisations will need to act quickly and will need improved processes and substantially upgraded information systems. They will benefit from working with consultants, analysts and technologists with in depth and proven expertise in all aspects of risk management, capital adequacy, regulatory reporting and compliance information systems. Quadrant has a range of consulting services and solutions to help banks and other FSIs adapt rapidly to the new and changing environment. Some of these are outlined below.

## So What Needs to be Done?

### Capital Adequacy, the ICAAP and Supervisory Review

One impact of the Credit Crunch has been greatly increased focus on capital adequacy and the formal process of developing an ICAAP. Further, it is important this ICAAP should, at first and subsequent submissions, be well received by the Regulator. Quadrant's approach is to partner with banks on a consultancy basis to help them in getting the most out of the ICAAP, in terms of both business benefit and regulatory approval. Quadrant is experienced in the development of a clear and concise ICAAP. Our people have delivered as industry practitioners themselves and have helped banks to do likewise.

The benefit to banks of Quadrant's involvement is in the delivery of an ICAAP that will be embedded in the business, thereby adding value to all stakeholders, including regulators, who will perform the SREP (Supervisory Review Process) with more confidence.

It is our firm view that bank supervisors will, in the future, expect to see enhanced ICAAPs, which will be subject to greater challenge. Banks need to recognise this new reality.

### Ensuring the Accuracy of the Regulatory Reporting Framework

Some banks have purchased regulatory reporting solutions from vendors who have purportedly delivered an inexpensive reporting solution for COREP or FINREP. They were told that these could easily be connected to bank core data systems by integration or data view structures. Unfortunately, this has not always proven to be the case which has meant that some banks have been unable to finalise implementation of their regulatory reporting solutions, and they have consequently failed to meet regulatory timescales.

Recent discussions with regulators have revealed that they have serious concerns surrounding the quality of banks' data underpinning regulatory reporting. This is an area that is likely to be subject to increasing scrutiny and banks need to have confidence in the robustness of their data. Simply put, banks need to be in a position to demonstrate this to their supervisors as a matter of priority.

Quadrant can help both from an advisory and solution perspective. We have developed an overall regulatory reporting architecture with the necessary financial models and software components to facilitate integrating data from core systems into a consistent data warehouse for regulatory reporting. As part of its overall holistic data model, Quadrant has selected sub-models that, for example, cover the Basel II standardised approach and financial reporting. These models come complete with embedded capital calculation engines, customisable for international regulatory regimes. The inter-position of one or more of these data model sub-sets between a bank's core system and the already acquired reporting layer enables the rapid interpretation and capture through "standard interface formats" of the required data to power the necessary calculations and the report output.

The benefit to banks is that Quadrant has successfully implemented a number of such structures within short timeframes, thus saving banks both time and, more importantly, finalising a project within regulatory timescales. Quadrant offers a range of off the shelf solutions including **SAB<sup>2</sup>** for Standardised Basel II reporting as well as FI Regulatory capital data models and calculators.

## Compliance and Information Systems Architecture

One important consideration is that board and management need to be sure that they have access to the complexity of information required to manage the business, while at the same time ensuring regulatory compliance. This will require access to “a Single Version of the Truth” across the enterprise whether it is for risk assessment, valuations, liquidity management, profitability analysis, compliance or regulatory reporting. To achieve this it will be necessary to review existing information systems architecture and systems to identify weaknesses, inconsistencies and gaps. The likely solution will be to create a BI (Business Intelligence) based data warehousing solution which consolidates the information from core processing systems, validating and cleansing it along the way and creating an information resource that will represent a Single Version of the Truth which can then feed decision support, information dashboards, management and regulatory reporting systems.

Key elements of this include:

- Formal financial data models for defining all aspects of the FSI business. These should be optimised for information reporting rather than transaction management;
- Data loading architecture and tools for connecting core systems to the enterprise wide BI data warehouse to ensure accuracy and consistency of the information;
- A financial data warehouse which can store core and derived data as well as results that will enable the tracking of trends and play back of the business state to points in time;
- The modelling, dashboard and reporting tools which provide information from this consistent data warehouse.

Such a resource will need to be flexible, agile and adaptable to cope with the changing business environment and regulatory framework. It will need to be quick to implement and massively scalable.

Quadrant has developed such Financial Information Models, together with a BI Data Warehouse Architecture which can greatly speed up the provision of accurate, reliable and comprehensive information solutions which will meet current and future needs in the areas of risk and compliance. Quadrant, in conjunction with its global partner HP, has developed the Massive Data Platform – a data platform capable of handling the large volumes of data emerging from the merger and acquisition process, structured for enterprise-wide risk aggregation of credit and other exposures, through Quadrant’s Massive Data Complex physical data model.

## Facilitating Mergers and Acquisitions

Another consequence of the Credit Crunch has been the sudden and unexpected mergers of significant banking institutions. This will result in enormous projects to integrate often divergent credit management methodologies, portfolio aggregation models, ALM processes, risk management cultures and systems. The new stakeholders in these banks (including governments and taxpayers), as well as regulators will demand that risk exposures be collated and managed across the new integrated organisations, whilst not paralysing the ongoing disbursement of credit, which is so essential to rebuilding national economies. Quadrant’s Compliance and Information Architecture (together with models and components) can help quickly integrating the systems from the various entities to provide a Single Version of the Truth for the new merged organisation.

## Partnering with Quadrant

Quadrant is a global supplier of both banking domain consultancy and technology offerings, and believes that it can be of valuable assistance in bringing clarity to banks who are currently struggling with the issues highlighted in this document, and in relation to the specific topics discussed.

Why not contact us to see how you can use the expertise and experience we have developed over many years to help you to get your risk and compliance functions into shape for the new paradigm that will exist in the post Credit Crunch era, or to assist with the process of collation of credit exposures if your institution has or is intending to be part of a significant merger? Visit [www.qrmi-group.com](http://www.qrmi-group.com) or email [simon.baker@qrmi-group.com](mailto:simon.baker@qrmi-group.com) to find out about our offerings and how we can help.

Quadrant Risk Management (International) Limited was formed in the UK in 1991 as a specialist consultancy by risk management professionals who had previously operated at board level in financial institutions. In 2001 Quadrant diversified by developing its domain expertise into the **B<sup>2</sup>**, Quadrant's risk and compliance suite, in response to the Bank for International Settlement's Basel II Capital Accord. **SAB<sup>2</sup>** was introduced in 2006 as a Standardised Approach solution to meeting the requirements of Basel II. In November 2006, with venture capital funding, Quadrant acquired Ecensity Corporation, a specialist in SOA (Service Oriented Architecture) to enhance its technology base and delivery capability. In January 2007 Quadrant announced that it is developing **S<sup>2</sup>** to address the risk based capital adequacy requirements being introduced with Solvency II for the European insurance industry, currently planned for 2012.

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