# Module (Management)

# Management and Security of e-Business

### e-Business Applications, Architectures, Integration

### MODULE (APPLICATIONS): e-Business Strategies and Applications:

Chapter 1: e-Business - From Strategies to Applications

Chapter 2: e-Business Applications (CRMs, ERPs, eMarkets, SCM, ASPs, Portals)

Chapter 3: From Strategies to Solutions -- A Planning Methodology Chapter 4: IT Infrastructure -- Overview of Enabling Technologies

Chapter 5: Applications State of the Practice, Market, and Art

### MODULE (ARCHITECTURES): Solution Architectures Through Components

Chapter 1: Solution Architecture Overview

Chapter 2: Enterprise Application Architectures -- Component-based Approach

Chapter 3 Enterprise Data Architectures in Web-XML Environments Chapter 4: Implementing Architectures -- Concepts and Examples

Chapter 5: Architectures State of the Practice, Market, and Art

### MODULE (INTEGRATION): Enterprise Application Integration and Migration

Chapter 1: Integration with Existing (Including Legacy) Applications -- An Overview

Chapter 2: Enterprise and Inter-Enterprise Application Integration (EAI/eAI)

Chapter 3: Data Warehouses and Data Mining for Integration

Chapter 4: Migration Strategies and Technologies

Chapter 5: Integration State of the Practice, Market, and Art

### The Enabling IT Infrastructure

### MODULE (PLATFORMS): Platforms for Mobile and EC/EB Applications

Chapter 1: Mobile Computing Platforms -- Mobile Application Servers

Chapter 2: e-Commerce Platforms for C2B Trade-- The Commerce Servers

Chapter 3: B2B Platforms and Standards -- The B2B Servers

Chapter 4: Platforms for Multimedia and Collaboration

Chapter 5: Platforms State of the Practice, Market, and Art

### MODULE (MIDDLEWARE): Application Connectivity Through Middleware

Chapter 1: Middleware Principles and Basic Middleware Services

Chapter 2: Web, XML, Semantic Web, and Web Services

Chapter 3: Distributed Objects: CORBA, J2EE, NET, SOAP, and EJBs

Chapter 4: Enterprise Data and Transaction Management

Chapter 5: Middleware State of the Practice, Market, and Art

### MODULE (NETWORKS): Network Services and Network Architectures

Chapter 1: Principles of Communication Networks

Chapter 2: Network Architectures and Interconnectivity

Chapter 3: Wireless and Broadband Networks -- Next Generation Networks:

Chapter 4: IP-based Networks and the Next Generation Internet

Chapter 5: Networks State of the Practice, Market, and Art

### Background and Management

### MODULE (OVERVIEW); The Big Picture

Chapter 1: e-Business and 3G Distributed Systems

-- From Strategies to Working Solutions

MODULE (EXAMPLES); Case Studies & Examples

Chapter 2: Case Studies and Examples

### MODULE (MANAGEMENT): Management and Security

Chapter 1 e-Business Management in Practice

Chapter 2: Management Platforms for Network and Systems

Chapter 3: Security Management - Approaches and

Technologies

Chapter 4: Security Solutions -- Using Technologies to Secure Systems

Chapter 5: Management State of the Practice, Market, and

### MODULE (TUTORIALS): Tutorials and Detailed **Discussions on Special Topics**

Chapter 1: Network Technologies -- A Tutorial

Chapter 2: Object-Orientation, Java, and UML -- A Tutorial

Chapter 3: Database Technologies and SQL -- A Tutorial Chapter 4: Web Engineering and XML Processing

- A Closer Look

Chapter 5: CORBA -- A Closer Look

## A Technology Briefing Module from

"e-Bsiness and Distributed Systems Handbook"

Amjad Umar, Ph.D. (www.amjadumar.com) January 2003

# MODULE (Management): Management and Security Issues

### Module Overview

IS management is becoming more difficult and more important at the same time in e-business environments. As this pace of technology changes increases, it is tempting to give up and wait for the next wave to come around. But the survival of most organizations in today's increasingly digital economy is dependent on technology — so the technology must be managed properly. The focus of this module is on the management and support aspects of distributed systems with special attention to e-business. First two chapters focus on the management issues. Specifically, the planning, organizing, staffing, and monitoring/control activities in e-business environments are discussed in Chapter 1. The emerging area of "management platforms" is discussed in Chapter 2 to show how technologies themselves can be used to manage other technologies such as networks, databases, and computer systems. The last two chapters concentrate on the vital issue of security. Chapter 3 discusses the security management approaches and introduces the basic cryptography techniques. Chapter 4 concludes this module by showing how to develop security solutions for networks, middleware and applications issues.

# Reader Background Expected

This Module is written for people with basic background in computing. The information contained in the Overview Module is highly recommended as a prerequisite. In addition, the Network, Middleware, and Platform modules provide needed background for the management platform and security chapters (chapters 2, 3, 4).

## Module Case Studies

XYZCorp Case Study: Management Task

The focus of the XYZCorp case study in this module is on the Management Task (Figure 1). The purpose of this task is to develop a management approach which shows how the XYZCorp IT assets will be managed and secured. Specifically, the following projects have been initiated as part of this task:

- 1). Establish an overall management approach. This involves specifying a planning, organizing, staffing, and monitoring/control approach. This project will be discussed at the end of Chapter 1 of this module.
- 2) Choose a management platform that can monitor and control the IT assets (networks, databases, applications, middleware) being used by XYZCorp. This project will be discussed at the end of Chapter 2 of this module.

- 3) Develop a security management approach that can be used to secure the IT assets of XYZCorp. This project will be discussed at the end of Chapter 3 of this module.
- 4) Build a security solution that will actually secure the IT assets based on the management approach developed in project 3. This project will be discussed at the end of Chapter 4 of this module.

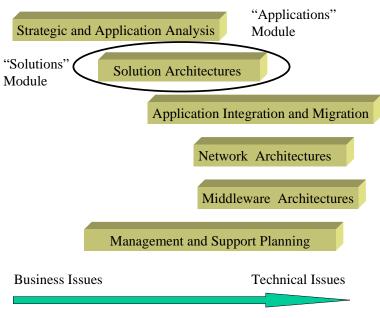


Figure 2: XYZCorp Planning Tasks.

### Additional Case Studies and Examples

Several additional case studies and examples are discussed in the chapters of this module. A number of case studies that are relevant to the topics discussed in this module appear regularly in trade magazines, vendor documents, web sites and books. Chapter 5 of this module gives a sample of relevant case studies and points to numerous sources for additional case studies and examples.

In addition, the following case studies in the "Case Studies and Examples" Chapter of the "Overview" Module can be used to illustrate different aspects of the material in this module:

- Section 2.5 A Financial Marketplace. After reviewing this case study, you can choose a management and security approach for this marketplace
- Section 2.9 A Customer Relationship Management Portal. Can you develop a management and security approach for this system?
- Section 2.12.1 Hewlett Packard's Migration to Client/Server Architecture. This is an interesting "classical" case study about architectures. How would you manage this transition.

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- 2.7 EXAMPLES OF MANAGEMENT PLATFORMS
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