## **Foreword**

The rapid strides made in the information and communication technology (ICT) arena have tremendously impacted the way banking is done worldwide. Nowadays, the customer does not have to enter the brick-and-mortar structure of the bank in order to get serviced by the bank. He or she can get all the services right at his or her doorstep on his or her desktop. Such is the quintessential influence of ICT on banking that all major operations/decisions with regard to deposits, withdrawals, and investments can be made at the click of a mouse on a computer or at an automatic teller machine (ATM). Another important fallout of this ICT-driven revolution in banking is that, thanks to the advances made in data mining and customer relationship management (CRM), banks can reap profits by increasing their service pie in a manner, which was unthinkable a decade ago. Consequently, the banks on their part can tailor their products to suit the customer needs and even pinpoint the customers who would purchase their products.

The banks are continuously striving hard to bring the state-of-the-art ICT innovations to make banking an even more convenient and pleasurable experience, and in the bargain attract more and more customers, thereby increasing the banks' profits. Consequently, the banks have dumped their traditional *product-driven* strategy to embrace the more logical and profitable *customer-driven* strategy. On the other hand, customers have also become hungrier and want the banks to become a one-stop-shop for all their financial and investments needs. This two-way demand and supply equation has not yet reached equilibrium, and this precisely has given rise to an increasingly difficult set of managerial problems for the banks to grapple with.

In this edited book, Dr. Vadlamani Ravi has succinctly captured these managerial problems in three dimensions, which he calls services management, business management, and risk management. This categorization, I believe, is logical and operationally sufficient. Services management takes care of technology-driven issues. Business management pertains to segmenting and identifying the right customer base for the right products. Finally, risk management attempts to measure and mitigate the associated finance and technology associated risks, namely, credit risk, market risk, and operational risk.

There is a right balance in the organization of the chapters in the book. All the important issues such as service quality in banks; technology acceptance of smart cards, Internet banking, and electronic purses; mobile banking and mobile commerce; information assurance in Internet banking; the usefulness of CRM and customer value dynamics in the banking industry; data warehousing and data modeling; data mining for risk management in credit cards; credit scoring, bankruptcy prediction, and foreign exchange forecasting; new computational model for value-at-risk; and software agent-based banking application architectures are covered in the book in great detail.

That the topic of this book is of paramount importance can be seen by the fact that the academics, researchers, and professionals from all over the world have contributed to it. This shows how relevant and contemporary the theme of the book is. Dr. Ravi must be congratulated for venturing into an undertaking as difficult as editing this book. Full credit to him for bringing the seemingly unrelated disciplines under

one roof. I have no hesitation in suggesting this book to MBA students in finance, financial engineering, and information systems at any university. I am sure this book would also be of immense use to technology, business, and risk management professionals in the banking industry.

Professor M. Rammohan Rao Dean, Indian School of Business Hyderabad, India

M. Rammohan Rao is the dean of the Indian School of Business (ISB). In his role as the dean, he focuses on bringing cutting-edge global research to ISB and helps in building the school as an academic institution of global repute. An illustrious academic, renowned worldwide for his research and teaching capabilities, Dean Rao has taught as a tenured professor of operations research at the Stern School of Business, New York University. He has also taught at the Graduate School of Management, University of Rochester as an associate professor and as a visiting faculty member at the University of Tennessee. He has held various positions at the IIM-B, including those of professor, visiting professor, dean, and director. His current teaching and research interests are in the areas of optimization, corporate finance, and financial derivatives. Dean Rao has published more than 85 articles in various professional journals. He has won several prestigious awards conferred on him by leading institutions across the world. He holds a PhD in Industrial Administration from the Graduate School of Industrial Administration, Carnegie-Mellon University, USA.