MEMORANDUM

Date: July 28, 2017

To: The Honorable Chair and Members
   Pima County Board of Supervisors
   Presiding Judge, Superior Court
   Elected Officials
   Appointing Authorities

From: C.H. Huckleberry
       County Administrator

Re: Board of Supervisors Policy Regarding Information Technology Lifecycle Management

Attached for your review is a draft Board of Supervisors policy regarding Information Technology Lifecycle Management.

I intend to send this and two other policies involving standardizing hardware and software, as well as security, to the Board of Supervisors for their final review and approval at their September 5, 2017 meeting. Therefore, if you have any comments regarding this policy, please submit them to me in writing before August 18, 2017.

CHH/anc

Attachment
PIMA COUNTY, ARIZONA
BOARD OF SUPERVISORS POLICY

Subject: Pima County Information Technology Program
         Lifecycle Management Plan

Policy Number: D 27.2
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Purpose

Pima County strives to ensure the successful management of the County’s Information Technology (IT) systems to meet the existing and known future business needs of Pima County.

This policy establishes a consistent framework across the County for telecommunication, servers, storage, and computers to ensure they are properly planned, managed and controlled using the most cost-effective strategies. This policy provides direction for design and implementation of systems, as well as requirements for the development and management of effective and sustainable IT solutions.

Background

IT is a critical tool for conducting County business, and the County must have predictable and appropriate IT equipment replacement cycles. IT networks, desktop and personal computers, server and storage upgrades, and office automation software are ongoing costs.

1. Inadequate IT replacement cycles may have the following adverse impacts on County service delivery:
   a. Equipment failures result in employee downtime, and the inability to access systems or applications hinders efficiency and consistency.
   b. Incompatibility of office automation products inhibits effective communications and information sharing.
   c. Increased costs for replacement parts and increased time to repair equipment.
   d. Considerable time to locate replacement parts or salvage parts from other equipment.
   e. Inconsistent and less predictable budget requirements, equipment monies being reallocated, and unexpected expenses when equipment fails and must be replaced.

2. External factors exist that are beyond the control of the County and also limit the useful life of IT:
   a. Much of the software used by the County is on a vendor-enforced replacement cycle, after which the software is no longer supported. This scenario forces upgrades to ensure systems are protected from new threats with the latest security enhancements and patches.
   b. Hardware manufacturers are working with software developers to develop hybrid systems that require a certain level of compatibility of hardware to the software. This is especially prevalent in operating systems where computer processors have firmware code that interfaces with the operating system to improve security, making it difficult to use or reduces usefulness.

3. The development of and adherence to appropriate IT replacement cycles, both hardware and software, provides the following benefits to the County:
   a. Predictable ongoing costs for budgeting purposes.
b. Lower overall IT support costs by using shared applications and information and core administrative applications.

c. Less effort required to analyze and justify replacement requests for individual departments, Elected Officials and Special Districts.

d. Consistent access.

e. Simplified implementation of state and federal technology policy direction, such as consistency in customer access.

f. Greater consistency in operating systems and application versions, which reduces complexity of the environment, support costs and administrative overhead associated with asset management.

g. Remote administration of desktops (software installations and upgrades) that can avoid considerable time and travel costs compared to individual installations.

h. Ability to take advantage of warranty agreements and software licensing agreements to reduce the overall costs associated with maintaining obsolete software and hardware.

Policy

It is the policy of the Pima County Board of Supervisors that:

1. The County Administrator shall establish Administrative Procedures that govern the implementation of the Lifecycle Management Plan to:
   a. Achieve predictable and appropriate replacement cycles for the County’s software, telecommunications, servers, storage and computer systems.
   b. Ensure efficient and cost effective delivery of information technology services.

2. IT assets will be replaced based on the following schedule:
   a. Servers and storage: five (5) to seven (7) years.
   b. Telecommunications equipment (telephones and network): three (3) to five (5) years.
   c. Computers and other end user or consumer equipment (desktops, laptops, tablets, audio/visual equipment and peripherals): three (3) to five (5) years.

3. At the end of lifecycle, the equipment proposed for replacement will be analyzed to determine the specific reason for replacement, and a lifecycle replacement justification report will be prepared by the Chief Information Officer and approved by the County Administrator before the equipment is replaced.

4. Applicability
   a. This Policy applies to all County Departments, Elected Officials and Special Districts.
   b. Violation of this policy will result in the offending software or hardware solution being removed from access to the County network.
5. Compliance
   a. The IT Department shall ensure all software and hardware solutions are maintained according to this Policy, including maintaining a sustainable and consistent approach to security.
   b. All County entities shall abide by this Policy unless expressly exempted by the County Administrator.

**Procurement and Acquisition**

1. All lifecycle acquisitions shall be in conformance with County Procurement Code. If a cooperative purchase agreement is used, the Procurement Director shall certify the cost to the County is the lowest and most responsible. At the discretion of the Procurement Director, any lifecycle replacement may be competitively acquired.

2. Two financing strategies are available for lifecycle management: leasing and purchasing, and strategy selection depends on which of these provides the lowest overall cost of ownership for equivalent acquisition. This selection will be based on a total-cost-of-ownership analysis of all equipment and labor costs, other key budgetary concerns of the County (e.g., the constitutional expenditure limitation), and other financial and budgetary considerations.

3. Once a need for lifecycle funding is established, the financial strategy decision will be made on a case-by-case basis, as not all acquisitions have the same cost structures. The County Administrator will be responsible for identifying the business needs, benefits and impacts (cost, time, productivity, service delivery and human resources). The Procurement, Finance and IT Departments, at the direction of the County Administrator, shall identify the appropriate procedures and processes to maximize benefits and minimize costs to the organization for the lifecycle program.

4. The IT Department, in conjunction with the Procurement Department, is authorized to establish and administer master contracts and to aggregate IT products. The IT Department will assist with selection and acquisition of competitively acquired hardware and software products for all IT assets, including, but not limited to, telecommunications, servers, storage and computers.

5. Obsolescence acknowledgment: Prior to any equipment being procured for a lifecycle acquisition, the vendor shall certify the equipment being acquired shall not become obsolete due to a lack of vendor support or any change in software compatibility during the projected useful life of the equipment.

6. Disclosure: Prior to any equipment being procured for a lifecycle acquisition, vendor is required to disclose any equipment or software obsolescence regarding systems updates, modifications or changes that may be required during the useful lifecycle of the acquired equipment, systems, software or products.

**Definitions**

1. “County Administrator” means the County Administrator or designee.

2. “Elected Official” means a person who is duly elected, appointed or retained through election to an elected County office.

3. “Lifecycle” means the period during which IT assets remain useful.
4. “Information Technology” means:
   a. County IT devices and applications utilized by County personnel to execute job responsibilities and duties in the conduct of County business, which includes, but is not limited to, enterprise applications, business applications, electronic mail and messaging capabilities, telephones, cell or smart phones, radios, computers, hand-held computing devices, peripheral devices that attach to computing devices (such as facsimiles, printers, scanners, copiers and other interfacing equipment), connectivity technologies used to access these computing and peripheral devices (whether accessed from within County facilities or outside), and Internet access.
   b. The County’s network and infrastructure components (connectivity), computing and peripherally attached devices and interfacing equipment, and voice or data communications systems. Control facilities such as security badge systems are also considered components of IT resources, given their impact and reliance on other IT resources.

5. “Information Technology Program” means all of the components of the IT Environment, IT Resources, Enterprise Applications, and Business Applications and the content therein.

6. “Enterprise applications” means computer software and hardware that has been internally developed or purchased to monitor, configure, balance the utilization of, maximize the performance of, or secure from intrusion, operational interference or destruction of one or more IT resources.

7. “Business applications” means computer software that has been internally developed or purchased and configured to automate and/or control (e.g., Supervisory Control and Data Acquisition; SCADA) specific County, departmental or division business processes.

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Adopted:  
Effective: