The Future of Supply Chain Podcast

Episode 2: Servitization: Make Services a Vital Part of Your Business with Patrick Crampton-Thomas

Richard Howells: Welcome to the Future of Supply Chain podcast from SAP. My name's Richard Howells. I'm the Vice President for Thought Leadership for SAP's ERP, Finance, and Supply Chain Solutions, and I'm joined by my co-host Nicole Smythe. Nicole, please introduce yourself.

Nicole Smythe: Hi everyone. I'm Nicole Smythe and I'm a blogger, marketer, and now podcaster in the supply chain area at SAP. So, today we're joined by Patrick Crampton-Thomas. Welcome Patrick. Thank you so much. It's great to have you on. If you could just give, you know, a quick moment to introduce yourself to our listeners, give insight into what you do, and how you've gotten to where you are today.

Patrick Crampton-Thomas: Yeah, sure. So thanks for inviting me to join and thanks for that introduction, Nicole. So, yeah, I work for SAP. I am responsible for our Asset Management and Service Management line of business, in what we call Solution Management. So, I've been at SAP for about 17 years or so. I have a background in supply chain, and, I guess more recently in Solution Management. I've been looking after some of our supply chain products, also our PLM products, and more recently our Asset Management and Service Portfolio.

Nicole Smythe: Awesome. Well, today we're going to be talking about servitization and how to make services a vital part of your business. So, let's start with the basics. You know, it can be a new topic for a lot of our listeners, and even I, myself, I'm a little unfamiliar with what services really are. So, if you could explain, in your terms, really, what is servitization?

Patrick Crampton-Thomas: So yeah, Nicole, the most common example we have in the U.K., right, is an interesting one, that I cannot ride an electric scooter in the U.K. legally. If I want to use an electric scooter, I have to take one that is offered as a service, right? And that's kind of a really good example of servitization, where a product is offered to me as an end user or consumer, but it's being offered purely as a, you know, pay-as-you-use service. And that kind of product as a service is one example of servitization.

It doesn't have to always be that way, though. I mean, what companies are also doing is they are looking to differentiate their products. I will sell you a product, still doesn't have to be as a service, but what I will do is wrap value-added services around that product. That's kind of another approach and the end result to those organizations is to try and generate more revenue through value-added services, and to try and differentiate themselves through those value-added services.

And of course, I benefit as an end user of the equipment, of the assets of the product, as the scooter or whatever because it's just made so simple for me. So that's how I would kind of summarize what servitization is.

Nicole Smythe: I remember when I was on a trip one time, I saw those exact scooters and I, at first, didn't know how do you use it? I was like how do I get this started? So, I think it's great, you know, to see it at a consumer level and then we can also now see it at a higher level as well in corporations.

Richard Howells: I would think also, Patrick, the other thing of, it's great that you can use those scooters as a service, but the scooters have to be working when you go and use them as well. And is that part of the whole service management component?

Patrick Crampton-Thomas: Yeah, I mean that's exactly right because, you know, it now drives actually a different set of business processes and an increased amount of collaboration actually between the user and the provider of a piece of equipment or an asset. So yeah, it is changing, you know, different ways of more working, more collaborative ways that people need to be connected, so that the service level that is being delivered, you know, that is being requested by me as a user, on my app perhaps, but actually is being monitored by the provider of the service, also, through their capabilities and software and whether that's monitoring with IoT or whatever, the battery levels, et cetera. So yeah, it's definitely totally new ways of working.

Nicole Smythe: So now that we, you know, have a better understanding as to what servitization is, why do you think it is so important for businesses to really focus in and hone in on this? And when you're speaking about these businesses, what industries do you really see kind of tapping into this as well, and can really benefit and utilize services?

Patrick Crampton-Thomas: Yeah, I already mentioned, I think one of it is about how do providers of equipment differentiate themselves in the modern world? And adding services to their product, or even selling their product as a service is one way to differentiate, and therefore compete, and therefore grow market share, but also actually grow more revenue.

You know, we have a customer who makes tractors, right? There is no more traditional business than making and selling tractors. This is in Latin America. And, actually, now that company makes, I think it's round about a third of their revenue, not through selling the tractors, but selling services on top of the tractors to farmers, right? And, so that's kind of one aspect. Of course, that's very relevant to any sort of manufacturer of industrial equipment, IM&C Industries, and so on.

But then you need to flip the coin to the user of those equipment - so operators of assets in perhaps chemicals industries, oil and gas, and so on. You know, what they care about is they want to have an asset that runs cheaply, and therefore control costs. They want to have minimum downtime and best performance from the equipment. And one way to do that is to actually wrap service level agreements around that equipment and buy it from a manufacturer and have the manufacturer or supplier or service partner actually monitor that equipment and provide that service level. And that can be a simplification for them as well as a business opportunity. So I think it's relevant to many industries and there are benefits both on the supply side and the operator side to servitization.

Richard Howells: It also sounds like it's a very broad area of business that is required. I mean, it's not just a supply chain capability or a maintenance capability or a finance capability or a sales capability. It's all of them working together. Is that a true statement?

Patrick Crampton-Thomas: Yeah. Yeah. I mean, absolutely. So you start right at the beginning of the life cycle when, you know, somebody is even designing an asset, of course, you need to define, well, what is it I need this asset to do? Now in the context of servitization, that would then get wrapped up into a service level agreement, and the service level agreement would ultimately then drive the cost, and, therefore, the pricing of that service to me.

So, there's a whole kind of commercial layer, right? Which comes into play, you know, beyond just simple sales and purchase orders of a piece of equipment. So that's kind of one extension.

And then the other extension is on the network side, because now it's not just me operating the asset and looking after it. I could have multiple partners engage with me to maintain a particular piece of equipment. And so we get into this kind of network world where we're having to share data and the exact same piece of equipment is being used by me, as an operator, as well as managed by somebody else, as a service provider.

Nicole Smythe: Yeah, and I was reading an article the other day and I know, you know, especially with climate change, energy efficiency, and everything, they're really seeing servitization be on the rise and be at the forefront of a lot of managers' minds now. So, I think it's great, to see that innovation that's stemming from it.

But you spoke about collaborative business models and networks, kind of having an environment that seamlessly, you know, works together. So, now that listeners can see where services fit in to the industries, to a company, what are some transformations that you're already seeing our customers making with services?

Patrick Crampton-Thomas: So, I would categorize these into maybe three major pillars, right?

So the first one is not necessarily a new pillar - this is around: how do I deliver operational excellence in the context of service, right? So, delivering service precision. This is where SAP has played for many years across any company that runs a service organization. You know, I need to manage my customers, I need to manage for the service calls and ticketing and so on, and I need to really deliver, then, the operation of the service. So, delivering service precision is kind of one aspect where I'm really looking to reduce costs, but also provide the best service to the customer.

But then I think there's some extensions of that, which one is around: how do I really reinvent service models in my business, right? On the one hand, this is about what we've discussed already. So, it's how do I introduce new service offerings, right? And so on. But then, on the other, how do I really differentiate myself offering an amazing, service experience for my customers? So, that kind of reinventing service, if you like.

And then the third area is rather about the product: how can I revolutionize the performance of the products that I'm selling, the equipment that I'm selling? So that my customers, firstly, it's differentiated in the market, and I sell more, but also then my customers get more value from my products. So, really revolutionizing equipment performance.

Richard Howells: So, let's drill down a little bit into those three areas. What guidance would you give a company looking to reinvigorate or reimagine their business models and identifying new business models to bring to their customers?

Patrick Crampton-Thomas: I think the first is you need to know your place in the market and what your products are, but then, you know, really understanding, what is it that my customers really want? And I quite often look at that by saying: what is the service level that would amaze them, right? So how could I package up my product in such a way that the consumption is so easy for the customer? And is that a lead change? Is it a little change or is it a big difference? Because if it's a big difference, you know, then you could really change your position in the market. So, consumption of a product, as a service, or is part of it. And then the service level agreements themselves - you know, how can I provide commitments around service level agreements? So that would kind of be one aspect. And I think, that

would help understand is what you are doing just a tweak or is it actually quite revolutionary for your business and the, you know, driving of growth and so on.

Of course, you do need to engage with the customers. I think you need to offer an immersive and amazing experience for customers, you know, I think this is very important. So, I'm providing omnichannel routes to service for my customers and make that as simple as possible right across the service life cycle. So that would be some thoughts I'd have around the service models and reinventing that. You know, maybe, also perhaps I didn't mention, but how do I better connect to the customers? That's part of that customer experience and managing that end-to-end life cycle. It doesn't end with the sales order, right? Or the invoice, you know. It really is how do I better connect myself across the whole life cycle of my relationship with that customer.

Richard Howells: You made a really interesting point there about it doesn't end when just placing the order. So, you've set up all of the different service level agreements, but how do you deliver that service precision? To really delight that customer and really provide a great customer experience.

Patrick Crampton-Thomas: What I really mean by that is this is really now around operational excellence. So, of course, we provide a piece of equipment, and it never breaks, right? But ultimately, there are going to be times when there is a calibration, there is a failure, there is a service ticket, something's not working, and we really need to be highly responsive.

So, how can I really reimagine that kind of field service type aspect, right? So I've got the service tickets coming in and I can delight my customer by making a very firm commitment because it begins with planning. Because the minute I get that call from the customer, they're going to want an answer. They don't want me to ring them back a week later, they want to know when's the engineer going to come and fix this product. And I think that level of commitment and, you know, you need to combine planning with execution and make sure the planning and scheduling is very reliable upfront. You're driving an expectation with the customer, right? And you want to make sure you actually meet that expectation.

I think there are some aspects of remote support that we've really seen grow recently. You know, with Covid, this was all valid. And some industries, like mining, is often run remotely - you don't have to be on the mine to be managing the operation. And in a service context, if something breaks of mine, could it actually be fixed remotely? And this is great for the environment because it could really stop a service technician visiting me, right? So, that would be the ultimate service precision, wouldn't it? You ring me up, and five minutes later, your piece of equipment is fixed because I've done remote diagnostics and I've helped you self-fix it.

But, in the end, you know, we do have to visit our customers, maybe bring the equipment back, whatever, and it's all about keeping the promise. I think it's about empowering our technicians in the field so they have all the tools at their fingertips to do the work first time; make sure they're connected to supply of materials, resources, tools that they might need so that when they come to a particular job, they can fix it first time. And when you think about talent, that becomes especially important because a lot of our engineering and technicians support engineer base right, is a maturing, and many of them retiring, talent pool and I'm bringing new talent, youngsters, into the business who don't have 20 or 30 years' experience. So, the tools that I can give them through, for example, mobile, maybe with

augmented reality, those tools at their fingertips, can actually be critical. They can allow that individual to be, as efficient or even more so than, someone who had 20 years experience, right?

Richard Howells: That whole collaboration and visibility across your network of maintenance people, customers, the business itself, must be critical to achieve that.

Patrick Crampton-Thomas: Well, of course, and what you also have to bear in mind is, we have a customer, for example, who is German. They provide mechanical handling equipment for warehouse operations and logistics, and they sell this in Argentina, for example. But they don't have service technicians in Argentina, right? A lot of the service management pool is done by third-party service companies or technicians or engineers. And so you're having to also integrate across networks with outsourced resources, right? So that's all kind of part and parcel of that.

Richard Howells: The third pillar you mentioned around equipment performance - that if you don't have to go to that site, that you can fix it remotely, that's great for the environment. But if the machine runs for longer and better, that's also good for the environment. So what guidance would you give listeners to how to extend the life of equipment and keep it running at all times?

Patrick Crampton-Thomas: Yeah, I mean, we definitely want to think of the environment here, right? And, if we can really revolutionize our equipment performance and reduce how often I have to replace a piece of equipment by extending its life, also improve its performance, perhaps reducing energy consumption, et cetera, it's clear: assets and equipment could be really at the heart of a company meeting its sustainability goals, right?

And, in terms of asset performance, we do see a couple of major initiatives going on right now. The first is maybe the obvious one we touched on already, which is around IoT. So how can I connect a piece of equipment, monitor its performance, what we call key indicators if you like, about that piece of equipment, and then, through those characteristics, spot when it needs to be maintained? And the point about that is that this is really getting towards a kind of lean concept; so now I maintain a piece of equipment only exactly when it needs to be maintained. I don't maintain it on a fixed schedule, right? You know, when I go to fix it and actually it wasn't broken in the first place, and so that's wasted cost, effectively. Or maybe, I don't turn up late when it broke already, right? So if I can use IoT and connectivity to monitor a piece of equipment, then we can get into predictive service, right? And that can form part of my service-level agreement then with the customer. And, ultimately, allows the equipment to stay operational at peak efficiency. So, I think that's kind of part of it.

But there's another aspect which, in some industries is quite mature, and this is around what we call risk and reliability management. You know, what is my best strategy to keep a particular piece of equipment running in an optimal way? And, this has been quite a mature topic with industries, like oil and gas, for decades even, doing what we call reliability management of a particular piece of equipment. And the outcome of risk and reliability management is: what is my optimal service or maintenance policy for a particular piece of industrial equipment? So that's another thing that we see - we can apply risk and reliability management methodologies to service, which means then I can optimize my service plans for my customers. So that's another thing that we see coming.

Richard Howells: I would imagine, Patrick, that another use case would be if you've got thousands of those pieces of equipment out there and you can see that there's a trend that's a certain percentage are failing after a certain number of hours of use, for example, that there's an opportunity to provide better service to all of those other products that will probably fail at the same time after the same amount of usage.

Patrick Crampton-Thomas: So yes, that type of feedback is really important. So, what we can do, you know, if I'm running a thousand pumps and I'm getting feedback from those pumps and I can monitor their performance and characteristics, then it allows me to actually understand which are performing best and help me with future decisions around which ones to buy for whatever form, fit, and function they may have. So, I mean, there is that kind of feedback. So I can see which equipment is performing best in my business and make sourcing and decisions around that.

But then there's another aspect of that feedback - if I'm getting feedback that certain things are failing on a regular basis, well, you know what? We could provide that back into the development organization so that they can then redesign or enhance a particular gasket on a pump, or something, to stop it failing in future. And this gets into an idea of digital thread, right? So if we have a kind of end-to-end digital thread that starts in design, and it goes right through to installation and service, but it's closed loops, so now I'm getting performance information back into design from equipment in the field. Then that will help us develop new products and enhance existing products with new revisions and new services going forward. So that kind of digital thread from service right back into design is also really, really important.

Nicole Smythe: Well, I think it's great. Just seeing the amount of advancement in the technology that's not even linked just to the services itself, but the equipment and how consumers can now use it.

You know, speaking about like predictive and everything, I myself just had to go through that. I had to just buy a new dryer because I had no idea that it wasn't working. But if I had known that beforehand, instead of going through a few uses and then realizing - oh, it's taking three, four times for things to dry, I should probably be getting a new one, I could have saved some energy, could have saved some money on my energy bill.

But seeing from both the corporate and consumer view of how this technology can change lives and just efficiency, it's so great to see.

But you know, it really is no secret that we need that innovation and advancement to stay ahead, no matter what industry we're in. So, with that being, which technologies do you believe will help enable that best-in-class Field Service Management? I know you spoke about IoT and everything else, but what other things do you see?

Patrick Crampton-Thomas: So there's a raft of things coming. I mean, the first is around connectivity and that happens in a number of ways. So any technology that helps me connect my teams across silos, not just within my business, but also across other organizations and businesses as well, is all goodness, right? I mean, this really helps with service precision, but it helps in actually all aspects of business.

So, those tools, you know, collaboration tools, whether it's on my handheld device. You know, I mentioned some examples, sort of remote support type tools. And here, technology like augmented reality could come in, so that I can provide visual work inspections, et cetera. But also there are video collaboration tools from various vendors, which can be used to help with that remote support, right? So

that we can work on a topic together and fix something without me having to send an engineer. So I think anything that helps connect the teams, resources, people across the service lifecycle is all goodness.

There are other technologies that I'm, and we mentioned IoT, of course, and also, you know, how can I connect the piece of equipment itself and, this is where IoT plays a part. And, now I can make the equipment far more intelligent, and it can talk to me about its health and condition rather than me waiting for it to fail or rather than me having to go and inspect it. I mean, a lot of equipment is run under an inspection regime, by the way, so there's nothing unusual about that, and, of course, that will continue. You know, I need to inspect pipe works, railway tracks, and so on. But if I can connect a piece of equipment with IoT, then you can automate that because it also, the word automation or automation technology has become very important then, because now I'm collecting colossal amounts of data so I need to process that, so I need advanced analytics and decision support. And in that area, machine learning and artificial intelligence type technologies really help so that I can correlate, you know, we talked about all of the pumps, Richard, I can actually correlate data coming back from thousands of pumps. Such that when a certain set of conditions are met, I could predict a failure tomorrow, right? And manually I may not have been able to do that. So artificial intelligence is, one.

And then maybe I just touch on another which I quite like because I fly radio control planes, you maybe see one of the back here in the office I'm in, and also drones, and so I think some of those technologies like videos, and drones and so on - video technology, drone technology - can be good. I've seen cases of flying drones through pipes, for example, sewers and so on. Flying drones along electricity pylons and also, you know, looking for heat signals where electricity is leaking, perhaps also on railway lines. That's another example of that. And those technologies, especially if you can combine it with GIS type technology, so railways, for example, looking at where, you know, foliage and trees are overgrowing tracks and this type of thing, that's another technology that can be quite innovative.

Nicole Smythe: Thanks for going into that cause it is really interesting to see, especially like we said, how much technology is already starting to change the industry and the world in itself. So being able to see that being applied to services and see consumers and customers already using that, it's great.

But, in regards to field service management, when you see it finally transform into a well-executed process, what do you believe are some of the key benefits that are stemming from that? I know you spoke about the one German consumer, but what other customer benefits have you started to see already?

Patrick Crampton-Thomas: So, actually, there are some real quick wins, right? I mean, in terms of field service management, if we look at mobile and using mobile to automate work and provide better information about my work, you know, we can see up to 40% improvement in efficiency in the field, right? And some of that is administrative efficiency because I'm not having to rely on paper and so on. Also, we're getting automatic feedback on jobs, et cetera; so mobile really provides some concrete benefits to engineers in the field and really automates and reduces administration times and so on. And that frees up their time to do, gives them wrench time, right, to do jobs.

Then I think the other area is, I talked earlier about planning, right? I want to plan my resources and my work, and that can be highly complicated; I can have jobs of different priorities based on service level agreements and severity of failure and criticality of the piece of equipment or the customer, et cetera.

So, you have a whole load of work to do with different priorities. I have a whole load of resources, some are mine and some could be external with different skills. And of course, often distributed, right? These are distributed geographically, so how do I really schedule and optimize that? You know, maybe using even artificial intelligence to predict traffic jams and things like that and getting into what we call predictive rooting. So I think optimization in the planning and scheduling phase really is important because the more accurate you are there, not only are you better utilizing your resources, but you're keeping your promise to your customers. Because if your plan and schedule is inaccurate, you will fail to deliver on the jobs you've planned, right? So planning and scheduling accuracy is also delivering major benefits in terms of resource utilization and also service level to customers.

And then we see some other ones - we have one customer of ours, big battery manufacturer, whom they're using our Field Service solutions and for them, it was about warranty. They ended up with a 50% reduction in warranty costs, because they were better able to manage and serve its batteries in the field in their case. So that's also another sort of interesting example around benefits and it could be perhaps there are benefits under warranty management.

And, of course, the final one is if I am visiting a customer, keeping them happy, then, of course, they will come back to me. So customers will achieve retention benefits, upsell benefits, cross-sell benefits, and, therefore, more revenue from their customer base.

Richard Howells: Lots of benefits to be achieved. It's hard to believe, but we're coming to the end of the podcast, and as the title of the podcast is The Future of Supply Chain, if you had to summarize in a sentence or two, from a service management perspective, what is the future of supply chain?

Patrick Crampton-Thomas: Yeah, that's a really good question, Richard. And I really think it's about how can I offer better services to my customers to better serve them and keep them happy, right? When I make those promises, how do I keep them? So I've got to be accurate. And of course, from a supply chain context, that means managing resources and materials, and so on, and logistics to be at the right place at the right time. And ultimately, how can I make it so that my equipment performance better serves not just the customer, but also the environment, right?

So I think from a service perspective in the supply chain, supply chains are built up end-to-end of complex assets ultimately. And if all of those assets and equipment are performing optimally, then there's major benefits, not just for the customers, but for the environment.

Richard Howells: That's great. Thank you. Well, Patrick, as ever, thanks for a great conversation. I didn't expect anything less. And, thanks everyone for listening. If you enjoyed this session, please mark us as a favorite and you can get regular updates and information about future episodes. But until next time, from Nicole and I, thank you for discussing The Future of Supply Chain.