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ASSESSING IT COMPETENCE IN BUSINESS MANAGERS

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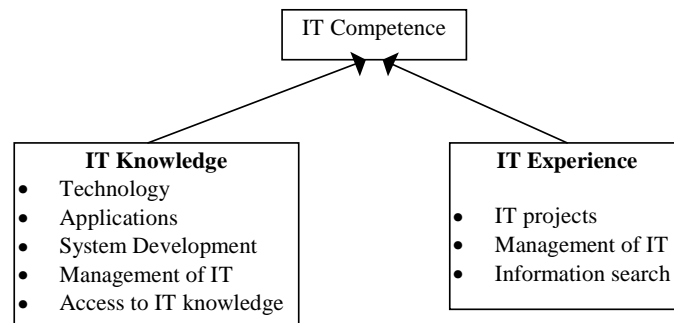
This work is motivated by the recognized need for business managers to get involved in information technology (IT) activities and IT management (Henderson 1990; Keen 1991; Rockart 1988, Sambamurthy and Zmud 1994). It attempts to understand and measure the concept of *IT competence in business managers*. The proposed perspective on the concept of competence is related to the two types of human knowledge identified by Polanyi (1966): *tacit* and *explicit*. Explicit knowledge refers to knowledge that is transmittable in formal, systematic language, while tacit knowledge is deeply rooted in action, commitment, and involvement of a specific context (Nonaka 1994). Thus, *being* competent refers to both knowing and doing—using that knowledge. Following this perspective, IT competence in business managers is defined as *a set of IT-related knowledge and experience that a business manager develops over time which enables him/her to contribute effectively to the deployment of IT in the organization*. The purpose of this research is to investigate what IT-related knowledge and experience is required in business managers to be IT competent.

Based on the MBA teaching model proposed by Silver et al. (1995), and on the concept of combinative capacity (Kogut and Zander 1992), five areas of knowledge that a managers should possess are identified: (1) technology, (2) applications, (3) system development, (4) management of IT, and (5) access to IT knowledge.

In addition to possessing IT knowledge, business managers increase their level of competence with hands-on experiences in activities both at the project level and in the management of IT. The life cycle model provides a typology of the activities in which managers may be involved at the project level: acquisition, development, implementation, review, and diffusion of IT. At the management of IT level, activities are concerned with the creation of an IT vision, strategies and policies, budget, priorities of development, and communication mechanisms between IT and business people. To enhance their level of experience, managers may also engage in information search activities, which is utilizing their access to IT knowledge and leveraging other's knowledge. Our model of the IT competence construct and its dimensions are shown below.

The nature of this research is exploratory and aims at increasing our understanding of the concept of IT competence and at developing an instrument to assess its level in business managers. In addition to defining the IT competence construct and operationalizing it, the research will investigate its influence at the individual level. It is expected that IT competent business managers will be more likely to hold positive attitudes toward proactive IT behaviors, such as taking on IT leadership and initiating IT projects within their domain of business. According to the Theory of Reasoned Action (Fishbein and Ajzen 1975), these favorable attitudes will influence managers' intentions to behave in a proactive way in regard to IT. IT competence in business managers may also help in building the partnership with IS managers. Background characteristics (age, functional areas, other career experience, and level of education) are identified as antecedents influencing the level of IT competence in managers.

The instrument developed to measure competence and the preliminary results about the influence and antecedents of IT competence will be presented at the conference.



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