

# The Future of Supply Chain Episode 7: Designing what customers want with Gareth Webb and Arend Weil

**Arend:** [00:00:00] You can think of product lifecycle management as the backbone of the enterprise, right? You need to know what your product is, what it does, what it's composed of, and so on. And, whatever you do across the enterprise, it, builds on that type of information. So think of it as, the backbone of the enterprise, right?

**Richard:** Welcome to the future of Supply Chain podcast from SAP. My name's Richard Howells and I'm the Vice President for Thought Leadership for SAP's ERP, Finance and Supply Chain Solutions. And today I'm joined by my co-host Sin. Please introduce yourself.

**Sin:** My name is Sin To and I'm a marketer, blogger and podcaster on the topic of supply chain at SAP. Today we're joined by our two guests, Arend Weil and Gareth Webb to discuss what it means by designing what customers want in a risk resilient and sustainable world. Welcome Arend and welcome Gareth. Thank you so much for joining us [00:01:00] today, and it is great to have you on the podcast series. If you could take a moment to introduce yourselves, give some insight into your past experiences and what you do today?

**Arend:** I am Arend as you can easily tell from my accent. I'm German, I'm joining here from the SAP labs in Munich. I am, with SAP since 2004 and had various roles, across sales services, pre-sales. There was one thing in common, although I, had those various worlds, which was the PLM so the product lifecycle management topic, I guess, which we talk about, today, and project and portfolio management as well, where most of my time I did spend, talking to customers, and matching basically customer requirements against, our beautiful products. And, since two years now, I'm with our development team managing basically the portfolio and the products, which we, so to speak, onboarded or started, when starting the partnership with Siemens. Gareth, over to you.

**Gareth Webb:** [00:02:00] Hello, and, I'm Gareth Webb. I work in the solution management team here at SAP and my roles and responsibilities within solution management is to look after our SAP Team Center by Siemens portfolio. And all of our wonderful foreign PLM integration solutions which includes obviously the new jointly developed solution with Siemens. And I joined SAP

just over two years ago and the purpose of me joining was to try and help drive this partnership with Siemens. And my prior experience is to, joining SAP was as the leader of the PLM practice at, one of the, major solution integrators where we were wrestling with this topic of where and what should we integrate from a point of view of product lifecycle management and obviously our enterprise resource planning capabilities. And so, yeah, I've been doing it for, many years, more than I can to mention.

**Sin:** Thank you so much for the introduction. So as you mentioned, product lifecycle management this is actually the key part of the supply chain. What is it exactly product lifecycle management? Can you just explain this briefly [00:03:00] to our listeners?

**Arend:** You can think of product lifecycle management as the backbone of the enterprise, right? You need to know what your product is, what it does, what it's composed of, and so on. And, whatever you do across the enterprise, it, builds on that type of information. So think of it as, the backbone of the enterprise, right?

**Richard:** Thanks guys. That's a great explanation. Now, we've got a common understanding. Why is it important? I think you just said why is it important, Arend? So maybe what are the business challenges that R&D executives and practitioners are facing today?

**Arend:** My experience is that, I'm, in this area for, believe it or not, like 30 years, lately. And, since I started, it has been, a common task, and a worry from enterprises, on how to transfer data from engineering to business, right? That is, a key task and a key challenge. And you see all type of approaches dealing with that since those 30 years. Many are very custom specific. Some even use the famous excel [00:04:00] capabilities to do so. And what that tells us is, you know, one of the constant challenges, I tend to think of first when, talking to our customers is, you need to, get beyond this siloed type of situation and, really get into a situation, especially today where we all talk about, digital transformation, digitalization, in this context, you need to get to a situation where that information seamlessly flows from engineering to business and vice versa, right. And whenever we refer to business, I mean like for example, manufacturing, purchasing, you name it. So I think one of the key challenges we meet a lot at customers is that, how do I, make full usage of that digital product data? And how do I do that in a, to put it that way in a, in the least, painful form, so to speak. Thinking about cloud qualities like, best case ready to run out of the box and so on so forth. Gareth, I don't know whether you wanna add to that.

**Gareth Webb:** I mean, all I would say is most of the customers that we [00:05:00] talk to are facing new challenges in terms of dealing with the end consumer market. We all as consumers, we're expecting more from our products these days. We want products not to be just consumable items from a sustainability point of view. We need them to be developed and enhance along with us. And what that drives is an extra level of complexity in the products, making sure that they're future proofed, making sure that the products are sustainable, making sure that they meet the customer demand for individualization or personalization of their products. And this does linking back to Arend's point. This drives an awful lot of complexity into the design of a new solution. Increases the amount of information, increases the levels to which we need to integrate our products and services now. You know, it's no longer something you just go and buy off the shelf I mean even the the fridge freezer and, the dishwasher that I bought recently are now wifi connected and offer you know automated ordering services for spare parts. So that [00:06:00] wouldn't have been even thought about in the past and this is now what most of our customers are facing, the combination of product services and that complexity that comes with it, that which is requiring them to break down the silos in their business if they're gonna compete.

**Richard:** Just to follow on question on that from that.

I mean you talked about developing smarter products said and everything , every industry is designing and manufacturing smarter and smarter products now. You talked about the fridge example of placing orders for spare parts and the like. Do you see these products also passing information back into the R&D process to see where there's a trend that the machine isn't working as well as expected and engineering changes for example.

**Gareth Webb:** Absolutely. And I think that's introducing where we are going next with some of the solutions that we've developed because we recognize that the life cycle doesn't just stop when the things shipped to an end customer anymore products do communicate . They do tell you when they need to be serviced or need to be cleaned or whatever. And what we have seen in this world of connected products is originating offerings from the [00:07:00] original equipment manufacturer to the consumer. They need to know have a direct customer relationship it's no longer a kind of B2B type distribution. It's very much a B2C business to consumer market. And in a PLM context when we talk about this, we talk actually about when a product becomes or no longer becomes just a virtual asset, where it becomes a physical asset. And that really then is starts to get into the world of what we are starting to refer to here as the kind of service lifecycle management and asset management. And from a PLM

point of view that means we've gotta control the configurations of products that were shipped. So again, that never increasing level of complexity management and control that needs to be exerted and Arend I don't know if you wanna introduce some of the topics that we're starting to look at within the next generation of our integration, but that whole return loop from operational life back into design is key.

**Richard:** Let's talk a little bit about the partnership with Siemens because Gareth you mentioned that one of your roles is to [00:08:00] manage or work with that relationship in the PLM space. So, how's the partnership progressing and how does Siemens Teamcenter fit into SAP's strategy for PLM?

**Gareth Webb:** What a great question. The partnership was signed back in July of 2020. We're getting close to three years now of collaboration and partnership. When we started that, within our business with all the capability of the Siemens Team Center portfolio as maybe offering us an opportunity to sell into a new market let's say with a different product set. I think what's happened is as we've evolved our level of appreciation of the portfolio from Siemens and we've begun to understand how actually the extended set of capabilities that they can bring to our own SAP offerings, we've started to look more holistically at that partnership and say how now can we truly transform that customer experience of working with SAP and Teamcenter by giving an even richer integrated experience of the two solutions. So the things that we're looking at now are what [00:09:00] we call kind of close loop processes true end-to-end process level integration. And I don't think maybe when we started this journey that was quite where we envisaged we would kind of end up. So I would say it's a continually transforming partnership. We're always looking for opportunity to excite our customers. But we also have to temper that we do still sell competing products in many areas. And the term I like to choose to use is I call this term frienemies. On one hand we obviously are very collaborative and you know the partnership and spirit is definitely there to work together. But we also recognize as grownups that sometimes we are gonna compete and we have different points of view. And I think over that past couple of years we've really established quite a good working practice in knowing when we're gonna be friends and maybe when we're gonna compete. And, for me that's really where we are right now. I think we have reached a point of maturity of our integrated portfolio where what we sell, how we sell, it's become quite clear to both organizations and certainly from my point of view, I can [00:10:00] see only nothing but goodness coming, for our customers in terms of the next steps we undertake.

**Arend:** Gareth, let me just briefly add, that's exactly also the customer feedback we did get from the early days on of that partnership. So, customers were really

giving us direct feedback, positive feedback, saying, you know, guys, this is exactly what we are expecting. You know, with Siemens, bringing that engineering competency to the table and SAP being the end-to-end process, master of end-to-end processes. That partnership is spot on. We do offer customers choice in areas where we have overlapping, capabilities and that is highly appreciated as well.

**Sin:** So if I understand it correctly, then you are bringing the partnership of both like the best of SAP and the best of Siemens together. So, and then in terms of customers, what is actually the value of this whole partnership. Let's say the end consumer, if the end consumer can recognize this.

**Arend:** Maybe let me give it a start by talking a little bit, obviously out of my [00:11:00] development perspective, right? And then, of course, Gareth, you're gonna add the, customer dimension to it. Value is, really about enabling true adoption and true innovation. It's not just about the idea. It's not just about me and Gareth talking about the potential. It's really about delivering tangible solutions which help customers to unlock that value, which we are referring to. So what we did already two and a half years ago is, we said integration is gonna be key to unlock that value. What that means is that for the first time, you know, with us and Siemens coming together, we had the opportunity not just to tackle integration from a pure interface perspective, here's a data structure, there's a data structure, let's match that as good as we can, and off you go. That's not, a sustainable solution. So instead what we did together with Siemens is we set together, you know, starting from the very simple processes, for example, for make to [00:12:00] stock type of manufacturing scenario and ran through the end-to-end processes and matched what is an item in Siemens Teamcenter and against the material in SAP. And looked at the process end-to-end, with all its complexities and, know, also questions which a lot of our customers also need to tackle with. And what that does is that instead of, like I said, providing a simple interface, we really strive for developing and we did develop, and deliver end-to-end out of the box processes. That's our ambition, and that's what we delivered. And, we do that, with the cloud qualities, which are crucial these days, meaning, they are available also out of the box, preconfigured. SAP has something called PC sets, and the corresponding counterpart on Siemens is a startup package. We did that with a common domain model, which describes how, for example, items and materials, fit together. And with that, you know, coming from an implementation [00:13:00] perspective, we turned something which is very often a project solution into a product, into an out of the box

capability. And that helps our customers to, at the end of the day, decrease , total cost of implementation, total cost of operation, you name it.

**Gareth Webb:** Add to that by saying that on the basis of all that process optimization Arend just described there. I always talk about the the top line benefit, bottom line benefit and then the green line benefit. So from a top line point of view, obviously the more efficient an enterprise is, the more product variation we can get through, the more product diversification the customer can start to enable. That obviously increases revenue. From a bottom line point of view in the optimization of processes we start to remove waste plain and simple. You can understand the impact of change management on your stock and your inventory. And then you can obviously make changes to your process to minimize that cost and then that obviously has a direct to [00:14:00] consumer benefit in terms of a lower cost of production, potentially higher profitability for the company. But you know that profitability can then be passed on. And then from a green line point of view clearly sustainability is the major topic, and if we are optimizing our processes and we are making decisions about what materials we choose to use. Maybe there'll be a bit more time within that design process to think a little bit more about that sustainability angle.

**Richard:** Can I ask another question around sustainability? I mean, we are seeing, the different regulations come out whether it's the plastics tax, well, the plastics tax in particular is a, great example from a, design perspective. What can SAP do to help companies address situations like the plastic tax and the design process?

**Gareth Webb:** Now I absolutely love that question and I love that question because it plays absolutely to the strength of what we've developed. We're now in a situation where we can take the richness of product definition information that exists within PLM. And we can [00:15:00] connect that in an integrated capacity to the capabilities that exist on the SAP side. So for the first time I think it is now possible to have almost real time information about the costs of goods maybe even before they're produced. Because we've got a richness of information enabled by this integration that Arend's team have developed. That's never been possible before. So as part of the product design process, passing data from PLM to SAP enables some of the SAP capabilities for product compliance, the responsible designer capability that we have on the SAP portfolio and obviously the product lifecycle costing solutions that we offer. So we get PLM data much earlier on in the design process, much richer, connected to the SAP capabilities and we can inform the design processes in

terms of what their costs are in terms of green cost and the cost of sustainability. So, brilliant question.

**Richard:** I love the fact [00:16:00] that it's not just the financial cost. It's the the environmental cost that we're tracking as well.

**Gareth Webb:** Absolutely.

**Richard:** Okay. So, maybe, I think this is probably for Arend but I'm not sure which release we're on in the partnership with Siemens and SAP. But can you describe some of the customer benefits of the latest release?

**Arend:** Absolutely. Of course. You know, let me start by talking about the features and related benefits attached to it. But we are on release three. And we followed a sequence which we defined jointly with our friends from Siemens, where we said in the first release. It's kind of the, some called it, the bare metal integration where you feed data from Teamcenter to SAP. All the usual suspects. The bill of material, the related documents, managing change, for example, triggered from the engineering side of the house, and so on. So that was kind of the core integration, which customers already started using as an out of the box capability to really down the operational costs and, get closer to a standard solution. And with that participate in the innovation cycles. What we then did in the second release, which was [00:17:00] available since mid of last year, was that we introduced, first of all, the concept of bidirectional exchange. So change, and change requests and problems don't just occur and are addressed in engineering, right? It's crucial to really collect feedback like Gareth earlier, also described at all sorts of places across the enterprise and the network. So change and change management processes must be bidirectional. So that is exactly one of the capabilities which we introduced with release two and latest release available since, end of last year, release three of the integration. By the way, the product from SAP perspective is called PLM system integration. And there's a counter piece on Siemens site, which is the Teamcenter gateway for PLM system integration. Those are the two products. So with the release three we went one step further and for example, introduced advanced. And, that is something I I love, for example personally, you know, [00:18:00] it's per personal favor. The very advanced variant configuration capability. So products are very much personalized these days not in terms of color and what they can do and what have you. And, if engineering starts collecting those and describing those variants, and the attributes attached to it and the rules along those rules which those variants are actually configured, why shouldn't I use and transfer that data also into the business world, so to speak, to use it in order management or when creating work orders for my manufacturing purposes. And that is for

example one advanced capability, which we introduced with latest release, as well as for those customers who are in complex assembly, imagine a company in aerospace and defense, for example. They often use a component from SAP, which is especially built for that purpose called, SAP PEO or production engineering and operations. And that integration is as well, [00:19:00] enabled with our latest release and we are working with many customers in that context, who really, I shouldn't say desperately, waited for it, but, expect a lot of benefit by again using that direct connection. And maybe before, Gareth, you add your perspective here. Last part, not least, I also love the data federation capability. So the possibility for an engineer, for example, who's working in his Teamcenter environment to directly access SAP data without transferring data obviously, and the other way round. So that is also, I believe, a very powerful capability which is appreciated and has direct benefits for the user.

**Richard:** I would imagine that variant configuration as well as, I mean you talk about integrating throughout the end-to-end process, but it becomes really important on the sales side when customers are putting in orders online. You don't want to put them a configuration that you can't make.

**Arend:** Yeah. And you know, it sounds simple, but it's so important to have accurate data available to ease the process of defining those variants and eliminating errors in those [00:20:00] configurations, right? That is a key challenge for our customers. And by handing that data over automatically and by reducing possibilities to introduce errors in those configuration rules, quality and at the end of the day, customer satisfaction increases.

**Sin:** Gareth, do you want to add something?

**Gareth Webb:** well, I mean, just to echo one of the points there, the beauty of this integration to me is in its difference to what's gone before. As much as it is about the features that we enable. He mentioned this feature around data federation. For me this is a kind of game changer in terms of the way a customer should consider how they implement the integration. I speak from experience many years trying to implement these integrations and the approach that was always taken is well let's send as much information across the integration as possible whether we need it or not because at some point, somebody might want some information. The second you do that it's outta date. It's not real time. You start to make wrong decisions based upon static information. What Arend just described there is a mechanism where now actually the [00:21:00] customer needs to consider what information do I actually need to support my process. And therefore what information should I retrieve at points of decision making. That's completely different in terms of an



approach and again, it's gonna enable a higher degree of efficiency and optimization because rather than then subsequently and check or log into another system and check the data or speak to somebody else in a different department. We've actually facilitated a dynamic kind of query , that gets you and retrieves that information immediately. Now one of the other things I do want to pick up on and maybe the question's gonna come later on, but what we've described there is a set of advanced capabilities in terms of this integration . That does not mean that this is not applicable to every organization and only applicable to those that have complex integration use cases. We've taken big steps in terms of providing out the box templates, quicker delivery times, trying to remove some of the complexity around these integrations to put in place. And we feel that that's gonna be way more [00:22:00] attractive to smaller enterprise as well as the larger enterprise that are gonna be interested in all of that wonderful feature and functionality. We still enable really rich quick to deliver set of features and functions for any business. And non-functionally it's all deliverable through what we call the cloud delivery model. So hybrid cloud delivery models you're an on-premise PLM or in the cloud or even public cloud later this year SAP environment and vice versa. If your PLMs in the cloud we can also leverage those types of integration patterns. So a tremendous amount of functional and non-functional capabilities.

**Sin:** Thank you. So, you, said there are a lot of incremental values that's coming, that's plant, which should come in the future. So can you maybe just explain some of those incremental value that companies can see?

**Arend:** Maybe let me, talk a little about the roadmap and then, Gareth, I'd be keen to also hear again, your perspective on that. From a roadmap perspective, what I personally experience right now is that there are a lot of beautiful [00:23:00] startup companies, green, I call them greentech. I don't know whether this is an English term or not, but companies which are, very engineering centric do new stuff, right? Why shouldn't I put, for example, hydrogen into an aircraft engine or how to use that to power a ship or think of those type of companies which are on the one side very clear that they wanna go, and use ERP as a service. But since they are so engineering centric in parallel, they of course, are heavy users of product data management capabilities, for example, SAP Teamcenter by Siemens as we call it. And, for those, the next big thing, and obvious next step is to make the integration available for S/4Hana public edition, right? That is one capability which we are focusing on in all the strengths which we just described. The end-to-end processes, the ready to run capability and so on play a major role in that and will enable that. And the other next big thing which we are [00:24:00] already working on with a lot of customers is transferring what we just discussed, from a product perspective to an asset perspective. So, imagine you would run, let's

say, a refinery, or build a huge, power plant with green energy. You know, how do I actually transfer the engineering data related to the asset into my enterprise operations. We refer to that as capital asset life cycle management. So that is a, one of the other major development priorities, where we also would expect that customers gain a lot of benefits from having that immediate high quality data, engineering data available for their following processes to make sure that they can run the plant as efficient as possible.

**Gareth Webb:** I just wanna pick up on something that you said there, cause I hadn't really thought about it in that context before, but I think you're right. You know, maybe 10 years ago I think it was we started to hear this term about industry 4.0 and , the concepts there of the [00:25:00] digital twin and obviously the operational life connecting IoT data. I think , know, you, you really hit upon a point with all of this , impact that we've had on our, our planet. And I don't wanna bang on about sustainability , but it's a very big problem right now.

**Richard:** Everyone should bang on about sustainability, Gareth.

**Gareth Webb:** The point is we are seeing companies who recognizes that maybe their processes are a little antiquated they need to move faster. And that's what we are starting to see. We we're starting to see spinoffs other companies, um, battery manufacturers space. How can we move quicker with cloud. How enable those, uh, more innovative, more iterative process. Now with our, partnership with Siemens and, and the wonderful integration that Arend's team. And the fact that we can distribute all of these solutions within the SAP price list, in effect, , from a one solution, one vendor perspective, we're actually at a point where we can well, we can put these tools in place quickly for companies. I think I'm right in saying that probably the only company in the world that has probably the best in [00:26:00] class PLM system, the best in class ERP system connected, and available from a single vendor.

**Richard:** We've come to the end of the podcast. We're just over half an hour in now and I ask everyone who joins the podcast to this question, but as this is the future of Supply chain podcast from an R&D and engineering perspective, what do you see the future of supply chain?

**Gareth Webb:** It, It's maybe a simple answer, but a complex question. For the last few years, supply chain problems have come about through obviously different reasons. What we've seen is a greater degree of collaboration occurring in our customer base. But what I think is gonna happen next is we're gonna see much much more collaboration across enterprises. And what that brings with it is the need for connecting design and manufacturing processes. And that again

is where I see opportunity um, as the custodian of the, the product information and with our ability to connect into multiple PLM system capabilities like our BTP solution [00:27:00] portfolio where we can even now begin to connect manufacturing processes between different systems that for me I think is the next generation of capability that we are gonna need to start to look at and introduce because that is really gonna add a reduction in supplier chain complexity, but at the same time as a allow and support an increase in product that to support need consumer demand.

**Arend:** As we discussed here in, coming from different perspectives, but future of supply chain for sure is gonna be more circular, or greener, so to speak. And to enable that it's fundamental really to understand, the product with all its time across all its dimensions as we discussed earlier. If you wanna run circular, you need to have that solid understanding of the backbone of your enterprise, right? what we discussed today, I believe is so nicely fitting into that overall future of the supply chain.

**Richard:** Well, I'd like to thank you both for a great conversation. And I'd like to thank everyone for listening. So please mark us as a favorite and you can get regular updates and information about future episodes. But until next time [00:28:00] from Sin and I , thank you for discussing the future of supply chain.