UC San Diego
Commodity Strategy and Spend Analysis
October 6, 2008
Gayle Ta and Bob Neuhard
Topics

• Commodity Strategy
  – Commodity Analysis
  – Strategy Development

• Key Performance Indicators and Metrics
  – Executive Dashboard
  – Demo
The Strategic Sourcing Methodology

**Preparation Phase**
- Project Plan and Scope determined
- Resource obtained (people, dollars, etc.)
- Kick-Off meeting conducted
- Team members identified

**Commodity Strategy Phase**
- Stakeholder Requirement sessions conducted
- Existing contracts summary produced
- Sessions conducted to prioritize requirements

**Execute Strategy Phase**
- Sourcing strategy developed and communicated
- User adoption strategy and implementation plan developed
- Initial cost/benefit analysis developed

**Implementation Phase**
- Negotiation strategy document developed
- Meetings/Negotiations with finalists
- Agreements signed

**Supply Chain Management**
- Quarterly reviews
- Metrics and measurements
- Ongoing operational improvement

**Launch Sourcing Team**
- Anayze spend by category / location and determine sourceable portion
- Document historical purchases
- Develop current TCO for each location
- “Quick hits” identified

**Develop Spend Analysis**
- Complete pre-bid industry analysis
- RFI developed / distributed (if needed)
- Supplier responses to RFI evaluated
- Final market analysis published

**Determine Location Requirements**
- RFP developed / issued
- RFP responses evaluated and scored
- “Short list” of finalists selected

**Conduct Market Analysis**
- “Quick hits” identified
- Complete pre-bid industry analysis
- RFI developed / distributed (if needed)
- Supplier responses to RFI evaluated
- Final market analysis published

**Develop Category Strategy**
- RFP developed / issued
- RFP responses evaluated and scored
- “Short list” of finalists selected

**Evaluate & Select Supplier(s)**
- “Quick hits” identified
- Complete pre-bid industry analysis
- RFI developed / distributed (if needed)
- Supplier responses to RFI evaluated
- Final market analysis published

**Negotiate Agreement(s)**
- RFP developed / issued
- RFP responses evaluated and scored
- “Short list” of finalists selected

**Implement Agreement(s)**
- Implementation team assigned
- Implementation plan finalized
- Implementation completed
Why a Commodity Strategy Is Important

- Proactive
- Underpinning for change management
- Improved Credibility
- Ensures goals are aligned with market conditions
- Price/cost reduced by pre-empting price adjustments
- Target setting easier
- Ability to determine UC leverage, market opportunity and savings potential
- Awareness of supplier base and market competitiveness improved
If You Don’t Create a Commodity Strategy…

- Reactive
- Supplier and product base may not reflect current supply market dynamics
- Insufficient knowledge puts buyer in a weaker bargaining position
  - On campus
  - With supplier
- May not be using the optimum supply base
- Remain with existing suppliers
- Not taking advantage of new advances
Components of a Commodity Strategy

Commodity Analysis
- Internal Spend/Data Analysis
- Requirements Gathering
- Evaluation of Commodity in Industry

Strategy Development
- Supplier Alignment Analysis
- Quantify Savings Potential
- Implementation Strategy/User Adoption
Commodity Analysis: Internal Spend/Data Analysis

- Spend Analysis (commodity spend, transaction count, commodity trend, # of suppliers, etc.)
- Product details (SKUs)
- Current Top 10 Suppliers in commodity area
- Identify departments/users that represent top 80% spend
- Subject matter expert (SME) review of data
Coffee Supplier Example

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Spend</th>
<th>Transactions</th>
<th>% of Total Spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>COFFEE INC</td>
<td>$93,482</td>
<td>583</td>
<td>28%</td>
</tr>
<tr>
<td>PCT COFFEE</td>
<td>$70,685</td>
<td>482</td>
<td>22%</td>
</tr>
<tr>
<td>TAB SERVICE</td>
<td>$38,228</td>
<td>141</td>
<td>12%</td>
</tr>
<tr>
<td>THE ART OF ESPRESSO</td>
<td>$27,875</td>
<td>134</td>
<td>8%</td>
</tr>
<tr>
<td>COFFEE PLAN</td>
<td>$19,886</td>
<td>121</td>
<td>6%</td>
</tr>
<tr>
<td>JAVA CUPS COFFEE</td>
<td>$17,942</td>
<td>95</td>
<td>5%</td>
</tr>
<tr>
<td>OTHER SUPPLIERS</td>
<td>$60,130</td>
<td>236</td>
<td>19%</td>
</tr>
</tbody>
</table>

Total Suppliers: 22  Total Spend: $328,229  Total Trans: 1,792

Commodity Analysis Phase: Internal Spend/Data Analysis
Top Departments with 80% of Spend Example

Depts with 80% of Coffee Spend

Commodity Analysis Phase: Internal Spend/Data Analysis
## Spend Analysis Item Categorization

Through invoice sampling MRO spend is further defined into seven main categories. Over 75% of spend is captured in six clearly defined categories.

<table>
<thead>
<tr>
<th>Supplier Category</th>
<th>Campuses (1)</th>
<th>Laboratories (2)</th>
<th>Medical Centers (3)</th>
<th>UC Office of the President</th>
<th>Total (4)</th>
<th>% of Spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical</td>
<td>$20,665</td>
<td>$27,694</td>
<td>$1,668</td>
<td>$147</td>
<td>$50,174</td>
<td>38%</td>
</tr>
<tr>
<td>Tools &amp; Hardware</td>
<td>$12,809</td>
<td>$17,167</td>
<td>$1,034</td>
<td>91</td>
<td>$31,101</td>
<td>23%</td>
</tr>
<tr>
<td>Lighting</td>
<td>$5,030</td>
<td>$6,742</td>
<td>$406</td>
<td>36</td>
<td>$12,214</td>
<td>9%</td>
</tr>
<tr>
<td>Plumbing Supplies</td>
<td>$2,073</td>
<td>$2,779</td>
<td>$167</td>
<td>15</td>
<td>$5,034</td>
<td>4%</td>
</tr>
<tr>
<td>HVAC Supplies</td>
<td>$644</td>
<td>$863</td>
<td>$52</td>
<td>5</td>
<td>$1,564</td>
<td>1%</td>
</tr>
<tr>
<td>Pumps &amp; Compressors</td>
<td>$397</td>
<td>$531</td>
<td>$32</td>
<td>3</td>
<td>$963</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>$13,151</td>
<td>$17,624</td>
<td>$1,061</td>
<td>94</td>
<td>$31,931</td>
<td>24%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$54,770</strong></td>
<td><strong>$73,400</strong></td>
<td><strong>$4,420</strong></td>
<td><strong>$390</strong></td>
<td><strong>$132,980</strong></td>
<td>100%</td>
</tr>
</tbody>
</table>

“Sourceable” spend is conservatively estimated to be $50 to $80 million

- Assuming 80% addressable for non-lab spend only
- Assuming 60% addressable for all spend

Commodity Analysis Phase: Internal Spend/Data Analysis
Data Collection Challenges

Balancing Needs and Wants

- Needs
  - Must have...

- Wants
  - Even Better if...

Poorly Understood Specifications

- Technical
- Commercial
- Supplier-driven
- Total cost

Data Integrity

- Accuracy
- Consistency
- Completeness
- Relevancy

Unknown Future Requirements

- Product mix changes
- Volume changes
- New technologies
- Product redesign

Commodity Analysis Phase: Internal Spend/Data Analysis
Commodity Analysis: Requirements Gathering

- Which suppliers are needed by UCSD and why?
- Unique offerings, sole sources, etc.
- UCOP/UCSD agreements currently in place
- Identify key requirements (savings, service, delivery, performance, sustainability, etc.)
- Take into account total cost of ownership
Commodity Analysis: Evaluation of Commodity in Industry—Industry Capabilities and Trends

- Top suppliers in the industry and key capabilities
- Competition dynamics
- Identify industry cost and performance drivers (quality, level of technology, flexibility, timeliness, etc.)
- Industry direction and trend (consolidation, pricing, etc.)
- Understand market capability versus business requirements
Strategy Development: Supplier Alignment Analysis

• Alignment with requirements – customer focus

• Evaluation of bubble chart (spend, potential transactions, difficulty, alignment) – sourcing focus

• What percentage of the commodity spend do the top suppliers represent? – consolidation focus
  – How much of current spend can be realigned to preferred suppliers?
    - Use goal of 80% contracted and sole source, 20% small/disadvantaged businesses.
## Supplier value framework

<table>
<thead>
<tr>
<th>Shared Risk</th>
<th>Knowledge</th>
<th>Relationship</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supplier’s Role</strong></td>
<td><strong>Vendor</strong></td>
<td><strong>Preferred Supplier</strong></td>
<td><strong>Partner/Primary</strong></td>
</tr>
<tr>
<td><strong>Our Role</strong></td>
<td>Transactional Customers</td>
<td>High Volume, Service Level Oriented</td>
<td>Collaborative Customers</td>
</tr>
</tbody>
</table>

### Supplier's Role
- Price, Availability, Quality, Reliability
- Transaction Efficiency
- Fulfillment

### Vendor
- Price, Availability, Quality, Reliability
- Transaction Efficiency
- Fulfillment

### Preferred Supplier
- Price, Availability, Quality, Reliability
- Transaction Efficiency
- Fulfillment

### Partner/Primary
- Price, Availability, Quality, Reliability
- Transaction Efficiency
- Fulfillment

### Strategic Ally
- Price, Availability, Quality, Reliability
- Transaction Efficiency
- Fulfillment

### Relationship
- Volume/Loyalty Discounts
- Problem solving
- Product/Service Bundling

### Knowledge
- Volume/Loyalty Discounts
- Problem solving
- Product/Service Bundling

### Product
- Volume/Loyalty Discounts
- Problem solving
- Product/Service Bundling

### Supply Chain Collaboration
- Joint Investment
- Joint Business Planning
- Gain Sharing

### Consultative Services
- Joint Investment
- Joint Business Planning
- Gain Sharing

#### Strategy Development: Supplier Alignment Analysis
Bubble Chart example – Supplier Alignment

Strategy Development: Supplier Alignment Analysis
Supplier Consolidation

Top 10 suppliers represent less than 20% of total spend in Laboratory and Administrative Services categories.

Strategy Development: Supplier Alignment Analysis
Strategy Development: Quantify Savings Potential

- Hard dollar
- Soft dollar
- Efficiency gains
- Environmental savings/sustainability improvements
Commodity Savings Calculation

Strategy Development Phase: Quantify Savings Potential

- **Reduction in Cost per Unit**
  - Reduced Prices
    - Price
    - Volume rebates
    - Payment term discounts
    - Taxes and tariffs
  - Reduced Inventory Carrying Costs
    - Cost of capital
    - Storage costs
  - Reduced Lifecycle Costs
    - Maintenance costs
    - Operating, energy, and other costs
    - Disposal costs

- **Reduction in Consumption/Volume**
  - Elimination
  - Substitution
  - Change in mix

- **Improved Operating Efficiency**
  - Reduced Procurement-Related Operating Expense
    - Cost of processing purchase orders
    - Cost of processing accounts payable
    - Cost of receipt/warehousing
  - Reduced Non-Procurement Operating Expense
    - Process efficiencies
    - Demand management

- **Cost Avoidance**
  - Commodity Prices
    - Cyclic price fluctuations
    - Sudden, unanticipated supply/demand changes
  - Business Costs
    - Currency exchange fluctuations
    - Legacy environmental cleanup
Efficiency Gains Examples

• Supplier Process efficiency
  – e-commerce order (cXML purchase order)
  – electronic purchase order via SciQuest portal
  – automated ordering process
  – e-commerce invoice (cXML invoicing)
  – electronic invoicing via SciQuest portal
  – automated invoicing process

• Tangible Supplier Benefits
  – Increase order accuracy
  – Elimination of fax/manual/phone order entries
    - Reallocation of order desk personnel to more productive tasks
  – Faster payment

• Incentives

Strategy Development Phase: Quantify Savings Potential
Strategy Development: Implementation Strategy and User Adoption

• Evaluate viability of successful implementation
  – Can we achieve goal of 80% contract utilization?

• E-Commerce enablement
  – Suppliers’ capability
  – Timing of enablement
  – Short-term solution

• Non E-Commerce
  – Supplier Fairs
  – Buyer Training
  – Direct engagement of Dept’s

• Communication strategy
  – User conversion strategy
    - Training
    - Supplier presentations
    - Supplier fair
    - Metrics and KPIs
  – Buyer conversion strategy
    - Campus & Professional Buyers
    - Training
    - Metrics and KPIs
How it all comes together

Market Analysis

Customer Key Requirements

Sourcing Strategy and Objectives

Spend Analysis

Commodity Strategy

Strategy Development: Implementation Strategy and User Adoption
Commodity Strategy Summary Example For MRO

- Market assessment and recommendations:
  - UC has large spend across MRO. It is concentrated in Tools/Hardware and Electrical/Lighting. The market has 5-6 large VARs with capabilities that align with our requirements. Product match will have to be determined via bid. 1 large VAR has no interest in engaging in a bid. All other large VARs expressed strong interest.
  - Summary Data
    - UC spend $54,000,000 (No labs). UCSD Spend $8,000,000
    - Currently at UCSD 180 suppliers provide MRO products for Tools/Hardware, Electrical, Lighting, Plumbing, HVAC, Pumps, etc
    - Consolidation Potential: 2-4 suppliers with some specialty suppliers in plumbing, HVAC and Pumps/Compressors
    - Savings potential: Category specific but ranges from 8% to 20%+
    - Transactions: 80,000 at $100 of product per Transaction
    - Supply chain: Consolidated shipping opportunity to drive shipping and sustainability improvements
    - Key issues: Delivery time, returns, copper pricing, steel origin

Strategy Development: Implementation Strategy and User Adoption
The Strategic Sourcing Methodology

**Preparation Phase**
- Project Plan and Scope determined
- Resource obtained (people, dollars, etc.)
- Kick-Off meeting conducted
- Team members identified

**Commodity Strategy Phase**
- Stakeholder Requirement sessions conducted
- Existing contracts summary produced
- Sessions conducted to prioritize requirements

**Execute Strategy Phase**
- Sourcing strategy developed and communicated
- User adoption strategy and implementation plan developed
- Initial cost/benefit analysis developed

**Implementation Phase**
- Negotiation strategy document developed
- Meetings/Negotiations with finalists
- Agreements signed

**Supply Chain Management**
- Quarterly reviews
- Metrics and measurements
- Ongoing operational improvement

**Launch Sourcing Team**
- Analyze spend by category/location and determine sourceable portion
- Document historical purchases
- Develop current TCO for each location
- “Quick hits” identified

**Develop Spend Analysis**
- Complete pre-bid industry analysis
- RFI developed/distributed (if needed)
- Supplier responses to RFI evaluated
- Final market analysis published

**Determine Location Requirements**
- RFP developed/issued
- RFP responses evaluated and scored
- “Short list” of finalists selected

**Conduct Market Analysis**
- RFP developed/issued
- RFP responses evaluated and scored
- “Short list” of finalists selected

**Develop Category Strategy**
- Stakeholder Requirement sessions conducted
- Existing contracts summary produced
- Sessions conducted to prioritize requirements

**Evaluate & Select Supplier(s)**
- Stakeholder Requirement sessions conducted
- Existing contracts summary produced
- Sessions conducted to prioritize requirements

**Negotiate Agreement(s)**
- Stakeholder Requirement sessions conducted
- Existing contracts summary produced
- Sessions conducted to prioritize requirements

**Implement Agreement(s)**
- Stakeholder Requirement sessions conducted
- Existing contracts summary produced
- Sessions conducted to prioritize requirements

**Finalize**
- Implementation team assigned
- Implementation plan finalized
- Implementation completed

**Supply Chain Management**
- Quarterly reviews
- Metrics and measurements
- Ongoing operational improvement
Metrics and Measurements

• How we will measure, track and report performance under contractual agreement(s)?

• How to monitor and track long-term, sustained benefits of executing a commodity strategy?

• What actions will result from missing contractual performance?

• **Sample KPIs and Metrics**
Dashboard

Supply Chain Management: KPIs and Metrics
Dashboard

Where are we?

Supply Chain Management: KPIs and Metrics
Dashboard

Where are we?
Where do we want to go?

Supply Chain Management: KPIs and Metrics
Dashboard

- Where are we?
- Where do we want to go?
- How do we get there?
Excel Executive Dashboard Demo

Supply Chain Management: KPIs and Metrics
UC San Diego Excel Dashboard Demo

Supply Chain Management: KPIs and Metrics
UC San Diego Excel Dashboard Demo

Supply Chain Management: KPIs and Metrics
UC San Diego Excel Dashboard Demo

Supply Chain Management: KPIs and Metrics
UC San Diego Excel Dashboard Demo

Supply Chain Management: KPIs and Metrics
QUESTIONS?
Gayle Ta, Principal Analyst
gta@ucsd.edu

Robert Neuhard, Associate Director
rneuhard@ucsd.edu
Commodity Strategy and Spend Analysis

APPENDICES
# Balancing Needs and Wants

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Dept 1</th>
<th>Dept 2</th>
<th>Dept 3</th>
<th>Dept 4</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>3.5</td>
</tr>
<tr>
<td>Reliability</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5.0</td>
</tr>
<tr>
<td>Delivery</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Technical expertise</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>4.0</td>
</tr>
<tr>
<td>Customer service</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>3.5</td>
</tr>
<tr>
<td>Innovation</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>Service Levels</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3.5</td>
</tr>
<tr>
<td>Price</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>Total Cost of Ownership</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Commodity Analysis Phase: Internal Spend/Data Analysis
Cost Purchase Price vs Total Cost

**Total Cost**
- Purchase price
- Policy compliance
- Transaction Costs
- Delivery / Freight / Handling
- Implementation Cost
- Training
- Communication / Marketing
- Productivity
- Risk / Liability
- Cost of Non-Compliance
- Maintenance / Warranty
- Parts / Yield / Useful Life
- Sustainability
  - Energy / Water usage
  - Packaging
  - Chemicals
  - Recycling / Disposal
- Inventory / Shelf Life
- Return / Trade-ins
Scope Setting

Commodity Analysis Phase: Requirements Gathering
Scope Setting

- Ensure commodity strategy alignment with stakeholder requirements
- Ensure commodity strategy is consistent with market conditions
- Analyze feasibility
- Fine-tune timeframe
Commodity Strategy Worksheet

Commodity Analysis

- Internal Spend/Data Analysis
  - Spend Analysis (include transaction count, commodity trend, etc.)
  - Product details (SKUs)
  - Current UCSD Top Ten Suppliers
  - Identify Departments that represent Top 80% spend
  - Subject Matter Expert (SME) review of data

- Requirements Gathering
  - Which suppliers are needed by UCSD and why?
  - Unique offerings, sole sources, etc.
  - UCOP/UCSD agreements currently in place
  - Identify key requirements (service, delivery, performance, etc.)
  - Take into account total cost of ownership

- Evaluation of commodity in the industry
  - Top suppliers in the industry and key capabilities
  - Competition dynamics
  - Identify industry cost and performance drivers (quality, level of technology, flexibility, timeliness, etc.)
  - Industry direction and trend (consolidation, pricing, etc.)

Strategy Development

- Supplier alignment analysis and consolidation
  - Evaluation of bubble chart (spend, potential transactions, difficulty, alignment)
  - What percentage of the commodity spend do the top suppliers represent?
  - How much of current spend can be realigned to preferred suppliers?
  - Use goal of 80% contracted and sole source, 20% small/disadvantaged businesses.
  - Is an RFP needed to satisfy requirements?

- Quantify Savings Potential
  - Hard dollar, soft dollar, efficiency gains
  - Environmental savings/sustainability improvements

- Implementation strategy/user adoption of suppliers
  - E-Commerce enablement
    - Suppliers’ capability
    - Timing of enablement
    - Short-term solution
  - Non E-Commerce
  - Communication strategy
    - User conversion strategy
      - Training
      - Supplier presentations, Supplier fair
      - Metrics and KPIs
      - Buyer conversion strategy
      - Training and Metrics and KPIs
Sample KPIs/Metrics

**Spend**
- Commodities Actual to Plan and to Market
  - Budget to Actual Spend Comparison
- Supplier Rationalization
  - Number of Certified Suppliers per Commodity Target
- Usage/Acquisition Cycle
  - Plan to Actual Process Improvement Comparison
- Spend Under Management
  - % of spend that goes to enterprise-wide preferred suppliers

**Process Excellence**
- % of On-Time Payments
  - >= 95% on time (Per Relationship Terms) payments
- Compliance & Standardization (Spend through proper channels)
  - >= 95% Compliance

**Innovation**
- Vendor/Supplier Managed Inventory (VMI/SMI) & Consignment (PPS)
  - % of VMI/SMI Related Activities (Impact to be Determined)
- P-Card Usage
  - Number or % of Employees Using Business/Purchasing Cards (Value/Savings Determined by Transactional vs. Paper Cost) in correct channels
- Reverse Auctions
  - Number of and Value of Reverse Auctions (Plans to be Developed by Commodity Teams)
Sample KPIs/Metrics

- **Cycle Time**
  - Current Measure =
  - Targeted Measure =

- **Purchasing Automation Progress** - # or % of orders manually touched by purchasing.
  - Current Measure =
  - Targeted Measure =

- **User Adoption Metrics / Total # of requisitions**
  - Current measure =
  - Targeted measure =

- **User Adoption Metrics / Total PO Dollars**
  - Current measure =
  - Targeted measure =

- **User Adoption Metrics / Total # of purchase orders**
  - Current measure =
  - Targeted measure =

- **Catalog Adoption**
  - Current measure =
  - Targeted measure =

- **Deployment Success**
  - % of user community trained on system =
  - # of departments transitioned =