CHAPTER OVERVIEW

Based on the framework defined in Chapter III, the fourth chapter discusses the models of information architectures that are used in implementing business computing solutions. In addition to the traditional mainframe-based architecture and most widely used client-server architecture, some recently developed architectures are briefly explained. This chapter aims at locating server configurations within these architectures critical points for ensuring continuous computing and business continuity.

INFORMATION ARCHITECTURE

Most widely used information architectures such as mainframe-based and client-server are explained and the critical points from business continuity perspective are identified. Specific business continuity-related layers of the client-server architecture are identified: client layer, networking layer, server operating platform layer and data storage layer.

Information technologies are implemented in business in several forms of business information systems or enterprise information systems. These systems are designed, developed and implemented by using several approaches and methodologies. No matter which information system methodology is used, business information system is consisted of several information technologies such as: servers, desktop
computers, portable/mobile computing devices, systems software, application software, data communication technologies, computer networks. Information systems employ several types of IT specialists while end-users can be considered as part of information system as well.

All these technologies are used for organizing, processing and managing data, hence, data management subsystem is crucial component as well. Business information systems are implemented today within several forms of enterprise information systems (see Figure 4.1) such as:

- Enterprise resource planning systems (ERP)
- Messaging systems
- Document management systems (DCM)
- Customer relationships management systems (CRM)
- Supply chain management systems (SCM)
- Business intelligence systems (BI)
- Legacy systems, and so forth.

Turban, Rainer, and Potter (2005) defined the notion of “information technology architecture” as “…a high-level map or plan of the information assets in an orga-
Big Data Business Intelligence in Bank Risk Analysis
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