
PREFACE

The more things change, the more they stay the same! This is a quotation which we all remember, but now the bottleneck is not at the bottom of the bottle but at top of the bottle. The judgment of people who sit at the top of organizations need real-time access to complete information in order to make better decisions. Enterprise Information System (EIS) is a great paradigm shift in the world of information systems, and has revolutionized business in a gigantic manner. In this new and rapidly changing environment it is exceptionally imperative that students should extend their understanding of the impact of these new systems on how organizations operate. Put another way, student researchers must ask themselves the fundamental question: “How can I improve my understanding of information systems?”

Degree programs in information systems vary, but they all have one widespread characteristic: a prerequisite that students embark on at least one substantial individual project or item of course work. This is a typical requirement for an undergraduate degree and for post-graduate students. Over the past two decades the arrival of fully-integrated Enterprise Resource Planning (ERP) systems has shown itself to be a source of significant business value. Many organizations are looking to streamline and gain more from their existing ERP systems. EIS is an integrated solution to the problem of how to control all major business processes with single software architecture in real time. It is a process of planning and managing all resources and their use throughout the organization.

Aim & Objective: One of the aims of this book is to help students develop their overall perspective of the discipline of information systems. Developing such a perspective is of critical importance, for

without it the subject will always be in danger of fragmenting into isolated islands of partial insight or empty techniques. We have to recognize that the phrase “information systems” is often used in a loose and fuzzy manner, and that there is still much debate and discussion over what exactly the field encompasses and what its theoretical foundations are. The aim of this book is to provide students with a thorough understanding of Enterprise Information Systems (EIS) which introduces them to Enterprise Resource Planning (ERP) systems and their benefits. The book describes the concepts of EIS, key terms as they relate to EIS, gives a basic EIS model, discusses different EIS maturity levels, the transition from Material Requirements Planning to EIS, states the benefits of EIS and the pitfalls of EIS implementations. This book is meant for corporate executives in steering or project execution committees for EIS implementation, vendors, and consultants. The book will provide the reader an understanding of the architecture and technology of an EIS system and give tools to analyze factors that lead to successful requirements analysis, design, and implementation of an Extended EIS Packages in an enterprise. Even those who are already familiar with some aspects of an EIS system and want to acquire a comprehensive view of EIS would benefit from the book. Students will understand the scope of EIS and corporate motivation for implementing EIS; appreciate the challenges associated with implementing such large-scale systems and the dramatic impact these systems have on key business processes. They will learn how to develop work plans for an EIS implementation, gain an understanding of process integration inherent in EIS, and experience the SAP software system through computer-based training materials and hands-on experience.

Pedagogy of the Book: Case discussions, views and experiences shared by users, vendors and academicians expose readers to EIS software, real life issues, further reading, competency review, etc.

Structure of the Book: This book is well suited as an executive guide for anybody who is considering EIS or evaluating EIS systems. The book is designed for students of technical and management universities where EIS has just been introduced and also senior management and executives because it is focused, hits all of the key points with each chapter treated

as a white paper that ends with case studies reinforcing the topic and references. Also, the authors make use of diagrams throughout to demonstrate points.

Unique Selling Proposition: The book could be different from its competitors in the following ways:

- a. It uses Indian and American case studies implemented in industry and academia as EIS systems.
- b. It explains the utility of EIS systems and make users aware of hidden costs.
- c. It covers issues in the form of chapters or subchapters.

The Overall Endeavour of the Book

In the mass-customization of information systems, a need has arisen for high quality analyses. Both the scientific community and professionals will benefit from a book that focuses on this. This book should describe the state-of-the-art, innovative theoretical frameworks, advanced and successful implementations as well as the latest empirical research findings. The main objective is to bridge theory and practice on the one hand and to fill research gaps and answer open questions on the other. It will improve the understanding of the problems that are encountered during the conception of information systems for mass customization. Furthermore, it provides measures to alleviate these problems and simultaneously highlights new directions for future research.

The Target Audience

The target audience consists of professionals and scientists working in the field of computer science and artificial intelligence. In addition, industrial engineers and researchers in business administration with a special focus on information systems and IT Management will find this book an adequate reference that describes current research and presents topics that can be expanded in future. Graduate students in the mentioned areas will find practical applications of some theoretical concepts.

Methodology

Most class sessions will involve lecture and extensive discussion of Enterprise Information Systems based on textbooks, readings and cases. Students will be expected to make substantial contributions to the learning process through participation in class discussion and *participation in electronic discussions*.

Teaching and Learning Approach

A mixture of lectures, exercises, laboratories and case studies can be used to deliver the various topics, some of which will be covered in a problem-based format to enhance the learning objectives. Others will be covered through directed study in order to enhance the students' ability of "learning to learn". Some case studies, largely based on consultancy experience, will be used to integrate these topics and thus demonstrate to students how the various techniques are interrelated and how they apply in real life situations.

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We hope students will be able to use this book some to facilitate their learning.

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