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School of Information Systems  
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**E-Mentoring and Information Systems Effectiveness Models:  
a useful nexus for evaluation in the small business context.**

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## **Abstract**

While information communications technology provides new opportunities for supporting mentoring, there is a need to explore how effectively these potential benefits are being realised.

The evaluation of the effectiveness of structured e-mentoring in the small business context is problematic because it is contingent upon a multitude of contextual factors and characterised by a range of research difficulties. A review of 31 effectiveness studies across the mentoring, e-mentoring and small business fields undertaken as part of this study provided a basis for systematically determining the nature of these research challenges. They included the heterogeneity and divergent pedagogical needs of individuals, the complexity of the mentoring phenomenon, measurement difficulties, the paradigm location of evaluation models, inherent problems with evaluation methodologies and data quality, and the almost contradictory imperatives to evaluate individualised outcomes while exploring commonalities and patterns in effectiveness.

To extend understanding and knowledge in the field of e-mentoring for small business, it will be necessary to develop empirically-based theories of effective e-mentoring systems.

As a means of contributing to the generation and refinement of theory, this study proposed a framework as a potential solution to some of the research challenges and contextual contingencies identified. The framework integrates the DeLone and McLean model of Information Systems Success (1992) which is based on the principle that Information Systems success is best evaluated by considering the dimensions of effectiveness - System quality, Information quality, Use, User satisfaction and Impact - together as a system rather than in isolation. The Rickard model extends this principle to structured e-mentoring, and adapts and redefines DeLone and McLean's Information Systems dimensions for the mentoring context.

The study investigated the framework as a means of consolidating and classifying the metrics used in the informing disciplinary areas, as a reference tool for designing qualitative and quantitative effectiveness measurement instruments, for selecting situationally-responsive research strategies, and most critically, for describing, classifying and interpreting variability in effectiveness outcomes. The framework was applied to evaluate the effectiveness of an Australian e-mentoring program targeted at self-employed professional contractors called Mentors Online. This examination of actual practice provided a basis for proposing a set of

determinants of e-mentoring effectiveness. This work in turn provided a basis for understanding how the potential benefits of structured e-mentoring are being realised.

Creating a nexus between structured e-mentoring effectiveness evaluation and DeLone and McLean's Information Systems success model was shown to provide a justified, sufficient and useful basis for evaluating structured e-mentoring effectiveness, and therefore a means of contributing to the body of international literature on e-mentoring effectiveness.

## **Student declaration - statement of originality**

I, Kim Rickard, declare that the PhD thesis entitled “E-Mentoring and Information Systems Effectiveness Models: a useful nexus for evaluation in the small business context?” is no more than 100,000 words in length, exclusive of tables, figures, appendices, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work.

A handwritten signature in black ink, appearing to read 'Kim Rickard', written over a light blue horizontal line.

Signed:

Kim Rickard  
PhD candidate  
October 2007

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