Chapter V

The ERP-Oriented Graduate IT Program

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ABSTRACT

The purpose of this chapter is to present a revised graduate CIS concentration in the MBA program at Western Michigan University’s Haworth College of Business. The new MBA-CIS concentration has been designed with a strong focus on ERP systems management, and it is proposed in response to industrial needs and to meet MBA students’ interests. The existing MBA-CIS concentration was developed in mid-1990s on the premise that future IT professionals must have mastery in technical IT skills in managing computing information resources. The recent trend in IT outsourcing triggers a new question — “What kind of IT training and education should be delivered to Americans to keep them employable in the United States?” A new premise resulted from the present environment changes that require our graduate students to have balanced knowledge in both IT skills and business processes (i.e., knowing how to apply IT to the development of business applications that support integrated business processes and enterprise operations). The authors hope that this chapter will contribute to the new issues facing the Academia in the 21st century in respect to IT education.
THE NEED FOR RE-ENGINEERING OF THE MBA-CIS CONCENTRATION

The existing MBA-CIS concentration was developed in mid-1990s on the premise that future IT professionals must have mastery in technical IT skills in managing computing information resources. This curriculum orientation was quite popular for international students who are often young with strong technical skills but lack extensive business experience. Therefore, courses were often designed to target students with interests more in technology itself than in those business processes that employ technologies. Similarly, faculty members who were assigned to teach graduate-level CIS courses have focused more on the technology per se than its functional role in business processes.

In brief, the major factors that have impacted our MBA-CIS Concentration are:

1. After the 9-11 terrorist attack in 2001, the course enrollment has declined more than 50% because of a big drop in international students due to difficulties in getting student visas.
2. For the sake of cost reductions, IT outsourcing has been increasingly adopted by big corporations since 2003. By and large, more technical routine jobs such as application programming and module development have been outsourced offshore. The IT triggers a new question — “What kind of IT training and education will keep Americans employable in the United States?”
3. The current corporate IT investments highlight the importance of the deployment and/or modifications of existing enterprise-wide ERP (enterprise resource planning), CIM (computer integrated manufacturing), and many others. A few prominent of such enterprise systems include SAP, Oracle (acquired both Peoplesoft and J.D. Edwards), and Microsoft Great Plains.

The aforementioned factors lay a new premise for our MBA-CIS education that should provide our graduate students with a balanced knowledge and skills in:

> how to develop enterprise-wide business applications with a strong focus more on the integrated business processes than on specialized facet of IT skills.

Simply put, an IT employee for any corporations today must stay closer to the business process (that uses IT) than to the technical knowledge or use of IT (e.g., computer programming, Web design, etc.). A business IT professional should be capable in operating an IT-driven extended enterprise, where ERP systems are at the center of the enterprise as shown in Figure 1. Process management is not another form of automation, a new killer-application or a fashionable new management theory. Process management discovers what you do and then manages the lifecycle of improvement and optimization, in a way that translates directly to operation. Whether you wish to adopt industry best practices for efficiency or pursue competitive differentiation, you will need process management. Based on a solid mathematical foundation, the BPM breakthrough is for business people. Designed top down in accordance with a company’s strategy, business processes can now be unhindered by the constraints of existing IT systems (Smith & Fingar, 2002). The business process management approach can be customized in such a manner that, despite Car’s (2004) claim that
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