

Architecting the Future of Logistics:

Accenture's Michel Roger on AI, Autonomy, and Workforce

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Richard: Welcome to the Future of Supply Chain, a podcast where we discuss the latest trends, challenges, innovations, and opportunities across global supply chains. I'm Richard Howells and I'm joined by my wonderful co-host Oyku.

Oyku: [00:01:00] Oyku Ilgar, a marketer, blogger and podcaster in the supply chain and ERP area at SAP. As artificial intelligence and autonomy redefine how goods move across the globe, logistics leaders are facing a new reality. Intelligence, adaptability, and human ingenuity work hand in hand. In this episode, we are joined by Accenture's Michel Roger to explore how advanced AI and autonomous systems are architecting the next generation of logistics and transforming the way businesses design operate and optimize their supply chains. Welcome, Michel. Pleasure to have you back on the series. Would you like to introduce yourself for those of our listeners who do not know you?

Michel: Yes, happy to be back and hey, Richard, always a pleasure to speak during those podcasts once in a while. So I'm Michel Roger. I'm leading globally for Accenture our SAP Supply Chain Group. And I'm very excited to share, some of the views. It's very hard to predict the future, especially in the supply chain world, but I'll give my best to give some [00:02:00] sense of what's happening and how, we can share some ideas for the leaders who are listening to this podcast.

Richard: It's always great to talk to you, Michel, and I'm sure we'll have some great conversations today. But I wanted to kick it off and ask a question around logistics. When we talk about architecting the future of logistics, what does this look like to you, especially when it comes to breakthrough technologies like AI, automation, connected ecosystems? What is reshaping this re-architecture the most?

Michel: Yeah, that's a good question. As I reflect, and we had so many conversations in the past Richard, actually my answer will be the same as in the past, and it could be a bit not against

what's happening with AI, but it's really about the way you architect the future of logistics is not really about the better tools and they are amazing.

And I'm gonna talk more about, what can we do now, but it's more about [00:03:00] how you enable those new operating model. Typically, and then if we focus on logistics, so logistics is, moving historically from a isolated automation within the four walls, and then trying to expand a bit beyond that to as I see a more orchestrated autonomy, and not yet fully aiming at, full autonomous lights-out supply chain, but more as a hybrid environment where we see a combination of multiple breakthrough, like AI, people, physical assets, and then together in real time, to each playing their own strength.

So to give an idea of why now is a bit different, and the way we are seeing that, I see four breakthroughs. The number one, obviously, agentic AI, the level is incredible. Every day I'm learning more on what can be done, but the reasoning, the decision making, the act across planning and execution is really [00:04:00] amazing.

At the same time, the number two is we augment all of ourselves as I call it connected workforce. Now AI, copilots, real-time insights are almost a must. And then number three is how now we can start seeing the autonomous data collection and intelligence simulation. So the digital twin is not really new, but the fact that now it's more possible more and more to get that real-time mirroring of what's happening physically within your four walls.

And last but not least is and that's also emerging very fast is what I would call embodied or physical AI which really enables skill-based task execution in the real world. So it's not only virtual stuff, but really robots helping to drive some of the work. Actually I have an example for that to make it a bit more real. I cannot name the client, so [00:05:00] I'll state just a global telco and we're working in partnership with SAP and Accenture and we're gonna showcase that in a upcoming conference in the next few months. So the example here is we are working at enabling humanoid robots to receive mission directly from SAP extended warehouse management, and conduct on their own autonomous inspection, how the pallets look like are they well balanced?

Is there any risk for anybody and things like that, and then feed directly insight back to the system and really work in harmony altogether, and that's the shift we are talking about, moving from digital intelligence to real-world execution at the same time. So it's really bringing that AI to the next level, where AI, human, and physical asset work together safely, productively and at scale.

Oyku: [00:06:00] Michel, as you said, many businesses from various industries are experimenting with AI in logistics, right? It can be predictive maintenance in transport fleets or intelligent route optimization and so on, but only a few manage to scale, right? So what distinguishes organizations that move from proof of concept to sustained transformation?

Michel: Yeah, and it's always the same question. It's like when something emerges, it's like how you can scale it fast. So trying to break down where I see some of our client I won't say fail maybe going on a slower pace, is where we only treat AI as a point solution or one pilot that are completely disconnected from core process that go on top and without really trying to redesign the decision right or the overall governance of the process. And where we see larger and faster

adoption and I would say more adoption, faster adoption than scalability, [00:07:00] it's where we have client quite mature already on their, what I call control tower, and they know exactly where based on their KPI, where the biggest challenges are to be addressed, so that they have already done that kind of analysis.

And then two, is really embracing kind of embedded AI as part of end-to-end workflow, not only at the point on top of a process, but really completely integrated. And then number three is also trying to match the form of AI based on their own maturity. Some basic copilots are sometimes good enough, but some advanced LLMs or even more advanced agent-to-agent networks can be adequate, but you gotta scale that also to a reasonable effort for accelerating the adoption.

And then last but not least, I would say the key magic or secret source to make it happen fast is your data foundation and governance, especially in some industry like [00:08:00] regulated industry life science where GxP compliance is critical, but not only. If you don't have that right data fabric underlying, it's gonna be very hard to scale.

And it's a hard cost sometimes to get, but we are seeing the faster scalable type of implementation thanks to that. So long story short, it's not to answer where we can use AI, but it's more like which use case gets the highest benefit outcome, and how do we redesign a process around them?

That's really what we are seeing emerging as the right question to address versus let's plug in AI somewhere.

Richard: Michel, earlier you mentioned four breakthroughs, and two of them were physical AI and/or robotics, and then augmented workforce. So I want to ask a question based on those two. So as automation and robotics gain ground and this is a hot topic for me personally, how do you envision the [00:09:00] workforce evolving both inside the warehouse and across the logistics ecosystem, and what will define the next generation of logistics professional? What will they need to know? What skills will they need to have, et cetera?

Michel: Yeah, that's a very hard question, but I'll do my best. So obviously the workforce challenge in logistics is now strategic, not anymore tactical. It's not about scarcity anymore. It's really about, redefining the type of roles you need. If you look at some report from a recent survey from the World Economic Forum, which projects a bit the impact on the overall workforce, and it's not specific to logistics, but I will come to that. So they, and it's very recent. They predict that 22% of the jobs would be disrupted, so globally, that's huge, and 63% of employees already see skills gap as their biggest barrier. And last number, 77% plan to upskill their workforce in response to AI. So there, there is, right now, you can't [00:10:00] ignore it's coming you see all client investing on, bridging that skill gap.

And now if you zoom in on the specific of logistics where we see that as the most disrupted area, like the delivery, the warehouse, the manufacturing area, and at the same time, the fast-growing job numbers as well. So as now we, you know, what type of skills and how we see the world evolving for logistics it's not that the world disappears, they evolve across warehouse and logistics network, we are seeing clear shifts.

So from manual execution to exception handling and orchestration, so that, that's a trend that was slowly being adopted, but we are seeing an acceleration with AI from static planning to real-time supervision. So here again, it's bringing more that real-time view of digital twin and and really stay on top of what's happening [00:11:00] in real-time.

And three, from narrow specialization to more kind of cross-functional AI-enabled decision making. If I summarize the next generation of logistics professional will be a bit different than traditionally was based on excellent operational experience, and you need to add amplifying the essential human skills like system thinking, digital fluency and judgment, and those are really the typical human differentiating skills that will make a difference and needs to be combined with that operational experience or excellence that AI will over time help more and more on making that noise disappear and then really focusing on the judgment on the stepping above the ground and more that strategy thinking of orchestration.

Oyku: [00:12:00] That's such an interesting perspective, especially as technology reshapes not just how work gets done, but skills truly matter. It sounds like we're entering a phase where human judgment and AI capability go hand in hand to drive smarter, more adaptive operations. With that in mind, are there any examples that you can share where advanced AI or autonomous capabilities have delivered measurable improvements, whether in speed, resilience, or customer experience for a logistics or manufacturing client?

Michel: Yeah. I'll bring two examples again, not naming names, but more one is a global fashion company where advanced AI will be applied across sourcing, planning, and warehouse execution including some multi-tier supplier visibility, and one of their critical business processes to address is how to be proactive on that purchase order deferral. In their world is knowing when to log the PO, not too early, not too late, in order not to miss, a [00:13:00] campaign or in a world of fashion that's really critical. There is no out-of-the-box solution that can do that. And for them, it's that critical that it can make or break a season.

And using that intelligent evaluation with multiple parameters you can help and drive and guide when is the right time to log that order in order not to be, competing for the same raw material as your competitors and beat the market more. And that's really where you can combine, AI and all that logic and including hard factor like the cost of transport that sometimes is not only the best solution like to air versus, ocean and things like that.

It's not only about the cost, but when is the right time and how I can commit. And we are seeing that as a very compelling story and maybe not applicable for all industry, but very relevant for that client. Another example which is more under operational [00:14:00] warehouse execution for industrial company AI was used to optimize the routing of human workers inside warehouse, and it was combining the real-time guidance with a digital twin that mirror the physical layout and constraint of the facility almost real time, and task execution was continuously optimized as condition change.

So really bringing that virtual into the real world and combine them together to optimize that, the typical flow path optimization, not per design, but as you execute it. So these two examples show

faster decision, higher resilience, a more stable operation rhythm, and without, adding complexity for the frontline team.

Oyku: In extending that idea, when companies combine AI with broader business network, linking N-tier suppliers, logistic providers, and planning systems, how does this strengthen [00:15:00] visibility, collaboration, and decision making?

Michel: Yeah the best warehouses today behave more like control tower than static facilities. By that, so AI can help to achieve that goal and transform the design and operation several ways like the dynamic slotting, layout optimization it's not as super static anymore. And adapting continuously to the demand and flow is being seen as critical and only AI can help you to do that.

It takes a lot of time of analysis and data to really look back and change that more often than typically companies do. Another one that is the labor forecasting and task of orchestration that's always, the critical mastermind behind any good operational site is how to combine the best plan with the people you have and you gotta be realistic and it's the people you have plus any [00:16:00] physical AI that you may have at the same time.

And last but not least, intelligent energy and asset utilization. So there is also a big component of optimizing, especially in a automated environment where it's a big part of your cost that you also want to improve. So it's not at the end only about optimizing the movement, but really improving the decision by using AI.

Richard: I want to look to the future a little bit now, and maybe imagine the logistics landscapes three, five years out, and what will distinguish true leaders in this space? What will we be seeing in five years time that people should be striving for?

Michel: Again, a tough question. So first you need to survive the permanent crisis and changes, but in my humble view, I think the leadership will be defined by who has the most dynamic and [00:17:00] agile system foundation. So I come back to the architecture and the system and who can orchestrate the entire ecosystem with confidence, so trusting your system and how you can maximize the usage of it.

And if I give another set of things that are really important to own as part of your leadership to get to the next level or the future of logistics, treat upskilling as a core capability, not as a change initiative. It's still applicable, like 10 years ago, it's even more applicable now with what AI is transforming in those type of core skills.

And operate logistics more and more as a real-time and adaptive enterprise. Embed governance, responsible autonomy, explainability, and compliance that I think that's gonna be more and more important because as you have a bit more autonomous steps in your process, you need to make sure that you still have the right control, the right explanation and you can [00:18:00] look back in confidence that you have done the right, optimized plan. And really my last point in terms of what will the future leader in five years is, like, how to integrate the agentic and automated capabilities to existing systems. So it's not even something to be debate, it's only to enable what is designed and AI is part of the process, but not something that this goes on top of the process.

Oyku: And Michel, how can Accenture help? Choosing the right technology, choosing the right software is important, but also choosing the right partner is important, I imagine. So how can Accenture help?

Michel: In many ways, of course we work in partnership with SAP and our client to really first envision what can be that future type of process and how to maximize the value you can get, not only by, I would say, simplifying, [00:19:00] cleaning up some complex or disharmonized processes that we still see a lot of companies need to do, but how to bring to the next level, how you can leapfrog and already embrace based on the high value AI use case for you and how you reshape the end-to-end process around them.

I think that's where that's the sweet spot of Accenture and including also some of the reinvention that we can go around new technology like we talked briefly about the robotics. It's also how you blend that type of communication between the robots and the central ERP solution, like the SAP at the core and the few example we mentioned today.

So we can help on that and obviously, implement, deploy that at scale, that's one of the final sweet spot of Accenture to do that for a large company doing the same way across the globe and at the speed that now AI is enabling faster [00:20:00] speed for doing those large transformation.

Richard: So Michel, we're coming to the end of the session, and I'm gonna ask you what I always think is the most difficult question, because I want you to summarize everything we've talked about, but in two or three sentences. So from a logistics perspective, what's the future of supply chain?

Michel: You gave me a heads up before, so I had time to think, because it's a tough one. So the future supply chain is still exception-driven. We have humans supervise and are highly adaptive to the ever-evolving dynamic of geopolitical markets.

Especially if I look now at what's happening in the Middle East. So when you look at that sentence, it's not that different than what I could have said five years, 10 years ago. What is changing is that AI more and more is taking care of the majority of the routine decision, continuously optimizing flows across warehouse, transportation and network, [00:21:00] and now we are seeing the human, us, the people spend more time on those strategic improvement redesigning the network, conceptually redesigning the supply chain, make new partnership with core manufacturers, and then supervision, like making sure that the decision and the governance on those decision are well-controlled and explainable and yeah and drive the change of the system that talk to each other in a harmonious way.

So the bottom line and I'm sorry, I'm quoting that from one of my leader in Accenture is human in the lead, not just human in the loop. That's really my conclusion here is that's really what we will try to aim to really enable that model.

Richard: Great answer. Michel, as ever, you didn't fail to provide some great insights, and I always enjoy talking to you. Thanks for joining.

Michel: All right. Thank you. Thank you, Richard. Pleasure to talk.[00:22:00]

Richard: And thanks everyone for listening. Please, mark us as a favorite, you can get regular updates and information about future episodes, but until next time from Michel, Oyku and I, thanks for discussing the future of supply chain.