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# The Evolution of Local Government Electronic Services in Victoria

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## Abstract

There is an increasing interest amongst governments around the world in the potential for delivering government services on the WWW. While there are examples of substantial transition to electronic service delivery in some sectors in some countries, it is generally accepted that most government services have failed to evolve from enhanced information-based web pages. This is particularly true of the local government sector in Australia despite numerous policies and hopeful deadlines imposed by state and federal governments. This research in progress studied the current status of local government electronic service delivery in most areas of local government. In an effort to enhance their websites, local governments have started to creep into the areas of e-Democracy and e-Governance suggesting that a linear maturity model of e-Service delivery may not be appropriate for the local government sector.

## Keywords

Local government, e-Government, e-Democracy, electronic service delivery

## INTRODUCTION

It is easy to understand the impediments that municipal governments in Australia have faced in implementing innovative reforms. The relative poverty of local governments in the Australian federal system is in marked contrast to the situation in other countries such as Canada and in the United States of America, where their comprehensive local government systems were established after federation. In these countries, local authorities are true third tier authorities with real powers and responsibilities. In contrast, Australian municipal governments that have no constitutional legitimacy have tended to concentrate upon the direct provision of a limited number of services.

Prior to World War II, the service was mostly of physical infrastructure such as road maintenance but has now expanded to include social and community welfare, economic development and environmental management. While local governments provide quite an impressive array of functions and services, it led Rumpf (1980:23) to observe that the fact that they lack adequate powers and that few functions are mandatory has meant that innovation and changes have been inhibited.

According to Gerritsen and Osborn, over the past twenty five years Australian local government have undergone extensive and continuous reform in a number of areas, "in it's structure; its powers and responsibilities; in changing patterns of public participation; the organisation of the local financial system; and in its occupational structure and management of its workforce" (1997:55). Local governments today are faced with a *Second Wave* of reforms which are impacting upon their role, that is, managing the increasing demands upon local government in a period of reduced fiscal capacity and continuing restructuring, downsizing and contracting out. As part of these reforms, local governments have had to reframe their organisations to take account of the changes and expectations in the community and to accommodate competition practices (DTLR, 2001; Jones, 1993; Kloot, 1999; OECD, 1996). Councils have some difficult choices ahead that include the rationalisation of their vast range of fragmented services, the need for greater emphasis on customer service and quality, and the implementation of user charges to create a stronger link between benefits and costs.

The Commonwealth Government through the Department of Transport and Regional Service, the Victorian State Government, and the Municipal Association of Victoria (Department of Transport and Regional Services, 1999; MAV, 1993; Multimedia Victoria, 2002) have endeavoured to benchmark the practices of local governments. It is their view that Australian local government are now expected to implement reforms to achieve higher levels of efficiency, effectiveness and accountability. Some of these measures have been achieved; there has been a marked decrease in the level of debt by local government (a decrease from \$395 million to just \$34 million between 1993 and 1997 (ABS, 1999b)), and the state and local government net debt as a percentage of GDP is now less than 10% (ABS, 1999a).

In this restricted environment, local governments have also faced the need to provide access to information and deliver services via the Internet. The Victorian State Government attempted to provide some assistance to local governments through its Electronic Service Delivery Project (ESD Project) in the late 1990's. The ESD Project, involving MAXI and Vic One, was part of the State Governments larger Victoria 21 initiative to promote economic development by encouraging multimedia and related activities (Multimedia Victoria, 1997). Under the ESD Project, electronic access to a range of government and related services commenced via the Internet and kiosks. For local governments the project promised "a number of benefits, including cost savings, strategic opportunities, and the ability to offer new and better services" (Multimedia Victoria, 1997:10). Although MAXI commenced in September, 1997 with 27 transactions from a small number of state and local governments, and some large private utilities, the project has not progressed substantially from its initial implementation. Only a small number of councils committed to the project.

Although some materials were prepared to assist councils with costing and implementation strategies for electronic service delivery (Multimedia Victoria, 1996), the bulk of information and policies concentrated more on what needed to be done rather than how to achieve it. This is evident in the most recent policy release by the Victorian government, *Putting People at the Centre*, which stated:

"As a vision, Putting People at the Centre is not intended to describe the things that the Government will do to get there. These things are being addressed by the Government separately and will be built on an implementation plan now under development" (Multimedia Victoria, 2002).

This research paper examines the progress that local government in Victoria have made in utilising the WWW to implementation and establishes a virtual counter for the delivery of services. It examines the models that are suggested for the maturity of local government electronic service delivery and suggests that the existing linear models may not be appropriate. An alternative maturity model of e-Government is outlined.

# LOCAL GOVERNMENT SERVICES

The Municipal Association of Victoria (MAV) identified 22 main functions undertaken by most Victorian councils (MAV, 1993) although many more smaller services are performed. Rather than discuss each individual service it is more appropriate for this research to examine the purpose of each service and the type of customer who utilises it.

The term *customer* or *client* itself may not semantically fit for local governments who often see their role as providing more than just services. Of all of the levels of government, local government play an important role in their contact with local communities. Although local government has no constitutional standing in Australia, it does have considerable power to determine the direction and framework of community infrastructure and culture. Some writers suggest that municipal governments across the world are faced with a range of different types of *residents* each demanding different types of services (OECD, 1996; Steyaert, 2000). Residents have a wide variety of contacts with the government sector and in each case the agency may respond differently and play a different role. Shand and Arnberg (1996) outline different relationships between government and residents that can be applied to local government (Table 1).

Resident	Example of Types of Service
Consumer	Home assistance for the aged
Receiver	Grant to a sporting club
Prosumer (producer and consumer)	Parent volunteers in kindergarten.
User	Public parks
Purchaser	Hire of bin service
Taxpayer	Payment of Rates
Regulatee	Town Planning

Table1: (adapted from Shand and Arnberg, 1996:17)

Steyaert (2000) provides some insight into how to match the services and information flows from local government to those required by their residents. Steyaert (2000) divides the role of the resident into two political categories (*voter and citizen*) and as a *consumer* or *client* of a service. Moreover, he establishes 5 *dimensions* of governments that can be matched to each resident type. This relationship helps identify the necessary content requirements of a website if each resident role is to be supported (refer to Table 2).

	Primary Role of the Resident			
Dimension	Voter	Citizen	Client	
Government Information	+	+	+++	
Community Information	-	++(+)	-	
Interaction	-	++(+)	+	
Service	-	-	+++	
Democracy	++	+++	-	

Note: The '+' indicate a the degree of importance

Table2: Relationship Between Dimensions and the Three Roles of the Resident (Shand and Arnberg, 1996)

Steyaert (2000) suggests that there are a number of items on a website that help support each dimension. As an example, Government Information would include contact details, information *about* the services or even links to other government bodies. The Service Dimension would include not only passive information but may include application forms, payment facilities and documentation. In this latter dimension, the website has elements of an electronic or virtual counter.

While the Information and Service dimensions, as outlined above, support residents who are consumers of services, there is now an increasing desire for local government to be more responsive to the needs of their community. The Victorian State Government, which has adopted Best Value principles similar to those in the United Kingdom (DTLR, 2002), has four e-Government pillars (Multimedia Victoria, 2002):

- Substantial improving support and services to citizens
- Providing better community engagement and more effective democracy
- Using innovation in finding new opportunities; and
- Creating a framework for ongoing reform within government.

These objectives include elements of both efficient and accountable management, as well as a desire for improved participatory democracy. It is the potential of the WWW to alter the relationship with communities, in particular, that has *citizen-focused government* or *e-Democracy* as a major platform in e-Government policies (CITU, 2000; Multimedia Victoria,

2002). Nevertheless, this objective is often seen as the final stage in a transition to the Internet and it has led Steyaert to observe, "for local government, aspects like computerization and the often connected automation of the work process are considered more important for daily work than the creation and use of an Internet web site" (2000:7).

## E-GOVERNMENT MATURITY MODELS

There are a plethora of models that outline stages of maturity as businesses embrace more of the capabilities of the WWW. Most e-Commerce or e-Business models outline 3 or 4 stages starting with net presence and often moving through to a stage incorporating elements such as a rich array of information, the full provision and payment of services, or interaction with customers. Government departments often provide different types of services than commercial businesses, and frequently without payment. It is therefore often inappropriate to extrapolate e-Business models to the government sector.

In recent times attempts have been made to establish models of e-Government. In semigovernment departments or organisations working with businesses or huge numbers of customers, the existing e-Commerce models maybe appropriate (Ninhim, 1999). It is, however, more appropriate to establish a different sequence of steps in local government, that have a greater community focus and arguably a greater empathy with their residents.

Musso, Weare *et al.* (2000) divide the activities of municipal governments in the USA into two categories – *entrepreneurial* and *civic*. Entrepreneurial measures emphasise the provision of services to residents and businesses to facilitate economic development. In their outline of a more mature electronic presence, changes to municipal websites advance activities of providing participatory or civic reforms such as facilitating the formation of interest groups and improving access to the decision making process.

Riley (2001) outlines a model containing 3 progressive stages; e-Government, e-Governance and e-Democracy. In this model, governments move from net presence (e-Government), through to service provision and representative democracy (e-Governance), to a final stage of e-Democracy. E-Democracy is a stage where a citizen interacts with government or influences the legislative process in a full participatory democracy.

These models suggest a linear progression to final maturity. Stamoulis *et al.* (2001) offer an alternative suggesting that governments and their agencies mature in various *spaces* rather than in distinct *stages*. Building on work by Angehrn (1997) they outline four spaces for a government revenue agency:

Virtual Information Space – such as the publication of documents.

Virtual Communication Space – such as email communication with customers.

Virtual Distribution Space – such as the direct collection and distribution of materials.

*Virtual Transaction Space – such as e-Filing services for income tax forms.* Diagrammatically they represent this as Figure 1.

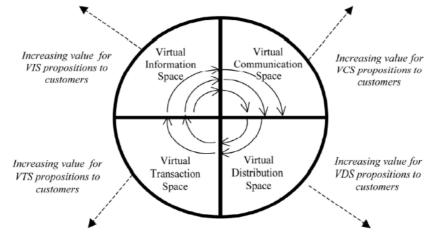
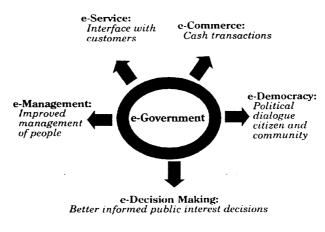


Figure 1: A Spiral Model of Adding Value in the Virtual Space (Stamoulis et al., 2001)



#### e-Government for Local Authorities

Figure 2: (Quirk, 2000)

#### THE STUDY

## Method

The objective of the study was to examine the content and level of maturity of different aspects of Victorian council websites<sup>1</sup>. The study evaluated websites from 20 councils as a pilot study using a content matrix in December 2001. The content matrix examined the presence of a number of features such as basic information, email facilities and the ability to make a payment. These features were grouped under nine areas. Using the categories outlined by Quirk (2000) above, they have been placed into 4 broad categories:

E-Management

**Basic information** 

Website navigation

Contact details

E-Service

Product and service details

Product and service support

E-Commerce

Transaction handling

E-Decision Making/ e-Democracy

Sense of community

Links

As an example, the Basic Information looked for the presence or not of features such as, information about the council, a location map, and information on the mayor or staff. Electronic Decision making and democracy were grouped together in this pilot study as the information available on a council web page can assist the user in both of these categories.

A website feature was given a score of '1' if it had been fully implemented, or a reduced score ('0.5') if the feature was partly implemented. The *score* for each feature was totalled and then divided against the total number of websites. As an example, if 8.5 out of 10 websites had implemented a particular feature, it would be given a content rating of 85% for that particular interest area.

<sup>&</sup>lt;sup>1</sup> The study was part of a larger study examining web sites of a number of Australian public and private institutions funded by the Electronic Commerce Research Unit, Faculty of Business and Law at Victoria University.

The analysis of quantitative data from this pilot study enables us to identify the extent and direction local governments are making in the area of e-Government. Some interviews have been done with personnel within councils although this is at a preliminary stage. These interviews have been conducted as part a PhD examining electronic service delivery in local government.

## Findings

Full details of the findings are provided in Appendix A.

#### E-Management

This category included features that assist a resident to navigate through a council website to obtain basic information and to contact the council or preferably a person within the council, if necessary. Moreover, it determined if there were incentives to encourage the user to use the website rather than over-the-counter services.

All of Victorian's 78 councils have some web presence and it would be expected that the sites examined would include a substantial amount of basic information about the council and the services they provide (90-95%). Email is possible to the council organisation but not necessarily to specific staff within the council (95%). The low number of council sites that have details on forthcoming events or what is new on the website (25%) suggests that the sites are relatively static, that they are not updated frequently, and/ or they are administered by external web designers. There were no incentive programs in place, such as discount for payments or competitions to encourage residents to use the site.

#### E-Service

This category included features that assist a resident to seek information about a product or service provided by the council. A more mature site would enable a user to seek support for a product or service without having to wait until the council office opened. Features such as Frequently Asked Questions and email support assist in this area.

While a significant number of sites provide details of their services (90%), only 20% of sites contain FAQs and none of those examined had email support. Services such as the ability to track the progress of a planning permit, a common over-the-counter query, was not available on any of the sites examined.

## E-Commerce

This section covers the transaction handling involved in placing orders for services or products and paying for them over the web. In businesses, this may involve an ordering facility where the customer orders the product or service by email. Typically, the customer has to wait for a response from a person, although some email responders can generate an automatic email confirmation receipt of the order. At the next level, an ordering facility is offered where the customer orders a service or makes an appointment through a form on a web page. The order or appointment is then sent to a database. Confirmation of the order or appointment usually comes immediately. Payment facilities usually require an online credit card payment approval system. Another option is where a council provides a facility for customers to send an email or fill in a form relating to a specific service enquiry.

There appears to be some anomaly between the small number of sites that have any form of ordering facility (5%) and the larger percentage of sites that provide for online payment (23%). This can probably be explained by the presence of one type of online payment – council rates. It is probable that ordering (by email or interactively) is more suited to commercial organisations where the products or services are easily definable and deliverable such as books. Nevertheless, councils do provide some easily definable products and services such as garbage bins. For those products or service, or town planning application) an email service or form could be provided for a further inquiry but was rarely available (5%).

#### E-Decision making and e-Democracy

This section covers features that aim to inform the resident of broad issues about the operation of the council. Items such as council minutes or strategic planning issues and newsletters are examples of this type of feature. Other features include links to bodies within the council region or to significant businesses. Links to other government services is another important feature that, surprisingly, was not present on any of the sites examined. Some sites offered job information through a listing of the types of employment available within the council. A more mature website would facilitate discussions on issues through a bulletin board, organised electronic community forums, or email response.

Features that became apparent during the study, but not initially included in the study, were instances where information about the local area, or 'things to do' were listed on the website.

It is surprising that, although at a relatively low level, many councils have placed a moderate amount of community based material on their sites (10-20%) and established links to a large number of community and business organisations (65%). Council websites, however, are not sufficiently interactive to conduct activities that would support the interchange of information and ideas. Bulletin boards did not exist on any of the sites examined.

The comments from interviewees suggest that councils have possibly sought to fill their sites with information and, as a consequence, have brought together disparate information that has not been readily accessible by residents over-the-counter.

## CONCLUSION

This research paper reports on the progress local governments in Victoria have made towards the implementation of services over the WWW. The paper outlines a number of models that are suggested for the maturity of e-Government services. Most of these models propose a linear maturity path from basic presence to full maturity. The local government sector, however, is significantly different from other levels of government and government authorities. Local councils, as one organisation, provide a wide range of disparate services, and work closely with their local communities. It is understandable that, in an environment of increased accountability where services must be delivered more efficiently and effectively, local government are under pressure from other tiers of government to exploit the potential offered by the WWW. This pilot research suggests that it may be possible to look at the stages of maturity of local governments have not made significant progress towards the implementation of a virtual counter. Additional work, currently under way, will examine in detail the ways councils decide on and implement services and the effectiveness of these services for local communities.

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#### **APPENDIX A**

Basic Information	About the Council	About Mayor	About Other Staff	Location of Retail Outlet	About Events	What's New?	Location Map
Percentage (%)	95	90	90	95	25	25	70

Web Site Navigation	Buttons on Each Page	Navigation Map	Web Site Search Facility
Percentage (%)	90	65	60

Contact Details	Email Links to Contact Business	Telephone Number	Facsimile Number
Percentage (%)	95	90	75

Product/Service Details		Product or Service Pamphlet or Brochure
Percentage (%)	90	80

Product/Service Support	Frequently Asked Questions	Searchable Product/ Service Support	Directions For Use	Email Based Support
Percentage (%)	20	0	0	0

Transaction Handling	Online ordering by email	Interactive ordering	Email/ form for quote or enquiry	Online payment
Percentage (%)	5	0	0	23

Sense of Community	Bulletin Board	Community Forums	Notification of Council Decisions	Newsletter
Percentage (%)	0	0	20	10

Links	About Local Area/ Things To Do	Business and community Links	Link to other Government services	Job Information
Percentage (%)	85	65	0	55

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