



RCG University

Strategic Outsourcing: The Good, the Bad, and the Ugly

Strategic Outsourcing Definition

Outsourcing is the transfer of control of a process or product to a supplier. An example of a manufacturing process is plating of a part. Plating is difficult and messy and is often treated as a process "orphan" in a plant. In these cases companies haven't invested the time and money into plating process improvements. Outside suppliers who focus on this business and have better equipment and technology, as an automated plating line, will outperform the process with better control, quality, and cost.

Companies outsource parts or components that are not one of their critical core processes for economic gain or better quality. An electronics manufacturer may choose to outsource its sheet metal work for control panels. Or an off-road equipment manufacturer may outsource a sub-assembly, such as a cab for a tractor.

At the strategic level, outsourcing allows not only the transfer of control to an outsider, but also the method of manufacture using a different technology or process. In strategic outsourcing a company may transfer an entire product, a product line, or an entire plant for strategic value.

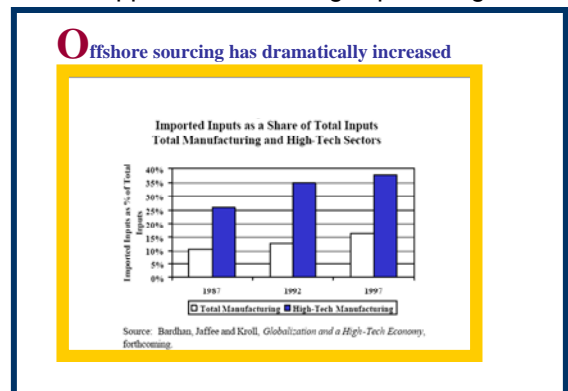
Taking dramatic steps to become agile is necessary to be a manufacturing or distribution contender in the next decade. Organizations must focus on moving information and products quickly through the entire supply chain, distribution, assembly, manufacture, and supply. All physical events must be enacted swiftly, accurately, and effectively. The faster that parts, information and decisions flow through an organization, the faster it can respond to customer needs and orders.

The Good, the Bad, and the Ugly

Global sourcing has been a trend over the past 20-30 years as companies seek to drive down costs: sourcing outside of a company's traditional market. Over time, companies have learned that suppliers outside the home market can often offer superior technology or low labor cost in products. The vast majority of companies turning to global sources are primarily because their domestic suppliers are no longer providing "world class" cost and/or technology.

The value of U.S. exports of legal work, computer programming, telecommunications, banking, engineering, management consulting, and other private services, according to the U.S. Department of Commerce, jumped to \$131.01 billion in 2003, up \$8.42 billion from 2002. Imports of services - a category that encompasses U.S. outsourcing of call centers and data entry - hit \$77.38 billion for the year, up \$7.94 billion from 2002. Measuring imports against exports, the United States posted a \$53.64 billion surplus in 2003 in trade in private services with the rest of the world.

While professional and business services in the US continue to grow, the pace of growth has slowed, suggesting that professional and business services are maturing as an industry. Looking at the relationship between outsourcing market maturity and off-shore outsourcing, service trade statistics reveal that the trade value of "professional, scientific and technical services" exports still outstrips that of imports, but increase rates suggest that imports are growing faster than exports. Affiliated transactions account for a growing share in the case of both imports and exports.





Winners never give up. Mistakes are learned from, techniques are mastered, skills are honed, weaknesses are strengthened, barriers are overcome, and the athlete becomes a relentless competitor. A vision of crossing the finish line in first place drives the athlete until the sweet smell of success is realized.

Looking at trends in trade, there is a possibility that India may be increasingly placed as a resource for offshore outsourcing in its relationship with the US and the entire world. A more detailed breakdown of “professional and business services” reveals that the number of services industries with declining employment has grown at an increasingly rapid pace in recent years.

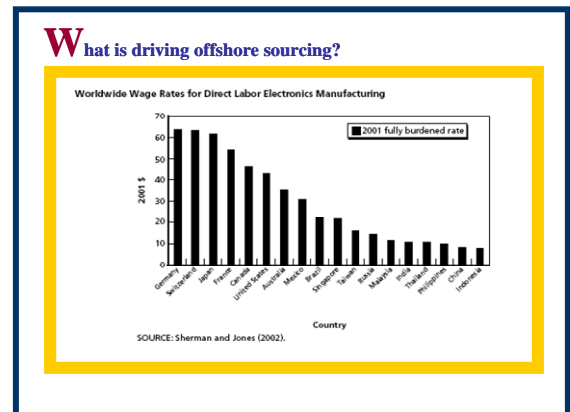
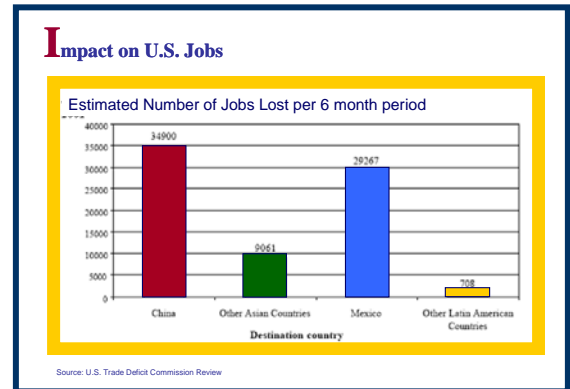
Outsourcing originally started with assembly, and progressed to manufactured components. Today it has crossed over into the office, with information technology comprising the lion’s share of what is being outsourced today.

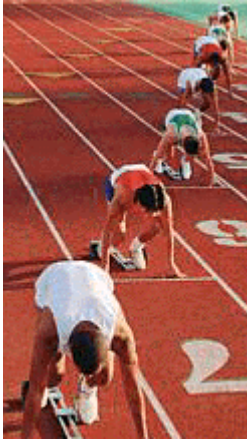
The impact on U.S. jobs has been devastating. From 1987 to 1997, the offshore sourcing for the high-tech manufacturing sector increased by 45-50%. Total manufacturing offshore sourcing increased by 35-40%. The jobs lost in the U.S. to China alone over a six-month period amounted to nearly 35,000. Total jobs lost to China, Mexico, and other Asian and Latin American countries comprised nearly 75,000 in the same period. Most of the jobs were lost in the electrical/electronic, chemical, apparel and household goods sectors.

Today, offshoring has expanded dramatically to include information technology, administration, and distribution/logistics. Fifty-five percent of Information technology jobs are outsourced, as are 47% of administration jobs.

Driving the rush to offshore sourcing is the relative low cost of labor. This is nothing new. In the 1970’s the trend was to “head south” in search of cheap labor. So companies packed up their assets and moved to the southern U.S. regions where the business climate was favorable, and non-union labor could be hired much more cheaply than in the North. Then came Mexico, followed by Japan and Taiwan. Today the key sources for manufactured and assembled products are in Mexico, China, and India. The future sources will be where the lower cost of direct labor exists: Asia-Pacific, Viet Nam, Turkey, Caribbean countries, and Africa.

So, if the rush to sourcing offshore has been increasing in volume and expanding in breadth to other industries, then what are the benefits that are being realized? We know that cost direct labor is lower in offshore companies, but what other benefits accompany the reduction in direct labor cost?





Why is this important? Competing is taking on tough, new proportions. A global resegmentation of markets is emerging that is changing the world economy. U.S. manufacturers face stiff offshore competition in most markets. Companies failing to respond to the challenge will find themselves left behind eating someone else's dust.

The Good: Advantages of Outsourcing

A survey of 33 multi-national companies by Watson Wyatt revealed that 65% of those surveyed have lowered production costs. Another 61% surveyed claimed that operational efficiency was improved.

One major consulting firm claims that offshoring can produce a 15-20% cost advantage. By looking at the differences in the cost of direct labor in the table below, this becomes more apparent:

Differences in Hourly Cost of Labor:

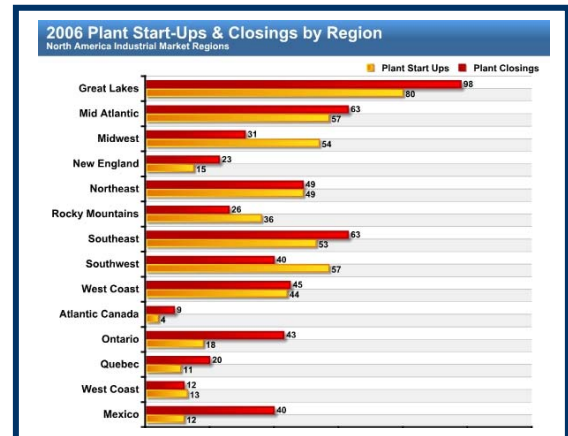
- United States: \$20.32
- Mexico: \$2.34
- Brazil: \$3.02
- Taiwan: \$5.70
- Singapore: \$7.77
- China: \$0.60

But there have been advantages reported by companies other than reductions in just direct labor cost:

- Reduce & control operating costs
- Focus on core competencies
- Access global capabilities you do not have
- Buy capacity
- Free resources, and
- Share risks with a partner company

How have these companies been able to accomplish these successes? No one said it was easy. Key to the success in global sourcing is in commodity segmentation to identify the best targets for "global sourcing". A company that sources globally to import back to its home market needs to determine if products can be shipped economically. This often means looking to developing countries for components with labor cost advantages in simple process technologies. In developing global sources of supply, there are other considerations that are just as critical as product cost:

- Supply Chain Complexity
- Information Infrastructure
- Quality
- Reliability
- Delivery
- Service Technology Employed
- Inventory
- Currency Risks
- Tariffs
- Logistics and Intermediary Costs, and
- Cultural/Language Differences



Where are the sources?

Current:

- Japan
- Taiwan
- South Korea
- Mexico
- China
- India
- Brazil
- Czech Republic
- Chile

Future:

- Asia-Pacific
- Viet Nam
- Turkey
- Caribbean Countries
- African Countries

Some reported results

Survey of 33 multi-nationals from Watson Wyatt:

- 65% lowered production costs
- 61% improved operational efficiency

Manufacturer of Drawer Slides:

- Outsource from China, make in-house
- Make in-house cheaper than Total Landed Cost from China

Electro-mechanical Assembler:

- Outsource from China, make in-house
- Make in-house cheaper than Total Product Cost from China



World-class performance requires speed, quality, agility, and endurance. In a highly competitive race for world market domination, there are no silver or bronze medals. You win or you lose. This degree of performance doesn't simply happen. It requires years of commitment, conditioning, and a vision of a gold medal.

Consider the following:

- The complexity of the supply chain is an implementation challenge in global sourcing. A wide variety of intermediaries such as foreign distributors, brokers, freight forwarders, and customs clearing agents may separate the customer from the supplier. These intermediaries add not only cost but also uncertainty to the supply chain. The multiplicative effect of these uncertainties can make a global supply chain difficult to manage. Simply tracking a shipment through each stage of the chain can be a time-consuming process.
- The information infrastructure supporting the supply chain must be available for speed of transactions and communications.
- A supplier's ability to meet quality requirements of the buyer is a given. Hidden costs of quality such as, defects, returns, cost of inspections, and transportation, can often drive total costs beyond initial consideration.
- A supplier's reliability to react to a buyer's schedules and product changes can determine the extent of overhead required to control the supply chain.
- Delivery time from order through receipt is critical today in most U.S. industries. Being agile in delivering product to customers is a distinct competitive edge.
- Inventory is a hedge against lead times. If lead times are long because of distance, then larger amounts of inventory may be needed, thereby incurring excess overhead costs.
- Service goes hand-in-hand with reliability. A supplier's ability to provide excellent service to a buyer will save seemingly endless hours of expediting and tracking, and the associated overhead costs.
- Exchange rates change daily, and properly assessing currency risk is difficult and often leaves a buyer in a state of confusion or fear.
- Tariffs present an additional item of complexity, as rates vary significantly by country. An even greater complexity, however, comes from variation by commodity or product classification within a country. Generally, nations impose higher tariffs on high-level assemblies or critical industries to encourage (or protect) local production. As a result, minor differences in a product's classification can have an order-of-magnitude effect on the tariff rate. Logistics costs are usually higher when importing materials from a foreign source since the distances are generally greater. Appropriate comparisons should consider the optimal mode (rail, truck, air or ocean freight) by considering inventory and expediting costs as well as actual transportation.
- Although English is generally the common language of business throughout the world, language skills vary. Even where language barriers are few, significant cultural barriers may exist. Most business executives traveling to Japan quickly learn basic "customs" like exchanging business cards and small gifts. Even the most experienced buyers struggle in negotiations in the consensus-driven cultures of Asia, where harmony is generally more important than frankness.

These complexities in a lengthy supply chain can produce costs that are *implicit* and not taken into consideration during the initial outsourcing analysis. Most outsourcing analyses look at "total landed cost", i.e. the "door-to-door" cost of procuring the product or component including all transportation and logistics costs, but leave out the implicit costs such as exchange rate variances, cash tied up in "floating inventory" on the high seas, expediting efforts, engineering changes, travel, loss of a customer order because of late deliveries, or deliveries of wrong or defective products, parts, and components.

We visited the top operations officer of a mid-west manufacturer and importer of drawer slides used in office furniture. He had performed a lengthy analysis of his total landed cost of the same product he was buying from China for extended capacity. When all door-to-door costs were tabulated with implicit costs, he determined that he could actually manufacture the drawer slides more cheaply than he was buying them.



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The Bad: Hidden Costs

But the extent of costs can be much greater than these, when events don't progress as they should, and they never do. So what are some of these hidden costs that can surprise you after the "horse is out of the barn?" We decided to identify these costs with one of our clients who had sourced electrical and electronic components from China.

The Chinese supplier was providing electrical wire harnesses to the mid-west assembly plant. Although the supplier was certified, we calculated there were 4500 defective harnesses supplied during a three month period. When we confronted purchasing about the high level of defective materials supplied, they simply stated that the company received credits from the supplier for every wire harness that was returned. What they didn't consider, was the cost of the labor and processing for faulty products that occurred starting at the receiving dock, extending through the production process, out to the customer and back to the plant:

Lost time in receiving, material handling, assembly, inspection, shipping, transportation, field inspection, process a return goods authorization, receiving, material handling, disassembly, inspection, repair, reassembly, and shipping. When we calculated the post-production costs for the defective harnesses, it amounted to 16%. The net result was, they saved 12% on Total Landed Costs, but lost 16% on Post-Production Costs of defective materials, for a net loss of 4% overall. So the hidden costs can be deceptive and need to be included in the total cost analysis of offshoring.

Typical add-on hidden costs can surprise the best of us, amounting to as much as 40% of the cost out of the supplier's door, depending on circumstances. Shipping and logistics typically adds 17%. The following are costs quite often overlooked because the tendency is to assess "Total Landed Costs" instead of overall total costs:

- CYA Safety Stock
- Producing products you don't need
- Legal Issues
- Theft/Piracy
- Shipping losses
- Cost of additional paperwork
- Cost of employee morale
- Cultural/Communication difficulties
- Loss of manufacturing control and flexibility
- Training costs
- Lost Overhead Spread
- Underestimation of startup costs
- Increasing labor costs once a vendor relationship is established
- Cost of transition
- Cost of layoffs and severance
- Cost of inventory carry due to shipping ,
- Cost of managing offshore
- Cost of bringing a project back to the U.S.
- On-going Travel Expenses
- Expedited Shipments (OSWO Air Freight)

One Case Study: Electro-mechanical Assembly	
Company Reported Offshore Sourcing Savings: 12% Total Landed Cost	
Further Analysis of Post-Landed Cost Revealed Added Hidden Costs: (% of Cost of Manufacture)	
• Cost of Warranty Due to Supplier Defects:	10%
• Cost of OSWO Air Freight:	1%
• Cost of Scrapped Parts:	1%
• Lost Time in Assembly:	2%
• Cost of Repair Labor:	2%
• Total Post-landed Cost	16%

Typical Add-on Hidden Costs	
• Baseline adder for shipping and logistics	17%
• Finding a vendor	1%
• Quality issues	4%
• Travel and communications	1%
• Post-landed cost	16
• All others	1%
Total adder	40%

Source: Boothroyd Dewhurst, Inc.



- Legal costs
- Overseas Training
- Extended Communication
- “Floating” Inventory (In-transit)
- Warranty
- Lost Assembly Time
- Inspections/Testing
- Repair Time
- Lost Administrative Time (Returns, Warranties)
- Trouble-shooting Causes of Failures
- Currency Fluctuation
- Soaring Fuel Prices
- Out-of-stock
- Goods Tied Up at Border
- Scrap
- Rolaid/Pulling Out Your Hair

Winners never give up. Mistakes are learned from, techniques are mastered, skills are honed, weaknesses are strengthened, barriers are overcome, and the athlete becomes a relentless competitor. A vision of crossing the finish line in first place drives the athlete until the sweet smell of success is realized.

The Ugly: Risks

The biggest single issue in strategic outsourcing is the giving up of control of the process or product. The risks are (1) degrading of quality, (2) delayed deliveries, (3) starving production, (4) theft of proprietary design or process, and (5) inadvertent creation of a competitor.

A company is not present at a supplier from day-to-day, hour-by-hour and can't possibly monitor production activities as it would in its own facility. Given that a company is unlikely to farm out manufacture of a component to a shoddy producer, a quality producer can undergo changes with its ownership, management or workforce, and a gradual degrading of quality can take place if not effectively monitored.

Once a supplier has control of a component, it may compete for production time with other customers. The customer with the greatest sales volume to a producer will likely get the most attention. This can cause delays in delivery to other customers.

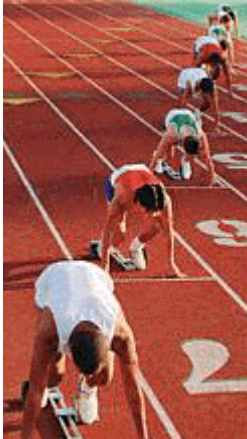
Production stoppages at a supplier facility due to catastrophic events, or neglectful attention to customer orders with smaller volume can starve production for those customers.

Another high risk in strategic outsourcing is that a company may effectively transfer control of a proprietary design or process that, if not controlled, may find its way into the hands of a competitor.

One of the highest risks associated with strategic outsourcing is that by trusting the production of a core product to a supplier, a company may inadvertently create a new competitor.

Other risks are:

- Musical customers/orders: shifts resources away from you
- Political Influences: China, or other government sets different standards
- Lack of copyright patent infringement enforcement: knock-offs
- Supplier becomes your competitor
- Supply chain complexity
- Tariffs
- Shipment delayed at customs/borders
- Currency fluctuation
- Cultural/language/communication barriers
- Inferior technology employed
- Inferior information infrastructure



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- Substituted materials
- Bad/counterfeit/inferior/late parts, partial deliveries
- Fuel costs spiral
- Your shipment discovers the bottom of the ocean
- Can't deliver on time/You lose customers

Common Buyer Mistakes:

- Focusing a supplier search on countries based solely upon macroeconomic considerations
- Allowing intermediaries – like supplier reps – to insert themselves in the purchasing process without defining their services and fees Applying contractual terms based upon home country legal practices that are irrelevant in international law
- Purchasing in home currencies under the assumption that it removes currency risk
- Requesting delivery of parts with all duties paid due to lack of understanding of freight, tariff, and customs practices
- Not bringing an interpreter on supplier visits in foreign countries and not documenting meeting results Assessing supplier operations and management practices without adequate appreciation for cultural differences

Pragmatic Applications

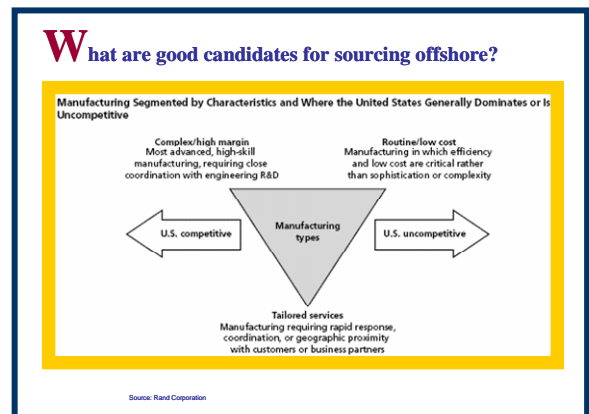
For starters a company should never engage in strategic outsourcing because it is in vogue, or the "fad of the month." Obviously, a careful analysis of current economics and the opportunities that present themselves will determine whether or not it is sensible.

When outsourcing, a company should be looking for economic or technical advantages that a supplier can provide. Keep in mind that when going to the outside for services, or product lines, you are adding that company's gross margin to the cost of producing. A company just as inefficient as your own won't produce any gains.

Ensure that the scope, boundaries, and performance levels are well defined when engaging in negotiations. This will avoid some of the pitfalls described above. In addition this will avoid a supplier providing something that was not agreed upon and then charging a premium for it, or the supplier not providing something the buyer assumed it would be getting for the price it is paying.

Caveats

- What works in one industry may not work in another
- Too much offshore sourcing can cause a loss of direct control of manufacturing processes, quality and lead times - a strategic trap Risk of offshore sourcing is your supplier gains expertise and provides components to competitors
- The risk of losing customers must be evaluated
- Total costs must be in the make-buy analysis, not only landed costs
- A company may be better off leveraging core competencies
- When products are commodity-types offshore sourcing may be an advantage
- Continuous capital outlays can avoid these situations and desperation
- Like most everything else, offshore sourcing is no panacea



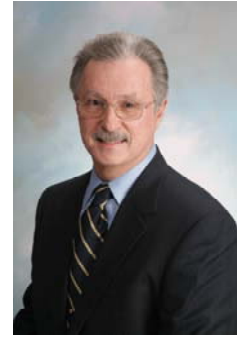


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Richard G. Ligus is President of Rockford Consulting Group, Ltd., located in Rockford, IL., with over 30 years experience in manufacturing, procurement, transportation and distribution. He specializes in developing and implementing manufacturing, distribution, and supply chain strategies. Rich is an author and a speaker, and has developed seminars with the American Management Association. He is certified by both the Institute of Management Consultants and The National Bureau of Certified Consultants.



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