

2004 SACUBO Best Practices

Business & Finance Computer Rolldown Process

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Abstract

With over 400 computers to track and assign to staff, the Division of Business and Finance at The University of Memphis faced a daunting task when attempting to develop a plan to ensure that staff members have a computer system that meets job requirements. To help with this, the office of Business & Finance Technology (BFT) developed a computer rolldown process that includes a user needs assessment, the definition of computer configurations for each requirement "level," and assigning user positions appropriately.

BFT has unveiled a Web site to enable users to search for information about the systems involved in the rolldown. This Web application uses an Access database, an ODBC connection, Crystal Reports, JavaScript, and a Web browser. Searches can be performed either by department or by rolldown number. These searches provide users with an easy way to track workstations by assigned user, serial number, department code, processor speed, and much more.

This project ensures that every member of the Division has adequate equipment to do his/her job effectively. A significant amount of money has been saved in the process of purchasing and assigning computers where they will benefit the Division. This Web site can be accessed at <http://bf.memphis.edu/bftech/rolldown/roll.php>.

Introduction to the Organization

The University of Memphis is a comprehensive urban university committed to excellence in undergraduate, graduate, and professional education; the discovery and dissemination of knowledge; service to the metropolitan community, state, and nation; and the preparation of a diverse student population for successful careers and meaningful participation in a global society. The University offers 15 bachelor's degrees in more than 50 majors and 70 concentrations, master's degrees in 46 subjects and doctoral degrees in 21 disciplines, in addition to the Juris Doctor (law) and a specialist degree in education. The U of M campus is located on 1,160 acres with 201 buildings at more than four sites. The university enrolls more than 20,000 students each semester, and employs more than 2,500 faculty and staff.

The Business and Finance Technology unit is responsible for the planning, implementation, and establishment of operating policy for the technology and systems activities of the Division of Business and Finance. This includes support for the Division's local area networks, hardware, software, and Web applications.

Statement of the Problem/Initiative

As budgets became tighter and technology requirements continued to escalate rapidly, we realized we needed a systematic approach to determine funding allocations for the acquisition of computer equipment. Additionally, we wanted a Division-wide process to help maximize the use of computers that had outlived their functionality for certain job requirements but could be effectively reallocated for continued use in other applications. Finally, we desired a method to streamline the rolldown process, map computers for new use and maintain an up-to-date inventory of computers by location. We also wanted the ability to negotiate the best possible pricing of new computer equipment purchases through volume purchases.

Design

We realized that a number of departments within the Division were able to regularly upgrade desktop computers while others lacked the budget flexibility to do so. It was apparent that some employees had equipment that exceeded their needs while a few struggled to carry out their work with inadequate equipment.

Three activities were initiated to address these problems: 1) A desk audit was conducted for every position within the Division to determine the minimum level of equipment needed to accomplish the tasks required, from which three levels were identified; 2) An Access database with Crystal Report writing capabilities was

developed to maintain the rolldown information; and, 3) A system was developed to efficiently prepare equipment before rolldown and to maintain adequate records tracking the life of the equipment. Importantly, department heads agreed to pool their resources so that computer equipment could be funded centrally.

Each year as new technology is introduced, the levels of our current computers are adjusted. When the required level of computer for an employee does not match the current level of the computer, new computers are purchased and a rolldown occurs. The resulting Business and Finance Computer Rolldown Plan ensures that staff members have a reliable computer system that meets their work requirements.

Implementation

Initially, our only intent was to pool equipment dollars to negotiate the best price for computers and ensure that equipment was equitably allocated throughout the division. We realized early on that we did not have a clear idea of the computing needs of each position, thus the desk audit. The audit was completed by our in-house computer technicians (Local Technical Support Providers or LTSPs) in conjunction with the employees themselves, and three levels of computers were identified; a fourth level was added for non-critical functions requiring a low-end computer, i.e., basic computer literacy training.

In the spring of each year, a review of computer configurations currently available is compared to configurations recommended by the University's Information Systems Division. From this information, a configuration is developed for each level.

Additionally, unit heads may request a change in the level of computer assigned to a

position; such requests are reviewed by LTSPs and the Computer Rolldown Management Team.

After computer levels are updated, a determination is made regarding the number of new computers needed; quotes are obtained from vendors; and a cost estimate is provided to the Vice President. Depending on funding availability, new computers are ordered. As the new equipment is received and installed, the rolldown equipment is “imaged” and relocated to a work station at the next level.

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Benefits

The process allows for the most effective use of relatively scarce computing resources by ensuring that all staff members have a reliable computer system that meets their work requirements. Since all information is maintained in an Access database, a variety of reports are available for use by managers and LTSPs. For example, a manager can print out an inventory of computers by location and user. LTSPs use the reports in planning their work as they install new machines and transfer the older machines to new locations according to the rolldown report.

Retrospect

- Generating dynamic reports would save time on back-end, though this feature would require an expensive upgrade of Crystal reports
- Much time could have been saved if report definitions and layouts were defined and finalized early on.
- LSPs interacted directly with the database, a time-consuming process; it would have been more efficient for them to enter their data on a secure webform.