The role of AI and supply chain orchestration in 2026 and beyond with SAP's Dominik Metzger

Dominik: [00:00:00] The future of supply chain and please, everyone get excited is immersing ourselves into a true industrial transformation embracing this tidal wave of Agentic AI.

Richard: I am Richard Howell, and this is The Future of Supply Chain, a podcast where we discuss hot topics, best practices, and the latest innovation in today's global business. Today I'm joined again by Dominik Metzger from SAP. And since his last appearance, which was actually episode 100 a few months ago, if you're looking to listen to it Dominik's continued to share forward looking insights at events such as SAP Sapphire, SAP Connect last October, and numerous other events around the world.

And most recently, Dominik authored a Compelling World Economic Forum article reframing supply chain orchestration as a strategic capability essential for navigating complexity. And today we're gonna be exploring the top priorities for 2026 [00:01:00] and beyond focusing on orchestration, intelligence and how supply chains are evolving into strategic advantages. So Dominik, welcome back.

Dominik: Thank you, Richard. It's a pleasure to be on the podcast again.

Richard: Looking forward to a great conversation, but maybe for those who didn't listen to episode 100 or one of the other ones that you've been on in the past, maybe you can quickly introduce yourself and your role at SAP.

Dominik: Yeah, happy to. So I run SAP's product and engineering organization for supply chain management. So this is essentially our product of applications that help companies run more resilient and more autonomous supply chains. It comprises of apps and our business network and increasingly AI agents.

Richard: So let's start with a big picture question. We're coming into 2026. What are the most critical priorities that are rising to the top from supply chain leaders that you've been talking to?

Dominik: Yeah, great question. First of all, basically no event I've been to [00:02:00] that you can ignore is the rise of Agentic AI. So I would say let's jump right in there. The I would say biggest question on top of mind for companies right now is how do I really unlock value with this tremendous amount of expectation the technology has created especially in supply chain, where I would say compared to the early LLM days, right when the first large language models came out, we realized those models are excellent in unstructured data. But no one had a full grasp if we are really honest, how far will we get with this technology alone. Now that we have entered really the agentic era, right, where we can truly think end to end workflows, so multiple process steps. Being managed and orchestrated by one or multiple agents, suddenly this vision was born, that this [00:03:00] new technology can truly in a much more drastic and in a much faster way achieve automation in supply chains, which is, for me, an equal sign to higher productivity, but also to to be much more resilient.

So now with this expectation out there. Most executives I talk to is it's really the question, how do I unlock this value while what are almost the prerequisites and there's usual suspects that come up in every discussion. Do I have the right data? Right? So is my underlying data foundation ready? Do I have the right skillset, the right people, the right knowledge in my organization? But also what are the right. Technologies in that big realm of AI that has evolved because let's face it, not only. AI agents have evolved, right? There is actually an unsung hero in AI, which is simulations What if scenario simulations, right?

Yes, of course an [00:04:00] agent can be key to model scenarios, but it's much more than that, right? It's really the ability to look at multiple possible outcomes. Of this volatile environment that most companies are in right now with a storm of disruptions that we keep seeing in global supply chains. So those are probably my top two in terms of what's what's rising to the top.

It's the question how do I participate in this value unlock for agent ai. What's the prerequisite I need to make as a company in skills, in data, in partners of technology? And then really third what's the right technology that I can use in this massive domain of AI. Not everything will be solved through agents.

This will certainly be a game changer of the industry, but we see also amazing results in optimization. We are doing a lot of research in quantum computing. What if scenario simulations have evolved [00:05:00] tremendously and are, in our opinion, critical to really achieve supply chain orchestration.

Yeah.

Richard: I'll come back to Agentic AI in a little while, but I wanted to talk about. The need to orchestrate supply chains and that whole concept of the simulations is a big part of that. So I had the pleasure of listening to you speak at the latest SAP Connect event. And in that event and others, you've been championing the need to orchestrate supply chains to better sense, predict, respond, simulate, and keep up with the changing market events and demands.

So what do you mean when you talk about orchestrating a company's supply chain? Maybe you could define that a little?

Dominik: Yeah. Let's put our blinders on for a minute on the technology, right, and really look at the business problem. The realization I think most supply chain leaders have or had over the last couple of years is disruptions are here to stay, right? So no one sees a horizon in [00:06:00] the next five years where suddenly you have no more uncertainty in raw materials or where the macroeconomic climate is just super supply chain friendly, meaning no new tariffs, no new global conflict. It's just the new normal. With this assumption what most supply chain leaders have struggled with in all the data we looked at is three things, right?

First is knowing disruption as soon as physically possible, right? And how can you know about a disruption even before it materializes? We call this supply chain risks, right? You need to have a much, much more drastic approach to understanding things that may happen, not in general in a supply chain, but to your specific supply chain. And the key here, and we'll talk about this probably a bit more in this session, is end tier visibility. You simply need to build out the ability to [00:07:00] know not only what happens. In your immediate supply chain, but in your supplier's supply chain, number one. Number two, then you need to have the ability to understand impact.

Because just the fact that a shipment is gonna be late or that there's a port congestion, doesn't mean that you need to be in crisis mode, right? Or that you have suddenly a severe disruption happening. Making sense out of all of those risks, out of those disruption events that happen. To your specific supply chain, understanding revenue at risk, understanding who are the customers affected, understanding what are the sites affected, really as much as you possibly can.

Finding out the impact is number two. And then third, and this is when we just spoke about the unsung hero what is the opportunity space. So what scenarios can I model out? Again, of course, for each scenario, what's the impact? What trade [00:08:00] off decisions do I have to make? Can I absorb a margin hit but boost top line by choosing one scenario or in a certain market condition is

margin what matters? And I'm even willing to take a hit on revenue. So what are the trade-offs decisions I have to make? And then of course, having the ability to execute this. Right. And this brings me to the final point why, in our opinion, supply chain orchestration is so critical?

I guess you could argue, well, everything you talked about, Dominik, already happens, right? I already have supply chain risk management, so I look at my supply chain risk. I already do planning and I model scenarios, but really hand on heart for most disruptions, for most supply chain risks. You have more than one actor, more than one department, more than one domain in your supply chain that is needed to resolve it, right? So if I just take the example of a [00:09:00] tariff and suddenly you as a high tech manufacturer having a severe increase in cost to move your finished product into the United States, mitigating this disruption, let's look at it. You could move inventory short term before the tariff hits. You need logistics data, you need inventory data, you need data around costing, right? So how much is it gonna cost me to move all of that inventory? And that's just one simple fix. What if you want to take more substantial decisions, such as, should I start a new partnership with a Nearshoring contract manufacturer in Mexico or in South Korea? What's the better off option, right? Should I move into the United States with production for a given unfinished product or raw material. You need procurement data, manufacturing data, logistics data and a ton of planning insights, right? And what for us at SAP Supply Chain orchestration is an equal sign [00:10:00] to it is that if I draw an analogy to the musical world, right? All of your departments are doing amazing work. I'm sure you have an amazing logistics team. You have an amazing procurement team, inventory planning, right? But who is that conductor, right? That has that end goal in mind, right? That end goal of a global optima managing through that storm every week as disruptions happen, who then can orchestrate the planning team can orchestrate your commercial team, your procurement team, your logistics team. That's the equal sign. The supply chain orchestration for us is the conductor. It is that central intelligence that makes the multiple sort of silos oftentimes work in much better harmony together for simply better decisions, faster time to response and ultimately better business [00:11:00] outcomes.

Richard: I love the way you broke that down of being able to predict or sense that risk. Determine the impact of that event and then identifying the scenarios, the opportunities, the different paths that you can take to address it, but also that ability to execute that whole concept of orchestrating everybody around you with all of that data.

And we're seeing increasingly AI and as you mentioned earlier, intelligent agents playing a major part in orchestrating that, of automating that process. So how are you, how are AI and intelligent agents transforming this orchestrated supply chain, and where do humans add the most value in this new landscape? How do we work together with technology, with AI?

Dominik: So I wanna answer the question, Hey, how do we tackle this SAP internally, right? The number one ask I have on my table, and I'm sure [00:12:00] it's the same for many of you, whether you're running a logistics team or a supply chain planning team, we need to do more with the people that we have with the skills. And this is for me, the exciting part, we've seen some amazing results leveraging agents that just work alongside our Scrum teams, automating development of net new features. Automating how we test, automating, how we build integrations, automating even prototyping for product managers, and I would love to apply that same mental model to now supply chain leaders, right? Think about Agentic workflows or AI agents as the ability to do more on the business asks that you get confronted. You have to open that new distribution center. You have to open and apply now well, let's face it, companies are moving their production networks right now. A lot more nearshoring, a lot more reshoring. Who's gonna do [00:13:00] that work? Right? You're not most likely not gonna be in a lucky position to now hire. Thousands and thousands of additional workers. To do that, you have to somehow manage it within your boundaries, and this is where AI agents, in my opinion, right now, are starting to really bring tremendous results and the way how we structure that for our customers. We have basically decided to provide for every major persona, right? So let's take an example. You may lead a logistics team and you have logistics dispatchers, or you may be running a manufacturing team you have your production engineers that do all the work instruction management, you routing management and so on, or you are in supply chain planning and you're a demand forecaster, right, or a materials planner. Those are the personas. Yeah. For each persona, we are launching an AI assistant, so this is essentially an assistant made for that persona, [00:14:00] for that role with Agentic capabilities. Let's say you are a material planner in supply chain planning. That agent might have a very basic ability, which is to explain your optimized supply plan, right?

Let's say you run an optimization engine, you optimize globally your supply network, which is a pretty complex mathematical thing to do. You chatting with your assistant, understanding why do I have a gap in my capacity? Why do I have in certain areas a gating factor that prevents me from achieving my meeting, my demand, et cetera, et cetera.

But then what gets me super excited is when these agents actually collaborate with each other, and that's what we then call a workflow. You received that amazing high value rush order from a customer. Can you meet it? Can you still squeeze it in? How about now your scenario agent kicks in and models a scenario. Is it even worthwhile for us to [00:15:00] do that? How about you then find out with your commercial team? And their commercial assistant. Right? And an energetic ability to check, well, what would even be the commercial upside if we met? That rush order, right? What's in it for us, right? What additional, what revenue gap can we close by actually going into that additional sales order or campaign or whatever.

So suddenly you have three assistants, a material planner, a commercial assistant, and maybe a demand forecast assistant collaborating with each other to give you a recommendation, prescriptive what you should do.

Again, looking at sort of the SAP development organization we are very much looking at how is the role of a product manager evolving? How is the role of a designer user experience expert evolving if essentially AI agents will be accelerating so much [00:16:00] product discovery and prototyping exercises, right? So I think every industry will now start to see more and more of the technology enabled ability to reinvent not only processes, but also roles and the organizations they work within. Yeah, that's for me the ultimate testament to the fact that we are truly in an industrial transformation right now.

Richard: A few things that you said there, Dominik really hits home. The first one was used the word assistant, the AI assistant. So the goal of that is not to replace that planner that you were talking about, an example. But to augment them, to empower them to make better decisions with better data. And the second one, and I think it's a real area of differentiation for SAP, is that business processes don't stop and end at a department boundary. They don't start, and end at a company boundary even, and they span within a company to different departments and within the [00:17:00] supply chain to different companies within your business network. So having those agents talking to each other across those boundaries, I think is a big differentiator for SAP.

One of the other things that you talked about a little earlier, , was the importance of data. 'cause the foundation of AI and by default, supply chain orchestration is high quality, connected, collaborative, and contextual data. I read in the article that you wrote that PWC reports found that 37% of operations and supply chain leaders cite data availability and quality among the top three challenges for scaling AI. So how can we ensure that we are basing our decisions on accurate, timely, and relevant data?

Dominik: Yeah, no, this is really a, to the question of, hey what's top of mind for many of our customers? This is the number one question I want to participate in that amazing value generation for ai. How do I create the prerequisites and boom, they land at data. Everything that I learned, and I had [00:18:00] some super inspiring discussions at zero one hundred .

Also when we had our SAP Connect event and with individual customers I think first of all, it all starts with having a data. Strategy and having clear roles and responsibilities. What is what was super interesting for me and honestly I hadn't really looked at this before, it's the question of who is accountable for data.

In many successful supply chain transformations where AI was a cornerstone technology. They worked when early on, even sometimes before the technology came into the picture, the company defined really clear ownership. So who owns a master data in planning take lead times. Who owns lead time, right?

Is it procurement? Because obviously that's usually where you negotiate your lead times with your suppliers or is it the ERP team? But then who is that [00:19:00] right? Is it your materials management team, is it IT, is it business? Do you have a data organization? So very clear accountability of you own data and you better make sure that it is intact, that it's semantically correct, that it's clean, right?

That I kill, duplicates, et cetera, et cetera. That's where it all starts. Then let me take the technology lens. One of the big sort of prohibit us that we have seen for many of our customers is you need the ability to converge data because no customer, even as much as we sometimes wish that at SAP has an end-to-end wall-to-wall SAP landscape, all of you have probably hundreds, many of the bigger ones of our customers, thousands of applications across their entire landscape.

And then even in supply chain it'll probably be dozens if not hundreds. And now back to my tariff example, if you want, at the click of a button, know what are the [00:20:00] scenarios in order to mitigate this tariff, right? Let's face it, you need that data available in a somehow converged place. And I think what companies are now crystal clear about is that purely egressing data out of apps.

It doesn't matter if it. SAP or if it's any other app, simply sucking the data out into a data lake won't cut it because you just lose all semantical context. And that is the reason why we have launched at the beginning of this year, SAP

Business Data Cloud, which is really a business data fabric. And it is also, it doesn't at all have the purpose to replace data lakes.

I think data lakes. are super important and a successful model for analytics also for domains of data where the business context is actually not that critical, right, but in SAP and in our domain, in supply chain business context is everything. If you don't know what's the end-to-end supply chain pegging of your demand, so meaning [00:21:00] how do you connect, demand all the way to raw material supply across all tiers, across your production network, your supplier network, right? Really end to end how do you do a serious impact analysis when a disruption hits? This is the power of business context data that your sales orders, that your purchase orders, your production orders, your inventory levels all the way to really the raw material provisioning from an MRP run, everything is connected. That's the business fabric. And then the last aspect, of course, the leveraging now this powerful data is incomplete if you don't look outside of the four walls of your own company, right? So I mentioned earlier the notion of end tier visibility. So knowing that something goes wrong. In your supplier's supply chain, right? This is really where we have doubled down so much in our investment at SAP in [00:22:00] deeply integrating the SAP Business Network pretty much into any collaborative process. Because let's face it, supply chain business is a network business, right?

And the wealth of the data that lies in the depth of your supply chain, right? This is in our opinion, a game changer that enables this first aspect that I mentioned in orchestration to really understand your end tier supply chain. And ultimately with that get an angle to data and to intelligence and ultimately then to Agentic AI that you would never achieve if you only looked at the four walls of your own company.

Richard: So Dominik, we've talked about lots of different topics here. So let's take an outlook for the next five years. Say, looking 2026 and beyond, what capabilities will define supply chain excellence and what emerging trends deserve more retention and things that you are looking [00:23:00] at for the long-term strategy?

Dominik: Fantastic question. Honestly, what fascinates me the most is the sheer pace of innovation that we see, especially with AI and Agentic AI, which further accelerates by the way makes this almost like crystal ball reading. But nevertheless, I think there are some absolute rising stars that we should talk about.

A little bit more short term, let's say one or two years. We know there will be a lot more agents, the number really will multiply and explode. There will be many more working alongside humans. We call it HITL, human in the loop in really automating more and more workflows. But at the same time, there will not simply be more they will just be significantly more accurate, better quality outcome, which is a prerequisite for scaling AI agents across industries, across use cases, across domains. That is something we know is going to happen. We [00:24:00] just don't know how fast in which specific domain. I think the second mega star that I see on the horizon is quantum computing.

I think the fact that in supply chain we have pretty successfully solved really big problems through mathematical algorithms and optimization puts us into the prime position to benefit from that next tidal wave. It's probably more on the high end of that time horizon. So I think five years is still ambitious.

Even if I listen to pretty optimistic researchers here. But nevertheless, the fact that, many of our customers today use optimization to basically configure the entire global supply network. How much product do I produce? For what exact markets? How much inventory level do I need?

So these big global network decisions, and even with a state of technology today, those decisions can run for [00:25:00] hours and hours. And having the ability on the horizon, even if it's 5, 6, 7 years out with quantum computing to significantly reduce the time it takes to make these decisions and the early promises we have seen in our own research even if that would just materialize in a few percentage points of better results. The value generation of this would be astronomical, right? So, SAP has therefore announced multiple partnerships in the realm of quantum research with leading think tanks like IBM, the Munich Quantum Valley, and many others. This makes me very excited of this of this second sort of. Rising star that we see a bit further out in the future. And then the last one I want to talk about, I think we can't close the podcast of supply chain without talking about physical AI. This is also a domain which is still in a research phase, but of course we have seen in the last decades the amazing results that industrial [00:26:00] automation has brought, whether this is to shop floors, whether this is to warehouses or transportation. But now taking that to the next level with large scale autonomous guided vehicles. And then of course, more and more humanoid and truly humanoid robotics getting smarter at scale.

That is of course also a super, super exciting rising star that we see. And my last one, and I think I mentioned it already, is we certainly see the ability here not only to leverage technology in solving technical or business problems, but really helping companies to reinvent how they run, how they configure their

departments, how they evolve roles and organizational structures within their teams, and with that really reconfigure themselves, benefiting from this agentic transformation, that AI transformation we are in.

Richard: Dominik I have one final question, and it's usually the hardest question to answer because I ask all of my guests [00:27:00] in a sentence or two. How do you summarize what we've just talked about? What's the future of supply chain?

Dominik: The future of supply chain and please, everyone get excited is immersing ourselves into a true industrial transformation embracing this tidal wave of Agentic AI.

Richard: That's a great summary. Thank you very much and thanks for a great conversation as always. It's been really interesting.

Dominik: Thank you, Richard. Great questions. Loved it.

Richard: We'll be sure to share links to Dominik's SAP Connect presentation and the World Economic Forum orchestration article in the show notes. But until next time, from Dominik and I, thanks for discussing the future of supply chain.