Transforming Manufacturing: Industrial AI at Hannover Messe 2026 with SAP's Matthias Deindl

Matthias: [00:00:00] What I envision is that you will find a future which is reacting to disturbances in a more frictionless way, without creating too much of a turbulence, without having results and shortages of supply, for example, and products that you can deliver to your customers. And this is something where I also see that AI will be our ally, and we are going to work hand in hand with our artificial intelligence co-worker, so to say, in order to realize that and make this happen.

Richard: Hello and welcome to the Future of Supply Chain, a podcast where we discuss hot topics, best practices, and the latest innovations in today's global business. And I'm joined by my wonderful co-host, Sin.

Sin: Thank you, Richard. Hello everyone. My name is Sin To and I'm today's co-host. And today we want to talk about the [00:01:00] upcoming Hannover Messe, which will take place between April the 20th and 24th.

As the manufacturing world we'll gather at Hannover Messe this year again, the spotlight is on industrial AI, how intelligent technologies are reshaping supply chains, driving resilience, and redefining the collaboration between people, data and machines.

So, to dive deeper into how industrial AI is transforming manufacturing and supply chain networks, we are joined by our SAP colleague, Matthias Deindl. Matthias, welcome back to our podcast show, and it's really great to have you again here. So, for those who don't know you, can you please introduce yourself and your role at SAP?

Matthias: Hi, and thanks for having me again. So, my name is Matthias Deindl. and I look after industry product engineering for discrete industries.

Sin: Thanks a lot. Now that we have a sense of who you are and your role in shaping the space, let's zoom out a little bit for a moment and look at the bigger [00:02:00] industry context, especially regarding the upcoming Hannover Messe. So, there's a lot of hype around industrial AI this year. And from your perspective, where are you seeing the most tangible impact right now?

And not just like marketing claims?

Matthias: So in my opinion, there's a lot of dynamics at the moment when it comes to AI and how to use it in industry. And I basically see two major, let's say topics. One is really the embodied AI, physical AI, where robots come into play. And acting as a resource, for example, for production execution, but also for warehouse management and logistics tasks or even asset management tasks. That's the one thing.

The other thing, which is also very interesting is how can persons in industrial companies be supported by AI solutions, [00:03:00] assistants, agents orchestrated in a smart way to ensure that the users are being more productive, reducing the amount of errors being more efficient. So this is basically the second part where we look into, and in our opinion, it's something where you really need to understand what are the industry specific processes in order to really create business impact.

Richard: Regardless of the type of AI, regardless of the industry, it's all reliant on accurate and timely data. So, with supply chain generating or supply chains around the world, getting more and more information, capturing data from different sources at all times, and we've got more data than ever. How can companies turn this into meaningful, real time and actionable decisions?

Matthias: That's a fair point. And an excellent question. So when I talk to [00:04:00] customers what I hear oftentimes is that they say within SAP, there is already a data treasure. There's countless information from historical activities, yeah. Be it for example, if you go into engineering, if you have some collaborations, if you have product structures suggested to customers, how can you leverage that data source in a best way?

And here we really have the data already. The question is how can you expose it in a intelligent way in order to empower the agents to work on? And SAP has obviously here a solution, which is Business Data Cloud, which is the data layer, which really empowers later on for let's say AI solutions to work agents to autonomously conduct certain tasks.

Richard: So, let's assume that we have the data, then we [00:05:00] have the Business Data Cloud. So, all the information is accessible. We still see challenges in deployment of AI and leveraging AI. So, what are you seeing as the biggest challenges manufacturers face today in keeping the operations running smoothly? And how can technologies such as SAP's AI capabilities help them respond faster and improve performance?

Matthias: The challenges of manufacturing companies are manyfold at the moment, and I think it's really important to first of all define the scope and to see where can you leverage benefit, yeah. And start small and then extend the scope. So I, for example, what we look into at the moment is the tendering process which means you get requests from customers in the form, for example, of a tender. You need to have specialized salesperson, engineers that can answer to that tenders. And it's a very manual, time consuming activity [00:06:00] sometimes. And then the question is, how can you increase the throughput time, also in order to reduce the amount of missed opportunities? Because you cannot answer all the requests, yeah. And this is, just to give you an example, I think you need to, first of all, if you want to be successful with AI you need to be crystal clear, okay, what's the business problem? And then you need to address that and come up with a solution.

Our task as SAP is then to take care that this is not a one time proof of concept, but how can we built out of this a product which then helps our other customers as well. So, this is just to give you one example.

Another example that you can also see at Hannover Messe is basically a AI driven inspection round, yeah. Imagine you have a SLM performance management strategy and you know [00:07:00] that your asset heavy production or installation needs to be monitored or inspected on a regular basis. Maybe it's somewhere very remote or in a place where there are hazardous environment. So, you want to be supported by, let's say a robot that is carrying out that inspection round. And imagine now if you have a vision system in this robot that can basically get the context in our plant maintenance system to really see, okay, this is a technical object. I want to check if this is really normal, that the temperature that I can sense is correct. So, really getting this physical information with visual inspection capabilities and overlay that with the context information that you get from plant maintenance from APM, asset performance management, to really see, okay, is that really within the [00:08:00] normal temperature or do I need to hear, create a notification so that you can have a closer look into.

Richard: That's a great example of something that a human might have been doing part of that task before, and a sensor might have been doing part of that task, but the human has to take, because they're doing the visual inspection, but the human has to take breaks. The human is prone to error. So, automating that whole process of both the temperature check and the visual inspection together in one is a huge step forward, I would've thought for many companies.

Matthias: Yes, absolutely. And if you ask me, I was also addressing this embodied AI topic. We as SAP, we have the best foundation, so to say, in order to integrate robotics in the best way because I personally believe that robots are another resource. We have a legacy of decades, where we optimize resources for production, for logistics, for asset management. [00:09:00] And why not just use that knowledge that we have and transfer to robotics, yeah.

It's not a human coworker in flesh and blood. It has oil. And I think another difference that we see is that you as a person, you would go to your doctors, right, to get the health check. But for the robot, we as SAP can do the health check, yeah. We can ensure to optimize the asset lifecycle the health state of this robot. So, it's another concrete application scenario where SAP comes into play when it comes to robotics.

Richard: And it can do better than the doctor because it can actually predict without you physically going to see the doctor, that something's gonna go wrong.

Sin: Yes. You just meant all the internal challenges companies also have in trying to overcome this. So, if we put now these together with all the global disruption that we have and seen right now, that is also happening around us. So, it [00:10:00] becomes very clear that resilience is a central theme. And so I would like to know how do you see AI now helping companies to build a more resilient and adaptive supply chain going forward?

Matthias: Yeah, so I think this is a phased approach. First of all, what I see also in numerous customer interactions, I think the basis is to really create a real-time transparency, digitize the processes, let's say for manufacturing execution. But also having up-to-date information about your suppliers, for example, yeah.

You have some inbound shipments coming in, yeah. And there is a delay. What effect does it have on your production, would your line stand still or can you still address this with your safety stock that you have? So transparency is key.

Then you basically have agents that can support you in [00:11:00] the decision as a human, really being here in the helpful coworker, so to say and say, hey look, I anticipate there's a problem coming up. I suggest this and that alternative to follow up. So you are as a human in the loop or, and still also in the driver's seat. And this is the natural next step of evolution in my opinion.

And then on top of that, we are also talking about autonomous agents that can interact with each other representing different roles and responsibility in a

company, yeah. You, for example, have a shop floor supervisor agent that really takes care. Okay, what's happening on the shop floor? Are there some events coming? Is there some a resource block, for example, how to treat that and do I need to inform someone else, yeah? Do I need to inform my sales so that you reach out to the customer and say, "hey, look, we have a problem here". Maybe there's a delay. And this could be also done with a sales agent that can take over [00:12:00] this task. And then you have a agent to agent communication.

And I would say that we are as SAP in the middle of this journey here, together with our customers, we explore how we can do this in the best way in order to have a process which is resilient but also reliable, trustful and provides the relevant output.

Richard: Matthias, you've given some great examples so far of use cases for AI and you talked about two different types of AI, the embodied AI, and then AI that empowers people. And I want to focus on that one a little bit because we often get asked and we discuss on this podcast the role and how roles will change moving forward of workers regard within the supply chain executives within the supply chain even, and how that will evolve. Either replacing some roles with AI, but also augmenting and empowering roles with [00:13:00] AI.

So, how is industrial AI changing the way people work on the shop floor, for example, and what new forms of collaboration between human and machines are emerging as a result? And are there any examples that you could see if you went to Hannover Messe?

Matthias: Yeah, so great questions. Maybe to answer that let us see what we will have at Hannover Messe. And by the way we are very happy to welcome you here.

So, we will have physical, let's say showcases, demonstrators that really illustrate how we see the future. So, we have, for example, a packaging machine that is packing small ginger shots. And what's the story around it? It's about digitization of this manufacturing execution step. It's also about how to integrate your suppliers when it comes to packaging material, the glasses that are necessary, how to really smoothly interact with them, but also what are the steps beforehand, yeah?

So, the mixing part [00:14:00] which will be done remotely in and how you basically ensure an end-to-end traceability based on our solutions. That's one thing that we have. We also talk about digital product passport. On the example

of the shot. Yeah. So you will have a digital twin for a shot, yeah. This is what you will experience here.

What you would then also can see is basically a handling step after end of line, so to say. Yeah, when the ginger shot is packed, where a humanoid robot will take over and do some warehouse tasks in order to really bring the shots to the consumer. And here, this is just to show how in a natural flow this robot can play a role. So, this is one example.

The other example is to see into CNC machining together with a partner and the whole value chain around it. Coming from a design [00:15:00] of a new part that you need which would then basically be integrated, assembled in this packaging line that I was talking about. And how you can support it with the digital tools that are available at the moment.

Also, addressing how to stay competitive, for example, in global economy to really see, okay, what's my insights on how can I optimize my working hours for this machine? How can I minimize scrap for example. So, these are other examples that we show.

Sin: These are great examples, and for me it sounds very interesting to come and to see all the different examples that we just mentioned. You also mentioned partners and that leads me actually to the next question that I would i'd like to know from you. Because this whole transformation in the interaction between people and machines, this is also reshaping how organizations are collaborating together throughout the entire value chain.

And change doesn't [00:16:00] happen just overnight and in isolation or in silos, right? So, what role does SAP together with its partners, suppliers, and customers play in enabling this kind of connected, intelligent ecosystems across the entire value chain?

Matthias: For the last or the past five years, I was involved in the S-factory at Walldorf. And here in a similar way, as in Hannover, we bring real assets, real machineries to life and show what is the value of integration into the SAP world and we deliberately do this with a whole ecosystem of partners, so we have more than 25 partners being here actively engaged.

Because we also want to show this nothing that you would as SAP as a provider do alone, but you have systems integrators, you have specialized hardware companies, automation companies. We also have, [00:17:00] when it comes to mobile robots, for example an integration layer which is basically provided by

the partner and smoothly integrated or a vision system that you use for an augmented reality that you can use for worker guidance, for example.

So, in my opinion, in order to really be successful as a producing company, but also as a provider, you naturally would rely on a lively and functioning ecosystem.

Richard: Mathias, we're coming to the end of the podcast and it's obvious that as you walk through Hannover Messe 2026 and specifically the SAP booth at Hannover Messe you will be seeing the future of supply chain in action.

But I wanted to give you a chance to give a summary of what we've just talked about, and from a perspective of AI and automation, what's your definition of the future of supply chain?

Matthias: Yeah. Richard, I think this is a [00:18:00] very interesting question and I think we are at the moment in the middle of a journey we see the horizon, but how it will look like there exactly. We don't know yet.

What I envision is that you will find a future which is reacting to disturbances in a more frictionless way, without creating too much of a turbulence, without having results and shortages of supply, for example, and products that you can deliver to your customers. And this is something where I also see that AI will be our ally, and we are going to work hand in hand with our artificial intelligence co-worker, so to say, in order to realize that and make this happen. Stay competitive, increase productivity. If you look at Germany, Europe, or America. So the [00:19:00] workforce is getting older. How do you address that challenge? And I think here we have this answer and now we all need to work together to make this happen and embrace this new age to come and form it together in the best way.

Richard: Great summary. Thank you. Hey, Matthias, thanks for a great conversation and thanks for sharing the information about what's happening at Hannover Messe, and I'm sure lots of people listening to this will be looking out for you at the booth to learn more.

Matthias: Thank you, Richard. Thank you Sin for having me and looking forward to see you all.

Richard: And thanks everyone for listening. Please mark us as a favorite. You can get regular updates and information about future episodes. If you'd like to join us at Hannover Messe, we will be in Hall 15, booth F 08. And there'll be

lots of SAP people and our partners eager to talk to you. But until next time, from Matthias, Sin and I, thanks for discussing the future of supply [00:20:00] chain.