



AE Initiative Summary Business Case – Scientific Supplies

Business Sponsorship & Ownership

Project Name:	Strategic Purchasing – Scientific Supplies
Team Members	Mike Hardiman (Team Lead), Mike Matschull, Janet Bresnahan, Kathy Jaglin, Aimee Lefkow, Catherine Carter, Ziqi Dai
Business Unit(s):	Vice Chancellor for Administration – Administrative Excellence
Business Process Owner(s):	UW-Madison Purchasing (central)
Preliminary Cost Estimate:	\$165K initial investment and \$510K annual recurring cost
Preliminary Savings Estimate:	\$3.9M over 5 years

Background

The Administrative Excellence (AE) Phase 1 assessment indicated that the University had the opportunity to generate savings by changing practices relating to purchasing scientific supplies. In January 2012, the AE Steering Committee, comprised of the Interim Chancellor, the Provost, and the Vice Chancellor for Administration, chartered a team to validate the opportunity and deliver detailed, action-oriented recommendations. The specific charge, as articulated in the team’s charter, described the objective as follows:

“Maximize institution-wide savings [on purchases of scientific supplies] through implementation of strategies to consolidate vendors, leverage university scale, and substitute purchases for commoditized options when possible, without sacrificing service levels [or quality].”

The team was asked to develop an understanding of the current drivers and processes attendant to the purchases of scientific supplies and to use that knowledge to formulate an actionable plan for implementation.

The team conducted its work over 20 weeks, recently presented its recommendations to the AE Advisory and Steering Committees, and received Advisory Committee endorsement and Steering Committee approval.

Approach

The team focused its efforts around four primary activities: (1) identifying those scientific supplies that may be commodities; (2) collecting and analyzing University purchasing data within identified commodity areas; (3) quantifying opportunities; and (4) understanding campus requirements and user needs in order to identify necessary process improvements to accompany change.

Identifying Scientific Supply Commodities

The team considered several approaches to identify purchases that are amenable to strategic sourcing, including evaluating Account Codes, assessing vendor product categorization, and evaluating purchase history with specific scientific supplies vendors. Ultimately, the team defined scope to include general consumables, chemicals, and other regularly-purchased (defined as at least ten times per year) scientific supplies with a unit cost of \$1,000 or less.

Data Collection & Analysis

In order to conduct this analysis, the team needed data on items purchased within the identified commodities. The team collected these data from both the vendor community and campus purchasing units and stockrooms. The team analyzed this data to better understand user purchasing preferences and funding sources most frequently used for the purchase of commoditized scientific supplies, and highlighted four sub-categories for more detailed review: pipettes, petri dishes, flasks, and tubes.

Quantifying Improvement Opportunities

In order to quantify savings potential within the four categories, the team analyzed the cost and frequency of purchases within each to identify opportunities to substitute current products with lower-cost branded or private label alternatives, of equivalent quality. After identifying potential substitutes, the team calculated the difference between the cost to the institution of current state purchases and a future state in which 70% of purchases would be of a selected lower-cost product. The team then extrapolated a weighted-average savings across the four categories to estimate a savings range across other categories of commoditized scientific supplies.

Understanding Campus Requirements

The team surveyed campus to understand the primary drivers of scientific supply purchase decisions, user requirements within the selected products in the target sub-categories, and readiness to change. The survey was distributed to approximately 3,000 UW employees, including researchers, administrative staff, Materials Distribution Services (MDS) customers, and procurement card users.

The team surveyed the current policy environment, both within UW and at peer institutions, to identify what rules might be required to support the team's recommendations and maximize savings.

The team's recommendations were sensitive to user-articulated requirements and the team recognized that implementation of any changes should minimize the risk of disrupting research.

Observations

UW-Madison spent more than \$9.5 million on purchases of commoditized scientific supplies in calendar year 2011. This expenditure included \$6.1 million with primary vendors included in the scope of the team's analysis.

There are no consistent policies within and across divisions and departments that govern the purchase of commoditized scientific supplies. In so far as policies do exist, they are often not regularly and consistently communicated or understood. Even when policy doesn't constrain purchases, limited information is available regarding lowest-price products and negotiated pricing.

No complete source of internal purchase data exists, which required the team to rely on a combination of UW and vendors data to understand university purchase history. This lack of comprehensive data hinders the university's ability to strategically source commoditized scientific supplies.

Currently, purchasers have unlimited choice in vendor selection, product choice, and purchasing channel, which results in significant product proliferation. While campus purchasers individually engage in price shopping and product comparisons, limited coordination creates inefficiency and reduces institutional negotiating power for commoditized scientific supplies.

The team identified that approximately 57% of scientific supply purchases, in total, were funded by grants. While cost savings on grants may not directly benefit the institutions' bottom line, the team recognized that improving efficacy of grant spending supports the university's research mission.

Core Recommendations

The team recommends strategic purchasing strategies be implemented on commoditized scientific supplies. The University has the opportunity to save approximately \$500,000 in the first year, and almost \$4 million over five years, through the following mechanisms:

1. Buy lower-priced equivalent items – substitute current purchases with UW-identified best value equivalents (manufacturer or private label alternatives) that meet the same functional specifications
2. Purchase from fewer vendors
3. Improve communication and policy landscape
4. Simplify purchasing of UW-identified best value products – make it easier to do the right thing for the institution

The team did not quantify, but anticipates significant additional savings in negotiating better prices with primary vendors.

In order to ensure that purchasing changes do not negatively impact research, UW-Madison should create a standards team charged with evaluating potential product equivalents and periodically re-evaluating identified alternatives to monitor alignment with evolving campus requirements.

Customer Readiness and Change Management

In order to minimize disruption to the research community, the team recognizes the following as critical to successful implementation:

1. Creation and simplification of policies – develop policy language that is unambiguous and ensure policies are known across campus;
2. Development of a more capable e-commerce platform – technology changes will be required to guide users to recommended products, MDS currently does not have this capability;
3. Simplification of purchasing procedures – streamline institutional procedures and supporting technology to make it easy to purchase scientific supplies;
4. Effective communication – communicate contracted vendors, University pricing, and selected products for substitution to campus, and demonstrate overall initiative benefits to campus;
5. Proactive product management – regular review of selected UW best value products by standards team(s) to ensure alignment with evolving needs and changes in the marketplace, ongoing evaluation of additional sub-categories for inclusion, and supporting a feedback mechanism where users can suggest avenues for future product selection; and
6. Creation of performance metrics – create consistent campus-wide metrics to assist with measuring initiative success and participation, and with monitoring policy compliance.