

TRANSCRIPT FROM THE PRESENTATION:

Al-Enabled Enterprise Is Closer Than You Think



Scott Lundstrom Vice President & General Manager, IDC What I really want to talk to you think morning is about context. And one of the great things about being at IDC is we have a simple tagline, "Analyze the future." For 54 years, we've kind of been looking at where this technology's been going, why does it go there. So, we have to look out into the next ten years. And that means we've had to kind of create

a model that hangs together for us of how this all unfolds. So, I want to share that with you today. And for many of you, this might also be a bit of a cautionary tale because as exciting and as tempting as the technology is, now might not be the time to buy. So, let's talk about some logical precursors before we pony up that big purchase order, all right? And let's make sure we're really ready to go.

So AI is really everywhere, all right? It's there already. How many of you used voice-enabled navigation to get here this morning, right? I used it to walk from South Station. I don't type anymore. My old arthritic carpal tunnel hands just hate it. I talk. And I get documents. We all watched AI in action yesterday during the football. Anybody here watch the NFL games? Notice last few years all of a sudden you can see where that next first down is? All of a sudden, we have annotation on top of video in real time? That's a lot harder than it sounds. You might be surprised at how much computational algorithmic horsepower sits behind that stuff. This same thing is going to happen in every application you use in touch over the next five years. Al really is going to be everywhere. But it's going to be these narrow, little bits of AI sprinkled on everything. We like to think of this as you're going to get task-level super powers. And that's how this is going to manifest itself for many of you. And especially for those of you that live in big enterprise application environments, you're going to consume this stuff versus create it. So, it's important to think about how does this progress from the task, to the process, to the real line of business? From real little, narrow superpowers to tasks linked together into bigger processes. Fascinating. And it's only the beginning. We've seen Al play Go. We've seen AI play chess. And the penetration's still really low, there's a lot of market left to come. There's a lot of money here to be made. There's a lot of stuff to do. But, it's also a market that's kind of tempered by these expectations of perfection and AI's far from perfect. All right? And some of these are a little lighter.

In the social services version of this talk, we talk about AI killing pediatric asthma patients. We talk about AI generating the most biased, sentencing requirements of any judge in the deep South. We talk about AI making



horrible mistakes. And in this presentation, I tell people to prepare to be amazed and disappointed because you have equal measure coming. But you got to be careful. This stuff is different. This is not another 4GL Dev tool. This is not another implementation of something like Tableau. This stuff creates actionable advice. Often, we don't understand, often we can't audit, often we can't explain. Think about being in court, or being in front of Congress, trying to explain that you don't really know what happened. The algorithm decided. That's not going to work. But we're going to go there because there's a lot of money at stake. All right? So this really is kind of our most current view of where does the money go. This here. And then we'll show you growth, and GO, and segment, and all kinds of other data underneath this. But these are the real big use cases. Automated customer service, diagnosis and treatment, and that's really being mostly driven by medical imaging, which is kind of a stunning niche market in its own sense, and in a lot around IT ops and security. And again, one of the places many of you are going to begin to experience AI superpowers is going to be absolutely undetectable to you. You're going to have to look to notice it. Your systems are going to stop going down. Your systems are going to stop being breached. And IT ops might be kind of the most exciting, most accelerated version because we have really clear goals: Don't let the system fail. Don't let the unauthorized user on.

We have these really simple, unambiguous tasks that are a really good match for the current generation of AI technologies. But we have all these challenges. Skills. Training data. Are results explainable and are they trusted? If you live and breathe in a regulated industry, this should concern you. It really should. How do you get by a regulator? Look at AI and health. We don't have a way to get an AI approved. How did the da Vinci robot get approved? It's a medical device based on clinical outcomes. Nobody ever had to defend the decision making of that algorithm. Why? Because they can't. They cannot explain 100 percent of how the black box works anymore. They just can't. This is going to be a huge issue. Do we comply? How do we prove compliance? This is a real challenge. Can an AI be a board-certified radiologist? Can an AI be a fiduciary? We don't have the legal constructs in place to protect you from the liability of making assumptions in these areas. You need to be careful. And then how does this all evolve?

So we spent a lot of time thinking about how do we create a framework that helps us understand what's going on? So, let's take this simple horizon view of the world. We start at one end: humans decide. Right? This is kind of where most of us are today. We look at our analytics, we look at our reports, we use our best judgment. We decide.

But then we move into an area where the machine begins to make recommendations based on our asks. 2011 I jokingly referred to a market that we called "answers as a service." Well it's almost here. Now we have to come up with a good acronym for that, because I haven't found one yet. But that's basically what we're talking about here, right? We ask and we get answers, and then we decide. Then we move to the point where the machine leads. And we only handle the exceptions. Think about this as Cadillac Super Cruise or Tesla's Autopilot. It'll drive under limited circumstances, but when that little red light goes off, you better grab that wheel because it's done. It's decided it can't navigate the vehicle for whatever reason anymore. The car it was following in front of you turned off. The snow on the road has become deep enough it can't see the lines

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anymore. Beep, beep, beep. You have three seconds to take control of that vehicle. Better be paying attention.

Finally, though, we transition to this whole notion of the machine-controlled environment. Skynet if you will. We think that's a long way away, all right? It really is. It's a long way away. But we have to think about this changing role of humans and machines, and really think about who produces the insight, who decides, and who acts. The thing with AI is it makes your head hurt, because there's a lot of thinking involved. And again, for most of you, not so much spending. Not so much buying. More thinking. OK? Every single account I've ever worked with. They're over their skis on investment, they're underinvested [in deep thought, all right? Don't make that mistake. Because this cascades. We started [TAS?], but then we're up in the activities and processes, and then whole systems begin to be interrelated. These little thin slices of Al baloney, these little tiny task augmentations get linked together. The processes get broader and broader. The amount of business being done on a fairly autonomic basis increases. And all the while we need to be paying attention here. Because this stuff goes off the rails really guickly if you're not careful. And honestly, if the machine learning guys were being honest with you, they'd tell you that they don't always know why the algorithm goes South. So, focus on thinking, not spending. At least for now. At least for this next month or two, OK?

What data do you have? Do you even know that? Do you know the quality of it? Who curates it? Who works with it? What are the rules about it? What data can we get from our partners, from our suppliers, from our customers? What is our ethical framework for decision-making? How many of you here have a published code of moral and ethical behavior for your Al initiatives? Not one. How many of you are willing to stand before a federal judge and explain why your software broke the law? It's one or the other, people. I mean that. I really do. If you do nothing else out of this event, go home, put a bunch of people in a room, and start banging away on a framework for your

developers. Because otherwise as their manager, you'll be the one on the hook. You need published guidelines to guide your development and understand what you're trying to do here. Do not let a bunch of developers loosen your customer file without rules. You will be disappointed with what happens.

And finally, what do your partners bring to the table? Most of you have big investments here. You've bought Leonardo. You've bought into Einstein. You've got a ton of Oracle. You've got a bunch of Open Source stuff. Understand what your partners bring to the table, especially your big enterprise application partners. Because again, think about this. The way that this stuff mostly manifests itself in your environments over the next few years, is an app vendor delivers it as part of an upgrade. And the application vendors are spending literally billions of dollars in the current year to build the AI capabilities in their base products. They've sucked up all the data scientists. They've hired all the smart developers. And they're burning cash at an incredible rate because the technology is changing about every 12 months. So, what we did last year is mostly experience, not product. And it's going to be that way for a couple more years. Don't be in a hurry to make big technology investments here. Get your house in order. Get your thoughts in order. Understand what your business priorities are. We work with our retail clients, we've identified 41 key retail initiatives that they have to execute; 31 of them have an AI component. Of those, though, about 25 look like they're going to be delivered by the application suppliers that these companies use. So now we find the six or seven uncovered use cases. Now maybe we have a science project.

But most of the organizations I work with right now, they're way over their skis in terms of technology. They're way underprepared from a business perspective. If you can't go and present your AI program to your board with a smile on your face, you are not ready to buy. OK?

So, some final recommendations. Data strategy at this

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point is really honestly much more important than Al strategy. Getting your data house in order is much more important than picking a machine-learning tool. Who owns the data? What can I do with it? Who curates it? Who integrates it? What are the rules? And not just what are the rules about how I use my data. How and what are the rules when my partners want to use my data, when my customers want to see their own data. You really need to think this through. Recognize the impact of automation on the process. This isn't all bad. This isn't jobs out the door. A lot of this is new capability. A lot of this is the ability to do a better job than we ever did before. Don't take the easy cost win. Always. Look at the service and the experience applications as well.

You got to produce a code of conduct. You have to have some rules here. I mean, I can't tell you enough how dangerous this stuff is when it's poorly applied without rules and adult supervision. Have an adult in the room. If you're doing AI development, have regular development reviews. Have your council or your ethics office or both in the room when you do those code reviews. Do not expect developers to make appropriate business decisions on their own. It rarely works that way.

And understand what your app partners bring to the table. So much money being spent in the bay now. So much investment by the big enterprise application providers, by the big data center providers. You will have a mostly autonomous data center, either in the cloud or on prem in the next few years. And you really don't have to do anything but take upgrades to get it. Don't waste your time. Let the vendors carry that load. Same with your big ERP and CRM frameworks, same with your big supply chain applications. It really makes sense to understand what these vendors bring to the table before you decide you're going to go out and reinvent the wheel.

So anyway, with that, I hope this hasn't been too much of the cautionary tale. But I do really think context is important here. AI is this great, big, broad market. It's like the elephant and the blind man. Depending on how you come at it, you might not even be aware of other aspects of this market. We meet with people so deep in data, so deep in algorithms, so deep in machine intelligence, that

About the Speaker



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Scott Lundstrom is a long-time industry analyst focused on the transformative and disruptive

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nature of technology. Mr. Lundstrom has been focused on IT driven business innovation and change in a variety of industries and settings. Mr. Lundstrom is an expert on the emerging third platform, and speaks regularly on the future of cloud, analytics, mobility, and social media to digitally transform and radically alter the process and services offered to customers in the marketplace.

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they don't even really think about how this stuff is going to be implied. What's the impact going to be? Think for a few minutes on your ride home tonight what ubiquitous facial recognition means to you. Are you in favor of it? Are you against it? Is it good for security? Is it bad for privacy?

There is no framework out there. We're going to figure it out. We're going to adapt. And you're going to be faced with regulation. Sooner or later, it's inevitable. And it won't just be here. It'll be in Europe, it'll be in Asia, it'll be in China. So the other thing you're going to have to deal with is this geopolitical fracturing of the rule sets. And again, if you're a global supplier, you'd really like your partners to deal with as much of that complexity as you can. Think of all the different geopolitical flavors of AI we're going to have based on regulatory. Based on constitutional versus other forms of government.

This is going to be the Wild West for the next ten years, and you really do have to be concerned about liability, you have to be concerned about morals and ethics. Because the long run here -- think about that spectrum, that framework. The long run here is we trust the machines, all right? That's the goal. Or we only want to work with machines we trust. Well, you become indistinguishable from the machine at the end of this model. The Als are running more and more of your business. If I don't trust your Als, I don't trust your brand. I won't do business with you. So, the long game, the end market here is all about trust. Early days, right now, it's about data. Next step of the market is about integration and process. But this final stage, this long tail where there's real money. It's all about trust. Don't blow it before you get there. Thank you very much **T**i