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"Strategies For Increasing The Uptake Of Government Online Services"

Authors

Assoc Professor Terry Laidler BA (Hons) LLB: Director, CIRCIT@RMIT
David Prater BA (Hons): Researcher, CIRCIT@RMIT

Abstract

Previous research at CIRCIT has identified five main factors mediating value for users of Government online services:

1. Services need to be focussed on users' activities
2. Services need to be easy to use
3. Services need to be secure and trusted
4. Users expect choice of channels
5. Services need to be responsive to provide incentives for use.

The paper reports research which identifies a design process likely to increase user uptake by examining four main areas of public sector activity in the transition to Government online service delivery:

1. Traditional service delivery supplemented by new ICTs
2. Delivery online
3. Quality control and gatekeeping across all channels
4. Service integration across channels.

The research involved in-depth consultations with key stakeholders in the four areas to identify activities targeted at adding value for users, the grouping of those activities into coherent strategies, and the prioritisation of strategies according to pre-defined criteria. The paper elucidates the four key strategic directions that were established:

1. Integrating service provision
2. Ensuring excellence in service delivery
3. Targeting the specific needs of known user groups
4. Strong cross-meshing, promotion and marketing.

1. Introduction

1.1 The International Context

Governments around the world are moving systematically to increase the contact their citizens have with them online.

Three main rationales are put forward for this movement (cf. e.g. *Connecting Victoria*, 1999, Minister's Introduction):

1. Building the "smart society" - where citizens have the skills and knowledge needed for enterprise and participation in the "information rich" twenty first century;

2. Increasing the quality of government's interactions with citizens – both in the ease of access it gives to members of the community, but also in the business re-engineering that ensues to allow online service delivery; and
3. Increasing the cost efficiency of delivering government programs and services – although there is some dispute about whether these savings will come when adequate numbers of people have migrated to the new service delivery structures or not, since there is little concrete evidence as yet that online service delivery is necessarily cheaper.

The belief that all services might be delivered more cheaply online grows from the conviction that they will all be able to be automated. And, indeed, it is probably important at this stage to challenge the assumption that online service delivery is or should be "automated" service delivery.

There is a large body of research (summarised in Singh & Ryan, 1999) that suggests that people, depending somewhat on their cultural background, age and gender, choose different modes of interaction and transaction generally depending on the type of dealing, and who they are dealing with.

While governments and their agencies enjoy a fair measure of "trust" in this context, this advantage is easily squandered if the new services are not of higher quality, do not give better access, and are not seen as affording a greater measure of choice and safety for the person using the system. In the Victorian context, the introduction of automated public transport ticketing might be seen as a harbinger of the problems that accompany such false assumptions.

It is also probably important to remember that the movement to online service delivery has happened only recently. The current Victorian government homepage (http://www.vic.gov.au) for example, has only been in existence for a period of three years. In the time since then, the online landscape has shifted. Citizens are demanding more and more services online. Citizens also do not wish to sift through complicated government structures in order to reach the information or transaction they require. In this sense, the challenge for government is to provide as many services online as is practical and reasonable, while maintaining a level of service that guarantees access and equity for all citizens, in both the online and physical worlds.

1.2. The Victorian Policy Background

The objectives established by *Victoria 21* (Multimedia Victoria, 1995) and confirmed in *Connecting Victoria* (Victorian Department of State and Regional Development, 1999) led to the rollout of infrastructure, industry, social and personal development programs, and the provision of government services online, such that Victoria could be "recognised as a centre of excellence in the global information economy by 2001". The pace of change needed to meet these objectives, through programs such as *Skills.Net, Vicnet, VicOne, maxi* and the like, necessitated a clear "supply side" focus in program delivery.

It was seen as important to put the hardware and software, the systems and processes in place that would allow efficient and secure online government service delivery. Many of the systems that were put in place found predictable, easy acceptance among people in the community who are "early adopters" of new technologies.

Promising an ongoing commitment to its

> "… internationally recognised Government Online program so Victorian citizens can access Government, seven days a week, 365 days a year, 24 hours a day regardless of where they are located, by phone, Internet or public kiosk – and in the future through television",

Connecting Victoria supplements these approaches with a commitment to

> "making ICT ubiquitous … creating the skills that will enhance people lives … putting technology in the hands of the whole community …"

To grow usage of government online services beyond the initial levels that have been seen with the rapid expansion of their availability now requires attention to "demand side" understandings of what is perceived as valuable by potential users so as to promote the uptake of online services.

2. Methodology

2.1 Definitions

"Uptake"

Uptake of government services online, in this report, is taken to mean:

- The rate at which repeat users of an online service return to that service; or
- The rate at which new users are introduced to a service; or
- The number of users accessing government services through electronic channels; or
- The number of times a page or site is accessed, including page hits and links.

The importance of a positive evaluation by those who use the services of the quality of the service so delivered cannot be understated, and becomes, in this project, a pivotal determinant of strategies to be proposed. Positive evaluation of the quality of online services by those who use them has become, in this project, a pivotal factor in the assessment of such services.

"Maximising Uptake"

Clearly, there is already a certain amount of 'uptake' of government services online (Australian Bureau of Statistics (ABS), 2000). Maximising that uptake can also include:

- Migrating as many users as possible to online channels; or
- Migrating all users to online channels; or
- Making transactions available online simple, secure and reliable; or
- Segmenting user groups and focussing instead on those most likely to access online services.

Maximising uptake also carries with it another component, namely: access. There would be no point marketing government services online if citizens did not have the requisite devices (and resources) to access these services. ABS figures indicate that the number of Internet-connected households in Australia is indeed rising (*op.cit.*) The number of public access terminals, in Victoria at least, is also being increased. However there will always be a percentage of the population who do not go online. Therefore maximising the uptake of online services needs to be balanced against another requirement: providing consistency of service to Victorians, regardless of the mode of communication.

"Government Online"
This phrase refers to all government services accessible via electronic means, that is: all relevant government web sites, channels and home pages. In addition, it can also be taken to include other communications channels, including e-mail, call centres, and kiosk services.

Government services online encompass both the provision of information and the facilitation of transactions, whether they are financial (bill payment), obligatory (change of address for electoral enrolment) or voluntary (making a submission to a department's community consultation). It also refers to other more innovative uses of online technology, including virtual voting.

"Strategies"
Strategies, in this report, mean purposive groups of activities that when performed together maximise the uptake of government services online.

2.2 Task

CIRCIT was selected by Multimedia Victoria to advise on maximising the uptake of Victorian government services online. The consultancy involved a round of stakeholder interviews, extensive research into domestic and international trends, close interactions with a Steering Committee and detailed implementation and costing plans. CIRCIT collaborated with Stanley & Milford Marketing (*http://www.sofcom.com.au/corporate/services.html#stanleymilford*) in those elements of the project which related to promotion and marketing.

2.3 Method

The strategies proposed in this report were developed by identifying four areas of operation for Government Departments and agencies in the movement from traditional forms of government service provision to a situation where they are complemented with delivery modes made available by new information and communications technology.

Six principles of effective use, known from existing research to drive user uptake of services online, were applied to each of these areas of operation, to generate a matrix of activities likely to lead to increased and more beneficial use of Government services online. Sometimes these activities were gleaned from local, national and international research; in other cases they were "brainstormed" with stakeholder departments, agencies and channel operators.

This matrix of activities was then used as a basis for generating strategic approaches that incorporated leading edge actions to propose this series of strategies.

It was at the stage of prioritisation by the Steering Committee that service provider and community benefit principles of effective use were introduced into the strategic development process. The Steering Committee was invited to assess each strategy by asking

1. of its component activities, were they:
   - able to be implemented
   - consistent with government policy directions

- not duplicating an existing program
- able to be measured for impact?

(Component activities were eliminated if they significantly infringed one of these criteria.)

b) of the strategy as a whole, should it have high priority on the basis of:
- its likely impact on user uptake
- it representing industry leading practice
- its broad cost
- the likelihood it would attract significant user support
- there being a gap between existing services and the proposed strategy?

Strategies (or in some cases parts thereof) were adopted or modified for further evaluation in the light of these criteria. They were then grouped according to impact – that is, 'maximum', 'high' and 'moderate' impact strategies.

Six Principles of Effective Use

CIRCIT research (Singh et al, 2001) into government electronic service delivery nationally and internationally indicates that six major components of effective use from a user's perspective are "drivers" that influence the likelihood that people will use services online:

1. The service provided is a "transaction" relevant to their daily activities, e.g. paying a bill, lodging a claim, exchanging information, seeking a licence or permit or booking an appointment;
2. Access points are located where people want to undertake transactions. For many people in their interactions with government, this will be at a computer at home or at work. For those who cannot use this form of access, collocation of online access at other points of service provision becomes critical;
3. The "interfaces" used in online service delivery are overwhelmingly user friendly.
4. Especially in relation to financial transactions, people use online services that they trust. Government enjoys a fair degree of comparative trust in this regard already, but must maintain attention to privacy and security issues to ensure the trust remains;
5. People choose different "channels" to communicate in different contexts and to suit their capacities and needs. Allowing choice of channels promotes effective use of new technologies for government, communities and individuals;
6. Quicker service, 24 hour availability, cheaper processing or convenience of home or work access are examples of how intrinsic or additional incentives can be highlighted to promote the use of online services.

Public Sector Activity Areas

Government faces important challenges as it re-engineers its service delivery systems to provide for access through new and emerging communications technology. Four areas of public service operation can be identified using a model derived from understandings of transition to new technologies in retail environments (Oliver, 1995):

1. Traditional service and program delivery mechanisms (the "public service") need to continue providing high quality services through traditional means to ensure equitable and effective access. These services need to adopt components of the new technologies in an incremental way to ensure "smarter" service provision while not downgrading other forms of delivery.
2. New technologies need to be introduced which transform the very nature of the way citizens and communities interact with government. "Intelligent agents" such as kiosk and desktop online services, e-commerce sites, "channels" which reach across traditional public service structures to reflect people's patterns of interaction with government or smart search agents which open up the structure of government
3. Government itself is transformed by the new technologies, and new "quality control and gatekeeper" roles emerge in the transition. As Departments and agencies re-engineer their processes and systems to deal with the growth in online access, the maintenance of the quality of information and services provided, and the oversight of the manageability of the new forms of access becomes a key component of government activity. Similarly, ensuring that the new modes of service are user focussed, and deliver equitable and beneficial results for the whole community requires a gatekeeper function to be developed.
4. Principles of equitable access and user choice lead to the consideration of options for "integrated services" that allow trailing and assessment by users of the value of the various forms of service delivery in a helpful and familiar context. The "one stop shop" concept, to make Government services available in an integrated across the counter, by phone and online, has proved remarkably successful in various jurisdictions (e.g. *Service Tasmania, Service New Brunswick*), and has also been applied successfully within some Departments and agencies. It responds directly to known research about the benefits of "choice of channel"; it serves the equity requirements of government policy, and provides for the "migration" of users across service modes.

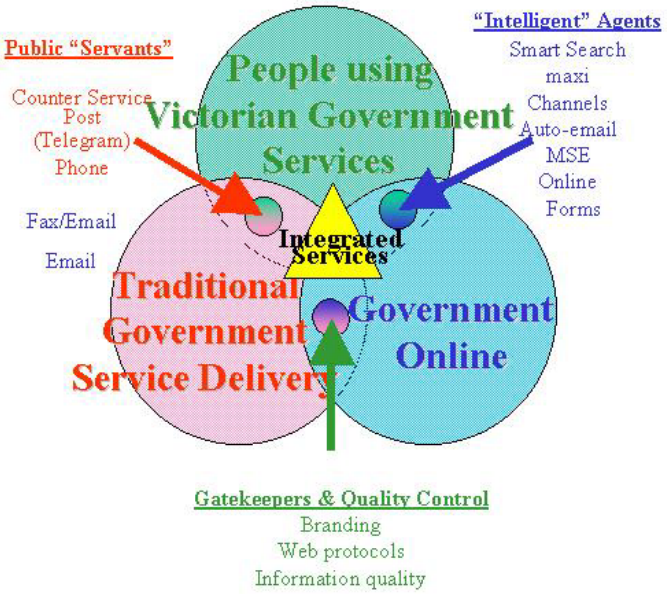

Figure 1: Public sector activity in changing service delivery environment

3 Results

3.1 Adding Value for Users of Government Services

In each of the above four areas of operation for Government in the transition from physical to the electronic means of service delivery, the six principles of effective use were applied to identify types of activity likely to promote increased uptake. These principles, in fact, integrate three perspectives in an understanding of effective use:

- a user perspective;
- a service provider perspective (including constructs such as efficiency, manageability, profitability and service improvement); and,
- a community perspective (with emphasis on concepts of equity, and growth in social capital).

The principles of effective use from a user perspective developed in this research by consultation with key stakeholders were:

Relevance to Daily Activities

A fundamental principle when designing any service is its relevance. The starting point when assessing relevance is always the user – how will this service be used? Will it be seen as convenient to conduct transactions in this way? The provision of a 24-hour capability for financial transactions, for example, will be relevant to users whose activities do not fit into a 9 to 5 paradigm. This is particularly true of services offered online, as they exist within a new transaction space, where business hours are irrelevant. This being said, not all transactions are appropriate in an online environment. Analysis of user activities and needs provides a relevance focus for assessing which services should be offered, in which format (Booz-Allen & Hamilton, 2000).

Location of Access Points

In the context of online services, the location of access points may appear irrelevant. However, user migration from physical to electronic environments depends, to some extent, upon the location of kiosks, one-stop shops and touch screens. In an online environment, the same principles apply. How easy is the service to locate (that is, how recognisable is the URL)? How should it be marketed? The question of access in general is also important. How many users within the community have home access to online services? Recognition of different levels of usage amongst (for example) different age groups leads to an emphasis on public access, cheaper or subsidised devices and staff-mediated transactions (a good example of this is Service New Brunswick in Canada or Canberra Connect in the ACT).

Ease of Use

Ease of use of online services depends on the quality of the interface, as well as user skills. In terms of the interface (for example, the web site), protocols and guidelines should emphasise simple layout and language, intuitive navigation and the availability of help, both off- and on-line. The development of effective search engines also makes an online service easier to discover. A principle of ease of use should reflect the differences between users when they approach new technologies. For example, ‘early adopters’ of technology will usually have fewer problems adjusting to an online service’s functionality than will ‘laggards’. An effective government service will provide the same level of usability for all user groups and research suggests that

citizens vary greatly in their attitudes to and willingness to adopt new technologies (CITU, 1998; The Henley Centre, 2000).

Trust

While users are more likely to trust a government brand than a commercial one, the theme of trust is still an important one, especially when governments provide the capability for financial transactions online. In this context, issues of authentication and receipt, privacy, encryption and the provision of personal and business information can influence a user's level of comfort within the transaction. Branding of government services also becomes an issue of distinguishing the publicly owned from the private. Co-channelling initiatives, for example, may effect a user's perception of government, to the latter's detriment. By comparison, the provision of mechanisms for user feedback (whether by way of an online form or a complaints line) may increase user trust in a government service (The Economist, 2000).

Choice Of Channel

Providing a range of channels across which users can conduct their transactions leads to more effective use of those channels, in that users can choose which option is more convenient or useful for themselves. It also means that users who are uncomfortable with new technologies have the choice of continuing to conduct their business with government through traditional channels. This is also an equity requirement placed upon government (MMV, 1999; UK Cabinet Office, 2000).

Incentives

Put simply, incentives to migrate to online services may be required in order to convince users of the worth of such services. For example, a discount on a license purchased online may lead to greater uptake of online services in general. Governments should be aware here also of equity issues and the need for detailed cost analysis of any proposed financial incentive. In other cases, the incentive may be as simple as a faster processing of a speeding fine, doing away with the need to queue for the same service in a physical environment (UK Cabinet Office, 2000).

Applying understandings of factors likely to "drive" uptake of government services online to these older and newer aspects of government service provision generated a range of possible activities within and among the service delivery platforms.

Table 1: Activities identified as likely to increase uptake

EFFECTIVE USE PRINCIPLE (in priority order)	"PUBLIC SERVANTS"	"AGENTS"	"GATEKEEPERS"	"INTEGRATED SERVICES"
1. RELEVANCE TO DAILY ACTIVITIES	*Provide a variety of modes of transaction *Provide directories of cross gvt services online, enable searching for services by area/ locality *Integrate local and state government services (eg rates, licences & utilities) by committing a wide range of agencies	*Make specific transactions discoverable, then give users options *Create consumer advisory groups for usability testing/ user-centric design *24 hour access *Investigate co-channelling with other governments, communities online, utilities & business, subject to effect on branded space *Flood transaction types, audience segments, life events	*Prioritize and promote valuable transactions – government service is not just information viewing. *Use service modeller data to measure value of transactions to both users and government *Create consumer advisory groups to advise gatekeepers of concerns (along the lines of ME workshops run by sausage with peak bodies pre-design of site) *Also use dynamic feedback from search data to inform government of most accessed/relevant services *Provide as a transaction, opportunities for citizens to become involved in online democracy (see the Canadian experience, talkingpoint.sa.gov.au,)	*Provide a 24 hour capability for all financial services *Co-channelling with other governments, communities online, utilities & business *Provide one-stop capability to suit a wide range of transactions and information types
2. LOCATION OF ACCESS POINTS	*Provide information about online services in appropriate physical locations (eg better health channel terminals in community health centres – could go further with this by providing access to other channels at the same time) *Provision of skilled, multi-lingual assistance in targeted locations	*Ensure that the government online portals are easy to locate (cf URL promotion) *Consistency of addressess across all government channels to allow intuitive navigation (business.channel versus betterhealth) *Recognise that access to online services is still dependent upon access in general population (see ABS statistics, Telstra survey)	*Continue marketing public access points through @i promotion *Choose access points according to population, demographics *Capitalise on growing PC ownership as providing alternative points of access – acknowledge the potential future audience for interactive television	*Place services in central locations or in relevant existing locations (eg post office, health centre, local council) *Ensure proximity to transport & other govt. services (see AUSTOUCH experience in ACT) *Explore alternatives to kiosks, or refocus kiosk services towards the most used transactions
3. EASE OF USE	*Clearly identify e-mail contact address on front pages of govt. websites *Introduce integrated e-mail/fax service for businesses accessing govt. info via fax *Ensure public service staff possess the necessary 'mass listening' skills & competencies to effectively deliver services across different channels	*Develop more effective search engines to facilitate greater ease of use *Support people with disabilities via speech recognition & other software *Provide option of text-only sites as standard feature *Provide help features both online (eg, e-mail query) and offline via a phone help-desk or call centre	*Monitor and evaluate adherence to W3C guidelines on web page useability & functionality *Ensure web pages feature simple layout & language, intuitive navigation *Group transactions according to those most commonly used *Use data from dynamic feedback to redesign portal to demonstrate govt. commitment to these standards *Review portals & develop easy-to-follow hierarchy structures	*Make use of existing human resources while providing option of self-service *Provide a choice of channels through one operator/ interaction *Provide integrated desktop systems for operators *Target different consumer groups – ie, non-users, repeated users, discontinued users – and different market segments)

4. **TRUST**	*Maintain confidence in existing services while also promoting migration *Capitalise on existing public trust in government services	*Guarantee secure servers for financial transactions with government *Introduce a reasonable standard of encryption for all business/financial transactions *Enable consumers to utilise personal cookies to customise access *Inform users of privacy considerations, emphasis on opt-in information provision services	*Promote branded space by way of URL displayed in all govt. promotional materials *Commit to a single entry point/portal site *Assign responsibility for site maintenance *Develop and continuously evaluate reporting structure for reliability *Provide opportunities for feedback via online surveys of satisfaction *Develop standards for authentication & receipt across departments, agencies, local councils	*Develop privacy policies for receipt/ transmission of personal info. via e-mail and/or web *Provide receipt for all transactions *Consider appointing an ombudsman to oversee and respond to consumer concerns about service
5. **CHOICE OF CHANNEL**	*Guarantee that consumers who communicate via offline channels (f2f, phone, post, fax) receive the same service as online customers	*Provide consistent service across all online channels (ie, MAXI, e-mail, web) by allowing users to conduct similar transactions via different channels (eg, business channel potential for link and return, meaning you can complete a variety of transactions at linked sites and return to the govt. site) *Encourage greater uptake amongst different user groups by exploring the future possibility of access through other devices (eg, WAP, interactive TV, Palm Pilot)	*Ensure that relevant and high volume info. available offline is also available online, in an accurate and updated format	*Provide operators with access to all channels *Use current f2f interactions to encourage migration to online services (see Singapore 1 experience) *Target services on the basis of convenience – for example, providing a fast DIY service for bill payments during lunch hours
6. **INCENTIVES**	*Institute govt. wide guarantee of reply to e-mail within x days *Institute penalties for late replies *Maintain general principles of best-practice customer service	*Encourage view that short term costs will be outweighed by long term benefits (not all of which are necessarily quantifiable) *Emphasis on meeting peoples' changing expectations	*Emphasise customized (ie, consumer-controlled) web pages rather than personalized (ie, government-controlled) content *Provide other info. upon request to add value to govt. info. (eg, tattslotto, weather, sport results)	*Explore costings of differential pricing strategies *Offer some form of discount as a means of increasing uptake (see New Brunswick, Service Tasmania)

3.2 Prioritising Strategies that Increase Uptake

From the matrix of activities in Table 1 above, four key directions for strategic intervention were identified:

Integrating service provision

With the range of government services now available online increasing rapidly, the need for consistency in both service provision and discoverability is becoming increasingly apparent. The specific strategies proposed to enhance integration further included a "One Stop Shop" approach to service provision; incorporating physical shopfronts, call centre and online presence. This approach has been trialled successfully in New Brunswick (Canada), the ACT and more recently Tasmania (Service Tasmania).

The adoption and implementation of whole of government and inter-government metadata standards and providing consistency of addressing across government departments and agencies were also seen as key strategies requiring support at the highest level. In terms of the transactions citizens undertake, developing a whole-of-government plan to "flood" a transaction, namely the ability to pay government and utility bills, was seen as having proved highly successful elsewhere. Finally, the report advocated planning for government services on the imminent new delivery platforms, WAP and digital TV (which is growing in popularity, in the UK at least).

Serving different user groups by "designing in" understandings of usage

Work has already begun within government on user-based strategies; however, further attention to channels likely to be of high frequency because of their relevance, (including the development of new channels and the establishment of protocols to preserve their special focus on usage) was seen as being more beneficial and effective than simply flooding all channels with everything that is available. For example, a Children's Channel, mining school project information from sites across government, can lead to cross-promoting other government online services that children can draw to their parents' attention. A Jobs Channel, either within government or outsourced, could consolidate information on all public sector job vacancies which should themselves be accessible online. In general, strong cross promotion of Government Online services, including trialing user customisation, was seen as a highly effective way to increase both awareness and usage of these services.

Ensuring excellent service delivery

The report elaborates strategies for establishing email as a third standard way of communicating with government alongside post and telephone, in accordance with research on the subject which indicates e-mail is an ideal 'migrator' for those uncomfortable with the Internet itself (Prater & Tegart, 2001). Providing user input into website design means that understandings of usage and principles of accessibility can shape the structure and format of government sites, rather than defining the user as passive. Managing feedback, particularly complaints, is another way to improve service quality, rather than viewing user complaints as a threat. Despite the move towards online delivery, there will always be citizens who will need some human assistance. Making available from major portals a human edited, open conversation, smart search agent was seen as one particularly effective way of managing this change.

Cross promotion and marketing

While the development of internal and external marketing strategies, with an emphasis on meshing of services, cross promotion and training internally, and on targeting and collaboration externally, was beyond the scope of this report, their importance was noted. The report recommends the development of comprehensive marketing strategies especially in relation to:

- Increasing general community awareness of scope of government services and their availability online;
- Encouraging the atmosphere of security and trust within which people would be likely to trial them; and
- Promoting their re-use by previous users.

3.3 Evaluating performance

The importance of evaluating the relative success of various strategies implemented was identified in the brief for the project. A survey of existing data sources indicated that while a substantial amount of material already existed and was collated to measure access, use and effective use from both user and provider agency perspectives, three further major types of supplementary information were required:

- A benefit/cost analysis of currently available online transactions.
- Tracking of "paths" to and from a targeted number of key access sites; and,
- Quantitative studies of use and non-use of online services generally, and Government online services in particular.

4 Conclusion

The true outcomes of this small consultative project may not become clear for some time. What has become clear during this process is the extent of government experimentation with electronic service delivery and its many advantages and pitfalls. After an avalanche of government agency activity online in the last three to four years, what we are now witnessing is an extended evaluation of these initiatives.

Interestingly, this has involved assessment not just of the scope of transactions and information available online, but also the day-to-day activities of everyday people, often outside the electronic interaction space. This emphasis on all citizens and their needs, at least in terms of service offerings, will always be the only recourse for equity-conscious governments. Hopefully, the strategic focus explored in this paper will give other government agencies (both within Australia and internationally) one possible method for evaluating, targeting and improving the quality, useability and usefulness of their own services.

The four strategic areas outlined in this report should give some indication of the complexity of government service provision, and may also prove beneficial to commercial understandings of users of Internet services. They are by no means exhaustive; indeed, the matrix was designed specifically to sift through workable and practical strategies, in a Victorian context. Our readings of literature from other states and countries indicate that many governments are grappling with these same issues, often situated along different points of the 'online' timeline. We hope that the strategies we have recommended end up becoming part of government policy and practice, thereby improving the quality of Victorian citizens' dealings with their government.

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