TUCK SCHOOL OF BUSINESS AT DARTMOUTH
GLASSMEYER/MCNAMEE CENTER FOR DIGITAL STRATEGIES

The Digital Enterprise and Changing Business Models

A Roundtable Overview

European Chapter Discussion

Roundtable on Digital Strategies

The Digital Enterprise and Changing Business Models

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

Our world is increasingly digitized, characterized by pervasive connectivity of people and things and overwhelming amounts of data. Advances in artificial intelligence, 3D printing, and a dozen other technologies are changing the landscape for business and IT at an accelerating pace. In April 2016 The Roundtable on Digital Strategies convened to discuss the nature and future of enterprises in this environment:

- *What does it mean to be a "digital enterprise?"*
- *How are existing businesses being challenged by new digitally-enabled business models?*
- *What are the key elements of shifting to a digital business strategy?*
- *What technologies are driving the change?*
- *How do enterprises need to change their relationship with customers, with employees, and with data itself?*

Participants in the Roundtable's European Chapter included CIOs, heads of digital technology and other senior leaders from Clariant, Hilti, LafargeHolcim, the International Committee of the Red Cross, its sister group the International Federation of Red Cross & Red Crescent Societies, as well as academic representation from the University of Lucerne. The session was hosted by the IFRC and ICRC at the ICRC Geneva headquarters.

Key Insights Discussed in this Article:

This overview was written by Stephen Plume, Executive Fellow. The Roundtable on Digital Strategies publication series is edited by Hans Brechbühl, Executive Director, Center for Digital Strategies (www.tuck.dartmouth.edu/digitalstrategies).

The Plug-In-Mash-Up Culture of Change

Hans Brechbühl, Executive Director of the Center for Digital Strategies, launched a broad question at the Roundtable: "What do you think when you hear 'digital enterprise?' Everybody's talking about it; what are its key components?"

"We look at 'digital' in three dimensions," answered Khushnud Irani, SVP and CIO of LafargeHolcim.

> The first is technology, where we talk about cost efficiencies and revenue increase as standard limits. We look at new business models and at the impact on our agility — so, four components of what technology can bring to the business.
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> The second dimension is analytics social media and mobile engagement, and the third dimension is what 'digital' means to employees, to customers, to suppliers, and to other players in our value chain.
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> Our trucks give an example that touches all three: We can analyze mobile data to know how many trucks are going out, ensure just in time delivery or at least predict delivery times, , Journey risk management (example which routes have the most risk) and Journey distance / time rationalization (leading to cost efficiencies). With that data, we can convey to our Haulers, "If your driver is above a certain speed that creates risk, we're going to deduct this much money from the transportation charge." The mobile and GPS connectivity of the truck allows our Customers the advantage of both on time and cost effective delivery. So this affects our operations, our costs, our suppliers, health, and safety.

"There has historically been a lot of 'digital' that's been branded as 'technology,' but digital is coming to the forefront," Irani summarized. "Digital now drives the business in certain areas."

"And *that's* called 'disruption,'" commented Volker Laska, CIO of Clariant. "We have four pillars around digital:

> The first is operational excellence: Cost efficiencies, which affect production, maintenance, supply chain, production. It's about using 'digital' to do things better, more efficiently, at lower cost.
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> The second is about new business models and new customer interaction models, especially in the areas where we are a service business, or where we are getting very close to consumer products.
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> The third is automation. We've already done a lot of the labor cost arbitrage; further improvements can only come from automation, and from extending our automation into customers and suppliers. 10- and 20-year old technologies can play a role here, that matter now because of differences in connectivity and compute power, so we can use them in a more integrated way. Machine learning plays here.

> The fourth is knowledge management. This covers a lot of internal collaboration topics: How do we work better as a global organization? And analytics cuts across all of these —we can't assign it exclusively to one area.

Martin Petry, CIO and Head of Business Excellence for Hilti, approached the question in a different way: "I hear 'digital enterprise' and in two seconds I say 'Google, Amazon,'" he said.

> They are the companies that have a virtual presence, not a physical presence, to the end customer. And Uber and Airbnb are digital companies with minimal physical presence. They live on two components: Transparency, so they provide information beyond what has been available; and the understanding that certain assets are used only part-time, so information can help them be used to a higher degree.
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> Hilti by definition is in more of a physical environment. We have an environment with part-time usage of physical things, with an underlying information infrastructure that could create completely new business models. How can we offer an Uber type of service to customers in a much more efficient way? Our future links software and digital interactions with our current business model, and it's happening in three major workstreams.
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> Workstream 1 is how we work: Digitization of internal business processes and the digital workplace. The second workstream is what we offer to our customers. Application software that helps customers and specifies our products, but there are also "smart tools:" Power tools that are internet-connected. And a little further out we can think about smart fastening points —heavy-duty anchors that inform us about their status.
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> Workstream 3 is how we interact with our customers: Online and social is one side of this, and the other side is to actually use the information we have to interact better, in a more individualized manner. This links to the first workstream because you have to have super-high data quality to make the step to the outside. If you are not good internally, that will create havoc and customers will not accept the service: There is a very high demand on data consistency. If Uber had a 30 percent hit rate on whether a car is coming or not, they would be forgotten in months. Customers won't appreciate 'beta' if we can't tell them how often the tool was repaired. If you want to build new business models, you better have production grade status on your information base.

"How do you balance that need against the need to have everything beta?" asked the fourth CIO, Ed Happ of the International Federation of Red Cross and Red Crescent Societies. "In the beta culture you will have gaps in data."

"I believe in a layered system architecture," Petry answered. "You do need a low-level integration layer to be agile and beta to, e.g. crank out new functionality in mobile apps, but you also need to be very clear on where you do that. There is no beta culture on your general ledger —your CFO will not have a lot of sympathy."

"That's a good point, and it's interesting, because there is a trust component," Happ commented. "When a disaster occurs, we put out an appeal for money, and there's an extensive database of appeals and how they are managed. And the call is coming from within the humanitarian movement to make that database open, for analysis and critique."

"So for us to be 'digital," he continued, "The first thing is, *everything* is online. That's obvious."

> #2 Everyone is connected, which is *not* something we can take for granted in the humanitarian space.
> #3 Transparency: The operation of the organization is visible to all its stakeholders. This also comes out of our humanitarian values.
> #4 Business at the speed of the internet.
> #5 Borrowing from Google, 'everything is beta.' We put digital stuff out there in non-final form in order to get feedback and interaction.
> #6 The plug-in mash-up culture of change. We should be able to throw components together in different ways to see what happens.

Conversation Is Cheaper Than Code

"There are different twists to the story here," observed Heiko Schickel, Petry's colleague and Global Head of Digital at Hilti. "'Digital' does sometimes turn into another buzzword, into the flavor of the month."

> Everybody wants to be 'digital,' and you get a lot of activity, a lot of background noise, and no impact, or even negative impact. People think Amazon is not physical, but it's quite the opposite: Their distribution network is a strength. There's always an integration of digital and physical.
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> I think a 'digital enterprise' leverages technological opportunities to truly deliver on its business model. Hilti's business model puts lots of emphasis on delivering in the physical environment, but it's going to be impossible for us to *fully* deliver *purely* in the physical environment. Technology gives us that opportunity.

Admir Trnjanin of the University of Lucerne expanded on Schickel's point:

> I recently saw a partner from one of the biggest private equity firms in Silicon Valley present, and for him 'digital' isn't even a buzzword anymore, he doesn't even say it. Every business is already digital, and the productivity factors are capital, land, and labor.
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> I like the example of John Deere, the tractor manufacturer. Deere is shifting to fully-automated tractors, and to a whole new business model based on data collection. What they're offering their clients is the physical tractor, and data about how to increase performance and productivity —i.e., labor —on farms, i.e., land.

"The Red Cross is almost the flip side of the Deere model," countered Happ's colleague Nathan Cooper, Senior Adviser to the Global Disaster Preparedness Center of the IFRC.

> Our infrastructure is our volunteer network, and that's how we provide our services. We're using technology to make that human, physical network more scalable. As an example, we've developed a first aid app that anyone can look at. We can help connect people who need these services to people who provide these services.

> So we are putting all these services online, but are we having an impact? Can someone learn first aid on an app and then actually be able to do it in practice? We can deliver these apps, but they always have to be complemented by physical infrastructure, by people meeting people.

"The question of lasting impact is a good one," Laska said.

> We talk about Uber and Airbnb and we talk about the beta culture. A lot of the digital business models we see now —We have no clue if they're going to be sustainable, or successful on a long-term basis. With the Deere example, is the world really going to take the route where the farmer sits at home and the tractor does all the work? That's totally open. Airbnb has a big challenge right now with licensing, especially in New York. You just need some legal side conditions and some of these business models are simply wiped out.

"So 'digital' can mean everything and nothing," reflected Jennifer Hauseman, Head of Digital for the International Committee of the Red Cross. "For some it's just a new way to say 'IT.' For me, it means content and engagement, because the enterprise is still a *human* enterprise:"

> You still need people to place orders, to tell stories. So user-centered design is paramount. Beta culture design thinking is tough, especially in the humanitarian space, where lives are at stake, but you still have to be willing to be goofy, to have paper prototypes, to be convinced that not everything has to be perfect and buttoned-up from the start.
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> You can have a cardboard version of a website, and you can put that in front of a real-live human being and make sure it's what they want to see before you spend a million dollars on a website that no one will go to. Conversation is cheaper than code, but there's a lot of emotion behind a transformation to design thinking.

"It's not a question of 'Are you a digital enterprise?' concluded Alva Taylor, Faculty Director of the Center for Digital Strategies.

> You are all, or will be, digital enterprises. You can't avoid it. The question is, "How effective a digital enterprise will you be?" The idea of the digital world is separating understanding from action. Since it's inevitable, you're facing issues of time and preparedness. What is the information for? What kind of action do you plan to take based on it? How you answer those questions determines how you treat the data, the quality of the data, and the level of resources that you allocate to it.

The Rise of the Beneficiary

"We've been talking about Uber," CDS' Brechbühl said, "They disrupted the taxi industry. Now they're launching UberEATS: They're getting into the food delivery business. They probably see some spare capacity, so they can use the same people and assets. What new digital business models are cropping up for you, and where are they coming from? From you, from competitors, or from a player in a neighboring space?"

"For the Red Cross it's the rise of the beneficiary," Happ of the IFRC answered.

> 70 percent of Syrian youth have a smartphone, and when they get off the rafts in Greece, their second question[1] is, 'Where's the wifi, and how do I connect to it?' So we have people in crisis, who have access to technology. All those questions we might answer face-to-face — 'Where's the clinic? How do I get my transportation papers?' — they now answer for themselves. That changes how we look at our supply chain, and how we should now look at mobilizing volunteers.

"We use the term 'beneficiary,' but it's just a 'user' anywhere else," explained Charlotte Lindsey Curtet, Director of Communication and Information Management for the ICRC.

> We are not the intermediary voice of victims anymore, because they can do that by themselves. People decide what they want, and how they want to get it, and what's the price point, and how others could provide it in a different way than we can.
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> On our periphery, Facebook has People Finder. The banking sector can do cash transfers without any humanitarian agency involved. They're testing what this means, but it won't be long before they figure out how to move into the $17 billion humanitarian sector, which doesn't even count the $100+ billion more spent on development. They see they can offer certain services to clients better than we can, because of their interfaces and platforms and speed.
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> So we have to review our added value in that chain. It now takes just three years for a new company to be able to take over significant share. It used to be 15. Just because we have a nearly $2 billion operation in 90+ countries does *not* mean we will still be there in three years' time.

"Proximity is critical, but digital doesn't require *physical* proximity, and that's why Uber doesn't own any real estate and Bookings.com doesn't own any hotels," Curtet finished. "They just facilitate access to what's already out there. We need to ensure that the ICRC does not become the taxi drivers of the Uber world."

"A young company named NUMBER26 is the Uber of banking," Trnjanin from the University of Lucerne volunteered.

> They've changed the whole experience for the customer: They call you on Skype, they screen you, you put in your information. It takes 8 minutes to open an account, and you have your credit card within 3 days. And they don't charge you the 1.5% on each transactions that traditional banks do. Their whole design, their pace, their customer experience is totally different. The big banks still operate on big infrastructure, and they did not see this coming.

"Those are the disrupters who actually change market dynamics," Irani commented. "The established players act based on a historical rationale, and then these companies change the game and everyone has to start thinking differently."

[1] "The first is, 'Where am I?'"

The Water We Swim In

"For us, the question is whether we know the end customers or not," Irani from LaFarge Holcim continued. "Within our chain, the distributers would also like to know the end customers. They would like to connect all the retailers to provide a common platform, and then potentially synchronize pricing. They could give very fast delivery from the nearest store, and get a closer proximity to existing and new customers."

"Distributors whom you would consider part of the industry? Inside the industry, not out of it?" Clariant's Laska asked.

"Not necessarily," Irani answered. "They could be selling other building material products as well. It's not all about just our product, some of the distributors also indulge in other building material products which they sell online and could be a direct threat to our traditional model. Also, other influencers or buyers such as architects, contractors, home builders would seek modern ways of collaborating and purchasing. We need to be in the forefront."

"There are three potential sources of disruption," Hilti's Schickel suggested. "One is completely different players. Then distributors, and manufacturers. And they all ask, 'How can I leverage digital in the best possible way?' If I'm a distributor, 'What do I have to do to get to the Amazon model?' If I'm a manufacturer, I want end-user access. They all want the customer relationship."

"So at Hilti we think about what we have to do that these guys can't break through," he continued. "And it's very simple: We need to provide unique value-added products and services, because that's an element they will always miss."

Ebbe Diekmann, Clariant's Head of Global Engineering Services, explained a similar competitive dynamic:

> The products we supply to chemical plants have much less value than the products our customers actually send through those plants. But our products make a huge difference in how the plants operate. Clariant supplies only the catalysts, but some of our competitors supply both the catalysts and the plants. That means they have an inherently better understanding on how these plants are running, and may be able to service them better.

"That's our competition from within the industry," added Diekmann's colleague Laska. "Our second threat is also from within the industry, and it's not necessarily digital. Lots of Chinese and Indian competitors are coming up, especially in the chemicals that are not especially complicated, and it's mainly cost competition."

"I wonder if it's a disservice to tie 'disruption' to 'digital,' Hauseman mused.

> Ultimately these are discussions of imagination: What are the potential threats and potential problems? Proctor & Gamble experienced two disruptions, neither of which was digital: The first was Starbucks. A failure of the imagination, because they couldn't imagine an environment where people would go out for over-priced coffee. The second disruption was

> environmentalism, which hit Pampers, the engine of P&G's business. "Digital" might not always facilitate that imaginative conversation because it's generational. It's burdened.

"But it's a fact that in today's world, the capabilities that technology allows is at least *one* of the biggest driving disruptors," Brechbühl rebutted.

"And it's quite difficult to imagine what could happen to your *customers'* business models," Laska added.

"'Digital' is a lot of things," Hauseman countered, "It's a kit of parts. In the case of Pampers, they used 'digital' in their reaction, in the form of design thinking. Design thinking, quick prototyping, beta versions: It's all part of the same thing, all part of 'digital.' Digital is just one of the elements. It's the water we swim in now, and if we can't visualize it properly, then we can't imagine the next potential disruption."

"I also have a problem with the word 'disruption,'" Trnjanin asserted. "Disruption' is just business model innovation. And *that* is just a way to put your customer even more in the center of your business, and think about what he wants. When Hilti introduced their fleet management, they changed their business model, and it was a *huge* innovation. It was *not* digital."

"That's absolutely true," Hilti's Petry agreed, "But we also know that in years to come there will be lots of innovation in combining hardware with information and services. And if you can combine multiple dimensions of innovation in one package, you are more difficult to copy, and you have customers with much greater loyalty."

"The two business models complement each other," Brechbühl proposed. "For example, GE would argue they no longer sell aircraft engines, they sell uptime of powering an aircraft. And in the end, if the engine is no good, the rest of their business falls apart, too. And because of all the data they now collect, they can build a better engine."

"GE combined formerly different steps of the value chain," Schickel observed. "They have a natural interest to do exactly that, and now they can catch more of the value generated. And we've seen typical 'digital' players adding physical elements to their business models. Microsoft buying Nokia, Amazon opening retail stores…."

"And not only in retail," Laska interjected. "I shocked our people by asking if they could imagine Amazon starting to sell cheap pigments. That's not high-tech stuff; they have the full distribution system. They don't need much knowledge about the product because it's a commodity, and that would be disruptive in an industry where we tend to think there can be no disruption at all." "Amazon and similar platforms are looking at selling cement online as well," Irani added.

"So the big point," Brechbühl summarized, "Is that the best disruption is to disrupt your own model, in whatever direction adds value."

Data Can Tell any Story

Brechbühl cited Jeff Hammond of Forrester Research on the elements of digital success:

> Hammond posits that four things are necessary for a successful business strategy in today's world. The first is a focus on customer experience. The second is software product thinking —and I think he means 'products and services' here. The third is rapid iterative development. And the fourth is an ecosystem business model. A good example of the ecosystem business model is Pampers, and their environmental issues that we discussed earlier.

"What the ecosystem model asks is," explained CDS' Taylor,

> What are all the things that have to happen, and all the players involved, in order for your ultimate customer to get value out of your product or service? So, not just what you do: How does your business model link with partners and the broader 'ecosystem' to create value? Consider Netflix: The more high-definition big screens there are, the more reliable high-bandwidth streaming there is, the more value their service has, even though they have nothing to do directly with either of those things.

"Fifteen years ago that company would have gone belly-up, because nobody would have spent three times the time needed to go to a Blockbuster in order to download a movie," added Hilti's Petry. "So complexity, technical ability, and social acceptance are all components you need to take into consideration to come up with a successful disruption."

"And I propose a fifth component from Ram Charan," Brechbühl resumed: "If you're not turning your company into a math house, you're in serious trouble."

"The question here is, do you need to convert your whole company into a math house, or are you looking more for digital-as-a-service?" Clariant's Laska asked. "Hiring data scientists is quite difficult, and it can be at least partially outsourced like a lot of other services."

"Just because it's difficult doesn't mean you shouldn't do it!" Petry countered. "Data helps understand today's environment, and yes, you need to do that. But it's also a driver of future product and service developments, and that is core to your innovation. If you outsource it, I don't see how it succeeds as a sustaining function."

"You can give your data to someone to analyze, and they may come back with ideas that sound great on paper," Petry's colleague Schickel acknowledged. "But if you really reflect on your own business model and your needs and your customers' needs, those ideas are complete bonkers and nonsense. *If* you take the position that you want to make decisions more consciously, more fact-based, then you *have* to go through the pain of hiring people who can help you with the technology and the methodology."

"For the IFRC, the first challenge is that we have no shortage of reports," shrugged Ed Happ. "We have 2000 of them, and most of the information in those reports is in tables. There's no aggregated data set. So our first challenge is to reorient our relationship with data, from tables and reports to a form that lends itself to analytics."

"At Clariant the first obstacle is actually talking to each other," Laska said. "The business guys usually don't understand what the data scientists tell them, and when they do understand, they don't believe it. It's outside their level of experience. That's something we need to overcome."

"But data can tell any story you want it to tell," Hauseman cautioned.

> In my last life we got vanity metrics with every funding opportunity. 'We have a reach of 10 million tweets!' Well, we had 500,000 followers, and we sent them 20 tweets. That's just playing with numbers. The idea of having a 'math house' means you have a math skeptic in there, who's going to push against interpretations of the data. There's always a risk of data replacing actual thinking, or data being seen as this benevolent force of good at all times.

"But as an augmentation, to help gain an understanding of a customer journey?" Brechbühl asked.

"If you're asking the right questions," Hauseman assented. "But there has to be strong leadership in place to ask those questions, or else the data smog just rolls over us, and we pop the champagne because of 10 million tweets, even though they're not actually reaching real human beings."

"The Twitter question links back to the elements we discussed of a successful strategy," Lindsey Curtet pointed out. "How do you ensure proximity, to your staff, to your customers, to your stakeholders? Success is about proximity. There is an element of that which is physical, and there's a growing element that is virtual, or digital."

"The ICRC is a very conservative organization," Lindsey Curtet continued. "When I introduced social media a few years ago, people laughed and said, "Really? That's a nice-to-have." Today, we would not be able to run our operations without "social media" —which is not a great term, because it's not just "social."

"That's a brilliant point, but what word should we use instead?" Taylor asked. "The idea of these platforms is a way to connect, to communicate, to energize, to engage. How can they help us do business better?"

"If we called it "proximity networks" we would have had far less difficulty than we do around the term "social media"", Lindsey Curtet replied.

Laska drilled deeper into Taylor's question:

> One of the big transformational challenges is that—at least in some geographies— the younger generation is outnumbered by the"old geezer" generation. The issue is to get the Millennials working with this inverted age pyramid that we have in many companies and countries in Europe. We have to get the older people onto collaboration tools, and make them more digital.

"On that point, we have the debate, is Facebook personal?" Cooper added. "To keep in touch with donors, it's been dominant for the last decade, but to get *work* done, people usually use

other platforms. But now you can set up a private Facebook working group for internal and external people to collaborate. Why wouldn't you?"

"Privately, people already do a lot of digital stuff as a natural behavior," Clariant's Diekmann agreed. "They stay connected on social media. They just need to apply the same approach to the business context."

"This Is Where We Need To Go"

Brechbühl asked what other obstacles and impediments block the path to becoming a digital enterprise.

"There are a lot of transformations going on, and digital is just one of them," Lindsey Curtet started. "How do you absorb all of them simultaneously? Which change is the governing change that's driving strategies? Is digital foundational, or parallel? And the answer depends on which business unit you're looking at, and what stage that unit is in."

"It's not easy for business cases," Irani observed. "If there's no *emergency*, then there's no immediate need to do something different, is the traditional thinking. Also, if there are huge investments needed, it would be difficult to get the approvals amongst other competing priorities. Thus, an ROI based approach demonstrating the risks of not doing so may be more helpful."

"They've got aversion to risk, and aversion to change," Cooper lamented.

"Organizations only move when they have a burning platform," Lindsey Curtet confirmed. "If you could get a shared view of the burning platform, you might get them to move."

"Data silos are another problem," Diekmann added. "We have information stored around the world, and there's nothing linking it together. This separation holds us back. And then there is a lack of agility, and the fact that people in sales and marketing don't really have time for this digital conversation. They'll talk for a bit, but then they go back to what they have to do. People don't spend time outside their own silos, because it doesn't benefit them."

"That's especially true around interactive data," Petry commented. "It's interesting that IT is not the bottleneck anymore."

"Metrics have to change," suggested Happ of the IFRC. "They need to be more long-term, more experiment-oriented. It's not a waste of money to run a hundred disciplined experiments."

"But you set the boundary in a very conservative place when you start with governance and metrics," Hauseman objected. "Then you've already pulled the conversation away from innovation and experimentation and the beta mindset, simply by playing on the field of governance and metrics. I agree, you can't have a free-for-all, you have to have *some* governance, but you can't burden the process by requiring that all solutions are outlined before taking the first step."

"Governance is finding the right balance between creative, chaotic components and some organizing structure," Laska suggested. "We need to come up with incentives for people to experiment, to make mistakes, and to learn from mistakes. And depending on our strategic pillars, we need ways to know if we are successful. How much money are we making from digital initiatives?"

"But the tendency is to carry over the same metrics and expect a nascent endeavor to follow all the rules of governance and bureaucracy and meet all established metrics," Brechbühl countered. "It's been shown over and over again that if you burden a nascent initiative with the grown-up baggage of corporate, it's almost impossible for it to grow and thrive."

"If we're managing it, can we even call it 'innovation?'" Happ asked.

> If we really want transformation, if we really want innovation, we have to get at least a plane ride away from the corporate culture that's not going to allow it to succeed. We talked about proximity earlier; this is negative proximity: Can you get far enough away from the antibodies that they can't surround it and push it out?
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> In that case the name of the game is, how many ideas are you gathering, encouraging, engendering, at the top of the funnel? How many of those are becoming pilots? How many of those get investment to go to scale? And how many of those become game-changer transformations? We may only get two game changers out the other end. But that should be our expectation.

"Is the key issue here actually leadership?" Lindsey Curtet asked.

"That's an important question," Brechbühl followed up. "Who does lead the path to the digital enterprise?"

"It's everyone and no one," Irani answered. "Digital in the organization cannot be led by just a single person. There are too many initiatives, in too many different areas. And at the end of the day, everybody wants a piece of digital."

"But if you want an Amazon-like outcome," Schickel argued, "You can't leave it in the hands of the individual business leaders who are driven by quarterly results. The other aspect is, digital is not just about single little tiny mushrooms growing up everywhere, trying to be something. It's a blob. And you need to have a certain amount of orchestration to see the business impact."

"You do end up in a position where everybody is responsible and no one," Lindsey Curtet concluded.

> But you can have an information environment strategy, and a roadmap that anchors ambitions, and those determine how you will respond to digital. Teams can do an awful lot if they feel safe, if you create an environment where they can take risks. Risk-taking was an important part of the companies we started off discussing, the Ubers and the Airbnbs. They failed in a lot of things before they got where they are. We do fall back into what we like: governance, metrics, and planned-out strategies. It takes leadership, really strong leadership, from the top, to break out and say, "This is the future. This is where we need to go."

Participant List

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Ebbe Diekmann	Head of Global Engineering Services Clariant
Edward Happ	Global CIO International Federation of Red Cross and Red Crescent Societies (IFRC)
Jennifer Hauseman	Head of Digital International Committee of the Red Cross (ICRC)
Khushnud Irani	SVP and CIO LafargeHolcim
Volker Laska	CIO Clariant
Martin Petry	CIO and Head of Business Excellence Hilti
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