RESOURCES

FutureLink Barcelona 2025 Keynote: Agentic Orchestration of Your End-to-End Supply Chain

Agentic AI marks the most momentous advancement in technology since the microprocessor—one that will transform how supply chains think, act, and perform.

For the first time, intelligent agents can reason over the information flowing through every partner, system, and process—anticipating disruptions, guiding actions, and automating responses across the entire network. But to reach that level of intelligence, agents require what TraceLink has already built: a foundation of end-to-end information, shared context, and real-time data.

In his keynote at FutureLink Barcelona 2025, Shabbir Dahod, President and CEO of TraceLink, shows how the OPUS platform and its solutions—**MINT**, **POET**, and **Reports & Dashboards**—are enabling this transformation today. Together, they form the backbone of agentic orchestration, where automation, reasoning, and human collaboration combine to deliver unprecedented agility, precision, and resilience across the pharmaceutical supply chain.

What you'll learn:

- How TraceLink is leading the era of agentic orchestration across life sciences

supply chains

- How MINT enables real-time visibility, insight, and action across every partner relationship
- How POET turns complex, multienterprise processes into structured, collaborative workflows
- How Reports & Dashboards transform shared data into intelligence that drives decisions
- How automation and reasoning will work together to power the next generation of supply chain performance

Watch the full keynote to see live demonstrations of MINT, POET, Reports & Dashboards, and Agentic Orchestration, and learn how TraceLink is shaping the intelligent foundation of tomorrow's supply chain.

Video Highlights:

01:46 - The Agentic Future: AI That Works With You
05:02 - Information as the Foundation of Intelligent Supply Chains
13:36 - The Integrate-Once™ Network: Powering Industry-Wide Digitalization
18:00 - The Next Chapter for MINT: Expanding End-to-End Digitalization
22:30 - MINT Demo: Real-Time Visibility and Partner Collaboration
26:43 - Introducing POET: A New Era of Multienterprise Teamwork
31:00 - POET Demo: Intelligent Issue Resolution with MINT + POET
36:07 - Reports & Dashboards Demo: Turning Shared Data into Action
51:49 - OPUS Solution Environment: Amadeus Assistant in Action (Demo)
1:08:55 - Building the Future of Agentic Orchestration Together

TRANSCRIPT

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Thank you all for coming. I really feel thankful and blessed that all of you have come here and that we've been able to build such an amazing company, platform, and network. But we really all built it together and it's just been a really incredible journey. And as I reflect back on all the different ups and downs, with compliance coming, going, coming, going. It's all done almost, right?

And what really excites me, and I really didn't think that I would be as excited as I am today as I was last year or when we first started the company, and I am actually more excited than ever. And it's because in my core, and most of you that know me know this, I'm a product technology person. And when you look at what is coming next and what is already here and what has been happening, it is, it is momentous. It is absolutely momentous that we are about to completely change how we live in society, how we work together, how we work within the organization. Our goal has always been to stay very, very focused on patients, the pharmaceutical industry, the supply chain.

And so what you'll see today is how we can together really build an amazing future. And that future is about this agentic future. It's about the future in which you know all our lives get enhanced. Our jobs will not get replaced, but our lives will get enhanced. It'll get enhanced because we will have a companion with us or multiple companions with us on our everyday journey.

And obviously you'll have them in your social lives, you'll have them in your other aspects. But in your work you will have a companion that will enable you and work with you and reason with you and actually be a huge asset to your success, to your company's success. And that that companion will have access to the information that it needs, will be able to work with the information across the full end-to-end supply chain, and will be able to then orchestrate with you. Again, not for you, with you to actually drive this future which will enable all of us to get more productive to deliver better products to patients, to make sure they're more on time, they're

in full, you have the right level of inventory. So these are all the benefits that you're going to get in this new world in this new future, which is really upon us today.

And it's really upon us today to really determine how quickly and fast we want to move to this future. And if we don't move to the future fast enough, we will get left behind. We as a company get left behind. Our businesses will get left behind and it'll be very impactful ultimately because we all do and contribute a tremendous amount of value in the products that we provide. And so our mindset is a mindset in which there is this concept of this Turing trap where if you just rely on computers things actually become more brittle, more fragile.

And the world is talking about replacing humans and all of a sudden you don't need people to do your job, etc. We don't see that future. We're not subscribed to that future. We're subscribed to the future in which you work together with an agent like you work together with technology your whole lives and that agent is with you on this journey. And the agent is going to enable you to continue to automate, continue to reason.

Enabling you to operate at a higher and higher level, so that you yourself will become much more valuable to your company. And as you've learned throughout technology waves that have come and come and come and another one comes, is that it's those that ride those waves as individuals and as companies that actually succeed. And so I don't think that anyone should be fearful of the future. You should be embracing it because you yourselves will be the number one beneficiaries of that. Because you will be living in a world in which agents will be working with you.

And we want to explain to you and unpack for you exactly how TraceLink can work with you and partner with you into this new future. So, it really starts first and foremost, with information. There is no agentic, there is no AI, there is nothing without information. And that information has to be end-to-end. It has to be

comprehensive because the agentic world, the generative world feeds on information.

It grows with better information. It analyzes better and so it is no longer a nice to have, it's no longer a productivity benefit, it's no longer an optimization to have information. It's absolutely essential that you have end-to-end information across all your processes, both human processes as well as systems processes, and that information is the foundation, is the bedrock upon which you can maximize the value in the agentic future. And so what we've seen already in the world today is there is billions of dollars, some may even say hundreds of billions of dollars, maybe even $1 trillion spent, or about to be spent on AI. And it's been very clear.

I mean if you look at the statistics, it's absolutely clear. You've seen some statistics that 90% of the projects fail. They don't add value. And it always comes down to the same issue. They didn't have the right information.

For the projects that don't succeed, it is because what powers this transformation, what powers LLMs, what powers the actual reasoning and the capabilities is information. And it's real-time information because if you don't have information, what do you get? You get hallucinations. You actually get misdirected. You get the wrong suggestions.

And so you have to really focus in on that the number one foundation is this information. And it can't be trapped in emails, it can't be put in FTP folders somewhere, it can't be in APIs that no one can access. It has to be one in which that information is that bedrock. Because that information then feeds into the ability to create intelligence. So, what is intelligence?

Intelligence is about understanding the information, the metadata around the information. It means that I know what that actual customer record is. I know what that particular product code means. I know what the structure of that purchase order is. I know what exactly what that ASN is.

It's not a guess. It is completely understood. And I know how it relates to something else because if I don't know that, I can't really gain any intelligence. It's just data. And it shouldn't be painful to know that.

It should be something that should be intrinsic in your systems and your capabilities. And then based upon that intelligence that you get from the information, then you can get agentic. Because then you can say, "Oh I understand the way agentic works is I understand how all these things relate in a hyperdimensional world in which you got 128,000 different vectors that relate them." And it's based upon those relationships that you're then able to actually automate and get agentic and get reasoning. So, it all builds on itself, right? So, it's an incredible world that we're embarked on right now.

We can actually move from what computers started with, which is calculations, to where computers are today, which is reasoning. And then where computers will move into the future, which is actually intelligence. Intelligence that's with you all the time. And that's what drives all the value because I understand that information. I understand how it relates.

I understand how to get intelligence out of that. Then only do we actually get the business benefits. And if there's any gaps in any of this, it doesn't work. We all know that. How many of you have spent time with any sort of system with bad information?

Then it just doesn't work. And you've observed that those companies that are at the leading edge of leveraging information and making information the bedrock of their success as a business. Those are the businesses that have constantly transformed. That have then moved into leadership positions. Those innovators.

If you even think back to the very beginning of commerce, those innovators that said, "Oh, you know, instead of me trying to sell this on my own, I'll open a general store." Because I can gather all the information about all the products out there. I

can work with all the different tradesmen out there and be that source of information and the source of actually purchasing. Then it moved to, hey, I could put this information of where these particular vendors are, what they sell, etc., in the catalog, and that created another revolution. It was information that was at the bedrock of that. Then you move to, you know, Walmart and the super retailers.

They were able to aggregate a set of vendors and the backbone of that was information. Every day they scanned, they knew exactly what the shelf inventory was. They sent it back to their suppliers, and that information was valuable enough for them to get discounts. It was information that made Walmart. Information was the bedrock of success for Walmart.

If you look at even Amazon, it was information. They were a network of suppliers put on a digital platform that can now do in real time, inventory management, and shipments, and drop shipments. All of a sudden, drop shipments directly from the manufacturer through the retailer. Again, information was at the foundation of that success. So, it is no longer an option for us in this industry to think about whether or not we should digitalize.

It's an imperative. Otherwise we will all get left behind. Fortunately for all of us, we have been on a journey, albeit a forced journey, to integrate, to digitalize, to share information, in order to be able to track and trace products for patient safety. And it's been a wonderful journey and I think we've all done a tremendous job building a very large network across the industry. And we've all worked together to build this network in which we're exchanging information at a terabyte a month.

We have products that are serialized over 1.1 billion a month. We have over 70 billion products serialized in the database. We have this information. And so we are so far ahead of the rest of the world. This doesn't exist.

It exists in like maybe a cluster around a company, but doesn't exist industry wide anywhere else to the extent that it exists in this industry. So, we in the

pharmaceutical industry have an opportunity that no other industry has. And we have a purpose that is greater than any other purpose. Our purpose is not to make cosmetics or bread or dresses. Our purpose is pharmaceuticals that save lives.

We have a purpose greater than anybody else to actually leverage this network, to leverage this foundation we've all built in order to drive the future. And we have innovation. And last year, we walked through and unpacked how we can scale up our ability to drive digitalization at a faster and faster rate because of the fact that we have a very unique and innovative architecture that allows everyone to integrate once into the network and interoperate with everybody else. And so based upon that we can digitalize all transactions. We can digitalize all processes.

And yes, could we take this to other industries? Sure. Are we going to? No. Why not?

This is the best industry to work in. This is the most valuable industry to work in. And we want to go deeper and deeper in this industry to drive more and more value. And we want to work with all of you to achieve that because we have the ability to integrate everybody, not just the top few, not just those companies that can spend $20 million on a digitalization project. Not just those companies that can even spend $10 million dollars. $5 million dollars.

We can digitalize companies that only want to spend $10,000. $20,000 dollars. A pharmacy that wants to spend less than $1000. We can do that. We can bring the whole industry together and we can let them operate however they want, whatever systems they want. We're not locking you into one ERP or one particular data lake or anything else like that.

We're saying you come as you are, you work as you want, and we'll make you all work together. So, there's no lock in. There's no need to say, "Oh, I have to pick this particular strategy because it's the only way I can get there." Everyone can work however they want and they can interoperate with each other. And that

foundation is solid. This is not your fly by the night AI company that's coming in saying that, hey, I want to digitalize your supply chain or your processes.

We're built on a foundation that is GMP compliant. If you're going to have information, if you're going to have intelligence, if you're going to have agents, they better be on the right foundation. It better be on the industrial foundation. It better be on a foundation that can be part of living compliant. Your agents better have audit trails to them.

You better be able to review those decisions. It's got to have a very secure network and access layer. so that you can control access to information. You can control the decisions that are being made. And it has to be massively scalable. It has to have the ability to scale up and down to the workloads that are necessary in order for it to execute on an end-to-end basis.

Because we're talking about digitalizing the whole industry. And what you worked with us on is that you know all this is true of the foundation of the TraceLink technology base. We run multiple data centers simultaneously. Every transaction that comes in can go to any one of three data centers. If any one data center goes down, the other two are still running.

Every year we do disaster recovery to make sure that we can do that. Why? Because we're an essential service to the industry. Because if there's a hiccup in us, we all know it. Packaging lines get impacted.

Warehouse operations get impacted. Shipping doors get backed up. You can't receive. Trucks are backed up. So, that's the bedrock.

That's the foundation that we built to be highly available, highly scalable. Because if you're going to run and make decisions on a supply chain platform, it has to meet that bar. And that's a very high bar. Last year, when we rolled out MINT, it was really about how do we leverage the foundations we've built, the innovations that we have, the capabilities that we have. And we built a platform, OPUS, to

enable us to digitalize all transactions on an end-to-end basis.

And it's been an amazing journey. Within a year, absolutely within a year, and I challenge any company in the world that's ever done any sort of B2B digitalization to match what we've done in a year. They probably couldn't even match it in five years, maybe not even 10 years. Just think about it. We have basically digitalized all transactions on the end-to-end basis.

Transportation, 3PLs, commerce. You name it, We've done it. And we didn't just do that, we also supported a whole number of different systems that we have to integrate into, and that's growing. So, it's not just about EDI. It's not just about X12.

It's not just about Edifact. It's not just about whether it's IDocs or SAP HANA APIs or some sort of unique CSV. It's going into NetSuite APIs. It's going into ODOO. It's going into Rootstock.

Some of these ERPs you've not even heard of, right? It's about the ability for us to integrate into all of them. And not only do we do that already. We also provide user interfaces for everything out of the box. Every transaction has a user interface.

Every object is known so we can relate the purchase order to the ASN to the invoice. Sometimes people say, "Oh, you're an EDI replacement." Hell no. EDI is simple. That's like one little piece right there. We're everything.

We're everything you need to end-to-end digitalize your supply chain and we're already here. And we're already implementing. Don't think of us as EDI. EDI is a very small piece. It's that one thing right there.

It's every transaction, every UI. You don't have to build a portal. It all comes out of the box, and as you know, at a very affordable price for everybody. And the customer base is growing at a very rapid rate. In my experience, in selling enterprise software, in selling B2B enterprise software, I have never seen this type

of scale.

We tried to do this in 2009 and 2010. I think we got one or two customers, and George was one of them. And within a year, we've got over 80. And those 80 are now onboarding nearly 1000 partners. Nearly 1000 partners have been signed up to be onboarded.

This is all due to all of you. It's all your hard work that's really achieved this. And what's really impressive is the network effects, right? The value of all of these partners, customers is that, just the ones that we've already integrated and are live with, there are over 6700 companies that can already link in with somebody that's pre-integrated. That means that there's 6700 of you out there as companies that tomorrow can integrate and already have a partner on the network.

That's within a year. And this is only going to scale faster and faster because you've all lived it, right? You all lived it when this happened with track and trace. Once that ball gets rolling, it just goes faster and faster and faster and faster, because there's just so much virtuous value in all of this. There's so much virtuous value for everybody to be on a common network.

To be able to be more productive. To have the right real-time information. So, let's take a quick look at MINT in action. Year one of its birth. Let us take a look at how the TraceLink MINT multienterprise solution helps a company digitalize their end-to-end supply chain.

Imagine I'm the regional sales manager at Linkiva Pharma and I receive an unplanned purchase order of 10 pallets of PainX 500 products. Before I acknowledge this purchase order, I need to understand my inventory levels so that this does not impact my fulfillment of existing deliveries. To determine this, I visit my inventory dashboard. The inventory dashboard provides real-time visibility into the inventory levels of various products across CMO and 3PL warehouses. I first check the inventory at my 3PL warehouse and I find that the inventory is very

close to the safety stock level of 100 pallets, Shipping out 10 pallets may jeopardize the fulfillment of planned deliveries, impact OTIF, and this may also lead to stockouts and penalties due to the failure to supply product.

I then check the inventory at my contract manufacturer's warehouse to find the quantity of product that is ready for shipment. I find that there is more than sufficient stock available at my contract manufacturer's warehouse. Shipping this stock to my 3PL warehouse would alleviate my concerns about stockouts and penalties. I then check to see what the average time is to ship PainX 500 products from my contract manufacturer to my 3PL warehouse. I find that on average it takes 22 days.

Now returning to my purchase order with a single click of the acknowledge button, I am presented with a draft of a pre-filled acknowledgement of the purchase order. I will review the acknowledgement, revise the delivery date, taking into consideration the average shipment time of 22 days, and submit the acknowledgement. For the first time ever, as a commercial and supply chain leader using MINT, I can orchestrate my end-to-end supply chain. Because of the visibility and opportunity to take action on real-time data, I can use the MINT solution to make informed decisions quickly and efficiently, preventing potential supply chain disruptions and stockouts while ensuring high service levels to my customers. Just think about what you just saw.

You saw the ability to exchange information in an Integrate-Once manner. And we do the onboarding. What you also saw was the ability to have that information be visually represented so that if your partner wants to view it, you want to view it, you can see it. So you have a collaborative view in which you can both share the view of what that purchase order is. You saw the ability to take that information that was exchanged over time between you and your partners and be able to do reports and dashboards as you like with it on real-time information.

What you also saw was the ability, if your partner doesn't actually have it, what

we've learned is many systems don't have something like PO acknowledgement. So, if your partner wants to go into the UI, leverage it, and be able to respond and acknowledge that PO, they can do so. And you get that acknowledgment back into your systems however you want it. There is no system in the world that does all that for you out of the box for a single link that's at $600 a year. No such system exists except TraceLink.

All that wealth. And the reason why we can provide that wealth is because of our innovations, because of our cost model. It's not like we're losing money on it. We expect to gain more and more momentum and drive more and more value because if all of us work together, there's plenty of value for all of us in this ecosystem. You saw all of that in one demo and we're just getting started.

Because next, what I'd like to talk to you about is our next product, POET, which we just released. And it's been an incremental set of releases that we've made, but the major release just occurred. And we know that a supply chain is not just about transactions. It's about people that collaborate across multiple enterprises and today, it's a mess. Just like sending purchase orders is a mess, so is sending change control.

So is batch record review and approval. So is exception management. Because it's a nasty web that you have to weave in order to get any of those things done and resolved. And it has material impact on your ability to be productive. And because of that, you're not using your time efficiently.

And so we built POET as a palette. A palette of all the things you could possibly do on OPUS. And that palette enables you to construct on a POET canvas your solution, your way. Partners will construct them, we'll construct them. They're in a catalog.

You can download them and use them. You can modify them. And you can have very rich objects. You can create any object you like with any structure. You can

say, "I've got rich text, decimal number, dollar values.

I've got groups. I've got tables. I've got nested tables." However you want, whatever is the complexity of your information that you want to collaborate on, you can create with POET with drag and drop. And on top of that you also have items that are work items, right? Tasks, due dates.

Those are things we do all the time so you can create that the same way. You also collaborate on documents. POET has support natively for documents and collaborating on documents, and putting metadata, putting all these other metadata information about who it's from, when is it due, things like that. You can add that to the actual metadata of a document. And you can also create lists of items and work items and documents.

This set of constructs lets you paint whatever you want. And lets us paint all the different processes because it's such a variety of processes that people engage in and we need to digitalize those, too. Because we know the next level of productivity is digitalizing those because those people working together exchanging those are related to the transactions. The actual release of a batch is related to the actual PO line item. And you need to know and see the fact of where's my batch at from a quality approval perspective for that particular product.

So you need to relate them. And so when we built POET, we said, "Let's take that mess, create a common application in which you can create a variety of solutions that can let everyone collaborate together through a single pane of glass." So that you're all sharing the comments. If somebody goes away for a vacation, it's no big deal. You can see it. If you need to follow somebody because, hey, they're working on this batch record.

And I need to see when that's going to be done. I can follow it and I'll get notified on the updates, right? Important things, so you don't have to keep pinging people

all the time. Where's that? Where's that?

Where's that? So, all those capabilities are there for you to collaborate with all your partners, collaborate with all your internal stakeholders to make sure that that teamwork is highly efficient, highly productive. And we're digitalizing all the information because when we put it in POET, when you use those objects, you've got the metadata. And now you can relate that with Reports & Dashboards, and later on you'll see that you can also use that information into intelligence that can be used agentically as well. So, let's take a quick look at POET.

TraceLink's OPUS platform connects every partner and process, turning supply chain disruptions into coordinated actions. Together, MINT and POET form a continuous loop of data visibility, issue detection, and triage, automating problem solving directly between your trading partners. In this example, a supply planner logs into their weekly shipments dashboard and notices an alert. There is a delivery delay on the ASN against the requested date on the purchase order. The planner verifies that the ASN shipment date is later than the PO due date.

MINT has automatically flagged this mismatch and created a supplier incident in POET. John, an account manager at Alpenstock, receives an automated email about the incident. He logs into POET and confirms the delay was due to a schedule change. He also notes that they will be publishing a new ASN to meet the original delivery date. The planner is automatically notified of the update and sees that a new ASN has been received with the corrected shipment date.

They verify the change, close the incident, and watch the dashboard update instantly. No emails, no manual follow-ups. TraceLink simplifies the planner's day by automating issue detection, supplier communication, and resolution, turning manual exception handling into effortless collaboration. So, just to recap on that, what do we see? We saw that there was a MINT transaction that noticed that something was going to be coming in late.

That triggered, automatically, an exception that was generated that both the supplier and internal team saw and could collaborate on. The notification of that incident went out by email to your supplier. The supplier could have chosen to just reply to that email and put that comment in or went to the UI to add that comment. That was then immediately communicated to everyone that's concerned because not just one person's concerned. Everyone's concerned about whether or not that shipment can arrive on time.

And now everyone can feel comfortable that that shipment is going to arrive on time because they were able to adjust their actual ship date. These are things that happen all the time. How long does it take you to chase all that down? Find the right person. Call them up.

Log a call, send an email, wait for a reply. Maybe the person is on vacation. Maybe something else is going on. And things don't arrive on time. And then you're not able to produce your products on time.

There's hundreds and thousands of these scenarios that need to get digitalized so that we can all collaborate and drive productivity for the whole industry forward. And that's what POET has the opportunity to do. And so what we envisioned and what we have built out is the ability to really define on an end-to-end basis all the different processes that are collaboration, multienterprise teamwork processes. And these are ones that we've defined. We've got partners here that are implementing a few.

We're implementing them. You can implement them. And we see this as a rich ecosystem that can continue to grow. There does not exist a multienterprise team collaboration tool out there. Yes, there's the Asanas of the world, etc.

Multienterprise, focused on supply chain, understands supply chain, understands those processes, is tuned and perfected for it. Because, unfortunately, it seems like supply chain is the last one to get digitalization. Marketing gets it, finance

definitely gets it, right? And sales gets it. This is an opportunity for the supply chain to actually get it.

This is your tool. This is not some tool that sales uses that you have to use. This is not some tool that marketing uses that you have to use. It's not some tool that finance imposes on you because for their budgets they want you to use it. This is your tool.

This is how you want to work, how you wanna design. It understands master data. It understands transactions, it integrates with all those things. So, this is your first time that you actually have a chance to have a team collaboration tool that's built for you. It's not built for somebody else that you have to use.

That's not the end. Now, the beauty is that you can now take all this information and through Reports & Dashboards, really integrate against all across all of them. Because the opportunity is that because we have the transactions digitalized, we're getting the processes digitalized. We have common UIs for all that, and we have the ability to interrelate all this information. Now you can have reports and dashboards with real-time information that integrates across all of these areas for you to now operate at a significantly higher level than you do today.

So, let's take a look at this demo. Reports & Dashboards let you control your data to collaborate on high value issues like aligning PO quantities, viewing inventory, and accelerating decision making. We'll demonstrate this using two companies: ShieldPath, a contract manufacturing organization, and Linkiva, a marketing authorization holder. Let's log into both OPUS instances to show you how they can share dashboards and work on the same data set in real time. We'll start from ShieldPath's perspective.

ShieldPath wants to understand the number of purchase orders they've received both over time and by product quantity. Using OPUS with data sourced from MINT, they easily build a dashboard to visualize this. Here you can see ShieldPath's

dashboard. The top graph shows the number of purchase orders received week by week, while the bottom chart shows those orders by product quantity. This view helps ShieldPath quickly identify demand patterns and order volumes across their customers.

Now, let's move over to Linkiva. Here under partner networks, we can see MINT for ShieldPath. This is the space where Linkiva can access all transactions, along with any reports and dashboards shared with them. And here's the same dashboard that ShieldPath has shared with Linkiva, displaying identical charts with data filtered specifically for Linkiva. Both companies are now operating from a single source of truth which allows them to collaborate and resolve issues on purchase order concerns, around quantities, and requested delivery dates by viewing the same information in real time.

If Linkiva wants more detail, they can simply click on any chart hyperlink to open the underlying report that powers it. This kind of transparency makes collaboration data driven, not assumption driven. By sharing dashboards directly inside the OPUS platform, both ShieldPath and Linkiva instantly eliminate the common friction points of collaboration. No more endless emails about issues, no more spreadsheets with stale data, and no more version confusion among teams. This gives them a single shared view, ensuring they are always aligned, faster and smarter together.

This is the power of TraceLink OPUS with MINT, transforming data sharing into true supply chain collaboration. So, just to recap what you just saw, what you just saw was two partners that are working together. The owner of the TraceLink or the subscriber of the TraceLink OPUS platform application solutions has decided that, hey, I want to create some reports and dashboards, we provide them out of the box that you can add in, that I want to share with my partners. And they basically say, "These are the reports and dashboards that are important." What's the trend on POs, when they're approved, incidents that have occurred, batch record? You

can design it however you like and have as many as you like.

And then they say, "Okay, this is the view I want to come into every day." And you can sort my partner, etc. And I can say, "Okay, this is the view I want to see every day across all my partners." Now, for free of charge, that particular partner, any one partner, when they log in and go into that collaboration with you, can see those reports and dashboards that you built with just their data. So, just their POs, just their incidents, just their batch records they're working on with you. How many times do you have to figure out exactly what is the status of each other. You probably use BI tools and all that to create scorecards and all that.

This is real time. It's available. It's immediately available to everybody. And there's no coding involved. Everything's done no code.

You can design the reports and dashboards however you like. You can have 100 partners. Every time the different partner logs in, they just see their data, their incidents, their purchase orders, their ASNs, their inventory levels, whatever is the information you want to share with them. To do that with any other system is probably years worth of work because you're coding it, you're building it from scratch. This comes out of the box, ready for you immediately.

Preconfigured. Now, we're building up. We're building up to the point where we've digitalized our core network, we've digitalized all the products moving on the core network that we've already done. We've digitalized all the transactions on your end-to-end supply chain, all available today. We've digitalized all the processes that you engage in through collaboration and teamwork on an end-to-end basis.

Now we're ready for agents. Now we're ready to really deploy expert agents. It is the most momentous time in the software industry in 50 years. Since the introduction of the microprocessor, there's nothing that's been so momentous as the introduction of GenAI. Because GenAI lets you progress what we used to do in punch cards.

You know, teletypes. You guys remember teletypes, right? It's kind of like ChatGPT right now. And then we kind of moved to PCs, then we move to smartphones. But now we have agents.

And agents are our new companion. Your phone's your companion, your laptop's your companion, the punch cards you threw away. But now you get to have your own agents. You get to have your own agents. But why should it be hard to have your own agents in your business world?

Because I think everybody in the organization should be able to create their own agents. And the we the world we envision is an organization in which every human may have people reporting to them, but also have agents reporting to them. You're their manager. They report to you. And so as you look at your organization hierarchy, you have to really think about what are the agents that you need? What are the experts that you need to help you be more productive? Just like you may think about you know how many PCs do I need? How many servers do I need?

Well, how many agents do you need? And these agents operate on this industrial infrastructure, in this compliant infrastructure, in this regulatory infrastructure. The agents all have human managers. You review all their work, you approve their work. They have roles just like any other user.

So you can limit them and say, "Okay, you can only have access to this partner, to this particular application or solution, to this particular permission to either add, delete, view. You can describe OPUS agents just like any other user. You can give them the permissions and roles just like any other user. And everything they do is audit trailed, just like any other user. If they start making changes, etc., there's a history of them.

They're represented. Because we feel that it's very important that if you're going to have AI, if you're going to have agents, it's got to be under the regulatory compliant industrial infrastructure. Now, how do we accomplish this? We're a little

contrarian, to be honest with you. What you'll see up there is small language models.

We're not looking to create the artificial general intelligence. We're looking to create the artificial expert intelligence. We want experts. We want every agent to be an expert. And that means that we have to combine metadata, which is information about the information so we know what the information is.

We've introduced into the OPUS platform meta reasoning. That means for every object, every operation, we have what we term as a reasoning artifact. That is really about what is the purpose of this information? What's the purpose of a purchase order? What's the purpose of an invoice?

What's the purpose of a partner? What's the purpose of a vendor? What's the purpose of this product? And you can have that purpose defined at any type level, any instance level so that the reasoning is part of the platform. And then we have optimized, we call fine tuned, small language models that we orchestrate across to make sure that it's fast and that it's accurate.

Because that's what's important. Right? You don't want hallucinations. You want accuracy and you want fast and you want richness of experience. And so it's the combination of this that is the real kind of breakthrough that we've had at TraceLink to say, "We can combine it in a very innovative manner and we don't need football fields full of servers." It's ridiculous.

We're gonna run out of power, We don't want to build another company that requires another billion dollars worth of infrastructure that we're all gonna be paying for and losing money on. We want to go the other way. We want to say, "No, let's create really finetuned, smart language models with smart agents that are experts." And I'm going to show you how we do that and we're going to actually demonstrate it for you. And those smart agents need the ability to access all the information. All that end-to-end information.

All the tools to go get that information to then reason about it. And so the agents need APIs and tools to access all the information that's in OPUS. Okay? And then the agents live on top of all this. They live on top of all this capability just like you do as humans.

And then they need the ability to be generative in that environment, which means that they need the ability to generate based on reason, the experiences, the analytics, the capabilities. And then that's how they develop the expertise is by continuously understanding the information that is available to them within your supply chain. And that means all the transactions, that means all the POET processes and everything else that that we have on the on the OPUS platform. So, how do we do it? Well, what we did was we said, "We're not creating agents for some other world.

We're creating agents for the supply chain." And we came up with this concept of what we term as a meta prompt which is really the ability to say, "Okay, every agent has an intent." And the intent is its purpose. You know, why am I here? What am I doing for you? Am I your supply manager? Am I a customer service rep?

Am I your relationship manager? And then it's got a set of objectives that says, "Okay, what are my objectives that I need to achieve for you?" And you can make that objective as narrow as you want. You can have a thousand of them, right? And so the beauty is that you can make them all like unique experts on this vial, on this material, on this process.

And you have the ability to say, "Focus on just vial inventory." And then you basically say, "Okay, in order to achieve that objective there's a set of decisions you have to make." So, what are the decisions I have to make? What are the rules? Isn't that how you guys think? Isn't it representative of how you think? I've got this particular objective.

I've got a set of tasks that I have to do in order to achieve those objectives. I

execute those tasks based on a set of decisions I have to make. In order to make those decisions, there is a set of rules I follow. Wouldn't it be wonderful just to be able to express that in English and have an agent do that for you? Well, we're going to show you that.

The way it works is that what we did is we just, again, being engineers, our first, usage of agents was for ourselves, obviously, to build a solution. You saw that drag and drop. And we said, "Well, no more drag and drop. We want to say and see." You just say what you want and it creates the solution for you. So, we decided to create an agent and we said that there'll be an assistant agent, an Amadeus assistant.

And we'll say, "You know, we want you to be the super duper solution designer in the OPUS solution environment. And we want to be able to create a new solution without any coding, no vibe coding, no code generation, no coding, no code generated. And just set a task that I have to do. I have to specify the solution. I have to identify the roles.

I mean this is what you do when you create a solution if any of you have done that. You identify the roles. What are the business objects? What are the policies? And it's gonna be a POET solution.

And I just want to have the agent build that for me. And you've seen companies that have been vibe coding, etc., that go to 0-100 million that generate a ton of code that is hard to maintain. There's no code generator here. We just generate the straight-up solution. And the way we do it is that we define the agent's purpose.

And we say, "Okay, this is your purpose and this is exactly what we've written." This is what is in the creation of this Amadeus assistant. You basically say, "Here's a purpose. Here's a description with guardrails." Never delete solution assets, right? That's an important one. Any removal of a solution asset requires explicit

user confirmation.

So you've got your guard rails. Just put them out in English. To find your outcomes, what do I want to create? Well, correctly structured business objects. I want tailored user interfaces.

That's all I have to say. I have to have the description of the guardrails. And this is creating this Amadeus assistant to create solutions. That's it. You define the outcomes, etc., and write it up in English.

Imagine you're doing a job description for a supply manager. This is what you would do. And here are the decisions that you have to make, the OPUS app to pick for the solution. The human must provide some requirements. The requirements should not exceed 200 megabytes.

Hopefully, that's good enough. The mock-up images should be ignored, right? So, just some basic guardrails to add in there. And there are metrics it will track on how well it's doing. So, let's see the OSE Amadeus Assistant inside the OPUS Solution Environment at work.

In the OSE, the Solution Designer now sees the OPUS Assistant. Engaging the assistant opens its profile page with clear objectives and tasks. Engaging an objective brings up its homepage. Because a designer can manage multiple solutions called objective targets, the assistant also provides a view of all objective targets in one place. From here, they select an objective to create a new solution, which brings up the related tasks.

When you select a task, you simply provide your requirements directly to the assistant. Instantly, OPUS Brain analyzes what's needed and dynamically generates the perfect interface in response. And it doesn't stop there. OPUS Brain continues its work, translating requirements into detailed specifications for business objects, experiences, and roles, presented clearly for your review and approval. The brain even suggests a solution name and description.

You can tailor them to your vision or approve with a click and then watch OPUS generate your complete solution in moments. Next, the brain automatically creates business objects prebuilt with the right fields based on your specifications. And together with the assistant, you can refine them instantly. When it comes to designing user experiences, the brain goes even further, automatically creating network pages for your business objects. What once took drag-and-drop builders now happens seamlessly through intelligent automation.

The assistant completes the solution, assigning roles and setting policies automatically so every detail is captured. And throughout, you remain in control, navigating tasks, refining details, even switching context across solutions. Then when you're ready, the assistant releases a fully built solution ready for action. That's it. The brain has created the solution.

Now your users can create change requests, view them, and edit them instantly. That's pretty amazing. The team has done an amazing job, right? So, let's again break that down. What did you just see?

That could have been a purchase order, that could have been a forecast, that could have been anything you want it to be because all you're doing is just defining the profile of that agent however you want it to be. And so when you're looking at it, let's start from the very beginning. That whole UI you saw was Agentic Pages. What does that mean? That means that the agent, when it's interacting with you, is actually on the fly generating the interaction, and it's not just text.

It's all the OPUS objects. It looks and it says, "Okay, you're asking me about this particular objective and it's this particular task." In order for me to accomplish this task, I need to provide you with this information. I need this information from you and it's not gonna be a bunch of two pages of text. I'm gonna give you a rich user interface because you don't deal with text, you deal with line items, inventory levels, that's what you deal with. You don't want to see that in text.

You want to see that in a rich UI like you're used to seeing. The agent automatically, generatively creates the right UI for you at that moment that's appropriate for you in that context. That is mind blowing. Think about that. Think about how much time you spend just trying to create a UI.

Then think about how much time you spend trying to create the appropriate UI for the moment. With agentic, it's more like a human. It's not this rigid, "Oh I've got to click that object to see this thing and search for that to then get to my information." It's like a human. It's like, "Oh, Caitlin, tell me about these purchase orders." And it's gonna tell you what you need to know at that time. It's not gonna come back to you and say, "Okay, click on purchase orders, sort by this, look for the ones that are late. It's going to tell you these are the five that are late.

Because that's what's important at that time. That's the power of generative. It is mind blowing. It's completely going to change how we work with computers and we're at the forefront of doing this. We are the forefront of doing this.

Nobody else is in the industry. We can lead the industry with AI because of these capabilities. And so let's kind of break it apart. This whole page was completely generative. Nobody hand-designed this.

The agent built it. The agent built it on the fly and it said, "Okay, here's the entire page. I'm Amadeus. Here's my current metrics on how I'm doing. You can ask me anything if you want to talk to me.

You can drill deeper into my metrics." Those are the tasks I can do for you, the objectives I can do. These are the tasks I can work through. I can engage. Right? I don't have to type back and say, "Yeah, 50." I'm given a field like an input, the solution name, the description, because that's what I need.

I'm going to suggest things for you if you want. I'm gonna generate these reports and dashboards on the fly. You don't have to sit there and create query objects and drag and drop and create the report by hand. The agent's going to say, "At

this moment, I think what you need to see is the POs delivered on time, because based on the objective that you're pursuing." This is the right report for you and it is on the fly making the queries, defining this chart and showing it to you. It's a rich interface.

It's not just text blurting back at you. And it's saying, "Okay, here's the decision flow I'm going through." Which POs to review, validate the PO acknowledgment, confirm the delivery time because this is the set of decisions I need to make in order to fill out a purchase order. So, it's following through the decisions you have to make. What are the key decisions you have to make when you have to fill out a purchase order? From whom?

By when? How much should I order? What should the price be? The set of decisions you go through, a set of rules you go through, the agent can run through that, present it to you, and then you can make those decisions, final decisions. But a lot of the leg work you go through, all the reports and the searching and all that, the agent can do for you.

It's part of its reasoning. And when we created that agent it wasn't like we created a bunch of code. This is the extent of it. We created the agent that could create solutions. We basically said, "Okay, here's your set of requirements." We created that agent and we gave it this input.

The input was, here's the requirements. We just fed it this document. And just like you would any other description of a solution, here's the business objects. Here's the use cases I want you to support for that solution that you saw. Here's the roles.

I'm just describing it in English. And out came that solution. This is amazing. Think of what this can do for all our lives. Think of what this can do for our business.

And agents can constantly be listening. They're working 24/7. They're just constantly listening and say, "Oh, another purchase order came in, another ASN came in." If it's a midnight, no no big deal. It reacts. It does what it needs to do. If

you set it up to say, "Hey. if this seems to be less than what we ordered the person to notify is this person about that. Create this incident, do all that on the fly." It can do it.

Because it's operating in the OPUS environment, it's a very rich reasoning environment. So, you guys seem stunned. But this is the new world and we're just beginning. We're just beginning. It's mind blowing what we can do.

And so look, I think it's pretty clear that we have an opportunity with real-time data, with metadata, with meta reasoning, with no-code agent development, with this agentic interface, that we have an opportunity to completely transform our industry. Completely transform it. And transform your business. And it's going to be a major competitive advantage to you. Now the question is: How do you actually pursue this?

Because I know you're overwhelmed. And it seems like there's just so much to do and how do I get started? Where do I start? How do we move forward on this? Because you can't get all this done overnight.

Here is our approach to it. You basically first define your business objectives. What do you want to accomplish from a business perspective? And as business leaders you have to then say, "Okay, well what's my business outcomes that I'm seeking?" Is it about the cost of serving external manufacturing? Is it about growing revenue through new market expansion?

Is it about improving cash flow? Then you can look at all the different orchestrations. And you can identify and say, "Okay, which of these processes do I want to focus on? And how much digitalization do I want on that?" How much agentic capabilities do I want on that? What transactions?

What processes? What team? What multienterprise team processes? Where do I wanna use agents? What agent profiles do I need?

And then you can then map out and say, "Okay, that's my Phase 1 of my journey. Here's the Phase 2 of my journey. Here's the Phase 3 of my journey." And we can help you with this. We can help you through our Solution Consulting Team and our value engineers can define this for you. And we want to partner with you on it.

And we have partners here and they can partner with you on it, too. They can help you with the change management, help you with the integration with your systems, help you with any sort of implementation that you need to do, any sort of strategy consulting that you need. We can be a part of that because we understand the product and the technology and we can be add value in there as well. So, let's work together to define these paths because from an IT perspective, we also have a significant journey. And based upon which areas that we focus on from an agentic orchestration perspective, then we can say, "Okay, how much do we digitalize?

Which ones do we orchestrate? Where do we use agentic?" And we can climb the IT ladder simultaneously based on the business objectives. And we can weave that path through. It's not like you have to wait for one big single ERP deployment to move to the next step. You can pick and choose how you want to grow, how you want to evolve.

Because this journey, it's unclear where the next focus should be, how deep you want to go. And you have to learn. You have to invest and you have to learn, you have to invest and you have to learn. And the faster you climb that, the more valuable you are to your business and your businesses in the industry. Because the value is very real.

The value is absolutely real. Because the efficiency gains that we've already identified based upon our value engineering work that we've done with our partners, we're already seeing just on basic digitalization, massive savings on team productivity on cycle time improvements on inventory reduction, on time in full. And if you look at any of the top tier consulting firms, 95% of life sciences roles

could have an agentic AI teammate. That should be 100%, honestly. I think that's a little less than what it should be.

If you you're carrying a mobile phone, you should have an agent. It should be there for you. That's everybody. I think the prize is really big. And I think that, like I said earlier, those who are first to that prize will own their industry, will own their segment of the industry.

And we're going to continue to innovate. So, we are actually accelerating our innovation and we're adopting AI at a very rapid rate. As you know, we build everything for OPUS with OPUS. That means that our ability to continue to drive innovation and drive productivity is also going to get to the next level. We've measured a more than 10x improvement in our productivity in using OPUS ourselves to build all the solutions and applications on OPUS.

We are anticipating a more than 10x productivity as we start to use agentic capabilities in OPUS to build OPUS. So, we are anticipating that in 2026, we are actually going to go even faster than we did in 2025. And you saw all the productivity we got in 2025. It's there. It's real.

You can use it. So, our next major focus is: How do we enable the humans and agents to be smarter with the information they have and get more intelligence out of it? And that releases Tempo. Tempo is the ability to really create analytics databases. Because right now we're operating on operational databases and the agents are operating on operational databases.

But analytics databases need to be built that are specific to your purposes. And so within OPUS natively, with Tempo, you'll be able to build your specific analytics databases that will aggregate and integrate information across OPUS and even from outside OPUS into an analytics database that you can then leverage within OPUS for yourself to make better decisions. But also for the agents to tap into. And the agents can then tap into that analytics database to propose better decisions

for you. So, that is something that we're going to release throughout 2026.

We're already working on it. We started to do the building of that. That will be a set of releases that will go on. I won't go through all the details. But by the end of 2026, this time next year, you'll see much smarter agents and hopefully much smarter humans with that as well.

The next level that we're going to do in 2026 is again, how do you integrate with everybody else? How do I integrate with other agents? How do I do it with other systems? There's a protocol out there called MCP, the Model Context Protocol, and what it does is it enables the OPUS Brain to be able to reach out directly to other systems and be able to access information in other systems in real time to help you with better information from other systems. And so that's also an investment we're making in 2026 so that for all the different end-to-end orchestrations and all the different systems, because we don't obviously hold all the information.

But you want to have access to it. And the brain wants to have access to it. So we'll provide access to a secure mechanism through MCP. The inverse of that's also true. We work in an ecosystem.

We've got partners like Kinaxis and others, and they need access to us as well. And we want to create a rich environment for everybody. We don't see ourselves as the only company in the world that's going to be doing this. So we want to open up and through MCP, provide access to our brain, to our analytical capabilities, the partners can also use. Because we think that they will also be on this journey of agent-ifying and incorporating AI.

And we don't see a world where there's only one company, one system. I know others see that world. I don't see that world. Just like they see one AI that has super intelligence. We think experts, companies with their expertise, need to work with other companies with their expertise, and that they'll be building unique and smart agent capabilities that we need to interoperate with.

Those are two major new initiatives in 2026 that we expect to deliver on. Obviously, there's many other things going on. Compliance in Indonesia, right? And continued compliance around the world. More and more MINT transactions have to go live.

Partners have to go live. POET processes have to be built, have to be used. So, we're going to continue to work with you in building up all of that. And we're going to, like we always do, work with you very openly. There are multiple sessions in which you can work with us.

There's a session on, I think, tomorrow afternoon, where you can help us define some of these agents. Because it'd be great to sit down and say, "Okay, what should the purpose be? What should the task be? What should the decisions be? What should the rules be?" And we can work on that, and we can test that and make sure it works, because this is gonna be a joint project with partners, customers, all of us working together in order to build the most amazing supply chain in the world, for the most amazing patients.

That's the main purpose. Just never forget that. I never forget that. That's what keeps me going. Thank you all.

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