

Information Systems Decision Making: Factors Affecting Decision Makers and Outcomes

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Abstract

Organisations are increasingly reliant on effective information systems (IS) yet little is known about the information and influences that contribute to their selection. Decision makers play an important role in the evaluation, acquisition and implementation of information systems in organisations. Their role during the pre-implementation phase of information systems projects is critical, yet little is known about how and why these decisions are made. This thesis explores the influences on these decisions and reports their effects. The aim of this research is to increase the understanding of what occurs during decision making in the critical pre-implementation phase.

A cross-disciplinary approach has been employed to develop a research framework informed by literature from information systems, innovation and adoption theory, management decision making and organisational decision making. A qualitative research method was used to develop four exploratory case studies. Research was conducted in private and government organisations that had implemented large information systems. An interpretive hermeneutic text-based analysis technique was used in a cross-case analysis in order to build theory and address the research questions.

Fifty-six informational and contextual factors were identified in this research as having effects on information systems pre-implementation decision making. These factors fall into eight broad thematic factor groups: confidence, decision process, opinions, option attributes, organisation, perceptions, politics and vendor attributes. This thesis concludes that there are linkages between decision factors and decision outcomes. It is argued that to achieve positive decision outcomes from information systems pre-implementation decisions, conditions for intra- and inter-organisational alignment must exist. It is also argued that information systems pre-implementation decision outcomes alter intra- and inter-organisational alignment conditions and affect future decisions.

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Dedication

To Garry, Ros and Simon: the most important people in my life.

and

To Pascal, Portia and Tabitha: the feline equivalents!

Acknowledgements

'In life's school of wars, that which does not kill me, makes me stronger.'

Friedrich Nietzsche

When I began writing these acknowledgements, I thought that the task would be relatively straight forward. It was something I had been really looking forward to as I had day dreamed scripting the narrative in my mind prior to completion. The intent was that once the thesis was submitted and (hopefully) passed, I would commit this wonderful prose to paper!

However, the reality of writing this acknowledgement has been somewhat bitter-sweet. There are many individuals who shaped the way I approached my education, my choice of profession and ultimately fostered the desire to undertake this research. However, it was never my intent to thank all of these people by name; there were simply too many, and I ran the very real risk of offence by omission. However, the very act of writing this reminded me of these individuals – some of whom are in my distant past or are now deceased.

I have been reminded how privileged I have been throughout my life to be surrounded by people who believed that the pursuit of knowledge and asking 'why' was important. I have been reminded of all the people who believed in me when I did not necessarily have belief in myself. And I have been reminded of those who have advised, mentored and inspired me. While I approach these memories with fondness, there is also an element of sadness that some of these people will never know how elemental they were in producing this work.

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Kieren Jamieson

Declaration

The work presented in this thesis is, to the best of my knowledge and belief, original and my own work, except as acknowledged in the text. The material has not been presented, either in whole or in part, for a degree at this or any other university.

Kieren Jamieson

Statement of prior publication

Parts of this work have been published, or accepted for publication, in the following papers:

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