**Committee:** Lori Winn, Chair, Carol Barnhill, Tracy Finch, Mark Hoeting, Dr. Shane Hunt, Dr. Craig Johnson, Christy Low, Donna McMillin, and Dr. John Pratte

**INTRODUCTION:** Arkansas State University implemented a Cost Containment Task Force during 2011 chaired by Dr. JW Mason and Dr. Len Frey. This task force created 3 sub-committees, one of which was the Business Services and Processes Subcommittee. This subcommittee met on a weekly basis through March 2012. The committee identified its charge and identified specific areas of focus to achieve optimal cost saving initiatives. The following report outlines the established charge for the Business Services and Processes subcommittee, focus areas, and recommendations for cost containment initiatives. Members of this subcommittee appreciate the opportunity to serve on the Task Force and look forward to continued collaborative efforts.

**CHARGE:** To identify potential gains in efficiency and cost savings for the operation of the university.

**FOCUS AREAS:**

* Technology Purchasing
* Campus Copying/Printing Cost
* Infrastructure Fee Processes - analysis within last 2 years
* Zero-based Budgeting
* Temporary Staffing
* Technology Fee Effectiveness

**ANALYSIS:**

**Technology Purchasing** – The committee conducted an analysis of the effects of costs of bulk purchasing compared with single-item purchasing of IT and Audio-Visual (AV) equipment.

Factors:

1. Manufacturers are transitioning away from the single-unit, direct purchase model.
2. An analysis of purchasing trends over 24 months indicates very little differentiation on units that are purchased either 1-at-a-time or in smaller quantities.
3. Units purchased 1-at-a-time or in small quantities reflect a higher purchase price than similar computers through other sources, even though the units are purchased through the state “contract”.
4. Lower costs per unit are realized when units are purchased in large quantities/in bulk.

Recommendation – Adoption of a procedure by Arkansas State University (Appendix A) that all computers and mobile computing devices are purchased from a common pool coordinated by Information and Technology Services. Equipment included in the scope of this procedure would include: computers (desktops, laptops, netbooks, etc.), mobile computing devices and multimedia and Audio Visual devices (projectors, smart boards, presentation systems, control systems, etc.)

All computer purchases funded by fees should be bundled for quantity buys at the beginning of the fiscal year.

All computers should be purchased using a purchase order number. Procurement cards should not be used to purchase these devices unless utilized within the university. Personal purchases of computers for the university would not be reimbursed.

Exceptions to the procedure would require approval of the Chief Financial Officer, IT Services, and the respective Vice Chancellor.

**Campus Copying/Printing Cost** – During FY11, the university purchased a total of 32 printers at a total cost of $14,027.28 and 3,247 ink and toner cartridges at a total cost of $184,021.98.

The subcommittee researched the number of pages that can be printed. Throughout this review, multiple factors were considered, such as the type of pages printed (text only, pictures, draft quality, etc.) and the amount of usage (ink and toner dry out, printers perform regular cleaning that uses materials, etc.) Manufacturers provide consumers with a print number based upon small amounts of ink per page (about 5% in text) and a little downtime between printing to prevent drying. Therefore, using the numbers provided by the manufacture would be an overestimation of usage.

In analyzing the data, we have assumed that most black inkjet cartridges will print approximately 500 copies per cartridge. Black laser jet cartridges will print approximately 2,000 copies per cartridge. For color cartridges, we assume 500 pages for each color in ink and 1,000 pages for each color toner. This assumes that most of the pages are text and that the printer is used on a daily basis to prevent drying out and caking of toner. With this analysis, we determine that the number of cartridges purchased will print approximately 2.95 million pages of paper. This gives us an approximate cost of $.0625 per page printed.

Recommendation - The toner costs for printing a similar page using a networked copier will be approximately $.01 per page region. Given this information, the above pages could be printed for a total cost of $29,500 in toner charges, which would be a savings of about $155,000 in ink and toner.

The university should solicit vendors for a comprehensive study of printing on campus and identify proposals that manage printing solutions across the enterprise for a fixed-cost based on printing quantities.

This analysis does not take into account the other costs associated with printing and copying. Printers purchased show the average printer on campus costs about $400. A network copier for use in a small office will cost anywhere from 5-10 times that price. There is also cost of maintenance, as copiers tend to require servicing after a significant number (usually in the 100’s of thousands range) of pages have been printed. Printers rarely reach that level and are normally discarded by that time.

This analysis does not take into account the ability to centrally locate a copier such that many people can use it conveniently.

This analysis does not account for confidentiality and privacy. Some pages printed require a level of privacy and confidentiality that cannot be maintained by a shared facility (i.e. personnel documents).

**Infrastructure Fee Processes** – The Infrastructure Fee was created in 1998 in response to a reduction in the budget from the State to purchase equipment to enhance the student learning environment. According to University guidelines,

“This learning environment consists of, but is not limited to, classroom furnishing, student computer labs, teaching media, student software teaching tools, highly mediated classrooms and technology enhancements, to name a few. The expenditure of these funds must go to visible improvements that students can see, touch or use in their everyday learning environments. Consequently, the students must have primary advice on how these funds will be invested.”

The Infrastructure Fee has remained a $4/credit hour fee since its beginning. With current enrollment, this brings in almost $1 million per year in funding.

A review of the expenditures over the last several years shows that most items fall into one of three categories: common digital technologies (computers, projectors, cameras, etc.), common classroom furniture (tables, chairs, whiteboards, etc.) and specialized equipment required of particular disciplines – these items make up the bulk of the purchases. For example, the number of computers purchased the last two years has averaged about 190 units, which has cost over 20% of the total Infrastructure Fee budget.

Issues:

* The process currently in place allows for little to no consideration between units. Students in individual departments draw up a list of needs, which then get discussed at the college level to create an ask list that is forwarded to the university-wide committee. There is no communication at the lowest levels to see if there are needs that cut across departments or whether there can be shared resources. For example, the College of Humanities and Social Science received money to purchase 3 DVD/VCR players. At the same time, other departments have these devices sitting in their boxes brand new, as they were never put in classrooms once teaching computers were purchased with DVD drives.
* There is no process for technical staff to weigh in on whether the equipment requested or the designs to be used are appropriate or best practices. While the expertise for specialized equipment probably resides within the individual departments, expertise on other equipment, such as computers or chairs, resides external to the departments.
* The lack of expertise on these items by students and faculty means that they waste time trying to design systems and find prices with which to make their wish list.
* The process is competitive and not cooperative, with each unit looking to get the most money for their initiatives, without any regard to what will be best for the students as a whole.

Recommendation - Bulk purchasing of common digital technologies and common classroom furniture would save money for the university. For purchases like computers, this could result in a tremendous amount of money being saved, which would allow more needs to be met with the same amount of funds.

The system for making decisions needs to be revised to make it more cooperative, to reduce wastes for asks and to bring more expertise to bear on the issues. Students should still be the first line in identifying needs, as that is the goal of the fee. However, the process of figuring out how to address these needs in the most cooperative, efficient and correct manner requires input from faculty and technical staff. A proposed method for doing this is:

1. Have student representatives in each department coordinate gathering of information that results in prioritized needs for students in the department. These prioritized needs should be entered into the Infrastructure Needs page, which will have many of the common needs (ex. “Refresh computers in lab” or “Improve audio/visual equipment”), as well as columns for specialized needs (ex. “Replace aging gas chromatographs in Course B”).
2. Lists are sent to a committee of students and faculty at the college level. These committees will look for any common solutions (ex. repurposing classrooms or equipment from other areas) that mitigate the need. The committee will then prioritize the resulting needs and separate the list into two categories: a) those that would need solutions of common instrumentation, such as audio/visual needs in Classroom A and b) those that require solutions that are specific to the department, such as the need for specialized lab equipment for Course B.
3. Lists of common solutions are sent to professional staff for pricing. For example, the need for better audio/visual in Classroom A would be sent to ITS to determine what solutions are possible and what the costs would be. At this stage, bulk purchasing information would be gathered.
4. Lists of specialized needs would be priced by experts in the individual departments.
5. Prioritized needs lists with specific remedies and costs would be sent to the university-wide committee. As with the college-level committee, the university-level committee, should include and/or be led by subject matter experts outside of AAR. The committee would check needs to see if there are no-cost or lower cost solutions that could be achieved in some other way. The committee would also check remedies to see if they are realistic and warranted. After this, the committee would also check remedies to see if they are realistic and warranted. After this, the committee would proceed in the manner currently employed in deciding on equipment that would be purchased.
6. Once decisions are made, all bulk purchases would be handled in a manner that takes advantage of volume buying (lower price, cheaper shipping).

**Zero-based Budgeting** – Over the years, the campus has changed, but allocated funding has not. The institution for the most part utilizes incremental budgeting techniques and as a whole has not increased maintenance and operating budgets for over a decade.

Recommendation - With changing priorities and shifting responsibilities, it would be beneficial to implement a zero-based budgeting technique on at least a 3 to 5 year rotation. This method of budgeting would attempt to align funding with strategic goals and objectives of departments and divisions. Reallocation of resources utilizing zero-based budgeting techniques would attempt to get operating budgets more in tune with current needs of all units and demonstrate the true cost of each department and division. Zero-based budgeting would create transparency and accountability of the limited resources of the institution while at the same time improving your institution’s analysis, forecasting, and decision making.

**Temporary Staffing –** ASUJ utilizes temporary staffing services throughout the university including event support and temporary administrative support. During the fiscal year 2011, the University spent $413,098.91. For fiscal year 2012, we are on target to exceed this amount.

|  |  |
| --- | --- |
| FY 2011 |  |
| Peoplesource of Arkansas |  $ 35,204.02  |
| Express Service Inc. |  $ 36,491.38  |
| Staffmark Inc. |  $ 341,403.51  |
|  |  $ 413,098.91  |
|  |  |
| FY 2012 (through December) |  |
| Peoplesource of Arkansas |  $ 46,658.11  |
| Express Service Inc. |  $ 153,668.33  |
| Staffmark Inc. |  $ 63,096.03  |
|  |  $ 263,422.47  |

Recommendation – Research potential costs savings that may be gained by creating a temporary staffing pool within the University.

**Technology Fee Effectiveness –** At issue is how the technology fee and related processes can be better streamlined to improve the purchasing power of fee revenue and reduce overhead/complexities of the planning process.

The technology fee was created in 2001 in order to fund the technology infrastructure that enables all activities of the university. At that point in time, students were paying an infrastructure fee that was used to outfit classrooms and other spaces that were dependent on technology. Departments were funding computers for faculty and staff. As the classrooms and other spaces were upgraded and improved, the gap between the edge of the network (where classrooms and other spaced are virtually located) and the capabilities of the infrastructure to support them was widening at a rapid pace with no consistent funding vehicle available to address the issue.

The current and proposed effect of purchasing power is better understood by the analysis below.

|  |  |  |
| --- | --- | --- |
|  | **Current Model** | **Proposed Model** |
| Total Personnel Covered | 371 | 500 |
| Computer Price Per Unit |  $ 1,620  |  $ 1,282 |
|  |  $ 601,020  |  $ 641,000 |

The *Total Personnel Covered* is an estimate based on current enrollment and student credit hour production (SCH). As enrollment and SCH increases, total personnel covered by the plan would also increase. Simultaneously, the *Computer Price Per Unit* would decrease, since the quantity purchased would increase.

The prices per unit drops substantially when like units are purchased together. The analysis below indicates how acquisition cost decreases and purchasing power increases when like units are purchased in larger quantities.

|  |  |  |
| --- | --- | --- |
|  | **Current Model** | **Proposed Model** |
| Price Per Unit under each model |  |  |
| Dell Desktop |  $ 1,255  |  $ 924  |
| Dell Laptop |  $ 1,627  |  $ 1,281  |
| Apple Desktop |  $ 1,598  |  $ 1,281  |
| Apple MacBook |  $ 2,000  |  $ 1,642  |

A proportionate allocation model to accomplish Classroom Renovation, Technology Infrastructure renewal and Faculty/Staff Computer Replacements would be structured as follows:

|  |
| --- |
| **Proportionate Analysis** |
| Classroom Renovation | 15% |
| Desktop Replacement | 15% |
| Technology Infrastructure | 70% |

Recommendation - The following recommendations were submitted to and approved by the University Executive Committee and are currently in use.

* Streamline budget planning through a proportional model.
* Require any initiative funded by the Technology Fee to have a permanent funding source identified within a maximum of four years, although the least number of years should always be selected if possible.
* Create a Classroom Renovation Committee comprised of the Provost, the Vice Chancellor for Finance and Administration, Facilities Management (2) and Information Technology (1) to prioritize a classroom renovation schedule.
* Create a Computer Replacement Committee comprised of Faculty (1), Academic Deans (1), Information Technology (1) and Student Affairs (1) to advise on computer configuration and catalogue options for purchasing and lifecycle replacement.
* Fifteen percent of technology fee revenue will be allocated to classroom teaching and learning systems. This will be paired with Classroom Renovation Funds in Facilities Management in order to reduce the cost of technology renovation to classrooms and to make each implementation more effective for teaching and learning. Funds will only be spent on the classroom renovation schedule established by the Classroom Renovation Committee.
* Fifteen percent of revenue will be automatically allocated for computer/lifecycle replacement through bulk purchases. The Personal Computer Committee will complete recommended configuration by April of each year. Each participant will select his/her system from the Campus IT Store Catalogue in May of the preceding fiscal year. Each program participant will receive his/her new computer by August 1 of each year.
* Seventy percent of revenue will be allocated for the Technology Infrastructure. Prioritization will be coordinated through the Chief Information Officer, the Vice Chancellor of Finance and Administration, the Vice Chancellor for Student Affairs and the Provost.
* Transition current “continuing costs” over 3 years, beginning in the FY 2012-2013 to permanent E&G sources.

**ADDITIONAL COMMITTEE RECOMMENDATIONS:**

This subcommittee recommends the continuation of the Cost Containment Committee and Subcommittee structure in order to:

1. Initiate and continue to identify cost containment measures within the university setting and provide a forum for discussion via the ASU website.
2. Identify champions and advocates that will focus on and institute cost containment initiatives.
3. Allow assessment of implemented Cost Containment initiatives and to follow-up on recommendations moved forward.