

University of Missouri Gets Strategic about Procurement

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Abstract

“There’s probably \$20-\$40 billion in costs that can be cut from higher-ed, just through supporting preferred vendor contracts, reduction of maverick spending, higher and more uniform quality processes, electronic commerce and e-business, and through collaboration with other colleagues.” – Tom Fitzgerald, CEO, Educational & Institutional Cooperative Service, Inc.

The University of Missouri sought to re-engineer its procurement function – a process we began in 2000 and continues to the present day – with dramatic results to share.

We knew the benefits of a strategic procurement operation could be enormous, enabling the University to gain greater visibility into enterprise-wide spending, reduce the costs for everyday goods and services, streamline outdated processes and eliminate maverick spending, just to name a few. But we also knew that changing old habits and processes would be difficult to overcome – particularly in a collegiate environment where administratively-forced mandates are not held in high regard. We would have to prove the value that could be gained by strategic procurement and obtain buy-in from all the necessary stakeholders along the way.

Our long-term goal was to transform this critical service support function from a transaction-oriented “order shop” to a strategic supply chain management body that could save the University millions of dollars, while improving the delivery of goods and services to our user communities.

Introduction of the Organization

The University of Missouri has provided teaching, research and service to the people of Missouri since its inception in 1839. As the first publicly supported institution of higher education established in the Louisiana Territory, the University of Missouri was shaped in accordance with the ideals of Thomas Jefferson, an early proponent of public higher education.

Founded in Columbia, the University had one campus until 1870, when a school of mines and metallurgy was established in Rolla. In the same year, an agricultural college was added in Columbia as the University assumed land-grant responsibilities.

In 1963 the University again expanded to better serve Missouri. In that year, the University of Kansas City, which had been a private institution, was acquired by the University and a new campus was created in St. Louis, resulting in the present four-campus system.

Today, the University of Missouri is one of the nation's largest higher education institutions, with more than 63,000 students on four campuses and an extension program with activities in every county of the state. The mission of the University, as a land-grant University and Missouri's only public research and doctoral-level institution, is to discover, disseminate, preserve and apply knowledge.

A nine-member Board of Curators governs the University. Curators are appointed by the Governor and confirmed by the Missouri Senate. The Board selects the president of the University. Each campus is headed by a chancellor, who reports to the president.

Statement of the Problem/Initiative

Often viewed as a transactional back-office function, procurement is one of the few departments at a university that has the potential to be a major revenue-generating center. If implemented correctly, the benefits of strategic procurement can empower any university to:

- tightly control costs and contribute to the bottom line, while providing more services and faster delivery of materials to its user community;
- engage more strategically with suppliers and leverage the buying power of its user community to negotiate volume discounts;
- streamline operations by eliminating process-heavy activities and paper-based practices; and allow users to stay focused on their jobs, with less time spent searching for and ordering the items they need.

Once people realize how a well-developed procurement function can better serve their needs, then procurement can play a much more strategic role at the university.

At the University of Missouri, the evolution of strategic procurement is in perfect alignment with the institution's Strategic Plan, specifically and dynamically impacting two of the strategic themes that serve to guide the University toward its vision: "Valuing People and Creating a High-Performing Organization" and "Developing and Managing Resources and Improving Processes."

In 2000, the four campus purchasing offices of the University of Missouri (UM) operated independently of each other with disparate policies, procedures and organizational structures. Although the same legacy purchasing system was common to all, each campus used its own version that fed into the central financial system. And while each campus was often buying from a common supplier base, there was little effort to consolidate purchasing power to take advantage of volume discounts.

As a result, campus purchasing operated as a transaction-oriented “order shop,” rather than as a strategic supply-chain support center that could help UM recapture millions of dollars and provide higher value services, such as pre-negotiated contracts and sourcing assistance for on-demand needs. Instead, purchasing staff often acted as “Procurement Police,” rigidly interpreting and applying policies to “just say no” without offering alternative solutions to their user communities. As such, purchasing as an organization was viewed as a bureaucratic necessity that faculty and staff tried to maneuver around. The challenge then was to transform UM procurement into a strategic function whose organizational structure, policies and processes provided exceptional customer service support, and whose recognized contributions to materials cost containment rendered it a “highly valued partner” in the University community.

Design

With our mission in place, we decided to undergo a two-phased approach. The first phase was a complete analysis and overhaul of the procurement structure and processes in place at our four independently-run campus locations.

When we started this process in 2000, there were roughly 2,000 personnel involved with the procurement of goods and services, most of whom were limited to P-Cards for direct purchases of less than \$2,500. There were about 110 people in the four campus system purchasing offices providing contract, purchasing and general store supply support.

We sought to consolidate these distributed operations under uniform leadership and policies. We also wanted to reduce costs and create a more service-oriented system that would address the needs of every type of user, while supporting the University's educational and fiscal objectives.

The first step was to engage key stakeholders in the process, which meant forming a Procurement Review Committee to evaluate the operations and determine what could be done. The committee was comprised of diverse users of procurement processes representing all campuses as well as associated service support functions such as IT and Accounting. We also hired a supply chain consultant firm to conduct an independent assessment, confirm the findings of our Procurement Review Committee and provide further recommendations – ensuring that the changes we planned to make would be in the best interest of the University.

Nominal group technique was used and many recommendations were made. However, there were a few key findings that guided our journey:

1. Effective consolidation would require a change in headcount and elimination of some services due to the redundancy of activities. For instance, there was no need to have central stores and central receiving capabilities at each of the campuses.
2. An organizational restructuring would require the hiring of a Chief Procurement Officer (CPO) to oversee operations and provide strategic leadership and uniform policies.
3. A common ERP system would have to be implemented to route all the purchasing orders and data to the central financial system.
4. The threshold for P-Card purchases should be raised to \$5,000 to encourage higher use of the card and ensure that all purchases would be tracked and driven through the ERP system.

The Procurement Review Committee also recommended that we look into how eprocurement technology could be leveraged to create a central marketplace, with online shopping capabilities to engage the University's user community and supplier population, and further eliminate paper-driven activities.

Following the guidelines established in 2000, UM set out to make the recommended changes, which included the implementation of a PeopleSoft ERP system.

The second phase, started in 2006, sought to extend procurement to the user community – from administrative staff and faculty to professors, researchers and executive leadership. In some circles, there is a belief that procurement should remain a transparent function operating silently in the background. But we believe that strategic procurement can only be achieved when it actively engages the people it serves and helps them understand how procurement can directly benefit them and the University as a whole; this

is where all of the benefits are fully realized – not in the CPO’s office or in the lines of a contract. In order to reap the rewards of pre-negotiated contracts, eliminate maverick purchasing and ensure that users follow our mandates, we would have to bridge the great divide between “us” and “them” with an eprocurement tool that was easy to use and could offer an “Amazon.com-like” purchasing experience. By engaging users with this tool and including them throughout the project, it would be much easier to drive spending with preferred suppliers and track university-wide spending habits. We were confident that once the vast majority of users understood how the new approach to procurement would impact the University’s mission and their job function, they would support this new direction.

However, ever sensitive to the fact that it’s reduction of work rather than financial benefit that drives the campus user community, we needed one last “hook” to seal the deal. If we could eliminate the use of the individual P-Card as a payment mechanism for eprocurement transactions, it would present the users with the answer to their only major perceived hassle with P-Card usage, i.e., monthly reconciliation. However, we could not transfer the resulting burden of paying thousands of individual invoices to an accounts payables function that had been radically and strategically down-sized with the advent of the P-Card.

Our answer was the integration of the JP Morgan Chase “virtual” credit card solution, “Exac Trac”. Prior to electronic distribution, the eprocurement catalog order – fully approved and with appropriate chart-field accounting – is assigned a credit card number by the bank, which accompanies the order itself and which the vendor simply charges as they would an individual P-Card. This is a single-use number, specific to that purchase order, to that supplier and limited to the stated dollar amount. The specificity of the transaction allows for auto reconciliation, which appears on the monthly P-Card statement. The statement is then paid centrally with the individual transactions, fed into the appropriate accounts on the General Ledger. This creates a more efficient workflow for small purchases and is a major incentive for our departments to purchase through eprocurement rather than through the P-Card. Furthermore, ExacTrac, allows us to recapture the significant volume shifting from the individual P-Cards, thereby assuring the continuance of our substantial commercial card program rebate. The rebate is used in part to pay the salaries and benefits of our central and campus P-Card program personnel thereby relieving the general operating fund of that burden. The remainder of the rebate is distributed proportionately to the Vice Chancellors of Administration at the four campuses for application as they so determine

Our ultimate selection of the appropriate eprocurement solution and design was greatly influenced by the experiences of other higher-ed supply chain management leaders. We benchmarked successful eprocurement implementations at institutions such as Caltech, Yale, UPenn, Michigan and Illinois, which had ERP environments similar to ours. One of the great things about the higher-ed community, not always present in the competitive commercial world, is the willingness to share experiences and best practices.

Recognizing that user adoption was the most critical success factor, we formed the following structures to guide the process from the design phase through deployment and beyond, ensuring that input from key stakeholders would always be integrated into the system.

- Core project team: The Core Team is comprised of functional and technical experts knowledgeable of procurement systems and business processes. This group includes the CPO, a full time Project Manager, IT leads, Supplier Enablement team, Change Management team, Training and Communications team and the Campus Advisory Group leads. It is important that the Core Team has committed time, freed as much as possible from their normal responsibilities.

- Campus Advisory Group: This group is comprised of key stakeholders from major departments, including faculty and other potential new users. These are integral and indispensable teammates whose role must be maximized in order to achieve ultimate success. The Campus Advisory Group(s) members should be:
 - Representative of all major departments
 - Well respected and trusted to vocalize the needs/desires of their department
 - Involved throughout the design and development - assume “ownership”
 - First-line communicators, campus “*Champions*”

The appropriate core project team members would meet at least once a month with the Campus Advisory Group to solicit their input on each significant aspect of the solution’s design and development from inception to completion.

Marketing would be another critical aspect to high user adoption. The success of our eprocurement tool depended upon the active participation of our entire user base and supplier community, not just the selected project teams. So, we built a series of marketing and outreach programs into the implementation plan, including methods for marketing to our suppliers, campus forums to talk about “what to expect” with eprocurement and supplier fairs. Every opportunity to engage our various communities was considered. We knew we had to address the cultural change issues and a strong marketing effort would serve as a key agent for change.

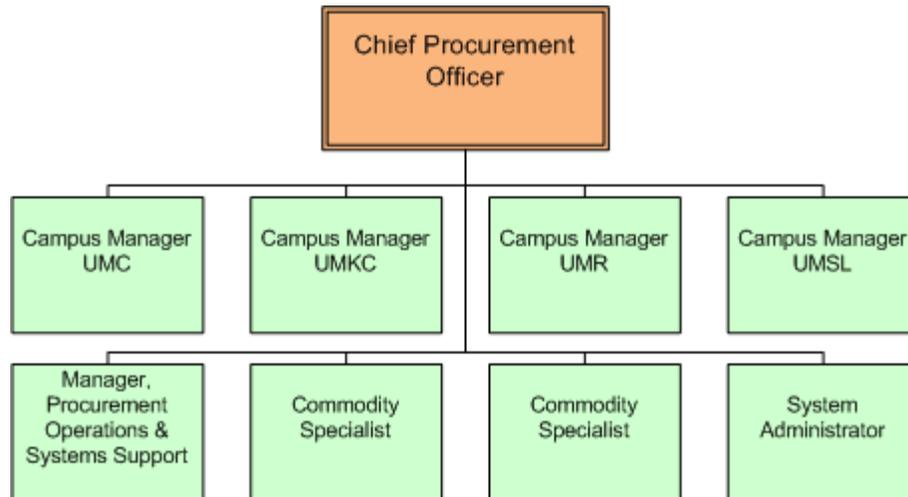
We wanted everyone to feel a sense of ownership and we needed their buy-in. We felt confident that with their direct participation, the actual rollout and adoption of the eprocurement system would be smooth.

The implementation phase would include pilot tests at each of the campuses simultaneously. Three to five departments representing various scenarios would participate, including academic, administrative, units with grant activity, and departments with various spending requirements.

Following the pilot, there would be a phased rollout of the system to be determined by variables such as the number of users, available training resources and the rate of adaptability to change in each campus. Lessons learned during the pilot were used to make corrections and enhancements prior to full rollout.

Implementation

From June 2001 through the end of 2002, we executed phase one of the plan. We reorganized the leadership and created the CPO position to provide clear lines of reporting and accountability. The disparate campus purchasing groups were united under this leadership. A purchasing manager role was created for each campus, but everyone reported into the same group and followed consistent policies through which requisitioning and payment were applied uniformly.



One of the major elements of the consolidation was the ERP system, which brought the foundational requisitioning and order management capabilities that tied procurement to the University's financial and accounting systems.

A system-wide Web site was created to provide a central location through which the University community could learn about the changes we were making and the value of these change-management initiatives.

Under the guidance of our Procurement Review Committee, we created new committees as they were needed to develop, implement and monitor activities. For instance, we created Campus Service Committees, where our new commodity specialist and primary users worked to evaluate and develop specifications for products that were subject to standardization. We also created a Procurement Advisory Committee that included the procurement office leadership and was focused specifically on developing policies and monitoring the overall performance of our developing procurement services.

Throughout the interim years between phase one and phase two, UM gained some valuable lessons that helped us create a strategic procurement organization.

One of the best lessons we learned had to do with the P-Card, which is intended to provide users with the flexibility they need to make unanticipated purchases. In 2000, we raised the threshold for the P-Card from \$2,500 to \$5,000, up to the capital equipment threshold, affording even greater decentralization.

Over time, we noticed that it had the unintended effect of contributing to maverick spending. Many faculty and staff simply avoided interacting with the often complex ERP system used to order from

our preferred vendors and, instead, relied almost entirely on their P-Card for purchases. Furthermore, the lack of third-level reporting made it impossible to achieve the detailed spend analysis required to deliver maximum price discounting through our strategic contracting program.

More than ever, it became clear that the ERP system needed to be tied into an online shopping environment that made it easy for users to access the items they needed, and enabled us to drive spending to our preferred suppliers, with whom we had worked to negotiate steep discounts. The administrative time required to process P-Card purchases also taxed our procurement staff members and users alike. The process was not as time-consuming or laborious as a paper-based purchasing system, but was far less efficient than an eprocurement system.

In 2006 we began the implementation of an eprocurement system. We chose SciQuest, the leader in procurement automation and supplier enablement solutions for research-centric organizations, due to its proven track record helping academic institutions gain efficiencies and cost savings. Its eprocurement solution linked into our ERP system, providing the “Amazon.com-like” online shopping experience we needed to encourage user adoption, drive spending with preferred suppliers and track university-wide spending.

To engage the suppliers, we initially targeted our top 18 vendors who generated the largest volume of transactions. These transactions comprised the majority of everyday items our users purchased, such as lab equipment and office supplies. As soon as many of our suppliers heard we were deploying an eprocurement system, they couldn't wait to join because they knew that their “preferred vendor” status would ensure a large volume of transactions. In fact, one major scientific supplier gave us steep discounted prices while we were still in the pilot phase in order to be first in line as a preferred supplier. Right out of the gate, we were able to negotiate a \$7 million reduction on our product pricing from these 18 vendors alone. In fact, this \$7 million annualized savings is a highly conservative figure as it is predicated on last year's contract usage with an average compliance rate of 30%.

We are now evaluating our second wave of 22 vendors, which we expect to add to the marketplace by the end of calendar year 2008. Ultimately, our goal is to drive 75% of our supplier-spend through the eprocurement system.

Our Core Project Teams and Campus Advisory Groups walked us through every step of the implementation, helping us to fine-tune the deployment and make adjustments along the way.

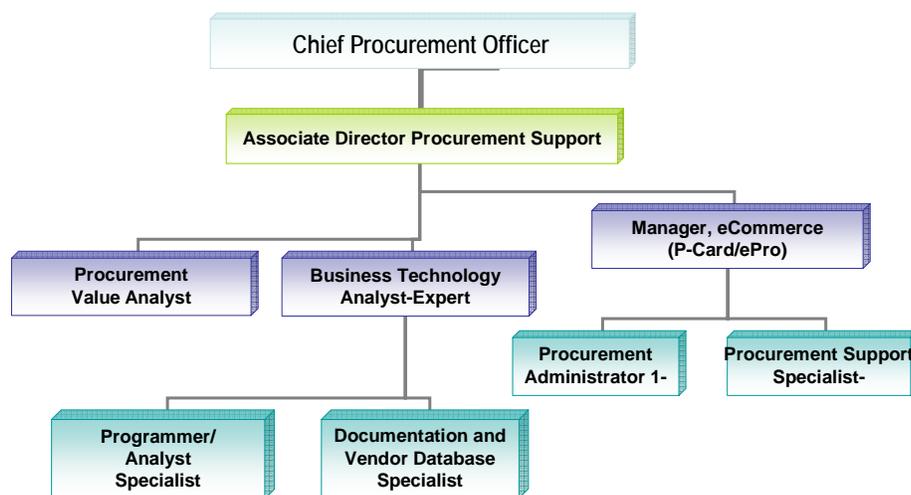
One of the most important contributions of the Campus Advisory Groups during the implementation phase was their role in helping us market the eprocurement system to users. As mentioned earlier, we conducted a number of activities to market the system, including supplier fairs. We rolled out a number of these fairs on each of the four campuses throughout September 2007, just prior to the pilot. The Campus Advisory Groups led these events to create a buzz in the user community. The suppliers set up tables and showed their wares during the fair, and there were raffles that encouraged people to visit their booths.

Another outreach tactic we used to engage users was soliciting their ideas for the name of our eprocurement Web site, as we felt it would be important to personalize the online shopping experience with a name they chose. Each campus submitted their proposed names online and we created a lot of hype and excitement around the winning name. Our eprocurement system, which we just rolled out in January 2008, is called the “Show-Me Shop.” Here is the link to the Web site:

<http://www.umssystem.edu/ums/departments/fa/management/procurement/apps/epro/index.shtml>

With the advent of our integrated PeopleSoft/SciQuest/ExacTrac eprocurement environment, we recognized the need to reorganize our support functions to leverage technology and resource investments that would better meet the needs of the campuses and UM System as a whole. For example, the addition of a full-time “Value Analyst” is essential to providing the spend analysis necessary to effect the most advantageous contract pricing. Through this resource, we will also be able to provide executive leadership with regular reporting, clearly documenting return on investment as well as specifically pointing out lost savings opportunities by department, incurred by maverick spending.

UM SYSTEM PROCUREMENT SUPPORT



Benefits

Today the University has realized more than \$24.3 million in savings from the successful transformation of our operational model and service strategy for procurement – which ultimately has positioned our group as a “high value” function at the University. With the rollout of our eprocurement system recently completed – the final stage of our multi-year plan – we expect to save millions more by providing the mechanism through which our strategic procurement strategy can be achieved. We have already saved more than \$7 million through better negotiated rates from the first wave of suppliers, which we expect to multiply as we bring on the rest of our marketplace supplier base.

The eprocurement system has enabled us to truly bridge the culture gap between the user community and the University by providing an easy-to-use shopping tool that facilitates their purchasing needs, while saving the University money and allowing the procurement group to focus on more high-level strategic activities.

Our strategic approach to procurement has enabled us to make adjustments along the way to solve issues, such as we experienced with the P-Card’s unintended contribution to maverick spending. Users are discovering that purchasing goods and services through the “Show-Me Shop” is even easier than using their P-Card. All they do now is simply log into the “Show-Me Shop” Web site to browse the online catalog from our preferred vendors and add items to their virtual shopping cart. The items are automatically ordered and routed through the appropriate channels via the ERP system. It is truly a one-stop shopping experience that lets them avoid the paper-work of submitting P-Card expenses.

The P-Card is now being used for its intended purpose of allowing users to make unanticipated purchases when the needs arises (such as purchases required while traveling), while the “Show-Me Shop” will become the online shopping destination of choice that drives the bulk of the University’s purchases to preferred suppliers and the pre-negotiated contracts they offer.

As we continue to automate the entire procure-to-payment process, the procurement group has increased time to focus on more strategic activities. We can spend time visiting each of the campuses to determine what their needs are, and if there are big-ticket items that certain departments need to acquire. We can focus on helping them make these purchases more strategically and apply our negotiation expertise. This frees users to focus on their jobs, while we concentrate on attaining the items they need at the best possible price. In many cases, our professional negotiation expertise results in significant savings that faculty and staff members can then reallocate to further strengthen their programs and initiatives. This is where procurement becomes much more valuable in the eyes of the people we serve.

The potential for savings has already been astronomical, but our projections are even bigger. We expect to achieve as much \$17.9 million annually at full system maturation. What other “back-office” function at a university can create such a financial impact?

In a time when endowments and legislative funding are shrinking, academic institutions are under increasing pressure to control costs. Innovations in strategic procurement have the ability to help universities address the fiscal challenges they now face, without losing sight of their core mission or cutting-edge academic programs. This is the ultimate value of electronic procurement. With a strategic procurement program in place, colleges and universities save money while making it easier than ever for faculty, researchers and staff members to attain the products and services they need.

Retrospect

We learned many valuable lessons throughout this seven-year process. However, the two most important insights we gained are the critical importance of encouraging the participation of the user community – no matter what that project may be – and the “active” endorsement and participation of top leadership.

While we created several constructive committees during phase one, we never actually engaged the users like we did with the Campus Advisory Groups in phase two. Accordingly, our organizational restructuring and ERP implementation was not as well received or as timely as it could have been. The success of our eprocurement implementation, spearheaded by the Campus Advisory Groups, is a testament to the fact that once you get the users involved and their input becomes a valuable part of the design and development process, the rollout will be much easier and user adoption increases greatly.

However, we cannot over stress the reality that only with the active and vocal support of the university leadership, including Curators, Academic and Administrative VP’s, Chancellors and Vice Chancellors, Deans and Department Chairs, will we be able reach our optimum savings goals. The ultimate success of the program rests on its positioning not as a “Procurement Program” but as a “Strategic Initiative” carried out by Procurement at the behest of the University’s executive leadership and critical to improving the financial health of the institution.

With user participation and active leadership support serving as cornerstones to a project plan similar to ours, it is our belief that universities throughout the country can transform their transaction-based purchasing shops into strategic contract operations that provide continuous supply and service support, while freeing millions of dollars of limited funding for reallocation to the institution’s core missions of teaching and research.