

# IT Management Issues in Digital Government

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## INTRODUCTION

A common thread among municipal governments is that they harbor a variety of enterprises under one roof. For example, police, fire, public works, social services, assessor, recorder, health services, human resources, and so forth, may all be constituent parts. They all provide services to the public, and many of these services are rapidly acquiring an online orientation (i.e., they are becoming e-services). Since they are all part of a single governmental entity, there is a need to review these online offerings to assure that the level of service provided is satisfactory and that there is a common look reflective of the parent political entity. This is discussed in the section titled "E-Government Services Review". The common look or adherence to standards on Web sites can be facilitated by having appropriate IT governance for the disparate departments in the form of a chief information officer (CIO) who represents the interests of the parent political entity on an overall basis. One mechanism the CIO can use to invoke an IT vision for the County is to develop a strategic IT plan that the operating departments can then use as a guideline to plan their IT actions. This is discussed in the section of the article titled IT Governance and Strategic Planning. In the development of e-government services, as well as other systems projects, care needs to be taken regarding a number of important factors in order to assure that development work is done within time, cost, and quality constraints. This is discussed in the section of the article titled "System Development Guidelines".

Los Angeles County has an annual budget of close to \$17 billion, encompasses about 30 major operating departments, and expends more than \$700 million each year on information technology operations. Providing review and counsel to this effort is a 10-member Information Systems Commission, of which the author has been Chairman for the past 10 years. The Commission has concerned itself with such topics as e-government services, IT governance and strategic planning, and systems development. This article presents managerial insights drawn from this experience that should be applicable to large public agencies across the country.

## BACKGROUND

The growth of government e-services is accelerating. Not only are more of the traditional government services becoming available online, but the level of sophistication and maturity of these services is also increasing. The opportunity exists for government services to make a paradigm leap in availability and usefulness. Services should become more oriented toward user needs and life events. However, such efforts require guidance and review in order to assure that they are going in the right direction.

This article lists various services and then indicates certain aspects that a review might cover. In addition, it discusses the potential evolvement of such offerings to become more process and problem oriented. Coordination between services, the need for a single point of entry, and a common look are other necessary attributes for the growth of e-services. Toward these ends, there is a vital role for the CIO function and for a Strategic IT Plan. Furthermore, the development work that will need to be done in the e-services arena can benefit from the application of best practices of systems development.

## E-GOVERNMENT SERVICES REVIEW

Most public agencies offer a considerable number of services to the public via the Internet. Periodic review of these services will ensure that the public is deriving maximum benefits from e-government. Such review would focus on the e-services offered by various operating departments. Specific transactions could fall into such categories as "non-interactive," "partially interactive" (i.e., downloading materials and then later completing the transaction in a non-electronic mode), and "interactive" (i.e., completing the transaction online). The nature of the transactions offered indicates the maturity level of e-government. Lam (2004) offers a categorization of maturity based on whether the transactions are informational, transactional, process integrated, or service integrated. Siew and Leng (2003) propose an alternate scheme based

on whether services describe, explain, consult, or connect. Los Angeles County seems to be entering stage three of both of these classification schemes.

Some examples of Los Angeles County e-services follow, divided into two groupings:

1. Non-interactive information available to the public, including:
  - Job opportunities
  - Financial aid programs (qualification and how to apply), including food stamps, medical services, and welfare
  - Locations of correctional facilities and inmates
  - Fees for service, building permits, bid results, and invoice status
  - Road closures, flood control, and rainfall
  - Waste management and recycling
  - Rosters of public officials
  - Election results
  - Procedures for document recording
  - Voting information, application for absentee ballots, polling place locations, sample ballots, and so forth.
  - Study guides for position examinations
  - Property assessment data and home sales
2. Partially interactive and interactive applications, including:
  - Fictitious name searches
  - Sample tests for positions
  - A wide variety of forms in PDF format that can be filled out online or downloaded and then printed and mailed in (search for forms can be done by keywords, category, or form number)
  - Web user inquiries answered by displaying responses from a database, if available, or otherwise routing the inquiry to appropriate parties for response
  - Application for, payment, and receipt (via printing) of transportation permits
  - Personalized traffic reports (which allow the public to define a travel route and be paged if an incident has occurred on that route or if there is congestion)
  - Crime tip input
  - Probation reporting
  - Complaints and commendations
  - Filing of business property statements
  - Emergency requests for birth and death certificates
  - Ordering of authenticated maps

Although these services cover a wide spectrum of activity, they are not as yet fully integrated with each other, and there is also need for further development

based on user needs rather than organizational structure. Borins (2004) reports similar findings in other organizations. Pan and Lee (2003) advocate the use of customer relations management techniques to achieve a holistic view of the organization's customers in order to better serve their needs, deliver greater value, and ultimately increase customer retention. According to Boyle and Nicholson (2003), there should be a single point of contact for any member of the public to access any government service.

The economic benefit of such e-services to a governmental agency can be reflected in a decrease in the number of telephone calls that the agency's employees need to handle (thereby achieving labor cost savings), a decrease in the number of people showing up at the agency's offices for over-the-counter transactions (more labor cost savings), cost decreases realized from the consolidation of certain agency operations because of a decrease in the volume of transactions at each of them, savings in postage and handling, greater accuracy, etc. From the public point of view, time is saved through not having to physically go to agency offices, lower fees for some services, accessibility of services that were previously not available in a non-electronic form, 24/7 availability of services, etc.

From an expense standpoint, the cost of building, implementing, operating, and maintaining such e-services applications have to be considered. In some cases, certain of the benefits and all of the costs are quantifiable. Research results indicate that often just the quantifiable aspects of the benefits easily pay for the costs of the applications in two to three years, thereby justifying the investment on that basis alone. A payback period of two years is generally deemed excellent for project investment. Borins (2004) indicates that there are strong financial incentives for government entities to switch users over to the Internet. Based on several economic analyses that are available in Los Angeles County, this would appear to be borne out. For example, a Simple Permits System for Los Angeles County that cost \$175,000 to develop (with annual maintenance costs of \$5,000) has engendered annual labor cost savings worth more than \$150,000.

Specifically, with regard to the e-services listed previously, the E-Government Services Review conducted by Los Angeles County addressed the following questions and areas of concern:

1. What services and transactions are being offered or are planned to be offered
2. What forms can be downloaded
3. What databases can be directly or indirectly (i.e., by use of an intermediary) accessed by the public

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