

## Foreword

Enterprise information systems (EIS) comprises of information systems such as enterprise resource planning (ERP), supply chain management (SCM), customer relationship management (CRM) and e-commerce. The ERP package aims to integrate all key business activities through improved relationships at all levels to achieve a competitive advantage. ERP systems can be considered as an information technology (IT) infrastructure to facilitate the flow of information between all business processes in an organization. SCM is the practice of coordinating the flow of goods, services, information and finances as they move from raw materials to parts supplier to manufacturer to wholesaler to retailer to consumer. The fundamental theory behind CRM is to identify profitable customers, attract and retain them, and maximize their useful life span and the profits from them by establishing and fostering good relationships with them.

The primary objective of this edited book is to provide comprehensive coverage and understanding of various enterprise information systems (EIS) such as ERP, SCM and CRM. Design, development and implementation issues of EIS have been discussed. These include organizational, technological and managerial issues of EIS. The secondary objective of this edited book is to expand the knowledge on EIS and in turn help researchers and practitioners to develop suitable strategies, tactics, and operational policies for EIS and for improving communication in organizations. I believe, that this book would enable the young research scholars to kick off their research in the EIS effortlessly and provide them the channels required to do research in the EIS meticulously to help the enterprises improve their performance through the successful implementation of an information system. Discussing the design and implementation issues of EIS from different perspectives will help the practitioners to get themselves adapted to the information system in a smooth way and reap its benefits. This book intends to be a forum for exchanging new ideas and developments in the field of EIS. It also acts as a medium of communication among EIS researchers and practitioners.

This edited book comprises of two sections namely ‘*Challenges and Issues in Enterprise Information Systems*’ and ‘*Supply Chain Management (SCM) System using Information Technology (IT) and Mathematical Modeling*’. Section 1 consists of fourteen chapters and Section 2 consists of nine chapters. Section 1 addresses the software engineering approaches and methods for information systems. Specifically, requirements in cross-organizational ERP projects requirements management, agile software development for customizing ERPs, software metrics and processes for ERP projects, success stories and lessons learned from ERP projects, future of information systems, designing a CRM, designing test cases for enterprise application integration are very well discussed in this edited book. Section 2 deals with the application of mathematical modeling in SCM, designing an information technology enabled SCM system and applying fuzzy concepts to logistics.

Business information system is an area of greatest significance in any business enterprise today. This edited book “*Enterprise Information Systems and Implementing IT Infrastructures: Challenges and Is-*

*sues*” aims at identifying potential research problems and issues in the Enterprise Information Systems. The editor of this book has done an outstanding job by identifying the most demanding chapters for this book. I am confident that this book will definitely contribute to the information systems community and would be widely referred by the faculty members, researchers and practitioners in information systems across the globe.

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**Dr. Angappa Gunasekaran** is a Professor of Operations Management and the Chairperson of the Department of Decision and Information Sciences at the Charlton College of Business, University of Massachusetts Dartmouth (USA). He has a PhD in Industrial Engineering and Operations Research from the Indian Institute of Technology (Bombay). Dr. Gunasekaran has held academic positions at Brunel University (UK), Monash University (Australia), the University of Vaasa (Finland), the University of Madras (India) and the University of Toronto, Laval University, and Concordia University (Canada). He is teaching undergraduate and graduate courses in operations management and management science. Dr. Gunasekaran has received Thomas J. Higginson Award for Excellence in Teaching (2001-2002) within the Charlton College of Business. He has over 200 articles published/forthcoming in 40 different peer-reviewed journals. Dr. Gunasekaran is on the Editorial Board of over 20 peer-reviewed journals which include some prestigious journals such as *Journal of Operations Management*, *International Journal of Production Economics*, *International Journal of Computer-Integrated Manufacturing*, *International Journal of Production Planning and Control*, *International Journal of Operations & Production Management*, *Technovation*, and *Computers in Industry: An International Journal*. Dr. Gunasekaran is involved with several national and international collaborative projects that are funded by both private and government agencies. Dr. Gunasekaran has edited a couple of books that include *Knowledge and Information Technology Management: Human and Social Perspectives*, (Idea Group Publishing) and *Agile Manufacturing: The 21st Century Competitive Strategy* (Elsevier). Dr. Gunasekaran is the Editor of *Benchmarking: An International Journal* and the North-American Editor of the *International Journal of Enterprise Network Management*. He has edited special issues for a number of highly reputed journals. Dr. Gunasekaran is currently interested in researching benchmarking, agile manufacturing, management information systems, e-procurement, and competitiveness of SMEs, information technology/systems evaluation, performance measures and metrics in new economy, technology management, logistics, and supply chain management. He actively serves on several university committees. He is the Editor-In-Chief of several international journals in the areas of Operations Management and Information Systems. Dr. Gunasekaran is also the Director of Business Innovation Research Center (BIRC).