2003

Transacting with Citizens: Australian Government Policy, Strategy and Implementation of Online Tax Lodgement

Jeff Chamberlain
Deakin University, jeffc@deakin.edu.au

Tanya Castleman
Deakin University, tanyac@deakin.edu.au

Transacting with citizens: Australian government policy, strategy and implementation of online tax lodgement

Jeff Chamberlain
School of Information Systems
Deakin University
Melbourne, Victoria 3125
jeffc@deakin.edu.au

Tanya Castleman
School of Information Systems
Deakin University
Melbourne, Victoria 3125
tanyac@deakin.edu.au

Abstract
Many governments have shown leadership in encouraging their citizenry to conduct transactions on-line. The policies that underpin these initiatives refer to a blend of civic benefits and efficiency goals. They combine the rhetoric of customer service with social shaping through 'government as model user' and procedures that require online activities. Many initiatives are described as 'electronic service delivery', terms that indicate an intention to provide much more than an additional channel for government interaction with citizens. Australia, as an innovator in eGovernment is a good example of this approach and its national government has specified policy goals for its online strategy. In this paper we examine the case of one Australian online delivery initiative, electronic tax lodgement (e-tax) and consider how well that initiative has met the policy goals of the government. Combining insights from Rogers' Diffusion of Innovation theory and political analysis, we outline potential difficulties that governments face in implementing ESD initiatives. Our conclusion from this case study is that the provision of good technology is only a small part of the ESD challenge. It shows how success of an ESD implementation may yield contradictory outcomes in terms of overall eGovernment strategies. This case highlights the need for long-term implementation plans and integration of initiatives with broader government strategy.

Keywords
eGovernment, Electronic Service Delivery, Government On-line, Electronic Tax Lodgement

1.   Introduction

As governments move online and promote electronic service delivery (ESD), most commentary has focused on what we might term the 'Big Politics' issues. These issues include service access (Lievrouw, 2000), privacy and surveillance (Castells, 2001), social movements (Smith and Smythe, 2001), voting and democratic decision-making (Wilhelm, 2000), open government (Webster, 1995) and the 'Digital Divide' (Norris, 2001). There are also a number of issues that more properly 'small politics' issues and incorporate the routine and unglamorous dealings that citizens have with various levels of government. These routine activities which form the bulk of citizens' interactions with their governments include applications for permits and licenses, registrations, payments, information requests and administration of the host of activities that governments document, regulate and coordinate. These functions of government have received little attention beyond discussions of the technical and financial issues that attend their introduction and dissemination. However, we recognise that technologies are not neutral either in their development or their deployment and that, to borrow from Langdon Winner's famous phrase 'artifacts do have politics' (Winner, 1986; Kling, 2000). The delivery of web business is not so much about technology as it is about new ways of organising and thinking (Matthews, 2000). We need to consider critically the implications of the shift of government activities online and their management via government ESD. Does the change in policy and practice to replace over-the-counter and postal interactions between governments and citizens in favour of on-line delivery have any consequences for civic and political life and, if so, what are these implications?

The purpose of this paper is to identify some of the issues that ESD raises for governments in their relationships with their citizens. This *may* simply be a minor issue if the change in channels for these transactions follows the diffusion of computers and internet access through the population. On the other hand, it may have the potential, over time, to change the government-citizen relationship in ways we cannot yet fully appreciate. The last decade has seen intense involvement in on-line service provision and other forms of eGovernment activity including ESD by many government bodies (NOIE, 2000) but we do not have a clear measure of whether this empowers all of the electorate or only some of it. There is no definitive measure of whether this invigorates government or whether this trend can weaken aspects of government performance. Governments are struggling to understand how their initiatives to use the internet for communication and transacting with citizens can achieve the desired outcomes and where the pitfalls in strategy and implementation lie.

The case study reported here illustrates both the benefits and the disappointments of one ESD initiative. It reveals the tensions between competing principles of eGovernment and the implications that these policy assumptions may have for the practical implementation of programs to move government activities online.

2.   Serving and Shaping the Online Citizen: ESD and Government Policy

Many writers extol the virtues eGovernment, arguing that the prime benefits of government electronic business include information dissemination (client service information and support) and the reduction in dissemination costs by providing electronic versions of documents. Other benefits have also been identified such as:

▪   Lower costs from fewer customer enquiries by telephone, mail and front desk visits

- improved public relations
- on-line procurement which saves on costs, derived through competitive bidding, aggregated buying power and streamlined purchasing processes
- better citizen access to public records
- reduction in the need for public servants to key paper forms
- greatly enhanced data analysis opportunities
- advertising opportunities are enhanced (Public Management, 2000)

It is acknowledged that these trends will be accompanied by a rise in the on-line service delivery expectations of citizens (Carberry, 2000) and that people's perceptions of their respective governments could fundamentally alter following implementation of fast and convenient, customer focused, web enabled services to the extent that their countries become more attractive locations in which to reside and work (Public Management, 2000; Symonds, 2000; *The Economist*, 2000). The bulk of this discussion is underpinned by a discourse of 'citizen as customer'. In this picture, the citizens can use internet technology (now 24 x 7, much enriched and easier to use) to 'pull' the services they need conveniently rather than 'pushed' by government requirements. However, the apparently seamless rhetoric of benefit doesn't acknowledge that there may be conflicts between efficiency and service (Chamberlain and Castleman, 2001; 2002). The multiple agendas of governments must still be balanced. These goals all fall within the 'citizen as consumer' model of eGovernment.
Another strand in the rhetoric of ESD provides a counterpoint to the principle of the citizen customer. These principles see governments taking the lead in moving online, shaping their constituents' behaviour to transact with them in this way whether or not they see this as desirable. The later point is rarely made explicitly but underlies moves to shift behaviour ahead of public preferences. This is most easily identified in initiatives to move procurement online (NOIE, 2000) and other programs that offer a mix of inducements and penalties to increase ESD and online transactions with government.

3.   Diffusion and Politics

Rogers' analysis of the diffusion of innovations offers some useful concepts for understanding the elements of the diffusion of a technology and associated practices (Rogers, 1995). The heuristic S-shaped diffusion curve which takes various shapes in different cases, may contain a shallow or steep takeoff stage depending on the rate at which new users adopt the innovation. Thus, this is not a deterministic theory in that the diffusion path is not pre-determined (Rogers, 1995). Key characteristics of an innovation that shape the diffusion experience include whether the adopters perceive a *relative advantage* from using the innovation, its *compatibility* with needs and practices, the degree of *complexity* in its use, whether the innovation may be experimented with beforehand (*trialability*) and the *observability* of the effects of using an innovation (Rogers, 1995: 15-16). The channels through which the innovation are communicated and the social context in which this communication takes place are also important factors in the diffusion process.
Rogers presents a useful set of tools for practitioners as well as analysts to think about an innovation both in the planning stages (what they need to take into account) and the evaluation stage (how well it worked, what went wrong and why). But the framework offers little for explaining the political dynamics of innovation policy and strategy and does not expand on the complex issues faced by governments which have to justify their policy decisions and service provision to the electorate at large. Contemporary governments must legitimate themselves both as good managers of public resources and as providers of appropriate services to the population. It is in the interests of governments to demonstrate

that by their online activities they use public resources more rationally and economically and can deliver better services.   But should those goals not be achieved through the implementation of this technology, a government will confront other political problems, especially those associated with rising expectations. Although ESD innovations are unlikely to pose a threat to government credibility, the potential problems they raise may well cause embarrassment and other difficulties for government administration. We can understand technological innovation by government as a more risky and problematic venture *in political terms* that the instrumental approach of diffusion theory suggests.   In the ESD area, the tensions between the citizen as consumer and the government as pace-setter require a political dimension to the explanation of implementation and diffusion process.   The case study reported here shows how these problems can arise in a government context and highlights some contradictions between the service needs of a group of users and the needs of a coherent and publicly-acceptable online policy.

4.   Case study: Australia's online strategy and e-tax initiative

The Australian Commonwealth government illustrates the dual themes of citizen-customer service and government leadership. An examination of government policy shows that it seeks both to serve and in various ways to influence its constituents to interact and transact with it via a growing number of internet sites with increasing functionality and improved design. Our case focuses on 'e-tax', an Internet based lodgement system for personal income tax returns, which is offered as an alternative to paper form and electronic lodgements tax accountant produced by the Australian Taxation Office (ATO). This case demonstrates how government online initiatives can simultaneously succeed and fail in meeting the dual goals of efficiency and service and how the diffusion of the application can create unforeseen difficulties.

4.1   Australia's eGovernment Strategy

In the late 1990s, the Australian national government committed itself to placing all appropriate government services on-line by 2001 (Commonwealth of Australia, 1997). It had evidence that this goal would be achieved by the great majority of agencies and saw the foundation for on-line service delivery as a web site (Government Online, 2000).   The government articulated its online strategy with four key *objectives*. These are:
1. An environment where virtually all government services are available around the clock to anyone;
2. A complete range of high quality, low cost online services;
3. Tailored services that are easy to use and allow people to interact with government in a way which is natural to them; and
4. Bringing government closer to people to encourage people to interact with government.

The on-line strategy delegates to individual government agencies, the decision making authority relating to which programs should be placed online first, how it will be done and which applications are best not to go online. It provides guidelines for this in the form of eight strategic priorities which reinforce the four objectives.

Five of the eight strategic priorities are relevant to ESD and the e-tax initiative. Strategic priority *one* states that 'agencies [are] to take full advantage of the opportunities the Internet *two* focuses on enablers. It notes the importance of securing the confidence of the Australian public by ensuring that transactions made online are private and

secure. This strategy also states that government online must be easy to comprehend and use. Strategic priorities *three*, *four* and *five*, addressing on-line services in regional Australia, the Australian IT industry and electronic procurement, are less relevant to our points here. Strategic priority *six* stipulates that online best practices and progress will be monitored so that government agencies can learn and adapt quickly. This, it is believed, will rapidly enhance service quality and reduce costs while strategic priority *seven* focuses on facilitating cross-agency services and actually states that 'expanding service delivery to include the online environment will have a number of advantages that are difficult to achieve in the offline world.' Strategic priority *eight* requires 'full' consultation with stakeholders, including individuals, business and industry, peak bodies and Commonwealth agencies.

4.2   ATO's Strategic Positioning and the e-Tax initiative

The ATO strategic plan is congruent with the national government's stated on-line objectives and commits it to service delivery that is relevant, secure, low cost, easy to access and easy to use. The government's policy approach is reflected in the ATO's electronic service delivery strategies which include:

- the technological transformation of businesses and associated processes and the opportunities offered by technology for gains in strategic and operational efficiency and effectiveness;
- the high levels of service consistently demanded by clients and their inherent expectations as influenced by change in their general environment (for example, an increasing exposure to the Internet and its capabilities); and
- budgetary constraints which consistently require that more be done with less, thus influencing the selection of technologies and communications channels with a view to obtaining those with the potential to deliver the highest quality service at the least cost, both to the ATO and its clients (ATO, 1999a).

- E-tax is an electronic tax return lodgement program produced by the ATO. It is downloaded by individual taxpayers from the ATO's Web site. It helps users to determine whether they should lodge a tax return and if so, proceeds by asking a series of questions requiring user input to complete the actual electronic return. A series of 'interview screens' guides users and rules built into the system ensure that only questions pertinent to respective users are asked. The program includes worksheets for computations and various information and help screens. Validation and consistency tests check the user's answers and figures and notifies of incomplete items. Upon completion, users can elect to receive Electronic Funds Transfer (EFT) refunds before electronically remitting the return to the ATO. 'Public Key' encryption technology is used to attain security, privacy, authenticity and integrity. Users can print copies of completed returns, including assessment estimates, for their records (Chamberlain and Castleman, 2002; McCarthy 1997; ATO 2000). The business arguments presented in favour of the trial of the e-tax product included improvements to client assistance, ease and speed of tax return preparation, reduced compliance costs and improved data quality (Chamberlain and Castleman, 2002).

4.3   Assessing the success of e-tax

Official and accurate income tax return lodgement data was obtained from the ATO's mainframe computer. Data includes summaries of statistics pertaining to income, deductions and tax offsets for all four major lodgement types. Other data has also been obtained including e-tax user gender, residency status, age, post code of residence, date of lodgement,

occupation, income level, refund history and lodgements from overseas. Data for the period 1997 to 2001 is complete; ie. total population data of e-tax users for the period.

Some qualitative data was also obtained in the form of a summary of e-tax client feedback for the 2001 lodgement year. The e-tax software provides users with an opportunity to voluntarily participate in a twenty-six question electronic survey. The survey asks a series of questions requiring responses relating to user satisfaction with the e-tax product and also requests a rating of the importance of various issues. It also assesses user's views of the importance of a range of motivators that are considered to encourage use of the product. Summarised results of the survey, which includes responses from over twenty six thousand e-tax users, were obtained and analysed for this study. It is acknowledged, however, that survey results may be skewed as participants are all e-tax users who willingly spent extra time answering survey questions before remitting their on-line tax returns.

E-tax commenced in 1997 as a proof of concept project and continued as a pilot only in 1998. Lodgements during this period were directly solicited by the ATO and in both years did not exceed 1700. E-tax was fully implemented in 1999 and the ATO expected around 100,000 lodgements but just under 26,400 individuals adopted it. Adoption figures rose in the 2000 year to over 114,000 however the ATO hoped for at least 200,000 users. Adoption again rose to 274,000 in 2001 but fell short of an anticipated 400,000 uptake (ATO, 1997; 1998). Preliminary studies of e-tax lodgement characteristics, conducted within the ATO during 2000, indicated that e-tax was more cost effective, facilitates early lodgement and encourages compliance. The majority of e-tax users were from professional occupations and was effective in identifying legitimate deductions for the taxpayer (ATO, 2000).

The e-tax survey feedback is generally positive. When asked if they would use e-tax again in the 2002 year, 94% of respondents stated that they would. The remaining 6% were undecided. Sixty-seven per cent of respondents were new e-tax users in 2000. Asked about their overall satisfaction with e-tax, 93% of users indicated they were satisfied. Clearly the e-tax product is popular amongst the vast majority of its user base. The majority found e-tax easy to use with 80% of respondents satisfied with their ability to locate e-tax on the ATO's website. Eighty-seven per cent of respondents were satisfied with downloading the e-tax software from the Internet and 81% were satisfied with downloading the e-tax security software. This is also pertinent because the 4MB e-tax software takes considerable time to download over a typical 28Kb telephone connection.

Whilst the user uptake of e-tax falls well behind the ATO's adoption forecasts it appears to address the four main government on-line objectives satisfactorily. E-Tax meets the governments first objective, providing high levels of accessibility, although whether all citizens actually have the capability to access and download the e-tax product is debatable. Whilst e-tax is free, it is effectively only available to those individuals with a personal computer, a modem, an Internet Service Provider (ISP) account (particularly if accessing e-tax from home) and Web access. This raises questions as to the true effectiveness of these types of products in terms of increasing citizen services, one of the major forces for on-line government service delivery. As the median income of actual e-tax users is higher than that of the population of taxpayers as a whole (ABS, 2001), it is likely that others who are potential e-tax users simply lack the resources to use it and are therefore restricted to using one of the alternative lodgement options. In this sense it is possible that e-tax has been introduced to Australians prematurely, thus explaining the product's weak diffusion rate against projections. This illustrates the significance of timing when developing business cases for innovation and when calculating inherent risks.

The well-developed, high-quality e-tax product, provided free of charge online meets the second government online objective. The ATO allocated sufficient staff resources to product maintenance and continues to build and enhance the program (ATO, 2000). It is arguable,

however, whether e-tax use can be considered low cost. Heavy costs must be borne by the ATO to sustain the product's life and whilst e-tax is offered to taxpayers for free, a series of typically hidden client costs are also beginning to emerge, such as the need for a private ISP account, ISP download charges and download time as well as hard disk space requirements (ATO, 1999a; Thomas, 2000; Walker, 2000; Fitzsimmons, 2001).

Costs incurred by the ATO include those associated with the development and currency of the product; technological and infrastructure requirements; project management and administration; and marketing and communications (ATO, 2000). Whilst actual project costs are unavailable it is considered that with a dedicated project team supported by development contractors it is likely that a project of this magnitude could cost several million dollars. This, coupled with a relatively small user base gives rise to a relatively high transaction cost. For example, a conservative estimate of say, A$3 million for total e-tax expenses in the 2001 year against the 2001 user uptake of 273,852 individuals (less than 3% of all taxpayers), equates to a very high cost of $10.95 per transaction. This is particularly alarming in the sense that e-tax is an electronic initiative which should, by definition, offer commensurate cost savings. It is unlikely that estimated transaction costs, as revealed in the above example, would be endorsed in any business case for innovation as such costs, in an eGovernment project, would represent an ineffective allocation of public funds.

E-tax meets the government objective of a tailored, easy-to-use service for individuals who are required to lodge tax returns. User satisfaction with e-tax, rates very highly as has been observed with the feedback received. There is no direct evidence, however, about whether the product lets users interact with government in a way which is 'natural' to them. Traditional communicative methods such as face-to-face discussions or telephone discussions could be more easily described as 'natural' interaction. Although the e-tax product is supported by these facilities and its users consider this to be important, only a minority revealed a need for it according to the feedback acquired.

Whether e-tax meets the fourth government objective of bringing the it closer to its citizens and encourages interaction is debatable. This objective clearly favours increased interaction through citizen service. The e-tax users feedback indicated that the product was attractive because it offers convenience and speed and thus a *minimum* of interaction. The majority of e-tax users also said they were attracted to the product because they expected to receive an earlier refund. The e-tax feedback mechanism offers user 'interaction' with government in the form of a survey, but fewer than ten per cent of the e-tax user population participated in this one-way communicative process in 2001.

This case study reveals although uptake levels have been disappointing, e-tax performs well and is popular with its users. It highlights the problems that governments have in balancing client services and efficiency. Several questions about electronic tax lodgement and the fundamental relationship between a government and its citizens include:

- Has e-tax's adoption rate approached its saturation point? What measures and variables should be used by individuals, developing business cases for eGovernment innovation, to predict likely diffusion rates and transaction costs, thus ensuring accountability for calculated implementation decisions?

- Was e-tax introduced too early to a population not yet equipped or conversant with facilities to obtain and understand the product? Should future plans and projections be reviewed? In managing change, and in particular, introducing new ways to conduct business in the on-line world, timing is now a crucial determinant to success or disappointment. What factors should be taken into account when projecting suitable times for eGovernment implementation and how should these be calculated?

- Is the potential user base cognizant of e-tax's benefits or even its existence? Any campaign for change in business processes must be supported by a comprehensive

marketing and communications plan. What kinds of strategies should eGovernments incorporate in such a plan? When should each strategy be implemented? How should each strategy be measured?

E-tax predominantly services those individuals seeking speedy return processing and tax refunds. Only a small minority of e-tax users are required to pay more tax following lodgement of their returns. Thus, we might question whether all individuals really need to lodge income tax returns or whether the tax system itself should be simplified. The ATO has already received tax revenue from taxpayers who were employees. In scoping business change for efficiency and effectiveness, eGovernments should eliminate all unnecessary processes, in particular administrative transactions. Such a move would constitute a major change in citizen-government relationships and may well have wider political ramifications. The question is not unique to e-tax but e-tax makes the issue more pressing, especially as the ATO now has to consider whether it should maintain this high-quality product for a small minority at an unrealistic cost per transaction. It faces, at least in the shorter term, a set of unpalatable political choices.

5.   Discussion

The evidence from ATO data and survey responses is that e-tax is largely effective in terms of ESD principles. It meets at least three of the government's policy objectives for the online environment in being widely available, easy to use and low cost. In meeting service objectives, e-tax is successful for a tiny minority of tax payers who use it. But it remains simply an additional channel and at this stage it is not feasible for the government to provide strong inducements to use it. The overall contribution of e-tax to the government's on-line strategy is unclear despite its ability to meet specific targets. This is because e-tax is not now, nor in the foreseeable future, able to replace paper lodgements especially for those without access to IT infrastructure and skills. There is a contradiction between its success as an application consistent with government strategy and policy principles and its lack of diffusion as the main form of personal tax lodgement.

On a technical level, e-tax has met Rogers' criteria for diffusion well. Its users recognise its relative advantages (low cost, easy to use, convenient, early refunds). It has not proved to be too complex for a broad range of users. It is compatible with the needs of taxpayers and with the practices (internet use) of a growing number of Australians. It is trialable and its effects are readily observable. For individual transactions, it reduces transaction costs for both the user and the ATO. It should be a resounding success. But there are contradictory aspects of e-tax and it may provide the ATO with as many difficulties as benefits. Diffusion principles are useful but this perspective needs to be supplemented by a recognition that government policy is ultimately a political exercise. E-tax seems to have addressed many of the 'Big Politics' issues. Privacy and security matters have been well addressed and the decision to make it both free and non-compulsory means that concerns about equity and the Digital Divide are unlikely to arise.

The 'small politics' of e-tax are more problematic. As a forum for interaction between government and citizen, e-tax requires considerable management and continued development and improvement as well as maintenance. The ATO will need to deal with issues of public perception. If it cannot keep up with rising expectations, it will have to manage public irritation. It can certainly improve service, but the government must also address issues created by rising costs for this development and the possibility that it will not be able to generate savings from its use. To the extent that Australians expect streamlined, cost-efficient government, the cost of maintaining e-tax may undermine their satisfaction with

government. At this stage e-tax is primarily a public relations asset or it could be if it were more actively publicised. On the other hand, its successful use has raised expectations among taxpayers and were it to be discontinued or a charge for its use introduced, it could turn into a public relations debacle.

6. Conclusions

As an ESD implementation, e-tax works well, but as a more general eGovernment strategy for meeting the Australian government's objectives, its effects are mixed. There are political ramifications of its slower than expected rate of uptake. It presents the government with potential difficulties in justifying its cost and managing public perceptions. Theories of diffusion are not adequate to explain these difficulties nor to guide the research on eGovernment policy and practice that needs to be undertaken.

There are some early signs that this and other ESD initiatives may presage some changes in the relationships between governments and citizens but there is no direct evidence of this. One way for the government to address these issues is to articulate a more explicit long term strategy and implementation plan for ESD initiatives, based on realistic projections of demographic shifts and internet adoption estimates and to communicate this rationale to the electorate.   The transition to the online environment will take a number of years and will require sustained investment of time and resources.   This goal is not entirely consistent with the goals of cost reduction. Governments must manage their leadership in eGovernment with their other strategic and budgetary goals. A clearer acknowledgment of this could help them plan and resource initiatives during what may be a lengthy period before online transactions with government become universal.

References

ATO, (Australian Taxation Office) 1997, 'e-tax trial scheduled for October', *The ATO Updater Online*, July 1997.

ATO, 1998. 'Epack gets go ahead for Taxtime 98', *The ATO Updater Online*, Feb 1998.

ATO, 1999a, A new tax office for a new tax system, *Australian Taxation Office*, May

ATO, 1999b, Supporting the Community - 1999-2002 Plan, *Australian Taxation Office*,

ATO, 1999c, Tax and the Internet, *Australian Taxation Office*.

ATO, 2000, Online eBusiness Strategy, Version 2.2, *Australian Taxation Office*, Sept

ATO, 2001, Online Action Plan 2001, *Australian Taxation Office*.

ABS (Australian Bureau of Statistics) 2001, 'Use of the Internet by Householders', *ABS*, http://www.abs.gov.au/ausstats/abs%40.nsf/e8ae5488b598839cca25682000131612/ae8e6761 9446db22ca2568a9001393f8!OpenDocument, Last Accessed, 10/01/2002.

Carberry, J., Steins, C.,, 2000. 'G2B Web Sites', *Tech Trends*, Nov/Dec 2000, p.20-24.

Castells, M., 1997, *The Power of Identity*, Oxford, Blackwell Publishers.

Castells, M. 2001, *The Internet Galaxy: Reflections on the Internet, Business and Society*, Oxford, Oxford University Press.

Chamberlain, J., Castleman, T., 2001. National Governments doing business on-line: An Australian look at current practice and future hazards. *CollECTeR*, Coffs Harbour, Australia.

Chamberlain, J. and Castleman, T., 2002, *'EGovernment Business Strategies and Services to Citizens: An analysis of the Australian e-tax system'*, IFIP WG 8.4, 2^(nd) Conference on E-business: Multidisciplinary Research and Practice, Copenhagen, Denmark.

Commonwealth of Australia, 1997, Investing for Growth, *Commonwealth Government of Australia*.

Fitzsimmons, C., 2001. 'E-tax takes a commercial turn', *The Australian*.

Government Online, 2000, Government Online - The Commonwealth Government's Strategy, *Department of Communications Information Technology and the Arts*, April.

Kling, R. 2000 'Social Informatics: A new perspective on research about information and *Prometheus*, Vol 18 No 3

Lievrouw, L. 2000 'The Information Environment and Universal Service', *The Information Society,* 16: 155-159

McCarthy, J., 1997. 'Electronic Tax Pack to be piloted during 1997', *The ATO Updater Online*, Feb/Mar 1997.

NOIE, 2000, The current state of play, *The National Office for the Information Economy, Commonwealth Government of Australia*, November 2000.

Norris, P., 2001, *Digital Divide - Civic Engagement, Information Poverty, and the Internet Worldwide*, Cambridge University Press, United Kingdom.

Public Management, 2000. 'A guide to e-government and e-commerce', *Public Management*, vol. 82, no.7. p.1.

Rogers, E. 1995, *Diffusion of Innovations*, 4^(th) edition, New York, Free Press.

Smith and Smythe, 2001 'Globalisation, citizenship and technology: the Multilateral Agreement on Investment (MAI) meets the Internet', in F. Webster, *Culture and Politics in the Information Age*, London, Routledge.

Symonds, M., 2000. 'Government and the Internet - The next revolution', *The Economist*, vol. 355, no. 8176. p. 3.

The Economist, 2000. 'Handle with care', *The Economist*, vol. 355, no. 8176. p.33.

Thomas, T., 2000. 'High hopes for online tax returns', *Business Review Weekly*, Vol. 22, No. 25. p.82.

Walker, R. W., 2000. 'Many govt. sites don't heed users' needs, study finds', *Government Computer News*, vol. 19, no. 16. p. 57.

Webster, F. 1995, *Theories of the Information Society,* London, Routledge.

Wilhelm, A., 2000, *Democracy in the Digital Age*, London, Routledge.

Winner, L. 1986, *The Whale and the Reactor: A search for limits in an age of high technology*, Chicago, University of Chicago Press