

# Making the Link Between Sales and Operations Planning

An Overview

Executive Roundtable Series February 17, 2004



# Making the Link Between Sales and Operations Planning

# **Thought Leadership Summit on Digital Strategies**

An executive roundtable series co-founded by the Center for Digital Strategies at the Tuck School of Business and Cisco Systems, Inc.

The Thought Leadership Summit on Digital Strategies recently convened for the sixth in its series of roundtables. This discussion focused on approaches to strengthening the link between sales and operations planning, both internally within large organizations and along the value chain. The sessions included business leaders and academics from 3M, Cargill, Cisco, General Motors, Lowe's, Owens Corning, Staples, Sysco, Whirlpool, the Tuck School of Business at Dartmouth, and Harvard Business School.

### **Some Key Insights Discussed in this Article:**

- Building trust on multiple levels and across enterprises is core to S&OP integration .... 9

  Trust is critical to avoiding S&OP breakdowns and generating competitive advantage from the supply chain; it must be built over time with face-to-face communication at multiple organizational levels, across the value chain, and with full support from top management.
- Planning and forecasting must become more dynamic, responsive, and data driven ..... 4
  Companies can better respond to the demand fluctuations which challenge the S&OP
  linkage by improving synchronization of human insights with data-driven modeling and
  encouraging greater organizational sensitivity to variability triggers and early warning signs
  of demand discontinuities.

### Introduction

The link between sales and operations planning – the front and back ends of any business – has always been crucial to growth and profitability. Optimizing this link has never been more challenging or strategic than it is today, in an age of global sourcing, short product lifecycles, volatile demand, lean inventories, and real time information flows.

How does the link between sales and operations planning typically break down in today's environment? And what can be done to prevent these breakdowns, both within individual organizations and collaboratively across trading partners? Although the answers to these questions vary significantly by industry and business model, an in-depth discussion of participants' real-world experiences yielded some consistent and compelling themes.

### **Breakdowns and Culprits**

Several participants, from both consumer-facing and business to business environments, shared anecdotes from their own organizations illustrating the varying causes of breakdowns between sales and operations planning. Cisco's Brad Boston described difficulties in getting visibility into distributors' pipelines of component inventories. Lowe's Steve Stone recalled an oversupply of lawn mowers pushed out to the stores in an effort to minimize distribution center inventory, only to have them linger unprofitably as Spring arrived unseasonably late. Sysco's Kirk Drummond described situations where salespeople brought in huge last minute orders for next-day fulfillment without any advance warning to operations.

Staples' Kevin Holian described an overenthusiastic promotion where merchants dramatically underestimated potential demand at a deeply discounted price point. And Whirlpool's Reuben Slone described a situation post September 11<sup>th</sup> where his company was unable to keep fill rates high for specific products (dishwashers and stainless steel appliances) in the wake of a very unexpected consumer demand shift.

Key themes that emerged from these anecdotes included the impact of: 1) demand shifts due to fashion changes, promotions, and unexpected events such as weather; 2) inaccurate or misaligned forecasts due to conflicting incentives, padding and hedging, lack of planning or visibility, and lack of sufficient attention to variability; and 3) the impact of other communication and organizational breakdowns including focus on functional silos rather than the whole business.

Cargill's Rita Heise noted that the bar has been raised in today's business environment with ultra short order fulfillment cycles. "I think the difference [from 10 yrs ago] is the impact of being wrong, the speed at which the supply chain moves" she said. "Ten years ago maybe it was okay to have 84 percent delivery, but now, 99.9 isn't good enough."

GM's Mark Hillman said that much like other consumer product markets, the automotive market is becoming more "like a fashion business," although still primarily built to stock rather than to order as in Europe. Echoing several participants, he also highlighted the impact of global sourcing on supply chain visibility, risk and responsiveness: "It's a huge issue…miss the boat, and you got a big problem, you got to wait another month."

Several participants, including 3M's Kirby Spike and Owens Corning's Dave Lepow, pointed to seasonal fluctuations as a recurring strain on the link between sales and operations planning, and highlighted the challenge of keeping fixed-cost manufacturing facilities running evenly throughout the year to meet demand peaks.

Almost everyone talked about the classic organizational challenges of trust and incentives alignment, resulting in 'bad behavior' such as padded forecasts or withholding information. Whirlpool's Slone for example, described the aftermath of the 2001 appliance shortage and resulting scramble to deliver product while balancing availability and fill rate with working capital and cost productivity: "We were totally disintegrated between the manufacturing operations and sales. There was no trust at all. The sales guys knew that we weren't going to build what they were asking so they would add things. We knew they were padding things so we reduced things."

Others spoke of the difficulty of balancing 'gut feel' and process in large organizations, especially in forecasting and trying to predict demand discontinuities, and in trying to scale up successful locally-tuned retail operations to national scale. "Gut feel...often came from operating at a small level," offered Harvard Business School professor Ananth Raman. But when you try to combine that with today's geographic diversity and product complexity, and the need to leverage large-scale data and analytics, "something's got to give."

### Does the CEO Get It?

Harvard's Ananth Raman struck a chord in proposing a single question as a critical backdrop to the entire sales and operations planning discussion: Does the CEO Get It?

If your CEO only sees the supply chain as a source of cost savings, said Raman, you have already lost the battle to better integrate sales and operations planning. The discussion is over before it started. By contrast, if top management sees the supply chain as a source of competitive advantage, that message is likely to permeate the organization and set a foundation for stronger internal collaboration.

CEO buy-in is key to developing "the process of cognition at the company," asserted Raman – mental models that will enable organizations to creatively solve today's most challenging sales and operations linkage issues. "We know how to think about forecasts, but how are we going to sit in a meeting and talk about demand variability?" asked Raman, who said he thinks it's a rare CEO who will get fully engaged in these seemingly unglamorous issues. "I don't know too many CEOs who want to go home to their spouses and talk about inventory."

Several participants agreed that CEO influence could push an organization to acknowledge the value of supply chain process improvement and to work more collaboratively across functions. Cisco's Brad Boston told of his CEO empowering another high level executive to look globally at the supply chain and identify disconnects.

Others, like 3M's Greg Ehlert, spoke of the CEO's role in creating a shared language or framework that the organization could use to talk about sales and operations planning. "We really get hung up in deciding how to define what is S&OP, from the standpoint of where it is most effective" said Ehlert,

who noted that 3M's new CEO has helped define a number of high priority cross-company initiatives that encourage organizational focus on improving S&OP linkages.

## **Choosing the Right Opportunities**

A main focus of the day-long discussion was identifying lessons learned in the quest to improve the link between Sales and Operations Planning. One big one: Don't try to boil the ocean. Many participants agreed that careful segmentation and selectivity – focusing on the most profitable opportunities – is an important pre-requisite to improving both internal and external S&OP linkages.

In particular, identifying customer profitability, and then focusing more resources on better serving and collaborating with your most profitable accounts, was a key theme throughout the day. Sysco's Bill Day described his company's system for segmenting accounts by current profitability as well as future profit potential. Jenny Verner described the work Cargill is doing to align supply chain operations and service levels with individual account profitability.

Cisco's Brad Boston discussed the challenges of splitting out product and service P&Ls to get a clear picture of customer profitability, and GM's Mark Hillman explained that in a fixed-cost manufacturing environment you sometimes have to make a decision to serve high volume, unprofitable customers just to cover fixed costs. Owens Corning's Dave Lepow pointed out that sales doesn't usually have a strong handle on account profitability, and stressed the importance of building rules to help them make profitable trade-off decisions and anticipate S&OP imbalances far in advance of getting an order.

In terms of external collaboration, participants felt that the same segmentation and selectivity principles applied. Cisco's Paris Arey described his company's success at winnowing down the hundreds of offshore contract manufacturers it works with to a smaller group in order to achieve tighter supply chain integration. "You build a stronger relationship with a few players," said Arey, noting that this winnowing made it easier to achieve meaningful integration.

"You've got to stratify the people that you're working with," agreed Lowe's Mike Mabry. "You've got to define who your strategic partners are and who you are going to get in bed with over time." Owens Corning's Dave Lepow suggested focusing on desired business outcomes, and categorizing some customers as strategic partners and others as purely transactional. Lowe's Britt Dayton added that the choice of strategic partners should be driven top-down with a view to business value and enhancing the overall customer proposition.

### **Rethinking Forecasting and Modeling**

A core topic for the group was mitigating the divisive impacts of demand variability: how to do better at forecasting and modeling, and designing responsive, dynamic sales and operations planning processes which take variability into account. "Variability is huge," said Harvard's Ananth Raman, ticking off a list of the many predictable and unpredictable events that impact demand and place stress on the supply chain, from hurricanes to fashion shifts to new product launches.

In many cases, participants felt it should be possible to do a better job of anticipating and responding to demand variability by paying closer attention to its signals and triggers. Whirlpool's Reuben Slone described one situation where the writing was on the wall (for a new product) but the company missed it: "We really screwed up from a merchandising standpoint because we could see the pot bubbling but we weren't seeing the bubbles.... If you went back and looked at weekly [data] buckets, you could see a very definitive growth trend."

Added Slone's colleague Esat Sezer, "We have the data to see variabilities...we can define rules, exception messages, alerts and signals. The technology is there. But what do you do with it? Who's going to react to it?"

Lowe's Mike Mabry pointed out that variability is highest at the consumer end of the supply chain, and then smoothes out as you go upstream toward the distribution center and ultimately manufacturing. So staying constantly on top of minor shifts in downstream demand is paramount: "Responsiveness in the supply chain and forecasting is an iterative process," asserted Mabry. "That forecast is only good for the day I gave it to you and then I have to come back the next day and say 'here's the trend.""

Several participants, including Sysco's Bill Day, argued for an expanded use of modeling in the forecasting process, incorporating the many terabytes of data already known about seasonality, weather, and other demand drivers. Day stated Sysco has found that computers actually do a better job of predicting demand variability of some products than do human beings – particularly for functional replenishment-oriented products with longer life cycles. "There is a woeful lack of understanding of just how predictable demand really is," said Day. "We did some modeling some time ago that showed that more effective use of computer forecasting tools (modeling) would increase service level and reduce inventory."

But the group also acknowledged the need to integrate human insight from sales and merchandising into this modeling process, while filtering out emotional attachments or the impacts of misaligned incentives. "You still need somebody smart enough to tell the model how to work," said Cargill's Rita Heise. And you still want the salesperson's insight, added her colleague Jenny Verner. Harvard's Ananth Raman noted that while the outcome of computer models on average can be very good (e.g., deciding which grad students to admit based on test scores), occasional they can make very big mistakes, like deciding not to admit an Albert Einstein. "Where's the biggest opportunity, that's not what computers will do well," said Raman.

Forecasting those seemingly unpredictable opportunities and events – like massive sudden shifts in consumer tastes (for example to stainless steel appliances) – seemed to the group to require emphasizing human insight over data-driven modeling, which participants saw as better suited for forecasting smaller demand variances around known parameters, as in the case of replenishment.

Finally, Owens Corning's Dave Lepow highlighted the importance of having an organizational mindset open to discontinuities. "How do we start to open up our lenses to start thinking about what other [variability] triggers could be," Lepow asked. "How do you predict fashion? How do you bring in potentially conflicting inputs to bounce up against the data?" His answer: "I think the only thing you can do institutionally is be open to the fact that the past is not necessarily the predictor of the future particularly when we have those sorts of discontinuities."

### From Forecasting to Planning: Breaking Down Silos

"Our biggest challenge," said Staples' Kevin Holian, "is converting all these demand signals into an order forecast." Holian echoed several other participants as he discussed the challenges inherent in developing effective sales and operation planning processes that cut across functional groups yet stay dynamic.

One problem is that different functions like sales and manufacturing typically develop their own plans, which get rolled up into a single number, which then becomes static and detached from what is actually happening in the business. Said Owens Corning's Lepow: "We talk about being trapped in a single number. There is a financial forecast we have to do, to set expectations externally, which has nothing to do with how we run the business daily. This policy of the single number, I think, seduces us into thinking okay, we got this covered when in fact all it takes is a very small amount of variation to really disrupt the customers."

Another challenge is that cross-cutting processes like forecasting, scheduling, production planning, and inventory management can only be improved marginally within the departmental silos of sales, manufacturing and distribution. "It's really the interconnect where we are going to see the breakthroughs in context of sales and operations planning," said Lepow, who added that his company realized after weathering a crisis that "our ability to fulfill our customers' needs was only going to be as great as our weakest link."

"How do you get one collective piece of information that you share and contribute to and all live with the consequences of, a single version of the truth?" asked Cargill's Jenny Verner. "You've got to get everyone in the room at the same time," answered Staples' Holian. "Let's get everybody there and talk about what the key drivers are and get it out on the table. The best information system can't substitute for that."

Whirlpool's Esat Sezer described his company's successful Monday morning cross-functional leadership meetings, instituted after the forecasting issues in 2001 to facilitate better planning, and co-ownership of issues like availability, working capital productivity, and cost productivity. "It is so critical to get that leadership in place," said Sezer, who noted that ownership of the meeting is rotated regularly among department heads "I can't over emphasize the importance of rotating leadership [of the weekly meeting] among sales, merchandising, and logistics."

Tuck's Hans Brechbühl noted the value of such cross-functional meetings in establishing a common language to talk about sales and operations planning issues and facilitate collaboration: "Inside your enterprise, you don't necessarily expect [language] to be much of an issue," said Brechbühl. "You kind of assume that everybody must know, must be speaking the same language. [But] when sales says something, does that translate into the same thing as what operations is thinking?"

Cisco's Paris Arey said the notion that sales is fundamentally incapable of understanding operations is inaccurate and must be proactively defused. "You can't somehow assume that there is this DNA factor [on the sales side] that could never understand the back office process," offered Arey. "You've got to make that connection."

Whirlpool's Reuben Slone added that matrix reporting relationships can also help foster a holistic view and break down silos. "Forecasting and the order desk are part of sales but they report in to me as well," he explained. He also suggested that technology systems can help provide multiple views of the supply and demand chain so functional specialists could better understand their counterparts' perspectives.

But Cisco's Brad Boston argued that while the right systems could potentially help, "it's not a tool discussion, it's a business process discussion... if you don't have the data right and the processes to load the data, it doesn't matter how good the tools look." This was seconded by Cargill's Jenny Verner, "You don't have to wait for the tool...you can have all these pieces of information come together and arrive at a common version of the truth without having a sophisticated system."

A key theme throughout this discussion was that although departmental forecasts must ultimately roll up into a single plan, 'or common version of the truth,' that plan must be dynamic and constantly refreshed based on bottoms-up input to avoid becoming stale and irrelevant to the actual business decisions that can help strengthen the S&OP link.

### **Incentives, Metrics and Accountability**

Once functional specialists have gotten together and are tackling the same issues and speaking the same language, how do you make sure their incentives are aligned so you can hold them and their teams accountable for achieving shared, rather than departmental, goals?

"Accountability...how do we operationalize that?" asked GM's Mark Hillman, who proceeded to describe some of GM's efforts to establish end-to-end process owners who live in between the silos of sales and manufacturing and have accountability for processes like order fulfillment.

Sysco's Kirk Drummond suggested companies should look at structuring management incentives based on collaboration at high levels in the executive group and in the sales and supply chain functions. "That person is [then] going to drive down those actions through his personnel even though they are more skewed towards their different departments," suggested Drummond. He also advised making sure people understand their incentives, noting that he was surprised to find that many managers didn't know what return on average capital was or how to calculate it.

3M's Kirby Spike seconded the importance of getting metrics right, noting that the proliferation of granular metrics that may distract from the more global, collaborative ones: "How do you get to the overlying metric that can drive all parts of the supply chain forward?" asked Spike. "It's hard to do that in a large organization because we may have a plan that serves 14 different divisions."

Cisco's Brad Boston highlighted another metrics-related challenge, which is that the further you drive the incentives down in the organization, the less dynamic they become. "A lot of it ultimately depends on how successfully they can translate [the metrics] into micro objectives for their staff," said Boston, who was seconded by Staples' Kevin Holian: "I think one of the advances that we are still going to get to is how to create a more dynamic set of incentives for the people that are out there making actual job schedules on a factory floor."

Whirlpool's Reuben Slone summed up the incentives conversation by noting that departmental and company-wide metrics can both contribute meaningfully to S&OP alignment, as long as no one gets their bonuses unless company-wide goals are met. He also proposed that incentives and metrics, to be most effective, should be additive to a shared understanding of how the business works and its interdependencies. "That empathy point can't be underestimated," said Slone. "I can't get my job done because I depend on you doing what you said you would do. Pretty quickly, people discover that 'you have something I need' is the best incentive to work together because it's like I have the keys to your life and you have the keys to my life."

### **External Collaboration: Key Success Factors**

A recurring theme of the summit was the interconnectedness of supply chains across trading partners, and the fact that successful external collaboration is a key component in the push to strengthen the link between sales and operations planning.

"In order for a retailer to truly have a sales and operations planning process," said Staples' Kevin Holian, "you have to have a supplier engagement process – some degree of regular open dialogue of what's going on in the business." Cargill's Rita Heise concurred: "I think you get more out of the inside by focusing on the outside... sometimes when you're doing that inside analysis, you are misguided in it because you really haven't looked beyond the borders."

What are the key ingredients in successful external collaborations with customers and suppliers? Participants cited many of the same factors driving successful internal collaborations, including shared goals and metrics, mutual trust and understanding, making sure the right people are talking to each other, with top management buy-in, and driving toward making the mutual pie bigger rather than simply shifting risks and resources.

"You've got to have an agreement and commitment around what the key metrics are," said Lowe's Steve Stone. "How do you want to measure yourself and how do we want to measure you?" 3M's Greg Ehlert suggested focusing in on the "one or two key metrics that add [the most] value to both companies...you can never hit all ten metrics that they measure you by."

"There has to be an investment in quality time and resources," added Staples' Kevin Holian. "It can't just be a pencil whipping exercise. You have to put good people on both sides."

"Where I've seen collaboration work is where there are actually multiple levels of collaboration," said Owens Corning's Dave Lepow. "It starts with senior level business planning alignment and integration that sets the tone in terms of what are the business outcomes we are trying to achieve [and] a framework for key actions we are committing to."

"You've got to know the right people to talk to within the [partner] organization so that your message gets heard and understood," elaborated Lowe's Mike Mabry. "You've got to have the logistics guy talk to the logistics guy, the IT guy talking to the IT guy so that they speak the same language."

But establishing such direct communication links can be tricky, several participants noted. "It's always a little delicate," explained Whirlpool's Slone, "because the sales people are kind of jealous of the

relationship with their account. To let the operations organization really form strong relationships requires trust and a lot of communication on both sides."

"A lot of people in sales want to be in the center of those discussions," agreed Staples' Holian. "Sales has to be a part of it but they can't be at the center of it," he said, adding that merchandising needs to also step back to let direct operational relationships develop.

### **Trust and Information Sharing**

Even with the right goals and framework in place, participants noted, collaboration can go awry when it comes to sharing the most valuable supply chain asset: data. Staples' Holian told of a situation with a technology vendor where the vendor was getting EDI sales and inventory data, and then using that data to manage channel inventory. "So we couldn't get the quantity of product that we wanted because of the data that we were giving," he recalls. "By being open and providing data, we were actually being hurt by it."

"The word trust is very genuinely part of the whole discussion," concluded Holian. "What information are you willing to share and how capable are you in dealing with information that could potentially use to the other person's detriment?"

3M's Kirby Spike talked about the importance of recognizing how trust is built over time, especially in a global environment across different cultures. "Trust is hard to systematize," he said, "there is a face to face component to this that you'll never systematize."

Whirlpool's Reuben Slone noted that navigating a crisis can be a key opportunity to build trust, citing a memorable case where Whirlpool had made a mistake with a major customer, potentially jeopardizing the entire relationship. "Our customer was in a position to absolutely severely punish us and the attitude was how are we going to work through it, how are we going to work together to be successful," recalled Slone. "That was definitely the turning point in the nature of the collaboration." What changed? "Trust, and both parties feeling more comfortable that they can take more risks, share more information, that either one would protect the other."

Several participants pointed out that today's advanced IT systems can help enable collaborative relationships by selectively providing and preventing access to important data. Steve Stone said Lowe's uses digital certificates to provide multiple authentication layers and protected data access, but acknowledged that this does not completely solve the problem of partners wanting access to data – for example cost and margin data – that Lowe's may not want broadly known. "The trust in data and the trust in each other almost go hand in hand," said Stone.

Harvard's Ananth Raman broached the example of the video rental industry, where a new tracking technology made possible a deeper level of collaboration – revenue sharing – than had ever been possible before in that industry due to lack of trust. "IT makes unobservable things observable, IT created trust [in that industry]," said Raman. "When you do that, you induce incentive alignment and you induce trust… technology allows you to verify, it changes the game."

### Frameworks for Deeper Collaboration

One of the most animated discussions of the day focused on the potential for deeper, strategic collaboration across supply chain partners, and whether it will ever be possible to structure truly win-win collaborative relationships – a subject of much disagreement.

Almost all agreed the potential exists for trading partners to collaborate in ways that expand the mutual pie, by providing more value more efficiently to their shared ultimate customer. Lowe's Steve Stone noted that a major opportunity for deep collaboration lies in sharing insight into the consumer. "Can we come up with a product that we can sell better?" he asked. "That's where I think you move beyond the data sharing and [into a deeper relationship]...when I'm helping influence your product decisions."

Cargill's Jenny Verner said a key to creating new strategic value is working through "who is best to perform" specific functions in the mutual supply chain. You need a "willingness to allow the best positioned company to actually manage that part of the supply chain," Verner said, citing the example of a fast-food chain, which leverages its risk management expertise to help its chicken growers make certain feed-related decisions.

Another key to growing the pie is a developing a deep understanding of each others' business and leverage points, said Sysco's Bill Day. "You should understand the profitability that I contribute to your business, and I should understand your profitability of your products for me," explained Day. "We take those two income statements essentially and see if we can do things that increase your profitability and mine."

But once gains from collaboration have been identified, is there any established mechanism other than sheer market power to divide up the spoils? Is the lack of such a mechanism putting a damper on potential gains from collaboration in the supply chain?

The Tuck School's Eric Johnson noted that "there has been a lot of frustration around collaborative forecasting and replenishment. The feeling is that it was a great idea but very few people really made it work." Johnson added that difficulties often seem to arise when partners get too deep into each others businesses: "Level one is sharing data... that's pretty easy. Level two is sharing decision rights...that gets a little harder. The last one – delegating work differently – that's huge. That's like you were saying, getting into my business in a big way."

"When it gets right down to it, then the supplier or customer wants it all to themselves," explained Cargill's Heise. "That is what those businesses grew up with...if there is money to be had, then it's mine."

Whirlpool's Slone agreed, saying that he hadn't seen any companies willing to commit contractually to sharing – for example – future improvements in fill rate, working capital and cost. "It's very difficult because a CFO has to agree with the merchandising people who need to agree with the operations people to make this work. All the flowery words are there and in many cases, the feelings are there and the behaviors can be there but when it comes down to really the bottom line, it's kind of like 'he who has the greatest leverage takes all.""

"At the end of the day, the commercial terms are what they are, the business people have to negotiate that," added Lowe's Britt Dayton. "Sometimes emotions get into the mix."

But Slone said the arm-wrestling over the potential spoils can get in the way of the ability to generate those collaborative wins in the first place. "The path we were on when we first started is how do we reduce the total cost to the customer between us? If you look at a manufacturer and a trade partner retailer, the way we're competing is competing supply chains. If our supply chain [becomes] more responsive, more effective and more flexible, then our collective customer is going to win on that model. How can you get there if you can't sit down and openly share this information?

A few participants said they are starting to see more of a win-win mindset and openness to sharing gains. "We are more willing and our partners are more willing to share information to benefit both [sides]," said Staples' David Barclay. "In the old days, three to five years ago, if our supplier lost, we won. Now we are looking at it like 'if I help you win, you're going to help me win.'

"We're being very successful in creating win-wins for our suppliers and ourselves by using collaborative models and it's working – it can be done," insisted Sysco's Bill Day, who described his company's model for breaking down costs, figuring out gains and splitting them up.

Cisco's Paris Arey described a similar situation where Cisco's analysts extensively modeled the financial impact of changes in how it dealt with its distributors, and then took that analysis to its top distributors to design a win-win implementation. "We said 'let's make a determination of what impact these particular initiatives will have on our mutual business," explained Arey. "We [then] spent another four months with them, going through everything, every assumption, cost of working capital and everything else."

GM's Mark Hillman suggested that the willingness to share gains may be related to the business model and more prevalent where there's more margin to split up in the first place. But Cargill's Jenny Verner thought it had more to do with fundamental alignment of interests, "It's driven by self interest of the business," said Verner. "If you have low margins and you want to widen the margins, then you have an incentive to look downstream and work with your customer and figure out how to do it."

Cargill's Rita Heise seemed to sum up the sentiment of the group when she asserted that figuring out frameworks for deeper collaboration is a work in progress. "I think we are into a whole new era of business models in between companies that hasn't existed before," said Heise. "It's going to take some time to develop."

# Participants in Thought Leadership Summit on Digital Strategies February 17, 2004

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