**Episode 6 - EON and Kraken Technologies**

**Russel Goldsmith:** [00:00:00] Thanks for downloading Inside Octopus. My name is Russell Goldsmith and for this episode, once again, we welcome back our CEO and founder, Greg Jackson, but joining the tour bus online from Essen in Germany is Dr. Karsten Wildberger, Chief Operating Officer for commercial at Eon. Now, for those wondering why we've invited someone from another energy supplier onto our podcast, it probably makes sense for me to explain that Ian is in fact, a major licensee.

Kraken the technology platform delivered by Kraken technologies, which is a subsidiary of Octopus Energy Group. Uh, back in March, 2020, Eon began a huge transformation project with Kraken migrating their UK residential and SME energy retail businesses onto the platform and so I thought a good place to kick off this episode is for you Karsten to perhaps explain why you chose crackin technologies as a partner.

**Dr. Karsten Wildberger:** [00:00:52] Thanks Russell. Well in the UK Eon had a massive problem at hand. So we are a large retailer, not just with Eon itself. We also acquired energy, which was our competitor, and they had a retail business called and NPower in the UK. And actually, both retail businesses were struggling big time and NPower in particular.

And at the core of our problem was a very poor customer experience because we were running our business based on old technology. Um, so basically at hand, we had a massive IT problem, which we didn't know how to solve. NPower was not sustainable as a business. It was, loss-making a quarter of a billion euros losses at that time per year.

So massively loss-making. And we had to find a solution to that problem. We were thinking about our own Eon platform, but then decided to think out of the box and said, do we find a technology company that could help us? And first we started to look at usually the big guys, the big IT companies, none of them could help us.

And of course we were looking at Octopus and Kraken Technologies from afar. And that's how it started. And that's what Eon Next is about, is actually creating a completely new home for more than 8 million customers from scratch based on best-in-class world-class technology. That's what we are building, a new retailer.

**Russel Goldsmith:** [00:02:21] Before we understand what the work that you've done with, with Kraken how that's gone through. What, why do you think the other technology providers were struggling to help you? Well, I think you need to be a bit of a Maverick to, to embark on such a journey and you need to be courageous. I'd say this is an entrepreneurial task that we wanted to embark on as a large company.

**Dr. Karsten Wildberger:** [00:02:42] And so this requires an entrepreneurial spirit, and I think that's what you often do not find in large organizations, which we did find with Octopus and with, with Kraken. Just over a year on, at the start of May, you've completed the migration of all the NPower customers to, to your next, which I understand has been done in record speed.

**Russel Goldsmith:** [00:03:04] How would you reflect on the partnership so far?

**Dr. Karsten Wildberger:** [00:03:06] It's gone much, much better than I was, had ever hoped for it's second to none. And I think the results demonstrate this. This can only work on a basis of a fabulous partnership. And today we have actually more than 4 million accounts, which is a driver of complexity.

So meters on the system, almost 2.8 million customers. So also more than half a million on the Eon side as well, not just NPower. But we're now filling kind of creating Eon Next from both sides, from NPower and from old Eon and it's gone really, really well. I think it's based on really good, strong relationships, very hands-on governance.

You know, I think everyone gets their hands dirty. Very fast decision-making and, uh, it's, it's an atypical project for a corporate that's the success.

**Russel Goldsmith:** [00:03:58] Can you just expand on the magnitude of the success that's been delivered here?

**Dr. Karsten Wildberger:** [00:04:03] This project is, is really massive and something I haven't heard of before actually.

And, um, it's a privilege to be part of it. So what have we done? In the past NPower tried to migrate onto a new platform. Many years ago, it took 11 years and didn't succeed in the end. We've now migrated the wholeof NPower onto the Kraken platform within 11 months. And I would say flawlessly, at extreme speed learning, fast adopting, developing the software further.

And at the same time building, in peril, a completely new organization. And when we started, we rented space in Leicester. We couldn't use the space because of COVID. So we had to hire and train and work with more than 1,000 energy specialists today, all done remotely from the home office. And at the same time, we were still operating an old company that is being wound down now.

So we're basically doing everything at once at record speed. In COVID times. And, uh, I can't be grateful enough to the people who are doing it and without their capabilities, passion, and what they put into it, it would just not be possible. So maybe Greg, you have something to add here.

**Greg Jackson:** [00:05:30] I think first of all, the backdrops, interesting in that technology projects of this scale usually go wrong.

Often very badly. I think according to McKinsey, you know, two thirds of them go wrong. Typically cost over of 66%, it's scheduled over and a 33%, they fail to deliver the benefits, you know, by a factor of at least 17%. And in fact, I think 17% of them threaten the very existence of the company. Right.

So you know, you don't embark on these things lightly. I think then, um, yeah, they tend to take a very long time. I mean, you know, I think we said 11 years, the last time NPower migrated, and this was done in 11 months and the pandemic, but I think this isn't a coincidence. Most technology platforms are designed for business as usual and migration or transformation is an afterthought.

And yet it's the migration that kills you. So I think when we built Kraken we always built that with migration in mind and, and, uh, you know, the team here have now run, I think, 15 migrations and it's kind of proven to be a migration machine. Now that's been exciting, but despite the tech and despite that degree of delivery, compared to what one would ordinarily expect, I think the, um, the point you were making at the end Karsten and about the team is we can't make it strongly enough.

**Greg Jackson:** [00:06:51] People have sweated blood. To keep this incredible project on schedule and delivering outstanding results for customers. And I think there's a philosophy behind that because if you're gunna to do these things the faster you do them, the safer, as long as they're well-designed and conceived because the world will change less during the process.

I think very often people build these kind of long buffer timelines. Uh, but as we got the buffer, you use the buffer and then the world changes and suddenly your project has to change and the team changes. By doing it so fast I think we've actually increased the chance of success, but that's only been possible because of the commitment of so many people.

And I wish I could name them, but it wouldn't be fair because as soon as I named one, I'm thinking of the next and the next and the next, and I know we can't name them more than this time, but you know who you are and you're heroes.

**Russel Goldsmith:** [00:07:43] Have you had any response back from your customers as well?

**Dr. Karsten Wildberger:** [00:07:46] Well, we measure it every day. In real time, we have Trustpilot online and we look at every single verbatim and customer rating and it's very, very strong, but you know, what's most important is our people and our energy specialists. When they speak about serving the customers, working in this new environment, working on different processes, having the digital tools now to do a better job by the customers.

They love it. And I think that's the prerequisite to deliver a superb customer experience. So our people who serve customers, are the ones, in my view that matter most because they everyday want to do the best job they can. And ultimately then our customers then give us the feedback, which is today very positive.

**Russel Goldsmith:** [00:08:32] Uh, great. We talked about Kraken in episode two of Inside Octopus when we were joined by your co-founder and CTO, James Edison, and a couple of the Kraken team members, but for anyone who hasn't listened to that episode, can you just give us a quick reminder of why Kraken is so fundamental to the business?

**Greg Jackson:** [00:08:48] Yeah. I mean, I think first of all, it's worth saying Kraken predated Octopus Energy, the concepts that we were going to build a platform, a technology platform to help digitize a large global sector came to us before choosing to do it in energy. So I think, um, uh, you know, we really were set out to build a platform for disruption.

And then we chose that the energy sector was the one which I think globally offered the greatest opportunity for improvement through technology. In terms of Kraken itself, the founding team of Octopus, we kind of had built platforms for other companies, really dating back to the early two thousands. And what we found was in every sector that hadn't yet been disrupted by technology, most of the companies would say, Technology is not going to disrupt our sector because, and they thought they were different, but it always happened.

And I think the kind of signs, when you look at a sector that is right for disruption, or, you know, do companies appear to have slow and inefficient processes. Our customers paying more than you'd expect because companies have got big overheads. Is the sector lacking innovation, you know, is it selling the same stuff? Is it only engineering, new ways of charging customers more rather than ways of changing the products and services that customers can buy and I think we looked and the energy sector kind of ticked all those boxes. And that said to us that, you know, this, the sector could dramatically be improved. By a 21st century tech platform and it costs 21st century tech is it's not about taking the legacy systems that we've all heard of them putting them in the cloud.

It's about building something in the cloud from the beginning, so that customers, employees, every function within the business can be sitting on the same data. Big data. The machine learning can work alongside people to make the company dramatically more efficient and provide better service for customers and a better experience for employees.

And that was what Kraken set out to do.

**Russel Goldsmith:** [00:10:40] What are the, um, utility companies that are using the system?

**Greg Jackson:** [00:10:44] Uh, well, uh, here in the UK, there's Good Energy as well as, um, uh, Eon Next. In Australia, there's a couple of companies, Origin, which I think is the largest energy coming to Australia and also can be called Nectar, which is owned by the massive Korean conglomerates.

And I think increasingly the idea of Kraken is to be a global platform because you know, the, the single biggest thing Kraken can do is help make the fight against climate change faster and cheaper than anyone imagined. And, um, every country faces the same challenges. We've all got to work out. How do we electrify our energy system?

How do we start using the renewable energy, which is cheap when it's available, but at times where it's not available in ways, which are most cost effective, how do we move to things like electric vehicles and electric heating? Now there's going to be more change in energy over the next decade than there was over the last a hundred years.

And I think Kraken's job really is to make that as efficient and customer friendly as possible. And if we're able to learn things in one country and reapplying to another, is that suddenly going to be kind of bad for the planet and better for consumers for citizens?

**Russel Goldsmith:** [00:11:53] Sure, just explain what a partnership like the one that you have with Eon means to, to Octopus Energy.

**Greg Jackson:** [00:11:59] It's colossally important, but it's already too late to prevent catastrophic climate change. The best we can do as a species now is to work as fast as we can to replace fossil fuels with renewables. Kraken makes that easier and cheaper for countries and for companies. And I think there's no way that Octopus Energy alone can drive that instead by taking the technology we've created and then working with the most forward-thinking large decisive companies that wish to drive change, we can scale out faster than we could ever could alone.

Karsten mentioned, you know, one of the things that's been successful is decisiveness. And I think great leadership requires decisiveness. That's both the leadership of a company and the company's leadership when you're facing into these massive global challenges. And I think, you know, what's been particularly effective here has been the rate of decision-making of Eon to do the right thing and to drive the change that we all need.

I hope, and I'm pretty sure that their decisiveness. And adopting, Kraken and then implementing it at such lightspeed is actually going to demonstrate to the rest of the world, instead of trying to hold back change, we should drive change.

**Russel Goldsmith:** [00:13:11] Karsten same question to you. But on the flip side, what does the partnership mean to you? And just listening to what Greg was just saying there.

**Dr. Karsten Wildberger:** [00:13:17] We couldn't have done that ourselves for me what is very special about this partnership, is that with you Eon Next, when you're talk with the teams, you do not differentiate. This is Kraken this is Eon this is just, Eon Next. So, it's really one team.

And, um, as Greg said, at the end of the day in energy, of course we serve a much greater purpose. So also, Eon with our business model is a hundred percent devoted towards making the energy transition work for all our customers and, um, all our customers are receiving green electricity today. And, um, this software is very flexible of making sure when a green electron is being produced, it actually makes it to the, to the customer who actually needs electricity in that moment. And this is quite a delicate problem to solve. And if you ask me what makes this partnership so successful and sets all the partnerships that I've been enjoying so far. Sets this, apart from it, I think are four things which makes that unique.

First. I think both companies from the beginning were very clear and aligned on the target picture, what we have to achieve migrate or customers from NPower onto the platform. So we can wind down the business and lets them work on a similar plan for the Eon business over time. But crystal clear on outcome.

The second one is. Both parties were equally clear on each role we have to play so correctness and very clear on what they play. We are clear about their role and we are, they are clear about our role and it's complimentary. The third one is both have done our homework. So we had enough time to understand the problem, to understand the technology and Greg and the team they were open enough to share everything. We shared everything so very big openness and what's then of course, most important is trust. And that comes down to people. And I think this has worked incredibly well, and it has not been one moment where we were not able to solve any issue based on trust, based on a phone call based on a quick conversation. And it requires sometimes only a handful of people will then work together and that make this happen.

**Russel Goldsmith:** [00:15:34] Greg, you were nodding along to, uh, everything that Karsten saying there.

**Greg Jackson:** [00:15:38] I was I mean, look, I think it has, um, been exemplary in terms of the respect that the teams have shown to each other. And that is, um, really hard to deliver.

When, you know, essentially a lot of people outside, but look and say, well, these are rival companies. And by the way, you know, when each company feels is bringing in an awful lot to the table to have respect and understand that you're only able to be as good as each other is an incredible experience. I think what it's driven through this joint commitment. Is a world in which people have been focused on success as being our customers, getting outstanding experiences. Are we delivering the efficiency that we set out to do? And are we delivering against the timetable that we intended and continually, I hear conversations about those three things collected that makes it a much more enjoyable process for the team because instead of them kind of trying to push water up hill.

Every day, the delivering successful results together. In fact, last week I saw one of the Octopus employees who's working on delivering Eon Next say," yes, we've overtaken Octopus!" Because they've now migrated more customers from Eon onto Eon Next on to Kraken than Octopus has. And I just thought that was a spectacular example of the degree of mutual commitment in this process.

**Russel Goldsmith:** [00:17:05] What's the roadmap looking like, then moving forward for Kraken Technologies Greg?

**Greg Jackson:** [00:17:09] People often ask me about, and I think what matters in Kraken is it is designed to be an incredibly agile platform that enables us to build towards a wide array of potential futures. And that's incredibly important in a sector, a heavily regulated sector like energy, because even though we've got our own views about what customers will want, how renewable energy generation is going to change over time and penetration of electric vehicles, like all that stuff. Ultimately regulators and governments in the sector will make decisions month in, month out, which changes what our platform has to do. So fundamentally what Kraken has to be able to do is to be very, very flexible to a world in which what citizens do may or may not be what we expect and what governments do will change.

All the time and you don't want to end up with a sort of a great big spaghetti platform. Instead, what you need to do is have something like an octopus. It has to be incredibly agile to handle all these different outcomes. And really that is the fundamental of Kraken. Now we know what direction it's pointing in its job is to make de-carbonization cheaper and faster than anyone could imagine across the world. And it does that as Karsten said, by fundamentally understanding that renewables a cheaper energy, but only if we use them, right, so Kraken's direction travel is to be able to enable people to use renewable energy and the ways which will be most cost effective and in doing so to have the best customer experience possible.

And that'd be whether they're an Octopus Energy customer. An Eon Next customer or an Origin customer in Australia.

**Russel Goldsmith:** [00:18:46] Do you have a target in terms of how many accounts you want to see on the platform by a certain date?

**Greg Jackson:** [00:18:51] You know, it's really funny I'm, I definitely wanted to give people a sense it needs to be big. So I put the number out there, a hundred million accounts by 2027. I dunno, is that under ambitious is over ambitious. I've no idea, but the point being, if we're going to make a difference, we've got to be big. I think, I think Steve Jobs said, you know, make a dent in the universe. Well, our job is to make a big green dent.

And the word big's pretty important.

**Russel Goldsmith:** [00:19:12] Brilliant, Karsten we should make reference to the fact that, um, and, and it has actually been announced that you are set to leave Eon to become CEO of the German consumer electronics, retailer, Ceconomy. So many congratulations on your new role. Do you feel you are leaving Eon in a better place now with the partnership that you established with Kraken?

**Dr. Karsten Wildberger:** [00:19:31] Well, first of all, I look very much forward to a new opportunity, which, um, maybe I'm still devoted to sustainability because consumer electronics of course, is inextricably linked with energy. At the end of the day, sustainability will continue to play a crucial role and Ceconomy actually more than every third European has bought in this place and the question is simply how will this business flourish in an internet world besides Amazon, for instance, and what's the business model. So that's I'm excited by this entrepreneurial opportunity at the same time. I've put a lot of energy into what I've done at Eon and, um, met fantastic people, made friends and, uh, so it's actually hard to leave as well because so many great things we've built with the teams all the time. We've built new growth businesses at Eon uh, in Europe for cities, for making cities more sustainable industry clients, more sustainable. We are the fastest growing solar and battery company making installations in people’s homes and we managed to transform the UK based on Kraken

So with that also feel a sense of pride in what we have achieved and that's important the team has achieved. And I feel that I've reached some milestones where I'm pleased to hand it over to my successor, who will do with this team and equally great job or better job in the future.

**Greg Jackson:** [00:21:00] So I think we are well set for the future.

**Russel Goldsmith:** [00:21:03] What about from a personal perspective? What would you say you've learned from this partnership that, that you're going to take with you now to your new role?

**Dr. Karsten Wildberger:** [00:21:09] So first I hope, um, uh, to keep the relationships and the friendships alive that I've built also with the people here on this podcast. But what I've learned is, and I actually said that to the people in the new company, which I've only met virtually a few people there, but I said something to them and I had Kraken and this project on my mind because they also struggle a little bit with IT and technology. And I said, if there's one thing I've learned is how fast, when you know what you're doing and you have the right capabilities, partners with you, how fast based on technology, you can solve problems for customers for businesses that you didn't think was possible.

And that speed and the impact at a short period of time, one can have when, when really thinks a bit differently about a problem and has the right solution. This is something I will definitely have learned from this partnership. And that amazes me still.

**Russel Goldsmith:** [00:22:13] Fantastic. Um, Greg, last thoughts from you on this one?

**Greg Jackson:** [00:22:17] Well, first of all, I'm gutted to see Karsten go. I think it was his personal leadership and decisiveness. That enabled this project to happen in the first place, and that has been one of the key contributors to success. And I think that partly comes from sort of shared humility and respect, which is, you know, for me, I spent a lot of my life talking about bloated, inefficient, incumbent companies, and actually recognizing that. Some of those were incredible companies, incredible people doing incredible work is, has been a really important part of this process, I think, and going the other way. One of the interesting features of Kraken, is it's a sort of take it or leave it model Kraken is a very complete platform. And unlike a lot of other kind of technology solutions, it's not designed to be kind of mix and matched to make the solution that a company wants.

Instead, it's designed to be an holistic whole, and it's very, very hard for companies to accept. Like we're going to take the whole thing rather than we're going to try and tinker with it to make it our version. I think Karsten has really driven kind of the respect within his organization to help people say, look, let's take Kraken as it is rather than be tempted to improve it.

And as a result, I think both of us. Have really learned a lot together and have delivered the success. That will be so important at a big picture level on a personal level. Karsten invited me onto his podcast a few weeks ago, and I was so in awe of some of the kind of values and visions described that, you know, I was desperate to go for a beer with him.

Currently he's in Germany, I'm here in the UK and COVID kind of gets in the way a bit, but I desperately want that beer and probably quite a few more to follow.

**Dr. Karsten Wildberger:** [00:24:08] First of all, thank you very much, Greg, for your very touching words. I remember. When I went first time to the UK and you showed me over the course of two days, the software and what you were doing. And it was, I would have the chance to talk to your people at Octopus and saw their passion. I remember there was one email, which was an answer to a customer, always says, love and power at the end. And I thought just this passion that came through all these, this communication. I love that, but I came back and I sat in the office of our CEO at the time, Johannes Tyson and he said me, so how was it? How was it? And I said, this was the best time so far at Eon what I learned in the UK. I have not seen this kind of technology before, how they think about the problem. And they translated this and separate the regulation, complexity from simplicity and how they manage to manufacture this software.

I said, I was really in awe and he said, so what do you think is that I think there is a chance to solve our problem that way. So that's very risky, they're a small company. Well, we'll continue to talk. And, um, you mentioned that actually when his, in his leaving do this conversation. So this was a very proud moment and I definitely will follow from afar, Octopus and Kraken and Eon and Eon Next of course. And I will always be a great advocate. And Greg, maybe you want to look into other industries as well and solve their problems too. Retail is an important one as well.

**Greg Jackson:** [00:25:41] Yeah we're very tense. I think we can talk to you about the blueprint and maybe exactly.

Maybe you can solve that one. Yeah, that'd be great fun. Yeah.

**Russel Goldsmith:** [00:25:48] Right. Good place to leave it. Um, Dr. Karsten Wildberger, thank you once again for giving up your time to chat to us and Greg always a pleasure. Um, that's actually it for this episode of Inside Octopus as always. If you've got any comments on anything we've discussed today, please do get in touch via the website, @octopus.energy or via the usual social channels, but for now, from me, Russell Goldsmith. Thanks for listening and goodbye.