Preface

Over the last few years, several high profile operational incidents in banks across the world have created an awareness amongst the public that good governance is important for financial institutions. The stakeholders of the Banking Industry realise that the risk culture of a bank determines the safety of the savings of the customers, the institution, the industry and the financial markets. The 'Too Big to Fail' culture invited a lot of criticism. Industry experts recommended computing the bonus of senior management over a period rather than annually. Regulators implemented measures to improve the selling of complex products and several articles on the operational incidents have emphasised the need for better Know Your Employee programs in financial institutions.

Operational losses do occur in all types of financial institutions. Multi-national, Regional & domestic, Conventional, Islamic, Commercial and Investment banks face the challenges of operational efficiency and risk mitigation. Although banks appear to have recovered from the 2008 crisis, they continue to face the challenges of staying competitive and attaining the desired level of growth.

The motivation to implement operational risk management is a combination of the need to be competitive and compliant. This should be accomplished through the right dose of self-regulation and supervision.

Most banks are computing their operational risk capital by using either the Basic Indicator or the Standardised approach. The limitations of these approaches are well documented. Banks are aware that they can reduce operational costs, increase productivity and minimise risks by improving processes. Some banks are overwhelmed by the effort in moving to a more efficient operating model. This is probably out of the 'daily fire-fighting fatigue' rather than an output of an objective assessment of the effort to improve their operations.

This book is not on computation of regulatory capital to cover operational risks. The focus is on designing, building and using a mature operating model using relevant tools. In doing so, banks will be able to collect operational data that is required for risk identification, measurement and mitigation. The

book views Process in a larger context of work done across the enterprise and is explained in Chapter 1. To effectively manage operational risks, a bank needs to get to the bottom of it and that is to monitor, identify and mitigate risks at the process level.

Many banks, particularly those using Basic Indicator or Standardised approach for capital computation, have done risk and control self-assessment using a "risk-black-box" approach. These banks do not have a complete inventory of banking processes and experience difficulties with risk identification and control monitoring. Their assessment are based on staff inputs and an evaluation of computer systems.

The technical architecture of the operating model in some banks is fragmented with numerous satellite applications on the periphery. Banking Processes and Technology are important factors that influence the ability to monitor and mitigate operational risks. Process-based banking solutions are evolving and many banks have implemented process-based automation in select areas. Banks that have a process inventory and are committed to a culture of process improvements could use the Advanced Measurement Approach for measuring their capital requirement. They are advantageous placed in managing their operations and reap the benefit of allocating just the adequate capital for their operational risk exposure.

It is widely acknowledged that the lack of data is a major constraint for the identification and measurement of operational risk. Operational data gathered at the process level, provides wholesome data for risk management. There are some challenges in quantifying the value of some operational risks. Even when external data is available, the ability of a bank to calibrate it for internal use is limited, as the metrics are not well defined. Calibration would need some metrics that is common to the source entity and the recipient.

In this background, Process and Operating model Maturity is important for successful operations risk management. Operations and operational risk management is efficient when it is process based. The book provides numerous case studies and examples to collaborate this view.

The first chapter provides an introduction to operational risks, delivery of banking products and banking processes. Banking processes are categorised as Front or Middle or Back office functions. Thus the front office is the customer facing activity and the primary performance indicator is the customer experience with the bank. The middle office establishes the risk-reward aspect. This is the risk management function and the primary performance indicator is the residual risk in the banking processes. The back-office functions are related to accounting and the primary performance indicator is the accuracy of the books of account.

The second chapter analyses **35 operational risk incidents** reported in the media in the last few years**.** It covers banks in the USA, Europe, Middle East and Asia. The examples include conventional, Islamic, multi-national,

domestic, commercial and investment banks. Suppositions are built based on the reported incident and the possible causes for such incidents are analysed.

The design-build-operate aspect of banking operations is put forth in the next chapter, **Chapter 3.** Control frameworks that are globally recognised for their usefulness are analysed from a banking perspective. These include COSO, SOX, FATF, ICC's UCP-600, ISDA, CMMI and ITIL. Most of these frameworks place a lot of emphasis on processes. The importance of attaining a feasible level of delivery standardisation is explained.

Business Process Management Suite, I.T. Governance and Advanced Analytics are analysed as tools for managing the operations of a financial institution. The several advantages that these tools provide for improving processes, reducing costs & risks are elaborated.

The case studies are re-visited in the **Fourth chapter** for the purpose of explaining how the tools could be used for managing operational risk and collecting operational data in all its dimensions. The case studies provide an insight into different types of operational weakness. In this backdrop, an approach for gap resolution to move from an As-is stage to a To-be (Target) operating model is explained. Balanced Scorecard is explained and it provides an objective method to determine the success of the improvements made to an operating model.

The chapter's last section examines **20 case studies** of Business Process Management Suite/Service Oriented Architecture or I.T. Governance implementations. The benefits derived by the banks substantiates the fact that an Operating Model built on processes and governed by the usage of process-based tools, will minimise risk and reduce costs. The benefits of using **Advanced Analytics** are also explained.

The fifth chapter details the operational risk management methodology with a focus on the Advanced Measurement Approach. Basel's Operational Risk Management Framework (ORMF) and Operational Risk Management System (ORMS) are explained. A significant benefit that Process Maturity provides the banking industry is that the maturity level can be the basis for External Loss data calibration.

Chapters 5 & 6 provide **95 examples of** process based Risk & Control Monitoring. These are categorised as Pan-bank Governance issues, Technology, Front, Middle and Back office incidents. The examples bring out the multi-factor aspect of the process approach and the ability to collect wholesome operational data. Data collection at activity and Process level are illustrated and examples of Frequency-Severity data are provided. The data collated at the granular level is used to prepare Heat-maps for management review. Banks have the ability to drill-up and down the risk database and several dashboards of a monitoring function are provided to illustrate the usefulness of the data for process improvements, transaction cost reduction and risk management. The correlation between Operational Risk and other risk types, Market, Credit, and Liquidity, are explained using the examples.

The last chapter summarises the details presented in the earlier chapters and presents an example of process based I.T. Governance Model Maturity and Operational Model Maturity. The ability to stay competitive by optimising the Risk-Reward ratio is a function of the Operating Model Maturity.

As the Banking industry takes an **enterprise-wide approach** to process improvement, the positive impact on Data Quality will improve supervision by the Central Bank. The last chapter provides some examples of the benefits that the Banking Supervisor can derive from process automation in the Banking industry.

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Chennai *KANNAN SUBRAMANIAN*

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