



Computer Lifecycle Recommendation

--Prepared by Debra Howell

Currently, Computer and Network Support (CNS) for Facilities Services (FS) and Risk Management & Public Safety (RMPS) operates with a three-year lifecycle for all of its computers (except thin clients – which are on a five-year plan). This was based on industry standards and research and has served our organization well over the past seven years.

Analysis

We have examined the various differences between a three-year desktop lifecycle and a four-year lifecycle. This analysis is based on business, financial, and technical reasons.

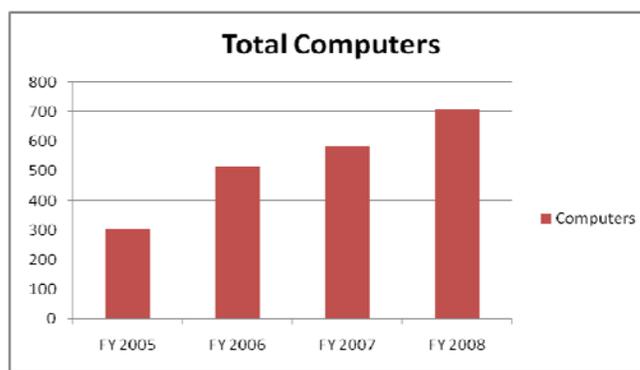
Business

With a fleet of about 800 computers, we are currently replacing about 260 computers per year. In the past, we have replaced anywhere from 111 – 158 computers. The increase to 260 for this fiscal year was significant.

In our present staffing model, one FTE is dedicated to the computer replacement process. This model has not scaled well as our annual replacements increased to 260. Current estimates are that we need at least 1.5 FTEs to replace that number of computers per year.

In order to maintain our existing staffing levels, we need to be creative with our resources and our business processes. By increasing the desktop lifecycle to four years, we will be replacing fewer computers per year which will enable us to continue to have one FTE dedicated to the process.

The decision to replace PCs is not purely technical; it is a business, financial and technology decision. We recommend that enterprises begin the due diligence within their own organizations to determine whether a four-year replacement strategy is applicable. --Gartner



Technical

Industry research now fully supports the recommendation for a four-year lifecycle for desktop computers. This research takes into account user environments, operating systems, software, and hardware reliability and performance. Desktops are now equipped with “multicore processors, 64-bit architecture, advanced graphics and multimedia capabilities, and large storage...most of which go unused.” (Gartner)

It is also our personal experience that desktops are failing at a lesser rate. Most of the computers that we replace are still serviceable and are sold to employees for several additional years of home use.

Note: The recommended lifecycle for laptops remains at three years.

Financial

Of our 800 computers, about 400 are desktops. We annualized the costs for replacement of these desktops:

Annual Desktop Replacement Costs		3 -yr. model	4-yr. model
	Unit cost	\$267	\$200
	Warranty	0	\$23
	Configuration cost	\$250	\$187
	Total	\$517	\$410

Details on how the above numbers were derived:

- Unit cost = \$800 for a new desktop (divided by three or four years for an annualized cost)
- Computer population = 400 desktops
- Fourth-year warranty cost = \$89 (divided by four years for an annualized cost)
- Configuration cost =
 - \$750 per unit (total staff cost (\$100,000) divided by total units configured (133))
 - 3 yr model = \$250 (\$750 per unit divided by three years)
 - 4 yr model = \$187 (\$750 per unit divided by four years)

Moving to a four-year lifecycle creates a savings of \$107 a year per computer.

Recommendation

We are recommending that the lifecycle for desktops be extended to four years. Laptops will remain on a three-year plan and thin clients on a five-year plan.

The four-year lifecycle plan will take effect immediately. We will not purchase warranty extensions on our existing desktops (a cost of \$35,600). Instead, we will ride out the extra year. If a desktop should fail during the extra year non-warranty period, we will replace it. All new desktops will be purchased with a four-year warranty.

It is our hope that we will continue to revisit our standards and processes, using sound technical and financial stewardship as our guide, and make additional recommendations as appropriate.

\$40,000

**Savings per year by
moving to a four-year
replacement model**