

Preface

The purpose of this book is to provide big-picture strategies and system architectures which evolve an enterprise. The synthesis of about 300 IT technologies is presented in a consistent manner under the form of graphic modeling. To analyze each of these technologies one must read about 300 books, which is a tough task. However, if we look at the library shelves, such an amount of different books on IT applications in an enterprise exists, if not more.

Therefore the book is recommended for those readers who are interested mainly in general solutions of IT in the enterprise. Among such readers one can include:

- Business executives
- Information executives
- IS/CIS/MIS major students of the cup-stone curriculum courses
- MBA students who take a course on IT management
- IT technicians who would like to understand how their specific solutions fit into a bigger-picture solution

The book concept is presented in the following model.

Chapter 1 analyzes paradigm shifts in enterprise management caused by the applications of information technologies (IT). As a result of it, a new set of business rules is defined.

Chapter 2 defines eight evolutionary enterprise configurations triggered by the implementation of advanced applications of IT. This is a very important approach in understanding how to manage the development of IT applications to achieve the right end-solution at a given time.

Chapter 3 portrays five layers of the Enterprise Information Infrastructure (EII), which evolves from islands of automation. To manage a modern enterprise it is necessary to understand how to develop and manage EII, which is composed of hundreds information technologies.

Chapter 4 defines architectures of major application systems within the framework of the enterprise-wide solutions. These architectures identify end-less number of components and their relationships, which control the flow of information (“content”) in decision-making processes of an enterprise.

Chapter 5 describes major solutions that determine so called enterprise electronization and integration. Several emerging standards which support these processes are presented. Also their relationships are provided under the form of a web’s services.

Chapter 6 defines the Internet Ecosystem in terms of its layers and major applications in business. The “dot.com” issue is analyzed and its impact upon the future of the Internet.

Chapter 7 present the major trends in developing IT solutions, among them such ones as design strategies and methodologies and 10 specific developmental approaches. Some future trends of IT developments are sketched.

Chapter 8 depicts issues and solutions on how to manage an IT-driven enterprise. The fundamental rule is to integrate business and system strategies and choose the right strategic applications. A set of management key indicators, based upon a balance scorecard, how to manage such enterprise is provided.

The author is very grateful to anonymous reviewers who provided very important suggestions on how to improve this book.

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The Book Architecture

