

Making the Most of Your Purchasing Dollar

Where Does the Money Go?

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Have you recently looked at a stack of purchase orders and wondered...

Wouldn't it be great if you could reduce costs, ensure materials and services are available as needed, minimize risk, and yet maintain a "win-win" relationship with your suppliers?

- Where does all the money go?
- What would I do if that one supplier we use went out of business?
- How much could we save if we paid on time?
- How in the world am I supposed to reduce costs?

Purchasing departments all over the world ask these and countless other questions every day.

Wouldn't it be great if you could reduce costs, ensure materials and services are available as needed, minimize risk, and yet maintain a "win-win" relationship with your suppliers? It may not be as hard as you think. You can use simple approaches to examine your purchasing data and develop strategies and policies to make the most of your purchasing dollar.

Why You Should Care

You likely have a reasonable idea of how much money your company spends. Think again. A survey of 200 enterprises showed that few actually know how much they spend, on which products, or with what suppliers. Most purchasing managers actually make decisions based on intuition rather than data. In fact, experts estimate that industry is losing \$260 billion each year due to a pervasive inability to organize and analyze spend data (Minahan, Aberdeen Group, 2005).

What are some of the benefits of analyzing your spend?

- **Leveraging your suppliers:** Analyzing your purchases helps you determine what you are buying, who you are buying it from, and for how much. You can use this data to negotiate better prices, delivery schedules, and payment terms.
- **Consolidating suppliers:** You may buy the same parts, supplies, or services from a multitude of suppliers, some of which may not be preferred by your company. You may even pay different prices for the same commodities. Analyzing what you buy and who you do business with lets you identify your most valued suppliers and reduce the overall number of vendors you work with.
- **Understanding your risk:** You can pinpoint key items you may purchase from a single supplier and reduce risk by seeking alternates in case the primary supplier cannot deliver.

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These are only a few of the benefits you will realize when you analyze your purchasing data. Of course, these benefits are important to any organization. How can this information help you reduce costs? How will you justify spending money and resources to analyze your data? What is the return on investment?

Affecting the Bottom Line

Firms began to realize that centralizing how purchases are made can greatly affect the bottom line.

The manufacturing boom brought on by World War II demonstrated the need for supply chain management. However, at that time only 20 percent of corporate spend was under the control of purchasing departments. In 1990, the number grew to 60 percent. (Procurement Strategy Council, Project Support Memorandum, November 2001) Firms began to realize that centralizing purchasing can greatly affect the bottom line.

Over the years, purchasing has evolved from an activity within an operations or finance department to one of the more strategic functions in the corporate structure. Purchasing is no longer a function that simply supports the process. It is now considered the primary antecedent for cutting costs. The concept is simple - if you improve how you spend money, you make more money.

If a company's purchased materials make up 60 percent of their expenditures and their profit margin is 10 to 12 percent, a one percent savings in purchasing can result in a 6 percent improvement to the bottom line!

Increased competitive pressures, global influences, and other external factors, have pushed toward continuous purchasing improvements. The good news is that you have the attention of your corporate leadership when you approach them with a plan to improve how you spend the company's money. Statistics show that many organizations can reduce spend from 5 to 10 percent simply by implementing good purchasing practices and strategies. If a company's purchased materials make up 60 percent of their expenditures and their profit margin is 10 to 12 percent, a 1 percent savings in purchasing can result in a 6 percent improvement to the bottom line (SVA, Purchasing Strategies for Achieving Breakthrough Performance).

Finding Answers in the Data

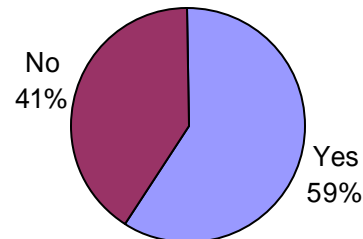
Most procurement officers would agree that most of the answers to those burning questions are buried somewhere in the data. Therefore, the obvious reaction might be “If I looked more closely at the data, I should be able to find what I am looking for.” Yet looking for an answer in most companies’ data can be like looking for a needle in a haystack.

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The next thought you probably have is, “I need some way to make sense of all this data.” A survey of purchasing executives showed that

less than 60 percent of the companies surveyed practiced some type of spend analysis (Purchasing.com, 2005). As you may realize, it is easy to decide you need to analyze your data. It is a completely different effort to do something about it.

Are You Practicing Spend Analysis?



Developments in information technology have enabled companies to view and analyze procurement data in many ways. Systems can store and manage terabytes of data and provide easy access to both recent and historical data. Interactive tools have replaced reports and empower users to view data in numerous ways.

You can get the information you need to make purchasing decisions about your expenditures in five simple steps:

- **Collecting the data**
- **Cleansing and classifying the data**
- **Storing the data**
- **Presenting the data**
- **Analyzing the data**

Typical Procurement Systems

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Many United States-based organizations find themselves in a less than ideal situation when it comes to using data from their procurement systems. It is rare to find an organization that keeps all their procurement data in a single system. Many companies store their direct spend data in one system and their indirect spend data in another system. Some groups do not even track indirect spend. Data for corporate credit card purchases is normally stored by the card provider. Companies that have absorbed or acquired other companies may have a significant number of procurement systems that are disconnected from each other.

Of course, it would be ideal if you could purchase a new, state-of-the-art procurement system and migrate all purchasing data to it. If you can convince your leadership to do this, you have more influence than most. The reality is you may have to deal with multiple disparate systems. Luckily, customizable tools are available that allow you to collect data from a variety of sources.

How Clean is Your Data?

Quality data is the fundamental ingredient in any good system. Your analysis is only going to be as good as the underlying data.

Have you ever seen a purchase order where the purchased item is documented as something like “See Joe?” While this may mean something to Joe, it does not help the person who is trying to determine what was purchased. You may need to cleanse data or implement business rules for data entry to ensure quality data in the future.

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Another common issue is the lack of standardized names throughout a system. For example, Plant 1 buys from Pittsburgh Plate Glass Company, Plant 2 buys from PPG, and Plant 3 buys from PPG Industries. To the experienced buyer, these are all the same supplier. In a system, they are three different suppliers. Even when descriptions, names, and part numbers exist, it is normally impossible to summarize purchasing data into groups that can be effectively analyzed.

You can avoid these issues. The simplest way is to use codes or identification numbers for all supplier names and purchased items. Using services to “classify” items and suppliers into common normalized groups is quickly becoming standard. 43 percent of businesses do not have a product classification system. Of the 57 percent that do, more than half have more than one system. It is not unusual for a company to have five or six systems and no idea how much they spend across the enterprise (Dunn & Bradstreet, 2005).

The best way to enable quality spend analysis is to mold your data into something more useful by classifying your items into commodity groups and normalizing your supplier names.

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- **Classifying items:** The United Nations Standard Products and Services Code® (UNSPSC®) is commonly used to classify purchased items and services into a hierarchical structure by assigning codes based on an item's description. You can purchase software or subscribe to services specialized to classify items.
- **Organizing suppliers:** Services also exist to normalize supplier names and provide information about those suppliers. This helps you to structure supplier data by the classification code, not the name entered on the purchase order.

Data Warehousing

Now that you have collected your data, cleansed it, and classified it, what are you going to do with it? Data warehousing technology provides a way to store and organize your data so you can mine meaningful information from it. A META Group survey of Fortune 500 companies reports that 90 percent either have a data warehouse or are building one (META Group, Inc., 2005).

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A data warehouse can function like a human brain. Your brain does not just store data it also remembers key points and organizes them into useful thoughts. If you burn yourself your brain remembers to signal you the next time you are near a hot surface. Data warehousing provides the enterprise with a similar memory.

A good data warehouse model stores transactional information and the data required to support it. Knowing the name of a key supplier is a good start, but capturing their address, agreed payment terms, phone numbers, and other information is key.

Going a step further, a data warehouse model can include a dimensional structure that makes data viewable in a variety of ways.

A multi-dimensional database (MDDB) stores the data using several data dimensions. A dimension is a hierarchical way of looking at the data. For example, a time dimension may include data by year, quarter, and month. Another example of a data dimension is the UNSPSC item classification hierarchy. This data “cube” allows you to rotate and slice the data in almost endless ways. You can even cross dimensions in complex ways. For example, *Show me how much we spent on fasteners in Q1 of 2004 from suppliers not under contract.*

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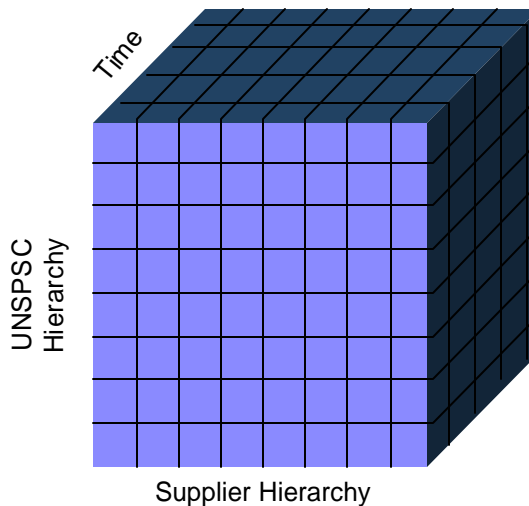


Figure 1 – MDDB Data Cube

Data Presentation

The fundamental way to analyze data successfully is through discovery realized by asking intelligent data-related questions. Several interactive tools are on the market that allow you to “slice and dice” your data. These tools can be customized so that purchasing executives can see data at a high level while buyers can view the same data in detail.

Think of the data cube as a Rubik's Cube. OLAP helps you rotate the segments of the cube and even disassemble it.

Most On-Line Analytical Processing (OLAP) tools also support “drilling” into the dimensional structure. For example, with the click of a mouse you can view your suppliers by country, by state, and then by city. Some tools even support “reach-through” allowing you to access the associated transactional records.

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There are a wide variety of OLAP tools on the market. Each has its advantages and disadvantages. However, an OLAP Survey answered by 2,897 people in 63 countries shows the overall benefits of OLAP regardless of product. The following chart uses weighted scores to illustrate what potential business benefits were realized after implementation of an OLAP tool (Pendse, DM Review Magazine, 2004):

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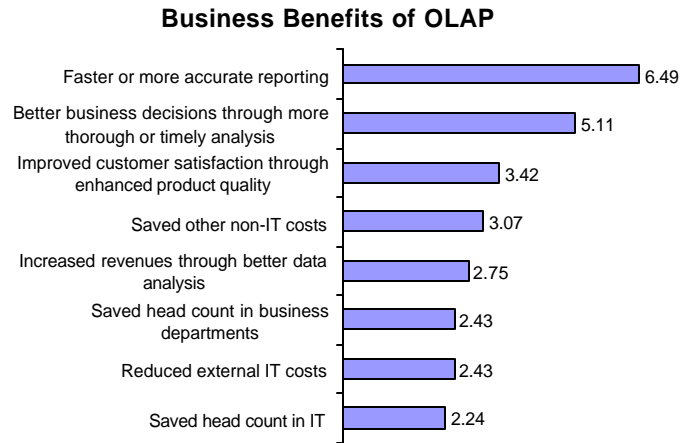


Figure 2 — Benefits of OLAP

Analysis

The final step to managing spend is to analyze the data. If you implement and manage the previous four steps well, data analysis is simple.

The primary objective to keep in mind when performing spend analysis is to back up new strategies, policies, and decisions with the appropriate data. You cannot manage your purchasing if you cannot measure your data.

"Information is the starting point in understanding where the opportunities are," says David McCormick, president of Sunnyvale, Calif.-based Ariba. "You can only drive action throughout your organization when you have accurate information that you can deliver at the right time to the right people. The companies who are excellent at spend management do it with facts and figures that get top management buy-in." (Purchasing Magazine, 2004)

Conclusion

When it comes to strategic buying, nearly three-fourths of all U.S. corporations have implemented formal programs, and most of the remaining firms plan to do so.

Analyzing spend initiates a challenging adjustment to the way you do business – it requires people to think differently. Traditional methods of saving procurement dollars almost always involved reducing prices.

However, we live in an era where prices continuously fluctuate due to price and availability of raw materials, supply and demand, energy costs, and even weather. This constant change makes non-traditional methods even more necessary. If you can find ways to spend less that are long-term and not so unpredictable, you can make a greater impact on your company's profitability.

If you collect the data, cleanse it, fit it into a data warehouse model, present it, and analyze it, you will realize opportunities for savings in areas you never looked before. By using proper data and the attitude to think "outside the box," savings can be realized through many strategies and policies, such as:

- **Reducing indirect spend** by moving these purchases to direct suppliers or e-procurement.
- **Using fewer buyers** by consolidating suppliers of common commodities.
- **Negotiating better delivery schedules** by understanding where your suppliers are and how well they are equipped to meet your needs.
- **Negotiating better payment terms and payment discounts** by knowing how long you typically take to pay suppliers and determining if you can improve that.

When it comes to strategic buying, nearly three-fourths of all US-based corporations have implemented formal programs, and most of the remaining firms plan to do so. Only 5 percent are on the outside looking in (Purchasing Magazine, 2004). Where are you?

About Qualex

Qualex Consulting Services, Inc. consults exclusively in the use of SAS, with experience in virtually every SAS technology and module.

Our consultants have worked on a wide variety of projects representing nearly every industry within the international SAS user community. We can give you the benefit of our experience in solving business problems and providing solutions with SAS. Quality is our top priority. All work, including on-site work, is supervised by senior consultants with at least ten years of SAS experience.

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