Agenda Submittal

Agenda #:	20	**Status:**	Approved
Type:	Resolution	**Department:**	Information Technology - Registrar of Voters
File #:	17-224	**Contact:**	Ira Rosenthal, 784-2703
Agenda date:	4/25/2017	**Final action:**	4/25/2017

Title: Receive a progress report from the Department of Information Technology on the implementation of their Service Delivery Model; Consider recommendations for organizational changes and adopting a resolution amending the List of Numbers and Classifications of Positions by adding 1.0 FTE IT Manager (TBD), 4.0 FTE IT Analyst, Principals (TBD), and 1.0 IT Analyst IV (TBD) effective May 7, 2017; Authorize the Chief Information Officer to negotiate and execute contracts for the acquisition of service management software licenses in an amount not to exceed $75,000 and implementation services not to exceed $460,000; and Authorize the Chief Information Officer to proceed with developing and issuing requests for proposals for contracted technology services

Governing body: Board of Supervisors

District: All

Attachments: 1. A - Presentation, 2. B - Resolution, 3. Adopted Resolution, 4. Minute Order

Date	Ver.	Action By	Action	Result
4/25/2017	1	Board of Supervisors	Adopted	

Published Notice Required?   Yes ____ No _X_
Public Hearing Required?   Yes ____ No _X_

DEPARTMENTAL RECOMMENDATION:

The Department of Information Technology recommends that the Board:
1. Receive a progress report from the Department of Information Technology on the implementation of their Service Delivery Model;
2. Adopt a resolution amending the List of Numbers and Classifications of Positions by adding 1.0 FTE IT Manager (TBD), 4.0 FTE IT Analyst, Principals (TBD), and 1.0 IT Analyst IV (TBD) effective May 7, 2017;
3. Authorize the Chief Information Officer to negotiate and execute contracts for the acquisition of service management software licenses in an amount not to exceed $75,000 and implementation services not to exceed $460,000; and,
4. Authorize the Chief Information Officer to proceed with developing and issuing requests for proposals for contracted technology services

SUMMARY:

The Department has been building and improving its organization and service delivery model to adjust to changes in technology, the technology industry, and customer demands. The Department needs to take the next step in its evolution in order to provide the quantity and quality of services expected by its customers. The presentation, included as Attachment A, outlines progress to date and includes a discussion on steps being taken to improve service quality. A rebalancing of staffing between the County's IT service provider and internal staffing is also recommended.   The proposed in-sourcing of six positions will be offset by a corresponding reduction in contracted services. Additionally, the current contract for technology services with Conduent State & Local Government Inc., expires December 31, 2018. As such, staff is seeking authorization

to proceed with developing and issuing requests for proposals (RFPs) for contracted technology services.

FINANCIAL IMPACT:

The Department is recommending the addition of six (6) full-time positions. The cost of these positions is expected to be fully offset by a reduction in contract services resulting in no change to total appropriations in the FY2016/17 working budget and no change to the FY2017/18 Requested Budget. The Department will work with Human Resources to finalize job classifications. DoIT estimates that the annual salary cost for these six positions will total approximately $721,000 at the top step. Staff is requesting an effective date of May 7, 2017 for these positions for purposes of recruiting lead time.

In addition, the Department is requesting authority to negotiate and execute a software subscription contract and implementation services for a service management toolset. Funding for this project is included in current budget appropriations. The software license is a cloud-based subscription and is not expected to exceed $75,000 per year. The cost for implementation services is not expected to exceed $160,000 for the first phase of the project,
which includes Service Asset and Configuration Management. Subsequent phases of implementation, estimated at $300,000, will occur next fiscal year and include Self-Service Portal, Request Fulfillment, Incident Management, Knowledge Management, and Service Level Management.

DISCUSSION:

The delivery of information technology (IT) services is of critical importance to the delivery of the County's services to constituents. Although spending on IT amounts to less than three percent of the County budget, it has an outsized impact on productivity and quality. As such, it is important that IT service delivery be as effective as possible. Since its creation in 2003, the Department has strived to follow industry best-practices, provide business value, and improve its service quality. The Board has been very supportive of the Department's recommendations to adjust its service delivery model over time. Below, is a progress report on the Department's recent activities including next-step recommendations.

History:

Prior to 1989, the County's information technology services were completely decentralized. To address problems with technology adoption and poor service levels the County signed its first out-sourcing contract in 1989 to consolidate infrastructure service delivery. The next strategic step to improve technology planning, management, and reduce costs occurred in 2003 with the centralization of all application development and support units and the infrastructure unit to form an integrated department.

Centralization of the County IT staff led to a more effective organization and improved its ability to provide services and manage contractual relationships. Soon after consolidation, the Department, working with technology consultant Gartner Inc., reviewed the County's sourcing strategy and recommended further refinements to its organization structure. A strategic sourcing and staffing plan, approved by the Board in February, 2006 rebalanced County & contractor staffing to strengthen the County's core capabilities in business applications and introduced a new service level-based contract structure.

In response to changes in the technology industry, the Board, at its May 7, 2013 meeting, approved a strategy that would shift the County from a completely outsourced model for infrastructure services support to a model that introduced a "best-of-breed", multi-sourcing approach to the provision of IT services. The approved model included in-sourcing key technical and technology management positions and an expectation that the Department would leverage managed services and cloud computing platforms from multiple providers in the future.

At its meeting on June 10, 2014, the Board approved DoIT's recommendation to have Gartner Consulting Inc.

conduct an assessment of DoIT's infrastructure services delivery model and propose an organizational design that would support the Department's strategy to multi-source its infrastructure services and leverage cloud computing where that proved to be beneficial.

DoIT worked with Gartner on an organizational design to address the weaknesses and challenges inherent in DoIT's structure and recommended a new staffing structure that would enable the department to support its technology strategy. Gartner recommended a "hybrid" organizational design as the best option for the County as it provided maximum benefits with minimal short-term disruption and lowest risk. The hybrid alternative assumed that the County would continue to leverage its current contract vehicle with Xerox, in the short-run, so as not to impact progress on projects and to allow DoIT time to build its in-house staffing and technical expertise.

The assessment resulted in a recommendation, approved by the Board at their March 10, 2015 meeting, to add four technology management positions responsible for infrastructure operations as well as an assistant director position. Separately, Gartner performed a benchmark study of the County's cost for IT out-sourcing and confirmed that current expenditures were within the market range. At their April 28, 2015 meeting, the Board approved extending the Xerox contract to December 31, 2018

This phase of organizational change provided a number of benefits, including:
- The Assistant Director serving both as an executive leader to focus on infrastructure activities, and as a back up to the CIO in his absence.
- County managers to function as domain experts and proactively set strategic direction, foster innovation on infrastructure related activities, better monitor the performance of vendors and reduce risk of critical knowledge leaving the County.
- The model allows the County to effectively manage infrastructure services from one or multiple vendors including cloud providers as needed. Vendor teams get strategic direction from the appropriate County manager domain experts.
- The model gives County the flexibility to increase internal infrastructure services resources in the future under each of the County managers and maximize/optimize vendor resources based on future needs.

Progress in employing a hybrid-cloud strategy for delivering services

Cloud services refers to services or resources that are provided over the internet by a third-party host. The host invests in and manages hardware and software related to the service and organizations typically pay a subscription fee to "rent" the service or tools. The benefits of cloud services are reduced costs, reduced complexity, expansion of technology solutions, and access to expertise that would not otherwise be available or affordable. The Department is working with cloud providers that have experience in the government sector and whose services have already been vetted for compliance with rules related to data security for HIPAA, CJIS, PCI, FedRamp and the IRS.

The Department has made significant progress in strategically employing cloud-based services, including:
- Office 365 (services included e-mail, encryption, SharePoint Online, Office productivity products, mobile device management)
- Spam & Virus Protection
- Mental Health EMR System (in progress)
- Documentum (pilot project)
- County Websites (investigating hosting alternatives)
- GIS Aerial Images (investigating hosting alternatives)
- Help Desk & Service Management software (software delivered as a service)
- Hosted Communications Services (finalizing contract)

The Department is exploring other cloud service offerings to address challenges in data backup and disaster

recovery, as well as data storage driven by the explosive growth of video in the law enforcement domain.

Next Steps in Evolving the Organization - Staffing

As the Department considers industry best practices for improving service delivery efficiency and quality, and plans for the next phase of contracting with IT service providers, it has identified areas in its organization that should be bolstered with internal staff. Additionally, it has identified toolsets that require updating and processes in need of improvement.

The Department has identified staffing challenges and gaps in certain functions and processes and recommends strengthening staffing in the areas of project management, service management, security, and network communications. While these needs could be met with contract staff, the Department believes that the critical roles played by these positions, the need for institutional knowledge in the performance of these jobs, and the benefit to the entire Department of integrating these positions into the fabric of the organization are important considerations in requesting these be regular County positions. These positions would work in a matrix fashion across the other divisions of the department providing both functional and project-based expertise and support.

The Department recommendation proposes adding six positions that would be responsible for:

IT Manager - Project & Portfolio Management (1)
- Provide project management expertise to application development and infrastructure teams.
- Lead the effort to develop an overall IT strategy, application and technology roadmaps, and improvements in IT governance and communications
- Lead efforts to improve business relationship management, project planning and coordination.
- Lead the IT Finance and Administration division including contract and procurement management

Principal Analysts for Network & Mobility (2)
- Implement the network and mobility roadmap for the County.
- Responsible for LAN/WAN architecture, network planning, Wi-Fi, end-user mobility, telecommunications and VoIP, and call center applications.

Principal Analyst for Service Management (1)
- Lead improvement efforts in the areas of request, incident, problem, change, and service catalog management.
- Monitor and report on service levels and customer satisfaction.
- Provide oversight on service level performance of contract providers

Principal Analyst for Information Security (1)
- Implement the information security strategy and plan for the County.
- Responsible for implementing security architecture for on-premise and cloud computing. Enforcement of the County's data and systems security compliance program; system, application, and data security policies; policy monitoring; audit support.

IT Analyst IV for Asset and Procurement Management (1)
- Assist in the areas of contract, asset, and procurement management.
- Manage license databases and asset configuration databases
- Provide system administration for the service management toolset

The proposed position classifications are based on new classification specifications that are still under development. These classification specifications will be presented to the Board in an upcoming meeting. The Department will work with the Director of Human Resources to finalize the classifications and once finalized

will initiate the recruitment process.

Next Steps in Evolving the Organization - Service Management Processes

Currently, the Department handles service requests, incidents, problems, and changes as if they were all one in the same. In reality, each of these are different ticket types that need to follow different work-flows. In fact, there are separate industry best practices in how to address each one. The Department is further hampered by the use of legacy service management software which does not address standardization of processes, process automation, asset configuration, or knowledge management.

To address these short-comings, the Department has selected a service management toolset, Service Now. Service Now is a service management tool that follows the widely accepted, industry best-practice ITIL (IT Infrastructure Library) framework. The toolset would replace the current Lagan service desk product first installed as part of the County's 311 call center. This toolset will facilitate the implementation of a Service Asset and Configuration Management (SACM) program built around a centralized Configuration Management Database (CMDB) that catalogs IT assets, their attributes, and their relationships. The CMDB will form the single authoritative source of software, hardware, supporting documents and their relationships and dependencies. This authoritative source will serve as the backbone that supports critical IT processes such as, Service Catalog Management, Request Fulfillment, Incident Management, Problem Management, Change Management, and Knowledge Management. In addition to the toolset, DoIT will be contracting for implementation services to ensure that best-practice workflows are configured into the software from the beginning and that these workflows are automated to the extent possible.

ALTERNATIVES:

Staff recommends that the Board accept the report and adopt the position resolution. The Board may choose to not approve the staffing model and resolution, but this is not recommended. The proposed staffing model is a necessary component of implementing the Department's technology and sourcing strategy. Staff is recommending this organizational change occur now so that timely planning and preparations can be made for the rebidding of the County's contracted technology services in December.

Staff also recommends that the Board authorize the CIO to procure and implement service management software. The Board may choose to not approve the acquisition, however, this is not recommended. Staff has identified the lack of appropriate service management tools as a significant challenge to improving quality, to introducing best practices, and in automating many time consuming tasks.

OTHER AGENCY INVOLVEMENT:

Staff reviewed the Department's service management and staffing plans with the Process Improvement Committee and the Committee supports the staff recommendations. The Department has worked with the Human Resources Department and County Administrators Office on the overall organizational model and classifications. The Department will work with County Counsel on the negotiation and approval of contracts for service management software and implementation services.

CAO RECOMMENDATION:

APPROVE DEPARTMENTAL RECOMMENDATION