Critical Success Factors for Implementing CASE at a Selection of Companies in South Africa

T. M. ADDISON.

Department of Information Systems
University of the Witwatersrand, Private Bag 3, Wits, 2050
E-Mail: 035ADDIS@MENTOR.EDCM.WITS.AC.Z4
Facsimile: (011) 339-5760
and

S. HAMERSMA

Graduate School of Business Leadership, University of South Africa, PO Box 392, Pretoria, 0001 E-Mail: HAMERSA@ALPHA.UNISA.AC.ZA Facsimile: (011) 652-0299

Abstract: CASE, or Computer Assisted Software Engineering, provides the potential for a future in which computer programs will be generated automatically from business rules, but many potential buyers have adopted a wait and see attitude.

This study explored some of the issues which will need to be addressed by companies embarking on an Upper CASE implementation programme.

Thirteen South African companies who had implemented Upper CASE were selected on the basis of their high profile reputation in the IT field. Of these, some were known to have been successful, and others less successful, in their implementation.

The research hypothesised various critical success factors regarding company commitment and determination; communication, extent of participative management and acceptance of change; and methodology and training issues.

Findings of the research confirmed most of the minor hypotheses. In the view of the researcher, the major issue overlooked by a number of unsuccessful companies was the importance of involving developers in the CASE acquisition process. Another important finding of the research suggests that companies which are not in an integrated CASE environment will only be at best partially successful, as the major benefits are only achieved if there is a single, common, fully functional repository.

Keywords: CSF, Critical success factor, Upper CASE, Integrated CASE.

Computing Review Categories: D.2.2, K.6.1