Episode 7 Evolution of Integrated Business Planning
Length of recordinTC: 39 minutes

Transcription notes

GB:	Gautam Basu
TC:	Tanguy Caillet
wo-	an unfinished word
(word)	an uncertain passage in speech or an unrecognised speaker
(-)	an unrecognisable word
(--)	unrecognisable words
[pause 10 s]	a pause in speech of at least 10 seconds
, . ? :	a grammatically correct punctuation mark or a pause in speech of less than 10 seconds

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[music]

GB: The Operations Leadership podcast with Gautam Basu provides insights for today's business leaders on creating value through operations improvement, process excellence, digital innovation, and organizational leadership. Our guest for this episode is Mr. Tanguy Caillet. Tanguy is a subject matter expert and a very experienced individual with two decades of experience in the field of supply chain planning, more specifically sales and operations planning – or S&OP – and integrated business planning – or IBP. He is currently the senior vice president of o9 Technologies, which is a supply chain planning software solution. And Tanguy, during the course of his career has consulted with and advised many different leading global organizations around this topic of supply chain planning. So in this episode, Tanguy will go into depth about the process, the technological solutions, and the organizational components around IBP. And we hope you will be able to get some insights and glean some knowledge from Tanguy during this episode. Thank you and enjoy.

[music stops]

GB: Hello, Tanguy, and welcome to the Operations Leadership podcast.

TC: Hi, how you doing?

GB: Very good, very good. So Tanguy, (I was wondering) if you could tell me a bit more about yourself and how you got interested and involved in supply chain planning, more specifically S&OP, and integrated business planning.

TC: Yeah, so as you could imagine (--) [01:55] probably a long story, but I will definitely try to make it short, but I think – in the short way, right? – I started to work in 2000 through warehouse management, software implementation, and barcode and labelling, so connected to ERP, so I was implementing (the systems) and at the time, I was also looking for the next job, and I was in UK, and I looked for, OK, what should I do, and the word supply chain management (came out, right)? And in my studies, I only had one day around MRP, if you would think about it. So MRP planning (--) master degree study, only day (in planning). But anyway, I (--) supply chain management and I thought: wow (--) exactly the topic I'd like to work with, and a planning topic looks complex, but also the idea of connecting the dots (end-to-end) in the supply chain felt appealing. So I (--) [03:02] chain management in a company called (-), which I worked for for 11 years, and then we got acquired by (-), and then I moved into (--) where, at the end, I was leading the (--) and that's where we met together. So planning has always been, then, a part of me, so to speak, and I think it (--) of trying to solve complex problems (--).

GB: Yeah, it's very interesting, so I mean, your genesis was around the warehouse management systems and processes, which is more considered execution, then you moved more towards the planning dimension, so –

TC: Exactly.

GB: Regarding planning, operational planning specifically, S&OP or sales and operations planning, or IBP, integrated business planning, this has been around for a little while now, so could you tell us what your view of the evolution – in terms of methods, approaches, processes, and technological tools – you know, I would say, in the last 5, 10, 15 years, because this has been around for several decades, so what is your view, since you've been so close to the planning dimension? How do you see this evolution?

TC: Yeah, I think that's (--) [04:24] question, because we are seeing so much changes lately, and I think technology is playing a key role, and (--) is to look at it from a process perspective. So you know and we know, S&OP has been there for a long time. And (--) pushing this for 30-40 years. And the idea (--) even from the beginning of S&OP was already having this capacity to align a company around sales, marketing, supply chain, (of course, so that means operation, logistics, and financial side). That was already the original idea, but (they) were probably too soon and innovative for (their time). And (--) kind of became a supply chain topic (--) topic at first. So I think people (--) supply chain people realized I need to know about the (--) so that I can actually (--) [05:37] and somehow not be late for having product in stock when the sales guys are (--) back and then say: OK, where's (--). So I think S&OP started very (--) way, let's say, but still, with the ambition to align the company (--) has been with us since a long time. I've been speaking with quite a lot of (--) and, ten years ago, they decided to push for IBP. And I think the reason (--) IBP was to try to get away from (-) being a supply (--). I mean, they understood

that, (actually, only the supply chain community pick it up). So then IBP was (--) to educate companies around the need now to add (-) marketing through the (--) review part and of course the demand review part in a much more accountable way. And then, bringing also the (financial community) in through the integrated (--) [06:48] review part, of course. And to be able to evaluate the plan (--) financial impact it has on the company. So kind of really linking strategy (--) supply chain analysts call it operation tactical planning. So that was, I think, the journey that we went on from a process perspective.

GB: Yeah, so if I understood you correctly, Tanguy, I mean, of course, integrated business planning, there's more the financial alignment in financial planning that gets incorporated in this, let's say, cross-functional sales marketing operations, you know, logistics, et cetera, but incorporating more this financial reconciliation. So you mentioned that that was already about ten years that folks like Oliver Wight were doing. So do you see now in the, let's say, the last few years, do you see another evolution, I mean, with (some of the technologies) [07:53] or the demand sensing with some of the real-time or near real-time information being incorporated (to demand sensing), do you see that also as kind of an evolutionary perspective as well?

TC: Well, (--) the ambition of doing IBP is easy kind of to write on a book. But to make it happen in a company, of course, there is a lot of challenges. What (--) fact that the collaboration aspect, the going across the siloes, between the different functions of the company, that has definitely evolved, and a lot of companies (have maturity) now to be able to work together. But I think what happen is, what is happening still now is the biggest challenge for doing (an IBP) process is technology. And today, many companies, most of the companies are still ill-equipped to actually correctly run the IBP as per (the book is saying) [09:05]. And the reason is that the siloes now (--) the head of people, I would say the (--) data. And companies have built over the years a very (-) landscape on the (--) which basically means (--). And that is still there today for most of the companies. So the challenge today (is like) guys are like, hey, (--) marketing (-) supply chain, I'd like to meet together, of course, but (--) plans, I want to understand (--) between us. And then what's happening is people then spend days in Excel (--) database together, so that everybody can speak about the same thing. So I think (--) realization which is now pushing companies to reevaluate their (-) landscape and think: how do I enable IBP for real now? Then that means I need to be able to do commercial planning, supply chain planning, and financial planning in the same data model, same platform. It sounds ambitious, but I believe… I mean, and then, with o9 solutions, the company I'm working with, we strongly believe that it is reality, possible, and that's where we are all going, and I think that's where the next generation IBP – or we could call it (-) [10:40] business planning – is something that is becoming (reality today).

GB: Yeah, so I mean, you know, of course, data and having the data quality and having the one plan moving forward across the different functions, it's a powerful

ambition, and so, you know, hopefully, from a technological perspective, the data will be available, so that the company can actually do this one plan, and everybody being on the same page. You mentioned this o9 Technologies, so I understood that this was founded by one of the OGs of supply chain planning, Sanjiv Sidhu, so could you tell us a little bit more, 'cause he was with i2 Technologies, and I know you and I are familiar with implementing i2 solutions, so can you tell us a little bit more about o9 and what you're doing there?

TC: Yeah, I know, absolutely, and I think – with what we just discussed – what Sanjiv (did) moving from (i2 to o9, and he's been) basically part of that journey. And I think that's where we are seeing Sanjiv being a very visionary person, and I would like to add Chakri Gottemukkala, our CEO, who has been basically also the brain, let's say, behind the technology – of course, with their early team of the o9ers. So what (--) [12:03] Sanjiv basically (--) vision of an integrated planning landscape (of the) capacity for companies to plan their functions, irrespective of which functions – by the way – into a one platform. That was a vision to enable really breaking the siloes and creating efficiencies in decision-making. (--). Now the decision for (switching is) really, I think, Sanjiv recognized – and I kind of speak for him, but this is the way that I interpret it – is he recognized that the technology (--) from platforming, from data model, database, and (-) and user interface was not anymore good enough to be achieving the vision. And he had to basically start from scratch again and re-platform everything. And I think the key thing is (-) 2009, it was basically the time when there was enough maturity in big data, cloud computing, AI (-) [13:21] open platform concept. I think that was already ten years down the road where open source was starting to (--) many other concepts, then you also kind of knew that (he had to) reinvent what a data model is, and go away from relational databases. And relational database, which is the foundation of the cubes and basically all planning systems today, I would say, except o9, is still using (the same concept), has strong limitations in terms of scalability, flexibility, and (extensibility). And I can spend a bit of time behind explaining (--). But the key thing was to innovate around graph databases and to combine graph and cube databases together to take the advantage of both technologies and make a new technology (--) that's the innovation, the patented innovation that Sanjiv, Chakri, and the early o9ers team actually worked for five years. So o9, for five years, was basically a development house where we built the system, spent time to make it cloud agnostic, so that means (--) [14:41] recognition that our customers would not want to be locked (--) architecture. So (you) need to basically go to a customer and give him the liberty to choose between Azure, the Google Cloud, or between AWS (--) and that we know that our customers (--) strategy today. And so the only question they ask is can you fit in into My Cloud, right? And the answer (from an o9) perspective is yes. Because that's the only way you can scale, right? Because they have (large contracts with) (--) and they want to be able to go as big as possible when it comes to data sizing and computing power. So o9 (--) business planning system (--) platform, (sorry), which is open, that means that can connect to outside data (--) data, (but can run) any types (--) we have (--) but we know that customers also have (-) that they have been working for many

years, and (that fits very well) (--) what you have done is not good, let's just go to mine, even though mine might not be as (-) to your business problem, (and then we develop it) [16:10], which is not a good answer. So basically, flexibility to customers to create also their own (-) by… because every customer has something special. They are running their company, their operating model in a different way than others, even if (they are in the same industry). So also coming to them (--) that's my template (for food and beverage company). And because X, Y, Z have it, then it's good enough for you. Now what you see in today's situation – we are in 2022 now – is (only channel is here). Going (--) B2B, B2C, they all have now different flavours, right? Companies (--) constant state of motion (--) COVID is (another case) where the consumer base shifted very fast away from traditional retail channel to ecommerce, because people could not anymore go to the retail stores. So many companies (--) [17:20] (permanently), and now we have the (proof). So you cannot get your (IT) solution, your platform in a kind of (--) basically being something that is absolutely not flexible. I think that's over, and that was a recognition of Sanjiv and the team 10 years or 12 years ago now, that a new system and a new platform needed to be created (--) situation. That was very visionary at the time, and I would say o9 is basically the (APS 2.0) of this market (--).

GB: Yeah, that's very interesting. I mean, it seems to me, as you said, this flexibility, this scalability and (extensibility) is factored into the o9 model. And you were mentioning about also the rise of, let's say, ecommerce and online platforms. So does that make demand and supply matching easier or more difficult?

TC: Very good question. Actually, (--) [18:35] more difficult (--) require a new (set) of technological capabilities to help you do that at scale. So let me get to the point, right? So if you go to ecommerce, you individualize the (orders), basically. So that means, before, if you would sell to a retail channel, classically, if I am an industrial company, I can basically sell (a big order) which is going to represent, (I don't know), the next two weeks of consumption of that (retailers). And I'm sending some (--) (of products). And this is the job of the retailers to put it into the stores, and individual consumers go to the shelf (--) product, and that's it. Now if you imagine that the same consumers, (-) individually (--) website, and you need to deliver each of them individually. So (--) [19:36] you basically hand yourself into (--). And basically, the challenge is you have to match each single (orders, so that means) (--) planning, and then you have to have the capacity from your (IT) infrastructure to deal with the workload, which is completely different as well from a planning perspective. So that is the big shift in terms of companies realizing. And one of our key customers, Nike, is basically going through that journey, and actually (--) two weeks ago (--) and it is amazinTC: you have all the products there, it is very easy, you get delivered fast (--) new age, right, but if you don't have the IT capability to deal with that and the supply chain configuration, of course, all those things come together, (--) not being able to realize that vision.

GB: That's very interesting, and I think the (whole) ecommerce and online channels, they're here to stay. I don't think they're going away. But maybe I can ask you a question, I mean, regarding just the business environment: it seems that businesses are facing more complexity and uncertainty. If we look at things like global pandemic, geopolitical conflict, inflationary pressure, trade disruptions, labour shortages, et cetera, how do you see these items being taken into account from a planning perspective? Are you embedding things like supply chain risk management into the overall planning – let's say – framework? How are you incorporating these, let's say, uncertainties in planning?

TC: Yes, so (that is) [21:40] one of the challenges of the coming years, right? So (--) solutions over there, and first of all, supply chain risk is starting with the capacity to connect to (values and many source of) data, which are (external). So there is… good thing was also the (-) movement (--) sustainability and risk are all kind of connected together also with supply chain. And people are looking for, OK, what is going to be my certification of origins, right? (-) labour. Things around, of course, (ports are being open), I mean, we know in the US how difficult the (port solution and the port) situation has been in California with the bottleneck around the containers, et cetera. So the (flooding risk) (--) in the future, right, it's still a long-term situation, but you might have also very short-term (disruptions into your) supply chain. So there are many, many different risks that are there. The key thing is you need to have the capacity to take those data in and connect (--) [23:08] supply chain. And I think that's (one of) the biggest challenges from a technology perspective. You have your own data internally in your company, and then, what you realize iGB: OK, (--) information is out there, but how do I (--) information to my (internal data), because the only way that I can get insight about the impact of (external risks) to my (internal supply chain) is to be able to (--) making those products that are basically (--) Finnish good over here (which then) impact customer ABC. So unless you have the capacity to create a digital twin supply chain, let's call it (extended) supply chain, which goes even (--) then you would have a very (hard time) to connect the (dots) and to make sense of those data. (Because, so the difficulty number one is get the data), difficulty number two is connect those data between themself, and then to (you, own) supply chain. Difficulty number three is, inside your own supply chain, make sense of those risks, and then, being able to take decisions (and understand impact) financially for you, and down to which market and customers which is at the front-end of your supply chain. So that's how (--) [24:39] account, but I think the other key topic is scenario planning. If you take it from a scholar perspective, (all those risks and variabilities), one could say: hey, we need to (--) supply chain. (--) supply chain, of course, makes a lot of sense. Now, how do you apply (--) planning system? Pretty hard, right? What you can do is you can say: OK, let's vary the probability of an inventory (--) probability of a lead time to move from 5 days to 13 days or whatever. But (inherently), what's happening (-) you would like to vary those different numbers (--) lead times, this yield, this demand variability, and you would like to create a scenario for each of them, because that's kind of like a Monte Carlo simulation, right? You want to (test all those

scenarios) and then understand how much your supply chain is going to vary inside the boundaries or outside the boundaries you set yourself, right? (From an) operational readiness. Now (--) [26:02] large company, (global one), you probably, we are reaching (--) in terms of… I mean, you cannot make thousands and ten thousands of scenarios and then compare them, right? (--) what we can do today and we are (seeing it with our) own customers, we can already today automatically generate, let's say, 10, 15, 20 different (supply scenarios) to 10-15 different demand scenarios (--) we are in a place where… (We came in a place) where today companies could (only do one demand) (-) and then one supply plan (--). And today what we can do is we can get to 20-30 different demand plans (that can be matched with) another 20 different supply plans, and then, you have the capacity to understand: OK, what is the right combination between those different scenarios. So this is today where, with our technology, we stand. We could (--) [27:08] size of your cloud and how much money you're willing to spend into the cloud to have then hundreds of scenarios, right? Because that's the limitation we are talking about now. So (having a) long discussion on this topic (--) dimensions and aspects that need to be taken into account.

GB: Yeah, I know, it's very interesting. I mean, obviously, you're a very experienced guy, Tanguy, and you've dealt with many different global customers who are engaging in the supply chain planning, (demand and supply) balancing, so what would be kind of your advice or guidance for companies that are just kind of getting into the journey of supply chain planning, maybe they're, let's say, noviceGB: what would be kind of your advice to them (--)?

TC: Yeah, this is interesting, because we are seeing and I'm seeing – let's say – a group of companies which (--) [28:13] first-timers into the supply chain planning technology world, right? (It sounds) crazy in 2022, (but it is also) reality now. And I think what is happening in 2000, let's say, i2 Technologies was the first company in the '90s to really get into the planning stuff, and I think the wider adoption of planning systems started in reality in 2000. And we had a wave of implementation of the early adopters from 2000 to 2010. And then, those kind of (--) next wave of replacement. So companies (--) 10-15 years, and now they are kind of like, OK, now what's the next move? At the same time, I'm seeing another side of companies where they never (jumped on that first wave of planning systems). For various reasons. So (--) [29:17] planning function of their ERP system. (--) they have some kind of (-) capabilities. So (--) now it's time to jump ship and to go into planning solutions. What's the right advice (--) replacement solution (--) new first-time situation, the problem is (--) same, right? I think the first thing is you need to look for what is going to be a future-proof planning solution capability. And what do I mean by future-proof? I mean it has to be a platform (and a) solution that is going to (groove with you as a) company. So I'm going back to the triptych of scalability, flexibility, and extensibility, so what do I mean by that? Flexibility means I can change the data model alongside my evolution of my operating model. And I think the best example to explain this to the audience iGB: when companies went from

single channel of distribution to (--) [30:43] distributor business, and then (--) (ecommerce started). (--) of channels. So when I went (--) many companies (--) old planning solutions, because the old planning solution could only do retail. But they could not (extend it) (--) flexibility to modify (--) add additional data dimensions or to add new data or new work flows, right, so that (--) in the same platform. So extensibility and flexibility is all about evolving the solution with the (--) model of your company (and the fact your company is) growing (--) also the company might be (--). So companies (are living organisms, and the solution) needs to go with it. (--) scalability is a consequence of flexibility and extensibility (in that) you have to be able to continue to run at scale with more and more data flowing into your platform. So that means that if I want to connect, (we spoke about the) (-) risk, (we're gonna) get (--) [32:05]. If I look at demand sensing, we talked about it quickly, but demand sensing is all about bringing (external) data and (drivers) from the demand side, (so my consumers) or my retailers, and then, (use this to) make a better forecast about what's going to happen in the market. All of those data (points), I mean, (explode the database size, right)? And if you have not accounted for that in your technology landscape, then actually you get into (performance issue), and then you (--) because maybe during the pilot it looks like (--) click a button and (--) time to get your coffee and come back. And when you do planning, it's not possible, (you cannot do that anymore). (--) consumer experience we have (--) everything is available on one click. (So that is highly frustrating) for the new generation of planners as well. So (your solution needs to be) future-proof, it has to be open. Your data scientist needs to be able to use any data in your platform. You need to be able to programme in (-), to code in (-) Python (all your) data scientist (algorithms you'd like to) [33:29] run in the platform. You need to be able to bring (--) in depending on the (case) you're trying (solve for), because the one-size-fits-all, of course, doesn't work anymore. And then you have (--) user interface, because (--) need to be able to change it, to evolve it, you need to be able to create new output, and sometimes we have customers which are not using our UI (and saying): I want to have a one unified UI across all my systems in my company, so let me take that (path) as well. And you need to give that flexibility to your customers. So many, many capabilities needs to be looked at (as being) future-proof, and I think the solutions which comes with (--) customers sayinTC: no, I just want very simple out-of-the-box, you know, (standard et cetera), and because I am a very mature company, and that's good enough for me for five years, and then I'm asking them: but why would you spend so much time implementing a solution which you know that will only carry you for five years, and then you will (start again) [34:43] the same process in five years' time, why would you do that?

GB: This is very interesting and very insightful, Tanguy, so I want to thank you for your guidance on supply chain operational planning. So if our listeners (--) any questions or want to get in touch with you, how would they – let's say – get in contact?

TC: Well, (--) and c-a-i-l-l-e-t, and of course, I'm… o9 Solutions, you can find me easily over there, so happy to take on questions and (--) discussion. I'm sure there are very different (--) out there, but I think, with the dialogue, we can definitely look at, OK, what is best for all our customers and clients who are looking for a solution that will help them mature into the planning function, and give them a competitive advantage. Because I think today, I mean, (--) [35:49] this is supply chains against supply chains, as a competitive story, but yes, it is the reality, and I think planning capability, with the right platform, the efficiency you can gain out of it by taking faster decisions, better decisions, which are more aligned to your financial objectives, we are already (seeing it) with some of our customers that are (starting) to realize (the gains), and they are definitely taking an edge (against the) competition. So to me, there is a strong perspective today where companies which are early adopters of new planning solutions are going to (-) competition, because they will be able to operate in a more efficient and nimble way (--) react faster to the type of (--) COVID, right? And we saw companies which blossom (through the changes), and they could adapt, and then we saw companies which just could not. And I think that is kind of a test proof that is showing which companies are ready for the next challenges coming and which are the ones which will still struggle, because they have not been equipped processes, organization-wise, people-wise, and technology-wise.

GB: Wonderful. Great stuff, Tanguy, thank you so much for your insightful advice, and thanks again.

TC: Well, thank you (--) [37:25] opportunity to speak with your audience and definitely looking forward (for another) opportunity, I think it's always nice to be able to (--).

[music]

GB: That's it for this week's Operations Leadership podcast. We hope you enjoyed it. And until next time.

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