

Global Supply Chain Management: Digital Supply Chains and Logistics

A Roundtable Overview

Americas Chapter Discussion



Roundtable
on Digital Strategies

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*An executive dialogue series of the
Center for Digital Strategies at the Tuck School of Business*

Modern supply chains have to account for the interdependence of global markets, the volatility of world events, and the pervasive connectivity of people and things. Simultaneously, advances in artificial intelligence, 3D printing, and a host of other potentially game-changing technologies are transforming how enterprises interact with suppliers, partners, and customers. In July 2016, the Roundtable on Digital Strategies convened to discuss critical trends in the accelerating digitization of the supply chain, and the consequences of those trends:

- *What are the most impactful factors arising from the evolving connected global economy on supply chain management?*
- *How will the next wave of disruptive digital technologies, including 3D printing and the Internet of Things, change supply chain operations?*
- *What are the consequences of consumer-grade customer expectations permeating B2B industries?*
- *What are the key responsibilities for IT in the developing “data supply chain”?*
- *What changes in culture and talent management will enterprises have to make to be successful in the coming era of the digital supply chain?*

Participants in the roundtable included CIOs and supply chain executives from the Bank of Queensland, Chevron, Eastman Chemical, Eaton, and Tenaris, as well as academics from the Tuck School of Business at Dartmouth College. The session was hosted by the Center for Digital Strategies at Tuck in Hanover, New Hampshire.

Key Insights Discussed in this Article

- **Consumer-style transactions and business relationships are starting to pervade B2B industries.** Supply chains are affected by new and rising expectations in pricing, reliability, delivery models, and services differentiation Pages 2, 3-5, 9
- **Standardizing some products while differentiating others through personalization and value-added services can solve for both increased cost pressures and rising expectations.** This approach gives rise to difficult decisions about investment priorities Pages 3-6
- **Meeting consumer expectations while facing lower margins has made reducing all-in costs the primary factor in supply chain operations.** Companies need to innovate in human skills, process and technology to satisfy customers at competitive prices Pages 1, 5-6, 7-8, 11
- **Lack of monetization strategies for digitally-based businesses is slowing the adoption of such disruptive new technologies as 3D printing and the IoT.** Back-end analytics enabled by new cognitive technologies may provide the answers Pages 2-3, 5, 8-10, 12
- **The millennials will force the tipping point.** When digital natives are enabled by disruptive technologies that have converged into complex systems, industrial supply chains and the businesses and organizations they support will undergo change at least as revolutionary as anything seen to date in B2C and retail Pages 3, 6, 7, 9-10, 11-12

PART I: CONSUMER INFILTRATES THE ENTERPRISE

Inefficiencies and Information

Moderator Hans Brechbühl, Executive Director of the Center for Digital Strategies, started by asking the group to describe the top issues affecting their companies in supply chain.

“Our focus is on re-setting our cost structure, with the view that the price of oil is going to be lower, for longer,” started Maria Lindenberg, Chevron’s Chief Procurement Officer. “How do we position ourselves to operate efficiently and profitably? Not just for the short term but also through the long-term market volatility that we foresee.”

“It’s not just about the simple costs of widgets,” she continued.

Its about understanding the total costs of getting products and services from suppliers to our job sites and determining how together we can execute differently to lower costs for both the supplier and ourselves. This includes supplier performance, risk management, security of supply and product/service reliability/quality. Transaction efficiency, data transparency and information/data management can be improved through better use of technology (as we consider our options to move to cloud technology).

“What the internet does is attack inherent inefficiencies in complex systems,” suggested Bill Braun, Chevron’s CIO.

What are the biggest inefficiencies in supply chains? A good example is spare parts inventory. The worst thing that can happen to a drill ship is to run out of some part that means a million-dollar-a-day ship is waiting for re-supply. So we make sure that could never happen. Why order ten of something if you can order 20? There’s a huge inefficiency that’s getting challenged because of the cost pressures that Maria mentioned.

Tom Morton, Vice President of Global Supply Chain for Eastman Chemical, commented on the demand side:

With all the volatility in the availability and pricing of raw materials, we struggle to ensure reliability of supply at competitive cost. Our customers also have visibility to this information, and so they have expectations of what our price should be. The range of buyer choices has increased in terms of cost, reliability, and the level of service expected from the supplier. Those expectations have gone up dramatically, and they continue to escalate. All this is adding significant strength to supply chains, and it’s because of the access to information.

“That’s a classic example of how consumer-grade expectations are coming to B2B companies,” pointed out Keith Sturgill, CIO of Eastman Chemical. “The buyer’s access to information has become so readily available, wherever they sit in the supply chain, that buyer power has gone up significantly,” added his colleague Tom Morton.

“That combination of data, people, and processes *is* what we are really trying to figure out,” commented Francisco Zini, Supply Chain Director at Tenaris. “The supply chain can help our transformation from a product-oriented company to a services-oriented company.”

Zini’s colleague Luis German, Chief Process and Information Officer of Tenaris, explained further:

We are investing in data transparency because it’s an asset that the company *should* have. We were keeping supply chain information purely internal, but in the last three years we have been publishing it to our customers. In many cases, we don’t even know what the value to the customers is going to be. We are not sure of the consequences of being the first in the industry to start tracking and publishing data on individual pipes, and everything that happens to each one throughout its life. But it’s inevitable that it will pay off in the end.

“So, your challenge is the sharing of information,” Morton remarked. “Does that become a value proposition to your customer base, or does it become a data source that *erodes* your value proposition in the long-term?”

“It’s both,” answered Donna Vinci, Group Executive Enterprise Solutions for the Bank of Queensland. “It’s an inflection point: It increases trust and collaboration between the parties. Then it does become commoditized and you need to move onto the next thing.”

“Right!” Morton exclaimed. “Does digitization change the buying process, how customers actually source and buy material? Then how does that have an impact not only on product offerings, but on service offerings, to ensure that we’re differentiating from the competition? And how do we get to the forefront with analytics to understand these shifts so that we can respond quickly enough? It *has* to start with the customer.”

“When we think about supply chain,” Vinci acknowledged,

We don’t actually think about the *bank’s* supply chain. We think about the *customer’s* supply chain, whether that’s an enterprise business banking customer or a retail customer. It’s happening in *their* lives, and we have to be relevant. So we’re moving out of our traditional products and services to think about how we partner for the customer’s supply chain. If you put the *customer* at the front of the conversation, it changes your whole predisposition,” Vinci finished. “You have to help them be successful in their business. People talk about B2C and B2B, but it’s really C2B and C2B2B.”

“If you put the customer at the front of the conversation, it changes your whole predisposition.” — Donna Vinci, Bank of Queensland

To Buy a Vacuum Cleaner

Eastman's Sturgill returned to the theme of customer access to data throughout the supply chain:

A connected world is a more transparent world, for the good and for the bad. Connecting people through the Internet totally transformed retail businesses, and if you missed that transition, you're struggling today. The growth of the Internet of Things and the connecting of the physical world is going to have the same impact on industrial companies that connecting people had in the retail business.

"The industrial side is notoriously conservative about laying out explicit business cases for moving forward, and I worry that we're being too complacent in recognizing what this next turn of digitization is going to bring about," he continued. "That approach is going to be too slow. This isn't an evolutionary thing: It's a revolutionary thing, in the next three to five years."

"But it's not just about calls-to-action in the same environment," German rebutted.

In consumer goods, there were some gains in efficiency, but in the end the *model* shifted: Saving through Amazon is not like saving through a physical retailer. It's not just about efficiency, it's a different *model*, and the same kind of thing may well happen in B2B. Working with Purchasing is completely different from working with the business manager: They need different information, and they may require different services even though the product and the price are the same.

"We are still struggling with understanding what's the right fact-based way of segmenting customers to the point where we can see with data how customers buy," Sturgill agreed. "Then you could think about how to simplify your *product* offering and come up with degrees of standardization around what your *service* offering will look like. This bundling is what adds complexity for us — but in the eyes of the customer, it's very simple."

"Doesn't that fly a bit in the face of the consumer trend towards customization in a set of one?" Brechbühl asked. "Isn't it possible that B2B customers are going to expect to be treated as 'one,' and it's expected because of the visibility of the data?"

"It's not customization but personalization," Vinci proposed. "A customer may not want something totally special, but they do need it personalized. The personalization is giving them information back: 'I see you're buying *that* way, but it's more efficient if you do it *this* way.' Then you're providing value without just doing everything they want."

"So customized not through product but through service?" Brechbühl followed up.

"A large corporation is not one customer," Morton emphasized. "Each buyer in it has an expectation of what the service offering is when he makes the buying decision, and then again at the actual point of delivery. Recognizing the differences between the two and how you personalize the offering to achieve both is a challenge."

“Customers are changing their behaviors, they are becoming more consumer-like in their expectations around information,” affirmed Bill Blausey, CIO of Eaton Corporation.

Even distributors and manufacturers are moving towards a consumer mentality. Fifty percent of our customers have done prior research on the web, just like any of us would do for a vacuum cleaner. That trend in behavior is going to continue to put pressure on cost, delivery, quality, and expectations.

Alva Taylor, Faculty Director of the Center for Digital Strategies, probed on this change in buyer behavior:

Right now, a vendor’s reliability of supply is a key differentiator in the industrial sector, but the definition of ‘reliability’ is changing. Over time will reliability become an expectation, not a differentiator, as it already has in the B2C world? As much as technology shifts things, customer expectations change even faster. Will the new expectations of ‘reliability’ shift from extraordinary to sustained?: “Everybody that provides materials and services to us has to be able to ramp up and deliver in this way.”

“Yes,” replied Santiago Gallino, Assistant Professor of Business Administration at the Tuck School.

But how do you make sure to provide the product without having enough inventory? The big difference is information availability. We already get so much information, but some of it is bad and then you become paralyzed. How do we integrate information and make it simple for the chain to make a decision? How do you take advantage of information by providing just the right information, faster?

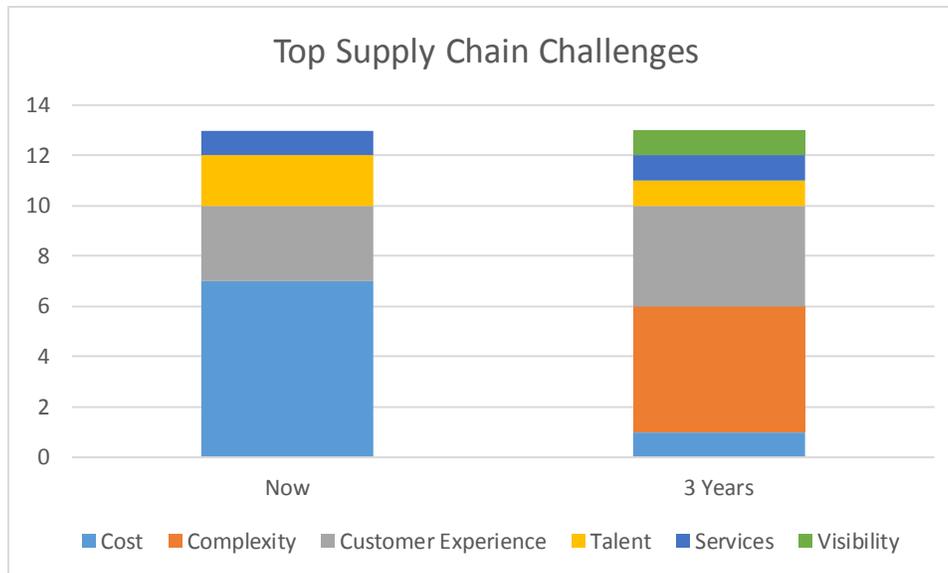
“That is hard to answer,” Sturgill admitted. But in developing the answer to Gallino’s question, and to the other questions raised during the discussion, he continued, “I’m convinced that consumer expectations trump enterprise standards. It’s taken me years to get to where I actually believe this, but it’s over. We just need to embrace that idea.”

“Consumer expectations trump enterprise standards. It’s taken me years to get where I actually believe this, but it’s over”

— Keith Sturgill, CIO, Eastman Chemical

The 90% Solution

Following the back-and-forth discussion on factors influencing supply chains, Brechbühl asked the group to identify the most critical challenges, both today and three years from now. Cost issues won the most votes in the “today” category, all from operating executives. The academia voted for the changing customer experience as today’s top issue — which many of the operating executives agreed with on the three-year horizon. The Tuck cohort, joined by a few executives, saw increasing supply chain complexity as the top issue three years out, with customer experience viewed as on par by the executives.



“If there is pressure on both supply chain cost and customer experience, then what is the right sequence?” German asked. “You need to satisfy your customer in the long run, so you need to figure that out first, *before* you start cutting costs. Otherwise you may be cutting the branch you need!”

“It’s a conscious choice to try to weather the short-term by *not* investing in something that will provide value in the long term,” Sturgill explained. “It’s not a comfortable choice, but it’s a conscious choice. When you talk about what truly differentiates you, it’s a much smaller percentage of what you do than anyone believes going in. It’s 10 percent, maybe 15 percent of what you do, and that brings a different mindset: 85 percent standard, 15 percent customized.”

“You start with the product lines that are not competitive,” Blausey suggested. “Changes in the market affect cost positions and even the ability to bid in certain cases, so you shift the effort to grow other parts of the organization.”

Lindenberg described an approach with the potential to address both costs and customer experience:

Even though there’s been a lot of conversation about standardization, in the oil industry we’ve all been very much on the customized end of things. But if you can make just a

fractional change in engineering design, what's the value of that being able to deliver a 90-percent solution for the industry, in order to really address your entire supply chain? You do worry about getting commoditized and possibly giving away your design advantage, but this low-cost environment demands resetting the cost structure, which means becoming more standard. And so maybe "personalized" is a way to address how you make yourself different, because that's really about execution.

Morton extended Lindenberg's argument:

So now the passion has to be around effective and efficient ways to drive speed in a highly integrated business model, with the recognition that the way we take products to market are different, and that success requires functional collaboration across the entire supply chain, not just our own organization.

To accomplish this collaboration, Morton continued, "Information technology is a massive enabler to make sure that we can accelerate our speed to market and our ability to meet customers more quickly."

Gallino addressed Morton's comment on evolving to more collaborative supply chain models:

The companies that have been successful at making this shift have combined two things. First, those who are more forward-looking in terms of seeing that this is a different animal, not the same animal moving at a different pace. And second, the companies who have a better vision and less friction to get rid of legacy systems that aren't going to help. Companies struggle when they try to hold back on changes, because those systems are not going to help you tomorrow.

"We could get very irrelevant to our customers if we don't start to shift very quickly," Vinci warned, identifying the key lesson of this part of the discussion. "The good thing is, we're not debating if we *should*, it's about the *how*."

"Information technology is a massive enabler to make sure that we can accelerate our speed to market and our ability to meet customers more quickly." — Thomas Morton, VP Global Supply Chain, Eastman Chemical

PART II: THE DIGITIZATION OF MATTER

Part of Donna Vinci's "how" are the potentially disruptive technologies making their ways into industrial supply chains. Brechbühl listed six megatrends identified by the World Economic Forum, and asked the group about their impact.

I'd Like to Build the World a Coke

"3D printing will be disruptive to manufacturing, and it's going to materialize much faster than we envision, even we technology professionals," Sturgill began. "Mattel now produces a 3D printer for \$300, targeted at children to print their own toys. For mid-tier manufacturing operations, that idea will be disruptive on the Uber scale. What if I can *print* the spare part that I need, as opposed to *stocking* it?"

Sturgill's colleague Morton gave another example: "A supply chain leader from Coca-Cola brought a thousand bottles to a presentation. They were all customized, none were the same, and they were all 3D-printed."

"We are starting discussions with maintenance people in terms of MRO¹ reductions," German declared. "Some inventories are not used frequently: We can just get rid of them and set up 3D printers, especially in locations where accessibility is not reliable or frequent."

Brian Tomlin, Professor of Business Administration at the Tuck School, agreed with German: "MRO is certainly where I'm hearing about the most traction. It's a classic use for printing: low and unpredictable usage, with lots of inventory tied up. It's a very attractive notion that I can print a spare part on-demand rather than holding it in stock."

Chevron's Braun offered a contrarian view: "In our industry, most of the assets have 30- or 40-year life spans. That cycle will take a lot of time before new facilities come out with the design in mind to have field-replaceable parts to be printed on-site."

"Could you see a scenario where you could have a 3D printer on a rig in the next three years?" Brechbühl asked. "And it had the capability to print the three most common valves that fail?"

"It's possible, but that's the point," Braun answered. "The rig platform wasn't designed with that in mind. So you're still running boats out there for the 97 percent of the parts that you don't carry in inventory anyway. So you're dabbling with incremental savings: You're not actually driving fundamental cost savings through your supply chain."

¹ "Maintenance, Repair, and Operations"

THE MEGATRENDS

**PEOPLE AND THE INTERNET
COMPUTING, COMMUNICATIONS,
AND STORAGE EVERYWHERE**

**THE INTERNET OF THINGS
ARTIFICIAL INTELLIGENCE AND
BIG DATA**

**THE SHARING ECONOMY AND
DISTRIBUTED TRUST**

THE DIGITIZATION OF MATTER

SOURCE: WORLD ECONOMIC FORUM,
GLOBAL AGENDA COUNCIL
ON THE FUTURE OF SOFTWARE & SOCIETY.
SURVEY REPORT NOVEMBER 2015.

“What if instead of printing it on the rig, you send a drone out instead of waiting for the next boat?” asked Don Castle, Executive Fellow of the Center for Digital Strategies.

“Delivery is becoming less and less of an issue,” Braun replied. “I’d be really worried if that’s your core business. You can make the assumption that it’s going to be easier to move stuff around faster and cheaper for all of us.”

“We are not going to print pipes, not in my lifetime,” Tenaris’ German declared. “There will be exponential growth in this technology, but it’s a matter of scale. The opportunity is in Engineering-to-Order, rather than stock producing or Made-to-Order. When you’re working with one-of-a-kind production, printing lets you go from design to product very quickly.”

“Cycle time is the challenge with 3D printing,” Tomlin agreed. “At mass volume it’s much slower than classic manufacturing. The upfront time kills you. For prototyping, it’s shorter.”

“But in any use case,” Tomlin continued, “The question then becomes, ‘Who owns the right to those actual blueprints?’ If I’m the OEM, I want to obtain as much of that money as possible. You might want to print quickly, but I’m going to charge an awful lot for the *right* to print quickly. So savings depend on the type of user benefit, and — from the OEM’s perspective — the *security* of those blueprints becomes paramount.”

“You may have the printer,” German agreed, “But the owner of the data wants to know how many parts you’ve printed. And they have the right to know.”

“Let me push a bit here,” Taylor challenged. “What if a new company comes in and says, ‘We’re going to do *everything* with 3D printing.’ And they pick off just the top two or three percent of your products, where you get the best margins. And then once the benefits are established, people will put up with lower levels of quality. Could that hurt you?”

“We know there are disruptors out there thinking about *parts* of the supply chain,” Vinci answered.

The challenge is to bring that future forward, and think about how and where to respond, and whom to partner with in that context. The convergence of these ideas is exponential, and someone will find a tipping point where it’s going to take off.

And we can’t think about this just in the first person. How might our suppliers and customers be disrupted? “My supplier whom I’ve relied on has just been disrupted out of business. Who is my supplier now?” We have to think about disruption up and down the value chain.

“But that inflection point seems further away than some of us might have anticipated,” Tomlin added.

“The Power Is in the Data”

“Whether it’s 3D printing or autonomous vehicles or some other technology, the biggest impact is really going to be the cross-application of that technology into other areas,” Braun argued.

If you now have the compute power and the learning engines to handle complex tasks like that, what other complex tasks can you look at? We have autonomous vehicles, and airplanes that can fly and land themselves. Operation of a drill bit is a really complex task with a gazillion inputs that’s prone to human error. We should turn that operation over to a computer as soon as we can. Or in hazardous areas we can turn maintenance tasks over to robots — that’s a potential lifesaver.

“In the 90s we applied technology to improve the quality and throughput of our manufacturing,” Sturgill assented. “How do we take that same concept and apply it to business decisions in the supply chain? How do we take people out of these routine but increasingly complex decisions and let the machines automate a lot of the decision-making?”

A common thread to all the new technologies, Blausey suggested, is that “the power is in the data. It’s not in the ability to print something on-demand, it’s the data. Products with sensors in them have been around for 15-plus years: That’s not new. The fact that there’s a sensor in your refrigerator means nothing. What’s new are the back-end analytics, and the fact that someone is monitoring and analyzing that data, and that you’re getting value out of it.”

“And people may not pay for that directly,” Vinci added.

Traditional thinking says to pay for that service, but people may not want to. But they will pay for something on the back end. Giving people information is a form of trust and loyalty. And then once we understand their behaviors better, we can shape the other products to monetize. That’s a very different business model than we’ve had appetite for in the past.

“To what extent do you trust the analysis that comes out of the data?” asked CDS’ Gallino. “First, in the scenario that you’re now tracking individual pipes, for example, and second, the more extreme case of machines making decisions without human intervention?”

“We are wired to say ‘My assumptions are right, don’t challenge them,’ instead of ‘This can analyze a lot more information than I ever possibly could,’” Vinci responded. “But if you actually put in some test cases and you put a small bet on testing the data, you get more confidence. You build the confidence and the capability, and you partner with allies you might never have dreamt of in the scenario where we’re looking for what we already know. This is all about the unknowns.”

“Testing is key,” Braun agreed. “And it’s really fascinating that in drilling our unconventional assets, the crusty old engineers are now listening to what the data scientists have to say. Success builds the credibility of the group, and now they all want to see the next set of results and continue to tweak designs.”

“There are two ways to come at those kinds of analysis,” Castle added. “You can ask a question and dive into the data for an answer. Or you can dive into the data and see what you come up with, and get insights you never would have asked about.”

As the end of the discussion, Brechbühl returned to the original list of digital trends: “It seems there’s far less going on in IoT than I would have expected. Of all the emerging tech areas, the IoT and sensors was the one I thought would have had the most action.”

“The activity is already quite profound,” Vinci answered. “It’s been there for years in logistics and factories. The challenge is, how to monetize it? How do we re-imagine ourselves in that world? You’ll see these worlds come together as more traditional organizations reach out to more disruptive ones, and the ones that work out how to monetize it will get the prize.”

PART III: MARCH OF THE MILLENNIALS

“No Time to Take a Breath”

“So if we believe that we are on the cusp of major transformational capabilities, do we believe our corporate cultures are ready to embrace the change that’s coming?” Eastman’s Sturgill asked the group.

“It’s going to happen naturally with the change of the generations,” suggested German from Tenaris. “The newcomers already have these technologies embedded in their mentalities. Five years, ten years — and not because we’re being proactive. Better to embrace it than resist it.”

Large organizations may have a greater challenge in being embraced by the younger generation then embracing them, Tuck’s Tomlin pointed out:

Students now grow up in a world where they’re used to seeing change. They’re conditioned to strive for personal impact, and they want to be in organizations where they influence decisions and where the cycle of change is very, very fast.

They believe these conditions show up in small companies, or in tech companies, and not in traditional companies. They believe they’re going to get lost in large organizations, and that they’re not going to have an impact. So the kinds of students who opt for change are heading in directions which may be different from your companies — even though once you talk about the complexity of large organizations, there is a *lot* of change going on.

“With this pace of change, often the information balance on an emerging technology is not tipped to the most senior people in your organization, but rather it’s increasingly tipped to the younger people,” observed Patrick Wheeler, Program Manager for the Center for Digital Strategies.

And the younger people have grown up in an environment where the nature of a hierarchical organization is not something that they’re used to, or that they value. The idea of moving to a hierarchical organization, with more information than someone who’s senior to them, is very difficult to swallow.

So the challenge is how to take advantage of this great resource of people that have incredible talent, insight, and knowledge, but for whom fitting into a hierarchical structure is very difficult. If you don’t create an environment that is less hierarchical with more autonomy, then you can’t get the talent needed to make these big changes.

“This generation has a higher respect for, and need for, and desire to be part of something that involves more ‘noble purpose.’ Something this is different and bigger than they are, that they can contribute to,” Brechbühl said, emphasizing Wheeler’s comment.

“That’s absolutely true,” Sturgill agreed, “But a lot of senior executives just don’t get that. As a manufacturer of molecules do we have a higher purpose? Absolutely. Are we willing to spend

time and energy to talk about it? I'm not so sure, but I think it's critical."

"But the idea that we haven't already lived through change in the last 20 years is just bizarre," Eaton's Blausey countered. "E-commerce and the Internet didn't even exist in 1986. Maybe there's a faster pace today, but I don't know that it's really different. Leaders are generally conditioned for change already."

"No doubt that people don't like change," observed CDS' Castle. "But they're good at it. They don't realize how good at it they are, and if you remind them of some of the changes they went through as executives, you can sometimes help them get more comfortable. But no, the CEO's job is not the same as it was five years ago, let alone anyone else's."

"The companies that often struggle the most, though," Taylor rebutted, "Are the companies that went through a change three years ago, and now they're facing a new change and they apply the same processes. They in fact do worse than companies who didn't have that previous experience, *even though* they were good at it in the past."

"So it's not even necessarily about being averse to change as it is about addressing the particular change you're facing without bringing previous models to bear on it," Taylor finished.

Vinci from the Bank of Queensland suggested a way around the problem:

If I'm 'the SAP person' in an organization, and the organization no longer uses SAP, then I'm lost, I don't know who I am anymore. If instead you talk about business outcomes, then SAP is just a means to an end. We train our people on new ways of doing things, and how to make them employable for the rest of their lives. Not that they'll have a job with us for the rest of their lives, but in the meantime we both get the advantage. That's how you can give people the mindset of adapting so that they're not so disoriented when the world shifts.

"And this change is not just about speed," Brechbühl emphasized, extending Vinci's point.

It's also the convergence of a number of technology-driven changes becoming ripe enough at the same time to really impact each other. People's ability to bite off one change at a time — mobile, then cloud, then social — will be outstripped. Fundamental structural change will be so systemic, so environmental, that the older generation will feel completely out of place. The "who does what to whom" is not going to be clear anymore.

"If there was one thing I could change about my company with the snap of a finger," Sturgill mused, "It would be the willingness to embrace positive change. That's going to be a continuing differentiator for companies in the future, because this pace is not going to decrease."

"That will create competitive advantage," Vinci agreed. She ended the day with the core challenge that every company will face in the accelerating digital age: "There is no capitalization of change anymore: In two years, this one's gone, and the next thing is coming through. Resist complacency, because the world is going to come down on top of you. There's no time to take a breath anymore."

Participant List

Bill Blausey	SVP and CIO Eaton Corporation
Bill Braun	CIO and President, Information Technology Chevron
Hans Brechbühl	Executive Director, Center for Digital Strategies Tuck School of Business, Dartmouth College
Santiago Gallino	Assistant Professor of Business Administration Tuck School of Business, Dartmouth College
Don Castle	Executive Fellow, Center for Digital Strategies Tuck School of Business, Dartmouth College
Luis German	Chief Process and Information Officer Tenaris
Maria Lindenberg	Chief Procurement Officer Chevron
Thomas Morton	Vice President, Global Supply Chain Eastman Chemical Company
Keith Sturgill Sigma	VP and CIO, Information Technology & Corp. Six Eastman Chemical Company
Alva H. Taylor	Associate Professor of Business Administration Faculty Director, Center for Digital Strategies Tuck School of Business, Dartmouth College
Brian Tomlin	Professor of Business Administration Tuck School of Business, Dartmouth College
Donna Vinci	Group Executive, Enterprise Solutions Bank of Queensland
Francisco Zini	Regional Director, Supply Chain Tenaris