A REVIEW OF
LOS ANGELES COUNTY'S PROCESS
FOR TRANSITIONING TO
E-GOVERNMENT APPLICATIONS

FEBRUARY 2014

CITIZENS' ECONOMY & EFFICIENCY COMMISSION
LOS ANGELES COUNTY
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The mission of the Commission is to examine any function of County government at the request of the Board of Supervisors, on its own initiative, or as suggested by others, and to submit recommendations to the Board which will improve local government economy, efficiency, and effectiveness.

CITIZENS' ECONOMY & EFFICIENCY COMMISSION
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February 20, 2014

Honorable Don Knabe, Chair
Supervisor, Fourth District
Kenneth Hahn Hall of Administration
500 West Temple Street, Suite 822
Los Angeles, CA 90012

Dear Chairman Knabe:

As directed by your Board, the Citizens' Economy and Efficiency Commission is pleased to report that it has completed its review of Los Angeles County's process for transitioning to E-government applications, as endorsed by the Board in a motion made by Supervisor Antonovich on October 9, 2012.

In response to the Board's request, the Commission has gathered and analyzed primary and secondary data from a wide range of stakeholders including those of similar jurisdictions over the course of nearly a year.

The attached report entitled, *A Review of Los Angeles County's Process for Transitioning to E-Government Applications*, is hereby submitted for the Board's review. During the course of our study, the Commission found that although progress has been made toward adopting and implementing digital solutions and technology, overall, the County of Los Angeles is generally not an early adopter or user of new technologies. The Commission further found that some large projects have been approved and are in the process of implementation while others have been derailed due to a myriad of barriers. It is the Commission's opinion that the recommendations presented in this report have substantial merit for improving and hastening the transitioning to E-Government.

The Commission would like to acknowledge the cooperation and candid feedback of County management. We also appreciate the opportunity to

present this study to your Board and recommend the Board consider adopting the recommendations of this report.

With Warmest Regards,

Isaac Diaz Barcelona
Chairman

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Economy and Efficiency Commissioners

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E-Government (or Digital Government) is defined as "the employment of the Internet and the world-wide-web for delivering government information and services to the citizens."
United Nations 2006

I. PREFACE

E-government applications are a global subject of interest for both small and large jurisdictions. Widespread use of the internet began some twenty years ago and led to various government applications. The first phase (called E-Government 1.0 by some) involves services of the "look-up" or "file-report" variety. A second and more elaborate phase (E-Government 2.0) involves "interactive" applications, where the user receives a "good" or a "service" during the process. Computerized payment processes were an early wave of this kind of application; more elaborate applications in the "submit data-make payment-receive permit" category are flourishing, as are various mobile applications that involve emerging "smart phone" technologies.

The continuing application of digital technologies to various government services is driven by the desire to create "win-win" situations where constituents are provided more efficient service and greater convenience at a lower overall cost. The emergence of desktop computing in the 1980's, internet communication in the 1990's, expanded data mining by digital means (Yahoo, Google, etc.) and interactive use of the internet, as well as the emergence of social media (Twitter, Facebook, etc.) - all in the last decade - and, finally, explosive adoption of hand-held digital devices (smart phones and tablets) during the last few years have demanded continuous innovation in operations to both adopt these new technologies and respond to citizen demand for their use.

At the federal level, the E-Government Act of 2002[1] was enacted "to enhance the management and promotion of electronic government services and processes by establishing a Federal Chief Information Officer within the Office of Management and Budget, and by establishing a broad framework of measures that require using Internet-based information technology to enhance citizen access to Government information and services, and for other purposes."

At the State level, similar initiatives have been implemented as State agencies have moved to electronic data management and digital access.

Globally, a wide range of applications can be found on a country by country basis, including – in the extreme – internet-based voting and internet-based systems to detect and minimize tax fraud.

Continuous evolution in computer and communication technology has created a dynamic environment where service providers must continue to innovate in order to keep abreast of evolving changes.

[1] E-Government Act of 2002, Public Law 107-347. 17 Dec. 2002. <www.reg-group.com/library/E-GovLaw.pdf>

II. BACKGROUND

Los Angeles County has been a frequent adopter of E-Government technologies since the Internet became a viable service delivery channel in the late 1990s. In 1997, the Board of Supervisors adopted an E-Government Strategy[2] to better align information technology investments with business goals. In an effort to further enhance the delivery of County services on the Internet, the Electronic Government Advisory Committee (EGAC) was formed by the Chief Information Office (CIO) in September 2005.

During the past decade, significant investments have been and are being made in upgrading technology, improving applications and enhancing security. In recent years, the Board of Supervisors has continued to press for technology innovation, but in a climate of severe budget restrictions.

On April 12, 2011, on motion of Supervisor Michael Antonovich, the Board of Supervisors (Board) requested the Chief Executive Officer (CEO) to survey departmental processes and report back on antiquated processes that could be computerized to better serve Los Angeles County residents and the allow the public to access services online.

In a memo [3]from the CEO to the Board dated June 1, 2011, the CEO provided a listing of the current online services available to the public by Departments, and the status of automation projects currently being developed to serve the public. Of the 137 applications listed, there were: (1) 122 web-based service applications available to the public; (2) 8 new on-line services in the development phase, and (3) 7 new on-line services in the planning phase. However, many of the 137 applications were of the look-up type application and were unevenly distributed among County departments.

On October 9, 2012, on a recommendation by Supervisor Antonovich, the Board unanimously passed a motion[4] that requested the Economy & Efficiency Commission to review the status of E-Government applications in the County of Los Angeles and recommend ways to improve efficiencies in the system. In response to the Board's directive, the Commission delegated this study to a Task Force of two Commissioners, assisted by the Commission's Executive Director.

[2] See Board's Statement of Proceeding, November 4th, 1997, Synopsis 65 S-1.
[3] See Chief Executive Officer's memo to the Board of Supervisors dated June 1, 2011, "Antiquated systems-Final Report."
[4] See Appendix 1a for Board motion

III. THE COMMISSION CHARGE AND SCOPE OF WORK

The stated objective of this study is "to conduct a review of the County's transition to electronic government applications that include online filing and access by citizens together with electronic approval by County departments; and recommend ways to improve efficiencies in the County's system."

While this charge clearly focuses on a review of progress in creating electronic interfaces between County organizational units and their citizen-users, the Commission was also able to make an evaluation of the infrastructure and processes through which projects to create such interfaces are initiated, approved and executed.

The additional objective to recommend ways to improve efficiencies countywide inevitably involves a wide range of departments where existing infrastructure, management style, culture, or operating processes vary over a range that may allow, discourage or even prevent the transition to electronic interfaces.

In conducting this study, the Commission recognized that the County framework for management of technology was already in place and sought to identify weaknesses that could practically be addressed in order to achieve more rapid and efficient transition to the universally accepted goal of utilizing the best available technologies.

As a result, our scope of work also touches on legacy systems, management structures and incentive practices where modifications may be made in order to accomplish the Board's objective of achieving a more rapid transition to electronic processing across the broad spectrum of County activities.

IV. DATA COLLECTION DESIGN

To provide a comprehensive analysis and clear understanding of the County's status on the adoption of E-Government applications, the Commission collected data from a wide range of sources.

Personal interviews were held with nearly 30 Department Heads and/or their CIOs or key IT personnel, and various members of County's senior staff, to assess technology status, implementation processes, the ability to work functionally across departmental boundaries, linkages to related management practices such as budget allocations, strategic plans and incentive systems, as well as the utilization and sharing of best practices from other County departments and outside jurisdictions.

Current County and Departmental Strategic Plans and Management Appraisal Performance Plan (MAPP) goals were also reviewed wherever possible to determine the inclusion of E-Government projects in these core planning and incentive documents.

In addition, telephone interviews were conducted with selected outside consulting firms that have recent experience in providing Los Angeles County with services pertaining to the implementation of technology. These interviews were aimed at obtaining independent outside evaluation of the processes in use to plan and execute E-Government projects.

To encourage candid responses in the interview process, all interviewees were assured that their comments would not be attributed to them individually, although their remarks might be used anonymously for illustrative purposes.

Finally, outside sources were developed and used as much as possible to learn of practices in other jurisdictions and to gather data about current trends in technology implementation.

V. FINDINGS

The difficulty in evaluating technological progress in an entity as large and diversified as Los Angeles County is exacerbated by shifting priorities driven by continuing innovation in available digital platforms. Yet our interviews enabled us to identify various shortcomings where fresh attention might improve future results. We also reviewed the environment outside of Los Angeles County government, and provided a glimpse at approaches of technology providers and users in governmental entities along with the private sector for applicability and adoption in the County of Los Angeles.

A. LEADERSHIP AMBIGUITIES

Los Angeles County has demonstrated an ability to initiate and execute information technology projects over a very wide gamut of applications. Large and innovative projects have been carried out. However, our interviews clearly indicated that successful across-the-board implementation of digital technology requires consistent and continuing emphasis from all levels of top management -- the Board of Supervisors, the County CEO, and members of the CEO's staff – to establish priorities and schedule. We were constantly reminded that maintaining informed and participating leadership at all these levels is a key element for adoption of E-Government technology.

A-1. The Commission found that County-wide implementation of digital technologies is too often delayed by mixed signals about priorities.

1.1 Interviews showed that virtually all department heads believe that the Board universally supports the broad utilization of technology. Similarly the County CEO is viewed as an active proponent of using technology to advance efficiency initiatives and a desire for more rapid implementation of emerging technologies is evident across the broad range of County departments.

1.2 However, these well-meaning attributes are diffused by daily demands that obscure the priority of technological applications relative to other County operating objectives driven by legislative requirements, budgetary restraints or executive fiat.

As a result, while many technology projects are in the pipeline, universal adoption as a high priority is still unattained.

A-2. The Commission found that innovative projects generally succeeded only when there was a strong project sponsor to push through needed change against resistance in the organization.

2.1 Projects already in the pipeline are understood to have strong support from an executive sponsor. Comments from, "We had strong Board support," to "The Board is behind these changes" were heard from sponsors of major digital technology projects currently in process.

2.2 In contrast, many departments perceived that other projects floundered without the proper attention and project champion from either a Board Office or the CEO's Office. Remarks such as, "Without an executive sponsor or support from a Board Office, most projects don't even get off the ground," to "When there is no unanimous Board support, large projects default back to silos, with every department trying to do their own thing," summed up some departments' frustration in their perceived lack of support.

A-3. The Commission found that digital technology projects involving multiple departments are difficult to accomplish and frequently subject to delays.

Management of technology projects has been successfully implemented in Los Angeles County for many years. However, on projects involving technology solutions that cross departmental boundaries, those departments must agree to solutions before their implementation.

3.1 There is general sentiment among department heads that, except for budgetary constraints, the main cause to derail or delay large projects is absence of a "lead" department driving cross-departmental projects. The more successful projects have a designated department as the project manager with stimulus and support from a Board district office. One Department Head reflected this sentiment, "In general, departments work well together, but someone has to take the lead."

3.2 There was consensus by interviewees that cross-departmental projects go more smoothly within a service cluster. However, even such projects can be impeded by disparities between silos that delay project schedules. One Department Head reinforced this view, "When it comes to interdepartmental interfaces, issues were internal, and it was the force of outside entities that finally led to changes internally."

A-4. The Commission found that culture supporting the implementation of digital technologies varies widely among departments and limits progress toward adopting interactive solutions.

4.1 In departments where the visible culture[5] supports the continuing adoption of technology to increase efficiency, technology projects are perceived as "main line" by department heads and are studied as part of the continuing management process. Innovation is encouraged and seen as a way to reduce cost and increase efficiency; strong departmental CIOs are present and innovation is embraced as part of an integrated business strategy. As one such CIO observed, "Departmental leaders need to understand the potential of technology, they need to go out there

[5] Culture is the social heritage of a group. It is a pattern of responses discovered, developed, or invented during the group's history of handling problems which arise from interactions among its members, and between them and the environment. Def. Business Dictionary. <http:www.businessdictionary.com/definition/culture

and initiate using technology to accomplish efficiency, and it is not enough to just encourage people to work together."

4.2 In contrast, less progressive departments delegate the implementation of new applications to its IT staff. In these cases, applications are linear[6] ,the fear of failure is pervasive, and funding for innovative projects is viewed as difficult to obtain. Comments by departmental CIOs in this group recognize the challenges ahead, "Our technical staff is either limited in size or has limited capability to expand or go beyond maintaining and supporting in-house servers and desktop systems," and "County staff was brought up in a paper process, their DNA is paper-based. Following directions established at the Board level is an established pattern of behavior in Los Angeles County."

[6] Linear logic in this report is defined as projects using technology that mimics old paper-based systems rather than innovating new and more efficient alternatives. The Commission understands that paper documentation maybe legal requirements for some departments, but in many situations it is not and should not be replicated when unnecessary.

B. IMPLEMENTATION BARRIERS

During the course of its interviews, the Commission attempted to identify various existing barriers to implementation that are perceived to exist by department heads, CIOs, and outside consultants.

All interviewees pointed to the replacement of antiquated legacy systems as the biggest challenge the County faces in its transition to digital solutions. As the phrase implies, any system designated as "legacy" is likely to have a long history and well established presence now in place. Such systems in any areas much less the fast-paced IT area are likely to have significant impacts with changes viewed with caution and perhaps even fear.

Additionally, top management from the Board, County CEO, and County CIO has established a County-wide structure intended to manage the process of innovation in a diverse organization. The program of plans and incentives include: a County Strategic Plan a County Business Automation Plan, a Strategic Plan for each department, and an annual Management Appraisal and Performance Plan (MAPP) for key managers.

Various commissions and committees also impact the process of adoption of new technologies. The Information Systems Commission provides oversight to County-wide IT functions. The Quality and Productivity Commission provides incentives to departments for innovative work. The CIO Leadership Board, CIO Council and E-Government Advisory Council (EGAC) all have oversight functions including the review of opportunities for new projects.

Other inter-departmental groups such as the County Criminal Justice Coordinating Council (CCJCC), and ad hoc entities such as the PALMS Working Group and the Property Tax Coordination Council all have technical roles in identifying and encouraging the adoption of new technologies across departmental boundaries.

B-1. <u>The Commission found that legacy systems based on old mainframe technologies are costly, inflexible, and complex to replace and impede Departments' ability to pursue new interactive digital technologies.</u>

1.1 There is broad agreement by departments and consultants that one of the biggest county-wide problems is the continuing need to maintain and support the large and complex legacy systems that are nearing the end of their life expectancies. Comments ranged from, "The replacement of obsolete legacy systems in various County operations is a mandatory step prior to the introduction of web-based digital technology. In most cases, old systems are not suitable as platforms for new applications," to "The process is costly and inefficient and requires individualized solutions on a department by department basis because of the wide disparity of tasks involved."

1.2 The consensus view of those interviewed is that the issue has been addressed vigorously in some clusters, less enthusiastically in others. One Deputy CEO (DCEO) commented, "Legacy systems are problems beyond technical, it is organizational. The complexity of this process involves so many departments. The biggest problem is that we can't get consensus on the approach but yet there is no lead department on any of the large systems."

1.3 Nearly all departments concurred that these antiquated legacy systems impact internal efficiencies greatly and that current solutions are band-aid approaches in nature and as a result, each of the band-aids has evolved differently in different silos. The sentiments ranged from, "We need to skillfully expedite the replacement and at the same time, retain institutional knowledge," to "Some departments fear losing control and therefore, some issues don't get addressed until it's too late. We are currently stuck in neutral."

B-2. The Commission found that the application of technologies for the creation of digital interfaces is unevenly reflected in the County's Strategic Plan, Departmental strategic plans, Management Appraisal Performance Plan (MAPP) Goals, and the County's Business Automation Plan (BAP).

2.1 Many of the departments' strategic plans reviewed have components of some form of E-Government strategy, but very few mentioned it in their MAPP goals. Departments indicated that although their strategic plans get extensive reviews, it is the MAPP goals that drive departmental priorities since MAPP is the basis for performance evaluation. Only one department interviewed has a standalone E-Government plan.

The general view of others is reflected in comments ranging from, "The MAPP goals are more results driven and focused on solving a particular operational problem and most County leaders don't see E-Government as being a solution," to "E-Government is not part of my MAPP goals because there are bigger fish to fry," to "E-Government is on everyone's minds but we are not there yet as far as integrating it into our MAPP goals."

2.2 Although most Departments uniformly indicated that their parts of the Business Automation Plan (BAP) get extensive reviews, they also expressed the process as a low value opportunity for them. Some observed that there is uncertainty and a missing link in terms of how this information is being used by the County. As summed up by one Department Head, "We input our portion of the data into the County's Business Automation Plan, but I'm not sure what the CIO does with it or how the data is being used."

In contrast, the County CIO lamented that BAP is intended to help departments organize and coordinate technology projects across varied functions and at the same time, stimulate discussions on the use of innovative solutions to improve efficiencies; yet that doesn't seem to be happening.

B-3. The Commission found that the existing array of Commissions, Committees, and Councils originally designed to manage the process of technology adoption and implementation, is not universally embraced by all Departments.

The many Commissions, Committees, and Councils remain a primary management tool for sharing information, identifying opportunities, discussing common challenges, and making recommendations on new technology and platforms.

3.1 A majority of departmental CIO's interviewed lauded the functionality of the various Commissions, Committees, and Councils during the course of the interviews. Comments made by one Departmental CIO reflected the general view of others, "This structure allows all County departments to have a voice and this orderly process ensures that all initiatives are vetted and aligned with County strategies."

However, some believed that the County continually avoids meaningful exchanges and expressed the desire and need to have better processes for sharing best practices used by other departments and governmental entities. Some departments indicated that they have never even heard of such Committees. Others confessed that although they know about the meetings, they just haven't attended any of the meetings in quite some time. Comments capturing this view ranged from, "While well-meaning in its design, it is not an effective stimulus for the initiation of new projects," to "The intent is good but the problem with these committees is that they have no decision-making power."

3.2 The Commission also found that the Information Systems Commission (ISC), originally established by the Board as an advisory body to provide overall guidance of data processing and telecommunication services in the County, receives minimal support from County management and has been perceived by interviewees as an ineffective Commission.

3.3 Ad hoc committees set up to coordinate technology projects across departmental or cluster boundaries generally work less well for adopting disruptive change, as the consensus-building process ends up with the least common denominator. An example of effective collaboration across departmental and agency boundaries is found in the Criminal Justice Coordinating Council (CCJCC), whose technology subcommittee received high praise from several interviewees.

B-4. The Commission found that small departments are especially budget-constrained and this lack of resources severely limits their motivation and ability to pursue strategic technology projects.

4.1 Small departments interviewed quipped that they have no resources to do anything other than to keep the lights on for their departments. They complained that the CIO does not have funds/resources to support their initiatives although some money has been allocated by the CEO for desktops and laptops, but not for major system investments.

4.2 A one-time information technology fund of $25 million established by the CEO seven years ago was used to finance various IT projects, but has not been renewed. Discretionary amounts set by the CEO (ranging from $100,000 to $350,000) have been allocated to the CIO in recent years for different projects.

A number of initiatives such as: Innovation Awards granted by Quality and Productivity Commission; the declaration of 2013 as the "Year of Technology" by the CEO; and other similar undertakings are helpful, but not decisive in changing the overall outcome.

C. CENTRALIZED SERVICES BARRIERS

As part of its interviewing process, the Commission attempted to evaluate whether the objective of introducing technology to produce interactive solutions to serve constituents was clear and consistent.

The Chief Information Office (CIO), Internal Services Department (ISD) and Department of Human Resources (DHR) all have vital roles in the process of adoption of these technologies and the standardization in their use.

C-1. The Commission found that the Chief Information Officer is pivotal in the process of initiating and carrying out applications of interactive digital technology across the spectrum of County activities; but the process for approving and funding technology projects is viewed as inconsistent, thereby leading to uneven accomplishments and delays.

1.1 Departments reported cordial relationships with the CIO and viewed the CIO's Office as a strategic partner to help sort out complex technical issues and navigate projects through the CEO's office. Among the small departments, there is unanimity that the CIO's office adds significant value in offering valuable information and direction.

One Department Head characterized the general view of many others, "The CIO has been very helpful, responsive and mindful of my department's needs and limitations."

1.2 However, many Departments, both large and small, voiced their frustrations over the process for project funding and approval.

While some believed that the guidelines are measured by hard dollar savings, others felt just as strongly that they are not tied to any cost/benefit analysis, or efficiency measures. Perceptions were mixed with comments that ranged from, "The guidelines are very clear with technology investments; justification is needed in efficiency, cost savings, and details at a granular level," to "Project justification is not tied to any cost/benefit analysis, net cost savings, or increased productivity. With the right political push, in reality, there is no need for any project justification if it is initiated by a Board Office."

1.3 A few departments perceived that the lack of in-depth understanding of diversified County operations by the CIO's Office contributes to the delay in the approval of projects. One Department Head commented, "The CIO is very proactive and collaborative in helping us, but needs better understanding about our business. Projects were delayed unnecessarily because it took some time to educate them about our operations."

1.4 Several of the CIO's 24 current priority initiatives bear on E-Government issues and the CIO's organization includes a separate function for oversight of Electronic Government applications. However, the emphasis on E-Government is diluted because of the wide scope of the other initiatives and also budgetary constraints, which limit CIO staffing.

1.5 Some departments observed that delays in some technology projects could be avoided and coordination improved if the CIO had greater authority in implementing Countywide or departmental initiatives. Similar sentiments were shared by other departments, "The CIO is not fully empowered to move the County forward," to "No single entity has oversight of technology management, which contributes to the inefficiencies on many levels, including ineffective coordination and shared learning."

C-2. <u>The Commission found that service agreements and interfaces between departments and Internal Services Department (ISD) were clear and well understood, but the high charges for ISD services continue to be a source of frustration for client departments and contribute to delays in project implementation.</u>

2.1 Departments that utilized ISD services were generally satisfied with the service provided but unanimously expressed frustration that ISD's interdepartmental charges are not competitive with private industry.

2.1.1 Large departments generally have fully staffed information technology divisions headed by a Department CIO. These departments generally have the capability and flexibility to initiate and execute new technology projects by using either in-house staff, sourcing out to private providers, or a combination of both.

2.1.2 Smaller department, with limited in-house IT staff must go to ISD for implementation. These departments stated that the service costs charge by ISD is so prohibitive that they are unable to build into their budget to absorb these charges but have no alternatives. One Department Head's comment reinforced this frustration, "ISD remains the primary service provider but needs to be more competitive with their pricing for services. They're overcharging due to their organizational structure but passing down the costs to departments, this is a real burden."

2.2 ISD, as a matter of County practices, prices its services on a "full cost" basis, which includes recovery of all departmental overhead.

Interdepartmental charges were studied by the Auditor-Controller in 2011[7] who suggested the opportunity for "targeted use of the NCC (Net County Cost) to fund

[7] See letter dated June 15, 2011 from the Auditor-Controller to the Board of Supervisors regarding "Review on Intrafund Transfers and its Efficiency and Effectiveness – March 22, 2011 Board Motions.

strategic initiatives," which could be put in practice to fund fully burdened ISD charges. The Commission is in agreement with this conclusion.

While we recognize the significance of the ISD cost allocations issue to user Departments, this is beyond the scope of this assignment.

2.3 Organizationally, ISD has a broad charter to operate the County's information technology infrastructure, as well as many other facilities and service functions. This leads to a visible bias for centralization and standardization, which while reducing costs, can stifle creative solutions from customer departments or outside vendors of technology services. Within this structure, the Customer Applications Branch of ISD is tasked to provide project design services to a broad array of County departments, whose needs vary widely and where E-Government solutions are sometimes already available from others in the outside world.

2.4 A number of departments complained that ISD's lack of business specialists cause delay in the procurement of services but that their options are limited. As one department head noted, "It is a very painful and stifling process. The "one size fits all" approach doesn't work with us." One consultant observed, "ISD is a willing participant, but they are not ready from a "skilled" perspective for the type of applications County departments need."

C-3. The Commission found that the established process for hiring of specialized IT talents hinders technology implementation.

A number of large and small departments expressed frustration at the process in hiring qualified IT professionals even when the budget allocation is available. Some felt that the prolonged delay caused the best candidates to accept employments elsewhere. Many felt that the reforms in hiring of technology personnel alluded to in the Commission's prior report[8] do not go far enough. Comments ranged from, "HR system for hiring IT professionals is broken. There is not a natural IT classification right now which creates a real barrier for the County," to "It is a nightmare trying to hire good people in the IT areas. We are totally hampered by the HR process and frequently lose the best candidates due to excessive delays. It is a hurdle that should not be there."

[8] A Review and Analysis of Los Angeles County's Human Resources and Civil Service Commission Processes. 4 November 2010. Citizen's Economy and Efficiency Commission.

D. TRANSFORMATIVE APPROACHES

This section is based upon interviews with consultants and review of published data about managing the transition to interactive digital technologies which gave the Commission additional insight. We try to capture the essence of several key concepts that appear to be applicable to Los Angeles County in its effort to advance technology at a more rapid pace as well as identify positive activities uncovered in the course of our study that represent transformative approaches already in use in Los Angeles County.

D-1. <u>The Commission found that the term "innovation" is increasingly being used in both industry and government as a descriptor for process change using technology and the title "chief innovation officer" is being applied to the official responsible for managing the process of innovation..</u>

Many organizations, both in the private and public sectors, have achieved success by focusing on "innovation" rather than just technology adoption. They have restyled their image by stressing "innovation" as the guideline for future activity.

1.1 On July 8, 2013, President Obama outlined the "Management Agenda for Government Innovation"[9] in which the "overall focus is on making government more innovative". The new agenda encourages the Federal government to look to state governments for innovative ideas, to eliminate duplication and to break down silos.

1.2 The City and County of San Francisco created the position of Chief Innovation Officer in January 2012, to advance potential innovative approaches to be applied in various operations. Philadelphia has appointed a Chief Innovation Officer to be the head of its Office of Innovation & Technology, which includes the traditional information technology functions. Similarly, Montgomery County, Maryland established the position of Chief Innovation Officer in 2012. In California, cities that employ the title of chief innovation officer include Riverside, San Leandro and Davis.

D-2. <u>The Commission found that various new management approaches are available to public sector entities in order to jump-start progress in adopting innovation.</u>

These new approaches are being used to focus attention on the need for innovation, to bring in talent from the private sector, to create private-public partnerships or to identify fresh funding sources.

[9] "A Smarter, More Innovative Government for the American People." Office of Science and Technology Policy. 8 July 2013. <http://www.whitehouse.gov/blog/2013/07/08/smarter-more-innovative-government-american-people

2.1 San Francisco has initiated a Mayor's Innovation Fellowship Program[10], patterned after the White House Presidential Innovation Fellows Program to attract qualified individuals from the private sector to work on City projects.

2.2 Philadelphia was selected to participate in CityNext[11], a Microsoft-sponsored initiative 'to strengthen communities in part through technology'. Philadelphia also plans to develop a more mobile workforce using technology.

2.3 The Mayors Project of Bloomberg Philanthropies[12] financed a three-year program in 2011 through which Innovation Delivery Teams were established in five selected cities: Atlanta, Chicago, Louisville, Memphis and New Orleans. The stated goals of the Mayors Project are to "increase innovation capacity within municipal government and disseminate effective programs and policies across cities."

D-3. The Commission found that the use of digital technologies is deemed more effective in both the private and public sectors when the new applications disruptively modify existing paper-based systems and thereby achieve greater flexibility, efficiency or cost savings.

3.1 The phrase "disruptive innovation"[13] has been coined to describe any new application that obsoletes a prior practice with a new simplified approach using technology. As one consulting firm wrote, "to get more for less requires doing things differently." Numerous examples of creative solutions are available both in private industry and in the public sector.

3.2 In Los Angeles County, several departments have taken digital approaches that are disruptive to the way that things were done in the past. Examples include the interactive use of digital means that allow citizens to log on and secure electronic tickets to public venues, permits for controlled activities or even dog licenses and amenity packages for jail inmates.

In the Department of Health Services (DHS), a major program of designing and implementing an Electronic Health Record (EHR) system across all County hospital facilities is currently under way.

Another current example of a proposed disruptive systems change is found in the Assessor's Office, where tablet computers are being evaluated as input devices for

[10] "Mayor's Innovation Fellowship/InnovateSF." Office of Civic Innovation (MOCI). 5 Dec. 2012. <http://innovatesf.com>

[11] "City of Philadelphia Selected as a Microsoft Citynext Showcase City." 16 July 2013. <http://cityofphiladelphia.wordpress.com/2013/07/16/city-of-philadelphia-selected-as-a-microsoft-citynext-showcase-city>

[12] "Bloomberg Philanthropies to Fund Innovation Delivery Teams in 5 Cities." 14 July 2011. <http://www.mikebloomberg.ocm/index.cfm?objectid=28464D06>

[13] Disruptive Innovation." Def. Search CIO. <http://searchcio.techtarget.com/definition/disruptive-innovation>

assessment data to eliminate paper forms and repetitive handling processes previously employed.

D-4. The Commission found that Departments generally perceived knowledge transfer to be a key factor for more rapid adoption of digital technology, but the current process for shared learning is limited by complacency.

The term 'use of best practices' is often cited in literature and also in Los Angeles County, to encourage users to accept solutions invented by others. However, many sources illustrate the benefits of transferable initiatives, e.g. projects where the design of the application has already been completed by others with similar problems. A European Union commissioner said at an E-Government conference, "We must be more active in learning lessons from each other and getting the benefits of scale from adopting common approaches across borders."

4.1 In Los Angeles County departments that are guided largely by Federal or State regulations governing various programs, established standards for information technology applications create a helpful and specific path forward in meeting government guidelines.

4.2 In other departments, where no such Federal or State standards exist, progress is more sporadic and resistance was found to the use of applications invented elsewhere. The task force heard comments such as, "Los Angeles County is one of the largest such jurisdictions in the country and existing applications in smaller jurisdictions just don't work for us", or "Available Commercial Off-the Shelf systems (COTS) are not flexible enough to be adapted to L.A. County's large and diverse requirements."

D-5. The Commission found that fresh approaches are being employed to encourage user participation by individual citizens and private sector entities in suggesting and designing new applications for government use in a fast-moving technological world.

Experience with the Apple iPhone teaches that a preponderance of high-volume applications can be originated by users. Similarly, in an interactive world, users of government services when confronting systems in their day-to-day contacts that they deem to be slow, awkward or inefficient can imaginatively offer fresh solutions.

These kinds of opportunities are being captured by other public sector entities in various ways.

5.1 The White House Office of Science and Technology established a so-called RFP-EZ program[14] to fast-track proposals from what are called 'non-traditional sources'.

[14] "RFP-EZ and Innovative Contracting Tools." The Presidential Innovation Fellows. <http://www.whitehouse.gov/innovtionfellows/rfp-ez>

5.2 The District of Columbia in 2009 initiated an Apps for Democracy[15] contest that solicited applications from the community. It was lauded as "producing more savings for D.C. government than any other initiative." Other experimental programs exist elsewhere for collaborative problem-solving, sometimes with the use of crowd-sourced solutions.

5.3 Individual users are being approached to provide part-time service, sometimes on a pro bono basis. According to the Wall Street Journal in August 2013, "A group of civic hackers in Chicago brainstorm on how to use public data to build apps that help solve city problems and foster open government." Code for America, a national non-profit based in San Francisco, has fellows working in ten different cities.

D-6. The Commission found that government entities are increasingly employing digital solutions that transcend traditional jurisdictional boundaries in offering shared applications for users in a city, county, region or state.

6.1 The State of Oregon, for example, offers an e-Permitting site, which is being used by an increasing number of municipalities to allow applicants for building permits to apply on a single statewide site. In Oregon, such applications are supervised by an E-Government Portal Advisory Board set up under legislation passed in 2008 to oversee the State's involvement in E-government.

6.2 The States of Michigan and Virginia, among others, have established business one stop web sites that simplify the process of applying for license and subsequently complying with regulations for entities throughout the state.

6.3 In Los Angeles County, faced with a requirement to substantially enhance the capability of a Multi-County Electronic Recording Delivery System (ERDS), the County Registrar-Recorder Los Angeles County acted in the role of both a vendor and a partner member to provide the system upgrade not only saved millions of dollars for the consortium of counties but also gained a more direct and responsive control of the capabilities of the system.

6.4 These applications give hope to the thought that future digital solutions for Los Angeles County can be designed within a greater regional framework.

[15] "Apps for Democracy Contest." District of Columbia: Office of the Chief Technology Officer. 05 May 2009. <www.dc.gov/DC/OCTO/About+OCTO/News+Room/Press+Release/>

VI CONCLUSION

The Citizens' Economy and Efficiency Commission was charged with reviewing "the County's transition to electronic government applications that include online filing and access by citizens together with electronic processing and approval by County departments" and recommending improvements.

From the Commission's perspective, the findings are mixed. Clearly, the County has devoted a great deal of energy and effort to implementing high tech solutions for delivering services across its various departments. Web-based applications in the "look up information" category are numerous. Interactive applications which deliver goods in the form of an admission ticket, use permit or the like against an on-line payment are also prevalent. In many departments, applications that respond to hand-held devices have been designed and social media (Facebook, Twitter, etc.) are being employed, where appropriate, to enrich communication with constituents.

Many extensive, high value projects (such as e-CAPS in the CEO's office, LEADER in DPSS and the electronic health record in DHS) have been approved and are well under way to implementation.

Yet, there is compelling evidence that the County of Los Angeles is generally not an early adopter of new technologies and that projects move along smoothly only when there is a high level, hands-on management sponsor and the project is contained within a single silo. Several attractive cross-departmental projects have been derailed, or watered down to simpler, less far-reaching approaches. One consultant who has done work for County commented, "There is little or no collaboration between departments within the County."

In many cases, application of internet-based technologies is impeded by the continuing reliance on old legacy computer systems that are costly to maintain and are not capable of handling new applications. Another consulting firm noted, "The replacement of the legacy IT systems is the biggest strategic issue for the County."

The Commission has reviewed these issues and herewith presents its specific recommendations.

VII RECOMMENDATIONS

Based on the findings and conclusions presented in this report , the Citizens' Economy and Efficiency Commission believes that the pace of future adoption of interactive digital technologies in Los Angeles County can be enhanced by additional steps taken by the Board of Supervisors to underscore its commitment to rapid, innovative and effective technological change in County operations. While each recommendation can stand on its own, the Commission wants to stress how interrelated these recommendations are.

These steps are outlined in the following recommendations:

Recommendation 1: That the Board consider directing the CEO to initiate additional steps to establish and publish a clear commitment to rapid adoption of E-Government technologies that involve the use of the internet by citizens interacting with County activities

Elimination of delays that are caused by mixed signals that impede the adoption of technology as identified in Finding A-1, requires a cohesive and concerted effort by the Board of Supervisors, the County CEO and the deputy CEO's to communicate a clear and consistent message. Priorities set forth in the Business Automation Plan should be reasserted in the strategic planning process and **consistently** receive funding when required to achieve implementation.

Recommendation 2: That the Board consider directing the CEO to take steps to designate capable individuals as champions of high priority E-Government projects, with authority to cut across departmental boundaries to carry out such projects.

As noted in Finding A-2, those projects that are successful inevitably have champions at the Board/CEO level and also have capable project leaders at the department level. For cross-departmental projects to succeed, powerful and continuing pressure from the Board/CEO level is needed to counteract resistance to change, which has caused otherwise strategic projects to founder.

Recommendation 3: That the Board consider directing the CEO to establish a management process of oversight for all high priority technology projects that have been identified in the County's strategic plan and goals, with special focus to manage those projects that cross departmental clusters.

The Commission's findings in A-3 indicated the absence of a process to push multi-departmental projects forward in situations when important multi-departmental E-Government projects have become stalled or watered down to limited functionality. Continuing review at the Board/CEO level is needed to achieve optimum solutions on all important technology projects that cross departmental lines

Recommendation 4: That the Board consider directing the CEO to initiate additional steps to institutionalize the creation of a proactive culture that helps insure the use of technology across the entire spectrum of County activities.

As noted in Finding A-4, the culture for adoption of technology varies widely among departments, with some departments effectively using new approaches while others remain mired in outdated processes such as existing, paper-based systems. Those departments where technology adoption is part of the management DNA are consistently more agile in implementing needed new projects.

Replication of these characteristics across the range of County activities requires both the identification of management deficiencies in departments where technology adoption is lagging and proactive decision-making to pursue alternate paths

Recommendation 5: That the Board consider establishing a multi-year program that identifies all needs for the updating of antiquated legacy systems and provides for their replacement in an orderly fashion over a period of time.

As noted in Finding B-1, E-Government applications will be impeded so long as mainframe based legacy IT systems are in use. These need to be replaced by platforms that accommodate modern digital applications in speed and scope. A county-wide E-Government plan is needed that includes strategies and target dates for legacy system conversion by department. As daunting as such changes may be perceived it is nevertheless incumbent upon management at all levels to have current plans in anticipation of potential capacity overloads, system shortcomings exposed or older technologies that are likely to be obsolete and subjected to the likelihood of being no longer supported. Equally compelling are the fast paced advances that are likely to be the basis for providing even greater service to County users, both from internal and external populations. .

Recommendation 6: That the Board consider directing the CEO to establish procedures that require the inclusion of E-Government projects in strategic plans, MAPP goals and business automation plans with consistency and emphasis. Also, directing the CEO to prepare an annual report to the Board on accomplishment and status to help ensure effectiveness.

As noted in Finding B-2, the Commission found that the implementation of technology as stated in business automation plans was unevenly reflected in various departmental strategic plans and not always included as MAPP goals, resulting in diminution of priorities for the implementation of interactive digital technologies.

Any established priorities for technology projects should be uniformly reflected department by department in these fundamental management tools.

<u>Recommendation 7:</u> That the Board consider directing the CEO to review the current management structure for oversight of innovative technology projects and develop an implementation plan designed to improve efficiency in structure and process.

The purpose of such review is to improve the focus on innovative solutions in County operations. As noted in Finding B-3, a number of Commissions, Councils and committees are operative in L.A. County, but they generally function as passive advisory bodies. As further noted in Findings D-1 and D-6, other jurisdictions have established greater focus by appointing an individual with line responsibility for innovation and an independent commission with oversight responsibility.

The proposed review should be consistent with the objective of strengthening the focus on other E-Government opportunities and its scope should include:

- **7.1** Providing a central point of focus for oversight of innovative E-Government at the CEO level including assessment of a new position of Chief Innovation Officer;
- **7.2** Expanding the charter of the Information Systems Commission to include the encouragement of innovative technology approaches across the full spectrum of County activities, with an appropriate change in its title and a review of its composition to determine adequacy for the new tasks;
- **7.3** Moving the E-Government Advisory Council (EGAC) from the CIO's office to align with the new structure (the CIO already has the CIO Council);
- **7.4** Establishing a Fellows program to attract qualified individuals from the private sector to work on innovative County projects; and
- **7.5** Developing administrative support for this new focus on innovation.

<u>Recommendation 8:</u> That the Board consider establishing a Revolving E-Government Incubator Fund to be managed by the CEO in the course of the normal budgetary process to provide financial support of strategic projects for small to medium size departments with financial constraints.

As noted in Finding B-4, there is a need to provide an available fund for smaller through departments to address needed E-Government applications.

The initial fund should be allocated to reflect priorities established by cost-benefit analysis, especially those General Fund departments that are lacking alternative sources of funding for innovative projects. This fund is to be reviewed for its adequacy and effectiveness on an annual basis. Ground rules will also have to be established to differentiate projects eligible for support from this fund from those that compete for funding from the existing Productivity Investment Fund managed by the Q&P Commission.

<u>Recommendation 9:</u> That the Board consider directing the CEO to establish, implement, and publicize a clear road map for initiation, approval and funding of E-Government projects that eliminates the ambiguities found by the Commission during its interviews.

As noted in Finding C-1, the Commission found that the process for approval of E-Government projects pivoted around the CIO's office, but various issues contributed to uneven accomplishment and delays.

Responsibility for initiation of new projects should continue to rest with departmental management as the line authority for each of the County's far-flung operations. Approval and funding of each project step should continue to be discussed as part of the ongoing budget process, with County funds being consistently provided when projects reach strategic approval milestones.

Coordination and planning of projects should continue to rest with the CIO's office as a unifying enabler for a coherent County-wide approach on similar applications. The cost of the CIO's function should continue to be absorbed as Net County Cost.

A better process is required for (a) transfer of knowledge among departments, (b) more focused consideration of other departments to be included in cross-departmental projects, (c) review of available outside options that reduce the cost or improve the application and (d) more detailed justification for funding based on cost/benefit calculations.

Additional centralized oversight at the Board/CEO level is recommended (See Recommendation 3 above) to assure the achievement of Board-established goals for conversion to digital technology.

<u>Recommendation 10</u>: That the Board consider directing the CEO to review realignment of the Internal Services Department to enhance technology adoption and services, including (a) re-examining the system of interdepartmental charges and (b) reorganizing the Information Technology Service group of ISD into smaller units of specialists to service individual clusters within the County structure.

As noted in Finding C-2, high interdepartmental charges for project implementation are a barrier to adoption of E-Government initiatives when similar services are available from the private sector at lesser rates.

The strategic use of Net County Cost (NCC) funding may be warranted when opportunities for investments in new technology and innovative approaches to County problems arise that cannot be absorbed in departmental budgets. This is with the Auditor-Controller's report on Intrafund Transfers (IFT) accounting as stated in Finding C-2.

As also noted in Finding C-2, delays and excessive costs may be experienced when ISD personnel assigned to technology implementation are unfamiliar with specific applications in client departments. While partly inevitable because of the broad spread of County activities, this problem could be ameliorated by aligning ISD technical personnel with specific needs of individual operating clusters.

Recommendation 11: That the Board consider directing the CEO to assess, in cooperation with the Director of Human Resources, ways that the process of recruitment of key specialized personnel for technology projects could be amended to provide for expedited decision-making where dictated by user needs.

As noted in Finding C-3, a recurring theme in the Commission's interviews was that a bureaucratic personnel selection process often impeded recruitment for technical staff positions in support of new programs requiring cutting-edge knowledge.

Recommendation 12: **That the Board consider directing the CEO to develop a process through which all Departments are encouraged to evaluate and apply transformative approaches already in use either in L.A. County or in other jurisdictions pertaining to E-Government practices.**

As described in Findings D-2 through D-6, the Commission found numerous practices within individual County departments that deserved to be considered County-wide and additional practices in industry and other jurisdictions, which warranted application for use in Los Angeles County. Some of these are highlighted below:

- Disruptive innovation;
- Transfer of knowledge through adoption of best practices;
- New management approaches and sources of funding;
- Encouraging user participation to initiate and design applications; and
- Regional or state-wide applications involving multiple jurisdictions.

The CEO needs to reinforce a management culture that clearly supports innovation as a desired approach and "thinking outside the box" as an acceptable alternative, while establishing communication teams that encourage the initiation of fresh ideas. Practices of other municipal governments should be studied to determine effective approaches in use elsewhere.

VIII. ACKNOWLEDGMENT

The Commission gratefully acknowledges the substantial contributions of our respondents. These interviewees were generous with their time and candor. Their help has been instrumental in our efforts to craft recommendations that we hope will improve County government.

IX. APPENDIX

1a. Board Motion
1b. Interview Questions

Appendix 1a
BOARD MOTION

STATEMENT OF PROCEEDINGS FOR THE

REGULAR MEETING OF THE BOARD OF SUPERVISORS

OF THE COUNTY OF LOS ANGELES HELD IN ROOM 381B

OF THE KENNETH HAHN HALL OF ADMINISTRATION

500 WEST TEMPLE STREET, LOS ANGELES, CALIFORNIA 90012

Tuesday, October 9, 2012

1:00 PM

9. Recommendation as submitted by Supervisor Antonovich: Request the Citizen's Economy and Efficiency Commission to conduct a review of the County's transition to electronic government applications that include online filing and access by citizens together with electronic processing and approval by County departments; and recommend ways to improve efficiencies in the County's system. (12-4653)

On motion of Supervisor Knabe, seconded by Supervisor Ridley-Thomas, this item was approved.

Ayes: 5 - Supervisor Molina, Supervisor Ridley-Thomas, Supervisor Knabe, Supervisor Antonovich and Supervisor Yaroslavsky

Attachments: Motion by Supervisor Antonovich

The foregoing is a fair statement of the proceedings of the meeting held October 9, 2012, by the Board of Supervisors of the County of Los Angeles and ex officio the governing body of all other special assessment and taxing districts, agencies and authorities for which said Board so acts.

Sachi A. Hamai, Executive Officer
Executive Officer-Clerk
of the Board of Supervisors

By Sachi C. Hamai

Appendix 1b
E-GOVERNMENT: INTERVIEW QUESTIONS

STUDY OBJECTIVES

1. To understand the role and value of E-Government as a process for setting direction at the County and Departmental levels, and linking departments for collaborative efforts and; mobilizing resources.

2. To determine the effectiveness of the County's E-Government planning efforts, interrelationship between Department and County E-Government planning processes, and how Department E-Government plans are weighted in the County's budget process.

3. To identify both drivers and *inhibitors* in the County's environment that impacts the use of E-Government (both development and implementation) as a planning tool in driving direction.

4. To encourage the sharing of best practices across the County by highlighting the effectiveness of Departments' planning techniques and processes.

QUESTIONS

PLANNING AND STRATEGY FORMULATION

1. Does your department have an E-Government plan? If so, can you describe the overall process used for the development of your Department's E-Government plan?

2. Are you aware of any E-Government planning activities at the County level? If so, how would you describe the alignment between the County's E-Government plan and your Department's E-Government plan?

3. What single change could add value to E-Government planning (a) at the County level? (b) at the Department level?

ROLE AND RESPONSIBILITIES

4. What is the role of the CEO/DCEO, CIO, and ISD in implementing the County's E-Government plan? Departmental E-Government plan?

5. How are implementation activities coordinated within your cluster? Across clusters? Across Board Offices?

PLAN EVALUATION AND MONITORING

6. Are you aware of how the County monitors progress of its E-Government plan?

7. How does your Department monitor progress on the implementation of E-Government activities? What are the metrics used to measure progress and performance?

8. Does the CEO's office require you to formally report progress on your Department's E-Government plan outcomes? If yes, can you describe the process/type of interactions?

9. What are the "barriers" that inhibit implementation?

BUDGET LINKAGE AND PERFORMANCE EVALUATION

10. Is your Department's E-Government plan an important component of your County budget discussions? If yes, please elaborate.

11. Have you used the County's E-Government plan when discussing priorities, decisions, and specific recommendations to internal and external stakeholders, including the CEO? the Board?

12. Are your Management Appraisal Performance Plan (MAPP) goals tied to the County and/or your Department's E-Government plans? If yes, please elaborate.

13. Do you have any "Best Practices" that should be shared with other County Departments?

CLOSING QUESTION

Is there anything else that you think is noteworthy relating to the efficiency of the e-Government process?