

## **Supply Market Analysis for a Competitive Advantage**

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**Abstract.** Supply management professionals should use supply market analysis in their sourcing process to establish and maintain a competitive advantage while also reducing supply risk. Supply market analysis includes developing a commodity profile, examining cost structures, researching suppliers, and identifying key market indicators.

### **Supply Market Analysis vs. Market Intelligence**

Market Intelligence is a term currently experiencing rapid growth and broader acceptance within professional supply chain management organizations. In a supply chain management context, market intelligence can be defined as the process of gathering and analyzing information relevant to a company's supply markets specifically for the purpose of supporting accurate and confident decision making in the procurement process.

The concepts of "supply market analysis" and "market intelligence" are closely related and while each can be conducted independently, supply market analysis should be understood to be a key element and integral part of any robust market intelligence program. Both concepts involve the gathering, recording, and analyzing of data and information about customers, competitors, and the market at large in order to facilitate better decisions.

The key distinction that should be drawn between these two concepts is that a market intelligence program, while drawing on secondary research like a supply market analysis, should itself be active, dynamic and constantly undergoing revision. Supply market analysis and "market research" are more static terms which may conjure up images of dated documents and not the vibrant living concept that supply chain professionals should think of when they think of a robust market intelligence program. Yet being able to complete a supply market analysis is a skill that is essential for every supply chain professional to master, irrespective of whether or not that individual or company can afford to fully fund and charter a market intelligence program. This article focuses on the essential elements of supply market analysis.

### **Supply Chain Professionals Need Intelligence, Not Information**

Intelligence is a collection of information pieces that have been filtered, distilled, and analyzed. A properly executed and insightful supply market analysis requires that significant and disparate amounts of research materials be collected and examined. Because of this requirement, it is important to briefly explore the two different types of research that should be used to develop your analysis.

Primary research is information gathered through interactions with other people typically through meetings, one-on-one interviews, focus groups, and surveys. Primary research is often more valuable and insightful than secondary. Secondary research is information collected from existing literature, publications, broadcast media, and other non-human sources. Secondary research is in general easier to gather than primary and often contains a value proportionate to the effort and expense required to obtain the information.

Much of the core information used to develop a supply market analysis can be garnered through secondary research and the advent of the internet has removed many barriers to collecting primary research. However, the deluge of information available on the internet is available equally to every one of the 1.3 billion current users. Primary research therefore is absolutely essential for developing supply market analysis that provides the intelligence needed to create a competitive advantage.

### **Supply Market Analysis Essentials**

The primary objective of conducting a supply market analysis is to develop the intelligence necessary to drive better procurement decisions. Creating an overall analysis of the supply market can be more easily understood and executed by first understanding the key elements of the supply market which need to be examined. Identifying and organizing your intelligence needs makes data collection easier and these subsequently collected elements can then be summarized into the final report as section headings.

**Develop Commodity Profile.** The Commodity Profile section of the supply market analysis gives the reader a clear understanding of what specific product or service is being examined and defines the scope of the analysis. Key information to be collected and reported within this section include: Product Classification (SIC, NAICS, UNSPSC), Commodity Description, Market Size and Growth Rate, Market History, and CTQ (Critical To Quality) Factors. The CTQ information should be specific to the organization's needs and is vitally important in both determining cost structures and researching suppliers. Good sources of information to be used in developing the commodity profile include: supplier interviews and site visits, internal subject matter experts, trade journals and magazines, presentations from industry trade conferences and investment analysis reports from your broker. The heavy reliance by business on email, fax and internet has provided the supply chain professional with an excellent opportunity to create a competitive advantage in this area. Talk to people. Conduct interviews with published authors, suppliers and subject matter experts. A rich and full rolodex was the internet for research professionals 15 years ago and is just as valuable today.

**Determine Cost Structure.** Much has been written about both the importance and the methods which can be utilized to evaluate supplier costs. The core information needed to understand supplier costs are mostly standard throughout the world and include Material Cost, Labor, Transportation, Energy, Overhead and so forth. Economic Census Reports, which are produced by the government and organized by six digit NAICS code, provide some limited information but true understanding requires deeper research. A best practice in this area is the use of published financial statements and in particular the notes section of supplier annual reports in developing cost profiles. Also, reviewing presentations given by the supplier to the investment community and attending scheduled conference calls where financial performance

is discussed can reveal information that the supplier would be less likely to provide in an interview with a supply chain professional.

**Research Suppliers.** Understanding the structure and history of the supply base is fundamental to creating a supply market analysis for obvious reasons. Well executed research in this area should begin with a clear statement on the number of suppliers and whether the industry is fragmented or consolidated, but should also include intelligence on the availability of low cost country suppliers, possible supply channels, geographic distribution of suppliers, and recent M&A activity. Internal sources can be used to assist in supplier research, but realize that internal subject matter experts may provide inaccurate or incomplete information regarding the supply base. Over time, subject matter experts tend to unconsciously narrow their views to become increasingly knowledgeable about ever more specific functions. Thus they are frequently unaware about recent changes in the supply market or specific supplier capabilities. Trade associations are a good source of information about a particular industry sector, but are not a good source of information for a particular company. However, phone calls to trade association staff members can often be productive and may lead to some interesting interviews. Also, some low cost ways to get supplier identification started are to scan the Table of Contents from published market research reports which are often available for preview on the internet, and to review supplier annual reports and investor reports for mention of market share statistics and legal actions from competitors.

**Identify Key Market Indicators.** Identifying the optimal market indicators for your particular industry, commodity, or area of spend is vitally important and one of the most challenging tasks in the supply market analysis. The importance of these market indicators is twofold. First, when viewed at the time of the completion of the supply market analysis they can provide insights into the current state of the market and may help codify early research findings. Second, when tracked and viewed over time these indicators can provide the data needed to identify seasonality, cyclicity and other market trends that repeat over time or under certain conditions. It is this latter use that gives the analyst the ability to create an early warning system to provide indication of potential future shifts in the marketplace that could affect pricing or continuity of supply.

Most market indicators are free and readily available, although some paid services include specific commodity price information not available publicly. To help guide the research function, it may be useful to segment market indicators into four primary categories as below:

- Economic Indicators – Highest level, they track pricing, employment and production rates in aggregate
- Pricing Indicators – Includes traditional pricing indices such as CPI (Consumer Pricing Index), PPI (Producers Pricing Index) and U.S. Import and Export Price Indexes
- Employment Indicators – Includes the rate of new unemployment claims and number of people with jobs.
- Production Indicators – Includes gross domestic product (GDP), industrial production, capacity utilization, and inventories

Integrated into the final list of key market indicators for the particular area of research there should also be identified the additional information sources which best track demand side information such as demand drivers, largest consumers, and emerging demand trends.

## **How Supply Market Analysis Provides a Competitive Advantage**

Supply market analysis, when used within a world class strategic sourcing process, can allow an organization to establish and maintain a competitive edge while also reducing supply risk.

Completing a supply market analysis can help reduce risk through knowledge of the supply market dynamics and supply base composition. By developing a comprehensive understanding of the number, type and structure of suppliers, risk of supply interruption can be minimized by analyzing supplier size and capabilities to an organization's CTQ needs. Examples of this would include identifying heavily concentrated supply markets with few suppliers able to meet your organizations needs, or highly fragmented supply markets where suppliers are smaller and more likely to suffer supply interruptions due to financial instability. In addition to these supplier based risk reduction opportunities, the identification and tracking of key market indicators can allow the supply chain professional to more accurately anticipate market moves and develop improved alternative supply strategies and risk mitigation plans.

The knowledge gained through completion of a supply market analysis will provide the intelligence needed to identify optimal sourcing strategy options and can provide cost structure insights to help determine if you're acquiring at the best possible price. Market indicators not only provide clues as to the best time to make your buys, but can also give advanced warning of coming events which may affect supply continuity or change the balance of buyer/supplier power. Key indicators can also be incorporated into contracts with specific allowances for fluctuations in the market during the term of the agreement. The development of supply market analysis within a strategic sourcing framework, coupled with strong primary research skills and the tracking and trending of key market indicators, can provide both the organization and the supply chain professional with a competitive advantage.

## **REFERENCES**

Kahaner, Larry. *Competitive Intelligence - How to Gather, Analyze, and Use Information to Move Your Business to the Top*, Simon & Schuster, New York, NY, 1997

Vibert, Connor. *Competitive Intelligence - A Framework for Web-Based Analytics and Decision Making*, South-western, Mason, OH, 2004

Handfield, Robert. *Supply Market Intelligence*, Auerbach Publications, Boca Raton, FL, 2006

Johnston, Judith Meister and Johnston, Rob "Testing the Intelligence Cycle Through Systems Modeling and Simulation", [https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-monographs/analytic-culture-in-the-u-s-intelligence-community/chapter\\_4\\_systems\\_model.htm](https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-monographs/analytic-culture-in-the-u-s-intelligence-community/chapter_4_systems_model.htm) , March 13, 2007

Miniwatts Marketing Group, Internet World Stats, <http://www.internetworldstats.com>, 2008