# Portals and Interoperability in Local Government

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#### INTRODUCTION

While the popularity of electronic government is evident in most countries, the true benefits to communities can only be obtained if there is access to services across all levels of government. Sadly, the multilevel nature of government often means that citizens are frustrated when accessing services that span many bureaucracies. Interoperability, which is the breaking down of barriers between the different layers of government to support the seamless delivery of services, is enhanced by the use of portals. This article looks at the limited use of portals in the local government sector in Australia, and how they have been used to assist staff within councils, and to support communities and businesses. It also examines the problems faced by local governments in implementing portals. The article concludes with a discussion of interoperability in the local Australian government sector, and how it can be used to support portal development.

#### BACKGROUND

Symonds (2000) observed that "... with few exceptions, governments have come late to the Internet." Yet if electronic government is interpreted to include all forms of information and communications technologies (ICTs), then it is not necessarily a recent development. Over the last 20  $years, some \, Australian \, state \, and \, common wealth \, government$ agencies utilized early forms of electronic commerce such as electronic data interchange (EDI), although these were concentrated into specialist transaction areas such as electronic tax lodgement (O'Dea, 2000). The term e-government, however, is associated with more recent developments in ICTs; particularly, incorporating the Internet and the concept of e-government started to appear as a genuine policy option in the mid-1990s in many countries, of which Australia was one of the first (Department of Finance, 1995; DiCaterino & Pardo, 1996; Multimedia Victoria, 1996; Office of Technology Assessment, 1993).

The advent of the Internet changed the perception of what governments could undertake with ICTs. In particular, the Internet has been the vehicle upon which many of the reforms proposed under the doctrine of *New Public Man-*

*agement* (Hood, 1991) have been able to be implemented. Thus, at all levels of government, e-government is aimed at achieving three broad objectives:

- to improve the efficiency and effectiveness of the executive functions of government, including the delivery of public services;
- to make governments more transparent by giving citizens better access to a greater range of information;
  and
- to enable fundamental changes in the relationships between citizens and public sector organisations, with implications for democratic processes and structures of government (Feng, 2003).

Moreover, electronic government challenges the traditional relationship between public authorities and citizens; it provides the opportunity for government to rethink how it configures and provides daily services, build different and deeper relationships with the community, and devolve power and responsibility to regions and local groups (Kearns, 2001). Yet in all countries, the major metric upon which the success, or otherwise, of e-government is measured is its ability to provide higher quality services via a virtual medium (Multimedia Victoria, 2002; SOCITM & I&DeA, 2002; United Nations, 2003). For this to occur, the traditional internal barriers to improved service delivery, primarily bureaucratic red tape at different levels of government, needs to be removed so seamless government can occur. Other external barriers, such as the requirement for improved telecommunications infrastructure, also impact on the ability of seamless government to be realized.

Although the overwhelming majority of agencies at all levels of government have made considerable progress in the area of e-government, there is an ongoing need to create an environment where e-government can continue to flourish and quality services can be provided. It is becoming increasingly evident, however, that more services do not necessarily equate to better service. The concept of interoperability, often referred to as enabling seamless connections through portals, has been championed in many countries.

# MODELS OF E-GOVERNMENT MATURITY INVOLVING PORTALS

A number of models have been developed in the literature that attempt to depict the path that governments follow as their electronic activities grow and mature. Arguably, the most popular of these models is the stages of growth model developed by Layne and Lee (2001) (Figure 1).

The stages of growth model outlined the relationship between the maturity of service delivery, as depicted by the level of integration of services across all levels of government, and improvements in the technological and organizational complexity of governments. The first two stages of the model showed that most services are initially provided in each sector of government. The final two stages of the model, vertical integration and horizontal integration, relate specifically to the use of portals in the government sector.

Layne and Lee (2001) found that vertical integration of similar services will occur first; that is, the linking together of government agencies at different levels to provide enhanced services to customers. A change to existing systems is an obvious challenge facing a government at this stage. However, cooperation amongst various levels of government is essential, which requires them to be less proprietary about their information. As governments embrace the ICT

Figure 1. Stages of growth model (Layne & Lee, 2001)

and undertake organizational change, there is a linking of services in different functional areas. The establishment of these silos enables citizens to gain information and services from a multitude of agencies at the same and at different levels of government. Cooperation occurs amongst agencies, say, to provide assistance, information, and support for business and the for all members of a community. It is important to note that although Layne and Lee (2001) see a *one-stop* government as providing potential benefits to business and the community, these groups themselves must have the opportunity to use it through improved ICTs.

# INTEROPERABILITY AND **GOVERNMENT PORTAL** DEVELOPMENT

In broad terms, interoperability is the capacity to transfer and transform information between different technologies (DCITA, 2005). Interoperability is a key issue in enabling seamless government. A high level of interoperability means a government can cost effectively integrate data and process to provide a single entry point for the provision of a group of interrelated services that may span many agencies. In contrast, a low level of interoperability means that the



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