#### Maximizing Your Value-Add: Conducting a Best-in-Class Market Analysis

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**Abstract.** Completing an effective and "telling" market analysis provides assurance to the sourcing professional that specific sourcing strategies and goals are both reasonable and achievable. In order to complete the analysis, guidance should be provided on the process to use in completing the analysis, and the sources of information. There is a plethora of information sources available for use, but some sources are critical. The market analysis should provide the backup data needed so that supply management goals can be predictably set.

**Background.** A market analysis is essential for any commodity strategy or sourcing because the results give the context for the procurement of goods and services. Market analysis provides data on suppliers, cost trends, market segments, extent of competition, cost drivers, use of technology, buyer and supplier concentration and customer needs. Other aspects include:

- Regulatory issues
- Changes in technology
- Supplier profiles
- > Financial analysis
- Economic drivers
- Product analysis
- Commodity issues and trends
- Raw material prices and trends
- Product cost curves
- Distribution trends

While the list is not exhaustive, it illustrates that there are many areas where additional information may be required. The key is to realize that market analysis is an integral component in managing your purchases and is crucial to effective procurement. A template and methodology along with sources of information is useful in providing guidance to staff.

The Market Analysis Process. Little guidance is available to sourcing professionals on the steps to take in completing the market analysis. In this paper, a six-step process will be proposed. The purpose of market analysis is to help determine long-term profitability, examine the competitiveness of a market, assess the behavior of suppliers in the market, and to define potential benefits to the sourcing organization. The market analysis answers the following questions:

- What do I buy?
- ➤ Who do I buy from?
- ➤ When do I buy?
- What price should I pay?

#### ➤ How do I buy?

The most difficult aspects of developing answers to these questions lie in "when to buy" and the price to be paid.

For sourcing, a market is the supply group of similar of closely related products. Some buyers only consider what their current suppliers supply as their market. This is probably due to the lack of time or experience, but this definition should be expanded to include broad markets of goods and services, not broad lists of suppliers in an industry. Market analysis data is best used for the development of category plans and annual sourcing goals.

**The Market Analysis Process.** There are five steps required to be completed to develop an effective market analysis. The steps are represented in the chart below:



The market analysis should consider market uniqueness such as whether the products / services are related to raw materials, intermediate materials, finished goods (all three considered direct spend), or overhead and support items (indirect spend). Data sources, supply chain impact, and cost structures will be affected by market uniqueness. Further, the analysis should be defined as global (across all geographic regions), regional (large geographic regions of many countries), domestic (within a specific country), or local (regions within a country).

Market Data Sources. Data sources can be broken down into three areas:

- ➤ Market analysis such as NCDEX or Chicago Board of Trade (for commodities)
- Industry price information sources such as RISI or inform ecommerces (for commodity and product pricing trends)
- Market and industry information from sources such as ABN-AMRO, supplier meetings, analyst surveys (from analyst firms such as Gartner), and from internal company sources.

Sourcing should develop potential sources in the following categories:

- 1. Commodity reports
- 2. Government and regional databases
- 3. Discussions with other buyers
- 4. Interviews with customers
- 5. Interviews with suppliers

Specific questions should be developed so that data collection is time efficient. A checklist of databases could also assist in the selection of potential data sources.

Now, to the six step market analysis process.

#### Step 1: Identify the market and describe its key characterization

This should consider supply and demand, type of market, industry competitiveness, and product / service life cycle.

a. Supply and Demand: Review the effect of changes in supply (quantity available in

market) on prices. Also assess the effect on price changes on

demand. Last, assess the effect of price changes on inventory / stocks. Determine whether effects are elastic

(variable) or inelastic (stable, consistent).

b. Type of Market Analyze the extent of competition in the market as this will

determine prices, supply and supplier competition. See the

following chart for the four types of markets, and the

implications on price and extent of competition.

# Market Competition, Concentration, and Profitability

The extent of competition will determine how willing suppliers will be to reduce their costs

Criteria	Type of Market						
	Perfect Competition	Monopolistic Competition	Oligopoly	Monopoly			
#Sellers	Many	Many	Few	One			
Product Characteristics	Homogenous	Differentiated	Homogenous (Pure) Differentiated (Impure)	Unique			
Barriers to Entry	None	None	High	Very High			
Competitive Strategy	Price Taker	Price on Value	Mutual Interdependence	Price Maker			

## Type of Market & Purchase Price

The price you pay for your supplies is influenced by the type of market that you are buying within.

Type of Market	No. of Suppliers	Type of Products	Marketing Method	Price Control	Relevant Sectors	
Perfect Free Market	Many	Identical	Exchange, Auction	None	Agriculture, Telecommunications	
Imperfect Free Market	Many	Different	Advertising & Product Quality	Some	Retailers, Software Development	
Oligopoly	Few	Different	Advertising & Product Quality	Some	Auto Industry, PC Makers	
Oligopoly	Few	Identical	Advertising & Service Quality	Some	Electricity, Gasoline	
Monopoly	onopoly One Unique		Public Relations	Considerable	Post Office (Operating Systems for PC and Chips for computers are near- monopoly)	

c. Industry Analysis:

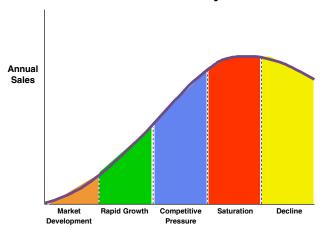
Use an industry competitiveness model such as Michael Porter's Five Force Analysis, evaluating entry and exit barriers, power of buyers and suppliers, and the profitability of an industry from a supplier's perspective. This will provide a perspective on market structure, supply chain, and extent of potential competition.

d. Product / Service Life Cycle

Market maturity can be predicted based on stages of life cycles for products / services. Progression along the life cycle curve determines the type and degree of competition in a market. Life cycles reveal the amount of market growth, operating margin, and profits you can expect. Depending on the stage of a particular supplier or a group of suppliers products are posted on, design features, pricing, or distribution policy will change accordingly. As an example,

prices decrease during times of market penetration and prices increase once the market matures.

### Product / Service Life Cycle



PRODUCT/SERVICE CYCLE

Step 2: Clarify the cost structure of the market and technology influence

a. Cost structure of the market:

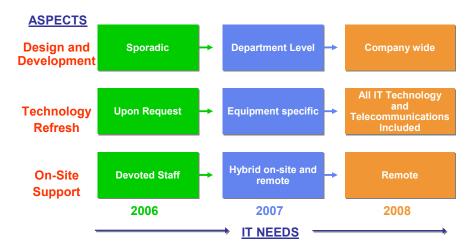
This is probably the most difficult task to be competed because the data is typically extraneous to the buying organization, unless there are subject matter experts (SMEs) available. Buyers should know the elements of the product / service costs, and trends in market prices versus costs, in order to develop the prices that their respective organizations should pay.

Data sources can be found to indicate how elements of costs change on a quarterly basis, and the effect on pricing and profits.

b. Impact of technology on cost:

In this sub-step, buyers should review the effect of technology advances on prices and profits. Some technology may be too expensive, too preliminary or not suitable to the buyer's needs. Technology analysis can be used to show current and emerging technologies, standard versus custom products, and price / performance ratios. See the following chart for an example of the factors to be considered for a roadmap for IT services:

## Example: Technology Roadmap for IT Services



By studying the technology roadmap of an organization, such as the one described above, sourcing staff can adequately portray their requirements to the supply base.

Roadmaps answer the following key questions. Answers will identify critical product needs, technological alternatives, and potential supplier solutions:

- What are the technological changes in the market / product?
- How critical is the technology to the market / product?
- What are the drivers of technology?
- > Factors to consider include:
  - Nature of technological advances (complexity, degree of obsolescence, cost)
  - o Patents

#### Step 3: Analyze the external macro environment

Buyers need to understand the specific economic, political, social, and technological factors present in the geographic areas of the world in which products / suppliers are purchased. Political risks include trade restrictions and tariffs; economic factors include interest rates, inflation, raw materials, and labor increases; social factors include education level and level of innovation; and technological factors include infrastructure, telecommunications, and extent of competition.

If buyers are planning to use global sources, the use of technology, particularly computer technology, is essential. See the following chart for an example of one research source for "ereadiness" of specific countries.

## Economist Intelligence Unit e-readiness Rankings, 2006

2006 e- readiness rank (0f68)	2005 rank	Country	2006 e- readiness score (of10)*	2005 score	2006 e- readiness rank (0f68)	2005 rank	Country	2006 e- readiness score (of10)*	2005 score
1	1	Denmark	9.00	8.74	23	22	Taiwan	7.51	7.13
2	2	US	8.88	8.73	24	23	Spain	7.34	7.08
3	4	Switzerland	8.81	8.62	25	24	Italy	7.14	6.95
4	3	Swede	8.74	8.64					
5	5	UK	8.64	8.54	51	48	Columbia	4.41	4.18
6	8	Netherlands	8.60	8.28	52	52	Russia	4.30	3.98
7	6	Finland	8.55	8.32	53	49	India	4.25	4.17
8	10	Australia	8.50	8.22	54		Jordan*	4.22	
9	12	Canada	8.37	8.03	55	53	Egypt	4.14	3.90
10	6	Hong Kong	8.36	8.32	56	51	Philippines	4.04	4.03
11	9	Norway	8.35	8.27	57	54	China	4.02	3.85
12	12	Germany	8.34	8.03	58	55	Ecuador	3.88	3.83
13	11	Singapore	8.24	8.18	59	56	Sri Lanka	3.75	3.80
14 (tie)	16	N. Zealand	8.19	7.82	60	58	Nigeria	3.69	3.46
14 (tie)	14	Austria	8.19	8.01	61	57	Ukraine	3.62	3.51
16	15	Ireland	8.09	7.98	62	60	Indonesia	3.39	3.07
17	17	Belgium	7.99	7.71	63	63	Algeria	3.32	2.94
18	18	South Korea	7.90	7.66	64	62	Kazakhstan	3.22	2.97
19	19	France	7.86	7.61	65	59	Iran	3.15	3.08
20		Bermuda*	7.81		66	61	Vietnam	3.12	3.06
21	21	Japan	7.77	7.42	67	64	Pakistan	3.03	2.93
22	20	Israel	7.59	7.45	68	65	Azerbaijan	2.92	2.72

\*New to the annual rankings in 2006 Source: Economist Intelligence Unit, 2006

This type of information would be helpful in assessing the environment of a firm in a specific country in terms of the overall IT infrastructure supporting telecommunications and Internet dealings.

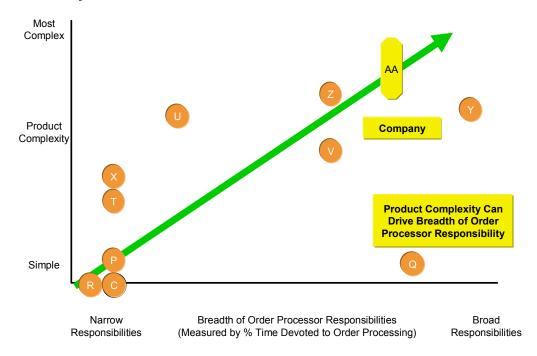
#### Step 4: Conduct a Competitor Analysis

This will provide data on supplier capabilities within a specific market. Data should be collected on supplier financials (more difficult to receive for global non-public companies).

Benchmarking can be used to define best practices within a market or across markets. Buyers can then compare the best practice performance against their own results such as cost savings, standard lead times, total costs, and supplier performance. This analysis, in turn, can be used to develop sourcing graphs along with the required level of personnel and organizational support.

Suppliers can be compared based on product / service, breadth of capability and customer service, and potential price flexibility / range. See the following example of an analysis of product / service complexity of order processing capability:

## Sample Relative Performance



By assessing relative performance among suppliers, sourcing staff can make comparisons of capability and develop total cost relationships.

#### Step 5: Conducting the market analysis

A template should be used to distill all the research into usable information that could include key market characteristics, cost structure, cost drivers, technological influence, macroenvironment risk analysis, and competitor analysis.

Market analyses should be completed / updated at the outset of yearly category plans, when sudden changes to the market occur (such as new technology is introduced or major industry consolidation), or when the buying strength of the buyer or selling strength of the supplier are grossly increased or decrease significantly.

#### **REFERENCES**

<sup>&</sup>lt;sup>1</sup> Porter, Michael E., *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, The Free Press, New York, NY, 1998.