Operations of the Santa Cruz County Information Services Department

Background

The County Information Services Department (ISD) provides centralized automation, telephone, printing and other support services to County departments to improve productivity and service. The department is responsible for managing the County's wide-area network and operates and supports a broad range of data processing applications for County departments including public safety applications, which require twenty-four hours a day, seven days per week reliability.

Scope

This report examines the use of personnel and financial resources to provide county wide "information services/data processing", which is a major sub-function of the ISD. This report will discuss the appropriateness of the current hardware and software architecture to support modern county operations.

Findings

1. The ISD uses mainframe computer hardware first introduced in 1990 which is an upgrade from earlier versions.

2. Current mainframe software includes applications for the Tax Collector, Assessor, Auditor, Payroll, Personnel, District Attorney, Welfare and Planning departments.

3. The Planning Department is in the process of migrating away from the mainframe.

4. The amount allocated for Information Services/Data Processing in the 2002-2003 county budget is in excess of $9 million.

5. Using the financial data provided by the ISD, the Grand Jury estimates that $1.1 million is spent annually on outside hardware, software and other services to support mainframe architectures. The exact costs for Data Processing mainframe operations versus other server operations are not delineated in the published budget.

6. Mainframe architectures are expensive to sustain and difficult to evolve to current industry best practices such as web access. To support these mainframe operations, the ISD employs 32 highly skilled programmers and technicians. Given the financial and organizational data provided by the ISD, the Grand Jury estimates this cost to be $3 million annually. The exact Data Processing personnel costs for mainframe operations versus other server operations are not delineated in the published budget.

7. The County continues to use a mainframe internal billing structure to allocate ISD expenses across county operations. This requires administrative personnel involved in determining and allocating costs of mainframe usage for the purpose of interdepartmental billing. The Data Processing Department is charged $709,000 annually by ISD for "Management Services." Some undetermined portion of this is for figuring the internal cross department mainframe charges and administrative overhead.

8. The published Data Processing budget does not delineate monies spent on mainframe architectures versus other server based services.

9. The ISD understands the ultimate need to eliminate the mainframe computer operations by migrating to less expensive current technology, but does not have a formal plan or time line for accomplishing this.

10. The mainframe software applications are a combination of "in house" and commercial software adapted "in house". These applications have evolved over a span of four decades.

11. Independent investigations by the Grand Jury determined that "Commercial off the shelf" (COTS) software is available for county governmental operations from many vendors for a variety of computing platforms.

12. However, the ISD has a policy to use Windows NT based servers for new server based applications which the limits the available options.

13. The ISD staff has reported having difficulty finding COTS software applications to replace the current mainframe applications.

14. Santa Cruz County is in a severe budgetary crisis.

Conclusions

1. The County is operating a midsized mainframe software organization.

2. As operations are moved away from the mainframe, such as the Planning Department, the ISD mainframe costs for the remaining departments will become more prohibitive. There will be fewer departments sharing the fixed overhead.

3. It is difficult to manage the costs of using mainframe architectures when the exact costs are not delineated.

4. The monies spent on maintaining the use of the mainframe computer hardware, software and personnel could be spent more effectively on contemporary industry standard server-based hardware with COTS software solutions.

5. The ISD policy to only use Windows NT for new server applications artificially restricts candidate COTS software solutions which could replace the mainframe software.

6. The ISD must find ways to reduce Data Processing costs.

7. The ISD needs outside help to facilitate a migration from mainframe architectures to current vendor supplied hardware and software technology.

8. The ISD department does not have the expertise to simultaneously maintain and operate mainframe architectures and at the same time migrate applications to new platforms.

Recommendations

1. The ISD should consult with many solution vendors and hire a consulting firm to facilitate the selection of and migration to current hardware and software technology.

2. The ISD should discontinue any new development for mainframe applications and only maintain those which are required for current operations.

3. The ISD should delineate the costs for supporting mainframe architectures in the published Data Processing budget.

4. The ISD should use application requirements to drive the selection of new platform architectures.

5. The ISD should develop formal 18 month and 5 year plans that detail the elimination of the current mainframe hardware and software and the complete migration to current vendor supplied solutions that do not require in house software development.

Responses Required

Entity	Findings	Recommendations	Respond Within
Santa Cruz County Information Services Department	1-14	1-5	90 Days (Sept. 30, 2003)
Board of Supervisors of the County of Santa Cruz	1-14	1-5	60 Days (Sept. 2, 2003)