

An Industry Snapshot based on an exclusive survey

How Business Network Collaboration Is Transforming Manufacturing

By Deborah Asbrand

Manufacturers are reinventing themselves to better contend with potent challenges and opportunities brought on by the rise of global emerging markets. Balancing a pioneer spirit with a wide streak of conservatism, they are overhauling every aspect of their business—from design and assembly through to the digitized transactions that now track sales and inventory.

They've also reached out to a wide range of third parties. Collaboration has become the new frontier for manufacturers, a once monolithic group if ever there was one. According to a recent survey of C-level executives from 353 companies, including 81 from manufacturers, by BusinessWeek Research Services (BWRS), more than half of the manufacturers polled currently rely on third parties for least 10 percent of their operations. And within three years, more than three-quarters will be reliant on others to one extent or another for R&D, production, logistics, distribution or other functions.

However, when it comes to sales, manufacturers are more guarded about collaborating with others. And more so than in other industries, improving their margins is the impetus for third-party collaboration—though they are keen for new opportunities.

Across the Manufacturing Spectrum

Of course, with the opportunities from third-party collaboration also come challenges. Depending on the sector, manufacturers have to contend with regulatory and intellectual property challenges when setting up a network of business partners.

Manufacturing has encountered similar growing pains. Literally extending the boundaries of commerce is not new, observes Andrew Hargadon, author of the book *How Breakthroughs Happen: The Surprising Truth About How Companies Innovate*.

“The problems today with global relationships and partnering are the same problems companies encountered when they were trying to build national firms in the 1800s,” points out Hargadon. The telegraph and railroad allowed firms to go national, but they faced a raft of differing regulations and environments from state to state.

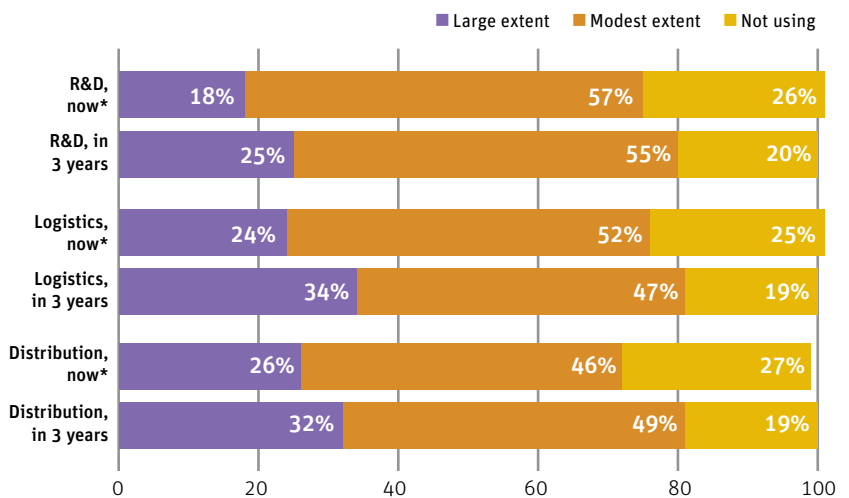
Third-party logistics providers are “the next step of ‘how do I get to the customer and serve the customer better.’”

– MICKEY NORTH RIZZA,
 AMR RESEARCH

Chart 1

Reliance on Third Parties to Increase

(% of respondents indicating extent of use of third parties for each function)



* Totals may be under or over 100% due to rounding.

Source: BusinessWeek Research Services, 2008

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Make It and Move It

Third parties are proving especially helpful in assisting manufacturers to cross borders. That's why manufacturers have been enthusiastic in embracing logistics collaboration. Three out of four survey respondents say they have turned to partners for assistance with shipping, transportation and warehousing. What's more, one out of four do so to a large extent (see Chart 1, "Reliance on Third Parties to Increase").

That preference for third-party help with logistics might be expected, given manufacturers' need to move the products they make. Perhaps more unexpected is the vigor with which they plan to continue it. Fast-forward three years, and manufacturers predict they will be much more likely to partner with third-party logistics providers, with more than one-third of respondents vouching that their reliance will reach a large extent. Distribution follows a similar path.

"It's the next step of 'how do I get to the customer and serve the customer better,'" says Mickey North Rizza, research director at AMR Research in Boston. "The logistics and distribution side is just an extension of the factory."

Creating R&D Ecosystems

To manufacturers, external research is a necessary supplement to their internal staff. These days, the complex, capital-intensive business of churning out goods for a global marketplace requires a spectrum of skills beyond what a single company can mount. Fresh ideas and new products are mandatory.

As a result of that reality, manufacturers have embraced research partners in greater numbers than other industries. So much so that, according to the survey, they plan to be enjoying even more expansive relationships with third-party R&D providers in three years. By then, four out of five manufacturers say they will be collaborating on R&D, up from three-quarters now (see Chart 1, "Reliance on Third Parties to Increase").

What's more, they expect their connections with those partners to grow more intertwined. Only 18 percent of manufacturers claim to rely on such research ecosystems to a large extent now. But three years from now, the percent rises to 25.

"The walls are coming down because it has become a global world," North Rizza says. Manufacturers are collaborating more because "they're starting to look at a performance business network. They're asking what's the value that needs to be delivered from a performance standpoint to meet the customer's end result?"

Sales Partnerships? Not So Much

When it comes to seeking outside help for sales, however, greater numbers of manufacturers prefer to go it alone. More than half of the manufacturing respondents keep their sales efforts in house, a much higher number than the overall survey response base.

"We want a low-cost position but also flexibility, and that means you have to be variable in some of your resource demands."

— DAVE KEPLER,
THE DOW CHEMICAL COMPANY

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Why the difference? The tighter profit margins prevalent in manufacturing leave few coins to pay third parties for their help. Also, more so than in other industries, manufacturers and their customers increasingly crave tight bonds that preclude third-party sales help.

“The last thing manufacturers want to lose control of is sales, because it’s their direct connection to customers,” says Doug Tuttle, principal of Deloitte Consulting in Boston. “Because it will affect the revenue line, they’re more conservative about using third parties for that function.”

Looking down the road a few years, however, manufacturers predict they will begin partnering for sales help. Some manufacturing verticals are ahead of the curve. Makers of consumer packaged goods contract out a hefty portion of their sales functions to brokers, sales agencies and manufacturers reps while retaining responsibility for global and regional sales management.

Tuttle attributes the shift to the growing acceptance of alliance-based revenues. He should know: Tuttle has been witness to the same shift at Deloitte, where he heads up the consulting firm’s alliances. At Deloitte, too, he says, the idea of alliances as extended sales channels has become a more accepted practice.

Checking for Cost Reductions—and Then Checking Again

Manufacturers are much more focused on the cost-cutting aspects of collaboration than the overall survey population. In keeping with that emphasis, they are also more likely than other industries to credit collaboration with improving their competitiveness and profitability. “There’s a long history of focusing on the cost side in manufacturing, especially on the plant floor, so it’s not out of character,” says Greg Gorbach, vice president of collaborative manufacturing at ARC Advisory Group, industry consultants in Dedham, Mass.

Deloitte’s Tuttle adds that forming strategic partnerships with suppliers around the world—and the attendant cost savings that result—has been a more vital element of collaboration for manufacturing than for other sectors because of that sector’s rapid globalization. It has also resulted in a dramatic shift in the industry’s way of accounting for its assets, jettisoning what were once huge, fixed components in favor of more flexible contracts.

“A lot of resources that were once seen as fixed are now more variable,” Tuttle explains. “If you’re a semiconductor company, it costs billions to build a fabrication facility. It’s a fixed overhead, so you want to get the most production out of it. Today, you could have a company design a circuit and then use a fabrication facility in Taiwan to build it. Instead of building a billion-dollar facility, you buy a little bit of overhead somewhere else.”

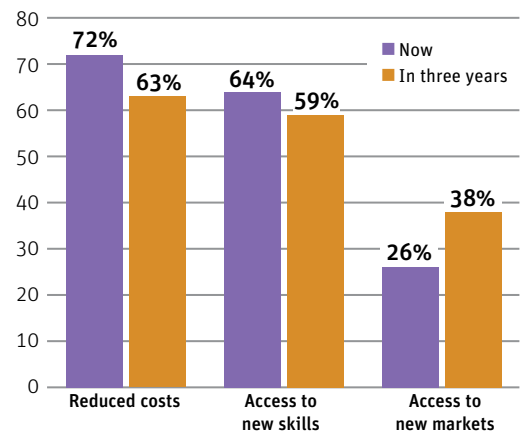
But the urge to partner is not just about cost cutting. While cost may once have been a determining factor, manufacturers now see it as one of a roster of benefits. Speedier innovation cycles, for example, are a key motivator. A recent report by global advisory firm KPMG found that the consumer electronics boom has boosted collaboration between manufacturers and chip designers as they band together to get products to market faster.

More than six out of 10 BWRS survey respondents identify access to new skills, products and ideas from third parties as one of the top benefits of collaboration.

Chart 2

It’s Not Just About Cost Savings

(% of manufacturing respondents indicating a benefit was among the three most important)



Source: BusinessWeek Research Services, 2008

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More than six out of 10 BWRS survey respondents identify access to new skills, products and ideas from third parties as one of the top benefits of collaboration. Furthermore, a growing number of manufacturers see access to new markets and customers as another primary benefit of such relationships (see Chart 2, “It’s Not Just About Cost Savings”).

Manufacturers that enjoy myriad benefits of third-party collaboration also acknowledge the challenges. The complexity of managing business processes across enterprises is a major concern for almost 40 percent of the respondents, while another 55 percent express a moderate level of concern about the complexity challenge.

The complexity challenge is partly due to inflexible IT infrastructures. Less than half of the manufacturing C-level respondents are satisfied that their IT infrastructures could support the level of third-party collaboration they will need in the next few years. In fact, they are less sanguine about their IT infrastructures than respondents in other industries (see Chart 3, “Not Much IT Satisfaction”).

Choosing and Locating Partners

Indeed, the strategic nature of supplier relationships has added dimension to the partnerships. The Dow Chemical Company, the world’s largest maker of chemicals, says it’s looking for genuine unions with its suppliers, not just the cheapest prices.

Choosing key suppliers is a strategic endeavor, says Dave Kepler, Executive Vice President, Chief Sustainability Officer, Chief Information Officer, Corporate Director of Shared Services at the Midland, Mich.-based company. “Cost is important, and I don’t want to downplay it,” he says. “But we always look at supplier capability: Transformational abilities, what they bring to the market. We want a low-cost position but also flexibility, and that means you have to be variable in some of your resource demands. “We can do some things well ourselves,” Kepler says. “But having partners help us build that scale really helps.”

Finding those partners is a work in progress at many companies. “We do things today it wouldn’t have occurred to us to do 10 years ago,” says Jeff Weedman, vice president for external business development at Cincinnati-based Procter & Gamble Co.

Weedman says the consumer packaged goods giant now works with young companies like Yet2, a scouting and licensing service for intellectual property, and NineSigma Inc., which pairs university research with commercialization opportunities.

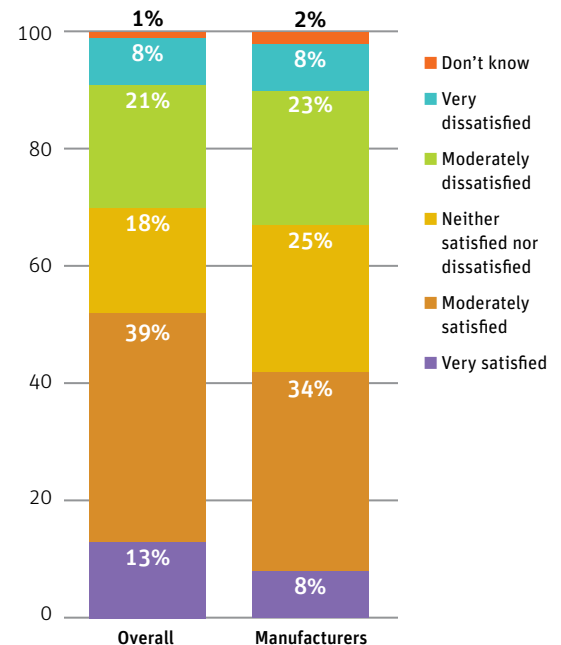
In addition, the company’s extensive work with its independent alumni organization has been surprising fruitful. One-quarter to one-third of Procter & Gamble’s deals have corporate alumni in them, Weedman estimates.

“There are a lot of companies and consortia out there,” Weedman says, “and we’re always on the lookout for new places to go fishing.” ■

Chart 3

Not Much IT Satisfaction

(% of respondents indicating a specific level of satisfaction with their IT infrastructure’s ability to support the level of collaboration needed in the immediate future)



Source: BusinessWeek Research Services, 2008

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This research project was funded by a grant from SAP.

