### e-Business Strategies and Applications

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### A Technology Briefing Module from

#### e-Business and Distributing Systems Handbook

From Strategies to Working Solutions

**Amjad Umar, Ph.D.**

(www.amjadumar.com)

January 2003
Module Overview

Demands for flexibility and pressures to respond quickly to local and global market conditions are the typical business drivers for modern enterprises. To succeed, companies need to establish an e-business strategy and then identify the applications to support the strategy -- the main focus of this module. The following chapters of this module introduce you to e-business strategic analysis, discuss the key applications that support the e-business strategies, introduce a systematic methodology that describes how to plan and execute the application (re)engineering efforts at an enterprise level, and give a quick overview of the IT infrastructure that enables these strategies. The module concludes with a review of case studies, commercial products, and trends to reflect state of the practice, market, and art, respectively:

- Chapter 1: e-Business - From Strategies to Applications
- Chapter 2: e-Business Applications (CRMs, ERPs, eMarkets, Supply Chains)
- Chapter 3: From Strategies to Solutions -- A Methodology Pattern
- Chapter 4: Enabling IT Infrastructure -- A Quick Overview
- Chapter 5: Applications State of the Practice, Market, and Art

This module feeds into other modules that concentrate on architecture and integration issues based on emphasis on building new versus dealing with existing applications (see Figure 1).
Reader Background Expected

This module is written for people with minimal background in computing. The information contained in the Overview Module is highly recommended as a prerequisite.

Module Case Studies

XYZCorp Case Study: Strategic and Application Analysis Task

The XYZCorp case study, introduced in the “Overview” Module (Chapter 1), will be used throughout this module to illustrate the key points. The focus in this module is on the Strategic and Application Analysis Task of XYZCorp (Figure 2). Different chapters of this module will deal with different aspects of this task. The purpose of this task is to establish a business strategy and then produce a high level application architecture that will support the business strategies.

Many ideas were presented in an initial management meeting to develop an overall vision. The ideas included a brainstorming session, a company wide reorganization, formation of an infrastructure planning committee, business partnerships, firing several managers (the ones who were not in this meeting, of course!), etc. Although the meeting lasted an afternoon, it was not clear how to proceed. To stay focused on strategic and application issues, Ms. Jones called another brainstorming meeting that identified some concrete ideas and also developed a list of short projects that should be completed before doing anything else. After some discussion, the following projects were initiated to support the Strategic and Application Analysis Task (we will discuss these projects in different chapters as indicated):

**Project 1**) Identify and analyze the overall business strategies for XYZCorp. The focus of this project, described Chapter 1, is to expand on some of the strategic suggestions made in the brainstorming session.
Project 2) Identify the e-business applications that will be needed to support XYZCorp. It is natural to assume that the company will need to build/acquire new EB apps to support strategic goals specified in Project 1. We will do this in Chapter 2.

Project 3) Adopt a methodology for engineering of new applications and re-engineering of existing (mostly legacy) applications for XYZCorp. In other words, how should the corporation approach the issues involved in building new EB applications (identified in Project 2) and establish suitable strategies for dealing with its embedded base of existing applications. We will do this in Chapter 3.

Project 4) Review the IT infrastructure architecture that will support all XYZCorp applications and services. Specifically, is the existing infrastructure suitable to support the enterprise applications needed by the company? We will do this in Chapter 4.

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 subject matter:

Section 2.3 E-commerce/e-business Examples. These examples can be used to examine different aspects of EC/EB applications

Section 2.4 E-commerce - Online Purchasing Examples. These examples can be used to illustrate different aspects of online purchasing at C2B as well as B2B levels

Section 2.5 A Financial Marketplace. This case study is a very good example of emarkets

Section 2.6 City of Seattle Public Utilities Go Wireless. This example can be used for a better understanding of mobile applications.

Section 2.7 Insuring Outsourced Enterprises in e-commerce -- A Methodology. This example can be used to illustrate the impact of outsourcing on insurance industries -- a very interesting angle

Section 2.8 An Integrated Manufacturing System. A good example of how information systems are being integrated in manufacturing environments.

Section 2.9 A Customer Relationship Management Portal. This discussion, although somewhat technical, is a good example of a CRM Portal.
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