

Town hall eGovernment: a study of local government electronic service delivery

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Abstract

Australian municipal councils recognize the need to use the Internet to deliver information and services. The move to eGovernment has been prompted both by local government reform and pressure from controlling State governments. Only recently, however, have there been more significant moves towards local eGovernment. This research paper reports on the progress local governments in Victoria, have made towards electronic service delivery. The paper provides a background to types of electronic information and services provided by local government and the stages of electronic maturity. The research found that although the web sites of Victorian municipal councils provide far more information and services than they did two years ago there still is a heavy focus on governance issues.

Keywords

Local government, Municipal Councils, eGovernment, eCommerce, Internet

INTRODUCTION

While it is difficult to find a universally acceptable definition for local government it is generally accepted that they occupy the lowest tier in a hierarchical structure with federal and possibly state governments above them. Despite their strong, grassroots links to communities, local governments frequently lack truly independent decision making powers in key areas and they are often subject to control from higher levels of government. The role and responsibilities of a local council, municipality or county, as they are sometimes called, varies greatly from country to country yet comprehensive eGovernment is only truly achievable with successful implementations within the local government sector. It is only in recent years that this sector has started to show advancements in eGovernment (Accenture, 2003; SOCITM & I&DeA, 2002). While electronic service delivery is the main thrust of eGovernment policies at all levels, greater community contact is often seen as more practical and achievable at a local level (Musso et al., 2000; Steyaert, 2000). In countries such as the Netherlands, Brazil and Norway, the establishment of strong community links is a major focus of governments at this level while in Australia the major focus has been on service delivery (SOCITM & I&DeA, 2002). In recent years, the role of Australian local governments has expanded to include both traditional areas of infrastructure and now town planning and social welfare.

In the 1990s many governments and their agencies, particularly in countries such as Australia and the United Kingdom, underwent massive change and are now faced with a new form of government. As part of this *New Public Management* (Sanderson, 2001) local governments today are under pressure to provide more efficient and effective information and services (Cochrane, 1993; Gerritsen & Osborn, 1997; Kloot, 1999; Sanderson, 2001; Steyaert, 2000). The aim has been to provide better government, often by a decrease in direct service provision as the result of outsourcing and competitive tendering, while at the same time attempting to reduce costs.

For many, eGovernment provides a platform to build on the recent changes to governments and bureaucracies at all levels (Lenk & Traummuller, 2002). These interpretations have eGovernment as more than the electronic replication of existing information and services but as an opportunity to provide new and enhanced services to the public, to increase the involvement of communities in policy making and to improve the responsiveness and convenience of service provision.

Recent research indicates that Australia is ranked highly in the area of eGovernment and is well placed to make significant advancements in the future (United Nations, 2002). Moreover, the current literature suggests that the direction and implementation of eGovernment strategies at different levels of government emphasize different relationships with citizens. This paper builds on previous research on the progress local governments in the state of Victoria, Australia have made utilising the Internet to deliver traditional services, improve governance and enhance community contact. Through a case study of three councils, it identifies the factors impacting on local government that determine the level, type and support for different forms of electronic service delivery and governance. Moreover, it examines the changes in directions local government has made in recent years compared to the findings of previous research(Shackleton, 2002).

PRESSURES ON AUSTRALIAN LOCAL GOVERNMENT

Australian local governments (often known as municipal councils), have no constitutional legitimacy, but have responsibility for the implementation of a large range of services such as roads, waste collection and local town planning. Councillors within each Victorian municipal council are elected by residents for three years. Residents pay council rates that supplement funds from the State government and the council is responsible for the management of those funds to provide a variety of services.

The influence of state governments over municipal councils is considerable both in terms of funding and policy direction. In 1994, the Victorian state government abolished 220 councils replacing them with only 78 larger councils. Other sweeping changes were made in policy development, such as the imposition of town planning restrictions (ResCode), in the provision of services through the introduction of Compulsory Competitive Tendering (CCT), and on resources with the forced reduction in residential rates and compulsory downsizing of staff numbers. Greater emphasis was placed on cost reductions while at the same time increasing the expectation of improved customer service and quality. (DTLR, 2001; Jones, 1993; Kloot, 1999; OECD, 1996). The Victorian State Government together with the Federal Government established benchmark practices for local government with an expectation that they would implement reforms to achieve higher levels of efficiency, effectiveness and accountability (Department of Transport and Regional Services, 1999; MAV, 1993; Multimedia Victoria, 2002). Many municipal councils have therefore been forced to consider alternative methods of delivering information and services to reduce costs with the Internet seen as one of those viable options.

Most Victorian municipal councils are comparatively poor which often impedes the implementation of innovative reforms. A review of local government revenue found a sixty-eight fold difference between the wealthiest council, the Melbourne City Council and the poorest in the Mallee district of Victoria (Figure1)

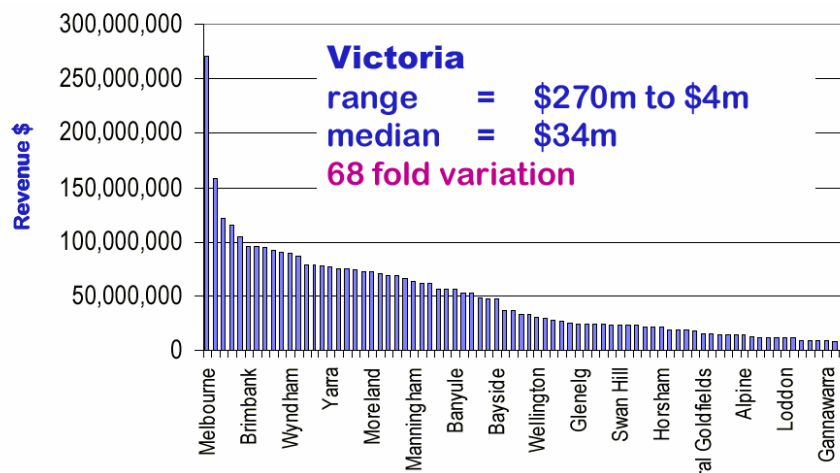


Figure 1: Victorian Local Government Revenue (Whitehorse Strategic Group & MAV, 2002)

Yet Australia is ranked second to the USA amongst United Nation member states in eGovernment capacity despite the comparatively low level of funding from state and federal governments for these types of initiatives (United Nations, 2002). Although the Australian Federal government in 1997, provided \$A250 in funding to support a range of eGovernment initiatives, only \$A5.77 million was allocated to the Victorian Local Government Online Service Delivery Project (VLGOSD Project). The project identified nine areas of importance, primarily telecommunications, web content management and payments on line, but funds were

restricted to the poorer regional councils who typically received only fifteen to twenty thousand dollars. Eager to take advantage of the limited funds and desperately needed support, by the end of 2002 most Victorian regional councils had implemented some form of web content management system while a lesser number had installed on line payment systems under the project.

SERVICES PROVIDED BY LOCAL GOVERNMENT

It is difficult to identify and categorize the range of services provided by local government as they vary from country to country. Recent research that compared local eGovernment implementations amongst seventeen countries identified different directions or *flavours* of local eGovernment policy (SOCITM & I&DeA, 2002). Most countries concentrate on eService provision while a lesser number direct their attention to eGovernance (including e-democracy) or eKnowledge (an emphasis on skills and infrastructure to support entrepreneurial endeavours).

It is easy understand the dilemma facing local governments on the path to eGovernment implementation. The OECD (Shand & Arnberg, 1996) found that residents have a wide variety of contacts with the local government sector and in each case the local government needs to play a different role. Table 1 outlines the different resident roles and matches these to some of the twenty two main functions undertaken by councils in Victoria as identified by the Municipal Association of Victoria (MAV, 1993).

Resident	Example of information/ Service Required
Consumer/Client	Home assistance for the aged
Receiver	<i>Grant to a sporting club</i>
Prosumer (producer and consumer)	Parent volunteers in kindergarten.
User/Citizen	User of public parks and facilities
Purchaser	Hire of bin service
Taxpayer	Payment of rates
Regulatee	Statutory town planning
Voter	Voting in council elections

Table 1: Examples of Different Resident Types (Shand & Arnberg, 1996, p.17)

Electronic government, particularly at the local government level, is often seen as providing an opportunity to improve aspects of citizen-to-government relationships and at the same time reduce costs and inconvenience on both sides of the relationship. Indeed, Australian local government is seen as opportunistic with an emphasis on eService provision as a way of driving down operating costs (SOCITM & I&DeA, 2002).

It is expected that more mature local eGovernment will eventually change existing government processes, relationships and structures to make them less hierarchical and more responsive to community needs (SOCITM & I&DeA, 2002; United Nations, 2002). Even at this comparatively early stage in their implementation, Victorian municipal councils are expected to move beyond service provision and to be more responsive to the needs of their communities. The Victorian State Government has outlined four pillars of eGovernment that include a desire for improved participatory democracy (DTLR, 2001; Mulitmedia Victoria, 2002). It is the potential of the Internet to alter the relationship with communities that has *citizen-focused government* or *eDemocracy* as a comparatively new platform in eGovernment policies (CITU, 2000; Mulitmedia Victoria, 2002)

E-GOVERNMENT MATURING MODELS

The overall level of eGovernment maturity often correlates to political, social and economic factors within a country (United Nations, 2002). In this respect, Australia is a comparatively wealthy country with a highly developed telecommunication infrastructure. Australians have been quick to embrace the Internet (ABS, 2002) and Australia is seen as one of the leaders in eGovernment (SOCITM & I&DeA, 2002; United Nations, 2002; World Bank, 2002).

While electronic government is more than just a move from a physical delivery environment to a virtual or online delivery environment, it is often in the interests of governments at all stages of maturity to emphasize this side of eGovernment (Lenk & Traunmuller, 2002). By outlining situations where citizens suffer inconvenience and high compliance costs via over-the-counter service delivery, eGovernment policies and performance evaluations are often used as a quantifiable metric to claim better service provision using electronic technologies (Multimedia Victoria, 1998; NOIE, 2001).

A number of models have been proposed describing the stages of eGovernment maturity particularly at federal and state government levels. The United Nations describe a typical five stage model of eGovernment maturity from online presence to full integration that they used to benchmark government web sites at a national level (United Nations, 2002). Similarly, Accenture (2003) outline a model choosing service transformation to describe the highest level of maturity.

There are models of eGovernment that look more at the *direction* or *flavour* of local eGovernment policy rather than overall levels of maturity. Musso, Weare et al's (2000) simple model of metropolitan reform distinguish between entrepreneurial and participatory activities amongst municipal governments in the USA,. Entrepreneurial activities emphasize the provision of services to residents and businesses while participatory or civic reforms improve access to the decision making process but are they are more common on established municipal web

Quirk's (2000) description of eGovernment maturity probably best represents the implementation of eGovernment amongst local councils because it emphasizes the disparate range of functions and services provided by governments at the local level. Quirk proposes that local eGovernment progressively mature across five functional areas eService, eCommerce, eManagement, eDecision Making and eDemocracy through four linear stages with Information Giving at the lower end and Empowering Citizens as the final stage (Figure 2). It is for these reasons that this model has been used for this research.

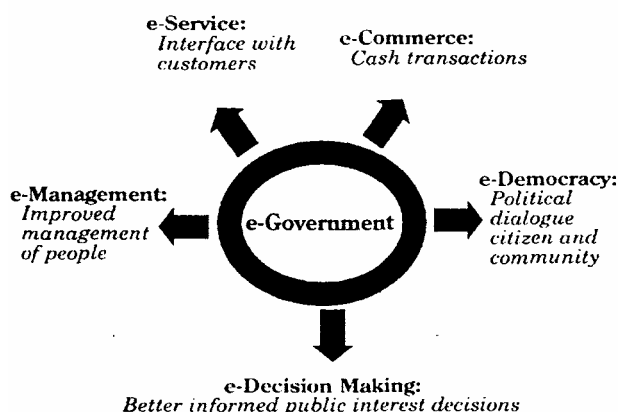


Figure 2: eGovernment for Local Authorities (Quirk, 2000)

RESEARCH ANALYSIS

Research Objectives

The objective of the first stage of the research was to investigate changes to the content and level of maturity of different aspects of Victorian council web sites over the last two years. The focus of the second stage of the study was to provide qualitative data from a case study of three councils to supplement the survey data

Content Analysis

A context matrix was developed and used to examine the presence of information and services such as council agendas and minutes, rate payment and community services in key areas of local government support as identified by Quirk (2000). As an example, Basic Information includes the presence or not of features such as, information about the council, a location map, and information on the mayor or staff. In this research, Electronic Decision making and democracy were grouped together as the information available on a council web page assists the user in both of these categories.

A summary of the findings of the early research (Shackleton, 2002) together with the analysis of the most recent research is summarised in Table 2.

Category & Feature	Present (%)	
	2001	2003

e-management		
Basic Information	95%	100%
News and coming events	25%	100%
Email address	95%	95%
eService		
Service details	90%	95%
Service tracking	0%	55%
FAQs	25%	25%
Email support	0%	5%
eCommerce		
On-line payments	23%	90%
Ordering facility (Downloadable Forms)	5%	70%
Email payment/ordering	5%	15%
e-Decision Making/e-Governance		
Community information	20%	100%
Links to other organizations/businesses	65%	95%
Community Groups/Bulletin boards/	0%	5%
Chat Room		

Table 2: Summary of main characteristics by category in 2001 and 2003

The analysis of the 2001 data found a huge variation between groups of municipal councils, some having leading edge sites and others labouring to maintain a web presence. Councils in this latter category often used community and governance features to supplement their basic sites (Shackleton, 2002). The most recent research, as shown in Table 2, indicates a substantial degree of overall maturity although it continues to wain in specific areas. A deeper understanding of the reasons for this difference is revealed in a major case study of a municipal council with comparisons to two other councils.

Case Study

Three councils were chosen for the case study research each at various stages of eGovernment implementation and representing different demographic parts of Victoria. Work was done intensively with one of the councils where fourteen interviews were conducted with a range of council staff such as section managers, communications personnel, web co-ordinator, councillors and associated council support staff. As the majority of the research was done in that venue the report on the research will concentrate on the progress that council has made towards eGovernment.

At least two interviews were done with staff from the other councils in an effort to identify similarities and differences between the councils. Details of each council are outlined below. While rigorous triangulation would be desirable, this initial research concentrates primarily on the major council of the study.

Council N was the major council in the case study research and is located on the fringe of Melbourne. It is classified as an *interface* council because most of the population is concentrated in a number of large suburbs but the council must service a sparsely populated rural constituency. Historically the community has a strong commitment to environmental protection, arts and local history and is actively involved in council governance. The council serves 20,600 households, has an annual income of \$35 million, but only one full time Web developer/IT/business analyst, and a part-time Communications manager. Some IT staff are working on separate web-based projects such as GIS systems. Although comparatively small it has had made significant progress in its eGovernment strategy. Since its first introduction in 1999 the council has not only changed the format and content of their site but on two occasions they have completely replaced the old web page.

The other two councils used for comparison are identified as Council L and Council M. Council L is a small rural municipal council located in the Victorian Mallee district. It has 6,500 households with an annual revenue of \$13.3 million. There is no IT support at the council and an Environmental Engineer works approximately 4 hours per week on web related support. It has a basic static but dated web page.

Council M is a metropolitan council that covers a number of affluent inner suburban areas of Melbourne as well as poorer working class suburbs with a high level of ethnic representation. It has 50,000 households, an annual revenue of \$51 million and five Web/IT support staff incorporating business analysts, web editor, editor in the Communications section. The council has had a web page for several years and it uses a content management package and payment software.

Case Study Analysis

The analysis found three broad areas impacting on electronic service delivery, Municipal council eGovernment priorities, external factors and internal initiatives.

Municipal Council eGovernment Priorities

The general move to eGovernment together with the impact of the VLGOSD Project has led to an improvement in the maturity of council web sites as indicated in the survey. The interviews with staff and councillors reveal that the Internet is seen more as supplementing the provision of existing services rather than changing the processes associated with its delivery. There is a strong tendency to think more of governance issues than delivery of key services. Certainly payment of rates and a long term desire to improve the submit process of building applications were mentioned but staff appear to concentrate more on supplying more information or improving community involvement than enhancing service delivery. This is consistent with the fact that the general focus of council business has a more hands on approach in its dealings with the community. Electronic commerce is available mainly for the payment of rates but rarely for other charges such as dog licences and parking fines. Expensive back-end systems are required to support electronic payments and councils often lack both the money and expertise to implement and support these systems. This led one interviewee to comment

If people can pay rates over the phone then I don't see a lot of merit of pushing payment of the rates over the web. It is an easy solution for them – the quality of the transaction from the consumer point of view is no better over the web than it is over the phone. Compare that to something like plans then the quality of the transaction over the phone is far inferior compared to looking at it over the web.

It is about tailoring the limited resources to get the maximum improvement in services. If you are getting a 5% improvement in putting resources into transactional stuff then I see that as marginal. Getting a 50% improvement somewhere else I see that as substantial and that is where I think resources should go ahead.

Nevertheless, council staff were starting to question the type of material on the web page and the need to deliver genuine services. A staff member observed:

We need to go beyond the governance side and concentrate more on services. As a ratepayer I want to go to a web page and find out what services they can provide. Through the technology it gives me the opportunity to seek out the right people and it has confidentiality.

While the content management systems made available to councils under the VLGOSD Project expands staff involvement in web-based delivery, it does not automatically guarantee councils will change their existing service delivery processes. A key example of this is the restricted community access to council staff via email for service and product support.

External Factors

The investigation found that a number of disparate and interrelated external and internal factors impact on the attitude of local government to web-based service delivery.

In recent years, a number of external factors have been working in the background to change council ethos with respect to electronic service delivery. State and federal governments were establishing policies on electronic service delivery that included municipal councils. External performance measures came into force that benchmarked Victorian councils for the quality and cost of service provision. There has also been indirect pressure from other councils as more and more of them have moved beyond web presence to mature sites with enhanced services. These became lighthouse examples for others to follow. Although there was no evidence to suggest extensive community pressure for electronic service delivery in any of the three councils in the case study, there was a perception that the metropolitan councils needed to have more than just a basic static web site.

There was also increasing community pressure on councils to 'catch up' with other state and semi-government authorities. As an example, Council N was criticized for having a low level of web-based service delivery at that time in an article in July, 2001 in one of the large syndicated papers. The one exception to the push by the community for better electronic service delivery was in the rural council where it is viewed as a low priority amongst the council, council staff and the community. This resistance to implement electronic service delivery is despite the extensive computer usage within the community to support functions such as crop and animal management. Council services are seen as being accessible via phone queries and visits to the main town and, as the council is engaged in a protracted legal battle for the payment of rates from rural rateable properties, funding for this area will probably continue to be difficult to obtain.

Internal Initiatives

While there may be pressure from a community to ensure its council has a level of electronic service delivery similar to its neighbouring councils, it is often internal issues such as the push from staff or councillors for more flexible delivery that accelerates the process of eGovernment.

All of the three councils experienced some of this change in the early stages where an enthusiastic staff member championed the need for web-based service delivery and develop an initial static web page. Moving on, however, from this initial stage has often been more difficult.

At Council N, the Communications Branch under the new manager was keen to establish a new much more flexible web page. Extensive consultation with divisions within the council was undertaken. The page that was developed contained a large amount of rich but static information that was well organized and functionally easy to access and download. The interviews with staff reveal that they did not have a sense of ownership of the page but saw it as the domain of one area, the Communications Branch. The restrictive updating routines quickly dated the static information. A second project involved an innovative web site developed for the By Laws division was also an example of an initiative by one staff member. The difference in this case from earlier iterations within Council N is that it had the support of the innovative division manager and it quickly became an achievable benchmark for the rest of the council.

In the background the IT manager at Council N took the opportunity to engaged staff in discussion of issues, involve other divisions in new programs but more importantly was committed to using technology to support and then change business processes. An extensive blueprint outlining these ideas was established called Business, Information and Technology Strategy (BITS) with a working group of staff from all divisions. This initiative encouraged council staff in a range of divisions to question existing service delivery processes and look to electronic service delivery as a way of improving everyday business.

The metropolitan council, Council M appears to be similar although without the same level of success. Recognising the problems getting divisions to input into the web page, they eventually implemented content management software and established 30 content editors from divisions within the council. Asked why they had not progressed as rapidly as similar councils in recent times the CIO stated:

We are about average and that is where our management here would probably prefer us to be. They don't want us to be leading edge because they don't want it to be seen that we are pouring money into fancy toys for the community. So I think they are comfortable for us to be middle of the road.

DISCUSSION AND FUTURE RESEARCH

Local government has until recently been a most reluctant entrant into the world of eGovernment. The comparison of the web sites over a two year period indicates a major improvement in the level of local eGovernment in part due to the financial resources and expertise available under the VLGOSD Project. A comparative examination of 20 representative local council web sites found that electronic maturity occurred between 2001 and 2003 in a number of key areas included: service tracking, online ordering and payment, provision of information relevant to the local community. Future research is needed not only track the maturity of local government electronic services but also to identify the changes to the nature of those services. Research into the types of services that are important to councils at various stages would also provide some understanding of council priorities at various stages of maturity.

The case study presented in this paper help explain the shifts and further illustrate why more improvement has not yet occurred. The research revealed that many municipal councils, unlike Commonwealth and State departments and authorities, often have little discretionary funding particularly for eGovernment. Limited funds are targeted for specific projects and any alteration to funding priorities must be justified to the community. In this environment, local governments are highly reliant on tagged external funding from State and Commonwealth grants and projects, and there will often be an expansion in local eGovernment maturity even when only limited funds are available.

In addition to the external pressure from higher levels of government, the research found that local communities have brought eGovernment to the fore for some municipal councils. This pressure incorporates both what is perceived by council staff about community expectations and real where limited evaluations have been done. In poorer rural councils the community has electronic service delivery low on the list of projects competing for scarce funds while most metropolitan councils have made decisions themselves to support more than just a basic web site.

There is an emphasis in local eGovernment on improving community involvement rather than hands-on specific electronic service delivery. Strong links to the community is a central tenet of local government, and the

research found that municipal council staff place great emphasis on governance issues through web delivery in preference to electronic service delivery. Even at more mature levels of eGovernment, municipal councils appear to emphasize governance issues before enhanced electronic service delivery.

One major exception is the on-line payment of rates which is seen as a major step in local eGovernment maturity despite the large number of alternative ePayment options via banks and other financial institutions available to people. In Council M rate payment was possible on their early web page that often lacked other basic services. Back-end systems are expensive to support particularly in the area of electronic payment of charges and many councils have lacked the budget and expertise to implement such systems.

The use of content management packages in local government, many of which were financed under the VLGOSD project appear to have had a major impact on the development local government web pages and ongoing maintenance. Future research examining how these packages have impacted on the maturity of local eGovernment would be highly beneficial.

CONCLUSIONS

This research paper reported on the progress local governments in Victoria, have made towards electronic service delivery. The paper outlined the types of services provided by local government and their strong community links. In Victoria municipal councils are subject to higher levels of accountability and are under pressure to continually improve the quality of services while reducing costs and fees to residents. The research found that although the web sites of Victorian municipal councils have improved markedly in recent years, they still have a heavy focus on governance issues. While the availability of funds through the VLGOSD Project and other forms of expertise have assisted municipal councils on their path to eGovernment, many external factors and internal initiatives have force them to seek better ways of delivery services electronically and engaging the community.

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