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December 2002

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Recommended Citation

Huang, Wayne; D'Ambra, John; and Bhalla, Vikrant, "KEY FACTORS INFLUENCING THE ADOPTION OF E-GOVERNMENT IN AUSTRALIAN PUBLIC SECTORS" (2002). *AMCIS 2002 Proceedings*. 84.
<http://aisel.aisnet.org/amcis2002/84>

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KEY FACTORS INFLUENCING THE ADOPTION OF E-GOVERNMENT IN AUSTRALIAN PUBLIC SECTORS

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Abstract

E-Government is a relatively new research area. While many countries' governments have invested heavily in e-Government projects in recent years, relatively little has been known about what are the key factors influencing e-Government adoption in public sectors. Although there is a rich research literature on IT adoption in private commercial organizations, the key factors influencing IT adoption in private organizations may not be directly extended to the context of public organizations due to some key differences between private organizations and public organizations. This study intends to explore these important issues through case study in four Australian organizations that have had experience in implementing e-Government projects in public sectors. The result findings may provide some clues for governments to implement e-Government projects more effectively and successfully.

E-Government has a potential to revolutionize ways and norms that government agencies work and function, which has gained its significant development momentum in the last few years (<http://www.ezgov.com/downloads/revolution.pdf>, accessed date: March 12, 2002). ezGov.com, the first software company specialized in e-Government technologies and services in the world, has already had dozens of government agencies as their clients over the last few years. Some countries such as the USA, Australia, the UK, Singapore, and Canada, have become early leaders in the march toward e-Government. The Australian government in its "Government Online Strategy" (Government Online 2000) required each government agency to adopt a thorough and systematic approach to place its information and services online by 2001. Millions of dollars have been invested in e-Government by many governments around the world in recent years.

However, relatively little has been known about the adoption of e-Government in public sectors. If public sectors were not ready for the adoption and usage of e-Government, the millions of investment in e-Government would be simply wasted. Hence, e-Government adoption in public sectors is an important research issue that has been inadequately studied in the research literature. The current study intends to explore this research issue by using case study to examine key factors influencing e-Government adoption in Australian public sectors.

Research on e-Government has just started no long ago and even the consensus of the definition of e-Government has not been reached so far. According to the IBM e-Government project, e-Government generally consists of six main components: E-ACCESS, E-PROVISION, E-DELIVERY, E-POLICY, E-COMMUNITY, and E-DEMOCRACY (IBM 2000). Because relatively little has been known about e-Government adoption in public sectors, prior research on IT adoption in private commercial organizations becomes relevant to the current research.

A comprehensive literature review of IT adoption in private commercial organizations indicates that the two theories, Theory of Reasoned Action (TRA) (e.g., Fishbein and Ajzen 1975) and Technology Acceptance Model (TAM) (e.g., Davis, Bagozzi and Warshaw 1989), have been dominant in the field for the last two decades. TAM is actually drawn upon the TRA and its two main constructs in the model, Perceived Usefulness (PU) and Perceived Ease of Use (PEOU), have been validated to be reliable predictors of IT adoption behaviors in private commercial organizations by numerous studies over the past two decades (e.g., Adams, Nelson and Todd 1992; Hendrickson, Gloffield and Cronan 1994; Keil, Beranek and Konsynski 1995; Lederer et al. 2000; Mathieson 1991; Rogers 1983; Yoo 1998).

On the other hand, key differences existing between private commercial organizations and public organizations/sectors may result in different adoption behaviors of e-Government in public sectors. Private commercial organizations are ultimately motivated by maximizing profit whereas public organizations/sectors are not. In fact, e-Government is designed to provide more cost effective and efficient governmental services to citizens. Further, other differences between private commercial organizations and public organizations/sectors such as organization structure, organizational culture, and social norms, may also result in e-Government adoption in public organizations/sectors being different from that in private commercial organizations. Therefore, case study was used to explore possible different factors influencing e-Government adoption in public sectors in this research.

Specifically, three Australian government agencies and one private company specializing in e-Government solution were chosen for the case study: Office of Information Technology (OIT), New South Wales State; Road and Traffic Authority of new South Wales State (RTA); Sydney Water, Australia; and IBM Australia, Government Programs.

Semi-structured questions were designed to explore e-Government adoption in Australian public sectors. Questions include: What is your definition of e-Government? Why do you think that e-Government is important to Australia? How are you involved in e-Government project? What are key differences between private commercial organizations and public sectors? How do those differences influence e-Government adoption in Australian public sectors? What do you think are key factors influencing e-Government adoption in Australian public sectors?

All the initial interviews with the four organizations resulted in positive feedback to the implementation of e-Government in Australian public sectors. Everyone interviewed had a different definition of e-Government but they all believed that e-Government characterized new processes that would revolutionize traditional governments. E-Government means improved service quality, a more accessible and better refined government. Interviewees also gave their own views on key factors influencing e-Government adoption in public sectors. To sum up, the key factors that were generally accepted by all interviewees in the four organizations were: PU, PEOU, accessibility (e.g., 24/7 accessible and fast and easy to access), facilitating conditions (including both technological conditions to access e-Government websites as well as the support, helpdesk, and service response/delivery provided by e-Government), and perceived attractive value (defined as the degree to which an individual is attracted by an e-Government website, which is vital to attract the individual to come back to the website in the future).

Our initial research findings from the case study of the four Australian organizations showed that e-Government adoption in public organizations/sectors might be different from the one in private commercial organizations. As a result, the dominant theory TAM should be at least extended before it could be used to study IT adoption in public sectors. Deeper and more detailed interviews will be conducted to explore interactions between the initially identified key factors influencing e-Government adoption in public sectors. Based on the case study, a quantitative research methodology will be used to validate the identified key factors through survey and statistical analysis.

References

- Adams, D. A.; R. R. Nelson and P. A. Todd, "Perceived Usefulness, Ease of Use, and Usage of Information Technology: A Replication," *MIS Quarterly* (6:2), 1992, pp. 227-247.
- Davis, F. D.; R. P. Bagozzi and P. R. Warshaw, "User Acceptance of Computer Technology: A Comparison of Two Theoretical Models," *Management Science* (35:8), 1989, pp. 982-1003.
- Fishbein, M.; and I. Ajzen, *Belief, Attitude, Intention and Behavior: An Introduction to Research and Theory*, Addison-Wesley, Reading, MA, 1975.
- Government Online, The Commonwealth Government's Strategy, April 2000.
- Hendrickson, A. R.; K. Gloffield, and T. P. Cronan, "On the Repeated Test-Retest Reliability of the End-User Computing Satisfaction Instrument: A Comment," *Decision Sciences* (25:4), 1994, pp. 655-667.
- IBM 2000, "eGovernment: Making it Work," White paper.

- Keil, M.; P. M. Beranek; and B. R. Konsynski, "Usefulness and Ease of Use: Field Study Evidence Regarding Task Considerations," *Decision Support Systems* (13:1), 1995, pp. 75-91.
- Lederer, Albert L.; Donna J. Maupin; Mark P. Sena; and Youlong Zhuang, "The Technology Acceptance Model and the World Wide Web," *Decision Support Systems* (29), 2000.
- Mathieson, K. "Predicting User Intentions: Comparing Technology Acceptance Model with the Theory of Planned Behavior," *Information Systems Research* (23), 1991, pp. 173-191.
- Rogers, E. M. *Diffusion of Innovations*, The Free Press, New York, 1983.
- Yoo, Youngjin. "Predicting Groupware Usage," *Proceedings of the 31st Hawaii International Conference on System Sciences* (HICSS'98), IEEE Computer Society Press, Los Alamitos, CA, 1998.