Raw Material Sourcing Strategies Are Critical to Revenue and Profit Margins

by Mickey North Rizza

Challenging economies and major fluctuations in demand require changes in commodity management planning and execution strategies. This research details the raw material sourcing challenges of 31 companies across five industries, providing course-correction strategies and tactics that deliver winning results.

Here are the key findings from our study:

• Improving end-to-end supply chain performance and securing profit margins require effective raw material sourcing strategies.

• Best practices do exist: 26 of the 31 companies interviewed found a total of $28 billion in savings.

• Visibility and integration of each business division’s requirements reduce the risk in daily raw material purchase decisions across the enterprise.

• Raw material sourcing decisions can affect profit margins in a multitude of ways. To maximize returns, focus on inventory levels, conversion decisions and cost-value trade-offs.

The raw material sourcing tsunami

Commodities have fluctuated widely in recent years, with pricing and capacity having peaked, crashed and stabilized for short time frames. Global commodity managers continue to struggle with managing demand, the market and supplier expectations, all without a clear sense of the future.

Consider the nightmare of navigation techniques with which raw material sourcing experts have contended. In the last two years, metals and plastics demand has declined, inventories have been depleted and capacity has become available. During this same time, El Niño temporarily altered global climates and natural disasters rose in frequency, creating havoc on crops and grains commodities and other natural resources. These global factors have created a raw material sourcing tsunami for even the most seasoned sourcing professional.

With change the only constant, buyers have many reasons to be concerned as they secure raw materials. From Gartner’s research into 31 organizations, six challenges in particular emerged as the major concerns for raw material buyers:

• Price—Raw material pricing continues to fluctuate. With price a driver for many companies’ sourcing strategies, many buyers are afraid to pull the trigger in case they’re wrong about the timing of the buy. Because of the volatility, buyers ask the same questions: What’s the price? How long should I lock in the price? What is my secondary position if the pricing level falls from my locked-in contract?

• Inventory availability—Because demand has been skewed in multiple directions in recent years, concerns from buyers continue to mount. They’re left asking the following questions: How much inventory is available for current and future needs? When do I secure inventory? Will it be in the right region of the globe?
• **Capacity**—Buyers are concerned current suppliers won’t have enough capacity to meet required demand. Certain questions are frequently asked: Can our suppliers mine and produce what we need, when we need it? Do we have the right suppliers for immediate and long-term needs? How do we balance the right portfolio?

• **Geo-environmental issues**—Buyers are concerned with raw material availability and conversion in volatile weather and earthquake-prone environments. Here are the questions buyers ask about this: What have been the current weather and earthquake patterns? Where are the most volatile regions for the commodities from which I purchase? Which other regions provide secondary alternatives?

• **Predicting future demand**—Buyers must put price, inventory, capacity and geo-environmental factors together to predict demand. Without knowing the demand, strategies become a moot point, with the company exposed by suppliers and inventory. The questions buyers ask are the following: What raw materials are required? How much will I need in one, three, five and ten years? Where will the raw material be produced and consumed?

• **Position view**—Although raw material sourcing experts worry about all of the above, an accurate view of current positions is most important. The right visibility includes the commodity and supplier markets, the demand that’s covered with material and demand that’s still open, the suppliers’ capabilities and how the visibility ties to the various divisions and final products. Here are some of the questions buyers ask: What’s my current position, and how far out does that go? What are the risks of filling this position now, given the current market, versus later? How does this raw material purchasing decision correlate to the end product’s forecast?

**Winning strategies and tactics**

Confronting raw material sourcing challenges provides companies with an opportunity for secured product and profit margins. These challenges lie in the methods buyers utilize to improve their raw material sourcing strategies.

Leaders in these areas follow best-practice strategies and tactics.

**Risk mitigation**

Mitigating supply risk requires a sharp focus on the factors that cause supply to be constrained or limited. We found that risk mitigation strategies varied based on the business drivers surrounding the six challenges:

• A representative of an engine manufacturer with $11 billion in revenue uses his monthly sales and operations planning (S&OP) process to ensure his raw-material metals plan for the next four months. Because of the volatility in metal prices and engine product demand variability, raw material purchases are spot buys for requirements that are three to six months out. The commodity buyer told us that because his OEM customer’s contracts are at a one-year fixed price, which is longer than the company’s supply contracts, he must manage the inventory efficiently to counteract pricing gaps between supply purchases and customer product delivery.

• A consumer packaged goods (CPG) company with $26 billion in revenue said its risk mitigation techniques included raw material hedging, but that the trends and results from these techniques had to be monitored closely. All hedging must have approval from the company’s board because of the financial accounting standards (FAS) rulings that require firms to report this. The board approval requires the product forecast accuracy to be monitored so that hedging strategies account for only 65% of the final product forecast accuracy percentage achieved in the previous four quarters.
• An agribusiness with $10 billion in revenue was securing volume and pricing in both short- and long-term contracts. Long-term contracts were 10 years out for land and crops, but in the short term, the company was locking in prices with suppliers for one quarter, six months or one year. Regardless of the time frame, this two-pronged approach had an advantage of planning security for the supplier and the business. However, there were disadvantages that could have meant issues for both. If the market was in an upswing, the price increase would hit at a later date for the business and affect the supplier now. If the market was in a downswing, the price decreases would provide the supplier margin now and come back to the business at a later date.

Bottom line: Managing price, inventory, geo-environmental and demand factors in the near and longer term is critical for mitigating risk when sourcing raw materials.

Supplier relationships
All 31 companies in our survey had improved many of their long-term supplier relationships. For 22 of them, economic changes had forced a two-pronged supplier relationship strategy: long term and short term. Long-term commitments were orchestrated based on pricing formulas, market expectations and inflation or deflation adjustments with the most strategic and preferred suppliers. The short-term commitments were typically spot buys or agreements with strategic or secondary suppliers that were less than one year in length.

A $30 billion energy supplier told us, “We work closely with our suppliers to correlate the inflation of raw material commodities to the price of the product. By reviewing all the cost drivers, market indexes and our suppliers’ margins, we have found we can work together to secure our end-customer requirements.”

A $10 billion CPG company found it has better supplier relationships. “Because of our bottom-line exposure, we have recognized that, regardless of market conditions, we must be extremely close with our raw material suppliers. While spot buys still tend to be done quickly and are the most volatile in terms of relationships, our long-term strategies have forced us to understand our suppliers’ business.”

Bottom line: Companies are developing collaborative relationships with their suppliers because sourcing decisions have major implications for both parties.

Supply portfolios
Portfolio management has typically been a stock-keeping unit (SKU) rationalization exercise done by sales. Because of recent global economic challenges, though, 16 of the 31 companies interviewed have been rationalizing product SKUs across their raw material requirements and commodity markets. SKU rationalization requires supply portfolio reviews so that suppliers, their capabilities and their contracts are understood in the context of the final product.

Take, for example, the case of an industrial company with $32 billion in revenue. It found that by rationalizing SKUs against its commodities, products and portfolio of supporting suppliers, it could change its metallurgical requirements and even introduce alternative materials. This portfolio review not only changes current and future supply requirements as well as the suppliers in the mix, it also provides additional products that may have profound effects on future demand. A CPG company with $12 billion in revenue found that by rationalizing SKUs at each division, comparing this information to the SKU forecasts and then comparing once again against the raw material requirements led to greater accuracy in profitability forecasts.

Bottom line: Supply portfolio management is a critical element to ensure supply is available to meet SKU demand.

Business processes
Business processes for raw material sourcing are complex. Although sourcing technologies provide an opportunity to competitively source raw materials, they’re not completely tied to the entire business process. These technologies are utilized for one-time events, and if they have advanced optimization and contract management capabilities, they can provide a closed-loop buying process.

But these technologies aren’t integrated with financial models that mimic the conditions of hedging, commodity market pricing and inventory trends. In fact, 23 of the 31 companies utilize market information,
Excel spreadsheets and their own company financial risk information to expose and understand their raw material sourcing purchases and the market conditions affecting them.

We did find several companies, though, that utilize sourcing tools for execution, but not for the analysis, opportunity assessment and planning that must occur before execution:

• An energy company utilizing Triple Point Technology manages and executes high-volume trades, with the visibility to review long and short commodity positions.

• A CPG company with $12 billion in revenue told us its cost position is critical. “If we miss the earnings forecast, that’s one thing. But missing the percentage points would be significant to our earnings.” The company is seeking a cost management application that looks at forecast demand, the positions against that demand and ultimately the net costs of its positions.

• A representative from an automotive supplier with $14 billion in revenue noted that he could secure the raw materials, but understanding how this related to the final end product was almost impossible because the raw material sourcing process wasn’t an integrated business process that included his end-product demand and inventory positions. Before he made a decision, the demand, inventory and current position inputs, algorithms and models for future and current requirements and market conditions had to be analyzed. Unfortunately, the decision factors were straightforward, but the complexity of inputs required analytics and predictive risk tools.

• Several large industrial companies are using sourcing services from Ariba to help them understand the commodity markets, while others utilize the procurement services of Maine Pointe for market indices and trends to build positioning formulas and spreadsheets (see Figure 1).

Bottom line: Technology providers are slow to embark on an end-to-end raw material sourcing platform. Services provide some intelligence, but don’t complete the entire end-to-end supply chain and raw material sourcing process.

Securing the product
Securing the product requires balancing strategic buying strategies like raw material purchases. Without the raw materials, conversion to the final product to meet the necessary demand won’t happen.

Consider the case of a CPG company with $12 billion in revenue. It required more frequent valuation and better accuracy of derivative positions so it could translate them into finished products, providing more divisional impact. The expectations of this enhanced the decent profit margins it already obtained because of its current end-product forecast approaches.

Bottom line: Securing the end product at sustainable margins requires an integrated and flexible raw material sourcing strategy.

Differentiator: Market and profit advantage
Challenges bring opportunities, with raw material sourcing no exception. The right strategies can reap large profit margins, capture entire markets and secure a company’s future for years to come.

They can also be the difference between being the market leader and being with the rest of the pack. A CPG company with $70 billion in revenue improved profit margins by $1.2 billion by tying its raw material sourcing strategy into its supply chain strategy. The integration of the multiple business processes and functions was complex, and it’s still not completely integrated, but, to date, the outcome has provided a path forward.

Contrast this with an oil and gas manufacturer that utilizes MetalMiner, a sourcing and trading intelligence product for global metal markets, to assist
Figure 1: Service providers bring buying performance differences

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- Historical -3.4% performance against 2008 index.
- Baseline performance for 2009 = Current index—3.4%
- Maine Pointe savings achieved is contracted/bought price—baseline

### Item XXXXX

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<th>Description</th>
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<td>Weighted Avg. 2008 Performance</td>
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<td>2009 Contracted Price/CWT</td>
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<td>2009 Index Price</td>
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<td>2009 Contracted Performance Against Index</td>
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<td>Baseline Index Adjusted</td>
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<td>Maine Pointe Savings/CWT</td>
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<tr>
<td>Maine Pointe Savings</td>
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**Baseline Index Adjusted:**

$50.52 \times (1 - 0.034) = $48.80

**Maine Pointe Savings:**

$48.25 - $48.80 = -$0.55/CWT
Or: $144,000

Source: Maine Pointe, 2010
with its market intelligence for large volumes of steel purchases. The company found that in one division, which generated $5 million in sales per month, was missing $115,000 to $519,000 in savings by not focusing on raw materials. Although this savings is critical from a sourcing perspective, it can mean a direct loss in EBITDA or earnings per share of $1.88 million to $6.24 million.

**Recommendations**

Consider the following takeaways:

- Develop raw material sourcing strategies that improve profit margins and deliver revenue.

- Utilize market indices, commodity sourcing services and technology to strengthen visibility, reduce risk and improve business processes.

- Remember that when compared to final product revenue and profit margins, visibility and analysis of raw material sourcing decision factors are critical to developing the trigger points of a successful strategy.

Shouldn’t you uncover the raw material sourcing practices in your company and integrate your sourcing decisions with your end-to-end supply chain?