

Bridging the Gap between Citizens and Local Authorities via E-government

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Abstract

Among the many promises of the digital revolution is its potential to strengthen social equality and make governments more responsive to the needs of their citizens. E-government is the use of information and communications technologies (ICTs) to transform governments by making them more accessible, effective, accountable, and making the most of the new technologies to deliver better quality and more accessible public services. This paper provides an overview of recent literature addressing e-government issues, and includes a discussion of its implications at the municipal level. It also covers Australian experiences in establishing and managing e-government services.

Introduction

The rapid pace of technological development has created increasingly more powerful ICTs that are capable of radically transforming public institutions and private organizations alike. These technologies have proven to be extraordinarily useful instruments in enabling governments to enhance the quality, speed of delivery and reliability of services to the citizens and to business. Many governments world-wide are attempting to increase accountability, transparency and quality of services by adopting ICTs to modernize and change the way their administrations work.

Meanwhile the e-government concept is becoming a significant decision-making and service tool at the municipal, regional and national government levels. The vast majority of users of these government online services see significant benefits from being able to access services online. International experience and major international programs – to identify ways of ensuring that the digital revolution will benefit the population of the whole world – have demonstrated that electronic government and governance can make an invaluable contribution in creating digital opportunities for the public.

E-government is a complex system of ICT networks that are radically changing how governments deliver services, collect, integrate and share information, and communicate with one another and the public. A growing number of people see the Internet as a transformative technology, and they regard e-government as part of a new vision of government for the twenty-first century. The use of ICTs to support public participatory decision-making with e-government provides information technology to assist governments to operate more efficiently. E-government draws on the actions and innovations enabled by ICTs combined with higher levels of speed, scalability and accuracy.

ICT is not a solution to all concerns about e-government, but it can start to close the gap between what governments do and how it relates to people's everyday lives. E-government means more than just a website as it has the power to transform citizens' lives.

Thus, this paper provides an overview of an important aspect of e-governance particularly its applications at the municipal level. The paper addresses the following research questions concerning the opportunities and constraints of e-government: (a) What is the potential of e-government in overcoming digital divide? (b) What are the challenges and opportunities of e-government? (c) What is the role of e-participation in establishing citizen involvement in local governments?

As Socitim and Idea (2002) state around the world the overwhelming majority (up to 80 per cent) of citizen-government transactions takes place at the local level. This paper is therefore mainly focused on e-government applications at the municipal level. The paper is organized into four key sections. These are: e-government and the digital divide; challenges and opportunities of e-government; Australia's experience on e-government; and e-participation in local governments.

E-government and the digital divide

The information age is changing the way people work, learn, spend their free time and interact with one other. Not since the industrial revolution has new technology had such a fundamental effect on the way people live. The old barriers of distance and time are being broken down. ICTs are driving down costs, improving efficiency and creating a climate of innovation, with competitiveness moving from the national to the global level (Hewitt 2000). The new technologies are challenging existing methods of governance, commerce, education, communication and entertainment.

E-government basically utilizes the application of ICTs to transform the efficiency, effectiveness, transparency and accountability of informational and transactional exchanges, and to empower citizens through access and use of information. E-government aims to make these exchanges and interaction between government and citizens (G2C), government and business enterprises (G2B), and inter-agency relationships (G2G) more friendly, convenient, transparent, and inexpensive. It endeavors to provide a service so that citizens will rarely need to queue in government departments, agencies or offices, but will be able to conduct their business by connecting to a given web site. E-government, therefore, requires greater citizen access to the Internet, enhanced searching and inquiry capabilities, and it need public contributions, organized government information, better public services, computer security and funding.

In e-government discussions the term 'digital divide' has quickly become a popular way to describe a disparity between the online community and others. Digital divide in a narrow sense can be defined as there being a distinct have or have-not divide linked to social differences, even with the expanding trend in use and accessibility to the Internet. While digital divide in a broad sense can mean that it is closely related to the emerging service and digital economy which causes new structural reform of production of wealth and change of wealth distribution. It has also used as a term to indicate social exclusion in the online world as we move to the knowledge economy, or the knowledge society (Graham 2002; Stimson 2002; Woodbury and Thompson 1999).

The concept of the digital divide is generally understood as a multidimensional phenomenon encompassing three distinct aspects. The 'global divide' refers to the divergence of internet access between industrialized and developing societies. The 'social divide' concerns the gap between information rich and poor in each nation. And lastly within the

online community, the 'democratic divide' signifies the difference between those who do, and do not, use the panoply of digital resources to engage, mobilize and participate in public life (Norris 2001).

According to Norris (2001) technology will continue to evolve rapidly, along with its social uses, so that projected estimates are often surpassed. Yet despite the need for considerable caution in weighing up the available evidence, if we can establish the main drivers behind the diffusion of the Internet, and if these prove similar to the reasons behind the adoption of older forms of information technologies, then we are in a much better position to understand and predict the probable pattern of future developments. It may also assist in determining the potential consequences of the rise of the internet age, and also the policy initiatives most likely to overcome the digital divide (global, social and democratic).

Due to research on global internet trends by Nielsen/Netratings (2001), at the beginning of this millennium there were an estimated 429 million people online globally. But even this staggering number is small when considered in context as it represents only 6% of world population. As well of those 429 million, 41% were located in North America. In addition the United States had more computers than the rest of the world combined. When assessed by region the following figures show that internet use is dominated by North Americans (DDN 2003):

- 41% of the global online population was in the United States and Canada,
- 27% of the online population lived in Europe, the Middle East and Africa,
- 20% of the online population logged on from Asia Pacific, and
- Only 4% of the world's online population was in South America.

The digital divide is becoming more of a recognized reality as technology makes phenomenal progress and e-government applications become more widespread. The United Nations Human Development Report demonstrates that high income OECD countries, with only 14% of the world's population, are home to 79% of all internet users, and only 0.4% of people in South Asia are online, although the region is home to one-fifth of the world's population (UNDP 2001). More than ever, unequal adoption of technology is excluding many people from reaping the fruits of the e-government and global economy.

...Even in advanced industrial nations with rapid maturing internet markets, whole sections of the urban population fail to benefit from the skills, education, equipment, infrastructure, capital, finance and support necessary to go and remain 'online'. This is so at precisely the time when being online is becoming ever-more critical to access key resources, information, public services and employment opportunities (Graham 2002: 37).

The digital divide is a complex issue with no singular cause or effect. Unfortunately, the new technologies alone in e-government will not suffice to close the digital divide, since they are heavily dependent on physical capital (for infrastructure, hardware and software), human capital (for installation, maintenance, updates and efficient usage of the computers) and the general economic policy environment (for functioning payment systems, stability) (DDN 2003). Whilst e-government provides many opportunities for local authorities to serve citizens more effectively, it also runs the risk of widening the digital divide and disadvantaging non-IT users.

As the Digital Divide Network (DDN) (2003) points out addressing the digital divide requires a multi-faceted approach involving:

(a) affordable access to information tools for the elderly, the poor, the disabled, and those living in rural areas; (b) economic development of communities developing an infrastructure of telecommunications facilities and cultivating a well-trained workforce so that communities can remain competitive in attracting and retaining businesses; (c) internet content that is relevant to and produced by communities addressing the availability of community-relevant information, overcoming language and literacy barriers, and promoting the diversity of cultural voices; (d) a society devoted to lifelong learning developing the learning skills which will enable all generations to adapt to constantly changing times.

The OECD (2001) stresses that apart from general approaches to reduce the digital divide such as extending infrastructure, skills and information, it will be especially important to offer low cost access. With computers and the internet available at public institutions like libraries, post offices, local and regional government facilities, schools etc., individuals can build up familiarity with the information technology and develop important relevant skills. Especially, the provision of low-cost and subsidized access in schools will help to establish a sound foundation for computer literacy of the future workforce and will improve the dissemination of knowledge necessary to participate effectively in the new economy.

The digital divide is a major issue as it is not only a resource or knowledge problem but a problem of bridging the ever-growing gap between those who have access to computers and the internet and those who don't. Governments all around the world are increasingly using technology to provide e-government services at a lower cost and at a higher quality for the public. E-government can contribute to improving government structures, public service delivery, transparency, and the relationship between governments and their citizens. Consequently the opportunities of e-government are challenging and it has an important role to play in the effort to bridge.

Challenges and opportunities of e-government

The e-government processes and systems often mean facing new kinds of challenges, and in particular developing countries have many barriers to overcome. Once governments commit to strategies transforming their governance processes, significant challenges and opportunities will arise during their implementation. Confronting these challenges directly can be a means to turn these difficulties into new opportunities. In general it is worthwhile to consider the following concerns in e-government initiatives (CDT 2002):

- *Infrastructure development*: All countries implementing e-government have struggled to develop a basic infrastructure to take advantage of new technologies and communications tools.
- *Law and public policy*: The application of ICT to government may encounter legal or policy barriers. Legislatures must ensure that laws are updated to recognize electronic documents and transactions. They must take proactive steps to ensure that policies support rather than impede e-government.
- *Digital divide*: Class, race, ethnicity, geography and other factors could lead to groups of people being disenfranchised. In many countries, content must be provided in more than one language or dialect. E-government must also address the needs of those who are illiterate.
 - *E-literacy*: Even in areas where access to technological infrastructure is nearly ubiquitous, there are still marginalized groups who are unable to make use of

ICTs because they are not e-literate. E-government programs will have to take special steps to include people who are not e-literate.

- *Accessibility*: Governments must serve all members of society irrespective of their physical capabilities. Online services will have to be designed with appropriate interfaces – this may have significant cost implications.
- *Trust*: To be successful, e-government projects must build trust within agencies, between agencies, across governments, and with businesses, NGOs and citizens.
 - *Privacy*: Privacy is one of the most important issues facing the Internet. Governments must be responsible custodians of the enormous amounts of personal information they hold.
 - *Security*: Security is costly, but must be addressed in the design phase, as security breaches can shatter public trust in e-government.
- *Transparency*: Government transparency should be embedded in the design of ICT systems.
- *Interoperability*: Rather than adding new systems on top of outmoded legacy systems, e-government planners should develop systems and record formats that work together and across departments.
- *Records management*: New technologies are being created to help manage information. Governments have unique needs in this field.
- *Permanent availability and preservation*: Historical documentation is of special importance for governments.
- *Education and marketing*: E-government services are only useful if people know about them. Education and outreach programs will be needed.
- *Public/private competition/collaboration*: Issues of public vs. private collaboration and competition are already part of an international debate on governance.
- *Workforce issues*: Human resources must be structured and managed with e-government goals in mind.
- *Cost structures*: While planning and budgeting in a changing climate is difficult, governments should seek to invest in sustainable programs that can produce savings.
- *Benchmarking*: Governments must regularly evaluate the progress and effectiveness of their e-government investments to determine whether stated goals and objectives are being met on schedule.

The concept of e-government combines electronic information-based services for citizens with the reinforcement of participatory elements to achieve the objective of the development of a successful online government service. The federal, state or individual local authority institutions give citizens the opportunity to electronically make their views known. At the same time, the internet allows the public sector to extend its role as a client-oriented service provider. Modernization and social equality are two sides of the same coin which must be carefully balanced and harmonized. The following factors and implementation strategies form the core of a comprehensive e-government concept and they can help overcome some of the challenges and improve citizen engagement in online services (Schmidt 2002; Stowers 2001):

- Combine the overall strategic planning and the operative detailed planning; and create clear responsibility structures in order to achieve stringent planning and implementation.
- Develop long-term action plans including definitions of objectives and parameters; and combine sensible standardization with the freedom to experiment.

- Draw international comparisons and relate best-practice models to other contexts; take advantage of the lessons learned elsewhere; prepare cooperation and work at a supra-institutional level; and market all projects.
- Develop appropriate experience with basic e-government activities before moving on to more complex e-government operations.
- Integrate members of staff to enhance possibilities for shaping the process; and offer the opportunity to gain qualifications as well as in-house training courses.
- Place the emphasis on user-orientation; plan for user friendly services with the user in mind and as a participant in the planning process; and use familiar models of operation so citizens find the system easy to use.
- Reach across the digital divide; provide affirmative outreach to citizens; and provide content and value-added services to citizens to help build a community around the site.

Lenk and Traunmuller (2002) say that clear strategies and views are the prerequisite to facing the challenges and making the best of the opportunities created by technological progress. E-government is more than a new wave of administrative modernization; e-government means a permanent e-transformation that enables governance on a comprehensive scale. Of crucial importance for its success will be a cultural shift away from treating information, knowledge and business processes as the sole, jealously-guarded property of each organization, and towards information sharing and linking up agencies to work among and across levels of government and in public-private partnerships.

Australia's experience on e-government

Australia is one of the leading countries in the world in terms of per capita use of the Internet. When comparing the percentage of the total population connected to the internet to the rest of the world, Australia ranks number eight with 53 percent of households having internet access (ABS 2001; DFAT 2002; Sofres 2002; Yigitcanlar, Baum, and Stimson 2003). Therefore, it is not surprising that in Australia the internet is now perceived as an important means for government to transform its working processes and to improve information and service provision to its citizens. The Australian Federal government has an important leadership role to play to enhance the extent to which businesses and the community take full advantage of the opportunities provided by the information economy (Riley 2002). It is doing this by maximizing the opportunities provided by technology to help transform government activities. This transformation has a significant demonstration and pull through effect on Australia's wider information economy.

The first traces of an e-government vision and related activities in Australian federal policy can be found in 1995 in a report by the Minister of Finance's Information Technology (IT) Review group called "Clients First: The challenge for government information technology" (Lips 2001). Australian initiatives to make use of ICT in government reinvention were launched in 1996 as an "Information Technology Blueprint" for the public sector. By 1998 the portfolio of initiatives included Fedlink, which creates a whole government Intranet, and the Commonwealth Information Centre, which provides a single point of access to government information (Heeks and Davies 1999).

The Australian Prime Minister John Howard emphasized in 1997 the importance of the information age for this country in a policy statement called "Investment for Growth". More specifically the following commitments were made in this policy statement (Lips 2001): (a)

to have all appropriate federal government services available by 2001, complementing existing written, telephone, fax and counter services; (b) to establish an online government information centre through the office for government as a main point of access to information about government services; (c) to establish electronic payment as the normal means of federal payments by 2000; and (d) to establish a government-wide Intranet for secure online communication.

The Australian Federal government passed the Electronic Transactions Act in 1999. It became a compulsory task for each government agency to develop and publish an Online Action Plan. To fulfill the government's commitment to have all appropriate government services available online, the Australian Federal government presented its "Government Online Strategy" in 2000 which consisted of the following objectives (NOIE 2000): (a) improving public access to a wide range of government services, especially by people who live in regional, rural and remote areas or older Australians and people with disabilities; (b) providing access 24 hours a day, seven days a week; (c) reducing the cost of delivery of some government services; (d) increasing efficiency-saving tax-payers' funds; (e) reducing bureaucratic and jurisdictional demarcation to provide unified services based on user requirements; and (f) encouraging growth of e-business and associated opportunities.

As stated by the National Office of the Information Economy (NOIE) (2001) results of the fourth round of reporting in October 2001 revealed that; 48% of agencies had already met the Government's commitment to provide all appropriate services online. Subsequent follow up in January 2002 confirmed that all agencies met the 2001 target. Online services are becoming more sophisticated, with a move from services providing static information to those with transactional capabilities. Future online services will be more sophisticated – 55% are predicted to be transactional or integrated services. The proportion of agencies paying more than 90% of their suppliers electronically has increased. Over three quarters of agencies (79%) pay more than 50% of the value of their payments electronically. The major impediment cited by agencies with reference to overall e-procurement implementation was a lack of supplier readiness. Nearly two-thirds of agencies (64%) anticipated full implementation of simple e-procurement systems by the end of 2001. The majority of remaining agencies expected to implement simple e-procurement in 2002.

In 2001, Commonwealth government entry points Gov.au (www.gov.au) and FedGov (www.fed.gov.au) along with Government Online (www.govonline.gov.au) were re-developed to gather metadata to provide infrastructure to support new e-government portals. They represent well-structured, informative and attractive e-government websites. They also offer a variety of online federal governmental services and links to state and local governments' online services.

At the national level in Australia, NOIE, which coordinates e-government, is taking up the issue of online citizen engagement. They are at an early developmental stage and their staffs have indicated that they want to explore this issue in terms of administrative responsibilities. As host of the joint Online Council of Federal, State and Territorial leaders they discussed e-participation at their March 2002 meeting. The Council acknowledged that e-participation is a significant issue emerging for governments in Australia and agreed that Australia's position as a world leader in e-government continues to be reflected in progress regarding e-participation. Ministers were pleased with the progress made to date, in terms of the application of online consultation, and in the development of policies and strategies to allow people to better engage with government (Clift 2002).

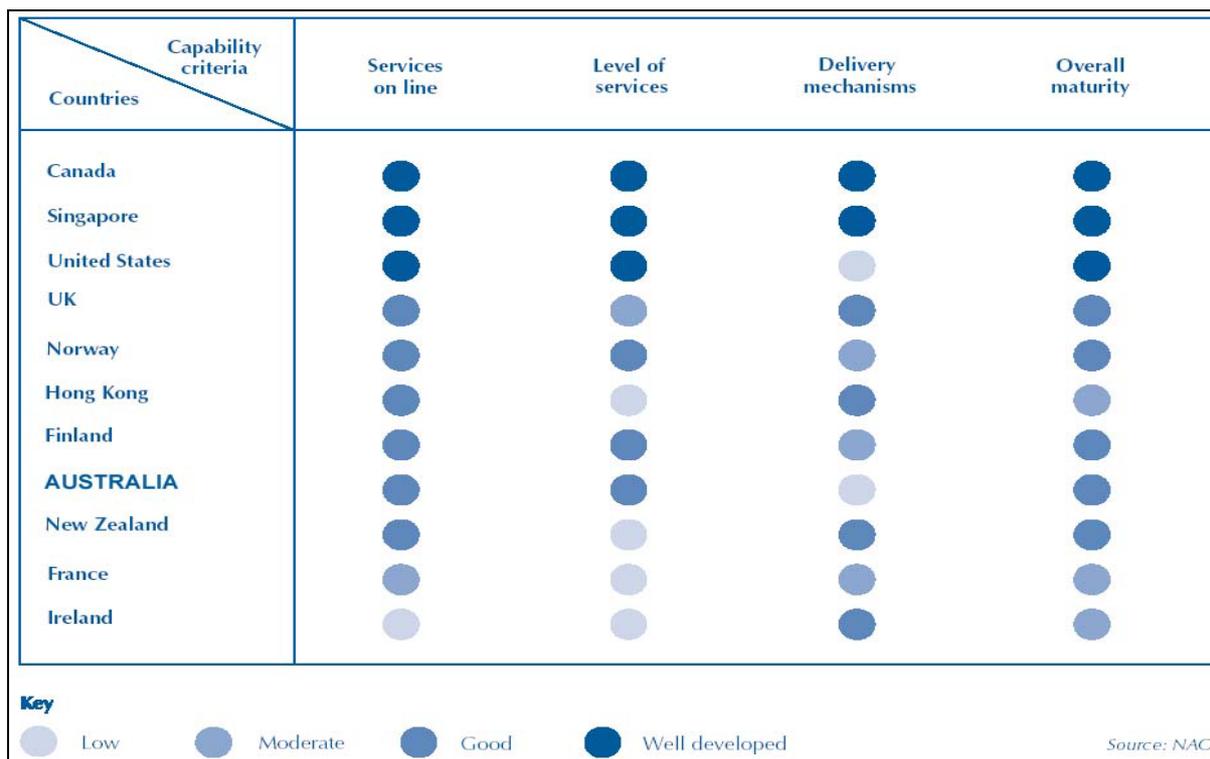


Figure 1: International assessment of the state of development of e-government (NAO 2002)

Of the 196 nations, Australia ranks third after Taiwan (65%) and Germany (59%), with 50 percent of its websites providing fully executable online governmental services. Also, when looking at disability access, Australia ranks third after the US (37%) and Ireland (24%), with 23 percent of its sites accessible. Australia is the second nation most likely to show a visible security policy of its sites (54%) following the US at 56%. Similar to the issue of security, Australia ranks second with a high percentage of websites (96%) offering a visible privacy policy after St. Lucia – which is an island country in the Caribbean Sea – (100%) (WMRC 2001). Australia has a high incidence of e-government applications (46%), and is internationally ranked eighth (Figure 1). Australia also has an above average incidence of all online government services with a high incidence of transacting (14% compared to an average of 7%), and information seeking (38% compared to an average of 24%). Australia has an above average perception of safety in providing personal information to government over internet (29% compared to 23% average) (NAO 2002; Sofres 2002).

More than one half of Australians up to the age of 54 years have accessed government sites online. Highest access was among those aged 25-34 years and significant growth has occurred in this age group since 2001 (up from 32% to 62%). More than one in three Australians 55-64 years of age accessed government sites online and this age group has had significant growth over the last twelve months (from 18% to 39%). Citizen demand for these services is clearly growing. These results suggest that e-government services are being utilized by an increasing number of people (Figure 2). Moreover Australians who are tertiary educated, have higher incomes and with children living in the household are most frequent users. However there has been significant growth in the access of the online services among those with only primary or secondary education, and low and medium-household incomes. There are no significant gender differences in online access. Transactors are more likely to be

found among those aged 25-44 years, whilst information seeking has been fairly even across adult Australians less than 44 years of age (Sofres 2002).

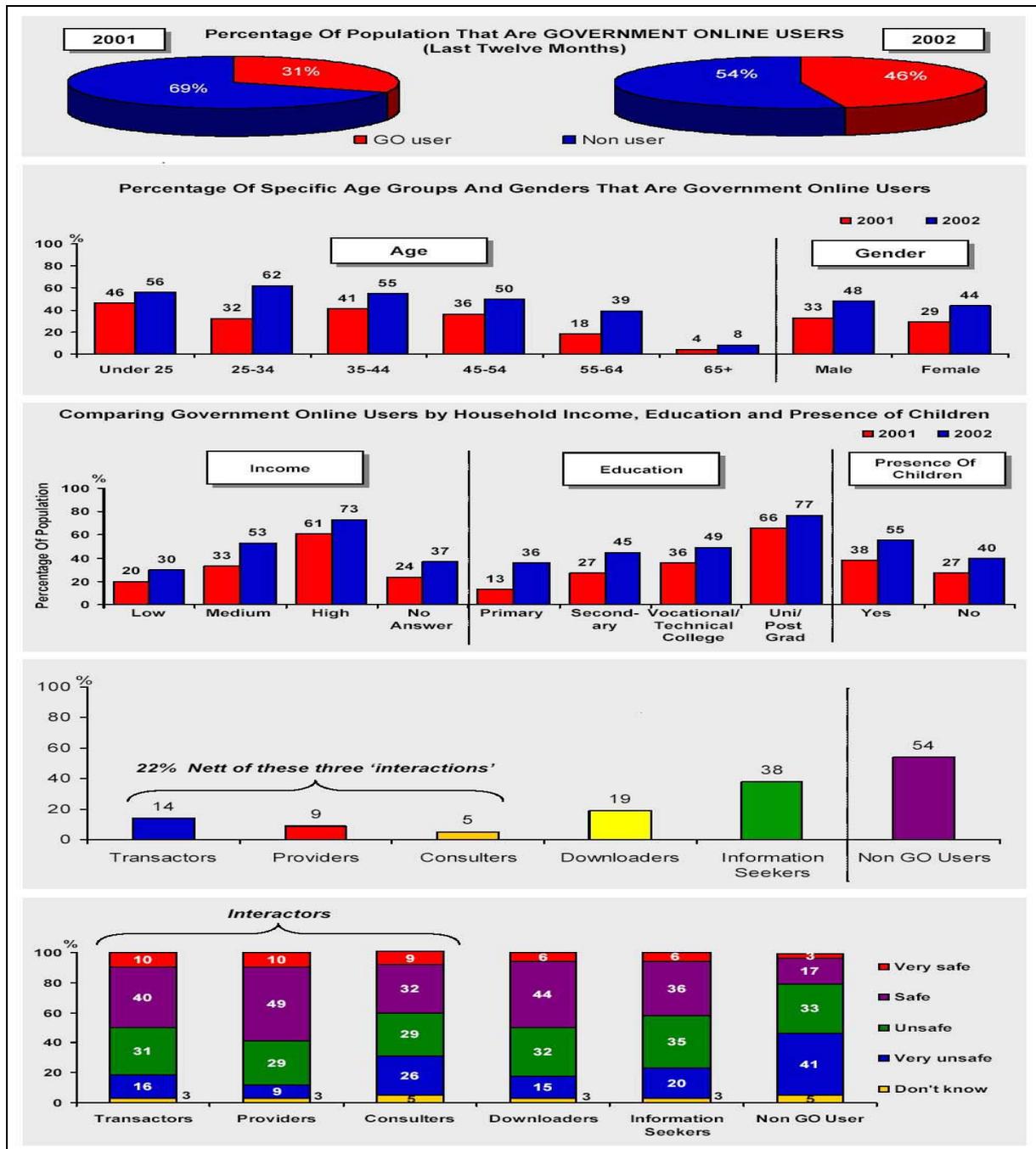


Figure 2: Profiles of the e-government users in Australia (Sofres 2002)

The national policy of e-government is a federal government initiative for implementation of e-government in Australia and covers all levels of government (local, state and federal). Local government in Australia exerts a major influence on local economies and communities (Socitim and Idea 2002). It is responsible for delivering a wide range of e-

government services (that is economic and human services, engineering services and infrastructure, environmental management, and providing information to the local communities). For example, the e-government service of the Sydney local government association includes e-procurement and information and transactions covering most of the council's services, supported by the council's many business units (Figure 3).



Figure 3: The e-government service of Sydney (www.cityofsydney.nsw.gov.au)

E-participation in local governments

E-government is about putting citizens and customers at the heart of everything governments do, and building service access, delivery and accountability around them. It is about using technology to break down social exclusion, and supporting the transformation of public agencies into more open, accountable bodies, which can enable and encourage citizens and local communities to exercise their rights and responsibilities, and to contribute to the modernization. Local e-government is the realization of this vision at the local level, at the point where the vast majority of services are delivered. Customers and citizens have overlapping, inter-related needs. Local e-government can assist in transforming experts' knowledge of dealing with public services in local areas. It can help transform the way public service providers do business, bringing huge gains in the efficiency and effectiveness of services. It can also make genuinely integrated, open and accountable government possible (ODPM 2002).

Local e-government is complex, encompassing the political, cultural, organizational and technical aspects of everything that local authorities and other public service providers do (Figure 4). It is driven by pressure for change both from the top down - as government and councils seek to modernize their organizations and from the bottom up - as the expectations

of citizens and businesses increase (Abramson and Means 2001; ODPM 2002). Local e-government initiatives are complex and involve change and effort to use new and emerging technologies to support a transformation in the operation and effectiveness of government. One of the challenges to local e-government is maintaining a primary focus on the business of local government and not on the technology. To do this, public leaders must be convinced that e-government requires their serious and sustained attention. As Pardo (2000) points out it is not about putting in a few computers or building a web site for information access; it is about transforming the fundamental relationship between government and the public.

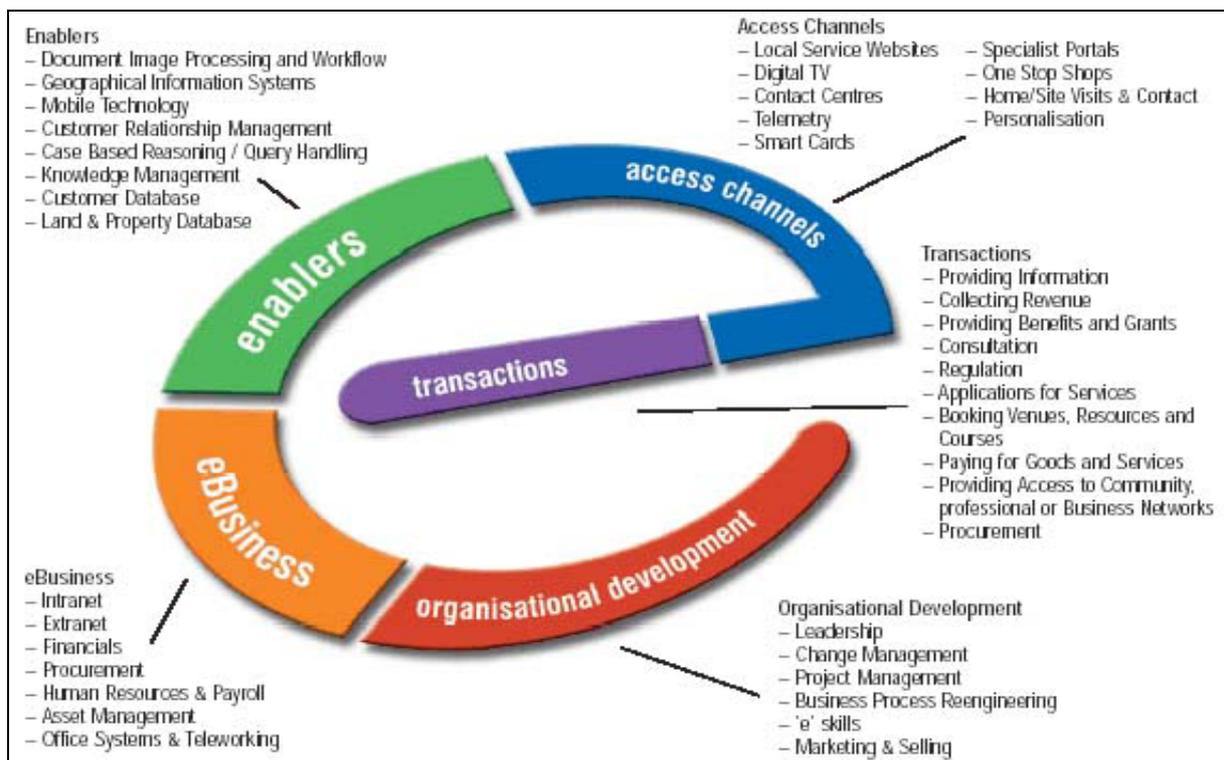


Figure 4: Local e-government organization (ODPM 2002)

The purpose of using ICTs for e-government is to not only provide information, but also to support consultation processes that encourage active participation of citizens in considering and establishing public policies. Public participation at the local government level includes both community and stakeholder involvement processes. The community is comprised of a distinguishable subset of stakeholders (for example, residents and small business owners whose property, property values, or economic welfare is adversely affected by the decisions). Stakeholders include parties with a legitimate interest or stake in the issues or impending decisions about the local economy, resources, planning (for example, site owners and users, government regulators, members of the community, industry and business, government at different levels). As Norris (2001: 128) says:

....The importance of transparency in government is widely acknowledged, both to promote greater public confidence in the policy-making process and to maximize accountability. The evidence demonstrates that more and more (local) government departments and public sector agencies are using the web to publish and distribute official information and, to a lesser extent, to facilitate the delivery of online services.

While to date much work has been conducted into local e-government, the main focus has tended to be on government administration, that is delivering services (for example, providing building permits and processing planning permits, and so forth). Stedman Jones and Crowe (2001) argue the distinction between e-participation, where ICTs are used to create new polling and decision-making opportunities and e-government, where they are used to improve the efficiency and productivity of public services, is false. While it is beneficial for the government to be effective and efficient, e-government also needs to foster better public participation through the use of e-participation systems.

E-participation is the use of tools such as e-mail discussion groups and web based discussion spaces, which may have real potential to connect citizens with the political process between government officials by facilitating, broadening and deepening participation in a variety of ways.

According to Kearns, Bend, and Stern (2002) e-participation can facilitate involvement, by making it simpler and easier for citizens to obtain information, follow the political process, scrutinize government and connect with the views and opinions of others. It can also make it easier for citizens to form groups of likeminded people and to campaign on issues of importance to them. E-participation schemes can also broaden participation, by creating new channels of equal inclusion which may make participation less intimidating and more inclusive of previously excluded or hard to reach groups. Finally, e-participation can deepen public involvement in political processes by increasing the frequency and enriching the content of dialogue between citizens, technicians, decision makers and all levels of government.

In determining the functionality of e-participation systems for specified purposes there is a need to determine whether there is an existing explicit decision-making process that effectively performs the task of engaging and interacting with the public.

As Macintosh, Malina, and Whyte (2002) say the application of appropriate technology should then attempt to improve that existing process through a range of devices to enable: (a) reaching and engaging with a wider audience to enable broader participation the provision of relevant background information in a format that is both more accessible and more understandable to the target audience in order to enable more informed participation; (b) understanding how to reach and engage specific target audiences to ensure more in-depth participation; (c) providing relevant and appropriate feedback to the target audience to ensure openness and transparency in the decision-making process; and (d) monitoring and evaluating the process to ensure continuous improvement.

Norris (2001: 230) provides us with the benefits of e-participation for disadvantaged groups:

...(E-government with e-participation functionality) can engage many groups (e.g. younger generation), those in isolated communities, or minorities who might otherwise be unlikely to become involved through local decision-making.

National Audit Office (NAO) (2002) says that the main way of ensuring that the public want to interact with local government departments online is by departments adopting a user-led approach to developing and implementing e-government (Figure 5). This means justifying every IT project in terms of the ultimate benefit it will provide in terms of better and more

efficient service delivery. Westholm (2002: 240) points out the advantages of e-participation for local governments:

....Thoughtful (local) governments are now looking at the internet (and e-participation) not as a threat, but as a positive potential tool to re-engage the citizens in the business of governing. As the internet and e-participation have helped to empower a new generation of well informed and demanding citizens, some people argue that it will challenge the essentially passive relationship that the majority of people have with their government.

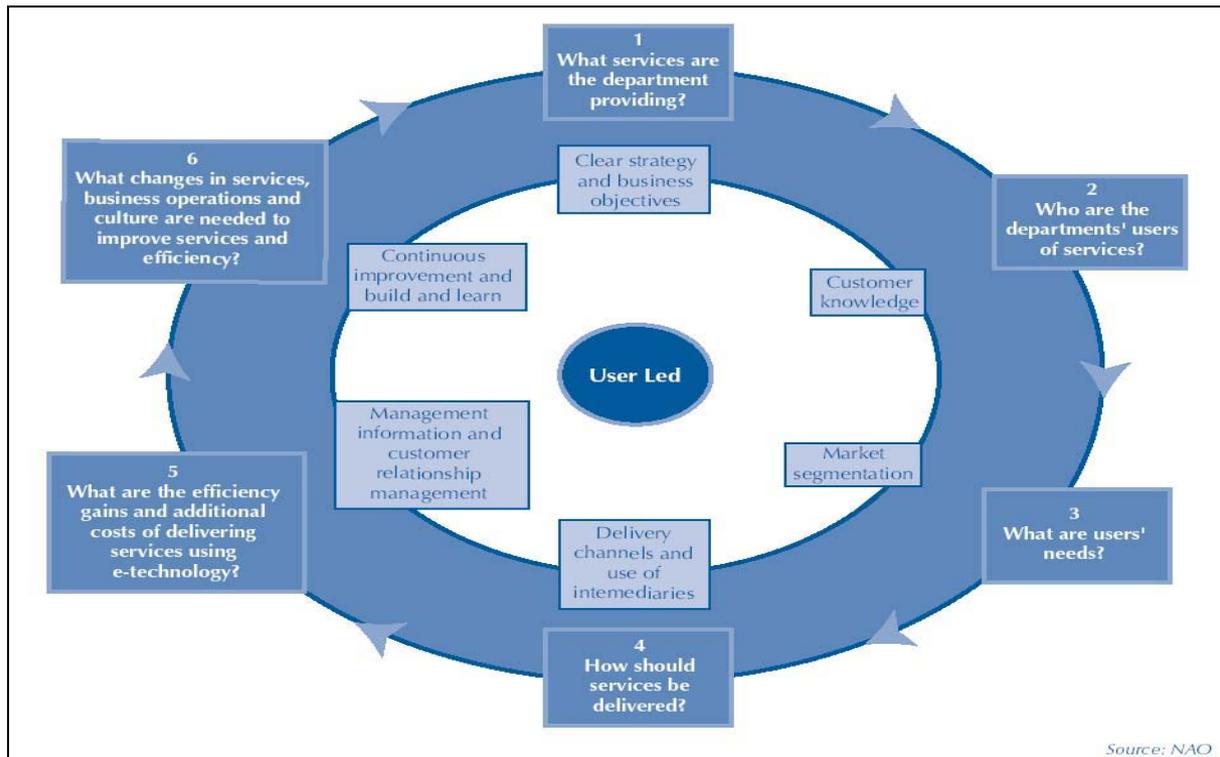


Figure 5: User led approach to e-government (NAO 2002)

The e-participation mechanisms available in e-government services through the internet create a broad array of possibilities for interaction between citizens and government officials. Furthermore, results so far indicate that e-participation has the potential to produce better societal outcomes by attracting broader citizen input in policy formulation and providing opportunity for people to interact among themselves and with local government about the issues that affect them.

Conclusions: E-government - Panacea of all problems?

E-government is an exciting frontier, but technology alone is not going to get results. It will take the move to the kind of government that uses technology as a tool to provide greater accountability, transparency and collective decision making through better and more meaningful public access to government information, not bigger and faster servers or more powerful search engines (Hewitt 2000). Online services and activities should not be focused on technology but be supported by it.

International practices have shown that there are many citizens who currently can not participate in the information society, and as e-government becomes more pervasive they will increasingly be left behind and become disenfranchised. Consequently, for any local e-government project to be successful there needs to be some degree of e-participation and community development. Only by understanding and addressing the needs of the citizens, will local governments be able to realize the vision of true e-government.

E-participation and citizen feedback via the internet on service delivery issues is beneficiary for local authorities' perception of their own activities, and the use of the internet for citizen input to policy consultation and debate. As Kearns, Bend and Stern (2002) summarized, local authorities should consider the following in their efforts to establish and develop services to support wider e-participation:

- Produce a draft framework policy document, for internal dissemination and use, setting out a clear best practice process for the conduct of all e-participation activities. This would cover pre-consultation planning issues, the process and conduct of e-participation activity in practice, and post-consultation evaluation and final reporting procedures.
- Produce a marketing strategy which explicitly addresses the issue of how e-participation opportunities are to be brought to citizen's attention. This should include general marketing, but also the issue of how participation on specific themes could be marketed specifically to the groups most likely to be interested. It should also address the issue of how to link e-participation opportunities to high profile offline activities.
- Produce a set of participation rules and guidelines designed to explain to citizens what their rights and responsibilities are when engaging in e-participation activities. Specifically, this should also be aimed at explaining to citizens what they can expect by way of response and influence on council decisions.
- Produce, in collaboration with IT staff, a new inclusive e-participation policy document which defines what inclusive means in this context and translates the need to reach excluded groups into specific measures to be built into both e-participation efforts aimed at the general public and into e-participation efforts aimed specifically at hard to reach groups.
- Identify training needs for a small number of e-participation moderators and for a small number of wired members.
- Draft a set of privacy guidelines to be read by all citizens prior to taking part in e-participation activity.
- Collate information on the existence of online discussion and debating spaces run by local community groups in the authority's area and offer an assessment of the needs of those groups in terms of taking this kind of activity forward. The authority should also spell out how it intends to develop experimental e-participation partnership activities with such groups.

It is important to note that policy innovation in e-government is not something which can be left to local authorities alone. E-participation policies need to be developed in local authorities, in local government support bodies, and indeed in state and federal government if they are to be successful, and each of these sets of bodies needs to work with each other to ensure that maximum impact is derived from combined effort and resources.

In conclusion, many authors acknowledge that e-government and e-participation are not a panacea to solve all local governance problems, but when they are used correctly they have

the potential for cost savings, streamlined processes and improved management information. Most importantly, the real success of e-government with e-participation comes from understanding the various public opinions and needs, and adding them into the local governance decision making systems.

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