EDITORIAL FOR SPECIAL ISSUE OF AJIS ON GREEN IT/IS (SUSTAINABLE COMPUTING)

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We are pleased to present this AJIS Special issue on Green IT/IS (Sustainable Computing). There are five papers published in this special issue of the AJIS which reflect the diversity of this emerging and important area of research in Information Systems. Environmental sustainability is one of if not the most important challenge facing organisations and society in the 21st century. Information systems and information technology have a major role to play in both reducing its environmental impact and providing the systems and technological innovation to reduce the environmental impact of organisations. Currently there is a lack of rigorous empirical studies which are theory and evidence based to provide a sound basis for understanding IT green best practices and how these can be best adopted in organisations. This special issue of the AJIS contributes to this current gap in the knowledge concerning green IS and IT with five empirical research papers which examined five different aspects of green IS and IT.

The first paper - How do Australian Small and Medium Enterprises Communicate their Environmental Improvement Activities Online? This research paper investigated how Australian SMEs use their corporate web sites to communicate their environmental improvement as corporate social responsibilities activities. A number of key themes were identified regarding how SMEs are communicating their environmental improvement activities. These themes were used to adapt the traditional 4Ps of marketing framework and provide a mechanism for more effective online communication of environmental activities by SMEs.

The second paper - An Institutional Perspective on the Adoption of Green IS and IT. This research paper examined how institutional pressures affect the adoption of green IS and IT across organisations. A natural resource based perspective was used to examine green IT and IS practices with a strategic foci on pollution prevention, product stewardship and sustainable development considering separate roles played by IT (a problem) and IS (a solution). This conceptual model was validated and tested using PLS. The major findings from this study show that mimetic and coercive pressures significantly drive green IS and IT. Outcome-based imitation and imposition-based coercion represent major institutional processes in green IS/IT adoption. The results also suggest that a complementary relationship between mimetic and coercive pressures exists. Such interaction significantly motivates the green IS and IT adoption focusing on product stewardship. This study concludes that institutional theory provides a means for understanding how eco-goals of organisations including green IS and IT can be adopted.

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The third paper - Impact of Pressure For Environmental Sustainability on Grid Assimilation – Empirical Results from the Financial Services Industry. This research paper examines to what extent grid technology is capable of reducing the environmental impact of IT in the financial services sector. Major findings of this study were grid technology is capable of reducing the environmental impact of IT and pressure for environmental sustainability as well as institutional forces impacting on the intention of organisations to use grid technology to reduce energy consumption of IT.

The four paper - Examining the contribution of Green IT to the objectives of IT departments: Empirical Evidence from German Enterprises. This research paper examined the contribution of Green IT activities to the organisational objectives of IT departments. The major findings of this study indicate that green IT contributes positively to the efficient internal operations, reputational management and market competitiveness of organisations. Reputational management plays a major role for green IT engagement. The findings provide CIOs, IT managers and environmental officers with new insights into how to enable the systematic measurement of green IT programs in organisations.

The fifth and final paper published in this special issue of the AJIS - **The Role of IT Service Management in Green IT.** This research paper investigated the relationship between IT service management and green IT. The ITIL framework was evaluated in depth to determine what level of guidance regarding green IT is provided in this best practice IT service management standard. The analysis of the ITIL books clearly shows that ITIL provides limited guidance on how to adopt and manage green IT programs in an organisation even though Green IT and ITSM share common goals such as operational efficiency and metric based improvement. A survey of IT service managers across Australia was conducted to gauge the level of green IT awareness and adoption in organisations practicing IT service management. The major findings of the survey were that most IT service managers have implemented a green IT policy, and were aware of the importance of controlling IT waste disposal and improving energy efficiency. This paper concludes that CIOs, IT service managers and ITIL authors need to continue to raise awareness of green IT, and that green IT best practice is still evolving and needs to be clearly distilled and articulated in ITIL publications.

There was also another paper published as a general research article for this volume and issue of the AJIS - Examining client perceptions of partnership quality and the relationships between its dimensions in an IT outsourcing relationship. This research paper examined the multidimensionality and interrelationships of partnership quality in IT outsourcing relationships using Partial Least Squares. The findings show that inter-organisational trust, shared business understanding and to a lesser extent functional and dysfunctional conflict between the client organisation and the IT outsourcing relationship is the mutual sharing of the risks and benefits. Commitment is confirmed as a multidimensional construct of behaviour and temporal/continuance commitment but is not is influenced by the other dimensions of partnership quality. Trust and shared business understanding are the key drivers in the IT outsourcing relationship ensuring that the sharing of risks and benefits are realised and conflict is minimised leading to a high quality and ultimately successful partnership between the client organisation and the outsourcing vendor. Furthermore behavioural commitment to the contractual obligations of an IT outsourcing relationship sustains an ongoing temporal commitment to the partnership between the client organisation and the outsourcing vendor.

Our sincere thanks to AAIS and ACPHIS for the help and support that they have provided for this issue. We would also like to acknowledge the contribution of the reviewers for this special issue of the AJIS without their efforts this special issue would not be possible. In particular we would like to mention Jon Heales for the great support he providing getting this special issue to publication. We also like to thank Acklesh Prasad for his dedicated work on the copyedit and journal issue administration.

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