



A TECHNICAL BUSINESS NETWORK EXECUTIVE REPORT

Collaborative Commerce - What's Working, What's Not, and Why

by Emily Sopensky, The Iris Company

REPORT ON THE SECOND IN A SERIES OF BRIEFINGS ON COLLABORATIVE COMMERCE

Houston, Texas
August 2001

FORWARD

The Houston Technology Center (HTC) is in the business of forming alliances to support technology-based industries that flourish beyond the borders of Houston. We are pleased to work with the Technical Business Network (TBN) in facilitating the information and solutions that help technology companies succeed.

The many energy-related businesses that are based in Houston provide excellent laboratories for collaborative commerce in practice. The briefing that TBN hosted in Houston on Collaborative Commerce provided practical information based on first-hand experience from C-level and director-level executives.

For those of you who were unable to attend the briefing, we hope this report provides enough information to help you in your own collaborative commerce effort. (Go to www.techbiz.com/assets/tbn-SA-report.pdf to see the report on collaborative commerce generated after another TBN briefing held earlier this year.)

We were pleased to work with TBN in producing this briefing.

Please feel free to send comments to me at pfrison@houstontech.org. To reach the Technical Business Network, email Sonia St. James, President and CEO, Technical Business Network at stj@techbiz.com.

We look forward to hearing from you.

Paul Frison, President and CEO, Houston Technology Center
August 2001

Collaborative Commerce - Collaborative Business and What Works, What Doesn't, and Why

"Collaborative Commerce is a new business model powered by the Internet. It is a mechanism that aids survival in the new economy." -
Sonia St. James, President, Technical Business Network

by Emily Sopensky, The Iris Company

The Technical Business Network presented this half-day briefing in conjunction with the Houston Technology Center. Featured were national and local who provided Houston executives with first-hand knowledge of implementing collaborative commerce. This report summarizes the proceedings of the event.



Sonia St. James welcoming attendees

Overview

The flow of information is at least as important as the movement of dollars. Nearly every organization must eventually deploy some aspect of collaborative commerce to remain competitive and deliver value.

The Technical Business Network's Collaborative Commerce Briefing held in Houston on August 21, 2001 featured industry leaders who shared information and their experiences creating, implementing, and working with this compelling business model.

Collaborative commerce is in a state of definition and growth due to the ever-increasing pressure on technology manufacturers and service firms to bring fresh products to market. Collaborative commerce offers competitive advantage by leveraging existing and new technologies and relationships, enabling a company to collaborate and interact with its partners, customers, suppliers, distributors and consultants.

The ability to deliver technologies to provide more effective communication among a company's distributors and customers across design, development, supply and distribution chains accelerates the entire competitive process.

Web-based solutions manage product content, critical communication and commerce transactions, improving time to volume, customer responsiveness and cost of goods sold.

More specifically, the opportunities are for all parties to participate in determining business goals and objectives, metrics and milestones, and stewardship of various projects. Further, customer-centric thinking is within reach, especially for companies already involved in ecommerce and in integrating information technologies.

Houston, the site of the second TBN collaborative commerce briefing, is counted in Business Week's top 10 cities for high technology (August 2001). Home to many leading edge technologies, Houston is the energy capital of the world. Over 1000 information technology firms, including Compaq and BMC Software as well as Bindview and PentaSafe Security Technologies, Inc., call Houston home, too. The city has the world's largest medical center - \$500 million in annual sponsored research, along with public corporations such as Lexicon Genetics, Tanox, Inc., and Texas Biotechnology. Finally, Houston is home to NASA's Johnson Space Center, the Super Conductor Center and Rice University - all strong examples of technology that leads.

Agenda

Following welcoming remarks by **Sonia St. James**, president and CEO of the **Technical Business Network**, **Paul Frison**, president and CEO of the **Houston Technology Center (HTC)** opened up the briefing by and to Houston area executives.



Paul Frison, president/CEO,
Houston Technology Center

"One of HTC's missions is to organize and endorse educational events that help Houston technology companies grow," said Frison. "This conference will provide insight into collaborative commerce trends and perspectives and how they can directly benefit Houston companies."

Laying the ground for future discussions, **John Beddow**, Publisher, **Houston Business Journal** and **Kip Amedeo**,

Regional Director of Sales, **divine, Inc.** gave their own views of e-business and its future among Houston-based companies.

The keynote was delivered by **Jim Walker** of **Forrester Research, Inc.** Featured speakers included **Will Goetz**, VP Energy Solutions **divine, Inc.**; **Rick Koskella**, E-Strategist, **Sun Microsystems, Inc.**; **Dave Lisle**, e-Business Development, **Reliant Energy Communications**; and **John Jordan**, VP e-Solutions, **Dynegy Global Technology**.

The panel on connecting the unconnected was moderated by **John Beddow**, **Houston Business Journal**. Panelists were **Jeff Dodd**, a partner in the law firm of **Mayor, Day, Caldwell & Keeton, LLP**; **David Archer**, the president and CEO of **Petrochemical Open Software Corporation**; and **Derek Ruths**, co-founder and chief scientist of **Advanced Reality, Inc.**

Keynote Briefs

To respond to the threat of mounting customer demands, firms must embrace dynamic collaboration to share business activities across a network of allies. The collaboration imperative is highest in industries facing rapid change and a complex market structure. **Walker's** presentation, entitled **"Dynamic Collaboration For Winning Partnerships,"** focused on the three ideas that **Forrester Research** has developed to help industries—like the highly competitive, zerosum game of energy trade markets—to find a better solution through collaboration. The platform is as follows:

1. E-business networks link companies' business processes.
2. Dynamic collaboration connects companies to achieve common objectives.
3. Extended relationship management, or XRM, supports multi-firm collaboration to manage supply and demand.

Sellers are moving online, according to Walker. United Technologies, GE and others have all benefited from reverse auctions. Walker reports that one-quarter to one-third of all sales will eventually come through the Internet.



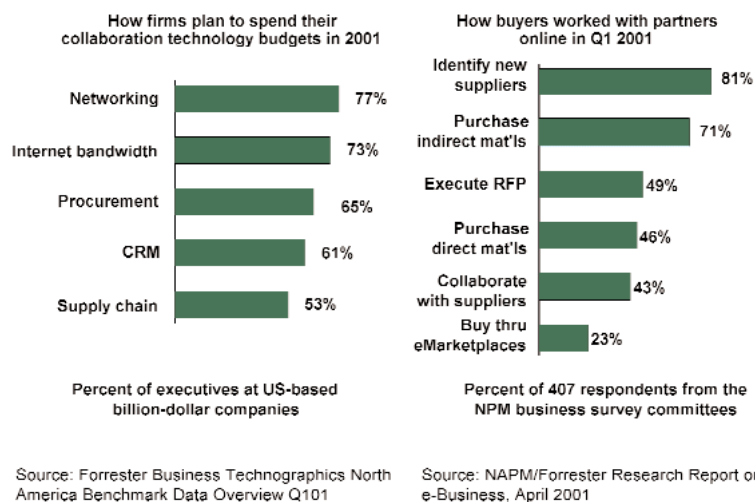
Jim Walker, Senior Analyst, Forrester Research, Inc.

Based on interviews with over one thousand C-level executives, Forrester finds that collaboration is a growing area for investments in IT. Forty-three percent are collaborating with suppliers because "you can only squeeze so much" from internal operations.

Over 75 percent of companies surveyed by Forrester are using the Internet for finding materials. Suppliers, too, are moving online.

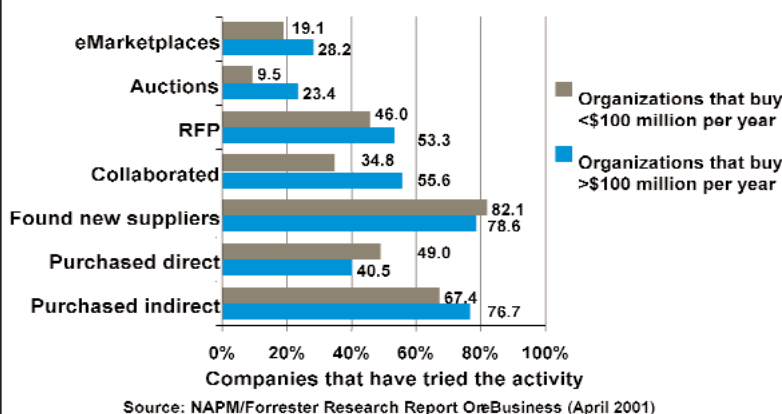
The reasons are obvious. The Internet offers several ways of freeing up capital that gets caught in processes. Because the Internet is a fluid communication tool, one of the offsets to the cost of maintaining a presence is to reduce design cycle times and design flaws. Also, it is another tool in minimizing inventory on hand. Finally, the order/payment cycle is shortened, and troubleshooting can be expedited via the Internet.

Firms have ambitious collaboration agenda



Companies have many uses for the Internet, including procurement functions.

Buyers use the Net for many activities



However, company buyers are generally not pleased with their online purchasing experience. According to an April 2001 Forrester Research report, 36.6 percent rate their online suppliers' capabilities as poor to bad. True, 55 percent say these are okay. But only 7.8 percent of buyers rate them as good to excellent.

e-Business Networks

E-business networks share the following three characteristics:

1. Links are free and standards-based (e.g., XML, SOAP, UDDI), resulting in real-time relationships.
2. Information diffuses instantly. Because access is open to partners, word spreads quickly. Market data is common property to partners.
3. Assets live on the network (e.g., online transactions, pipeline bulletin boards, RTO/ISO scheduling, energy exchanges).

Links based on standards such as XML, UDDI, and SOAP and data exchanges such as OASIS, GISB, and eTags pave the way for more collaboration among companies.

E-BUSINESS NETWORK CHARACTERISTICS

	TODAY	E-BUSINESS NETWORKS
INDUSTRY EVOLUTION	Consolidation	Specialization
PROCESS FOCUS	Intracompany	Intercompany
DATA STRATEGY	Own and hide	Share and exploit
BASIS FOR TRUST	Relationship	Performance
DECISION-MAKING	Computer-assisted	Human-assisted

Forrester Research, Inc.

Dynamic Collaboration

The characteristics of the e-business network that drives collaboration must be dynamic. Without diminishing the value of information a company receives, being able to respond quickly in a collaborative fashion demands that much of the data must now be shared with vendors and partners to fuse new strategies and ways of working together.

The three principles of dynamic collaboration that Walker identified suggest a highly sophisticated approach to collaboration. The principles are as follows:

1. Seek mutual gain by forming strategic partnerships.
2. Work flexibly across boundaries.
3. Tailor effort to the context.

Dynamic collaboration supports information sharing to achieve shared business goals.

Emerging technologies fuel collaboration by offering integrating solutions. New offerings include those that monitor (e.g., content management systems, enterprise portal servers and instant messaging), manage (e.g., supply portals, enterprise integration servers, developer portals, and collaborative design applications), and optimize (e.g., B2B integration servers, supplier clearinghouses, business registries, and Web services).

Extended Relationship Management

The third idea that Forrester contends will be a driving force in collaborative commerce is the management of the extended relationship. Applications for such collaboration must accommodate and be more tolerant of differences among firms that must work to together. Mixing apples and oranges to achieve a strong, but dynamic collaboration is now just part of what works when companies partner for very specific goals. The following chart compares today's applications with those that will dominate collaborative arrangements.

XRM APPLICATIONS VS. TODAY'S APPLICATIONS

	TODAY'S PAIRED APPS	XRM APPS
IMPLEMENTATION	Installed, customized	Hosted, configurable
ADMINISTRATION	By the enterprise	Distributed
INSTALLATION	1 per enterprise	1 per network
INTEGRATION	Proprietary	Open
ARCHITECTURE	Client/Server	Net-native
INFORMATION DELIVERY	Pair-wise	Hub-and-spoke

Forrester Research, Inc.

Extended relationship management supports information visibility through supply/sales chains.

Featured Speakers Briefs

Featured speakers were **Jordan**, with **Dynegy Global Technology**; **Rick Koskella**, of **Sun Microsystems**; **David Lisle**, with **Reliant Energy Communications**; and **Will Goetz**, for **divine, Inc.**



John Jordan, Dynegy Global Technology



Rick Koskella, Sun Microsystems

Digital Dynegy - The Evolution of e-Business at Dynegy

Discussing **Dynegy's** commercial e-business initiatives, **Jordan** noted that the investments made will not decrease. In fact, the average Global 2500 company will spend \$35MM per year on e-business (ranging from 2 to 5 percent of revenues). In other examples, he said that Goldman-Sachs plans to spend \$6B over the next five years on technology solutions, and Reuters will spend \$750MM over the next four years to Internet-enable their business.

Dynegy's e-business solution evolved in the traditional chronology. First, the company established a Web presence. Then, it began to apply existing processes to the Web presence and allow transactions. Next, Dynegy actively sought a strategy for its Web presence and investment in it as a collaborative tool.

Some of the tools that Dynegy uses are assigned to each of the company's four dimensions of its Digital Dynegy: Connecting people and processes, driving solutions based on knowledge, working in real-time for event-driven activities, and leveraging key partnerships.

It used to be uneconomical for Dynegy to file insurance claims of less than a few thousands of dollars. But with their collaborative solutions, the company now files the smaller claims because the information needed is much more accessible.

Part of the collaborative strategy is to have traders work with company partners in real time. However, Dynegy is wary of chatrooms because security is hard to impose.

"We can't do it all ourselves," Jordan admits. Working with partners and alliances is important. In addition to its technology partners, Dynegy considers the Houston Technology Center and Rice University as its allies. Jordan admits that the process of fumbling through disjoint-

ed efforts was frustrating to him. Jordan notes that e-business initiatives at Dynegy have been fast-paced, with sites launching every two to four months. But in addition to the results of faster response times with partners, there have been many unexpected benefits. For example, it was always difficult to get a price quote on propane gas. Now the customer can get it on the Web site. Both Dynegy and the customer benefit.

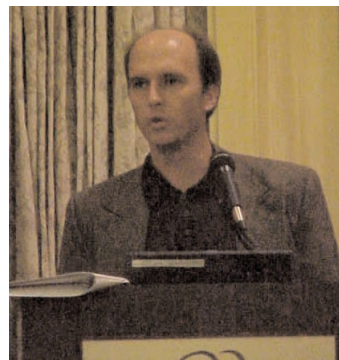
Sun's Vision for Web Collaboration

Sun Microsystems' Rick Koskella drew on the company's experience and best practices in solving e-business problems for collaborative commerce and supply chain tasks.

According to Koskella, of the \$2.7 trillion forecast for B2B commerce in 2004, over half will be through e-marketplaces. To date, Sun is helping companies in healthcare, automotive, pharmaceutical, retail, manufacturing, transportation, energy, and construction. Enron Online, for example, uses a Sun-based system.

Koskella reports that Sun systems, including its iForce used in building e-business systems, are found in over 250 exchanges.

Sun understands the critical importance of building e-marketplaces on top of a well-defined Internet software "stack" and of using open standards. The value of a robust, scalable infrastructure platform cannot be underestimated in addressing current and future needs.



David Lisle, Reliant Energy Communications



Will Goetz, divine, Inc.

Reliant Energy Communications --Integrating e-Procurement into the Enterprise

David Lisle of Reliant Energy Communications focused his presentation on the challenges and solutions of an energy procurement portal.

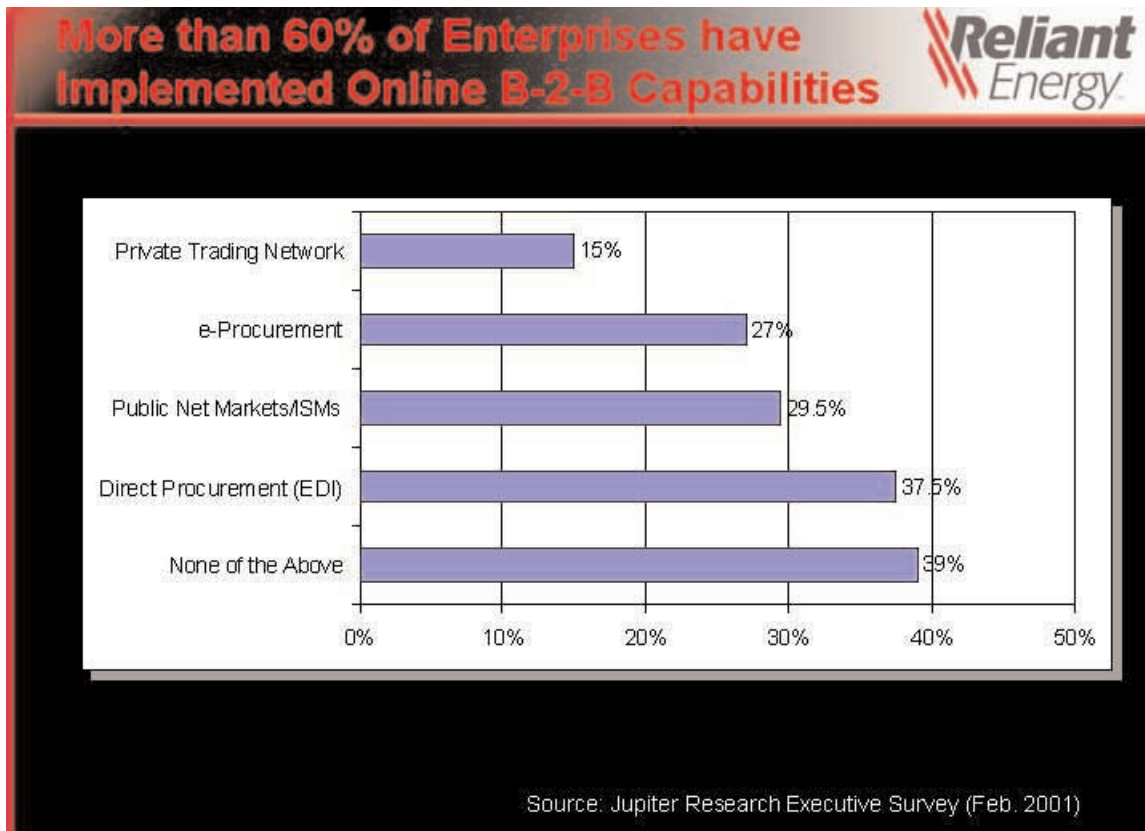
The decline in market value of many Internet companies is just another challenge to older, more traditional companies whose leaders are already reluctant to invest in building an e-business infrastructure where only 25 percent of executives polled have not yet seen a return on investment. Regardless, fully 60 percent of enterprises have implemented B2B solutions.

Lisle reports that Pantellos, a Houston-based, industry-sponsored consortium, was launched January 2001.

Establishing collaborative agreements between buyers and sellers, the consortium now includes 18 supply chains ranging from office supplies to nuclear packing, gaskets and seals. Agreements for another 29 supply chains are in development.

have dynamic, digital catalogs.

Further, catalog standardization and streamlining homogenizes products, diminishes comparative advantages, and dilutes branding.



In researching its own response to e-business, Reliant found procurement was an ideal application for the company's investments. The top reasons for B2B e-procurement are as follows:

- Access to multiple supply sources
- Market price instant availability
- Reduced pricing through the use of dynamic bidding
- Lowered purchasing administration costs
- One-stop shopping for services
- Reduced inventory costs
- Compressed product acquisition cycle times
- Curbed maverick spending

Yet, according to Hurwitz Group research (April 2001), less than 20 percent of US suppliers have adopted online public market channels. Primarily, suppliers are afraid of disturbing the existing relations they have with customers. Also, online marketplaces increase supplier competition, and promote downward price pressures.

With collaborative commerce, there is also a perceived loss of control of marketing and of catalog content. Most who do collaborate on these do so statically. Few actually

Finally, few companies have yet to experience a positive ROI. Little or no return on an investment in an already risky operation provides no incentive for committing resources to the e-marketplaces.

On the other hand, B2B e-commerce is yielding real benefits in the form of streamlined processes, lower costs, and market liquidity, though not at levels originally forecast, says Lisle. According to Aberdeen Research, automating e-procurement results has brought a 70 percent drop in cycle time. Meanwhile the price of goods decrease has decreased 5 to 10 percent, while inventory expenses have dropped 25 to 50 percent.

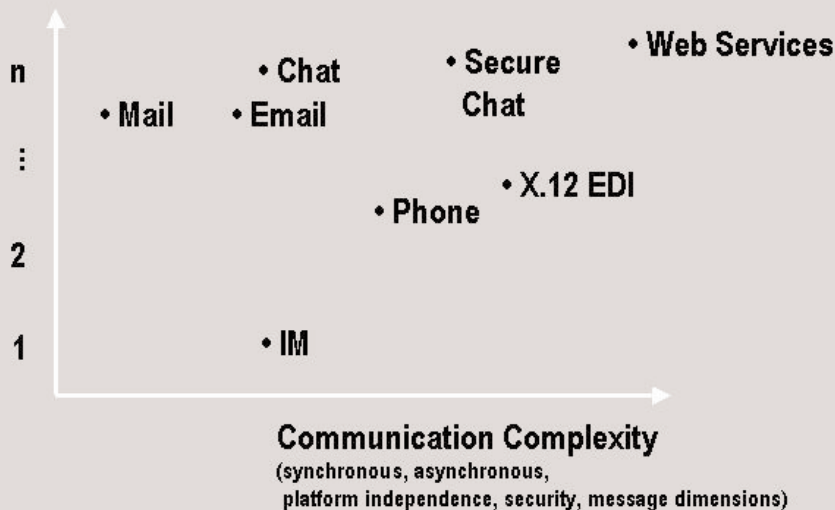
Portal Technology in Collaborative Commerce for Energy

Will Goetz, VP of Energy Business Solutions for **divine, Inc.**, a company of 3000 Web savvy consultants, reviewed what the user community expects from a portal and what it takes to meet those expectations.

Providing the tools for business agility for faster time to market and greater efficiency now requires serious partnerships and alliances. Ultimately, companies should be seeing their investment in collaborative commerce to see improved responsiveness to customers.

Collaborative Technologies Continuum

Number of Partners



August 29, 2001

Collaborative Commerce
P1

divine

In energy-related fields, Goetz sees a high need for collaborative commerce in energy services, specialty chemicals, construction, marketing and trading, but only a moderate need for it in energy logistics.

One of the fundamentals of implementing a Web-based solution that is often overlooked, says Goetz, is ensuring partnerships are focused on long-term objectives. “Barney” (“I love you, you love me”) deals do not work because they are not core to the business.

Previous attempts at collaborative commerce have been cumbersome and costly. The administrative costs of Lotus Notes and X.12 EDI, for example, are high and still too slow.

“Standards structure the deal,” cautions Goetz. “They structure the environment, reducing the need for application infrastructure, lowering administration costs and enhancing the flexibility of interface connections

Recently, Web services (software components accessible over ubiquitous networks) has emerged as the solution that drives the partnership deals. Standards, such as UDDI, XML, SOAP as well as Web-enabled applications under Web services provide the enabling infrastructure for successful partnerships.

Panel: Connecting the Unconnected

Collaborative commerce often makes the promise that all business partners can work together to make everyone successful. Discussing that proposition, TBN’s panel of experts dealt with a range of real-world issues for connecting the unconnected.

The panel featured moderator **John Beddow**, **Houston Business Journal** and panelists **David Archer** from the **Petrotechnical Open Software Corporation**; **Derek Ruths** with **Advanced Reality**; and **Jeff Dodd** of **Mayor, Day, Caldwell & Keeton**.

Conclusion

The examples of collaborative commerce in practice that Houston-based Reliant Energy and Dynegy presented reveal full-blown works in process. While alluding to some of the pain of proceeding in uncharted territories, both companies recognize the inherent importance of investing in technologies and processes that permit them to be closer to their suppliers and customers. Being on top of the latest technologies in Web-related infrastructure and services is just one of the caveats of running to stay in place in the emerging collaborative commerce arena. Metrics that “prove” the success of these investments are still scarce. Yet there is enough evidence that streamlined processes are lowering costs and the real-time nature of interaction via the Web means there is more market liquidity. Being vigilant and open to new technologies and new opportunities is important to those who have already made substantial investments in collaborative commerce.

Emily Sopensky writes for and about companies in high technology. Considered technically astute and armed with an MBA from The Wharton School, she focuses on the business implications of technology. The Iris Company works with businesses to hone their message and technical communications. You can email her at emily@iriscompany.com.

Biographies

Will Goetz, VP of Energy Business Solutions for divine/Whittman-Hart

At divine, Goetz is responsible for the design, development and marketing of portal based solutions for the energy industry, including Dynegy, Williams, and Shell. As the VP for energy marketing at SageMaker, Goetz directed the creation of SageMaker's energy portal. At Standard & Poor's Platt's, Goetz directed the World Energy Service, leading a publication group that provided strategic planning advice covering 50 countries throughout the world. He holds an MS in Resource Economics from the University of Massachusetts.

John Jordan, VP e-Solutions, Dynegy Global Technology

As VP of e-Solutions for Dynegy Global Technology, Jordan is responsible for the company's commercial eBusiness initiatives, including Dynegydirect, Dynegy's Internet-based, multi-commodity trading portal, and Dynegy's participation in Tradespark, an online energy commodity exchange. Prior to joining Dynegy, Jordan served as customer service VP TransEnergy, Inc. Jordan has more than 20 years in the energy business working for companies such as El Paso Energy, Tenneco Energy, Occidental Petroleum, and Hughes Tool Company. Jordan has a BS in computer science from McNeese State University.

Rick Koskella, E*Strategist, Sun Microsystems

In providing strategic e-business counseling to Sun's customers, Koskella draws on Sun's experience and best practices in offering integrated solution sets to solve e-business problems. He leads a solutions marketing team for eMarketplaces and Supply Chain implementation, and is a member of the solutions marketing team for Collaborative Product Commerce. Prior to joining Sun in mid-2000, Koskella was a principal in two startups, one an eMarketplace and the other aimed at Web-enabling shopping malls and retail shops. He has 20 years experience in international trade consulting, with assignments in over 30 countries, and is a former professional staff member of the U.S. Senate Budget Committee. Koskella has a BS degree in Astronautics from the US Air Force Academy. As a Rhodes Scholar, he has two MAs in politics and economics from Oxford University.

David Lisle, Director of e-Business-Business Development, Reliant Energy Communications

Prior to joining Reliant, Lisle was COO of the Oil & Gas Journal Equipment Exchange, the largest Internet exchange of its kind in the world. His substantial experience in business development, acquisitions/alliances, marketing, strategic planning and financial evaluations, was developed during progressive management assignments while at Amoco Production Company, North American Coal Company, Unocal Corporation. Lisle received a BS degree in Geology from Michigan State University; an MS degree in Geophysics from Louisiana State University, where he was an Amoco Fellow; and his MBA from The Darden School at The University of Virginia. Lisle serves as a Board Member and Treasurer of Wausaukee Composites, Inc.

Jim Walker, Senior Analyst, Forrester Research

A registered professional engineer, Walker researches eBusiness strategies of buyers and sellers to maximize value in Internet commodity trading markets, private exchanges, and eMarketplaces. Prior to Forrester, Walker consulted to Cambridge Energy Research Associates (CERA); was SVP for XENERGY and founded XENERGY's energy services business, including directing the development of its Internet billing and CRM systems in the early deregulated natural gas and electricity markets. He holds an MBA from MIT's Sloan School of Management and a BS in mechanical engineering from the University of Massachusetts.



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