IBM Global Business Services

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Supply chain management

Low-cost country sourcing can benefit a company's bottom line.

Contents

Executive summary

Companies can realize significant direct material savings — up to 40 percent or more in purchase price[1] — when they successfully access and rely on low-cost sources in emerging regions. This white paper describes the bottom-line and competitive benefits companies can derive from using low-cost manufacturing sources. It also describes the risks companies face and some ways to keep those risks at manageable levels when they work with suppliers in low-cost countries around the globe. Finally, it outlines five best practices companies should employ when working with low-cost country suppliers.

Low-cost country sourcing helps grow revenue

Revenue growth. That's the number one priority for four out of five CEOs.[2] CEOs seeking revenue growth must often reduce costs to maintain or expand profit margins. Both tasks are made more challenging when customer demand changes on a whim, supply chains are interrupted, costs for materials increase unexpectedly and the competitive landscape morphs apparently inexplicably.

The following countries are typically considered to be emerging markets which are offering a low-cost environment:
- China
- Thailand
- Vietnam
- India
- Ukraine
- Romania
- Bulgaria
- Mexico
- Brazil

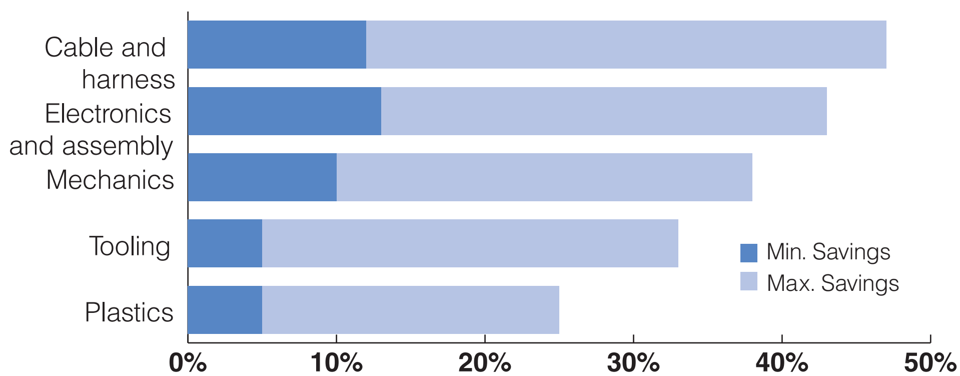
Highlights

Sourcing in low-cost countries helps companies to improve their competitivemess.

Savings of up to 40% on purchased goods can be realized.

Implementing sourcing programs in economically emerging regions like Asia-Pacific, Eastern Europe and Latin America is one way for a company to grow revenues. That's because, by sourcing goods in the local market, a company can compete more effectively and expand its business. Additionally, low-cost country sourcing can provide reduced cost for a company's global factory network as well. In fact, a company sourcing materials or products from a low-cost region can improve its bottom line by reducing its purchase price up to 40 percent[3] or more. (See Chart 1.)

Chart 1: Range of sourcing savings for selected spend categories



Source: IBM Integrated Supply Chain analysis

Savings generally result from low labor and infrastructure costs, as well as capitalizing on the growing and highly competitive marketplaces for subcomponents in these regions. And those savings present compelling reasons for companies to migrate manufacturing operations to low-cost areas.

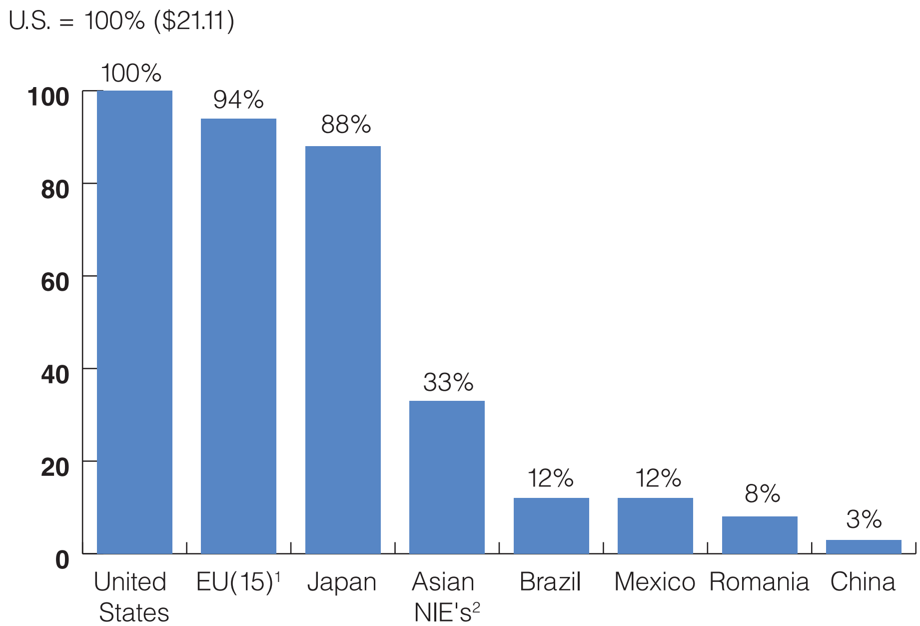
Low labor costs are a primary driver of the substantial savings companies can experience. Chart 2 illustrates the dramatic differences in labor costs between regions. The hourly costs for labor in China and Mexico, for example, are substantially lower than in North America and Western Europe.

Highlights

Determination of net savings should include consideration of all additional costs (e.g. transport, duties) on top of the component price.

Comparison of labor rates between mature economies and low cost countries shows significant opportunities for savings.

Chart 2[4]: Average hourly compensation costs of manufacturing workers, selected economies and regions, 2002



Citation: *Manufacturing earnings and compensation in China*. Judith Banister, *Monthly Labor Review,* August 2005

[1] EU(15) are the European Union member countries prior to the expansion to 25 countries on May 1, 2004.
[2] Asian NIE's are the newly industrialized economies of Hong Kong, Korea, Singapore, and Taiwan.

Source: Bureau of Labor Statistics, "International comparisons of hourly compensation costs for production workers in manufacturing,1975–2003," Nov. 18, 2004; on the Internet at http://www.bls.gov/fls/home.htm. For China, data are from this article and not from the BLS series. The data for China refer to all employees rather than just production workers. Hourly compensation for Romania in 2002 as per Eurostat website: http://epp.eurostat.cec.eu.int.

But labor is only one element in the total cost of a component's price. To determine the total cost, a company must include the component's manufactured price *plus* shipping costs, customs charges and other expenses involved with moving a component from the manufacturer to the point where it's incorporated in the final product.

If, for example, the cost basis is 100 points for a component manufactured in Germany and 70 points for the same component manufactured in China, the gross savings is 30 points. Shipping the component to Germany and customs charges may add another 10 points, bringing the component's total cost to 80 points. The net savings of 20 points may still be enough to warrant sourcing that component in China.

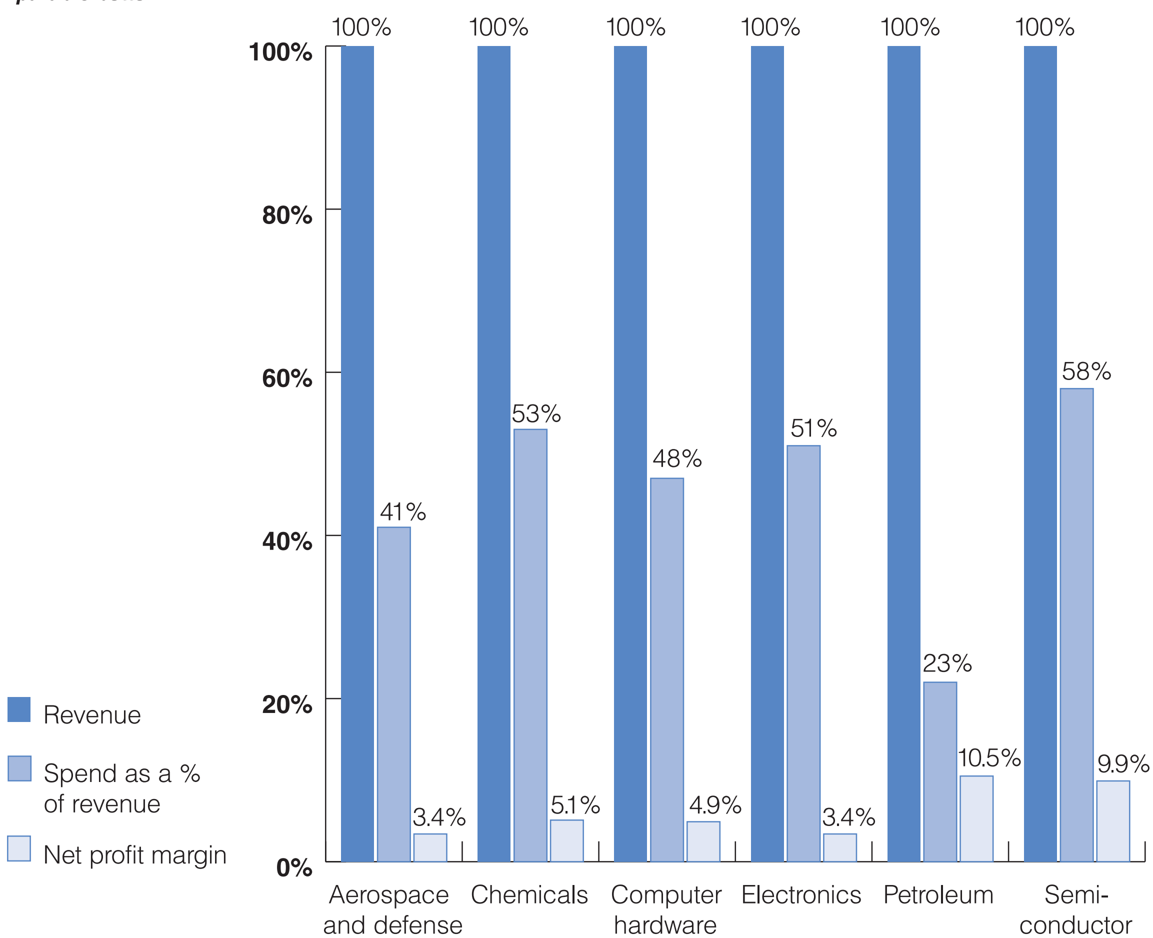
Highlights

Procurement savings can significantly influence bottom-line results.

Significantly greater revenue increases are required to net comparable bottom line impact.

Procurement savings can make a direct contribution to a company's bottom line, compared to other methods for improvement. Chart 3 illustrates that for a company in the electronics industry, every procurement dollar saved may go directly to the company's bottom line. To otherwise achieve the same impact, the company must increase revenue 29 percent.

Chart 3: Spend and net profits as % of revenue for selected industries.



Bottom-Line Increase	1% pt	1% pt	1% pt	1% pt	1% pt	1% pt
Incremental Revenue	**29.4%**	**19.6%**	**20.4%**	**29.4%**	**9.5%**	**10.1%**

Source: IBM Global Business Services Analysis. Reprinted with permission from the publisher, the Institute for Supply Management(tm) and W.B. Carey School of Business at Arizona State University.

Highlights

Sourcing in low-cost countries is often the starting point for a company to achieve market growth in emerging regions.

Low-cost country sourcing is becoming an important tool for forward-looking companies looking to optimize the overall performance of their supply chains.

Other benefits from low-cost country sourcing

Cost-savings is perhaps the initial reason for companies to source in low-cost regions, but turning to low-cost sources offers other benefits. A significant example is the competitive advantage gained against companies that don't effectively incorporate low-cost sourcing in their procurement processes. Companies can boost revenue by reinvesting procurement savings in new products. Alternatively, they can carve substantial markets for themselves by extending highly competitive pricing to buyers. Companies that tap manufacturing sources in low-cost countries, can further grow their markets by offering goods they produce for local consumption.

Some forward-looking companies are radically restructuring their cost bases as they shift to globally integrated manufacturing and supply chains that include low-cost sourcing. Freed from managing multiple sets of supply chains, other parts of these companies can concentrate on customer relationships and value-added engineering.

Some companies move outsourcing to a shared-services model in the back office. The shared-services model provides those companies with far greater ability to integrate acquisitions and realize value from them.

Low-cost country sourcing is becoming a common strategy

The competitive and bottom-line benefits are attractive to many companies. That's why, according to Aberdeen Group[5] 60 percent of manufacturers now source from China as part of their low-cost sourcing strategies, and almost half of their Low Cost Country Sourcing spending is for direct materials — chips, circuit boards, cables and other parts used in end products (See Chart 4). Through 2008 the average of the total spending for direct materials with low-cost country suppliers will almost double — from 21 percent to 39 percent. (See Chart 5.)

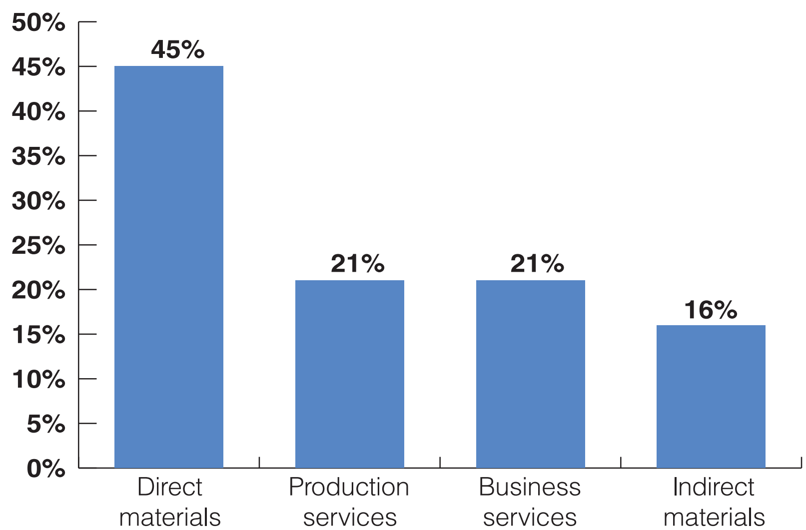
Highlights

Sourcing efforts in low-cost countries have mostly addressed direct materials.

An average of 45 percent of surveyed companies' spend in low-cost countries is for direct materials.

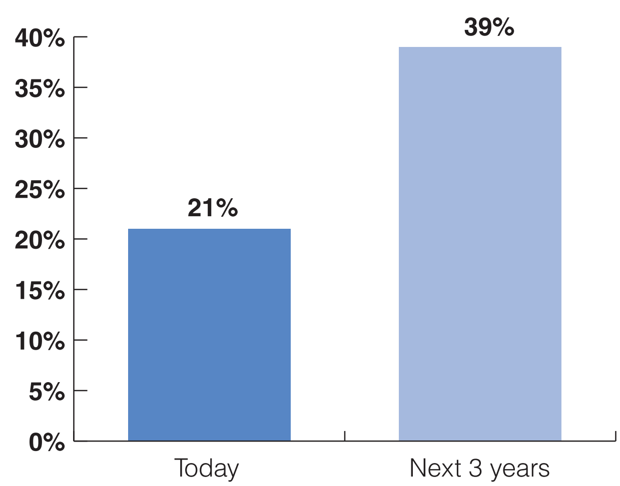
Surveyed companies plan to almost double their spend in low-cost regions.

Chart 4[6]: Average Percent of Spending by Category in Low-Cost Countries



Source: Aberdeen Group, Inc. *Low-Cost Country Sourcing Success Strategies — Maximizing and Sustaining the Next Big Supply Savings Opportunity,* June 2005.

Chart 5[7]: Average Percent of Total Spending for Direct Materials with Low-Cost Country Suppliers



Source: Aberdeen Group, Inc. *Low-Cost Country Sourcing Success Strategies — Maximizing and Sustaining the Next Big Supply Savings Opportunity,* June 2005.

Highlights

Besides enticing benefits, low-cost country sourcing presents pitfalls that companies need to be aware of.

More than individual companies are sourcing in low-cost countries. Entire industries are gaining footholds. It is not unusual for tier-one and tier-two manufacturers to build plants on the same property or very near to the manufacturer of the end product. Why? Besides low labor and land costs, increasing tax benefits, maturing manufacturing and services, improving infrastructures and stabilizing political environments all play a role.

The potential downside of low-cost country sourcing

While sourcing in low-cost countries offers enticing benefits, it also presents potential pitfalls and difficulties to achieve available benefits. The obvious issues are cultural and political differences. Another issue is finding capable suppliers in unfamiliar places. And when you find them, you must ask whether the suppliers can provide the consistent quality you need and your customers expect. Companies seeking low-cost country sources for the first time may find that establishing and qualifying those sources, and making the transition to them may take longer than expected. Companies new to sourcing in low-cost countries should also be concerned about other issues, including staff quality and technical capabilities in the region, government interference, intellectual property protection and potential for fraud.

Overcoming risks

Working in a low-cost country often adds complexity to a company's operations. Risks include:

- Inflexible customs practices
- Intellectual property protection threats
- Foreign exchange controls
- Business licensing limitations
- Political or joint-venture partner interference
- Project management challenges associated with migrating manufacturing operations effectively

Highlights

Risks associated with low-cost country sourcing need to be addressed and managed in a comprehensive way.

Companies can overcome these risks. Forming deep, key relationships at critical points along the supply chain's inflection points help reduce potentially rigid customs practices or foreign exchange restrictions. A considered approach and developing deep, lasting relationships with vendors help ensure intellectual property. Because business license and value-added tax fraud can be commonplace, companies should perform comprehensive documentation checks to help ensure licenses are proper and taxes have been paid. More and more, as countries derive the economic benefits from companies relying on low-cost manufacturing sources, political or joint-venture partner interference is diminishing. Finally, as with any change in manufacturing operations, good project management is critical.

Technical issues related to manufacturing and shipping the product can arise. Risks include:

- Poor product quality
- Low-tech and labor-intensive production
- Infrastructure weakness
- Distant client markets

Overcoming these risks is also possible. Suppliers with the latest high-tech equipment and the ability to solve problems onsite rapidly can realize the product quality a company expects. And suppliers with shorter tooling development cycles tend to offset increased shipping distances. If necessary, companies must monitor constrained airfreight capacity to support timely shipping of products. In the end, technical issues are often no worse than in any other supply market, and high quality local resources can be deployed to manage them.

Good staff can be difficult to find and retain, and other issues can also arise. Risks include:

- Poor-quality staff
- High turnover or even poaching of effective employees
- Lack of experience
- Fraud
- Ineffective use of expatriate staff

Highlights

Quality staff is a key success strategy to sucessfully manage risks in low-cost regions.

Managing the introduction of new low-cost country sources is critical and early involvement in the product development process is an important step in ensuring success.

Actively recruiting and developing quality staff is the most effective way to overcome these risks. That effort includes concentrating on training and developing staff, and hiring good local managers to help retain good employees. At the same time, companies should provide appropriate performance-related compensation and incentives. Also, to prevent procurement fraud, it is important to develop strategic missions locally. That activity includes implementing tight process controls and executive-level vendor relationships. Building a capable local organization that uses mature processes, then, is a prerequisite for success in a low-cost region.

Establishing a new manufacturing source brings change, which affects the supply chain — especially early in the process. Risks include:

- Difficulties in communicating with staff and vendors
- Availability of accurate baseline data
- Underestimating the time required to complete transitions to low-cost country sources
- Sustaining savings after the initial benefit

To reduce or eliminate these risks, companies should establish a rigorous product development process, making a significant initial effort to expose the full, comparable costs of sourcing. Also, the procurement department and suppliers must be involved early in the product development process.

Developing and acting on a detailed project plan — including risk management — throughout the enterprise and with contract manufacturers is essential to move manufacturing successfully to a low-cost country.

Despite the risks that companies face when doing business in an emerging region, they are driven to do so by competitive pressures and the desire to expand to new markets.

Highlights

CPO's are faced with a number of questions when addressing a low-cost country imperative.

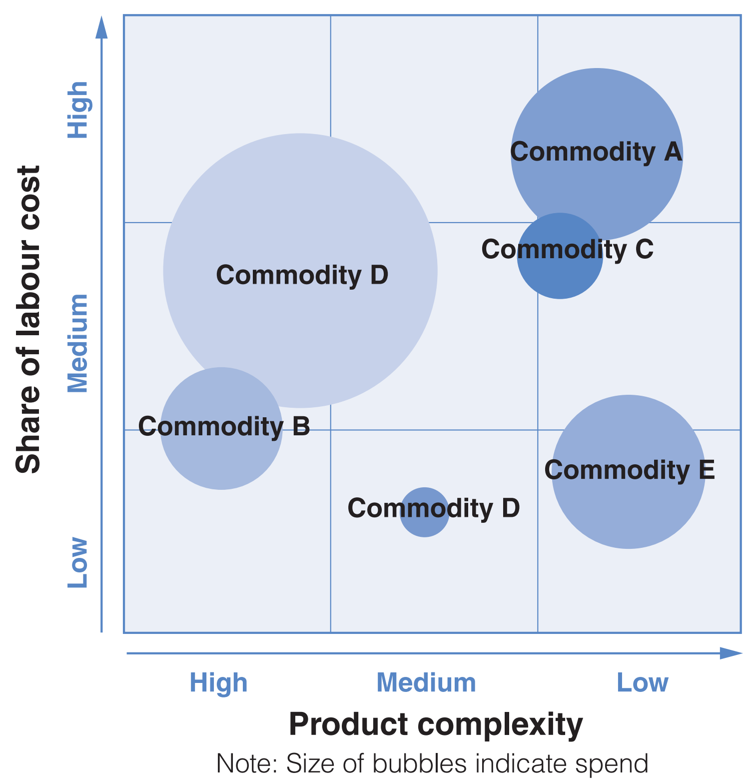
Commodities with high labor share and low product complexity present the best savings opportunity.

Key low-cost country sourcing considerations for a chief procurement officer

All of the direct materials the company uses in the manufacturing process have come from high-cost regions, and the company is growing increasingly less competitive. To reduce costs across the company, the chief executive officer (CEO) tells the chief procurement officer (CPO) to move 30 percent of the company's current spending for direct materials to low-cost country sources.

As the CPO ponders the necessary steps to meet the CEO's requirement, many questions come to mind. First, the CPO must determine which components should be sourced in low-cost regions — and then determine where the best suppliers are. Chart 6 illustrates that components with low complexity and high labor costs usually present the best opportunity for savings in low-cost countries.

Chart 6: Low-cost country sourcing, Commodity evaluation matrix



Source: IBM Integrated Supply Chain analysis

Highlights

A comprehensive set of questions need to be addressed before moving to low-cost countries.

Intellectual property protection is often an important consideration in low-cost country sourcing.

After identifying which components to manufacture, the CPO must find the best supplier or suppliers for the company. The CPO must ask questions such as:

- Who are the right suppliers?
- What are the strengths and weaknesses in commodity coverage in the suppliers' countries or regions?
- How can I ensure savings, considering total cost of ownership?
- How can I build a business case?
- How can I maintain product quality?
- How can I most effectively manage the extended supply chain?
- How can I ensure competitive lead times?
- How are contracts set up?
- What are the legal requirements?
- What are the benefits or pitfalls regarding local taxation?
- How can I manage the local language and cultural challenges?

Answers to those questions will help the CPO narrow the list of potential suppliers. Then the CPO must be assured that the company's intellectual property is protected. Questions to ask include:

- Does the supplier work for the competition?
- Does the supplier demonstrate business ethics that are in line with expectations?
- Is the supplier's country known for corruption?
- Has the supplier indicated a reticence to sign a nondisclosure agreement?
- Does the supplier have a proven track record of treating intellectual property confidentially?
- Has there been any negative news or rumors about the supplier not acting in an appropriate manner?
- Does the contract include significant penalties for intellectual property violations?
- Is the supplier willing to provide reference customers?

Highlights

IBM has interviewed numerous companies and has identified 5 best practices for low-cost sourcing success strategies.

These questions are unlikely to reveal absolute or complete answers for the CPO. The answers to these questions do, however, provide initial direction for the journey that the CPO — and the CPO's company — will take as they build valuable, viable manufacturing sources in low-cost regions.

Five best practices for low-cost sourcing success

Consultants with IBM Consulting Services interviewed dozens of chief procurement officers and hundreds of other C-level executives around the globe in 2005 to explore critical procurement topics and determine ways that manufacturers can succeed when working with low-cost companies. From those interviews, IBM consultants uncovered five key best practices companies should employ.

Become business partners, not just buyers
Overcome a pervasive buyer mentality. Buyers tend to seek the lowest possible price regardless of any other benefit. Procurement should identify and respond to broader business goals proactively. Partnering with low-cost suppliers involves a mindset shift — from price to value, from products to solutions, from inputs to outcomes.

Explore new value frontiers; it's not just about price
A procurement organization that is historically biased toward buying raw materials and supplies should convert thinking and actions to fit the different demands of low-cost sourcing in other countries. Focus should turn to overall business outcomes, total cost of ownership and the potential for creating long-term value for your company.

Low-cost country sourcing involves a more holistic business perspective when evaluating and selecting vendors. First, a long-range assessment of the supplier's overall business health and process capability is necessary. Then, understand the supplier's strategy, so you can discover new areas where a strategic supplier can add value and become a more integral part of company operations. It is critical to foresee any conflicts of interest the supplier may encounter to derail the relationship.

Highlights

Effectively managing low-cost country sourcing is one important opportunity for companies to realize the full potential of their supply chain.

By sourcing in low-cost countries, companies will be able to realize tangible bottom line results.

Make suppliers part of your team; the best value chain wins
Today, suppliers are more tightly integrated with the supply chain than they have ever been. So companies must take a more inclusive approach to managing them, bringing them into the decision-making processes and change initiatives. Procurement organizations need to champion the full contribution potential of strategic suppliers — even beyond the supply chain.

Pursue low-cost country sources
To tap into more cost-effective sources around the globe, companies must be prepared to leap hurdles imposed by borders and geographic differences. Even after overcoming language and cultural obstacles, companies still need the expertise to establish and manage contacts in different countries – particularly emerging markets. In most low-cost locales, pioneering companies have already tackled many of the anticipated issues. As a result, effective risk mitigation and management approaches already exist.

If it is not possible for a company to develop the skills and expertise on its own — and only a shallow talent pool is available — the company should look outside for the right resources to augment its internal staff.

Low-cost country sourcing can deliver tangible results to the bottom line
Companies can realize significant direct material savings when successfully relying on low-cost sources in emerging regions. But companies must have strategic sourcing experience and skills to attain those savings at a manageable level of risk. Working with a third party may open the door to minimal up-front capital investment and, combined with a holistic approach to procurement transformation, be a quick route to such savings.

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