

# CRITICAL SUCCESS FACTORS FOR ADOPTION OF INTEGRATED INFORMATION SYSTEMS IN HIGHER EDUCATION INSTITUTIONS – A META-ANALYSIS

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## ABSTRACT

Integrated information systems continuously develop into a strategic instrument for higher education institutions. In contrast to private companies, specific characteristics of higher education institutions in regards to their organizational structure as well as their management and operations require a tailored project management approach. There is need for thorough research and practical recommendations for implementation of integrated information systems in higher education institutions. This paper provides a systematic meta-analysis and a state of the art overview of critical success factors for selection and implementation of integrated information systems based on the characteristic of the higher education sector. A qualitative content analysis is applied to receive a comprehensive list of critical success factors for higher education institutions. The mostly named critical success factors are stakeholder participation, business process reengineering and communication which align well with the peculiarities of the higher education sector.

## Keywords

Project management, critical success factors, CSF, state of the art analysis, higher education institutions, university, ERP systems, campus management system, CMS, integrated information system

## INTRODUCTION

Challenges such as an increase in the number of students, intensified competition between institutions, and government pressure to improve operational efficiency (Allen et al., 2002; Rabaa'i, 2009) forces higher education institutions (HEIs) to adapt their strategy and their internal business processes. Thus, integrated information systems (IIS) continue to develop into a strategic instrument for higher education institutions (Haneke, 2001), as clear structures and process integration become their immediate focus. Integrated information systems in the higher education sector include functionalities of Enterprise Resource Planning (ERP) and Campus Management Systems (CMS). The latter are defined as cross-functional, modularized standard software which is designed to widely support administrative and service processes in HEIs (Alt and Auth, 2010) covering the entire academic cycle from student data and credit management through course and lecture room management (Jannek et al., 2009; Sprenger et al., 2010). In the following, this type of systems will be referred to as IIS for HEIs and will be compared to private sector ERP systems.

HEIs are generally more resistant to change than private companies due to the loosely coupled and independently operating academic and administrative units (Gates, 2004) as well as a scattered authority structure (Rabaa'i, 2009). This peculiarity makes it even more complicated for technological advancements to find their way into the daily business of higher education service provision. The fragmented organizational and technical landscape with the decentralized faculties and institutes leads to individual agendas, processes and information systems. Heiskanen et al. (2000) argue that HEIs can be differentiated from