Chapter IX

Theoretical Foundations for Enterprise Systems
Technology Collaborations: An Adaptive Structuration Framework

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Industry/academic collaboration, involving the utilization of advanced information technologies (AITs), is an expanding phenomenon involving a substantial commitment of resources. This chapter presents a comprehensive framework for studying this phenomenon by extending adaptive structurization theory at the inter-institutional level. We suggest propositions, derived from the framework, to advance further research and to inform decision-making by stakeholders in industry/academic collaborations.

THE EMERGENCE OF TECHNOLOGY COLLABORATIONS

Alfred P. Sloan, Jr., former chairperson of General Motors once stated:

*When the annals of our time are recorded, it will most likely be found that the two greatest contributions of our time have been the U.S. University and the U.S. Corporation: both mighty*
forces, both uniquely American. If these two forces can go forward together in understanding and cooperation, there is perhaps no problem beyond their joint power for resolution. If, however, they choose to go their separate ways, there is no solution of any problem affecting either that is likely to be long lasting (Slaughter, 1990, p.9).

Consistent with Sloan, many educators and industry leaders believe industry/academic collaboration can initiate transformations by providing opportunities and resources not otherwise attainable (AAA Changing Environment Committee, 1998; Beckman et al., 1997a; Mead et al., 1999a; Powell et al., 1997; Sikkel et al., 1999; Wohlin & Regnell, 1999). Whether one agrees with these sentiments or supports the position of complete academic independence from industry, the existence of industry-academic collaborations is a true and existing social structure with cultural roots that has taken on a new dimension in a technological age. Our purpose is neither to advocate nor reject these alliances, but to acknowledge the technological dimensions of this phenomenon for purposes of study and provide perspectives for decision-making and action for those who lead these relationships and whose lives they may affect.

Collaboration can be defined as “a joint effort wherein each party provides specific products and services toward a common goal” (Beckman et al., 1997b, p.50). Collaborations may be in the form of strategic alliances, collaborations or joint ventures. Industry/academic collaborations present complex challenges as institutions with diverse missions, goals and cultures join together in various levels of formality. The range of formality in industry/academic collaborations may extend from informal guest speakers to formal joint venture graduate programs (Mead et al., 1999) to product development research. The scope of this chapter considers industry/academic collaborations involving any exchange of advanced information technology (AIT) resources between academia and industry for the purpose of deriving joint outcomes. In these instances, the AIT may be viewed as a participating “entity” in shaping the nature and direction of the collaboration.

In exploring collaborations, curriculum studies provide indications that industry needs, as well as student needs, are actualized in various components of higher education programs. Examples of industrial involvement in the development or emergence of programs and curricula can be found in the fields of accounting and management information systems as indicated below:

- The Report of the Changing Environment Committee of the American Accounting Association mentions both industry partnerships/
E-Government and Transformation of Service Delivery in Malaysia
www.igi-global.com/article/e-government-and-transformation-of-service-delivery-in-malaysia/122571?camid=4v1a