

# **BUILDING A STRATEGIC PROCUREMENT FUNCTION**

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## **Abstract**

"Procurement as a function, regardless of the industry, is incredibly strategic to the bottom line and higher-ed is realizing that there is a significant impact that procurement can have on campus." - Doreen Murner, CEO, National Association of Educational Procurement.

"There's probably \$20 to \$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 colleges." - Tom Fitzgerald, CEO, Educational & Institutional Service, Inc.

Over the past six (6) years the University of Missouri has engaged in a multi-level re-engineering of its System-wide procurement operations, transforming this critical service support function from independent, transaction oriented "order shops" to a unified and strategic supply chain management "body" which has since the year 2000 saved the University over \$19 million dollars. The "Level I" effort entailed a "complete overhaul," which ranged from the identification of process improvements aimed at reduced costs to a complete re-engineering of the organizational/operational model and service strategy, positioning these activities to better support the University's strategic goals and objectives. This past year the University stepped up to the "Next Level" by initiating a System-wide eProcurement implementation which will provide the mechanism by which our strategic procurement program can fully mature. This state of the art system will not only significantly streamline the purchasing process, in doing so it will shave millions of dollars off the cost of materials required to carry out the University's teaching, research, community involvement, and economic development efforts. The "Next Level" eProcurement solution is expected to result in annual savings ranging from a minimum of \$5.4 million to as much as \$17.9 million when fully deployed; critical dollars available for re-deployment to the University's core missions.

## **Introduction of the Organization**

The University of Missouri has provided teaching, research and service to the people of Missouri since its inception in 1839. 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 also 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**

In 2000 University of Missouri (UM) procurement activities were, from an overall system perspective, being carried out in an ineffective and inefficient manner. The four campus purchasing offices operated totally independent of each other with disparate policies, procedures and organizational structures. Although the APS legacy purchasing system was common to all; each campus used its own varied instance of APS.

All of these varied instances fed into the central FRS financial system. Although often buying from common supplier base there was little coordination to leverage inter-campus requirements effectuating volume purchase discounts. Campus purchasing offices primarily functioned as transaction centered "order shops" rather than providing highly valued supply chain support via pre-established contracts as well as on demand sourcing assistance for instant customer requirements. Purchasing staff too often responded as "Procurement Police," rigidly interpreting and applying policy to "just say no" without offering alternative solutions to their client's supply/service need. As such purchasing as an organization was at best 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, processes provided for exceptional customer service support, and whose recognized contributions to material costs containment rendered it a "highly valued partner" in the University community.

## Design

### Level I

In the year 2000 the University of Missouri procurement functions and activities involved many people across the multiple campus environment...

- Roughly 2,000 staff throughout the system were involved in one way or another with the procurement of goods and services, most limited to using P-Cards for direct purchases of less than \$2,500.
- There were approximately 110 people (93 FTE) comprising the four campus and system purchasing offices, providing contract, purchasing and general stores supply support.

The University formed a Procurement Review Committee to evaluate procurement operations and determine what could be done to reduce costs, operational and material, streamline processes, and improve purchasing service response across the system...

- The committee concluded that consolidation of operations and elimination of some services would lead to sizeable headcount and operating cost reductions.
- The committee believed that the University should outsource certain stores operations.
- The committee felt the University should evaluate the benefits of e-Procurement

University leadership decided to engage a supply chain consultant firm to conduct an independent assessment of University procurement operations seeking confirmation of the committee's conclusions and further recommendation of the most appropriate organization/operating model for procurement in the future...

- Assessment Objectives
  - Review findings and results of the Procurement Review Committee
  - Evaluate the cost effectiveness of current purchasing operations
  - Recommend a cost and service effective organization/operating model that would lead to meaningful reductions in:
    - Operating expenses
    - Personnel costs
    - Commodity and purchased services expenditures
  - Develop a realistic strategy and timeline for implementing the recommended model
    - Identify potential problems, pitfalls, risks, and methods for overcoming them.
- Assessment Scope
  - Included
    - All four campuses
    - Food service purchases at the Columbia campus

- Excluded
  - Travel card program
  - University Hospital
  - Bookstore purchases
- Method of Approach
  - Phase A dealt with assessment and determination of:
    - Cost and service effective organization, structure, and potential for consolidation activities
    - Procurement and sourcing strategy
  - Phase B dealt primarily with detailed evaluation and improvements in:
    - Operating Policies
    - Operating Methods and Procedures
    - Functional and Activity Practices
- Resulting Decisions - Operational Model
  - Segment commodity purchasing
    - High volume focus
    - Contract specialists with team approach
  - Raise threshold for P-Card purchases to \$5,000
    - Additional 10.7% of transactions
    - Incentives to promote higher use
  - Raise asset inventory and reporting limit to \$5,000
  - Raise bid transaction to \$10,000
    - Reduce Pos and transactions
    - Improve product and service performance
  - Increase use of internet for procurement
  - Implement process improvements focused on users
  - Improve data management and reporting
  - Implement PeopleSoft Purchasing module with fully electronic requisitioning
- Resulting Decisions - Organizational Model
  - Consolidate all procurement activities at System level under the leadership of a Chief Procurement Officer
  - Put in place contract specialists for University wide contracts
  - Maintain campus purchasing offices
  - Transfer certain functions to finance
    - Petty cash
    - Accounts payable
  - Eliminate Central Stores
  - Eliminate Central Receiving at all campuses
  - Focus organization on improved standardization, policies, and procedures

Savings based on these activities were estimated as follows...

- Commodity costs - estimated at \$10.9 to \$17.1 million:
  - 21% of commodity classes represent 90% of purchases - \$150M
  - Improved procurement in existing Volume Purchase Agreement commodity classes estimated at 5-9% or \$3.4 million
  - Improved remaining procurement in remaining classes estimated at 10-15% or \$10.6 million
- Operating costs - estimated at \$600,000 to \$700,000
  - Operating cost savings/staff reductions - \$1.01 million
  - Additional staffing (CPO and Commodity Specialists) - \$340,000 to \$428,000

### The "Next Level"

In July 2006 the University set out to take the procurement program to "The Next Level" through the System-wide implementation of an industry leading eProcurement system which would...

- Afford centralized control and influence of the purchasing process, with decentralized execution
- Provide end users an improved self-service option which affords finger tip access to and "Amazon.com" like ordering ease from supplier catalogs at pre-negotiated discounted pricing.
- Through the selection of the SciQuest Higher Markets for Oracle/People Soft solution allow the University to complement its current investment in PeopleSoft without requiring substantial internal resources for ongoing maintenance
- Provide Procurement Services and senior management
  - Greater spend visibility
  - Better communications with suppliers
  - Metrics and benchmarking tools to enhance strategic sourcing activities
  - Improved contract compliance resulting in significantly reduced material costs as well as reduced administrative costs associated with their acquisition
- Method of Approach
  - Recognizing ultimate user adoption was the most critical success factor we formed an Implementation Model Team comprised of representative of key users, including faculty and staff from all four campuses as selected by the campus Administrative Vice Chancellors. This group determined the implementation effort would move forward under the following organizational structure:
    - Core Project Team: comprised of the CPO as "Business Owner", the Project Manager, IT Leads, Supplier Enablement Team, Change Management/Process Redesign Team, a Training and Communications Team, and the Campus Advisory Group Leads
    - Campus Advisory Group: comprised of "extended stakeholders" current primary users of the procurement systems in their functions

as well as faculty and other potential new users. The appropriate Core Team members will meet at least once each month with each Campus Advisory Group to solicit their input on each significant aspect of the solution design and development from inception to completion.

- Pilot Testing: After completion of design and development pilot testing will take place at each campus simultaneously to insure final design is as much as possible representative of the needs of all. The campus Vice Chancellors will identify 3-4 pilot departments to participate. The overall pilot group should represent various scenarios; academic, administrative, units with grant activity, departments with large spend and numerous transactions as well as infrequent small dollar requisitioners. The period of testing will be specific to each campus dependent upon their assimilation of the solution as well as required system debugging and modification.
- Phased Rollout: At the completion of pilot testing each campus will implement a phased rollout plan the makeup and duration of each phase to be determined by variables of size, available training resources, and adaptability to change pertinent to each campus.
- Detailed Project Plan: The University engaged a consultant with specific experience in the implementation of PeopleSoft ePro and SciQuest solutions to develop a detailed project plan and scope. The firm also has the capability to supply experienced IT staff to assist in implementation if later required.

## Implementation

### Level I

- June 1 -June 30, 2001
  - System leadership met with campus administrative vice chancellors, purchasing directors and staff to discuss transition and staff concerns.
  - Developed user satisfaction survey including key service and satisfaction indices to establish benchmarks for future comparison.
  - Developed position description for system wide Chief Procurement Officer (CPO)
  
- July 1, 2001
  - All procurement and related staff report to the System.
  - Campus purchasing directors report to the CPO
  - Campus purchasing department accounts transfer to the System at FY 2000 levels plus increases for staff salaries and benefits.
  
- July 1 - September 30, 2001
  - Coordinate the implementation of PeopleSoft to support the new procurement model
  - Survey purchasing customers
  - Establish benchmarks and service levels for performance
  - Develop purchasing manager position for each campus
  - Begin developing commodity specialist positions
  - Develop training program for commodity specialists
  - Implement new limits for procurement card and bidding threshold
  - Work with accounting departments on transition of accounts payable and petty cash
  - Establish Data Base Management group to capture procurement information including commodity and operational cost
  - Develop System-wide web site for Procurement
  - Revise policies and procedures to reflect new organization
  - Establish committees to develop, implement and monitor new initiatives.
    - Campus Service Committees: Includes faculty, staff and campus purchasing manager; establish service levels and provide feedback on operation.
    - System-wide Commodity Committees: Includes the commodity specialist and primary campus users of the commodity; evaluate and develop specifications for products which are subject to such standardization.
    - System-wide Procurement Advisory Committee: Includes two representatives from each campus, the System AVP of Management Services and the CPO; develop procurement policies and monitor overall performance of procurement services.

- October 1 - December 31, 2001
  - Begin Department training on PeopleSoft
  - Finalize plans for PeopleSoft Implementation
  - Modify staff responsibilities to implement PeopleSoft
  - Begin filling commodity specialist positions
  - Develop incentive program for use of procurement card
  - Increase the use of Internet and web pages for distribution of bidding documents and for use in acquiring bids
  
- January 1 - June 30, 2002
  - Implement and trouble shoot PeopleSoft
  - Fill commodity specialist positions
  - Modify staffing to implement PeopleSoft and match workload
  - Develop and issue RFP for office products
  - Increase use of Internet for acquiring products
  
- July 1 - December 31, 2002
  - Survey customers and evaluate performance. Review data with campus and System-wide procurement committees and revise service criteria as necessary
  - Provide summary of savings from commodity specialist's activities
  - Reduce procurement staff to match workload
  - Return funds to each campus from staff savings
  - Increase use of Internet for acquiring products

### The "Next" Level

- October 1, 2006 - January 31, 2007
  - Develop Project Charter, the governing document that details...
    - Project Goals and Objectives
    - Implementation Team Members, roles and responsibilities
    - Project Scope to include software implementation, target suppliers, and deployment strategy
    - Project metrics
    - Assumptions/Dependencies
    - Project Risks
  - Pre-Kick Off Planning Meeting including Business Owner, Project Manager, IT Leads, SciQuest & Oracle/PeopleSoft Project Team members and ePro Consultant - review project charter and develop Kick-Off Meeting Agenda
  - Official Kick-Off Meeting including entire Core Team, Executive Sponsors, Campus Advisory Group Leads

- Review project goals, scope, success measures, dependent projects/products, and team members roles and responsibilities
  - Product demonstration
  - In depth discussion of deployment approach
  - Explanation of supplier enablement process
  - Force Field analysis: expected resistors/drivers
  - Overview of next steps
  - Make project overview presentations to targeted leadership constituencies key to success, e.g., campus Chancellor's Councils, campus Provost Councils, campus Councils of Deans, System Inter-Faculty Council, campus Fiscal Officers, etc.
  - Integration Workshop - SciQuest/ePro Consultant and UM Business Owner, Project Manager and IT Leads met to ...
    - Provide an understanding of the SciQuest integration solutions
    - Review key components of the integration process
    - Build draft integration specification
    - Identify key issues or risks
    - Draft Solution Workbook
- February 1 - March 15, 2007
  - Solution Specification/Design
    - Final Integration Design Session
    - Project Management Board Meeting
    - Project Gate Deliverables: Signed Solution Workbook/ Signed Integration Specification
    - Project Risks
- March 16 - May 15, 2007
  - Solution Build
    - Solution Configuration
    - Integration Development
    - Test Planning
    - Solution Testing
    - Supplier Enablement
- May 16 - September 15, 2007
  - Solution Deployment
    - User Acceptance Testing
    - Solution Activation
    - Production Training - Pilot/Production
- September 16 - December 15, 2007 - Simultaneous campus pilot testing
- December 16 - ? Phased roll-out to all campus users at large

## Benefits

### Level I

- Operating savings
  - Headcount reduced from **93**FTE in FY 2000 to **46** in FY2006
  - Salary and benefit cost savings as a result of consolidation
    - Estimated - \$600,000-\$700,000
    - Actual - \$998,064
- Commodity cost savings
  - Estimated - \$10.9 to \$17.1 million
  - Actual thru FY 2006 - \$15.5 million
- Additional Program Cost Savings realized through operational re-design
  - P-Card Rebate - Spiked from an average **\$133,900** for the years 2000 thru 2002 to an average **\$740,000** from 2003 thru 2006 as a result of the implementation of PeopleSoft, elimination of petty cash and programmed efforts to increase P-Card utilization. This has occurred with relatively the same overall spend. Due as these rebate dollars are proportionately re-distributed to the campuses, operational re-design has made available an additional **\$2,424,000** for re-deployment in support of core mission activities.
  - Surplus Property Disposal- The introduction of a System-wide eBay surplus sales program has resulted in a **\$240,000** return to departments disposing of excess/surplus materials over the last two fiscal years.
- Total Level I Savings - **\$19,162,064**

### The "Next Level"

- Key Process Benefits
  - One stop shopping to meet end-user requirements
  - Simple purchasing process for end user (get needed item with one or two clicks)
  - Streamline activities of purchasing department to focus on high dollar items
  - Reporting data available to all levels of the organization
  - Reduced time in reviewing requisitions for items already under contract
  - Reduced time in purchase order conversion
  - Dramatically improve the focus of the teaching and research community, away from administrative activity

- Strategic Vendor Savings
  - Increase on-contract spending
  - Negotiate better contract pricing
  - Foundation for further strategic sourcing
  
- Projected Return on Investment
  - First year investment of \$900,000 and approximately \$500,000 each year thereafter for licensing.
  - Projected minimum savings over 5 years is approximately **\$24.9 million** for an investment of **\$2.9 million**; an ROI of 8-to-1.
  - Projected optimum savings over five years is approximately **\$77.9 million** for an investment of **\$2.9 million**; an ROI of 26-to-1.
  
- Total Projected "Next Level" Savings **\$22 million to \$76.1 million**

## **Retrospect**

Customer satisfaction with the "Level I" PeopleSoft solution ultimately installed would have been greatly increased had we used Campus Advisory Groups to insure individual campus input throughout the design, development and deployment phases as is being done in the "Next Level" eProcurement implementation.