Why Outsourcing Is In

Once used largely for nonessential, tactical activities, partnering now covers core operations, transforming entire industries.

by Anne Chung, Tim Jackson, and Tim Laseter

Earlier this year, IBM entered into a $5 billion manufacturing outsourcing arrangement with the Sanmina-SCI Corporation, an electronics contract manufacturer. Straightforward financial reasons justify the outsourcing — but, more important, the agreement supports overall business strategy at both companies. The deal also offers an archetype of a broader trend: strategic operations outsourcing.

In the past, outsourcing focused on tactical, nonessential activities such as payroll processing or manned security stations. But the focus is shifting. Strategic operations outsourcing encompasses core activities — such as manufacturing or logistics — that could substantially affect a business if not performed well. The best companies pursue it through a critical reevaluation of their positions along industry value chains, aiming to improve financials in mature businesses. When multiple companies in or around an industry come to the same strategic conclusion, a reinforcing cycle of strategic outsourcing can initiate a fundamental restructuring of entire industries. Understanding the motivations that drive strategic outsourcing and the appropriate way to apply it positions your company to drive such restructuring in your industry, rather than merely react to it.

For IBM, outsourcing desktop PC manufacturing furthered its evolution from a purveyor of low-margin hardware to a high-margin services company. In 2001, less than 40 percent of the $87 billion computing giant's revenue derived from hardware sales. Its Global Services business unit, which accounted for about 12 percent of revenues in 1993, has now surpassed the hardware business in revenues while producing half of the gross profits.

The decision to partner with Sanmina-SCI was a significant component of IBM's ongoing transformation, and it was not made lightly. Desktop computers, now a commodity, have been dragging down IBM's margins for years. Nonetheless, personal computers remain key to its e-business infrastructure strategy — its thrust to help companies enter the Internet era. In fact, the outsourcing arrangement was

Illustration by Lars Leetaru

deemed absolutely necessary to achieve greater cost competitiveness in support of IBM's overall business strategy. Ultimately, Sanmina-SCI will drive down the cost of PC-making by shifting production across its own network of manufacturing facilities, including its lower-cost Asian facilities.

The IBM deal also hit the "sweet spot" of Sanmina-SCI's business strategy. Starting in 1980 as a just-in-time manufacturer of printed circuit boards, Sanmina shifted in the early 1990s into production of backplane assemblies and subassemblies, which are basically master circuit boards with slots to connect other circuit boards. More recently, its emphasis has evolved further, migrating to finished product assemblies, including personal computers. The IBM contract also supports Sanmina-SCI's industry-diversification strategy by decreasing its dependence on the suffering communications industry — a sector that accounted for 45 percent of its 2001 revenues.

The IBM/Sanmina-SCI story is not unique. By some estimates, outsourcing in the United States has grown at a compound annual rate in excess of 30 percent over the last five years. Industries offering strategic operations services — services such as electronics contract manufacturing and third-party logistics — have experienced rapid consolidation as companies seek out scale economies. As a result, the largest outsourcing companies, like Sanmina-SCI, have grown far in excess of overall industry growth. A mere $65 million company with fewer than 600 employees in 1992 (its first year as a publicly traded enterprise), the former Sanmina Corporation passed the $1 billion mark seven years later, when it had grown to more than 7,000 employees. Through major outsourcing deals and aggressive acquisitions (including the 2001 acquisition of SCI Systems Inc., a competitor more than twice its size), the newly named Sanmina-SCI topped $4 billion in sales in 2001 and had nearly 50,000 employees. This year, the revenue forecast exceeds $11 billion.

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Does this growth in outsourcing represent a fad or a fundamental shift in operations strategy? Probably a little of both. Even the casual observer recognizes that U.S. business tends to respond with a herd instinct to the newest idea. In fairness, the search for best practices is inherent in our dynamic capitalist model. At times, however, companies that rush to copy successful techniques of others end up with a superficial implementation lacking an adequate strategic rationale.

A framework for understanding what motivates companies to outsource offers insights both for companies planning to *shrink* their scope along their current value chain and for those seeking oppor-

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tunities to *expand* their scope of services along an industry value chain. In the end, building the capabilities to control the lucrative "sweet spots" in evolving value chains defines the essence of operations strategy in any industry.

Six Motivations

Why do companies outsource? Over the last decade, the reasons have shifted as strategic needs have evolved. Think of the motivations as six overlapping waves that reflect emerging strategic priorities:

- Factor cost advantage
- Superior competency
- Asset transfer
- Utilization improvement
- Economy of scale
- Business risk mitigation

At the most basic level, companies outsource to achieve lower factor costs, such as lower wages. In the security services industry, many companies found that wages for in-house security guards were comparable to those of highly skilled factory laborers. By outsourcing security, the companies realigned the wages with market pricing, consistent with the lower skill level required of a security guard. Similarly, automotive industry outsourcing initially focused on the wage-rate differential between the vehicle manufacturers and the supply base.

Over time, access to superior competency typically emerges as a motivator for outsourcing; the service provider offers a degree of sophistication that in-house specialists cannot match. Catering offers a simple example. Companies such as Sodexho Inc. have so much expertise in managing corporate cafeterias that no in-house operation can match their quality at the same cost level. In the oilfield services industry, Schlumberger offers such superior competency in drilling that oil companies have little choice but to outsource. Why spend more to do it yourself when you can spend less and get it done better?

Asset transfer is next in the waves of increasingly sophisticated outsourcing rationales. In the IBM/Sanmina-SCI agreement, Sanmina-SCI paid $200 million to take possession of two IBM plants in the U.S. The asset transfer has a doubly positive effect for IBM: Thanks to the better cost competitiveness of Sanmina-SCI, IBM will improve gross margins; the sale of the plants also improves IBM's balance sheet, by exchanging fixed assets for cash.

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Currently, third-party logistics companies, in conjunction with leading financial institutions, have begun bundling inventory financing with their outsourcing deals — offering another form of asset transfer and balance-sheet improvement.

Improving asset utilization provides a related but different motivation for outsourcing. Companies often have underutilized facilities and equipment. When a contract manufacturer takes over a plant in an outsourcing agreement, it can add volume from other customers to improve utilization and the resulting economics. (Of course, when the requisite volume doesn't materialize, the new asset owner may need to shut down and rationalize facilities to ensure overall utilization. Sanmina-SCI could be forced to shut down one or two of the IBM plants and shift production to underutilized facilities elsewhere.)

By concentrating in a single discipline, outsource service providers also can gain economies of scale, furthering the cost advantages they can offer original equipment manufacturers (OEMs). Scale economies result from larger facilities, broader and denser networks, and even greater purchasing clout. Electronics contract manufacturers have developed economies of scale in component purchasing by pooling demand across customers. The largest third-party logistics providers (3PLs) have enough volume to support regional cross-docks in far more areas than does any individual customer alone. The broader network of cross-docks offers the opportunity to consolidate shipments more efficiently to reduce transportation costs.

The most advanced thinking about outsourcing addresses business risk mitigation. Customers and suppliers can collaborate to reduce such business risks as inventory obsolescence and stock-outs related to volume fluctuations. Over the coming years, new ways to share risk across the extended enterprise of customers and outsourcing partners will inevitably emerge to drive further strategic outsourcing.

These outsourcing waves have prompted the restructuring of entire industries. After outsourcing manufacturing to align wage rates, for example, automobile manufacturers outsourced knowledge-intensive tasks such as detailed product development. Now the car companies have hired brand managers away from the packaged-goods companies and focused on design and marketing rather than manufacturing. As a result, the industry's supply base has been entirely reorganized. Twenty years ago, the American "Big Three" dominated a multitude of medium-sized automotive suppliers. Today, the supply base has evolved into a highly concentrated core of multibillion-dollar global specialists serving all 13 global vehicle manufacturers. This new core of "Tier 0" suppliers, such as the Robert Bosch Corporation and Johnson Controls Inc. — coupled with the spin-offs of the Delphi Automotive Systems Corporation and the Visteon Corporation (from the General Motors Corporation and Ford Motor Company, respectively) — represents a fundamental change to the industry. Now, a mere 10 companies account for 50 percent of the U.S. automotive supply market, compared with 31 companies as recently as 1995.

The electronics industry shows a similar increase in strategic operations outsourcing, though it is driven by a different set of dynamics. Like the Big Three automotive companies, manufacturers of personal computers, office equipment, and telecommunications equipment faced an onslaught from lower-cost global competitors. The electronics OEMs also encountered innovative domestic startups and increasingly compressed product life cycles. The average lifetime of a personal computer has dropped from five years in 1992 to a projected 1.5 years in 2002. Because of this, electronics OEMs (such as IBM) have been forced to focus on product innovation and services rather than their once-core manufacturing operations.

Finally, consider logistics. Despite all the hype about the Internet, physical movement of tangible products remains a fundamental part of the economy. Decades ago, manufacturers, distributors, and retailers turned to 3PLs for "trucks and sheds" (transportation and warehousing). Today, leading third-party logistics providers such as TNT Logistics, Excel, and United Parcel Service offer services like optimization planning, spare-parts stocking, and real-time inventory tracking. In combination, these services bundled into a custom solution can provide a strategic advantage for the customer.

Beyond the Fad

As the waves of motivations for outsourcing have become more complex, so has the demand for more rigorous decision making and execution. Though the specific processes vary by company, the most successful methodologies include four key assessments that avoid the herd mentality and ensure the best strategic outsourcing practices:

- Assess the strategic priority
- Examine supply options
- Analyze total economics
- Define relationship model

First, the company considering the outsourcing of such significant operational activities as manufacturing, customer service, or product development must assess the strategic priority of the activity under consideration. Management must ask, Can the company accomplish its strategic goals without ownership and control of the activity? Companies like Cisco Systems Inc. decided early on that product development, including development by acquisition, would drive growth; manufacturing could, in fact, inhibit it.

The next step involves a comprehensive review of the market. Early movers often find that, despite their desire to exit an activity, no viable supply market exists to absorb it. Consider the order fulfillment activity in e-tailing. Amazon.com Inc. thought about outsourcing its distribution centers but found a limited supply base capable of performing the tasks. So Amazon rejected the outsourcing option. As the leading e-tailer, it concluded that it would have to invent the model as it went along — either alone or with a supplier. Teaming with a supplier posed the risk that competitors would gain from Amazon's hard-earned learning.

An economic analysis of the in-house operations versus the outside ones — in other words, the quantification of benefits — comes next. Measuring the benefits of outsourcing motivated by factor-cost reductions appears quite simple at first blush. Assigning a number to the differential in wage rates, for instance, is pretty straightforward. An appropriate analysis, however, would consider each option under best-practice scenarios. In this particular instance, the analysis should adjust for labor productivity differences and consider whether utilization can be improved through internal changes to reduce capacity.

But measuring the value of unique services or business risk mitigation is another matter entirely, requiring qualitative and complex analyses. Techniques such as Monte Carlo simulation can help assess risks. These models, which can be programmed and run easily on a PC, use random number generators in combination with various mathematical probability density functions to generate thousands of scenarios of unpredictable events. By summing the scenarios, the model provides a forecast of the results expected from integrating the interactions of dozens of uncertain events. But even with such sophisticated tools to forecast the future, purely qualitative, strategic issues also must be taken into consideration.

After rigorous quantitative analysis, the company should define the appropriate relationship model. A strategic outsourcing relationship — particularly one motivated by sophisticated goals — demands clear performance metrics. These metrics must be incorporated into the relationship agreement, especially if the relationship is focused on such complex issues as business risk mitigation. Such relationships cannot be consummated with a traditional customer–supplier relationship, but instead require a sophisticated alliance relationship.

Any company considering outsourcing must also consider its own ability to manage the relationship. Although it is seldom an issue for simple relationships built on nonstrategic activities, management represents a challenge for complex activities that require sophisticated relationship models.

Extracting Maximum Value

Regardless of the initial trigger, as your company examines its strategic role in your industry's value chain, consider all six of the possible outsourcing motivations.

And keep in mind: This set of motivations highlights a range of ways to leverage your own company's capabilities as well. Does your company possess a superior competency that could encourage others to outsource to you and expand your role in your industry value chain? Do you have scale advantages that could be exploited to gain additional revenues and strengthen your position? How could you help mitigate risks inherent to your industry?

Thoughtful, strategic consideration of outsourcing ultimately offers the opportunity to consider both sides of the equation. Think broadly about outsourcing motivations in your industry and apply disciplined analysis of the market and the economics. Ignore the fad, understand the facts, and your company can benefit from strategic operations outsourcing. +

Reprint No. 02303