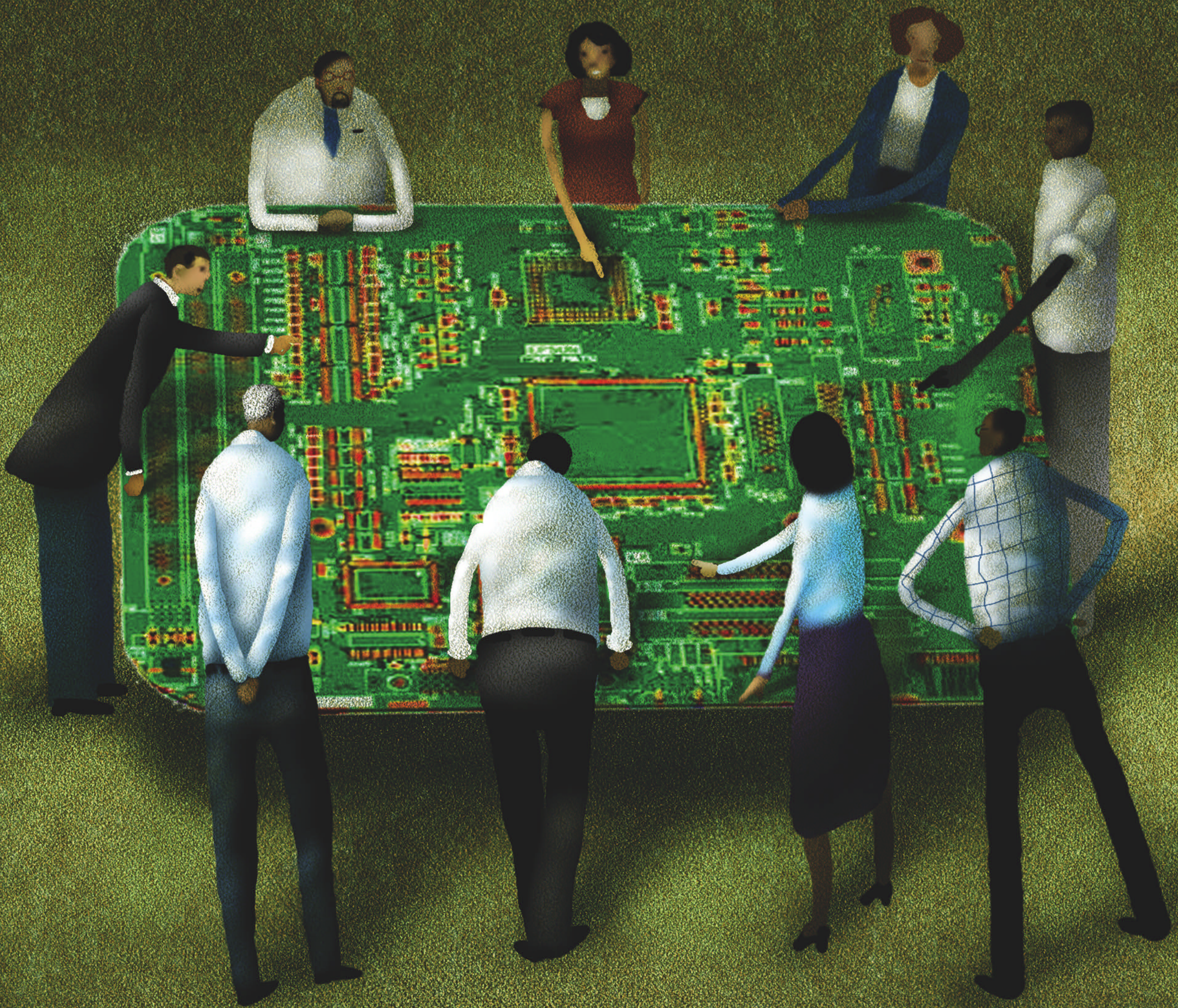
Bringing better PARTNERSHIPS TO THE TABLE

The 2009 electronics market tested the strength of supply chain relationships



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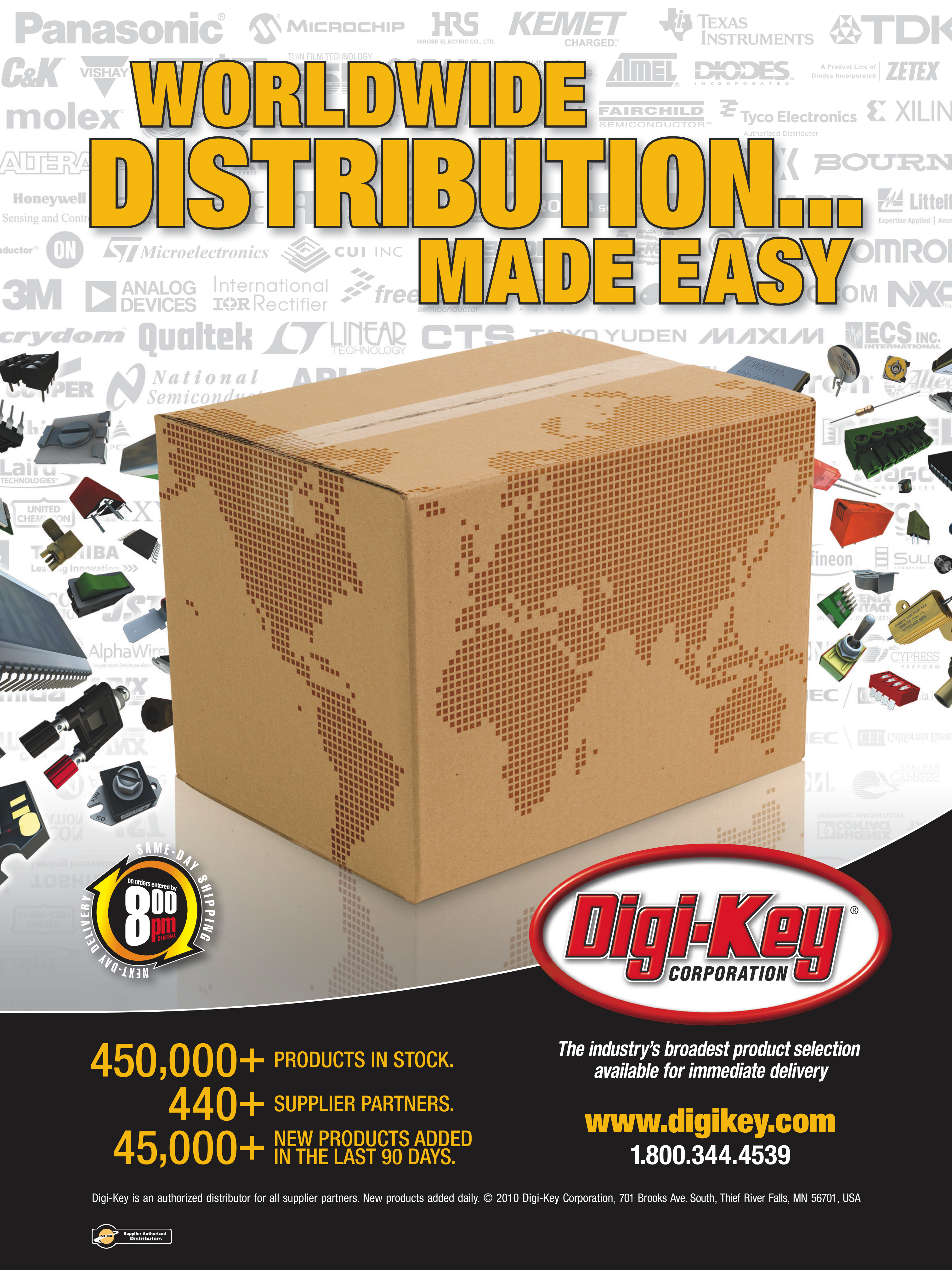
Including the TOP 25 North American Electronic Component Distributors ranking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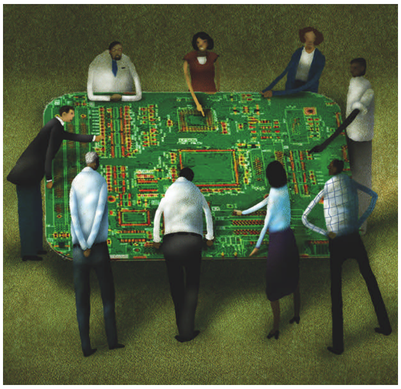

COVER: DAVE CUTLER

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CANON COMMUNICATIONS LLC

33 Hayden Avenue, Lexington, MA 02421
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EDN Worldwide

Russ Pratt, *Publisher*
Phone: 781-869-7982
Russ.Pratt@cancom.com

Judy Hayes, *Associate Publisher*
Phone: 925.736.7617
Judy.Hayes@cancom.com

Karen Norris-Roberts,
Director of Custom Programs
Phone: 781-869-7980
Karen.Norris@cancom.com

Barbara Jorgensen, *Special Issue Editor*
bjorgensen1@comcast.net

Norm Graf, *Creative Director*

Judy Hunchard, *Sr. Art Director*

A LETTER FROM THE EDITOR

Big changes to come

By **Barbara Jorgensen**

There weren't that many changes in the ranking of this year's Top 25 North American distributors versus 2009—but wait until next year. Just as the 2010 list was going to press, the top two companies in the industry—Avnet and Arrow, respectively, both announced acquisitions of other Top 25 players. By next year, No. 4 Bell Microproducts will be part of the Avnet organization and No. 12 Converge will be part of Arrow.

It's been a long time since two such major acquisitions happened back to back. During the 1990s, Top 25 (then Top 50 or Top 100) distributors were getting acquired all the time—literally. Not since Avnet acquired No. 3 distributor VEBA in 2000 has there been such a shake-up in the rankings.

The other big story this year is Smith and Associates, which grew by 41% in the 2008-2009 period to move from No. 13 last year to No. 7 on the 2010 chart. Executives at Smith said this wasn't due to an acquisition or a major expansion—the growth was all organic. Sales at last year's top growth company, Mouser Electronics, declined by 4% between 2008 and 2009 but Mouser retained the same ranking as last year at No. 15.

This year there is also a new entrant to the list. World Pace Group, or WPG, is well-known overseas as the biggest broadline distributor headquartered in Asia. Through its acquisition of Jaco Electronics' components business in January of 2009, WPG enters the North American distribution market at No. 20.

By late 2009, the best thing distributors could say about the year was that it was over. The year was exceptionally difficult in the electronics supply chain. Unlike the prior worst downturn in 2001, the electronics industry had little or nothing to do with the economic conditions of the market. Instead, the global financial markets and the declining value of North American real estate had a far-reaching effect on spending, which meant most of the Top 25 saw sales decline last year. 2009 was a real test of relationships in the channel, as we discuss in this year's Top 25 supplement.

The remainder of 2010 promises to be better. Although first quarter earnings releases had not begun before press time, most channel execs expect results have to be better than 2009.

Freelance writer Barbara Jorgensen has been covering the electronics distribution industry for nearly 20 years, most recently as a Senior Editor at Electronic Business *magazine.*

TOP 25 North American Electronic

		CALENDAR YEAR 2009						% OF REVENUE 2009				
Rank	Company name	North American Revenue (millions of $)	Total Revenue 2009 (millions of $)	Revenue Change 2008-2009	5-year compound annual growth	Public/ Private	Independent/ Franchised	North America	Europe	China	India	Japan
1	Avnet[8]	7,497.0	16,660.0	-7%	9.1%	P	F	45.0%	32% (EMEA)	23% (Asia-Pacific)		
2	Arrow Electronics[9]	7,048.4	14,684.1	-12%	7.0%	P	F	48.0%	29% (EMEA)	23% (Asia-Pacific)		
3	Future Electronics[1]	2,971.8	4,572.0	-16%	N/A	PR	F	65.0%	N/A	N/A	N/A	N/A
4	Bell Microproducts[1]	1,268.9	3,021.2	-16%	N/A	P	F	42.0%	41.0%	0.0%	0.0%	0.0%
5	Digi-Key Corporation	695.2	926.9	-6%	10.0%	PR	F	75.0%	11.0%	4.0%	1.0%	3.0%
6	TTI, Inc.	598.9	1,015.0	-19%	5.5%	P	F	59.0%	34.0%	3.0%	0.05%	0.05%
7	Smith & Associates	437.0	437.0	41%	N/A	PR	I	100.0%	0.0%	0.0%	0.0%	0.0%
8	Newark[3]	422.2	429.9	-28%	N/A	P	F	98.2%	0.0%	0.0%	0.0%	0.0%
9	DAC	383.6	387.5	-21%	2.0%	PR	F	99.0%	0.0%	1.0%	0.0%	0.0%
10	Nu Horizons	371.8	641.0	-19%	N/A	P	F	58.0%	10.8%	15.5%	1.6%	0.0%
11	Sager Electronics[1]	306.9	310.0	-10%	N/A	PR	F	99.0%	1.0%	0.0%	0.0%	0.0%
12	Converge[6]	280.0	280.0	-10%	N/A	PR	I	100.0%	0.0%	0.0%	0.0%	0.0%
13	Allied Electronics[2,5]	278.2	281.0	-17%	N/A	P	F	99.0%	0.0%	0.0%	0.0%	0.0%
14	Carlton-Bates[2,4]	277.4	277.4	-28%	N/A	P	F	100.0%	0.0%	0.0%	0.0%	0.0%
15	Mouser Electronics	228.3	285.4	-4%	25.3%	P	F	80.0%	9.0%	3.0%	1.0%	1.0%
16	Fusion[6]	198.1	233.0	11%	9.65%	PR	I	85.0%	N/A	N/A	N/A	N/A
17	America II Electronics[1]	195.6	254.0	-8%	N/A	PR	I	77.0%	9.0%	5.0%	0.0%	7.0%
18	Richardson Electronics	173.7	496.4	-12%	6.0%	P	I	35.0%	25.0%	18.0%	0.0%	5.0%
19	Dependable Component Supply[1]	149.3	237.0	-12%	N/A	PR	I/F	63.0%	11.0%	23% (Asia-Pacific)		
20	WPG Americas[1,7]	140.0	140.0	600%	N/A	P	F	100.0%	0.0%	0.0%	0.0%	0.0%
21	PEI-Genesis	123.6	158.4	-8%	21.0%	PR	F	78.0%	20.0%	1.0%	0.0%	0.05%
22	Advanced MP Technology[1]	101.5	290.0	-10%	N/A	PR	I	35.0%	25.0%	25.0%	0.0%	5.0%
23	Electro Sonic[1]	95.3	100.3	-5%	N/A	PR	N/A	95.0%	N/A	N/A	N/A	N/A
24	Master Distributors	92.6	107.7	-7%	N/A	PR	F	86.0%	4.0%	6.0%	1.0%	2.0%
25	Bisco Industries	78.6	81.0	-13%	4.0%	PR	F	97.0%	<1%	<1%	<1%	<1%

Distributors are ranked by calendar year 2009 North American revenue.

N/A = Not available

Revenue figures are gathered from financial filings, company provided information, and Reed Business Information estimates.

Component Distributors

				% OF REVENUE 2009						
Rest of World	Total Employees 2009	Revenue per Employee ($ thousands)	% of Revenue from VA Services	% of Revenue Active Components	Passive, electromechanical, interconnect	Computer products/ systems	Contract Manufacturing	Services	Other	Web Address
0.0%	13,400	1,243.3	N/A	51.3%	9.3%	39.4%	0.0%	0.0%	0.0%	www.avnet.com
0.0%	11,300	1,299.5	N/A	66% active and passive		34.0%	0.0%	0.0%	0.0%	www.arrow.com
N/A	5,000	914.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	www.futureelectronics.com
17.0%	2,000	1,510.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	www.bellmicro.com
6.0%	2,023	458.2	10.0%	44.0%	50.0%	0.0%	0.0%	0.0%	6.0%	www.digikey.com
3.0%	1,965	516.5	15.0%	1.3%	98.7%	0.0%	0.0%	0.0%	0.0%	www.ttiinc.com
0.0%	265	1,649.1	N/A	74.0%	22.0%	4.0%	0.0%	0.0%	0.0%	www.smithweb.com
1.8%	1,317	326.4	20.3%	12.4%	48.0%	0.2%	0.0%	0.0%	39.4%	www.newark.com
0.0%	630	615.1	40.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	www.heilind.com
14.1%	778	823.9	70.0%	85.0%	7.0%	8.0%	0.0%	0.0%	0.0%	www.nuhorizons.com
0.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	www.sager.com
0.0%	350	800.0	35.0%	70.0%	8.0%	22.0%	0.0%	0.0%	0.0%	www.converge.com
1.0%	680	413.2	N/A	4.0%	57.6%	0.0%	0.0%	0.0%	38.4%	www.alliedelec.com
0.0%	N/A	N/A	N/A	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	www.carlton-bates.com
6.0%	648	439.8	8.0%	35.0%	57.0%	0.0%	0.0%	0.0%	8.0%	www.mouser.com
N/A	90	2,588.9	15.0%	60.0%	20.0%	20.0%	0.0%	0.0%	0.0%	www.fusiontrade.com
2.0%	N/A	N/A	6.0%	75.0%	23.0%	2.0%	0.0%	0.0%	0.0%	www.americaii.com
17.0%	760	653.2	10.0%	57.0%	15.0%	0.0%	0.0%	0.0%	28.0%	www.rell.com
3.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	www.dependonus.com
0.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	www.wpgamericas.com
0.05%	490	323.3	70.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	www.peigenesis.com
10.0%	N/A	N/A	10.0%	60.0%	30.0%	5.0%	0.0%	5.0%	0.0%	www.advancedmp.com
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	www.e-sonic.com
1.0%	153	703.9	N/A	10.0%	84.0%	2.0%	0.0%	2.0%	2.0%	www.masterdistributors.com
<1%	320	253.1	10.0%	2.0%	98.0%	0.0%	0.0%	0.0%	0.0%	www.biscoind.com

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[1]Revenue figures and percentages are Reed Business Information estimates.

[2]Revenue figures are Reed Business Information estimates.

[3]Newark is parent company Premier Farnell's (West Yorkshire, England) main North American presence in electronic component distribution. Revenue represents FY end 01/31/10.

[4]Carlton-Bates is a subsidiary of WESCO Distribution.

[5]Allied is a subsidiary of Electrocomponents plc.

[6]North America revenue percentages are Reed Business Information estimates.

[7]WPG Americas completed purchase of Jaco Electronics' electronic components distribution assets in January, 2009.

[8]Avnet Inc. announced in March it would acquire Bell Microproducts

[9]Arrow Electronics announced in April it would acquire Converge

Channel connections are key to success

Communication is vital for profitable partnerships

By **Barbara Jorgensen**

Successful personal relationships, experts say, require a lot of open communication. The same holds true for business relationships, particularly in the electronics supply chain.

Supply chain relationships are no longer about just sharing forecasts, industry participants say. "It's about reliability and trust and meeting frequently to review how well the relationship is working," says Colin Campbell, vice president, distribution, for catalog distributor Newark. "You have to be tightly linked with anyone you are going to do a supply chain program with."

More information is being shared than ever before. Environmental regulations such as RoHS require suppliers to disclose the materials makeup of their components. Pricing information must be passed between partners because component prices vary from region to region. Tracking an order from design through fulfillment ensures the appropriate partner gets compensated for their work. End-of-life (EOL) notifications allow customers to plan for a dwindling component supply. "We are in constant communication with our customers, particularly when things get volatile," says Chuck Delph, senior vice president of sales, Avnet Electronics Marketing Americas. "Nobody likes surprises."

After months of stability, the supply chain is beginning to see some volatility again. Component lead-times are stretching out and spot shortages are beginning to appear. As a result, the supply-demand balance is beginning to shift. "OEMs are beginning to forecast out as far as possible," says Alex Iorio, senior vice president of supplier management, Avnet Electronics Marketing Americas. "This is crucial to our customer's ability--and ours--to pipeline demand to component factories and make sure inventory is at an optimum level."

It's the kind of environment that tests supply chain relationships. As the market begins to improve, industry players are looking for opportunities to profit. But no one wants jeopardize a solid relationship for profits' sake. "Most supply chain relationships have terms built in to them to protect the parties involved," says Michael Knight, vice president of product marketing and supplier marketing for specialty distributor TTI Inc. "But the reality is, customers can vote with their feet at any time."

CRAFTING A WIN-WIN-WIN

Ideally, supply chain relationships benefit everyone involved. Programs such as vendor-managed inventory (VMI) are designed to give customers flexibility while providing distributors and suppliers with crucial forecasting information. As long as value is added at each link in the chain, partners can build profitable relationships. "Everybody is looking for value," says Tom Valliere, principal at consultancy Design Chain Associates. "Everybody is coming at this with a different set of problems."

In a common VMI model, an OEM will rely on its channel partners to have inventory on hand when the OEM needs it. Vendors carry enough product to cover a sudden uptick in demand or provide a means to dispense of excess product. Programs may consign inventory; schedule orders; flag inconsistencies; and automatically replenish low stock. "The reason VMI works is, it addresses the fundamental issues that customers have in planning for their materials requirements," says TTI's Knight." The more dysfunction there is in a customer's planning environment, the more they will get out of a VMI program."

One of the major benefits for a customer in a VMI relationship is not holding inventory. Buying, warehousing and managing inventory adds costs for OEMs. One advantage of using a distributor in a VMI relationship is flexibility: distributors handle many different component lines and can assemble them into a kit for just-in-time delivery to a manufacturing site.

Using a distributor for VMI can make particular sense for small electronics OEMs, says Valliere. "Small companies lack the resources of the larger companies—they don't want to duplicate overhead such as purchasing and

Supply chain programs "are all about reliabilty and trust and meeting frequently to review how well the relationship is working."

Colin Campbell
Newark

materials management—so they can outsource as much of that as they want through a distributor."

A key factor in a successful VMI relationship is managing customer information. Customers forecast their component demand and provide as much other data as possible: order quantities, shipment dates, EMS factory location; environmental or trade restrictions, etc. Communication can be automated, personal, or a combination of the two. Partners will also outline their expectations: how much of an upside a distributor is expected to handle; pricing parameters; frequency of updates; and policies regarding non-cancelable/non returnable items (NCNR). "These discussions are customer specific and we make sure we have a process to support the customer and help mitigate risk," says Avnet's Delph. "The frequency of communication will vary based on the customer," says Newark's Campbell. "We have an annual meeting to set goals and then we deal with things day to day or week to week."

AVOIDING ANOTHER DISASTER

All of this communication is targeted at minimizing the risk of not having enough inventory when the customer needs it; having too much inventory; or having the wrong parts at the wrong place. It also acts as a reality check for suppliers and distributors. During the Internet bubble of 1999, orders were padded in anticipation of allocation; high forecasts weren't scrutinized and historic buying patterns were overlooked. When demand stopped, the supply chain was left holding billions of dollars' worth of excess inventory in 2001. Today, VMI and other supply chain programs are more carefully constructed. "All of these types of programs are most successful when you go in with very clear expectations," says Jennifer Bleakney, vice president for National Semiconductor Corp.'s (NSC) Worldwide Distribution and Customer Support. "There has to be shared risk; full visibility and clearly defined goals."

Nevertheless, risk is never entirely avoided. Components have a shelf life and unsold parts eventually have to be disposed of. Order cancellations leave unclaimed inventory somewhere in the supply chain. Components that are custom-made for a particular customer may be non-cancellable/non-returnable (NCNR), meaning the customer has to take and/or pay for the parts even if they don't use them. Partners in the supply chain frequently outline the terms under which a party can be liable for unused inventory (see "Why some partnerships aren't perfect," page 62). Just like VMI programs themselves, NCNR parts are determined on a customer-by-customer basis. "What is an exception to one customer might be standard operating procedure for another," says Newark's Campbell.

From the OEM standpoint, the ideal VMI relationship allows customers to place orders as needed without contractual obligations. Some distributors specialize in this model by always having inventory on hand. Future Electronics Inc. and Digi-Key Corp., as two examples, maintain their overall levels of inventory based on a number of factors, including general market data, customers' historic buying trends and their own risk assessment models.

"We have inventory on hand. We take in product without hesitation. We carry it without commitments," says Chris Beeson, vice president, sales and volume business division, for catalog distributor Digi-Key. Beeson says Digi-Key's wide customer base ensures there will always be demand for a product. Many of these customers are small OEMs and EMS companies specializing in quick-turn, low-volume orders. Digi-Key's business model asserts that always having stock on hand; not requiring forecasts; and not bonding or consigning inventory provides the greatest possible flexibility for customers. "Our industry has a lot of complexity and a lot of business practices exist," says Beeson. "That's compounded now by shorter product lifecycles, suppliers that are very focused on proprietary products; and distributors dealing with date-coded inventory. All of these things factor into our inventory management as well as the question 'should there be any barriers to providing service?'"

Future operates under a similar model on a larger scale. The broadline distributor has a constant handle on its inventory by operating on a single IT system, worldwide, throughout the company. The inventory is managed centrally, so Future can track it in real time. "I think we have a critical advantage in having the same IT system around the globe," says Lindsley Ruth, corporate vice president for Future Electronics. "We have one global process, one common approach and we use real-time programs. We are very focused on making sure inventory is on the shelf and available to sell. Our IT system allows us to bond inventory at the right level and have it available at anytime to handle unplanned demand."

CAN WE BE OF SERVICE?

Although distributors bear the brunt of carrying inventory in a VMI relationship, there are built-in advantages for the channel. "One of the benefits of VMI is you build a 'moat' around your customer," says TTI's Knight. "The more complex the relationship, the more difficult it is for a customer to switch [vendors]."

Most VMI relationships are custom, meaning communication and other protocols differ from customer to customer. Scrapping such a program with one vendor and starting up with another is time-consuming but far from unprecedented. "While it may be complex for a customer to switch its business, it doesn't mean we don't do the things expected of us, or if there is a hiccup or hitch we don't fix it immediately," says Knight. "You have to earn that business every single day."

Good VMI relationships enable distributors to be close to their customers and have visibility into their bill-of-material (BOM) and inventory needs. With this insight, distributors can be pro-active about selling complementary products to these customers; subbing in parts they carry on their linecard, or offering incentives to buy inventory that's building up for various reasons. Distributors involved in their customers' design process can align their linecard with customers' production needs. "We have talked about the supply chain, but a huge component of optimization is the design chain," says Avnet's Iorio. "If we get involved right at the design phase, we can construct a customer's supply chain to have the right product with the right lifecycle available right when they are ready to build."

The channel sees the most profitable opportunities, however, in the service sector. VMI offloads the work of ordering, storing and shipping inventory from the OEM to the distributor. The challenge for distributors lies in compensation for those services. Decades ago, to differentiate themselves in the market, distributors began offering value-added services—kitting, bar-coding, tape and reel, programming, etc.—to deepen their relationships with their customers. The cost of these services was bundled into the overall component order. In the years since, services have become more sophisticated and more costly to provide. The channel has tried to charge for services independent of a component purchase. This fee-for-service model did not work as customers perceived they were paying a higher price. Some distributors have spun off a services business—such as Avnet's Logistics unit—but typically, services are still tied to components.

Still, experts say, the benefits outweigh the burdens. "VMI can drive a premium associated with service," says DCA's Valliere. "Distributors can make more money selling services [than just components alone.]"

THE VALUE OF VISIBILITY

While suppliers may directly manage inventory for a small portion of their customer base, most outsource that task to distributors. "Component suppliers are really getting out of the fulfillment business," says Valliere. "They are trimming their list of direct customers and relying on distribution for both demand creation and fulfillment."

Similar to customers, suppliers are able to hold less inventory when their distributors have a far-reaching VMI program. "National has been shifting customers to distribution for quite some time; I'd say greater than 50 percent of our customer base goes through distribution," says National Semiconductor's Bleakney. "This has been a long-term focus for us—shifting the appropriate accounts through distribution—enabling us to support thousands of customers."

The flow of information from the distribution channel is a useful tool for suppliers. Distributors reach a wide and diverse customer base and can aggregate a suppliers' sales across that base. "From my perspective, the one asset that epitomizes the value of VMI is the visibility," says National Semiconductor's Bleakney. "It requires some level of forecasting as far out as we can see and if there is volatility in demand it helps us all plan better."

When things do go wrong, says Avnet's Delph, it's usually due to a lack of communication. "In a [customer] situation where I have to get involved, somewhere in the process we didn't have the right communication," he says. "That's when the customer gets surprised." ●

Why some partnerships aren't perfect

Aligning everybody's expectations can be a challenge

By **Barbara Jorgensen**

"Trust, but verify" was a favorite phrase of Ronald Reagan's. It's not a bad philosophy to apply to the supply chain.

As amicable as most supply chain relationships are, things still go wrong. In most cases, partners rely on best practices and contractual agreements to protect all parties when products become obsolete, orders are cancelled, or excess inventory begins to build. Channel players don't like to make a big deal of contracts, but they are a reality of today's supply chain.

"When you talk about a contract, it's something we put in place to protect the distributor as well as the customer," says Chuck Delph, senior vice president of sales, Avnet Electronics Marketing Americas. "But what it's really meant to do is make sure our teams are communicating regularly on the scope of services our customers are expecting and that there is a strong line of communication about what the risk of exposure is at any given time."

In the electronics supply chain, "risk" and "exposure" are all about inventory. During the industry downturn of 2001, excess inventory cost the supply chain billions of dollars in write-offs for products that were never built or consumed. The channel has since improved its processes and adopted practices that should avert a similar disaster. At the same time, the supply chain has become more complex and companies increasingly risk-averse. Protection and flexibility are a delicate balance. Channel players recommend suppliers, distributors and customers outline their respective expectations upfront; communicate as often as possible; and respond quickly when something goes wrong.

RETURN TO SENDER

For example, return privileges have been a longtime practice in the channel. Component suppliers allow customers and distributors to return products under certain circumstances. This practice intends—among other things—to ensure old or substandard parts aren't circulating in the supply chain.

But sometimes, the issue of returns gets sticky. When there's excess inventory—a customer orders more product than they can consume—returns make a good inventory management system. When there are non-cancellable/non-returnable (NCNR) orders—usually proprietary parts designed for a single or very narrow customer base—returns aren't encouraged. When there's slow-moving inventory that might get old and eventually lose its value, returns help refresh inventory. But pushing products back through the channel can cause excess inventory; requires complex credit accounting practices; and raises traceability issues if products aren't retuned in original packaging. Custom products can't be re-used. When inventory, in effect, becomes useless, it ends up on someone's books as a write-off.

If components are still viable when a customer cancels an order, those products can be sold to other customers in the supply chain. This is an area in which distributors excel: they have an extremely broad customer base so it's highly likely some customer can use the excess product. This works best with products targeted at broad and general use. It doesn't work as well with proprietary components. These NCNR products are essentially of no value to the majority of the supply chain. "[NCNR] products have always been an issue—and for good reason," says Michael Knight, vice president of product marketing and supplier marketing for specialty distributor TTI Inc. "They can be very difficult to forecast."

NCNRs might be negotiated between supplier and customer or distributor and customer. The exposure to NCNR differs greatly. Like VMI programs,

"What [contracts] are meant to do is make sure our teams are communicating regularly on the scope of services our customers are expecting."

Chuck Delph
Avnet Electronics Marketing

NCNR contracts tend to be customer-specific. "There are some situations in which we will enter into an agreement where a customer wants an unusual product," says Colin Campbell, vice president, distribution, for catalog distributor Newark. "We'd like to emphasize the products that we normally stock. But we will work with the customer to meet their needs. We stipulate upfront what service levels and what elements are included in the agreement."

"With NCNR we have to manage the situation very carefully," says Lindsley Ruth, corporate vice president for Future Electronics Inc. "We have to make sure the customer doesn't end up with excess—or that we don't end up with these products. You also have to be careful with automation [inventory replenishment systems particularly] if you are dealing with a high-risk, high-priced articles. But most people understand the nature of these products and are in constant communication with one another."

Suppliers and distributors acknowledge that OEMs face a lot of complexities when it comes to component selection. On one hand, customers want to differentiate their products. On the other hand, they want to minimize the risk of buying too much inventory. "Our industry has a lot of practices that exist to manage risk," says Chris Beeson, vice president, sales and volume business division, for catalog distributor Digi-Key Corp. "The financial aspects [of the supply chain] are important to everyone in the channel—there's cash flow; ROWC; margin pressure and the list goes on. I think what's happening is we are realizing that one size doesn't fit all."

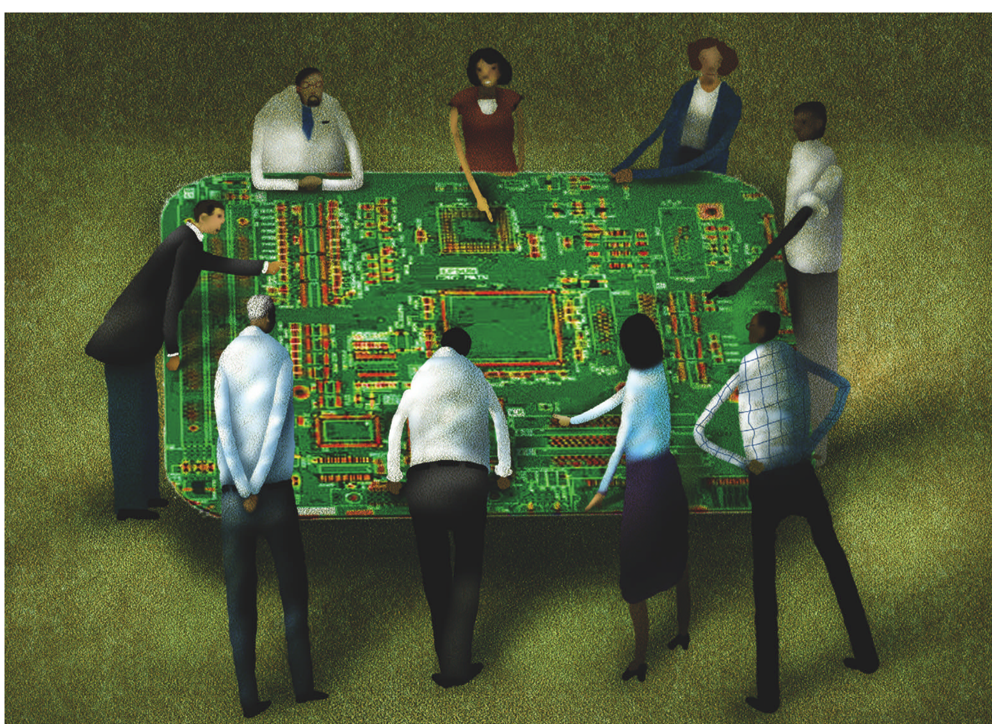
"All of these types of programs are most successful when [suppliers, distributors and customers] go in with very clear expectations."

Jennifer Bleakney
National Semiconductor

WHEN FORECASTS DON'T WORK

While the supply chain runs best on shared forecasts, predictions aren't viable for some customers. Small EMS companies, for example, specialize in low-volume prototypes and fast-turnaround products. "The nature of the [sourcing] relationship is hand to mouth," says Beeson. "Their ability to forecast is limited and from a traditional perspective, the ability to hold and bond inventory always carries some risk. So here you have a customer base that that, when faced with contractual relationships, could find themselves in a situation where they could not take advantage of a typical supply chain methodology." Most distributors try to meet the needs of such customers, and some specialize in the hand-to-mouth model. Each distributor has their own way of managing inventory and risk. "We bring together a base of knowledge and experience to make sure we are able to minimize risk in a volatile environment," says Alex Iorio, senior vice president, supplier management, Avnet Electronics Marketing Americas.

"In a supply chain program, the most important predictor for the future is the immediate past," says Future's Ruth. "We look at what is reasonable. We want to make it simple—if we bond inventory we release it as customers need it in a quantity that makes sense. In terms of liability and risk, we understand that things are going to happen. The key is the speed of execution in addressing those issues and making sure it doesn't happen again. We find people don't like to deliver bad news, so salespeople may sit on a return request or a cancelation. We encourage addressing it immediately and swiftly to correct the issue."



DAVE CUTLER

Distributors and suppliers prefer to avoid hard and fast rules when a customer engagement is out of sync. Clear, consistent and upfront communication goes a long way toward avoiding problems. "All of these types of program are most successful when you go in with very clear expectations," says Jennifer Bleakney, vice president for National Semiconductor Corp.'s (NSC) Worldwide Distribution and Customer Support. "There should be shared risk, full visibility and shared goals. Customers should outline their expectations relative to shared risk."

"We tend to communicate with the customer so we can see an inventory slowdown in real time and ask them if they want to back their supply chain down," says Avnet's Delph. "We ask what they want to do with the inventory. We can burn it off, we can slow it down—the only time you see NCNR come up is when we can't use the product anymore. Then the question becomes how do you remove that inventory? Are there other avenues for it? What does the supplier support? Even in the worst case scenarios we work to see that there are no surprises."

Everyone acknowledges that the supply chain has come a far way from the glut of 2001 when the industry was flooded with inventory that was built to forecast but never consumed. All parties in the supply chain tightened up their practices, improved their diligence, and adjusted to a more realistic business environment. Nevertheless, players agree, there is always room for improvement.

"We bring together a base of knowledge and experience to make sure we are able to minimize risk in a volatile environment."

Alex Iorio
Avnet Electronics Marketing

"I think what the entire supply chain continues to need to improve is how we serve customers, whether it's through the channel or whether it's regional or global," says NSC's Bleakney. "We always need more forward visibility to end-customer demand."

While supply chain agreements contain a large element of trust, each party should conduct their due diligence. "I think when you build an agreement on the needs of the customer, through the rights types of discovery, everybody benefits," says Avnet's Delph. ●

Technology optimizes channel bonds

Keeping products and information flowing

By **Barbara Jorgensen**

It wasn't that long ago when technology was going to replace distribution relationships in the supply chain. Specifically, the Internet was going to render many of the services provided by the channel obsolete. Instead, the Internet has become one of the many tools suppliers, distributors and customers use to optimize their complex relationships.

Even though the Internet has enabled self-service for designers and buyers, customers are not bypassing the channel in favor of managing their own supply chains. Distributors are able to pull together the offerings of hundreds of suppliers and aggregate them into one place. Engineers, procurement professionals and planners use distribution Internet sites for component research; price; performance parameters; part substitutions and environmental compliance status, etc., and then, if appropriate, enter into relationships that require a higher level of technology integration. While some supply chain relationships can run on technology alone, "there is also a lot of individualized attention customers need," says Chris Beeson, vice president, sales and volume business division, for catalog distributor Digi-Key Corp. "We are committed to building whatever capabilities our customers require."

In many respects, technology has strengthened supply chain relationships. Component suppliers, for example, do not have to be directly linked to their end customers to get input on their demand expectations and technology needs. Distributors can service customers on behalf of the supplier as if the service comes direct. How all of this is communicated is up to the customer, and there are standards or proprietary options for transmission. "Whether it's through a proprietary protocol, EDI or RosettaNet PIPS, we have engaged with distribution to optimize communication in the supply chain," says Jennifer Bleakney, vice president for National Semiconductor Corp.'s (NSC) Worldwide Distribution and Customer Support. "One of the things we look for is continuity of data—a set of standards and transaction sets so we can understand the data coming in. We continue to make our business engagements as seamless and as responsive as possible."

When entering into a supply chain relationship, industry players advise against relying on technology alone. "Of course we have [forecast] data, but then it's up to our organization to have conversations with our customers on a regular basis," says Chuck Delph, senior vice president of sales, Avnet Electronics Marketing Americas. "When that happens, we rarely have surprises."

Although customers usually drive the technology that manages a supply chain relationship, distributors and suppliers have to be in sync. "We work collaboratively so we understand [customers'] forward-looking demand—our arrangements cover all aspects [of the relationship] from how we communicate; what data is communicated; how we reconcile differences; and how we use that data within the planning and manufacturing environment," says NSC's Bleakney.

The channel has spent the better part of the past decade improving the way signals are sent and received. The optimism of 1999 led to the inventory excess of 2000-2001. Now, forecasts go through a number of procedures to make sure they are based as much as possible on actual demand. Industry executives point out that even though market demand slowed abruptly just before the current recession, demand and supply stayed well within balance. "Distribution has generally done a great job of managing forecasting

Technology "helps us to find what is of interest to our customers and what is relevant to their needs."

Alisha Mowbray
Newark

since the bubble of 10 years ago," says Eric Sussman, director for Americas distribution for connector maker Molex Inc.

One of the challenges for the channel will be continuing to provide a range of supply chain services to suit all customer needs, and providing those options in a way that is profitable for all parties involved. "VMI is one example of a supply chain service implementation; in-plant stores or proximity warehouses are another," says Alex Iorio, senior vice president of supplier management, Avnet Electronics Marketing Americas. "They are all pointed in the same direction: optimizing the trading relationship. It's up to us to make sure [customers] have as much or as little support as they need. We believe we have a full suite of services and we can assist any customer regardless of how large or how small an engagement they need."

There are other issues on the horizon for the channel. Digi-Key's Beeson says the supply chain should look at the social networking phenomenon and try to determine how it may affect business relationships. Just like the last 10 years has been about optimizing technology, "the next 10 years may be about figuring how Facebook and Twitter and blogs fit into the business environment and if they also figure into productivity," Beeson says. ●

BUILDING A COMMUNITY

Technology has enabled a free-flow of information back and forth between suppliers, distributors and customers. At the same time, though, the proprietary nature of much of this information and partners' desire to protect privacy requires that this information be shielded from the rest of the world. Building a community among peers that also compete against one another is a daunting prospect.

Element14, a forum provided by Newark, is designed to bring the engineering community together for discussion and problem-solving. The site is not linked to Newark's catalog or purchasing sites and does not promote any particular technology, supplier, or Newark marketing promotion. Engineering and purchasing have distinct needs says Alisha Mowbray, senior vice president of marketing for Newark, "and element14 is targeted at engineering." The catalog distributor sees element14 as one more way distributors can build relationships with their customers.

"We have known for years that information is the key to the design engineer," she says. "As we got deeper into the analysis we saw the need for engineers to collaborate with other experts in the field. What is unique about design engineers is, once they have made their purchasing decision, they push the decision through the channel and then move on. Early in the design process they are in the research phase. Then when they are ready to buy, they move on."

Discussion topics on element14 are driven by participants. There is an open forum and the option for private collaboration and groups. Newark also makes experts available to answer questions. Some are from Newark suppliers, others are in the academic or research fields, Mowbray says. "This is community driven, meaning, it's agnostic—it's not just our suppliers."

Users of element14 are not marketed to or sent follow-up e-mails. If business is pulled through the site, it is at the behest of the user. "These are people that don't want to be marketed to and not interested in receiving e-mails and calls," says Mowbray. "If someone is searching for information and there are types of products they are looking for, we will help them get that information. The community needs to customer driven. Pushing products is contrary to the point."

Of course, Newark hopes once a design decision is made a purchasing decision will follow. But element14 also helps the distributor stay on the cutting edge of the engineer's mind. "From our standpoint, it gets us an opportunity to stand right next to the customer," Mowbray says."We don't want to downplay the IT investment and expertise involved--this is leading our industry--but I think the ongoing work is around how you engage your supplier and customer base and how to reach out to experts."

It's more about coordination and engagement, she adds. "We are building a longer term relationship whether it is with the supplier, customer or even pre-customer. We don't think we are going to make big dollars, but users are talking about new technologies and new solutions and we can use our internal expertise to pick this up and leverage it. It helps us find what is of interest to our customers and what is relevant to their needs." ●