Podcast Episode 19: Bob Ferrari on the Shift From Linear Supply Chains to Coordinated Multienterprise Networks

Key Takeaways

- Supply chain professionals need to stop thinking in terms of rigid, linear supply chains and instead focus on the idea of highly coordinated, collaborative, and agile multi-enterprise response networks.

- A growing number of industries are embracing outside-in, demand-driven supply chain strategies, which originated in the consumer goods and high-tech sectors.

- Enterprise resource planning (ERP) systems once served as the technology cornerstone for achieving agility. But the idea of “agility” has come to encompass much more than just technology—it also depends on people, processes, and leadership.

Supply chain consultant and analyst Bob Ferrari, Managing Director of The Ferrari Consulting and Research Group, provides actionable advice on how to make the transformation from a linear supply chain to a highly responsive and collaborative

multi-enterprise network. He also shares his thoughts on the evolution of agility.

Transcript:

Supply chain analyst and consultant Bob Ferrari offers expert advice on how to make the transformation from a linear supply chain to a collaborative, multienterprise network, right now on "The Agile Supply Chain Podcast."

Roddy Martin: Bob, welcome to the next version of our thought leadership series on supply chain and agile healthcare transformation. It's a pleasure to have you. You and I worked together for many years as analysts in the industry. I have a lot of respect for your opinion of where supply chain and supply chain IT is going. I look forward to this session.

No need to introduce myself. I lead digital transformation of supply chain at TraceLink. How about introducing yourself and talking a little a bit about the kind of analyst work and industry research that you do.

Bob Ferrari: Thank you, and hello, everyone, and hello, Roddy. As Roddy has mentioned, my name is Bob Ferrari. Basically, I provide two personas. One is being a long-recognized supply chain technology industry analyst. The other persona is within global supply chain social media under the banner of the Supply Chain Matters website, which I founded in 2008.

Today, we've got a very much a global-wide readership, to no surprise, because that's what supply chains are today. As Roddy has mentioned, my background spans about 30 years of experience guarded in multiple functional areas of supply chain, you name it -- planning, customer fulfillment, customer service, and IT.

18 years of that experience has been either as a supply chain industry analyst where Roddy and I date back somewhat that we don't want to tell people, and as a marketing executive and also as a keen observer of multi-industry supply chain business processes and technology adoption. That's what my background is.

Roddy: Fantastic. Bob, one of the things we're going to do today, we're going to spend a little time decomposing the technology and vendor-agnostic Agile Supply Chain Credo that TraceLink has sponsored.

I think it's very exciting because the credo doesn't answer questions. What it does is, it provides a really nice blueprint with some key operating principles as a blueprint for transformation of healthcare in bringing in today's principles of Agile.

Let's kick off a question. What pops out at you as an analyst from the credo? What really grabbed you? What do you think is the most exciting part of the credo?

Bob: There were two value drivers that really popped out for me. One was the customer-patient outcomes over process metrics. That is so very pertinent today especially with what's going on with COVID-19 and what's currently in the limelight of industry supply chain response.

It's not just pharmaceutical and life sciences and all the associated healthcare networks as part of this, but it's others as well. It's interesting because when we talk among ourselves as supply chain management people, we know what this world is all about and we know what to expect.

Now, the visibility into what we've been doing as professionals is so much more enhanced. I hear that all the time now. It's definitely reached the boardroom level; it's definitely reached the C-suite level. That's one value driver that really strikes me.

The other one is demand-driven over supply-driven. We've talked about that as the outside-in strategy. How to think about that? More and more industries are starting to manifest that. The origins really came from consumer, as you know, Roddy, and high tech. Now, they're permeating to many other industries.

We should talk about that from the notion of pharmaceutical and life sciences. Those are the two that really struck out for me.

Roddy: You're absolutely right. Let's pick up on the point of pivoting from supply-driven to patient-driven because when you take very specialized operating models like cell and gene therapy. You simply can't survive with a 300-day inventory strategy in the cell and gene environment where you're making for maybe 10 patients or even one patient.

One point I would love to hear from you and that is the pivot from inside-out to outside-in is not trivial.

Bob: No.

Roddy: In the context of Agile, what do you think has changed in the context of the word Agile in comparison to the Agile that you and I knew when we were talking Agile 10, 15 years ago?

Bob: Absolutely. For me today, Agile is very much a more business-driven effort. It has business process outcome connotations. As you pointed out, that's completely different than the way we saw this about 10 or 15 years ago.

If you can allow me to provide one perspective is that, over 15 years ago, I was a global marketing leadership executive at SAP. I must admit, I was one of the marketing architects for what was then called SAP's Agile Supply Chain Vision and what that implied.

Essentially, when you boiled it all down, it was a technology-driven concept of integrating information among inside-out systems with data integration technology being inherently cumbersome, at best. Agile at that point was aspirational.

It was something that we can put in front of SAP customers and basically say, "This is the direction that you should be headed in and we're going to be with you," so to speak, "to make that happen."

There's been a lot of water under the dam since then, in the sense of integrated

resource planning systems and connect making all of those internal business processes and data information needs may have been sufficient at the time but it was still an outside-in perspective. Whereas supply chains shift the other way to the notion of external now. That's a fundamental difference.

Roddy: That's a good point. No one wants to knock the billions of dollars that any big company spent on the ERP system. It tends to be exactly your point. It tended to be an investment to bring together the back-office business and supply chain functions in an organization -- HR, procurement, material model, all of that stuff. You can't do without that.

If you think about the transformation of healthcare. Healthcare is a really big networked community. It goes all the way from patients through hospitals, distributors, wholesalers, logistics, all the way back to contract, manufacturers. We can't have strings and strings of interconnected ERP systems and expect to run the healthcare and transform healthcare network.

ERP as the back office of the business, it's fundamental. A company doesn't actually need to put in an ERP today, but if they've got an ERP, it wasn't a wasted investment. The real challenge for a lot of companies is how on earth do I now connect my four walls of my enterprise into this community of healthcare partners who are all patient-centrically organized?

I recently did that podcast with you on digital platforms, where that's going to go? What's very exciting is that there's now this complimentary role of an ERP system connecting into the digital network platform and all other partners with their ERP system.

In the context of Agile, we are now not just about being able to respond in an efficient way because we've got integrated data as the basis of Agile. We've now got a whole series of partners, people, processes, organization, leadership, etc. via this platform. That's quite exciting.

One of the points I made too is, what sort of behaviors do you think the industry needs to stop doing in order to move forward and start thinking about healthcare transformation patient-centrically, so to speak?

Bob: There's a number of them that we can really talk to in a sense of the notion of stop thinking about it as a linear supply chain and start thinking about it as coordinated multienterprise response networks. As you pointed out, the ERP system is another node on that network. It connects to other ERP systems. It connects to B2B supply chain network platforms much more than today.

When you consider, we go back to the history of EDI, and what it was. EDI was an electronic means to move transactions across extended supply chains. We've moved way beyond that right now from a platform in technology perspective. Now, it's not just transactions, it's collaboration. It's information.

It's streaming information regarding orders, regarding production status. Now, when I talk to audiences about this, it's the notion of we always had this vision as supply chain management professionals that when will we ever see the ability probably in our lifetime when we could bring digital and physical together. Now, we can do it.

Roddy: That's such an important point. We always...As analysts 10 years ago, we said, "Well, we're looking forward to the days when you can separate the flow of information about the product from the flow of the product itself." Up until quite recently, the two were inextricably linked and coupled.

Now, I can have information flowing completely different routes to the flow of my product, and in fact in such a way that I could almost start doing predictive analysis and predicting what's likely to happen to the product when it eventually gets to a point.

That makes this whole idea of a healthcare community network platform so realistic. The connection of the ERP Foundation or let's say the back office of the

business onto the network is where companies need to start thinking about their future architectural strategies.

What are your perspectives on the start and stops of digital, Bob, because I heard a supply chain executive from a life science company stand on the stage and say, "You know, I thought we'd nailed supply chain, and along came digital. Now, everybody is confused."

How would you respond to that comment because it makes me laugh when I hear it? It is indicative of the mindset of supply chain leaders who see this as another wave of technology that's hitting them.

Bob: We've always been exposed to the way I hear it described, and you do as well. The buzz of the technology community or whatever that is. To some extent, maybe it is. For me, it's, especially for pharmaceutical, life sciences, and medical products, it's a regulated industry, right?

The notion is to stop articulating the notions of forcing governance, performance governance around a linear supply-chain driven supply chain. It's far different than that. It's now this notion of networks. It's digital. It's all the aspects of digital.

Yes, regulatory compliance, regulatory performance is a part of that, extremely so in pharmaceutical life science. It's always been a part of that in consumer products, as you know.

Roddy: What's interesting, Bob, is to your point that yes, the FDA and World Health Organization enforced compliance, enforced serialization, enforced good manufacturing practices, and validation of systems, etc. It's really a way of working. If this one deliverable that ERP gave the industry was a codified approach to validating and compliance in the four walls of the business.

We've got to stop seeing that as a penalty. It's gotten in the way now of a response of supply chain because we've now hard-coded everything into big, inflexible

systems. When a disruption comes along like the pandemic, the wheels come off.

There are so many changes and so many re-plans and re-organizations, reframing of supplies that the business...and we're seeing them all reeling as a result of that. That hard-coded back office, as to your point, is sufficient. It's not resilient enough. It doesn't provide an architecture that will enable the resilience to disruption.

There is another way that the supply chain credo as we put it together. The fact that we're augmenting people's behaviors and their capabilities with systems rather than replacing them as I think the point you and I made when we had been talking replacing people with systems. That's not the paradigm.

Bob: No. No, it's not. No. I was going to say, for me, it's the notion of stop is operating in those internal or external suppliers of protected information. We keep information protected because of these notions, these cultural notions.

What encourages me and watching the industry as an outsider, but watching them, is you see even the FDA today is talking about experimenting with digital technologies. It's being open to things like blockchain. It's open to internet of things kinds of aspect.

They're beginning to understand that how they regulate and the way they regulate across a global network of supply and demand requires that they've got to look at this as well.

Roddy: Bob, both you and I have seen the wave of control towers hit us, right?

Bob: Oh, yeah.

Roddy: Control towers being synonymous with, "Well, I can't see upstream and downstream because I've got all these systems. I mostly share data and compare data." What's exciting about the credo is the fact that we point out that the need to have the visibility and the sensing capabilities to capture and see disruptions as

they are occurring and solve them in as near time with Agile teams as possible.

How would you comment on the control tower wave that hit everybody as a reaction to this lack of visibility? The digital network platform like Amazon, the native AWS capabilities allows you to exchange real-time data to see upstream and to see downstream and share data with partners. How would you comment on the control tower wave?

Bob: I was in the beginning of control tower when it was first introduced maybe five years ago, maybe six years ago. There were two iterations of it, if you remember. One was planning control tower, and it came from the supply chain planning side of the house.

It was the notion of how do I bring all this information that again is outside-in? It's coming from external sources. How do I put it in context to the notions of what's going on? What do I really need to pay attention to? Where are the real exceptions going to happen? What are we doing about those kinds of things?

The control tower analogy was purposely selected because everybody could relay to an airport control tower. What does an air traffic controller do? The systems, the control systems, basically navigate the planes, the aircraft in terms of navigation and things like that.

The controller provides the communication of what plane should be doing what. When you get an exception, like an aircraft would call an emergency or things like that, then the controller really gets involved and brings in additional resources and help to respond to that.

It started off as with that. It got some legs. There were some early implementations of this, and then it moved to the execution area. Some would say, it started in execution and move to planning. It doesn't matter. That was the notion of control towers, was the ability to tap these networks. It's very much for me like the aircraft analogy.

When we fly very modern aircraft today, think of the Airbus A380, one of the biggest aircraft ever designed and put into the skies. Now granted, [laughs] it was a little overkill. Basically, it is very sophisticated. The Airbus A320 or the 321, or the Boeing 787 Dreamliner.

They're all very, very sophisticated aircraft with onboard systems, redundant flight control systems. Three or four different versions with onboard analytics and telematics that are actually alerting maintenance people on the ground to their performance criteria and things like that.

Marvelous, sophisticated equipment, self-controlling, but at the same time, that pilot has overrides on all of that stuff.

When I talk to audiences about that, Roddy, and try to give them a sense of that, especially where people come in, I always say, "Remember, those pilots always have a override, and remember, all of those sophisticated cockpits with all of those autonomous systems and sophisticated technologies, there's still a windshield."

Roddy: Going back to your point, and then we can close out and maybe you can leave us with some nugget that we can remember, Bob, by. The point that you made earlier about the ERP system, the ERP system, yes, was a technology integration cornerstone for agility, but today, it's people-processed technology and leadership. The scope of agilities are much wider.

Bob, as we close out, and I appreciate you doing this thought leadership piece with us, what nugget would you leave listeners with to think about as we shut this session down?

Bob: Beyond the stops and starts, and what that's involved in what we just talked about, other principles that I could share is basically understanding that while no two transformation journeys are the same, there's common industry-wide learning. Not just in pharmaceutical and life sciences, but other industries as well.

How to best align stakeholder interests, and how other organizations are doing that today, and what have they run into? Tap into that learning, understand it. Remember that technology is not the sole solution here. It's about transformation. It's about leadership. It's about culture, people skills, change management, and then best purpose technology all aligned and addressed in parallel.

We should focus on people in a sense of developing a personal development plan that allows people to be positioned for what we're talking about here. Analytical, digital, and collaborative team skill environment where leadership and decision making are going to be the jobs of tomorrow. That doesn't say people are going to be eliminated.

As an analyst and been around and seen a lot of this in many iterations, I cringe today when I hear some technology companies talking about the totally autonomous supply chain. We got to be very careful about that.

Roddy: No, I absolutely agree with you. That's a good note to end on. Bob, it's great to talk to you.

Roddy: Your ERP background and some of your perspectives on ERP...They weren't necessary at the time, but they're not sufficient to do the pivot to patient-driven and customer-driven in the future.

It's a great pleasure to have you on the session. Thank you very much.

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