Episode 152: Supply Chain Planning with Lori Harner

Lori: [00:00:00] Planning is no longer about balancing our supply and demand. It needs to have transformation data from all sources. That data needs to be normalized and being able to use within the applications. And then AI on top of that for complete strategic insights that empower your teams to make those confident real-time decisions.

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. I'm Richard Howells, and today I'm joined by a repeat offender on the podcast at Lori Harner from SAP who's been on before. So, welcome Lori.

Lori: Thank you, Richard. Glad to be back.

Richard: Great to have you. And we're gonna discuss how to reimagine supply chain planning with AI with the goal of shifting from reactive to proactive . So maybe we can start by asking you to introduce yourself maybe somebody didn't listen to the other two or three podcasts you've been on and don't know who you are.

Lori: Sure,. Lori Harner. I am the Global Vice President of [00:01:00] Product Marketing for supply chain planning. I've been with SAP for about a year, but in supply chain overall for about 16 years. Before joining the supply chain arena, I spent time in software at Microsoft working on the ERP side of the house. So pivoted to supply chain about, like I said, 15 years ago or 16 years ago. And happy to make the shift and glad to be a long time individual within supply chain. So, and happy to be here today.

Richard: It is great to have you, and you have a very similar background to me. I started in ERP and moved to supply chain as well.

Lori: We're on the good side.

Richard: That's right. So. SAP has been talking about reimagining your supply chain planning for a while, and we're hearing terms like reimagining or reinventing your supply chain planning processes. So why is there a need for this transformation and, why now?

Lori: Exactly. So we're going through a very pivotal change right now when it comes to AI in the marketplace, right? So we have to look [00:02:00] back at some of the other obstacles that supply chains are facing in order to kind of evaluate why we're bringing AI into supply chain planning overall. So number one, we know that volatility is the new normal, right?

We we're dealing with geopolitical shocks, climate events, demand swings supply constraints, et cetera. Also, customer expectations keep rising. I know back in the days of, , e-commerce, we thought it couldn't get any more, you know, faster to market, speed to market. But it really is. Customers are really looking at faster lead times, more personalization and perfect order execution is now. Those are just table stakes, right? We also are seeing some margin pressures and sustainability requirements around the areas of inflation, energy costs, scope three requirements, et cetera. In some areas, believe it or not, we are seeing that talent and time is scarce, right? So planners are very overwhelmed by [00:03:00] exceptions and firefighting and are looking for systems that learn, recommend, and automate, which is really where AI comes in.

And then around technical and technology readiness, right? Looking around cloud and memory computing, real time data, having trustworthy AI. I was just on a webinar earlier today where trustworthy AI came up very prevalent. And then the payoff for modernizing your planning is now more immediate and more measurable.

Richard: Yeah, that word trust is a big deal because you've gotta trust the data and you've gotta trust the tools that are analyzing the data.

Lori: Hundred percent

Richard: I wanted to carry on that discussion around AI. You've started to talk a little bit about the business challenges across different industries today, and maybe you can elaborate on a few of those, but how can AI help address these challenges?

Lori: Sure, of course. So I'll take a look by industry, right? So if we look at CPG, High Tech and fashion, we're really looking at shorter product life cycles [00:04:00] and hyper-personalization. So in this particular area, some of the AI use cases that come to mind are around improving new product forecasting attribute based modeling and promotional uplift estimations.

If we look at supply risk and variability, this is really focuses on the automotive, industrial, and life sciences area. AI today can learn actual lead time distributions. It can predict delays, and recommend a rebalancing and safety stock policy automatically within the system. If we look at regulatory and sustainability pressures, this really shows up in our chemical, pharma and discrete areas and AI can help here with simulating scenarios that meet service cost and carbon targets simultaneously. And we do actually have Richard some vision demos and vignettes that actually focus on this, as well as doing those scenario comparisons and coming up with. The most optimal plan also near shoring and network redesign.

Of course, it's a much in the mid to longer term, but across [00:05:00] industry. We look to AI to help optimize models to evaluate your multi-stage or multi echelon inventory, to take a look at those capacity constraints and sourcing risk trade-offs at speed.

Richard: It's clear that different industries have different challenges, but, but companies can learn from the competitors in their industry, but also from leaders in other industries and how they're addressing some of the challenges they're facing. And one of the things that we're hearing about is this living or learning supply chain that moves from being reactive of solving the problem once it happens to being more proactive, to identify challenges and opportunities before they arise and address them before they become a major problem. So what does that look like in practice for a planner sitting in front of a system today?

Lori: Absolutely, and I think it's a kind of a hybrid here is right, is that we are also hearing from our customers and our partners, [00:06:00] they're asking us to help us define what does that planner of the future look like. So if I could take you through maybe a day in the life, right? A morning start for a planner could be, you know, showing up to a personalized workspace, which is really surfacing these prioritized exceptions that are really based on things like service risks, supply delays, forecast bias, et cetera, with an impact quantified in revenue, margin and high capacity. So tying back that supply chain planning to the financials, to the operations, et cetera. So morning start looks at a comprehensive dashboard very interactive dashboard that's actually not only for planners, but also decision makers, right? Where we're interacting together as a team. Also, there's this component of being able to have at your fingertips is real time sensing. So where you're seeing external signals like poor congestion, weather, supply risk, et cetera, and internal execution events like what's gonna be late in our production models? What quality holds are we seeing and updating these [00:07:00] risk scores and alerts on our particular dashboard.

Then as planners love to do right, we need to be able to make guided decisions and the planner of the future. It looks like the system will be recommending these actions reallocating inventory automatically.

Pulling in a purchase order, adjusting state safety stock or a shift in production, and then showing trade-offs and KPIs that help make sound decision centric decisions. Okay. Other things that could be potentials for our planners of the future is this one click simulation. This is where planners run what if scenarios compare outcome side by side and commit to the best version of the plan. That's of course fully auditable. Okay. Another thing that the planner would see throughout their day is this closed loop execution. So a confirmed plan changes the flow to the ERP or to the available to promise and is very outcome.

Outcome driven and outcomes would arrive. The models would learn based on things like lead time and forecast [00:08:00] bias, and the parameters would Auto-Tune. So again, things that we would see in the future at the plan of the future when AI becomes enabled to cross. Not only these generative AI examples, but also when we introduce the concept of agents.

And then lastly this idea of collaboration and context, right? So tasks, comments, workflows. Route decisions to sales, procurement, manufacturing with clear ownership and due dates. And so the planner of the future, as we see it today, kind of evolves around many different planners of the future, but doing different tasks and different areas in which they, they work in where it's an agent plus human interaction.

Richard: I love that example of those guided decisions and putting the planner in the middle of the process but augmenting them and empowering them. It's a great vision of what a planner of tomorrow would be doing. But I'd really like to focus now on planners of today and which companies are leading the way. Do [00:09:00] you have any real life use cases that you can share with us about companies that are leading the way today in the planning process and that are re-imagining planning?

Lori: Yeah, we have quite a few customers and testimonials that we have that are going along with us on the journey, right across a variety of industries. And so if we look at those that are adopting our AI or generative AI capabilities, it goes across all industries as well. So some real life use cases could be a large CPG company that we are onboarding with that is going along with us on the journey that is utilizing not only this planner of the future type hypothesis, but also looking at business processes and deciding where agents will play across the business processes. So again, a large CPG company that we're working with.

We have also a large, food and beverage company that also is dealing with the same type of process journey, if you will, with us. And then it really gets exciting when we start [00:10:00] introducing some of our customers in bottling as well as food and beverage as well that are working with us on our forward deploy, engineering and those forward deployed engineering engagements really are a combination of us working with the customer directly to develop the agent and then to productize the agent so that others can take advantage. And so this is really where we're seeing not only a trajectory from just building, you know, inherently within the SAP four walls, but also working with our customers to really build out agents that'll be usable right out of the box.

Richard: Again, I really like the way that the approach you are taking of working with companies to identify where agents will play a role. Because AI is like every other technology. It's not technology for technology's sake. It's technology to help drive business value, to solve business challenges and make business [00:11:00] decisions. So there's some great examples there of working with companies from different industries to get to that end goal for all companies.

Lori: Hundred percent.

Richard: I wanted to move on a little bit to the implementations, because many organizations struggle with adoption after implementation, and it's usually due to the fact that they go back to bad habits or old habits, and they're reliant on their spreadsheets that they've always used. So how does SAP help bridge this gap and help with a true business planning culture

Lori: yeah, it's kind of a multi-touch approach, right? So. We first look at meeting users where they're at today. So SAP has a lot of IBP Excel add-ons, which provides that familiar usability that they're using today. We know planners love to work in spreadsheets, right? But it stays connected to a single source of the truth with real-time data versioning and audit trails. So again, we know when people work independently in spreadsheets, mistakes can happen. So [00:12:00] with the SAP IBP Excel add-on, we get the familiar usability as well as the controls in place to help planners be more efficient. Moving on to planner workspaces, which is something we introduced a a year or so ago these are really role-based browser dashboards and they're combined with alerts, analytics, and actions so that planners spend less time exporting and more time deciding. We are using planner workspaces as our defined UI as we move forward with our vision state or our vision vignettes, our things we're gonna be bringing out in agents so that it's really more user friendly. And Richard, honestly, we've seen a great adoption over the last couple years on planner

workspaces, right? The planners are kind of leaning more towards, this is the way I want to interact with my planning system versus maybe working in a spreadsheet. So. Although the transition is will take time in some companies and other companies, they're adopting it very quickly.

Process and governance, we really look at task orchestration, workflows, scenario approvals [00:13:00] and how planning gets done right? Moving away from ad hoc offline files. Also, we look to our embedded analytics, so in-app KPIs and root cause drill downs, which really help us reduce the need for side analyses, deeper storytelling comes via our SAP analytics cloud. In addition, we have best practice content, which is really important. And these are prebuilt templates for areas like SNOP, demand Inventory Supply, which really help us accelerate time to value and standardize our methods across teams. We also help companies with change management, which is really around this role-based training in-app guidance and design for exception management, which really helps us help planners trust and adopt the system.

And as we know, anytime you're. Implementing a large system, be it an ERPA planning system, a warehouse system that really guided hands-on role-based training and guidance helps people adopt more to the application. And then again, integration with [00:14:00] execution. And this is this closed loop, real-time integration to our S four HANA products and ATP which really ensures NPPDS by the way that plant that really helps ensure that plan changes matter in the real world and build up credibility and usage across the entire supply chain planning portfolio, if you will.

Richard: And for those not aware of one of those acronyms, PPDS, production planning and detailed scheduling.

Lori: You got it. And advance available to promise.

Richard: Thank you. I wanna go back to , a word that you used a little earlier, and it was the trust in the system. And I've been outta college for a very long time, but one of the first things I learned about in my computer science classes was about garbage in, garbage out. The data isn't right nothing good can happen from there on. There's always been a little bit of skepticism towards business planning output because it's a black box and people just are not sure [00:15:00] whether to trust it or not. So how is SAP evolving governance and integration capabilities to build stronger trust in the real time planning solutions that they're using today?

Lori: Yeah, absolutely. This gets around a couple different areas as well around data governance and, and data integration. So the first thing being that strong real-time integration, and this is really around the prepackaged API based connectivity between our IBP system and our S4 HANA products. Right.

So including near time options, reduce latency and manual file handling. So that seamless integration is a good starting point. Then there's also the component of data governance, right? So our SAP master data governance provides our stewardship, our lineage, our harmonization.

So basically it's, it's taking the data that we have, normalizing it and making it usable within the application. Data quality and data quality monitoring is also really important. So our IBP data integration monitors our [00:16:00] validation rules, exception dashboards, et cetera, really play a role into, analyzing that data before it affects the actual plans we have also have learning models around things like demand sensing, outlier detection lead time learning, et cetera, which helps us reduce the noise and inform parameter tuning for better planning, stability. Our change control and traceability would be the next thing.

I think this is around versioning, right? More scenario comparisons and then making the model and data changes transparent. I used the word earlier, auditable, right? So we gotta make them where they're able to be audited and reevaluated. Lastly, I think the roadmap to simplify. SAP continues to consolidate integration, tooling, and deliver more pre-built context, reducing, of course custom interfaces that often degrade our data quality. And so those things in general kind of, again, relate to your question of garbage in, garbage out, and how we're remedying these things within our applications and our [00:17:00] data models.

Richard: So Lori, you talked about your 15 years experience in supply chain and then you worked in ERP before that and you've worked with companies of all shapes and sizes with SAP and with other companies. So you are probably the perfect person to ask a lessons learned type question. What are some of the common pitfalls you see as companies reinvent their supply chain from a planning perspective?

Lori: Yeah. So I think first of all, treating it like an in it install on not a business transformation without process redesign, KPI, alignment, et cetera. New tools will replicate old behaviors, right? I've recently been talking to a customer that is going through a transformation just like this. They're a large discrete manufacturing customer and basically they were going through some of the transitional components. They have, of course, like everyone has multiple ERP

systems, multiple, disparate systems from a planning perspective. And it was really around, okay, these are [00:18:00] the kind of the major requirements that we have. And, and, and surprisingly I could go back and say, you know what, we can demo every single one of these to them at which they were , in a surprise state, right?

Like, wow, you've already got all this. But then I reiterated to them where you can really start to take advantage of not just planning of today, but planning of the future is when we go through with you our vision and our strategy, right? So they're very excited about that as well. So kind of meet 'em where they're at today and treating it from a business perspective, not an IT perspective. And we look at that and we say planning is no longer about balancing our supply and demand, right? It needs to be have transformation data from all sources. That data needs to be normalized and being able to use within the applications. And then you tack on AI on top of that for complete strategic insights that empower your teams to make those confident real-time decisions. That's the next phase , into autonomous planning. So in SAP, our supply chain planning and decisioning solutions really do redefine this parameter [00:19:00] and this paradigm, right? And it helps us as we move forward to be able to provide this real kind of living learning, as you mentioned earlier, supply chain through our predictive insights, our seamless, cross-functional collaboration, et cetera. And again, meeting those customers where they're at today and helping them through the journey through tomorrow.

Richard: That's a great summary of our conversation. And you've started to touch on what I ask as my last question as we're coming to the end of the podcast. So I will ask you to try and summarize what we've talked about today and the whole concept of re-imagining supply chain planning. When I ask from a planning perspective, what is the future of supply chain?

Lori: Yeah, I think it's really about moving companies from where they're at today. Like companies are not really thinking about efficiency anymore. We talked about it at the top of the hour with all of the, you know, disruptions that are happening in supply chain. They're moving more towards being resilient and wanting that trajectory to autonomous planning.

And so I base this [00:20:00] really on a foundation of six core pillars. The first is looking at integrated business planning, supply chain planning on a continuum, right? Being able to provide integrated decision centric planning. And this is really about enabling your cross-functional collaboration that helps break down those silos between sales and operations, and also for inventory optimization and really focusing on the mid to long-term horizons.

Next, we have to have the ability within the continuum, right, to focus on this autonomous planning and decisioning. And this is really around the short term disruptions that are happening. So being able to balance that integrated optimization with our accelerated responses across different decision types and collapsing our planning workflows and shortening those cycles.

So making quick, accurate decisions. The third pillar is really focused on after the planning cycle is done, looking at the data-driven post-planning intelligence and actioning. So this is where we play back your decisions. And this is undermined by various core capabilities. So being able to go back and say [00:21:00] hey, if we have forecast inaccuracy or a depletion in our forecast, accuracy in a certain region, going back and understanding what those changes might be that we have to make. And doing that as a post-planning intelligence recap if you will. We also look at real time forecasting and planning with embedded AI and then we talked about agents quite a bit. So being able to be able to execute on that. Also end-to-end visibility and impact analysis across of our, across our supply chain. And then really tying the areas of planning and execution together in one concise platform to address those long, longer term needs. So again, helping our customers go from efficiency to resiliency to that journey on the autonomous planning.

Richard: Great summary. Lori, as ever, thanks for a great conversation.

Lori: Absolutely. Thank you for having me, Richard. I appreciate it.

Richard: And everyone, please mark us as a favorite and you can get regular updates and information about future episodes. But until next time, from Lori and I, [00:22:00] thanks for discussing the future of supply chain.