Podcast Transcription: Discussing AI and the Future of IoT Connectivity with Soracom

[Mohit] (0:07 - 0:49)

Hello everyone, and welcome to yet another episode of The Counterpoint Podcast. I am your host, Mohit Agrawal, and today we will talk about IoT, and IoT connectivity landscape. I am delighted to be joined by Kenta Yasukawa, who is a co-founder and CTO at Soracom.

Soracom is a global cellular IoT connectivity provider and was recently named as a leader in Counterpoint's ranking of connectivity management platforms for IoT. Soracom recently got listed on the growth market of Tokyo Stock Exchange, apart from getting investments from Suzuki Venture Fund. We will talk about Soracom's focus areas, strategic investments, IoT connectivity landscape, and much more in today's podcast.

Welcome Kenta to Counterpoint's podcast. How are you doing today?

[Kenta] (0:49 - 0:54)

Thank you. Thank you. Thank you for having me. Yes, I'm doing great. I'm excited to be on the show.

[Mohit] (0:54 - 1:04)

Thanks. So, Kenta, a lot of our listeners might not be familiar with Soracom. So, maybe we can start with you talk something about Soracom as a brand to our listeners.

[Kenta] (1:05 - 2:06)

Sure. Yes. So we, Soracom, provide smart connectivity for IoT devices, meaning that we cover cellular LPWAN satellite connectivity so that the customers can connect their devices to cloud backend of theirs.

We are in a way an MVNO, but we do much more than that. We provide the value-added services that actually make customers' IoT journey smoother and easier. And by using our platform, we accelerate customers' time to market and make more innovations possible.

So we have, for example, we have built our own cellular core network on top of the AWS cloud environment. So from device point of view, next hop is already cloud. And we have our own software that actually provides the offloads, all the heavy lifting from the devices to our cloud side so that the customers can focus on their businesses and applications when it comes to IoT project development. That's what we do.

[Mohit] (2:07 - 2:25)

Thanks. Thanks, Kenta. And congratulations on your listing on the growth market of Tokyo Stock Exchange and the investment from Suzuki Ventures. So KDDI acquired Soracom a few years back. And with the latest listing as well as the Suzuki investment, how does it all fit into the puzzle? How do you plan to utilize the latest investment that you have got?

[Kenta] (2:25 - 5:16)

Yeah, I think that's a great question. First of all, this achievement, we couldn't have done this without our customers and partners and their support. So we are so grateful for everyone.

And yes, just as Mohit mentioned, we got acquired by KDDI back in 2017. So until the date of the IPO, we were part of KDDI group. And then we decided to become public and we just did that on March 26th.

So it's a very fresh news. And the reason why we did this and the reason why KDDI decided to help us do this is to expand our platform technology and platform services globally so that we can support everywhere in the world through our connectivity platform and features that make the IoT project development easier. So we call it actually a swing by IPO.

You know, swing by is a term used in space travel. You use the planet's gravity to assist your acceleration and also changing the direction. So KDDI is of course a big company. They are one of the largest telcos in Japan. And we became part of the group. And we provided our technology and KDDI helped us to grow our business.

And we actually used the gravity to grow our company and accelerate. And then KDDI helped us to move even faster in the space so that we can actually support more and more customers worldwide. So that's what we did.

And we are so excited about that. And KDDI, their CEO, Takahashi-san, actually came to celebrate our IPO on the day of the listing. And they've been always helping us even after the IPO as well.

And the Suzuki investment actually was also announced right after the IPO. So the, you know, Suzuki has a huge market share in many countries, for example, especially in countries like India, they have a top share in the automotive and smart mobility devices. So we are excited about this partnership.

They invested in us and we are now discussing how we can make their smart mobility devices and automotives get connected to cloud backend so that we can achieve more and more together. That's what it is about. So by having all the funds and all the partnerships that this IPO makes possible, we can accelerate our growth in the global IoT market. And we try to achieve our vision to reconnect the world by leveraging this.

[Mohit] (5:16 - 5:56)

Yeah. And it's pretty interesting because a few days back or a few months back, Cubic Telecom, like another competitor of yours, also got investment from Softbank. And they are also targeting automotive in a big way.

So automotive, it seems, is going to be the next battleground for most of the companies. So what we'll do is we'll move on to talk more about IoT as an industry, IoT connectivity as an industry, the landscape over there. So if you look at IoT connectivity, it's a very crowded

market with over 30 serious MVNOs there and almost all the MNOs are competing in this globally. So what differentiates Soracron from your competitors?

[Kenta] (5:56 - 8:16)

Yeah, that's a great question. So definitely we provide connectivity. So we sometimes hear other players' names like MVNOs and MNOs. Well, fundamentally, we are offering IoT platform and connectivity is one of the features. So we provide features for security enhancement and cloud integration and also the device management. So we can actually offload much more of all the heavy liftings in IoT development to our platform compared to pure connectivity players.

One example is that when you use our connectivity, again, as I said earlier, the next hop is already our cloud environment. The customers like tiny sensors and small constraint devices, they can send data to our endpoint using our connectivity. And you don't have to use a full-fledged secure cloud-side protocols to do that.

They can just send data to our endpoint by using simple overhead protocol, like even just one single UDP packet is fine. And we extract the payload and call cloud-side API on behalf of the devices. By doing that, you can reduce the data usage and battery consumption on the IoT device side and still integrate with full cloud services.

Since we have all these different kinds of value-added services to make IoT project development easier, we can actually differentiate ourselves and we can acquire more happy customers who are accelerating their IoT project by using our features. And we sometimes actually collaborate with MNOs and MNO partners since we have all these capabilities that the connectivity players may not have. We can actually offer these technologies to enable them to support their customers as well.

So our relationship with KDI started in that way, actually. So as we see more of these smart devices in the world are connecting to cloud, we can actually work with other connectivity players to make sure everything is more efficient and sustainable and financially practical.

[Mohit] (8:17 - 8:47)

Right. And so we track the cellular IoT module market very closely. And last year, it was for the first time that we saw a decline in the module market.

And there was a modest decline of only 2%. But again, it was something that was not expected because IoT continues to grow significantly. And last year was a decline.

So are you also seeing softness in the market? And what do you think are the current challenges that is preventing the growth in the IoT market?

[Kenta] (8:48 - 9:51)

Yeah, as we see from our customers and demand from our market, we see constantly seeing new applications and new IoT projects are happening. So the overall growth has been continuous as we see. And when it comes to the IoT use cases, it's also changing.

It used to be more like a small data transfer or telemetry type of use cases, but we also started to see a large volume of data coming from IoT devices, especially like a video surveillance type of use cases. So as that grows, we are still seeing the growth in the number of IoT devices on our platform every day and every hour. But at the same time, we also see the increase in the data amount.

So the overall market will continue to grow. And I think this is going to be an important technology for the future.

[Mohit] (9:51 - 10:29)

Right. And the value chain itself for IoT is very fragmented. You have players, multiple players. I mean, we last counted 7000 players are there in IoT value chain overall. And then the players, they are getting very little out of that value chain and trying to get into other areas as well. So it's very fragmented. So what do you see? How do we solve this problem of value chain fragmentation? And as a connectivity provider, is there something that you can do?

[Kenta] (10:30 - 12:10)

Yeah, so that's a very interesting question. Definitely, you know, the demand or the use cases in IoT are so broad. So, you know, definitely you can think of like telemetry, smart gas meters and automotive and all these traditional use cases as well. We also see lots of interesting verticals growing.

Like, for example, we have a customer doing beehive monitoring by using our cellular connectivity. We have seen customers connecting some of the animals in the farmer's field so that they can keep track of the location and health of those cows and some livestock. So the demand and all these use cases are growing.

That's why the market tends to get more fragmented because of the different needs from different applications. But certainly, we try to provide a horizontal connectivity solution and value-added features that can be applied to all different types of use cases. So I think other popular companies, other solution providers will also try to kind of, you know, find the common needs and provide those functionalities.

I think over time, some successful businesses and successful applications will grow and migrate to some of those, you know, fragmented markets. And when it comes to platform players like ourselves, I think we keep enabling all different types of use cases and learn from that and provide a core common functionality for all different markets that are currently fragmented. So I think that's how it's going to evolve over time.

[Mohit] (12:10 - 12:58)

Right. And we also saw Qualcomm Aware and Telenor Complete platform that is there, that is trying to provide a service that is end-to-end because on the devices side also there is a lot of fragmentation. There is a lot of certification issues that are there.

So that's pretty interesting things like we are seeing on that side as well. Moving on, like if you look at the MNOs, many of the MNOs have already hived out their IoT connectivity or IoT as a

separate company, and many of them are in the process of doing so. Vodafone is a good example of that.

So how do you think that's going to impact the IoT connectivity market? Because now these guys will be able to get more investment that they were not able to get earlier and they will be more agile probably. But do you see the same thing or what's your view on it?

[Kenta] (12:59 - 14:41)

Yeah, we also have seen that trend for sure. And when we started actually, the idea was to provide the IoT connectivity platform that everybody can get started and everybody can make an innovation as far as they have ideas. So our platform offers a self-service based approach.

So you can actually sign up on our website and purchase SIM cards or eSIM online and get started in the IoT project. That actually has accelerated the many players to get started on IoT. And traditionally, the MNOs, IoT, M2M businesses started from the large enterprise side.

So we have been working on different market segments, but we see certainly the demand coming from a large number of long retail customers. So it makes sense for the MNOs and other players to find a different way to approach those markets. And we certainly have been in touch with several MNO partners and we see the interest in partnership in that space.

When it comes to IoT, as I said, there are so many broad use cases. You can't have an account manager for each and every company. So this type of self-service approach and low cost operations of managing a large number of customers and a large number of devices is important.

So I think there are ways for us to work together with those connectivity players and accelerate the innovation.

[Mohit] (14:42 - 15:04)

Right. Interesting. So in our study, when we were studying the connectivity management platforms, we came across many players who were looking at AI for analytics, but not only analytics, but for better operations management.

So what is your view on how AI can be used in IoT and IoT connectivity and what do you see the future for AI in this space?

[Kenta] (15:05 - 17:59)

Yeah, definitely. The AI is going to be the crucial, important piece in IoT. It's already, it has been already, but the emerging gen AI and new AI technologies will be accelerating the innovation in IoT.

So we have done several things in this space. So first of all, we are adding the integration to gen AI so that whenever customers collect data to our platform, they can actually make use of gen AI to analyze data. So for example, if you have time series data coming from sensors, you can click on our new button saying, ask AI and use that.

Behind the scene, we actually use the gen AI API so that we can look into customers' time series data and provide some analysis, including like trend and outliers and things like that. So the customers can actually use AI to analyze data, even if they don't have a data analyst in their team. So that can accelerate many players in this IoT space.

We are also working on to achieve more. We believe the AI can be the missing piece in IoT, meaning that now so many devices are connected and they have access to cloud. So in the cloud, we have plenty of resources to consume data and analyze them.

But so far, there was not an engine or some kind of an enabler to make a decision or draw conclusions from the data and take an action in the IoT device. So having this latest technology evolution in AI, we started to see some examples of taking data and draw a conclusion and send a command to the device so that we can actuate devices in the field. So we believe AI is going to take the important role in the true IoT vision that we have been talking about for a long time.

And certainly, there are things that can be improved by applying AI in connectivity space as well. So we have customers who have managed large fleet of devices, and those devices connect and disconnect every day, everywhere. So there is so much data that is collected from those devices and their connectivity behaviors.

We are thinking of adding AI-based analysis on those connectivity fleet so that they can also get insights into their connectivity fleet, even if they don't have an analyst working on the large number of devices fleet by themselves.

[Mohit] (18:00 - 18:28)

Yeah, thanks. And at Counterpoint, we are also very excited about the prospects of AI. And we see many applications that are going to be there and many new areas that would open up with AI.

So we are also very excited about it. And so I come to my last question, which is about, have you seen any, like, can you describe any innovative or interesting use case that you have seen on Soracom's platform?

[Kenta] (18:28 - 20:43)

Yeah, I see so many. So it's kind of hard for me to pick one or two. But I get more excited when I see a use case that actually takes advantage of one device into a way that people may not have thought about. In that sense, we have a customer in Japan called HelloLight.

They have built a connected light bulb. So light bulb is the integrated cellular module. And when you use it in the regular room light, when you turn on and turn off the signal, the event is sent to cloud.

So far, it's very simple, right? But the reason why I picked this is that the customer actually uses that event information to see if the elderly people living alone are doing their normal daily life in a healthy way without actually having an invasive monitoring device such as

sensors or cameras or anything. So the families, they can actually see grandpa and grandma doing fine and doing well from remote without actually explicitly asking.

And what actually is interesting is they also, when something happens and when the events are not reported, they can actually talk to some local logistics company and ask them to check if they are doing okay in a natural way. If you don't want to just send an ambulance or anything just because of that event, they can work with local company to just knock on door and say, hey, Mr. blah, blah, blah. Are you doing fine?

How are you doing? So that actually is a cool use case. And we see a lot of interesting use cases in, of course, automotive and smart mobility devices, EV chargers, and oil and gas and healthcare.

So whenever I get new, exciting use cases that I never think of, I get excited. And this is one of the examples.

[Mohit] (20:45 - 21:13)

Thanks, Kenta, for the insightful discussion and joining the show. I learned a lot about Soracom, and not only Soracom, I learned a lot about IoT and IoT connectivity. Thank you.

Thank you. And for our listeners, thank you for tuning in. Reach out to us via email on contact@counterpointresearch.com.

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