

Copy/Print Management Program

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SACUBO 2007 Best Practice Submission Abstract

Kennesaw State University (“KSU”) had an unwieldy semi-centralized copy/print program for both the administrative and student users that was established in 2000 and was to expire in June 2005. The contract called for guaranteed minimum usage, had built in annual price increases, required use of vendor manufactured paper at their prices, did not have clean audit trails or adequate reporting, and did not provide for consequences to the vendor for under or non-performance. A cross functional team of faculty and administrators formed a task force in the summer of 2004 with the express purpose of devising a new business model that would address these issues as well as the over \$700,000 in annual cost for the existing program that was borne by the entire University not just copy/print service users. The process included separating devices from Network Print Management (“NPM”) software solutions and using RFI’s to gather specific current industry information that would be used in developing specifications for the RFP’s that were to follow. The timeline was for one year, requiring implementation to commence by March 2005 and to be completed by June 30, 2005. (This was missed by one month in some areas, but was complete before fall 2005 classes commenced.) Steps in the process included: 1) obtaining state technology authority approval, 2) engaging a consultant, 3) site visits and telephone interviews of references, 4) doing our homework, and 5) providing adequate testing and training before final implementation. The results have been worth the effort as a true cost-per-copy business model was developed with the cost of the program assigned to the users. The NPM solution is online which enables clear audit trails, reconciliation between use and vendor charges, detailed reports for administrative departments that reflect by person, by device use, and total “portability”, the ability to use any networked device from a desktop for printing or in person copying without individual machine programming. Functionality (faxing, color, and scanning) has been increased across campus while reducing costs significantly. Faculty and staff can have their own personal use declining balance account just like students. Costs to users were either maintained at the old levels or reduced (none were increased) despite the increased services offered. In many instances, existing fax machines and their phone lines were disposed of, increasing savings. Paper costs were reduced from approximately \$0.04 per page to the state contracted rate of less than \$0.01 per page (a significant savings when usage is over 20 million images per annum). On-site technicians trained to industry guidelines were added to campus (as part of the cost-per-copy) and clear, measurable vendor expectations (like strict 98% uptime performance and 2 hour problem response times) were identified with penalties for non-performance.

SACUBO 2007 Best Practices Submission

Introduction of the Organization

Kennesaw State University (“KSU”) is a four year institution and a member of the University System of Georgia located in Cobb County, Georgia, (suburban Atlanta) with a current student population of approximately 20,000. At the time of the implementation of the new Copy/Print Management Program, the University had a student population of approximately 18,500. The University was founded in 1963 as a two year community college, achieved four year status in 1976 and university status in 1996. KSU added the first doctoral program in Education in 2007. On-campus housing was introduced at KSU in fall 2003 and now features 2,163 beds in apartment style units that contain full kitchens and washer/dryer connections.

Statement of the Problem/Initiative

KSU had centralized the administrative and student copy/print services in 2000 under two separate agreements with a national copier/printer device vendor. These contracts would expire on June 30, 2005. In both instances, minimum guarantee usage requirements existed that often meant the University paid for services not received as well as providing for pre-set annual cost increases. Additionally, the paper supply was limited to the brand manufactured by the device vendor and at their pricing versus state contract paper pricing (costs varied but were in the \$0.04 per page under the copy/print contract versus less than \$0.01 per page under the state contract). The contracts did not provide for an effective method to replace devices that were not performing or updating of machines with newer models as technology

improved and did not have repair and maintenance standards with related consequences or penalties for non-performance. The Network Print Management (“NPM”) system was not online and each machine required programming for each administrative department code that would be accepted. Extensive manual effort was required each month to determine the usage that was translated into administrative department charges. Per copy charges to administrative users were \$0.10 for black & white and ranged from \$0.15 to \$0.75 for color depending on the pre-centralized program (pre 2000) machine cost that were all wrapped into the existing contract.

The student copy/print program had the same issues. Of particular concern with this program was the minimum guaranteed usage that had been based on usage when all student access was free. The program provided \$10 of free prints (based on a cost of \$0.05 for black & white and \$0.60 for color images) for students. The cost of a color image actually started at \$1 per page for students, but was lowered to \$0.60 to encourage usage.

Costs for the programs were borne by the CIO and Business & Finance divisions at KSU. The annual cost to the University for the student segment was approximately \$650,000 and for the administrative side approximately \$140,000 in the final year of the contract. In both instances, the pricing of the service to users had not been developed based on the cost to the University. The students were receiving free prints (but that should have been approximately \$180,000 per annum). The poor systems in place for identifying department usage were a contributing factor for the administrative shortfall. All of these funds could have been put to

better use for enriching the information systems infrastructure on campus. Neither program allowed for tracking the actual usage by person, by device.

Total costs to KSU were approximately \$100,000 per month for the combined programs and over 20 million images were produced each year using machine fleets of approximately 100 and 25 for administrative and student programs, respectively. The vendor also oversaw approximately 30 KSU owned machines in the student labs and 5 coin operated devices for guest usage.

KSU decided to devise a business model that would provide for no guaranteed minimums, i.e. a true cost-per-copy program wherein if no images were produced, no cost accrued to the University. An additional goal of the project was to impose clear operating standards on the vendor and ensure that the latest technology was in place throughout the term of the contract. Furthermore, the NPM system was to be online, enabling immediate activation or termination of users or cards as well as total “portability” – the copy/print access could be from any PC and used at any device on the network and charged to any valid administrative department code. Students or personal use accounts would also be available at every device on the network. Reports would be provided that allowed any department to know who had made what copies (number and type) at what devices and when. These reports would provide support for billing to the departments and would be reconcilable to the vendor invoices for the images produced. Students would be able to add cash to the copy/print account on their ID cards and reports would be produced reflecting cash added and usage by date, device, and types of images produced (color or black & white). Staff and faculty would also have

personal use accounts for their use. Guest cards would be available for casual users or for students who could not locate their ID card. Paper would be purchased by the University at state contract rates, but deployed by the vendor provided technicians/staff. The overriding objective of the new business model was to provide improved service with the latest technology where only the users of the services were charged and in a manner that would promote accountability and clear audit trails.

Initiative Design

In 2004, a task force of faculty and administrators was created to determine what could be accomplished. This task force was led by personnel from the information technology hardware and enterprise software solution departments and from auxiliary services. The team decided to separate the device and NPM software solution efforts. This was done because KSU was considering bringing the NPM in-house and wanted to establish a cost against which to benchmark outsource solutions. Furthermore, the task force decided to issue RFI's initially to gather current industry information as no one was a copy/print expert. Results from the RFI's would then be used to develop the RFP's. RFP's recently developed (within one year) by other institutions were sought (three were found – from the University of Wyoming, Bowling Green State University, and St. Louis Community College) that provided insight into provisions that would be beneficial to the KSU environment. For example, an important section of the St. Louis RFP defined high, medium, and low machines within bands (we were looking at similar functionality, not model numbers!) that would help us avoid the trap that we had faced under the then current contract wherein machines had to be swapped out in an exact model number manner in order to avoid additional charges. The

Information Technology Services team researched various software and methods available to perform effective NPM services. A KSU procurement manager was essential in knowing the best way to achieve what we wanted in the RFP process. Basically, we did a lot of homework!

Before we created the RFP's, we also had to obtain approval from the Georgia Technology Authority ("GTA") since this was outside the state contract provisions for copy/print services. The GTA programs indicated approved prices for leasing and/or purchasing machines. The arrangements did not deal with a centralized program like KSU wanted to implement. Gaining approval to develop a new business model was not a popular move with many of the machine vendors (one-off pricing made them more money than the proposed KSU solution).

A timeline was established requiring responses to both RFI's in hand by September 2004. The RFP's would be posted by November with responses required by January 2005. The task force would evaluate the responses and award the contract(s) no later than March 2005 to allow sufficient time for testing, completion of any needed infrastructure changes, acquisition and installation of any required hardware, training of personnel, deployment of new devices, and marketing of the program prior to the termination of the existing contract on June 30, 2005. During the RFP evaluation phase either site visits or telephone conference interviews were held with institutions that were cited as references by the respondents to determine performance and satisfaction levels. All members of the task force were encouraged to participate (and many did).

One of the tools developed by the University of Wyoming was a scoring matrix that contained one level of scoring for the response as proffered and one for the credibility of the response (i.e. Can the vendor really provide what's promised?). We happily plagiarized them with their full support and advice. This matrix was a part of a presentation done by Wyoming at the 2004 NACAS conference in Orlando.

As the team prepared to evaluate the response, we realized that expert industry advice was needed to ensure that we really understood what was meant by commitments couched in accepted copy/print industry jargon, but that might have nuances we would not recognize. A consultant was engaged in January 2005 and proved invaluable. The consultant produced a Bid Clarifications document that was circulated to RFP finalists that made a significant contribution to the final decision making process. Answers to the Bid Clarifications as well as the RFP's were included as part of the final contract.

Implementation

The implementation did commence in March 2005 with a test environment that was established in a vacated University facility. Members of the task force, representatives from departments that would be involved in the operations (Card Services and Business Services) as well as vendor representatives participated. Difficulties were encountered in replicating all of the conditions under which copy/print services were delivered across campus.

Furthermore, we discovered that the NPM solution would work with PC's, but not with MACS. This had been the same situation that existed in the existing contracts. A MAC solution has been developed and will be deployed for Spring 2007.

Deployment of new devices commenced in June for administrative offices and the decision was made to transition the student use areas in the approximately three weeks between the end of the summer session (during which KSU has over 10,000 students) and the commencement of fall semester 2005. The deployment took longer than anticipated and a one month extension with the existing contract was executed. One of the challenges encountered was having the card readers safely and securely mounted on the copy/print devices. This took more than one try to achieve a workable solution. A machine retrieval plan was developed with the existing vendor who would only pick-up machines two days a week. Deployment was completed by the beginning of classes.

Concurrently, the entire campus was recarded to combine access cards, ID cards, and copy/print cards into one. The effort was handled by Card Services at a cost of approximately \$23,000 (paid from the new program's revenues).

New servers and other hardware were purchased at a total cost of approximately \$200,000. The servers could be used with other systems should a change be made to the NPM solution.

The new contract on-site team shadowed the previous vendor team to learn the customers and training sessions were conducted as departments were converted to the new system. New signage was developed and displayed for both administrative and student labs as areas were transitioned.

Benefits

On the operations side, our copy/print solution provides the University with a high degree of flexibility to add, remove, or modify elements of the solution to accommodate new technology and University growth (beyond that generated by usage volume) or physical relocation needs without additional costs (with the exception of adding fax and scanning functionality to devices not originally identified as requiring these). All devices are replaced on a like-for-like OR BETTER basis (no downgrades unless warranted by usage volumes). Furthermore, we required and achieved an agreement that only models in current production and currently supported by the manufacturer could be deployed at KSU. All devices, regardless of when put in service at KSU, would have a co-terminus contract date. KSU has no cost for delivery, freight, installation, or removal. Another benefit has been realized from the on-site ongoing monitoring of all system elements. This has enabled on-site technicians to have appropriate levels of parts inventories resulting in rapid response in addressing problems. Any risk of low toner yield is borne by the vendor. The vendor must perform and report proactive preventive maintenance as well as reporting all service calls. The contract provides penalties if strict 98% equipment uptime performance is not maintained and for lemon replacement. A two-hour response time guarantee is part of the contract with hourly service credits and/or penalties charged for non-performance. Having on-site service technicians certified per industry guidelines is part of the deal.

From the financial perspective, all departments can see what they are spending on copy/print with monthly billing totals and very detailed (by person, by device) reports upon request. At the University level, the NPM system ensures that all costs on the copy/print service are allocated to the cost generating user. The reduction in overall expense (which to date has

never been more than \$68,000 in a month versus \$100,000 per month for similar usage under the old contract) has been significant. Furthermore, the University is protected from annual maintenance cost increases. Both KSU and departments have been able to create more accurate budgets. There are no surprise costs and charges to customers have been developed based on real cost to the University, rather than just what the market will bear.

One of the unexpected results has been great vendor relationships. KSU is important to the vendor (in this case one lead and two subs) and we are working with an entrepreneurial group that is willing to try new approaches.

Retrospect

The outside consultant should have been engaged at the very beginning of the process. That would have saved untold hours for the team in trying to do a self-study course. The RFP's specifications (while sound) could have been written in industry language thereby avoiding some of the clarifications that were needed and addressed in the Bid Clarifications document.

The perceived "simplicity" of copying a document or printing one led to an underestimation of the impact on end users, most notably the faculty/staff users. More than a year after implementation, some users still are unaware that the copiers in use are also printers that can be accessed from their desktop that also offer scanning and fax services. There is no charge for scanning and faxing only costs the price of the fax transmittal page regardless of the size of the fax. Many administrative users are also unaware of the personal account functionality. While there was training provided, it should have been offered for a longer period coupled

with more extensive information and “how to” explanations on the copy/print web site for the administrative users. (This is currently being addressed.) Support for students was more extensive and ongoing with better signage near the devices and lab assistants available to explain the process or resolve any issues. (Student labs are reviewed each term for up-to-date signage, software installations, and support staff.)

From a business perspective, we should have engaged a KSU copy/print manager focused on all the issues involved in running this “small business”. The training, financial tracking, technical issues (such as MAC support), and the day-to-day operations (such as student refunds and new department code requests) need a University focused manager rather than relying on the vendor supplied staff or team members who had other full time responsibilities. The manager was not put in place until almost a year (May 2006) after contract initiation.