



Bose Corporation's Nontraditional Partnering Earns 'Best-Practice' Status Internationally

BY APRIL CANIK, ABC

Sharing—one of the primary lessons of childhood—is typically one of the first practices to vanish in the adult business world, particularly as it relates to information between companies and their suppliers. However, Bose Corporation has pioneered an innovative business strategy called JIT II that involves sharing everything with its suppliers—from information, authority, and profits to office space—all on a daily basis. With an impressive track record that has lured other companies of all sizes to follow suit, Bose was named a best-practice company by the American Productivity & Quality Center in a recent consortium benchmarking study, “Partnering for Profit: Managing Global Supplier Relationships.” *Business Week* termed Bose “world-class champ” in supplier management. And, in the presence of Disney, Southwest Airlines, IBM, and 35 other revolutionary businesses, Bose is featured prominently in Arthur Andersen’s recently published book, *Best Practices: Building Your Business With Customer Focused Solutions*.

Bose Corporation, maker of premium audio products and headquartered in Framingham, Massachusetts, began taking the partnering concept to the next level in the late 1980s. Lance Dixon, purchasing manager at the time, recalls the idea being born out of his need to increase manpower without increasing the budget. Explains Dixon, “When I was repeatedly denied funding for new procurement staff, I proposed bringing a vendor representative into our facility to sell from the inside while performing the duties of a Bose buyer and materials planner. This way we could have the supplier function cov-

ered in house but not by our payroll, and our key suppliers could have an inside advantage on our business. It was an idea I’m sure thousands of other people thought of but probably stopped short of its potential.”

Thanks, in part, to a corporate culture that championed creativity, the concept—dubbed JIT II—became a registered service mark of the Bose Corporation shortly thereafter. While “Just in Time” (JIT) is a globally recognized Japanese business technique eliminating inventory and bringing customers and vendors closer together, JIT II was designed to eliminate the traditional salesman and buyer roles in favor of integrating the vendor and customer even more closely. The *Wall Street Journal* has labeled JIT II “the 1990s version of Just in Time.”

THE ULTIMATE PARTNERSHIP

The JIT II concept uses “employee exchanges” to generate significant decreases in paperwork, personnel, inventory, and costs associated with sales, transportation, and purchasing. The arrangement also cuts down on the need for multiple suppliers, further streamlining the procurement process. An on-site presence facilitates a high level of supplier-customer involvement that allows greater cooperation and the elimination of wasteful steps. Savings are then divided between both companies by virtue of new cost and price information on the companies’ internal engineering change orders (ECOs).

While Bose has only recently taken the concept public, JIT II has stood the test of time within the company and positioned Bose as a popular best-practice benchmarking partner for many organizations. For 10 years,

a growing number of vendor representatives (called “in-plants”) have officed at Bose and had access to customer data, people, and processes—and the authority to place purchase orders with their parent company on behalf of Bose. A decade into the program, 16 in-plants representing a dozen vendors now office at Bose, fully integrating functions far beyond purchasing and logistics (Figure 1, page 3).

“The key to the success of the program is empowerment and a high level of mutual trust,” says Dixon. “And support from senior management is a must. Bose is fortunate to be headquartered in the Boston area, a business community that champions innovation, and to have executives willing to give new ideas a chance. Since this is a strategic diversion from the norm, it can’t be implemented at the buyer level alone. Our president encourages innovation in our culture because he recognizes you often have to do things differently to leap ahead of the competition.”

Chris LaBonte, materials manager for G&F Industries, Inc. and Bose’s first supplier in-plant, agrees. “It’s a fresh, nontraditional relationship that works,” he says. “The more we trust each other, the more opportunities we find.” Working closer with the customer, he adds, makes the supplier faster and better than before. Because of JIT II, says LaBonte, G&F’s standard cost to Bose has stayed the same or declined in the past nine years without his company losing market share.

The partnership alliance works for companies of all sizes. G&F has taken the JIT II concept “downstream” by bringing in five of its key suppliers as in-plants as well. LaBonte credits G&F’s growth from \$2 million nine years ago to \$20 million in the late ’90s to innovations achieved through JIT II.

G&F partners with Bose at every level. In one instance, LaBonte cut costs on a Bose product 20 percent by replacing a speaker’s expensive plastic part with a cheaper resin part with similar qualities. The two companies then split the savings. In another example, worker teams from both companies visited each other’s front lines to understand what kinds of processes and qualities were required to develop a new cosmetic technology for the Bose sound systems. “This kind of communication enables us to see with each other’s eyes,” says LaBonte.

HOW CUSTOMERS BECOME COLLEAGUES

Driven by a new understanding in business that people have to work more closely together to succeed, JIT II is a type of business marriage that depends heavily on the partner “mix.”

The first step is obtaining buy-in from business executives on both sides, based on evidence that both companies will realize substantial benefits through dollar savings and improved processes. With JIT II relationships, the customer usually realizes an immediate material cost reduction at the start of the partnership, in exchange for the vendor receiving an “evergreen contract” that has no ending date and no rebidding as long as prices remain competitive. The vendor can eliminate costs associated with its sales effort while the customer enjoys the benefit of additional staff members at no extra cost. When the partnership is right, both companies enjoy dramatically improved communication and purchase order placement. Both businesses also enjoy efficient invoicing and payment administration in this direct arrangement.

Beyond increased business, additional benefits often include the evolution of a “standards program” and concurrent engineering and planning as vendors sit in on early design engineering meetings. Suppliers can design

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Figure 1: Bose Corporation took the partnering concept to the next level in the 1980s with JIT II. This process eliminates the traditional salesperson and buyer roles in favor of integrating the vendor and customer more closely.

themselves into Bose's manufacturing process early in a manner that is most efficient for both companies. According to Dixon, concurrent engineering provided early and throughout the design phase almost always delivers better products and cost levels than competitive bidding exercises begun at the end of the design cycle.

"JIT II sounds like a leap of faith at first, but the more you look at it, the more it becomes a sound business strategy," says Dixon. The biggest hurdle to overcome is the concept's direct opposition to financial practice textbooks, he adds. "Making this work means we have to rip entire chapters out of books that teach tight security with regard to financial management."

The statistics and testimonials, however, speak for themselves. Notes Dixon, "While business leaders that just hear about the idea at arm's length are likely to be resistant to this intensely connected relationship with suppliers, the volumes of documented results are hard to argue with. If JIT II is working for AT&T Bell Laboratories, IBM, Honeywell, The Foxboro Company, Ingersoll-Rand, and Intel, for starters, maybe it's worth a closer look."

According to *PURCHASING* magazine, wherein Dixon writes a monthly column evangelizing JIT II ideals, many pacesetter companies and small businesses have obtained confidence and ammunition from the Bose prototype. "It's hard to say how prevalent the con-

cept is since many firms have begun similar practices under different names," notes Dixon, "but I know of hundreds of companies that are allowing suppliers to operate in various capacities inside their purchasing, planning, product development, transportation, and other corporate systems."

One of Honeywell's facilities, for example, has 15 representatives from 10 suppliers, most of which oversee purchases for existing products. As with all JIT II relationships, the in-plants are encouraged to think like Honeywell employees and look for ways to trim costs and improve the partnership. In its first few years using JIT II, Honeywell measured inventory levels in terms of days rather than weeks or months, operated with 25 percent fewer purchasing agents, and obtained insight on how to standardize parts to save manufacturing costs.

Bose has experienced results equal or greater to those at Honeywell from this innovative process, Dixon says.

"Bose saves hundreds of thousands of dollars in overhead by having in-plant personnel paid by our supplier," he comments. "We've saved 10 percent or more in inventory management expenses and untold quantities by handling our purchasing function in an orderly fashion instead of crisis mode on the third shift. There is also significant savings in our flexibility to respond quickly to marketplace changes without losing valuable time."

THE GOOD FAR OUTWEIGHS THE BAD

Each firm finds its own comfort level with JIT II-related empowerment, and often that level expands as the alliance matures.

Bose in-plants work under the supervision of the purchasing manager and must obtain approval for purchase orders, new parts, or part changes and cannot commit Bose to new contracts without prior approval.

“Companies are responsible for the behavior of their own employees,” notes Dixon. “That means that the vendor representative is the responsibility of the vendor even though he physically works at my facility. Only once in 10 years has one of our suppliers exceeded the limit without authority, and he was immediately replaced.”

The Foxboro Company provides its in-plants office space, a telephone, modem connection, e-mail, voice mail, an ID badge, and a parking permit. The supplier, in turn, provides proof of million-dollar liability insurance, proof of workmen’s compensation, a secrecy agreement, and various monthly reports that document purchasing and service deals.

“Problems can, and do, arise occasionally in any relationship,” notes Bob Ouellette, director of sales for BT Office Products, among Bose’s key JIT II alliance partners. (The \$1.6 billion office supply company currently has 25 JIT II relationships with its customers and suppliers.) “Mutual success depends on our ability to work through problems to generate solutions to everyone’s benefit.”

APPLICATION BEYOND PURCHASING

Since JIT II principles have worked so well in the manufacturing arena, many companies, including BT Office Products, have adopted these unique efficiencies beyond material planning and engineering into areas such as office supply management, printing, financial services, and transportation systems.

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LANCE DIXON

When Dixon approached Ouellette about his innovative partnering idea, Ouellette was a little skeptical. “He said he wanted me to double my business with him that year,” says Ouellette, “so I started with a roving, part-time employee at Bose. In no time I saw the potential and quickly embraced the value of the JIT II concept. We now have a full-time employee there and have trained all of the end users on the benefits of consolidating all of their office needs through our contract agreement. I can attribute \$3.5 million of new business with Bose and other companies to JIT II relationships.”

David Guinn, vice president of Marketing at BT Office Products, says the “process costs” in a product line with relatively small orders and small unit values can actually account for 150 percent

of “product costs,” far exceeding the value of the office supplies. “It’s difficult to imagine a solution that surpasses JIT II in driving down the total costs,” notes Guinn. “By eliminating steps and unnecessary paperwork, process costs diminish and end-user cycle times are improved. In a business with a standard of next-day delivery, high fill rates, and customer expectations, JIT II represents a great method for meeting expectations while reducing costs.”

In retail, a JIT II system often is called Efficient Consumer Response and is based on continuously replenishing products rather than building inventories. Wal-Mart pioneered this idea with Procter & Gamble in the early '90s in a big step to strengthen its low-price reputation. Success has come from sharing sales data and eliminating warehouses as goods move directly from suppliers to stores.

Notes Dixon, “Companies like Motorola are using the JIT II principles internally in a slightly different way. Instead of in-plant vendors, these companies exchange employees between divisions to better coordinate and strengthen support for the overall company.”

LESSONS LEARNED ALONG THE WAY

Lance Dixon has developed the following tips in response to general challenges often presented by JIT II: convincing management to try it, convincing suppliers to try it, finding the right partners and in-plants, making the culture changes related to innovation, educating and integrating the concept within the business, ending the relationship, confidentiality issues, and suppliers assuming they have a lock on your business.

1. Introduce JIT II into the easiest, least controversial part of the business.
2. Narrow the list of potential partners by concentrating on key relationships.
3. Choose partners carefully. Qualities of the ideal JIT II partner include:
 - a vendor you're currently doing a high volume of business (large number of transactions) with;
 - a vendor with an established record of dependability and high quality; and
 - a vendor that already has competitive cost levels, strong engineering support, and a history of continuously developing technology.
4. Choose vendor in-plants carefully. Qualities of the ideal in-plant representative include:
 - thorough knowledge of production/manufacturing capabilities,
 - outgoing personality and good fit for customer culture,
 - someone who takes initiative and can gain trust and cooperation of others easily, and
 - team player.
5. Discuss, document, and monitor expectations for the partnership. Review this often, staying focused on the core of the original deal.
6. Normal controls (appropriate signatures, computerized order limits) generally work well to limit risk.
7. If you seek staff reduction as a result of JIT II, do it gradually with attrition over time to avoid harm to your existing staff.
8. Test the pricing waters periodically on new and existing supplies to ensure your partner is earning the coveted JIT II position and maintaining competitive edge.
9. Focus on training at the start-up phase: comprehensive training for top-level personnel involved and general training for employee groups as a whole.
10. Don't be afraid to exercise discipline if the supplier partnership is not working out.

SUPPLY CHAIN MANAGEMENT

By transferring JIT II precepts to its transportation area, Bose also has achieved a seamless transportation network that puts Bose in the "driver's seat" rather than allowing materials to be shipped by vendors at will. As the supply chain lengthens across continents and oceans, having representatives from key transportation suppliers office within Bose has helped compress transit times, reduce raw materials and finished goods inventory, and improve carrier equipment use. Armed with communication and management systems that give reps and Bose managers up-to-the-minute information on every company shipment at all times, the in-plants allow Bose to handle their goods almost as if they were in hand.

When a computer can serve as a "warehouse," materials in transit can be considered and managed as inventory. "We don't allow our material suppliers to ship to us because thousands of people moving your materials in different ways is hard to track," explains Dixon. "Our suppliers put the material on their docks and we take it from there, using only a handful of trucking companies and ocean freighters coordinated completely by an in-plant representative from Roadway Express."

Paul Tagliamonte, corporate transportation manager for Bose, says this group of in-plants from a truck carrier, an import/export brokerage firm, and a major ocean carrier sitting side by side at Bose creates an on-site "command central," allowing the company to keep tabs on raw materials around the clock. "Having this type of information on hand and the experts there with authority to respond to changes in delivery needs allows Bose to react more efficiently to customer and plant needs," Tagliamonte explains. Bose calls this system "insourcing," as opposed to outsourcing logistics to a third party.

"Insourcing has helped Bose clip days off our ocean delivery cycles, improve the on-time delivery performance of our surface freight to 97 percent or better, and reduce the time involved in transporting finished goods to customers by as much as 30 percent," Dixon adds.

He warns that insourcing is not for everyone. It is ideal for high-volume shippers and requires discipline to build

a transportation structure of core carriers that are used for all shipments. It also requires buyers to change their traditional shipping patterns. With this system, the shipments are controlled by the transportation managers as opposed to the material or component supplier.

"In the past, the key measure of success was getting your material on time," says Dixon. "Mastering responsiveness within the supply chain is a new competitive weapon in American business."

SHARING THE IDEAS

Bose Corporation pioneered the ideas behind JIT II in the late '80s and took the idea public in the early '90s—but not for profit. In recent years, JIT II has been featured in front-page articles in the U.S. and European issues of *The Wall Street Journal* and a number of other business publications. A JIT II videotape is currently used in university MBA programs nationally and worldwide, combined with the case study used by the Harvard Business School. Dixon's textbook, *JIT II: Revolution in Buying & Selling*, has just been released in the United States with publication in Japan and Korea in progress.

Deluged with requests for tours and information on this new twist in partnering, Bose has recently created the JIT II Education and Research Center of which JIT II founder Dixon serves as director. Revenues in excess of expenses at the Education Center will be donated to educational scholarships.

Businesses by the hundreds are now sending as many corporate leaders as possible to one-day seminars offered by the center or bringing the director to their location to train departments and key vendors at the same time.

"JIT II is an idea that swept the nation before anyone even thought to sell it," says Dixon. "It's going worldwide a shade faster than Bose or the Education Center can keep up with because an amazing phenomenon happens when you train company managers of a multinational business or discuss the principles with American professors. They then take the ideas to their peers and colleagues in businesses and universities throughout the world."

WHERE DO WE GO FROM HERE?

The quick expansion of JIT II across geographical and traditional business boundaries is an indication of an active revolution in buying and selling. Harry Wallace, managing director of business development for Arthur Andersen, should know. He makes it his job to track business trends and update clients.



“Long ago, sales was a function of close, interactive relationships,” Wallace says. “We got away from that with mass production and mass marketing, and now the business world is focusing on tightening the buyer-seller relationship again. It’s a move that involves greatly changing roles, and Bose is leading the way.”

WILL THERE BE A JIT III ANY TIME SOON?

“We own all of the numbers but will not introduce anything new for at least 10 years,” Dixon says. “It will take 10 more years for JIT II to be fully adopted in the business world, even though it is catching on like fire.”

Computers, the Internet, and general electronic technologies are likely to help the JIT II concept explode in existing and new ways. BT Office Products already uses the Web to allow customers to place orders at their computer stations on its “Syntranet” site. “With a system of remote electronic controls, our customers can input their company code and see their specific pricing, browse the catalogs, and choose between contracted and non-contracted items without ever going through purchasing,” Ouellette explains.

JIT II in its entirety may not be for everyone, but bits and pieces of the partnering strategy offer businesses a new competitive edge. Dixon says anyone can get his

	 CUSTOMER	 VENDOR
Beginning of Partnership	Realizes immediate material cost reduction	Receives “evergreen contract” with no ending date
Throughout Partnership	Enjoys benefit of additional staff with no extra costs	Eliminates costs associated with sales effort
Results	<ul style="list-style-type: none"> • Dramatically improves communication and purchase order placement • Creates efficient invoicing and payment administration 	

JIT II relationships offer significant benefits for both the customer and vendor.

or her mind around the ideas without extensive training, but mistakes are possible if the fit isn’t right or the application is too wide to control.

Like any good thing, JIT II has its risks and payoffs. “I compare it to driving a car,” notes Dixon. “Yes, the possibility exists that driving a car could kill you, but at the same time it’s a much better option than walking. And it’s important to take driver’s education before you hit the highway.”

Two other upcoming JIT II opportunities are licensing and certification. The JIT II Education Center is now offering exclusive licenses to businesses in non-competing industries as a way to differentiate themselves from their competitors. Dixon says that so far about 15 companies have purchased exclusive licenses. The next step, Dixon adds, will likely be a JIT II certification program for procurement departments similar to ISO 9000.

RESULTS ALMOST GUARANTEED

Most business leaders can see the potential strategic advantages of their salespeople working side by side with design engineers, planning experts, and their customers’ marketing personnel. They can develop turn-on-a-dime flexibility to respond to new and unexpected

Bose Corporation

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demands of the marketplace, and they can generate a lot more business than the salespeople who only know their customers from the outside looking in.

“Although purchasing will always need to manage the relationships with strategic suppliers, we have experienced the benefits that can be achieved by empowering our suppliers,” says John McLaughlin, manager of corporate material services and transportation at Honeywell Inc., in a JIT II article within *PURCHASING* magazine. “By having on-site supplier reps, we’ve seen dramatic improvement in design cycle-time reduction, lower costs, delivery and quality improvements, inventory reduction, and lower prices as a result of more efficient value analysis efforts.”

Although Bose has a decade of JIT II results under its belt, JIT II is still considered a new idea in the business world. Notes Dixon, “Ten years from now this will be boring, but right now it’s at a delightful stage—

a type of American adventure. It’s an amazing matrix of interlocking business processes. I could write a novel about the way this whole process unfolded because a desperate purchasing manager in New England decided to try something new.” ●

CONTACT DATA

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