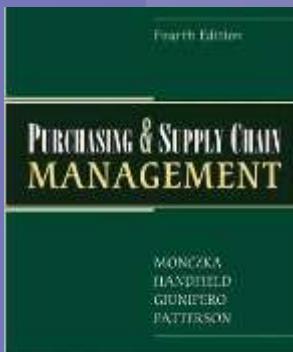


Supply Management and Commodity Strategy Development

Chapter 6



CENGAGE LEARNING
Monczka – Handfield – Giunipero – Patterson

Chapter Overview

- Aligning supply management and enterprise objectives
- What is a category strategy?
- Category strategy development
- Types of supply management strategies
- E-reverse auctions
- Evolving sourcing strategies

Theme of this lecture

- *How do organizations strategically manage their suppliers and spending to gain a competitive advantage?*

Why Apple Invests Billions to Diversify Chip Suppliers

Spend Analysis:

- TSMC (Taiwan Semiconductor Manufacturing Company) manufactures approximately **25% of Apple's chips** (estimated from Apple's total chip needs)
- Apple also concentrates final assembly in China through Foxconn - **over 80%** of iPhone production happens there.

This creates a **single-point-of-failure risk** in critical commodities (semiconductors and manufacturing services)

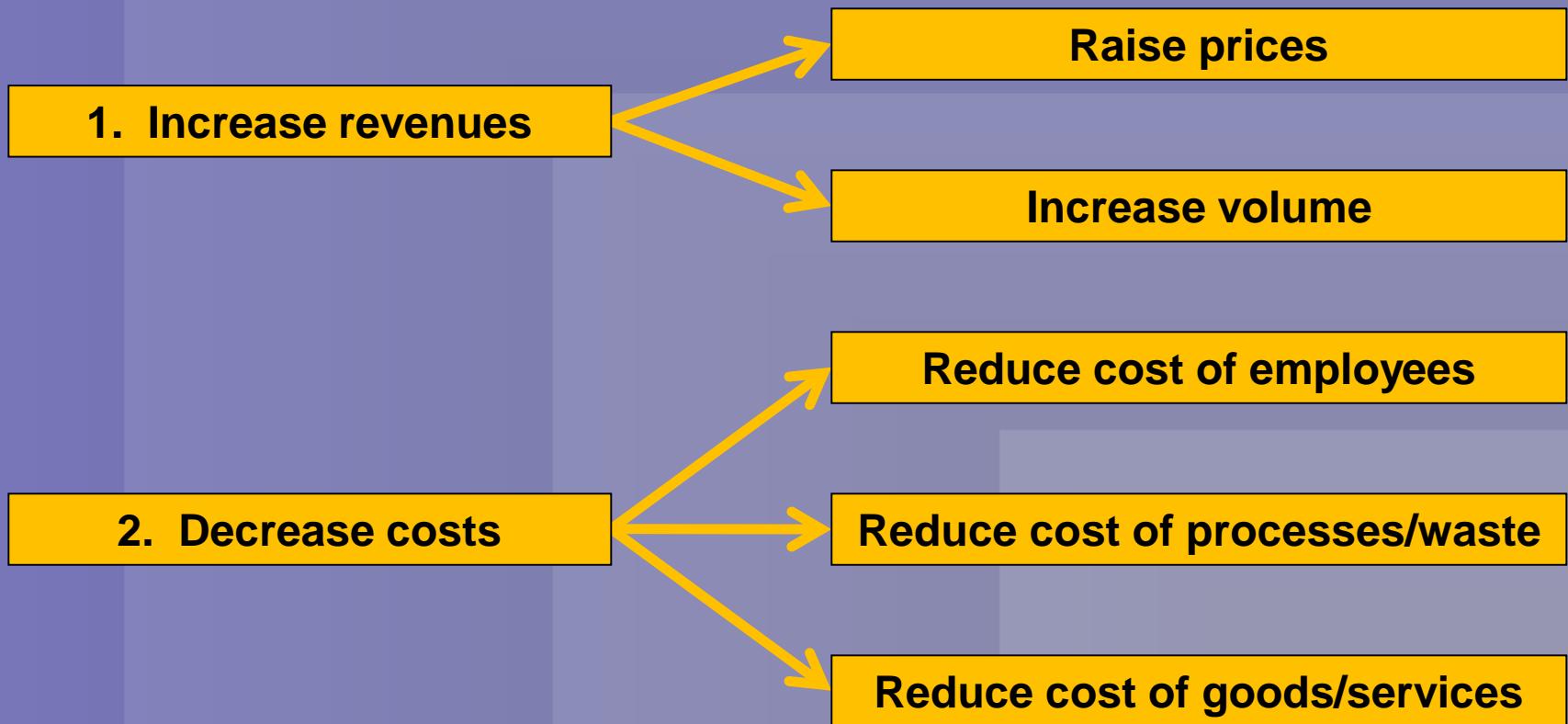
Apple Strategic Response (2024-2025)

- *Investing \$1+ billion annually in supply chain diversification*
- *Moving chip production to the U.S. (Intel partnerships) and South Korea (Samsung)*
- *Bringing manufacturing to India, Vietnam, and Mexico*
- Why?
- Geopolitical risk + supplier concentration risk

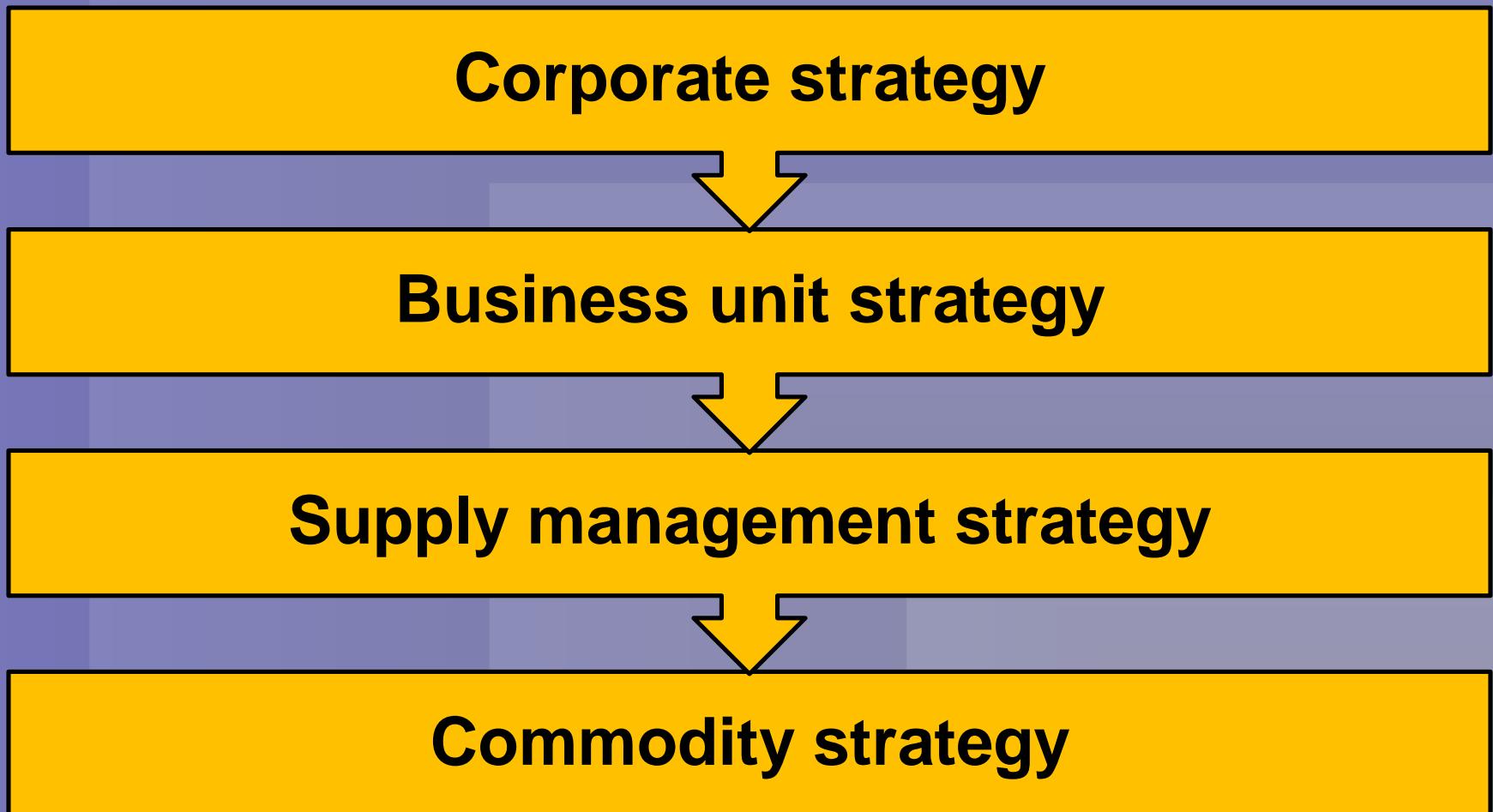
Aligning Objectives

- What markets will the firm compete in, and on what basis?
- What are the long-term and short-term business goals?
- What are the budgetary and economic resource constraints, and how will these be allocated to functional groups and business units?

How Companies Make Money



Integrative Strategy Development



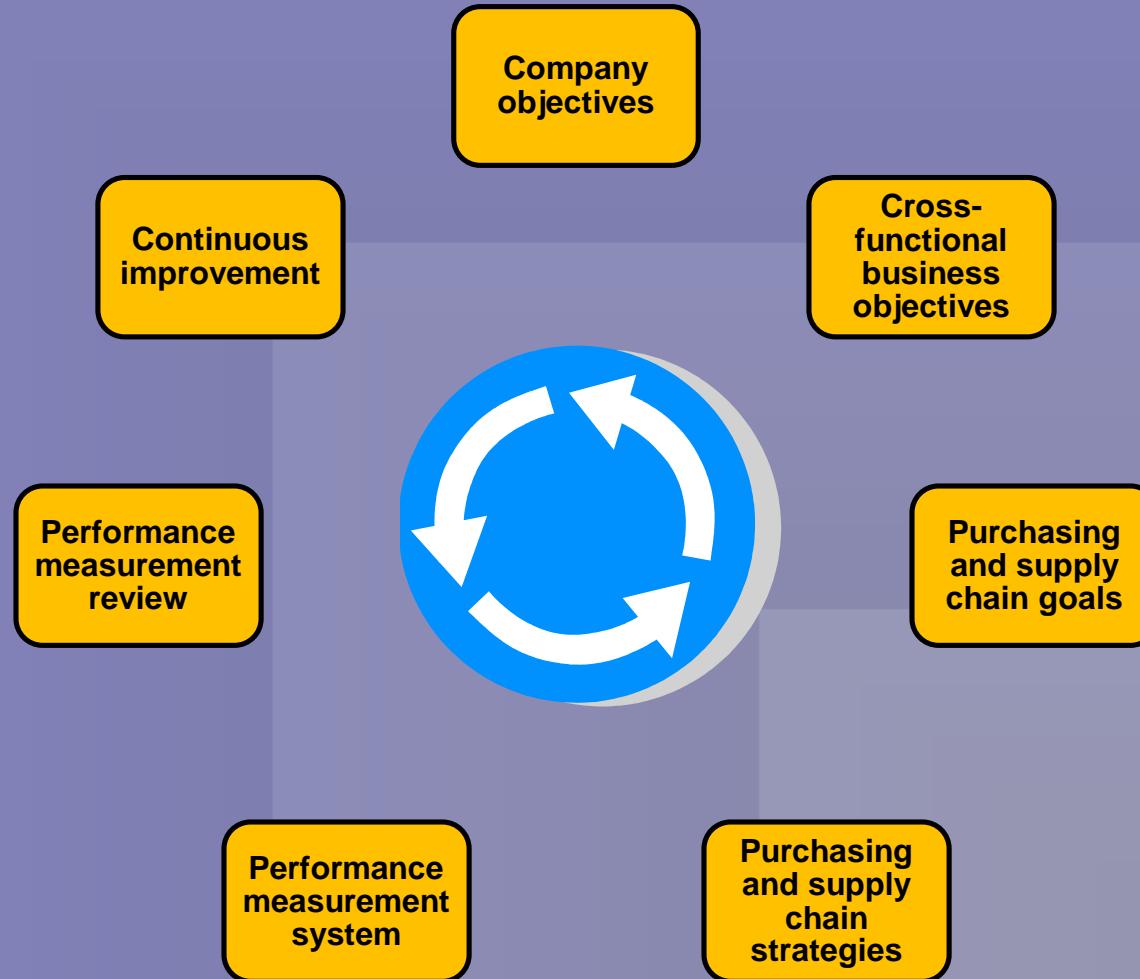
Integrative Strategy Development

- **Corporate strategy**
 - Definition of businesses in which to participate
 - Acquisition and allocation of resources to those businesses
- **Business unit strategy**
 - Scope or boundaries of those businesses
 - Basis of competitive advantage

Integrative Strategy Development

- **Supply management strategy**
 - Support the desired competitive business-level strategies
 - How to complement other functional areas
- **Commodity strategy**
 - How to purchase commodities to support higher-level strategies

Components of Integrative Strategy



Translating Objectives → Goals

Cost reduction objectives → goals

- Be low-cost producer in industry
 - Reduce material costs by 15%
- Reduce levels of inventory required to supply internal customers
 - Reduce raw material inventory \geq 20 days' supply

Translating Objectives → Goals

Technology/new product development objectives → goals

- Outsource non-core competency activities
 - Qualify 2 new suppliers by end of year
- Reduce product development time
 - Develop a formal supplier integration process manual by 12/31

Translating Objectives → Goals

Supply base reduction objectives → goals

- Reduce the number of suppliers used
 - Reduce the supply base by 30% in next 6 months
- Joint problem solving with remaining suppliers
 - Identify \$300,000 in cost savings with 2 suppliers by end of fiscal year

Translating Objectives → Goals

- Supply assurance objectives → goals
 - Assure uninterrupted supply from identified suppliers
 - Reduce order cycle time on key parts ≥ 1 week
- Quality objectives → goals
 - Increase quality of services and products
 - Reduce average defects by 200 ppm on all receipts in next fiscal year

Enabling Effective Category Strategies

- Spend money on resources initially, including assessment of current spend, data collection, market research, training, and people
- Validate savings or contributions to other company objectives achieved by supply management and drive them to the bottom line

Enabling Effective Category Strategies

Sustain the initiative through presentations to senior executives who support the move towards an integrated supply management function with other functional groups in the supply chain.

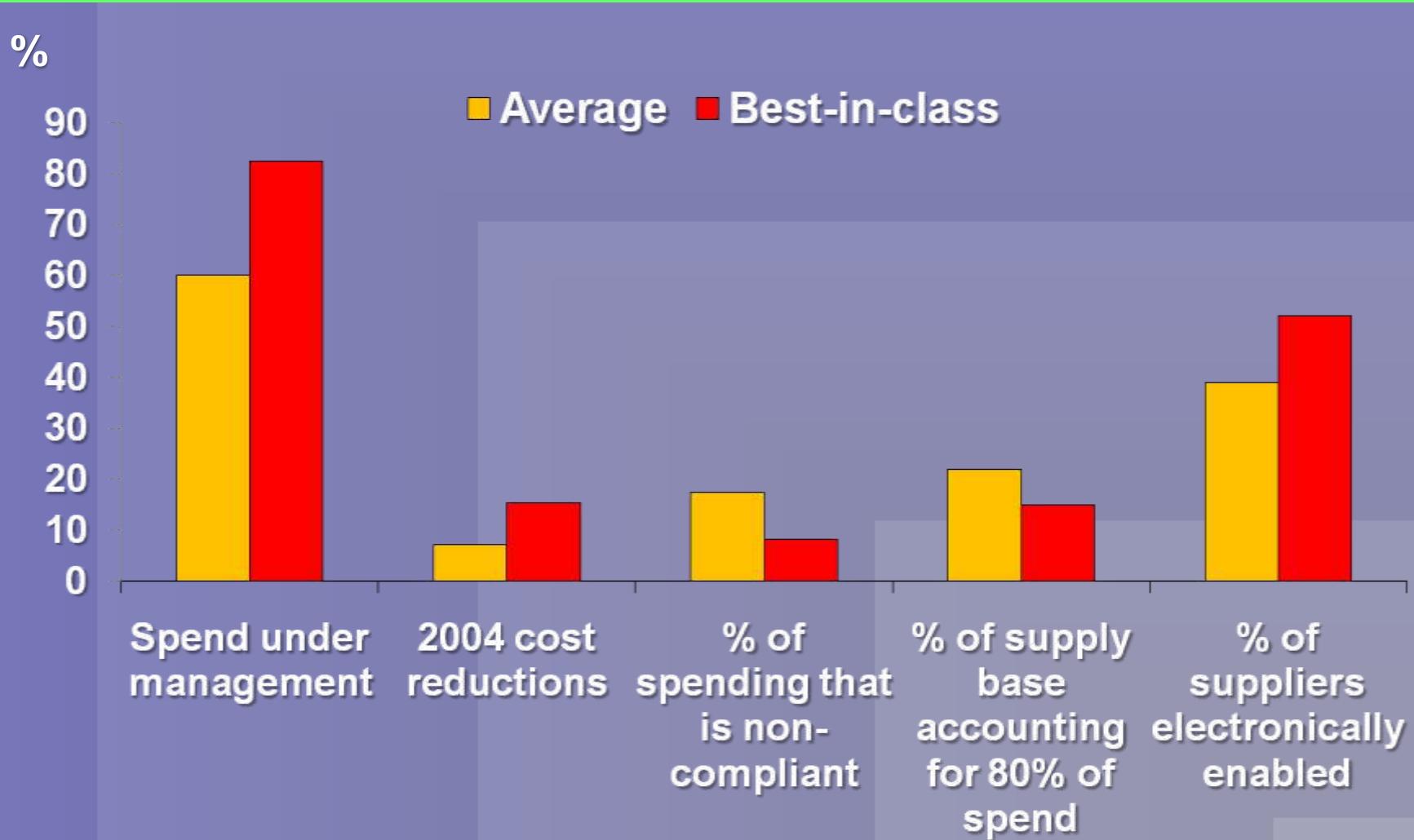
Conducting a Spend Analysis

- What did the **business spend** its money on over the past year?
- Did the business receive the **right amount** of products and services given what was paid for them? (S/OX issue)
- What suppliers received the **majority** of the business?

Conducting a Spend Analysis

- Did the suppliers charge an accurate price across all divisions vs. P.O. requirements, contracts, and SOWs?
- Which divisions spent their money on products and services that were correctly budgeted for?
- Are there opportunities to combine volumes and standardize purchases?

Procurement KPIs Example



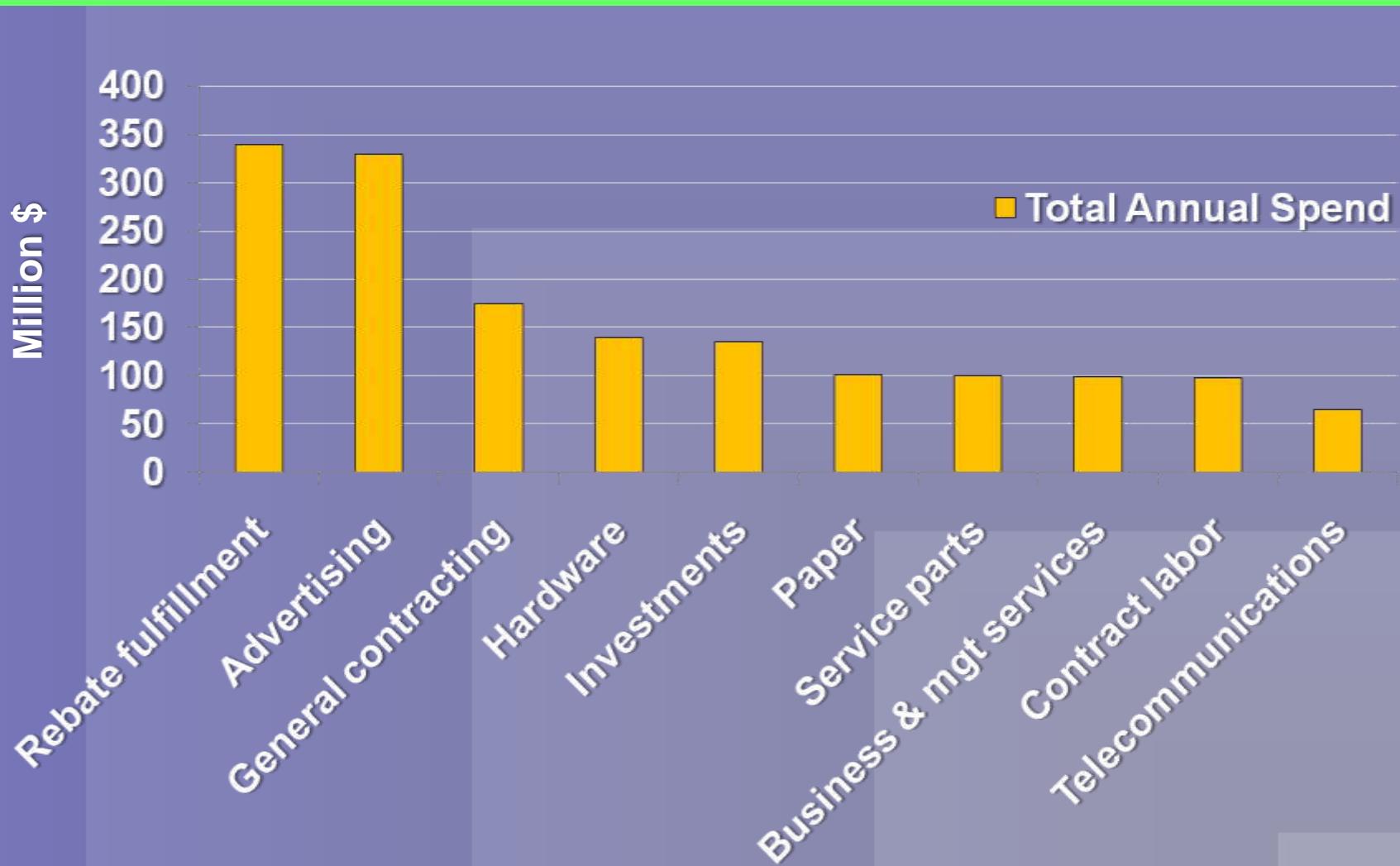
Spend Analysis Spreadsheet

- Sort by commodity
- Find total spend by commodity
- Chart top 10 in descending \$ amount
- Sort by number of suppliers/commodity
- Chart top 10 by descending # of suppliers
- Find average spend/supplier/commodity
- Apply Pareto analysis for opportunities

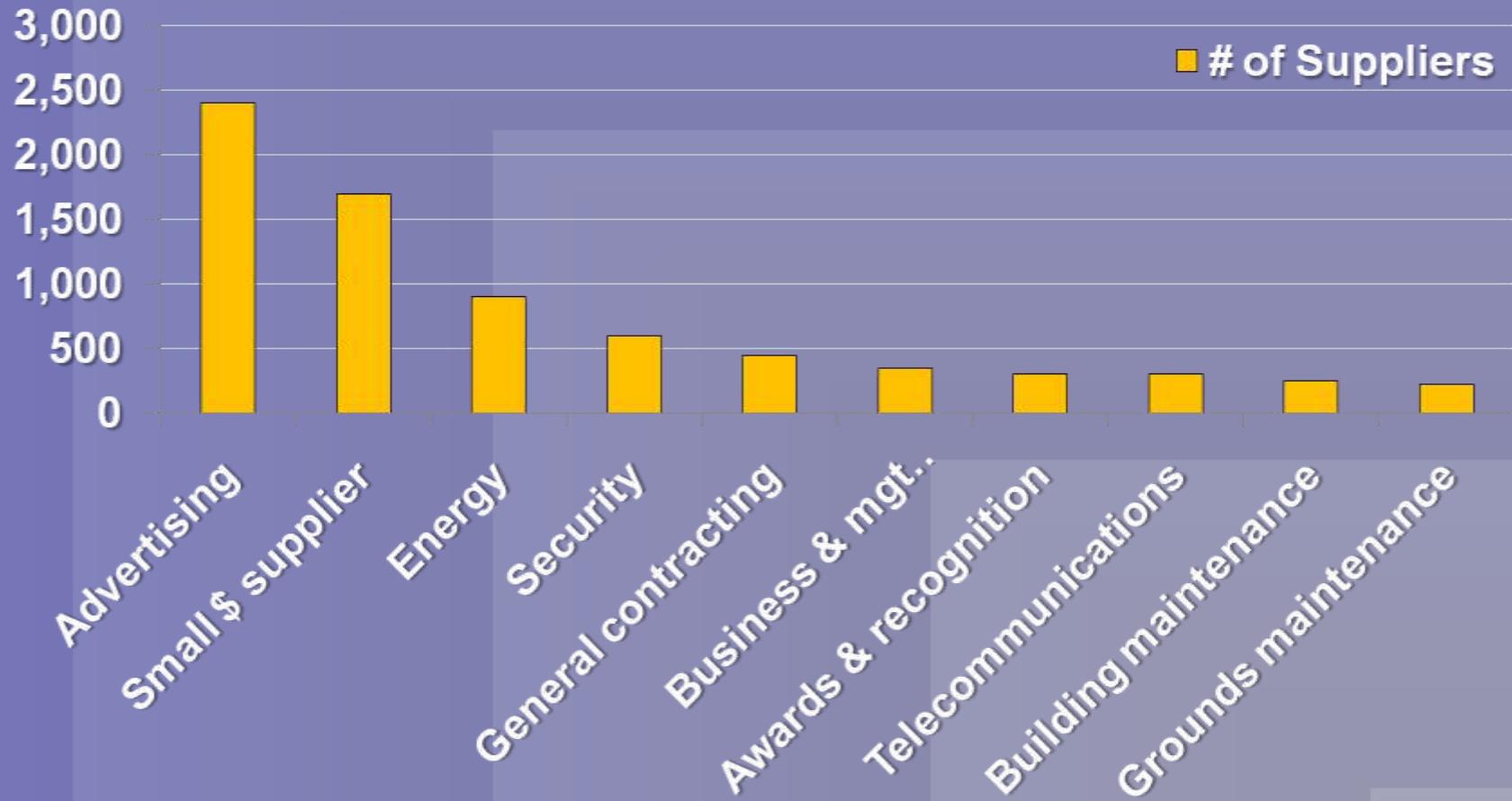
Sample Spend Categories

Supplier	Commodity	Annual Spend
Rebate Company	Rebate fulfillment & call center	\$329,873,663
Invest Company	Investments	\$130,328,512
Advert Company	Advertising	\$56,134,490
Repair Company	Service repairs	\$49,339,218
Benefits Company	Benefits	\$48,969,149
Hardware Company	Hardware	\$40,572,450
Partco	Service parts	\$39,910,372
Telecom	Telecommunications	\$31,055,599
Display Company	Store displays	\$30,020,969
Penpaper Company	Paper	\$29,175,843
Labor Company	Contract labor	\$27,880,363
Supply Company	Paper	\$23,844,707
Contract Company	General contracting	\$22,579,113
Office Company	Paper	\$22,257,690
Graphics Company	Graphic design	\$21,966,989
Payment Company	Business & management services	\$20,380,275
Freight Company	Surface freight	\$19,369,010
Paper Company	Paper	\$15,603,682
Service Plan Company	Service plan	\$15,478,827
Service Company	Service parts	\$14,868,023
Consumer Company	Consumer financing	\$14,833,333
Energy Company	Energy	\$14,087,177

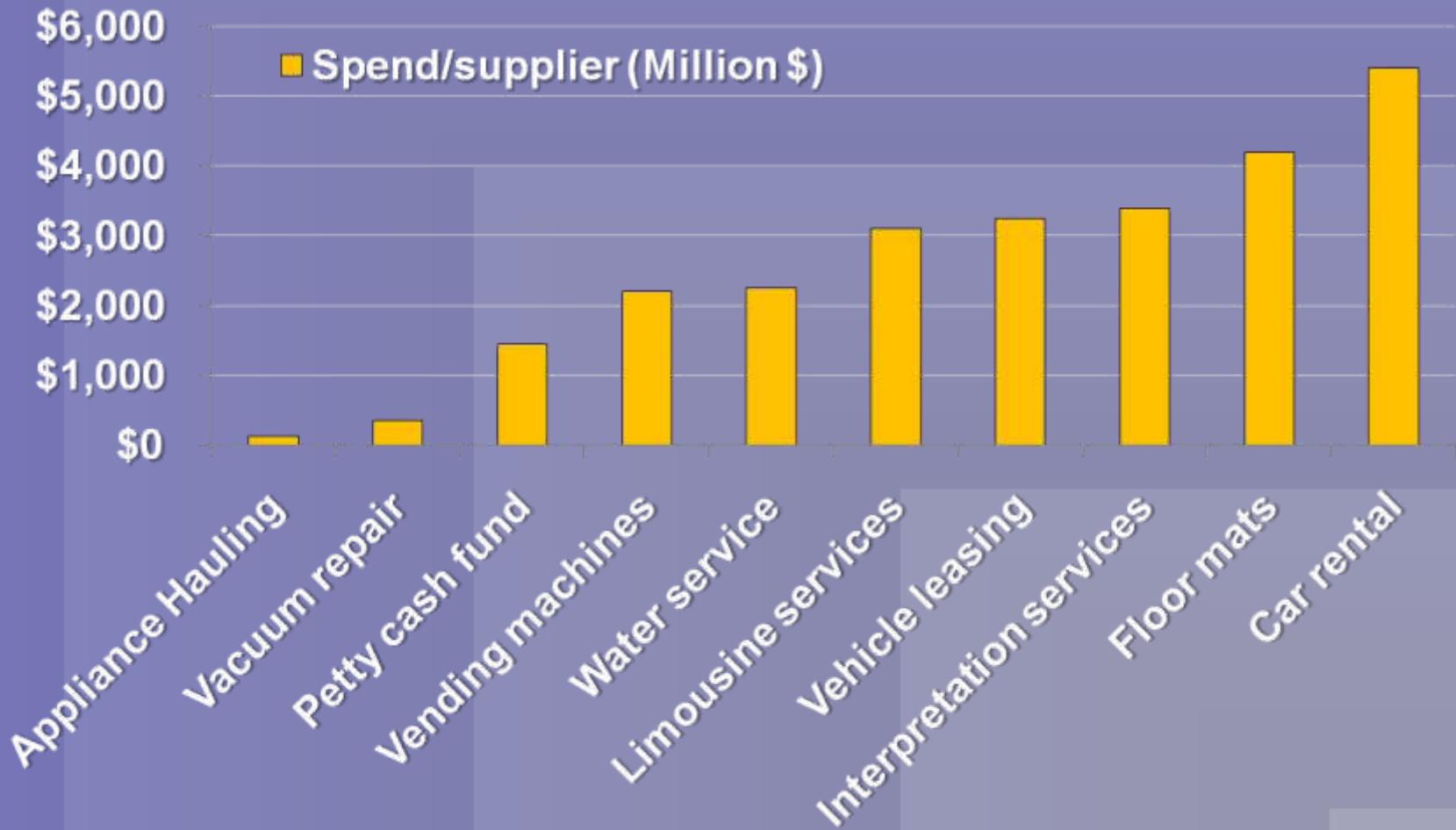
Spend by Commodity



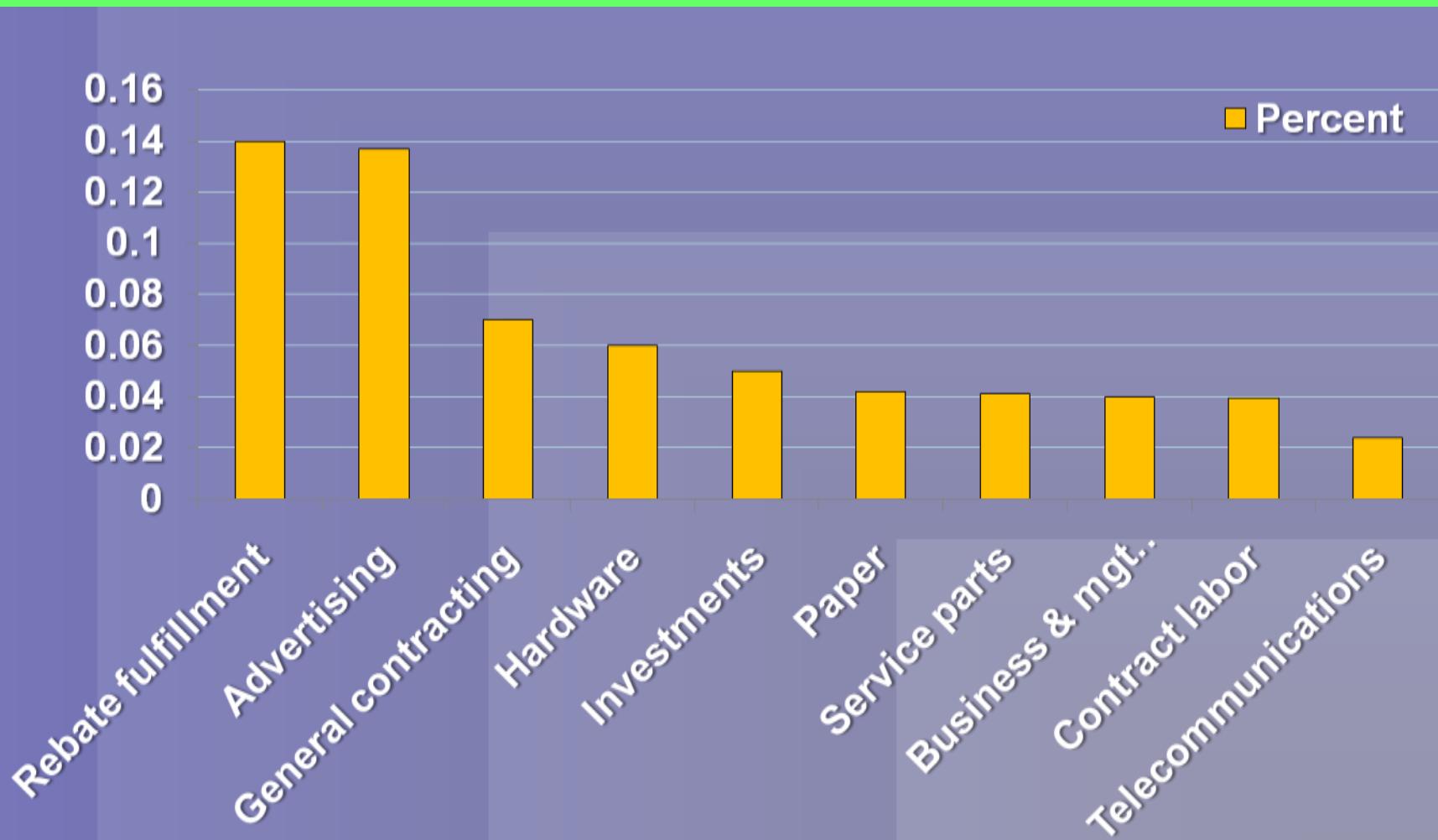
Suppliers by Commodity



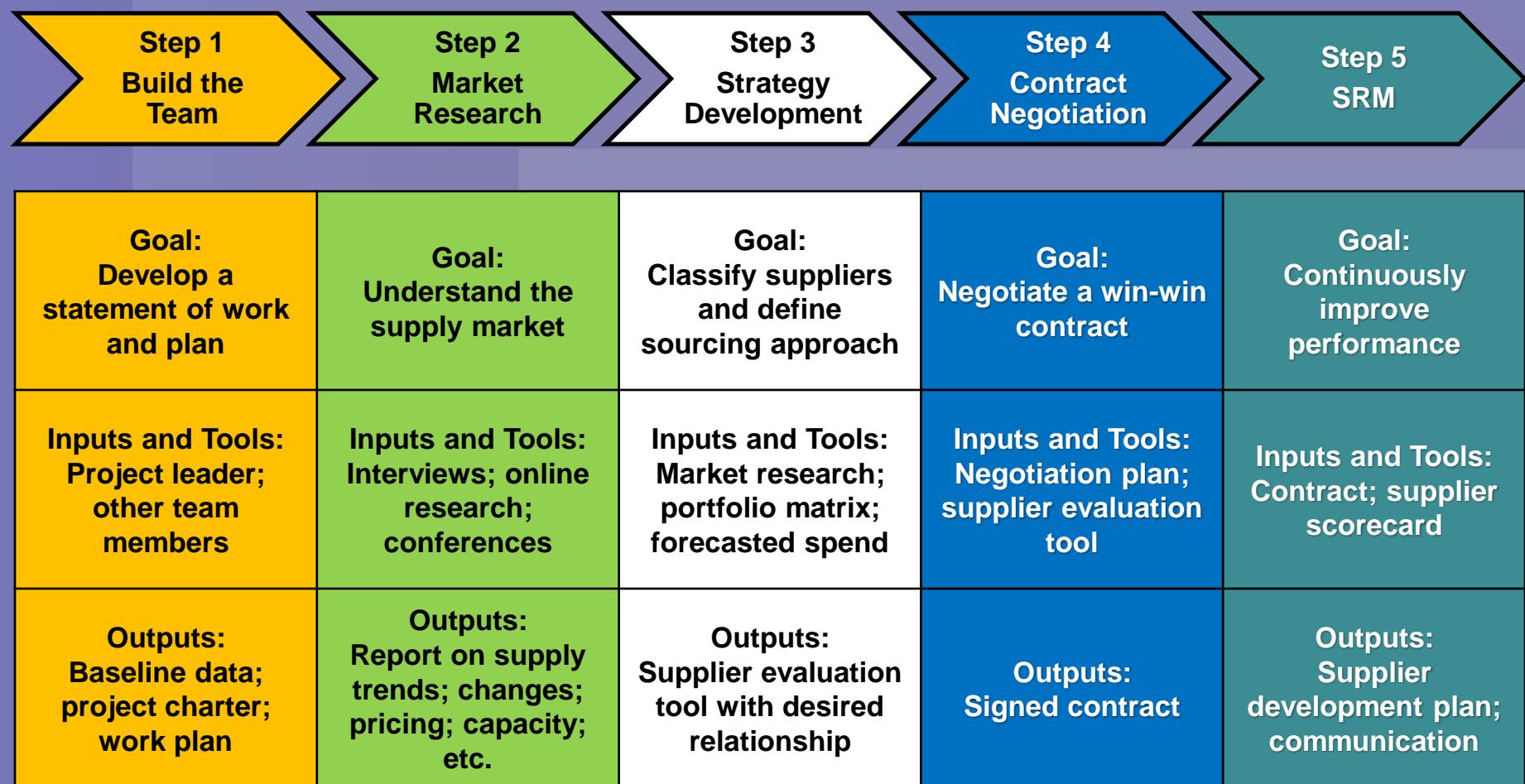
Spend/Supplier by Commodity



Percent of Total Spend



The Strategic Sourcing Process



Step 1: Team and Project Charter

- Identify key cross-functional team members
- Define the scope of the category strategy
- Publish a team charter
- Develop a work plan and communication plan

Step 2: Conduct Market Research

- Understand the purchase requirement relative to business unit objectives
- Conduct thorough spend analysis
- Identify specific internal users
- Identify current suppliers
- Research supply marketplace

Step 2: Conduct Market Research

- **Information required**
 - **Total annual purchases**
 - **Interviews with stakeholders**
 - **External market research**

Key suppliers

Available capacity

Technology trends

Price data and trends

Cost data and trends

Technical requirements

Environmental issues

Regulatory issues

Other available data

Step 2: Conduct Market Research

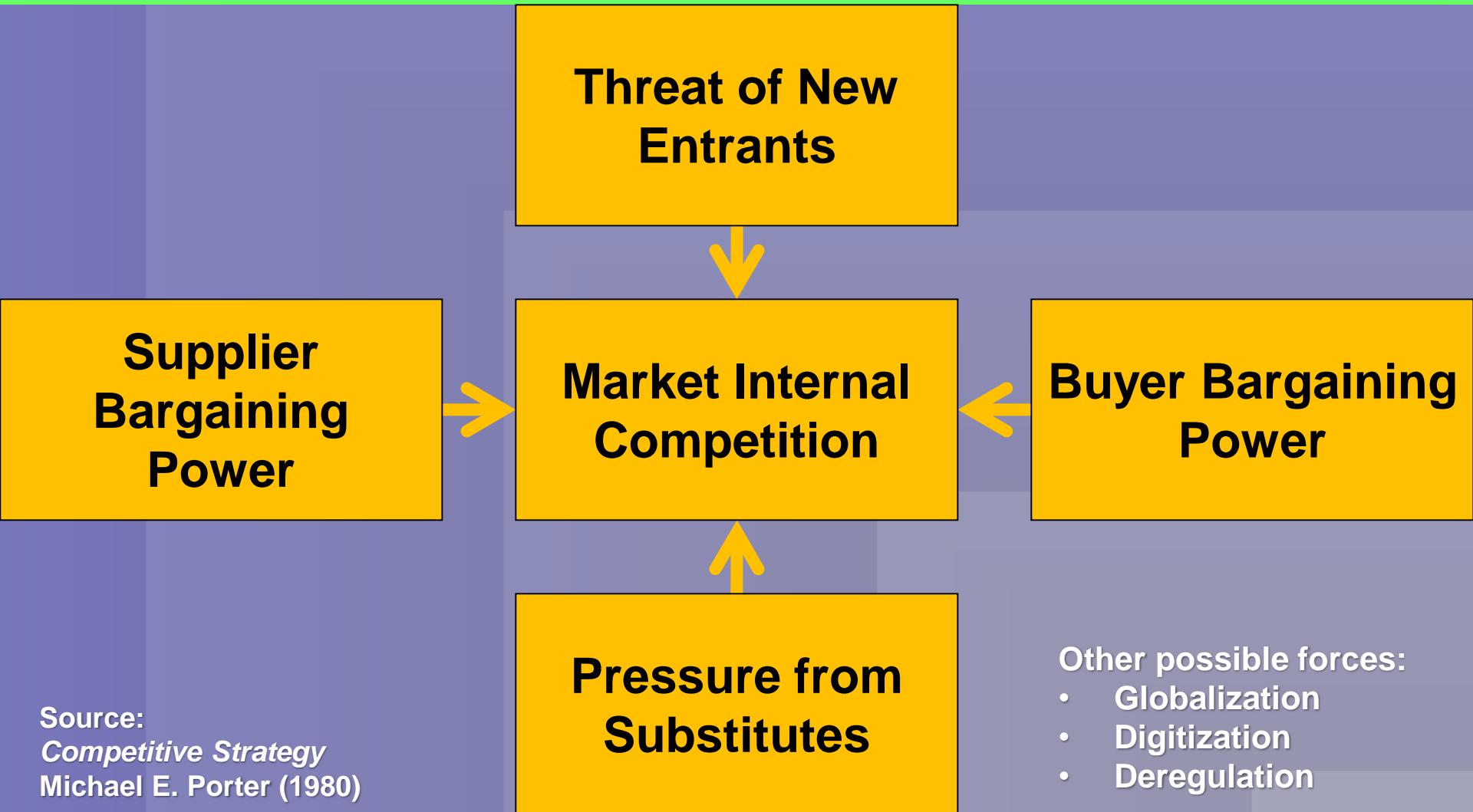
- **Triangulation – explore, compare, and contrast data from multiple sources**

Trade journals	Annual reports	Internet	Books
Snow-ball sampling	Trade consultants	Category managers	Headlines
Suppliers	Investment reports		

Step 2: Conduct Market Research

- Porter's Five Forces Model
- SWOT analysis
- Establish benchmarks through industry databases
- Requests for information
- Value chain analysis
- Supplier research

Porter's Five Forces Model



Market Internal Competition

- Speed of industry growth
- Capacity utilization
- Exit barriers
- Product differences
- Switching costs
- Diversity of suppliers

Threat of New Entrants

- Capital markets
- Availability of skilled workers
- Access to critical technologies, inputs, or distribution
- Product life cycles

Threat of New Entrants

- **Brand equity and customer loyalty**
- **Government deregulation**
- **Risk of switching**
- **Economies of scale**

Pressure from Substitutes

- Relative performance of substitute products and services
- Relative price
- Switching costs
- Buyer's propensity to switch

Buyer Bargaining Power

- **Buyer concentration**
- **Buyer volume**
- **Buyer switching costs**
- **Price sensitivity**
- **Product differences**

Buyer Bargaining Power

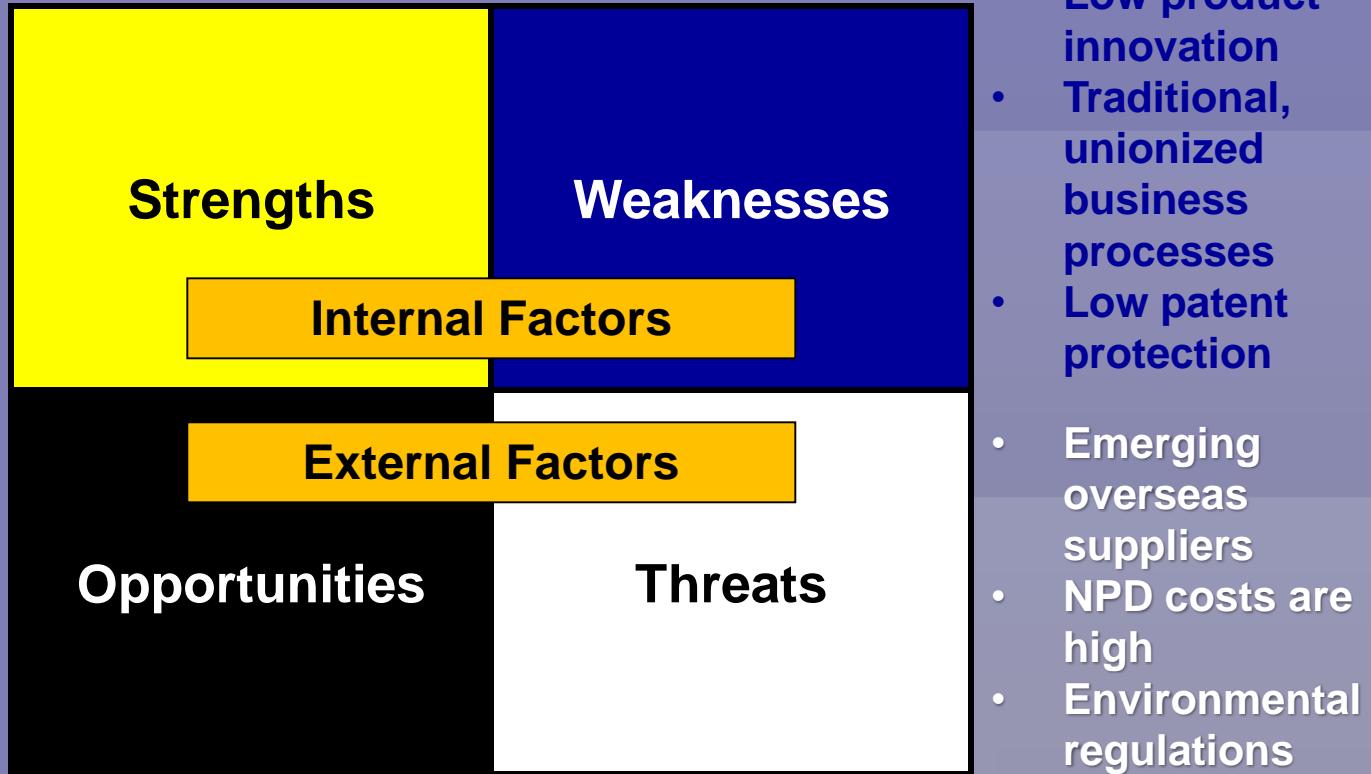
- **Brand identity**
- **Impact on quality or performance**
- **Buyer profits**
- **Availability of substitutes**

Supplier Bargaining Power

- Price of major inputs
- Ability to pass along price increases
- Availability of key technologies or other resources
- Threat of forward or backward integration
- Industry capacity utilization
- Supplier concentration
- Importance of volume to supplier

SWOT Analysis

- Broad customer base
- Established product range
- Established distribution channels
- Emergence of other uses and markets
- Emerging overseas markets
- High entry barriers



- Low product innovation
- Traditional, unionized business processes
- Low patent protection
- Emerging overseas suppliers
- NPD costs are high
- Environmental regulations

Benchmarks

- Identify critical performance criteria
- Identify relative competitive performance
- Use of industry benchmarks
 - CAPS
 - Third party consulting firms

Requests for Information (RFIs)

- **Use before a specific requisition is issued**
- **Use to obtain general information about services, products, or suppliers**
 - Does not constitute a binding document
- **Use when a large or complicated purchase is considered and when pool of suppliers must be prequalified**

Supplier Research

- Cost structure
- Financial status
- Customer satisfaction levels
- Support capabilities
- Relative strengths and weaknesses
- Buyer's fit with supplier
- How the company is viewed
- Core capabilities
- Strategy/future direction
- Culture

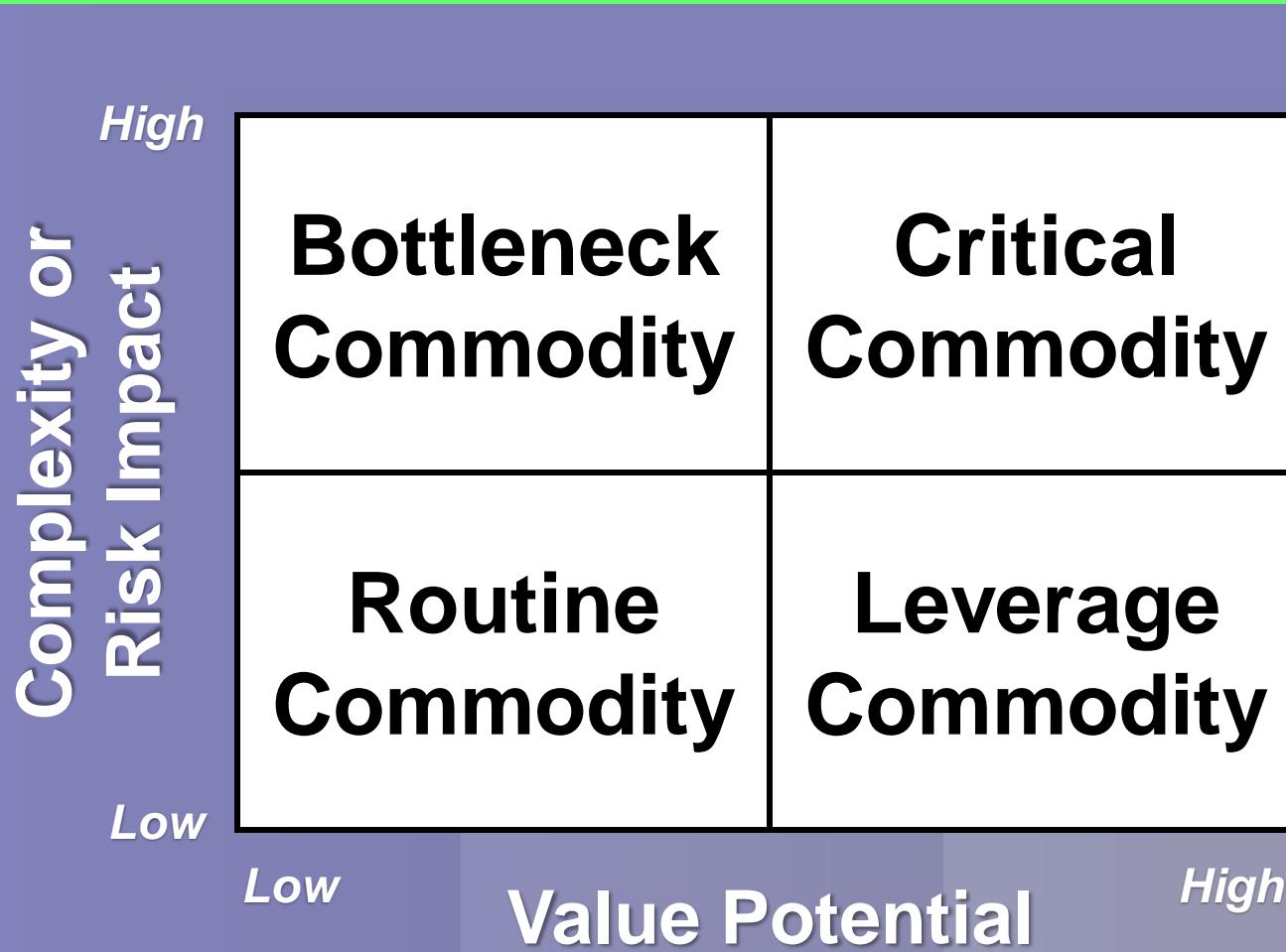
Step 3: Strategy Development

- **Portfolio analysis**
 - Critical commodity – strategic supplier
 - Routine commodity
 - Leverage commodity – preferred supplier
 - Bottleneck commodity – transactional supplier
- **Process and design capabilities**
- **Management capability**

Step 3: Strategy Development

- **Financial condition and cost structure**
- **Planning and control systems**
- **Environmental regulation compliance**
- **Longer-term relationship potential**
- **Weighted point supplier evaluation systems**

Portfolio Analysis



Critical Commodity

- Critical to profitability and operations
- Few qualified sources of supply
- Large expenditures
- Design and quality are critical
- Complex and/or rigid specifications

Critical Commodity

- **Strategy**
 - Form partnership with suppliers
- **Tactics**
 - Increase role of selected supplier

Critical Commodity

- **Actions**
 - Heavy negotiation
 - Supplier process management
 - Prepare contingency plans
 - Analyze market and competition
 - Use functional specifications

Routine Commodity

- Many alternative products and services
- Many sources of supply
- Low value, small individual transactions
- Everyday use, unspecified items
- Anyone could buy it

Routine Commodity

- **Strategy**
 - Simplify acquisition process
- **Tactics**
 - Increase role of systems
 - Reduce buying effort

Routine Commodity

- **Actions**

- Rationalize supply base
- Automate requisitioning, e.g., EDI, credit cards
- Stockless procurement
- Minimize administrative costs
- Little negotiations

Leverage Commodity

- **High expenditures**
- **Large marketplace capacity with ample inventories**
- **Many alternate products and services**
- **Many qualified sources of supply**
- **Market / price sensitive**

Leverage Commodity

- **Strategy**
 - Maximize commercial advantage
- **Tactics**
 - Concentrate business
 - Maintain competition

Leverage Commodity

- **Actions**

- Promote competitive bidding
- Exploit market cycles / trends
- Procurement coordination
- Use industry standards
- Active sourcing

Bottleneck Commodity

- **Complex specifications requiring complex manufacturing or service process**
- **Few alternate productions / sources of supply**
- **Big impact on operations / maintenance**
- **New technology or unleaded processes**

Bottleneck Commodity

- **Strategy**
 - Ensure supply continuity
- **Tactics**
 - Decrease uniqueness of suppliers
 - Manage supply

Bottleneck Commodity

- **Actions**
 - Widen specifications
 - Increase competition
 - Develop new suppliers
 - Medium-term contracts
 - Attempt competitive bidding

Step 4: Contract Negotiation

- Establishing and tasks and time lines
- Assigning accountabilities and process ownership
- Ensuring adequate resources are made availability
- Strategy communicated to all stakeholders
- Price analysis

Step 4: Contract Negotiation

- Preferred supplier lists
- Competitive bidding
- Negotiation

Price Analysis

- **Defined marketplace**
- **Best price**
- **Average price**
- **Business unit's price**
- **Expected trends in pricing**

Effective Competitive Bidding

- Buying firm can provide qualified suppliers with clear descriptions of the items or services to be purchased
- Volume is high enough to justify the cost and effort
- Buying firm does not have a preferred supplier
- Price is dominant criterion

Effective Negotiation

- Item is new or technically complex item with only vague specifications
- Purchase requires agreement about a wide range of performance factors
- Buyer requires supplier to participate in the development effort
- Supplier cannot determine risks and costs without buyer's input

Step 5: SRM

- **Continuous monitoring of both the strategy and the supplier**
- **Continuous monitoring of the supplier's performance on key goals and objectives**
- **Supplier scorecard**
 - Use quarterly and review results with supplier

Types of Strategies

- Supply base optimization
- Supply risk management
- Global sourcing
- Longer-term supplier relationships
- Early supplier design involvement
- Supplier development
- Total cost of ownership

Facilitating E-Reverse Auctions

- Buyers and suppliers able to communicate in real-time, worldwide, via the Internet
- Development of robust, user-friendly, third-party auction systems
- Significant improvements in goods and service quality and cycle time reduction

Evolving Sourcing Strategies

<i>Basic Beginnings</i>	<i>Moderate Development</i>	<i>Limited Integration</i>	<i>Fully Integrated Supply Chains</i>
<ul style="list-style-type: none">• Quality/cost teams• Longer-term contracts• Volume leveraging• Supply base consolidation• Supplier quality focus	<ul style="list-style-type: none">• E-RAs• Ad hoc supplier alliances• Cross-functional sourcing teams• Supply base optimization• International sourcing• Cross-location sourcing teams	<ul style="list-style-type: none">• Global sourcing• Strategic supplier alliances• Supplier TQM development• Total cost of ownership• Nontraditional purchase focus• Parts/service standardization• Early supplier involvement• Dock-to-stock pull systems	<ul style="list-style-type: none">• Global supply chains with external customer focus• Cross-enterprise decision making• Full-service suppliers• Early sourcing• Insourcing/outsourcing to maximize core competencies of firms throughout the supply chain• E-systems

Phase 1: Basic Beginnings

- Supply management characterized as a lower-level support function
- Short-term approaches
- Reactionary
- Impetus for change is driven by management
- Ensure adequate capacity

Phase 1: Basic Beginnings

- **Adversarial supplier relationships**
- **Limited resources for improvement**
- **Mid-level reporting**
- **Efficiency-related performance measures**
- **Focus on price reduction**
- **Transaction-based information systems**

Phase 2: Moderate Development

- Centralization of supply management function
- Commodity management
- Company-wide databases
- Company-wide agreements
- Single sourcing with long-term agreements

Phase 2: Moderate Development

- **Limited cross-functional integration**
- **Recognition of strategic supplier relationships**
- **Evaluated on achievement of competitive objectives**
- **Supplier viewed as a resource**
- **Informal internal integration**

Phase 3: Limited Integration

- Concurrent engineering
- Supplier development
- Lead time reduction
- Early supplier involvement
- Supply management strategies integrated early in product and process design activities

Phase 3: Limited Integration

- **Evaluated on strategic contribution**
- **Extensive functional integration**
- **Focus on building competitive advantage**
- **Strong external customer focus**
- **Global databases**
- **Total cost modeling**

Phase 4: Full Integration

- Assumed a strategic orientation
- Automated non-value-adding activities
- Greater focus on strategic objectives and activities
- Developing global supplier capabilities
- Systems thinking approach over entire supply chain

Observations on Strategic Sourcing

- Few organizations have fully executed complex Phase 3 and Phase 4 strategies
 - Relative complexity
 - Inadequate resources and commitment
 - Lack of supply base optimization
 - Personnel requiring higher level skills