Episode126: Yard Management as a Key to End-to-End Logistics Success

Michael: [00:00:00] I believe that supply chains in the future will be a hotbed for innovation, AI driven that will become crucial and critical and decisive in the success of an organization. Over the past five, six years, we've seen all sorts of disruptions in supply chains. There from a global pandemic through shortage of labor and transportation capacities. Supply chains will continue to having to need to react to all of these things, but also to support new business models that are out there. And last but not least, while doing all of this, leveraging latest and greatest technology and technology that is becoming available in shorter and shorter cycles. So if you're not able to leverage all of that, it's gonna be difficult for you as an organization to keep up.

Richard: I'm Richard Howells, and this is The Future of Supply Chain, a podcast where we discuss hot topics, best practices, and the latest innovations in today's global business. And today I'm joined by [00:01:00] Westernacher, Michael Augustine, to discuss yard management and its key role in the end-to-end logistics processes. Michael. Welcome to the podcast. It's great to have you here today. If you could quickly introduce yourself and a little bit about your role at Westernacher.

Michael: Absolutely. So Richard, first of all, thanks for having me. It's an absolute pleasure. Very excited to be here. Great fan of your podcast. I listened to a lot of episodes, so finally being here. Very exciting. My name Michael Augustine. I'm a managing partner here in Westernacher Consulting. I wear multiple hats. One of those hats is that I'm the global director for a yard practice. So what that basically means is, uh, we do implementations in the yard management space, um, globally, for which, uh, my team is then, responsible in, in implementing SAP software for those problems. We try to do help our customers in that area.

Richard: Great, great to have you on, on the podcast. And maybe we could start with some basics and just a definition of what yard management is [00:02:00] because, keep it simple, isn't it just a warehouse outside? And how can it improve overall efficiency to manage your yard better?

Michael: Let's start what's not yard management? Right? It's not keeping the front yard and backyard of your house clean. Yeah. So be, let's be honest with that, right? So.

Richard: You have been in America too long because you call it a yard.

Michael: Exactly, exactly. When you are in, in the US and I'm from Germany, obviously there's, it's a little bit differently, but yeah, if you're in the US then definitely there's a little bit of a confusion around the word yard. so what is the art management? There are a lot of different fields of application for yard management. lot Of different scenarios. If, I think the one that we all will relate to is think about a warehouse where we distribute or produce. You typically have dock doors around that warehouse. You have a gate, you have a check-in, or some sort of entrance into that side where trucks and trailers are going in and out. That part of the process, which connects transportation on the one side and the warehousing activities on the other side, that's yard management. So building basically the bridge [00:03:00] between those two and. As I've said, this is the most common scenario. Of course, there are other types of yard management and use cases for yard management, thinking about huge chemical sites, production facilities, not only talking about trucks and traders going in, but also about ray yard management. So managing hundreds if not thousands of ray cars in a yard and managing their movements and making sure that a ray car is at the place where I need it at the right time, or even thinking about a port, right? So a, a sea port where I have containers going off and on vessels, onto trucks, and onto, uh, ray cars, uh, onto trains in order to go further inland. So those are all types of yards and areas for yard management, that we are also working with. in terms of your question that you have asked, right, what is the overall efficiency gain that we can see, and also a little bit the question, right? Why should a company really look into this as a topic? We have transportation on the one side and warehousing on the other side. Typically, if you do not connect those dots together, which typically [00:04:00] is the yard, because the yard sits in there, you can optimize your warehouse as much as you want. You can optimize your transportation as much as you want, but if something in between cracks, that's where you lose a lot of efficiency. Yeah, so a yard management system and yard management in general is able to increase and keep up that efficiency overall throughout the supply chain by connecting all these dots and just making sure that from a transportation perspective and logistics perspective, things are running smoothly throughout all pieces of the puzzle.

Richard: So we have warehouse management solutions. We have transportation management solutions. Why are the capabilities in those two areas not sufficient? Why do we specifically need yard management? What are the different requirements that you wouldn't find in a warehousing and transportation system?

Michael: That is a great question that we are also being asked by a lot of customers, and what I typically try to say is the following. Think about, do you want to go to sleep? What do you do? Do you go and [00:05:00] sleep on your sofa or do you go and sleep on your bed? Probably for a good night's sleep, you will go to your bed. That's what it's made for, and it will give you a good six or eight hours or how much time you you need in order to have a good sleep. It will give you that so that next morning you wake up refreshed. By sleeping on a sofa for a couple of nights, you might be still sleeping the same amount of hours, but you will start feeling those impacts because you just wake up in the morning and you're tired and your back hurts and everything. That's the same with the warehouse management system, for example, having your capabilities and trying to manage that, right. So while a lot of warehouse management systems to offer. A certain subset of capabilities to manage yard operations. They are not made for that. A warehouse management system is, as it says, made for processes within the four walls of the warehouse and. Yard processes can be significantly different and more complex and cannot be well suited with a warehouse management system anymore. So what we are seeing, for example, a lot of customers have done this [00:06:00] over the past 8, 10, 12 years, is basically using their warehouse management systems. Trying to leverage what's in there and have figured out it's not enough and started to extend their warehouse management systems quite significantly to build themselves yard management systems in there. And that's exactly the key point. If you are running a very low volume, low complexity operation, might be that a warehouse management system offers you what you need. But if you're managing hundreds of trailers and trucks, yeah, if you have a fleet of internal trucks that's moving trailers around. That's where you need a yard management system that gives you all those capabilities that you can leverage rather than building something yourself into a warehouse management system.

Richard: Great answer. So how can digitizing yard management help businesses? What are the business benefits that you are seeing companies achieving by deploying a yard management solution in conjunction with warehousing?

Michael: Obviously it also depends a little bit on the overall use case. So we are [00:07:00] gonna stay a little bit with the warehousing distribution use case, which is the bread and butter of your management. So what I've already said, let's start with efficiency, right? So if you think about it. It takes typically 45, 60, 75, maybe even 90 minutes in order to turn a truck around. And what I mean with that, it's the time that the truck needs from arriving at the check-in to being loaded and unloaded and going out in the world of logistics. If I'm a shipper and I'm working with a carrier, in that contract that I have, it says how much time I am allowed in order to do such operations. So when I'm doing a life note that

I've just described, or a life unload, it tells me I have 90 minutes, 120 minutes or whatsoever. So if I am not able to make it in that time, I will have to pay the carrier waiting times, and that's the last thing that I want, and that, but on the other side, it happens quite a lot because if your processes are not efficient. The driver comes, has to wait for an hour or [00:08:00] two, then we go to the door where they have to wait for another 45 minutes. All of a sudden it takes three hours. And then I as a shipper, am responsible for that delay. I have to pay to the carrier

Richard: And not only that, it messes up the scheduling of everything that comes out.

Michael: Exactly. And if we also think about the, the other side, right? And I've, I've seen this personally myself. Whenever we go to customers and you go live with a yard management system and you're standing at the check in and you deal with drivers, they are under a lot of stress, they are running extreme tight schedules. They have to make delivery windows. They have to drive enormous distances. Every minute that they lose somewhere is a minute that they might not be able to catch up again. And this is also why they are getting frustrated and angry pretty soon if something is not working. So that's the importance of having efficient processes. first and foremost. The other topic is accuracy and visibility. And Richard, I can tell you, I, I stopped counting the number of customers where I have been, [00:09:00] where basically when I asked the question, can you tell me which trainer stands out there, I was basically getting raised eyebrows and like, yeah, we have no idea. So. sounds unbelievable.

Richard: But it sounds pretty basic..

Michael: It sounds pretty basic. It is basic, pretty basic. But a lot of customers are dealing in the yard with the basics of not knowing what's actually happening out there. And again, make a comparison to, for example, warehousing or transportation. These problems also used to exist there. That is 15, 20, 25 years ago when companies started to implement warehouse management systems. Right. But before that, it was also the same, right? You looked at, the at warehouse, you had no idea what was going on. Same is still in the yard. that's the second, basically, besides the efficiency gain, it's just the transparency of knowing what's out there, seeing which traders do I have out there, or if we talk about other use cases, ray cars or whatever. And with that also visibility and accuracy gives you also the impro, the possibility to improve [00:10:00] overall information flow in the yard. Today, if you go out there to a yard of your choice you will see drivers with walkie talkies. Everything is kind of managed on an a talk basis. People maintain spreadsheets. Maybe there's a piece of paper where

some information is written on, so. Getting all of that in a streamlined process where instead of having to talk to someone, we basically direct them, okay, this is what needs to be done. Having that visibility of what's happening. That's where we see the most benefits for businesses right now.

Richard: You were talking about basics, like using spreadsheets and walkie talkies. I want to move on to the next level of technology and we've been talking for 10 minutes and we haven't mentioned the words that we always mention in this podcast aI. Because AI seems to be the hot topic over the last 12 to 18 months. So where does AI play in yard management, do you think there are valid use cases for the use of AI when we're talking about managing yards.

Michael: Absolutely, yes. And let me comment first of all why it takes us 10 minutes to [00:11:00] talk about AI. And the reason for that is a lot of organizations, a lot of yards out there are not digitally matured enough where the next immediate step is to think about an AI use case.

Richard: They need to be able to walk before they to before can run.

Michael: Exactly. That's exactly what it is, right? So if you think about it like transportation, logistics, like keeping things moving, most of the organizations we deal with have already something in place from a system perspective. There are processes. On top of that now introducing latest technology like AI, that's the immediate next steps with yard management. We first of all have to get those basics done, and then we can think about AI and that's the challenge that we see. But still, of course, there are AI use cases for yard management as well, and there are also organizations out there that start using that, especially those that have already implemented your management systems a couple of years ago. It goes in many cases also hand to hand with hardware. One trend that we definitely see is the adoption of OCR for a couple of years, [00:12:00] and where I AI now basically comes on top is that. When we, for example, have a truck that goes through such Canberra gate, and takes those pictures and everything automatically analyzes if there is a damage or not. Basically, it feeds that into a yard management system that then is able to make decisions with regards to do we turn this truck around and reject it because it's too damaged. Do we call the carrier automatically or whatever? So that's one.

Richard: That's a, quality check before you even unload it. It's a preemptive quality check.

Michael: Exactly. Exactly. That's a use case that we start to see more, uh, adopted by companies more and more. Another one is just making intelligent

decisions in the process, right? So, where AI is also extremely useful, especially when we are running high volume operation, and I'm not talking about a hundred to 200 trucks a day, but I'm talk, talking about thousands. But also on the rail side, if we are dealing with thousands thousand 500 rail cars on the yard that we have to deal with every day, um, having the AI, making [00:13:00] decisions when to do which processes, like, when do I need to move, which trailer so that it's on time at a loading dock, for example. Those are then the intelligent decisions that an A I is able to do in the yard management space.

Richard: So if companies have deployed a yard management system, when would they be ready to start taking advantage of AI use cases in yard operations? You said that obviously you've gotta be able to walk before you can run and get a position where you've gotta a stable solution. What are the key, things to consider when looking at AI use cases in yard operations?

Michael: It's really what you have said. There needs to be a certain level of, digital maturity for organizations in order to incorporate these things. So if, there is already something in place and there is also a, a particular use case that you can think about, where you all might still even today have a pain, that's when, definitely makes sense to look into an AI use case. And also from our experience, the customers that we in the yard management space talk about AI use cases [00:14:00] are the ones that have implemented yard management systems over the last two to three years. If we talk to customers where we are now discussing, implementing a yard management system, we still might talk AI, but that is really a, okay, let's do this in 2, 3, 4, 5 years once, we learn how to walk basically. Yeah. And that's exactly the cross point. So if you as an organization have something already in place and also a certain critical volume associated with that, again, yeah. If I'm running a small yard with five warehouse doors and, and 10 trucks coming in. Happy to talk about AI, but, uh, whether or not it's gonna provide the business benefits, that's a little bit questionable. But if there is a critical size of that operation and also a certain level of maturity already reached, then it definitely makes sense to look into AI.

Richard: I think you've summarized it perfectly, AI shouldn't be a technology looking for a problem to solve. You should be working out what your business problem is, and then what are the solution, what is the solution or solutions, which may or may not include AI to solve that [00:15:00] problem. And with that in mind, what, what are you seeing as the future of yard management going forward. which industries do you think will leverage solutions for yard management the most, and what do you see as the next big innovations in yard management?

Michael: Personally I believe that the future of yard management in general will be that more and more organizations will start adopting that. Because again if if you look at the past 15, 20 years in supply chain right? there has been an evolution. It started with warehousing systems, transportation systems. Recently, over the last five, six years with everything that has happened, we've seen a, a major push towards, uh, planning software and supply chain planning software. By the way, over the last five, six years, we've also seen a massive push already towards yard management as a topic, and I do think that we will continue to see this, that in the next five to 10 years. More and more companies will realize the importance of yard management and what it actually means in their supply chains. And [00:16:00] with that also invest in digitizing that part of, their supply chain. In terms of where does it develop or where, where is going to go towards, I think similar to all the other topics in that ecosystem, AI is gonna be a huge topic. So how can a yard management system not only help me to walk, but how is it able to make me run and automate processes and make my, make my, make myself as an organization also run more intelligently? This will be one huge point. And the second point is connectivity. Not necessarily connectivity to hardware or such, connectivity in the supply chain. So talking to transportation planning and, and all other functions around it, but also talking to external parties, talking to my customer, giving real time updates about their shipment. Yeah. Is it right now in, is it loaded? We opened The trader has something, was, uh, something that happened during the transportation. So giving that as an information and bringing all the parties closer together. The yard management piece of it will also play here a crucial [00:17:00] part.

Richard: That example of working with your partners, working with your customers, having improved visibility is a huge. I think, prediction for supply chains in general in every area of the supply chain and yard management would be no exception, I totally agree. So you talked a little bit about the next few years and that you see yard management will increase in importance or implementation popularity at least. So how can companies like SAP and Wescternacher and our partnership help companies who are looking or even considering at the moment a yard management solution.

Michael: There are multiple angles that we can help organizations, right? So first and foremost it's about what we have also discussed today. Why should we go that down that route? Why do we need a, a yard management system and what is actually the benefits and what can I expect out of such implementation? Because let's be honest, there's always an investment involved. And at one point in time [00:18:00] we also want to see an ROI, right? So. Having these discussions, that's extremely important upfront, and this is something where both SAP and Westerner can be of help to show the future, but also to show what are those benefits, by, um, implementing yard management solutions. and

then of course, talking from a Westerner perspective, we have been in this area for multiple years. we have done a lot of projects, globally in Europe and North America, but also in other regions across the world. We do have a team of dedicated experts that does nothing else than yard management implementations in the SAP ecosystem, which is quite unique. And with that, obviously you are not only getting a, a consulting company or a system integrator that implements a system for you. You're getting a lot of knowledge with that as well. And if we broaden that and get you guys from SAP basically with us in the boat, the trend that we have also seen over the last 3, 4, 5 years, it goes more and more into the, what we call holistic supply chain. Yeah. So one common platform that is able to [00:19:00] operate is the supply chain of a company and sAP is one of the very, very few software vendors out there that is uniquely positioned by offering capabilities in all of these areas. And that is, I think, something which is gonna be very valuable going forward, , by having those capabilities in one platform rather than having to go different routes for different use cases.

Richard: That's a really important topic as well, because if you've got niche warehouse management solution or best of breed, whatever term you want to use, and a separate transportation management solution, and then a separate yard management system in the middle, if they're not integrated together, there's no real benefit. There's no real value and, and keeping those, that integration up to date. So having that single platform, as you pointed out, I think is a, key differentiator.

Michael: Exactly.

Richard: So I have one question I ask all of my, guests or victims, and as you've listened you know the type of answers we usually get. So [00:20:00] I'm really curious for your point of view, especially, taking into account the discussion that we've been having. In a sentence or two, what is the future of supply chain?

Michael: I personally believe that supply chains in the future will be a hotbed for innovation, AI driven that will become crucial and critical and decisive in the success of an organization. Over the past five, six years, we've seen all sorts of disruptions in supply chains there from a global pandemic through shortage of labor and transportation capacities. We, uh, obviously now have the terrorist situation going on. Supply chains will continue to having to need to react to all of these things, but also to support new business models that are out there. And last but not least, while doing all of this, leveraging latest and greatest technology and technology that is becoming available in shorter and shorter cycles. So if you're not able to leverage all of that, it's gonna be difficult for you

as an organization to keep up. So, bottom [00:21:00] line, very exciting, I think, but also challenging for everyone that is in, and around the ecosystem of supply chains.

Richard: Great answer, Michael tha thanks for a great conversation. It's been really interesting. I'm sure that the listeners have learned something new if they weren't experts on yard management before, they've certainly. You've been listening to one now.

Michael: Perfect. Thank you so much.

Richard: Please mark us as a favorite. You can get regular updates and information about future episodes, and we'd also share some information about Westernacher in the show notes. But until next time, from Michael and I, thanks for discussing the future of Supply Chain.