

# THE INTERNET: A NEW MEDIUM TO SERVICE YOUR COMMUNITY

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## Abstract

Worldwide, 100 million people were connected to the Internet in 1998. In the year 2005 it is estimated that 1 billion people will be connected. Traffic on the Internet is doubling every 100 days. Can you afford to ignore the impact of the Internet on the way you service your community any longer? This is a clear challenge as we lead into the new millennium.

Information management and technology will be a key catalyst for changing the way we provide information and service our community in the future. The Internet and the World Wide Web have moved from entertainment into powerful and useful business tools. It is now not sufficient to have a mere presence on the Internet. A site must be properly planned following clear objectives with a measurable outcome. A web site without purpose will become a "lonely billboard in cyberspace".

The presentation of the Paper will include examples of how some public agencies are using the Internet to better inform and better service their communities. It will illustrate the potential of the Internet to streamline processes and to provide quicker response to our citizens.

**Key Words: Internet, service delivery, virtual communities, Internet marketing**

## Introduction

In the 12 months to February 1999, nearly 5 million adults accessed the Internet in Australia compared to 3 million in the preceding 12 months. This represented 37% of Australia's population aged 18 years and over – a dramatic increase from the 23% of adults for the same period in 1998.

Australian households with access to the Internet are also frequent users. Almost 90% access the Internet once a week or more.

Worldwide, 100 million people were connected to the Internet in 1998. In the year 2005 it is estimated that 1 billion people will be connected. Traffic on the Internet is said to be doubling every 100 days. More than 25% of U.S. households are on-line today; this is expected to triple by 2002 – only 3 years away.

Growth of the Internet is spectacular. There are daily news headlines of growth in Internet

stocks. On-line banking in Australia is expected to grow by 300% over the next twelve months. The Internet is also no longer the realm of high income early adopters. The proportion of middle income users on the net is now equal to that of high income earners.

Local government can no longer afford to ignore the impact of the Internet on the way we provide information and service our community. This is a clear challenge as we lead into the new millennium.

In recent years local government has downsized, rightsized, outsourced and benchmarked its way towards providing more efficient and effective services. Information management and technology is now the key catalyst to changing the way business is undertaken in the world today.

The purpose of this Paper is to raise awareness of local government to these trends and to the potential of this new medium to service our local communities. It

will discuss some of the issues to be considered in developing an Internet site.

### **Where to start?**

As with any new process or project, to be successful an Internet proposal needs to determine its purpose. A site needs to be properly planned following clear objectives with measurable outcomes.

In the first instance however, a sound Internet strategy begins by getting a feel for what is possible. The presentation of this Paper will illustrate the potential through a series of on-screen examples – some of which are included in Appendix A at the end of this Paper. The experience of live Internet access to "surf around" is important for those new to the world of the Internet and its potential for local government.

A heightened level of interest in the Internet will soon be evident once given an exposure to its potential. The development of an Internet strategy should not be left to the I.T. department! A WebTeam (sounds better than another committee!) should be formed to project manage the implementation and ongoing development of a Councils Internet site.

All operational departments of a council should be included on the WebTeam - including public relations staff and most importantly the Customer Service Team. It would be preferable that volunteers are sourced who are keen and excited about the potential of the Internet. As public works professionals, make sure that you are represented. The WebTeam also needs a "champion" to drive the implementation of the new website through the organisation.

### **Evolving Uses of the Internet**

The Internet is taking its place next to fax machines and the mobile telephone as an indispensable means of communication. The evolving use of the Internet for local government is developing rapidly.

**E-mail** is being extensively used as an alternative to the telephone, fax or snail-mail. It is an efficient way to exchange text, data and graphics files between offices, from your consultant, contractor or citizen, across town or around the World.

**Information dissemination** on the web is often the first step to having a web presence. Council agendas, policies and codes, opening hours, contact information are put up on the web like a bulletin board. This first stage allows development of in-house skills and a better understanding of the full potential of the Internet.

**Service delivery** is about "doing it on-line, instead of standing in-line". Transactions over the Internet are becoming more common as consumer confidence and access grows, and as more on-line services are developed. Developing and implementing services for citizens will require a new way of thinking. It will necessitate internal business processes being reviewed as some middle layers of a process are eliminated or substantially changed. Citizens are demanding faster, more responsive and convenient services which can now be made available 24 hours a day on the Internet.

**Push technology** is being promoted as the biggest development on the web since the web itself. This is where users subscribe to a service that delivers information automatically to their desktop. In its simplest form, this may be just a regular e-mail. Citizens could receive a fortnightly message listing all the agenda headings on the Council Business Paper. A hyperlink could then take them direct to the full on-line report if they wished to explore an issue further. Newsletters or updates can be distributed automatically to residents - instantaneously.

**Virtual communities** are the way of the future for local areas - with council services at the core. Residents will be able to access all information and services through a single gateway (or portal) – whether it is submitting a building application, getting a quotation from local contractors, booking a restaurant, registering "young Johnny" for the soccer team, reporting a pothole, or finding out what

movies are on at the local cinema and purchasing a ticket.

The key to virtual communities will be to encourage communication and interaction between and amongst visitors to the site. The aim is to build relationships, or a sense of community, not unlike real world communities. A positive, interactive experience needs to be created that encourages repeat visits for a site to be truly successful.

An on-line community provides an opportunity to generate a highly targeted market or audience. Local government can use this opportunity to foster e-business and develop a virtual community as a means of local economic development. If residents can easily target and access local businesses on-line, they are less likely to head for a competitor in the next city or community.

**Governance** itself is likely to be transformed in the future – changing the role of citizens as *shareholders* in government, as opposed to citizens as *customers* of government. (Alliance for Converging Technologies [[online](#)]). The Internet will offer new avenues for participation in government decision making – from day-to-day decisions to four yearly electronic ballot boxes. Comments or objections to development could be received over the Internet; on-line referenda could be undertaken on hot issues; and electronic election campaigns taken to the 'net.

One United States city is even trialing live audio and video of Council meetings over the Internet. [Murphysboro City Council](#) started broadcasting Council meetings live in August 1997. Additionally it allows citizens to participate in the meeting through a live on-line chat room which is monitored from within the council meeting.

## Some Examples

Here the reader is referred to [Appendix A](#) to view a number of examples of how local governments are using the Internet.

[Appendix A](#) includes examples of award-winning sites, virtual communities and

transaction-based sites such as the City of Seattle's *Public Access Network*, the City of Indianapolis' *Indygov* site, *Blue Mountains Web*, Australian *My Community* sites, *OurTown2000* and *Maxi*.

As noted earlier, it is important to have an understanding of the potential of the Internet before proceeding down the path of having a web site.

Also included in the Appendix are links to many [local government technology and other sites](#) of interest.

## Target Audience & Site Concepts

*"Don't even think about what service you're going to provide (on the Internet) or how you're going to provide it until you have (also) figured out who your customer is and what he or she wants". (Tod Newcombe (1998) quoting Patricia Seybold)*

It is important that information and services provided on the web are relevant to the daily lives of our community. A challenge in developing a website for local government is the broad scope of the target audience. Local government doesn't market just one product, eg., surfboards. It has a myriad of disparate services that it provides to its local community.

A simple survey could be undertaken to categorise the enquiries a council receives by telephone and over the counter. Common examples of the reasons the community contact a council are:

- Development Approvals - lodgement of building & development applications, tracking progress of approvals, seeking inspections
- Community Information - hours of operation, fees & charges, community resources available
- Bookings - halls, child care, pools, parks  
Payments - rates, fees associated with various applications

- Council Business Paper - agenda, reports, minutes
- Positions Vacant - job information
- Contacting Council - staff, councillor's, reporting minor maintenance requests (potholes, missed garbage bins)

This information assists in planning how a council needs to target its priority “market segments”. A council's primary objective in developing a website could be:

- To improve customer service by promoting 24 hour access to ‘City Hall’ information and services

Further objectives could include:

- To promote local economic development through development of the site as a virtual local community, and
- To improve the corporate image of the City by being at the forefront of service delivery through the new medium of the Internet.

The “look and feel” of the site will be critical to its success (and could easily be the subject of another Paper). Modern design dictates that sites should be well laid out, fresh, lively and uncluttered. A site needs to engage its audience in an interactive way and in a manner which is relevant to daily lives to ensure an experience that encourages repeat visits.

The site should leave an impression that it is constantly changing and being updated. It should be quick to download and have user friendly access to navigate around the site. It should provide an opportunity to give and get feedback. It should reflect the organisations goals for the site.

## **Internet Marketing**

Internet marketing means thinking beyond the website itself. Marketing of the site should be integrated into the organisations total communications and marketing strategy.

The site address (URL) should be included on all stationery, business cards and the numerous other documents that the City produces each year. All employees should include the URL and a short description of the site into the automatic signature of their e-mail.

The starting point of a more thorough look into marketing the site will again be to consider our goals and objectives - and our target audience. It will be more efficient to target our 'priority market segments' than to fire randomly in the promotion of a City's new website.

Website visitation will fall away quickly after the initial curiosity so it is important that the site is ready to go as each new feature is promoted. It is appropriate to progressively promote the site to our chosen target markets as each of these new features come on line.

Government marketing on the web is unique. Our priority market segments provide a lead to some of the avenues where the site could be promoted - and integrated into Councils overall marketing strategy:

- If on-line permitting has been provided, applicants for Development Approval could be advised of the website in pre-application guidelines and code documents; acknowledgment & approval letters could advise to check the website for progress with their application; conditions of development could refer to the website for further information.
- People seeking to book halls, child care, pools or parks may have been notified of the website facility on notice boards at the particular facility; or in publications specific to their need; local schools may be advised in the annual promotional mail-out for pools, etc.
- Ratepayers seeking to pay their rates would be advised on their rate notice of the new facility to pay rates on the Internet;
- Application forms for tree removals would note the facility to both submit the

application and pay any required fee at Council's website.

- Potential applicants for vacant positions would be notified in newspaper advertisements that further information may be downloaded from the web.
- The general community seeking information would be alerted to Council's website via the Council's weekly Corporate Page in local newspapers, on all Council stationery, on library membership cards, in the monthly council newsletter, etc.

Another opportunity to promote the site is to offer prize incentives in print media to visit Council's website.

## Measuring Success

*Anonymous hits on your server can only tell you so much. It's sort of like counting the number of times the front door to your store opens. You don't know if it's one person coming back four times or two people coming in together ... But if you stop to interview them, if you scan their membership cards on the way in ... you have the opportunity to collect a wealth of information. You can track their path, measure their stay, and ask them questions along the way. (Sterne, 1995, p.234).*

The above quotation from Sterne (1995) puts, in a nutshell, many of the issues in measuring a site's performance. It is about site measures versus user measures. Measurement on the Internet is an evolving science. It is possible to reasonably measure page-views (a site measure) using available technology - though hits can be deceiving. However the elusive question is who is visiting your site and why? Have they been satisfied?

To measure the success of a council's site, or others, it is necessary to return to the original goals and objectives. It is necessary to rate performance against a specified criteria. In the hypothetical case earlier, the PRIMARY objective is "to provide 24 hour access to City Hall services". Are people

taking advantage of submitting and tracking their development applications on-line? Or making bookings for halls, child care, pools or parks? Are they paying their rates via the Internet?

In many of these instances, it will be possible to directly keep track of these statistics by noting the number of successful transactions achieved by way of the new medium. A comparison can be made against normal transactions received via other means. This could be compared with A.B.S. figures on the percentage of people with Internet access in the general community, or with the particular market segment, eg, the total of those people in the community submitting development applications.

Besides measurement of completed transactions, it is desirable to also determine if in fact people intending to complete a transaction, visited the site but were unsuccessful. This could be occurring because of poor site design or poor navigation around the site. Perhaps people visiting the site were actually after information that was not provided - the target market segment may have been incorrectly targeted! ...or the correct services may not have yet been established on the website. Measuring specific page hits can give feedback on which pages are important to visitors - and which pages are being ignored or lack interest.

It may be possible to require visitors to log in with a previously distributed password or membership number, e.g, to access progress with their development application, to reserve library books. In doing so, a few simple questions can be put exploring comment on the success of the site and assisting to build up a profile of the user. Visitors could be invited to subscribe to e-mail newsletters which will be another opportunity to develop user profiles and obtain feedback on satisfaction. As sites move towards "gated" virtual communities there will be further opportunities to measure success and tailor sites to satisfy target audiences.

## **Maintenance and Feedback**

A true measure of success will also be how the site is maintained and enhanced. People will only visit a site time and again if it is of value or interest to them. And what is most valuable and interesting? Up-to-date information. Maintenance of the website will be essential for ensuring return visitors. One person should be made accountable for the overall care and conduct of the site.

Content on the web pages should be owned by the various stakeholders within the organisation who will need to be committed to providing regular updates. The WebMaster should ensure that the content is updated in a manner that makes it consistent with the style, intent and structure of the website. The design theme should be consistent with the organisations desired corporate image.

Regular checks should be made to ensure that all the navigational links are working correctly and that visitors are not lead down dead paths.

Any marketing strategy doesn't just choose one "angle" and then stick with it forever. Similarly the design elements of the website should be reviewed and changed from time to time. Goals, objectives and target market segments should be reviewed to ensure that they are still relevant. The results from measuring and analysing the sites success should be fed back into the design process to further enhance the site. Visitors should come to expect that your site is regularly updated and changing to encourage their return visit.

New ways of providing a site that is interactive with its visitors should be explored - but with the care that the technology doesn't overpower the content. This interactivity can be used to encourage feedback which can then be used to improve the effectiveness of the site. On-line surveys are an obvious mechanism for encouraging feedback however they should generally be simple, short and perhaps even fun. Incentives could be offered to have residents register on-line to receive an electronic version of the City's quarterly newsletter.

Traditional 'contact us' by e-mail should be included on the website. It can be very frustrating to want to contact an organisation to provide feedback or seek information, only to find that there is no e-mail or 'comment box' provided. Close attention should be paid to visitors who go to the trouble of sending comments. The value of their comments can be demonstrated by personally replying to their message, preferably within 24 hours.

## **Conclusion**

Local government can no longer afford to ignore the impact of the Internet on the way it services the community. The potential is far beyond e-mail and providing access to information. It is about new methods of service delivery, two-way communication and virtual communities. The Internet provides opportunities for improving internal business processes. It should be seen as a key catalyst for changing the way we do business is undertaken.

Public works professionals and others in local government should be aware of these opportunities and explore ways that they can better service their community through the new medium of the Internet.

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## Appendix A

### Some Examples

The starting point here is [Government Technology](#) magazine's [1998 Best of the Web award winners](#) in the local government category. The primary criterion used for these awards is the amount of interaction and business that citizens can undertake with their local authority via the Internet.

#### **City of Seattle**

[The City of Seattle's Public Access Network](#) (PAN) is an example of that city's commitment to improving service delivery for their citizens: '*PAN's primary purpose is to provide a 24 hour 'city hall' for Seattle's citizens*'. In addition, PAN also provides citizens with information about City activities and electronic contact with City staff and elected officials. PAN contains more than 32,000 documents and includes multiple searchable databases.

Reinforcing that the single most important consideration is your intended audience, Seattle's PAN posts information within three major categories according to target audience, ie., Citizens, Visitors and Business. PAN has also installed Internet workstations around Seattle for public access to the Internet for people who would otherwise not have such access. Some pages of interest include:

[Electronic Mailing Lists](#). To receive announcements or to participate in discussions.

[Traffic News](#). Includes live camera shots.

[Pay Parking Tickets](#). Payment using secure on-line forms.

[Report Potholes](#), [Streetlight Outages](#), etc.

[City Jobs](#). Advertisements are posted.

[Seattle Virtual Tour](#). Take a tour complete with sounds of the local frogs.

[Seattle Maps](#). From GIS system.

[Out-of-School Activity Database](#). 450 programs. Child Care Referral Service.

[Newcomer Information package](#). Includes maps, floral gift, and business introductions.

[Community Resources On-line](#). Up-to-date searchable details of services.

[Land Use Permits](#). On-line codes, tracking of building permits & complaints.

Seattle also allows residents to read budget proposals and other documents day or night, then submit testimony without having to attend city council meetings. Refer article online: [Sleepless, but Civic, in Seattle](#)

#### **City of Indianapolis**

[The City of Indianapolis/Marion County's Indygov site](#) uses the Internet to improve how their residents interact with their city. They also can apply for permits on-line and pay parking tickets, find parks and recycling sites, e-mail officials, and access ordinances.

To increase some of the fun essential to a good Internet experience, they also let users act as a 'virtual mayor' to distribute revenues while balancing the city's budget.

Importantly, they also cater for the kids. Children can play '[Survive Alive Village](#)' and learn fire safety in a fun way, or visit the [virtual zoo](#). Indygov recognises its different target audiences with links for Business, Community, Employment, and Sport. Some examples of interactive services include:

[City-County Calendar](#). Dates and times of upcoming meetings.

[Zoning Base Maps](#). View the official city maps.

[Discussion Groups](#). Various issues via newsgroups.

[Announcement List Registration](#) . Receive e-mail of news.

[ArenaCam](#). Watch the new stadium being built via the Internet.

Indy's Mayor explains the potential: *"We are beginning to change both the way we operate internally ... and the way we use the Internet to respond to customer needs, so that citizens can do business with the city hall, secure the information they want ... in a much more convenient and efficient way. The biggest challenge has been to rewrite our way of doing business to make it easier for the Internet customer."*

The point here is that using the Internet to service the community is not just about putting information up on the web – it is about reorganising processes within the organisation to take full advantage of this new medium.

### **Virtual Communities**

Virtual communities are likely to be the marketplace of the future. Some examples of virtual communities are emerging to illustrate the variety and potential of these models:

#### **Blue Mountains Web**

[Blue Mountains Web](#) is a privately managed web site that provides a central point for anything in the Blue Mountains region. The site contains access to more than 160 businesses and organisations as well as comprehensive tourist information. It provides a strong local community focus.

The site provides a forum where members can list their business often in competition with other members. There is a broad cross-section of services available. The site promotes local economic development for the many small businesses in the area. The Council webpage which is linked from Blue Mountains Web has a very interesting [Interactive Mapping](#) facility and [WebCam](#) that entices visitors to explore further.

Some of the other links available at Blue Mountains Web include:

[Blue Mountains Directory](#) | [Accommodation](#) | [Adventure Activities](#) | [Arts, Antiques & Galleries](#) | [Blue Mountains City Council](#) | [Churches](#) | [Conference & Function Centres](#) | [News & Community Information](#) | [Dining Entertainment](#) |

[Holidays and Travel](#) | [Professional Services](#) | [Real Estate](#) | [Residents' Address Book](#) | [Schools & Education](#) | [Shopping](#) | [Sport & Fitness](#) | [Tourism & Area Information](#) | [Transport](#) | [Trades](#) | [Wedding & Bridal Services](#) | [Add a Site](#) | [What's New?](#) | [Your Feedback](#)

### **My Community**

There is a growing number of councils launching their Internet site using the "[My Community](#)" concept as a new way for residents to access information about the council and their local community. At this early stage, the sites mostly provide frequently asked questions, locations of libraries, historical information, contact details, and many other types of council and community information. There is an initial list of businesses in the area, links to weather sites, postcards with photos of the local area, information on schools, community events and many other community resources.

These councils are using the services of a private web solutions company who is developing the principle of virtual communities based around local government areas. It uses a set backbone structure for sites to allow for ease of maintenance and development (and in the long run cheaper maintenance). Each site is designed with its own distinctive "look and feel" to reflect the local community. Example sites are [Baulkham Hills Shire Council](#), [Hornsby Shire Council](#) and [Unley City Council](#).

The "My Community" concept is designed to reflect the communities in which we live. It comprises several main components. These include *local government, residents, businesses* and in some cases *tourists*. "My Community" provides services and benefits to each of these groups. Its aim is to provide an on-line mirror of "your community" providing visitors with information and services that directly relate to daily life.

It is possible to search business and services directories to find the services you need in your local area. To encourage repeat visits, "My Community" is launching a [Loyalty and Phone Card](#) to use when purchasing goods and services. My Community will offer a reward program to users for supporting local merchants and service providers. It also

provides an opportunity for local government to receive an income stream.

### ***OurTown2000***

[OurTown2000](#) allows citizens to directly send “customer requests” to the relevant council officer. The backbone of OurTown2000 is database management software that records, tracks and manages services provided by the local authority. It includes optional modules for tracking citizen communication, scheduling events, permits and applications, plus an Internet/intranet interface for data entry. A live example of OurTown2000 in operation can be seen at the [City of Des Plaines](#) site.

At this time it appears to be fairly basic in its operation, however the developers are seeking to expand the role of OurTown2000 by incorporating new [e-City Hall](#), [e-Citizen](#) and [e-Government](#) modules. Their aim is to create a virtual 24 hour, 7 days a week City Hall.

### ***Maxi***

[Maxi](#) proves that electronic commerce is no longer a dream for local government, it is a reality. It is an electronic way of delivering services and information as part of the Victorian governments Vic21 strategy. Interestingly [Maxi](#) can be accessed not only through the Internet, but also through interactive voice response telephone and also touchscreen kiosks in shopping centres.

*Maxi* aims to “make government services more accessible, lower the cost of doing business and co-ordinate the delivery of services and information by the different spheres of government”. For example, it is possible to do business from the one Maxi site with [VicRoads](#) (pay registration, book a drivers licence test), [Eastern Energy](#) (pay an electricity account), and [Manningham City Council](#) (pay account, report missed garbage service, order replacement bin, change customer details). It is also possible to change address details for a number of agencies through the one transaction.

## **Interesting Local Government Technology & Public Works Sites**

[7 Steps to a Successful Web Development Project](#)

[American Public Works Association](#)

[Alliance for Converging Technologies](#)

[Australian Local Government Information Network](#)

[Civic.com](#)

[Developing & Delivering Government Services on the World Wide Web: Recommended Practices](#)

[Forrester.com](#) - Internet research company

[Governing Magazine](#)

[Government Online](#)

[Government Technology](#)

[IBM Center for Electronic Communities Institute for Electronic Government](#)

[Institute of Public Works Engineering Australia](#)

[International City Management Association](#)

[Office of Government Technology, Australia](#)

[Public Technology Inc](#)

[Public Works Magazine Online](#)

[Prism Online](#) - technology news for local government

[Telstra LGnet](#)

[WWW Starter Kit](#)

## Author Biography



**Chris Champion** has been Director of Engineering Services at Holroyd City Council for the past 10 years. He has 30 years of local government experience. Chris holds an Honours Degree in Civil Engineering with postgraduate qualifications in Engineering Science and also Local Government Management.

Particular areas of interest are continuous improvement practices, management information systems, and appropriate development of our urban landscape. He seeks to balance the competitive provision of services provided by Council, with the need to develop a strong partnership with the local community and to provide rewarding jobs for staff.

He has a strong interest in the Internet and its impact on the way we will operate and manage in the future. He is currently undertaking postgraduate studies in Internet Marketing.

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