0:0:25.120 --> 0:0:26.650 Lucy Thatcher OK, we'll get started.

0:0:26.660 --> 0:0:33.120 Lucy Thatcher And then if more people join, then they can catch up using the recording.

0:0:33.180 --> 0:0:36.930 Lucy Thatcher And so thank you very much everybody for joining us today.

0:0:37.260 --> 0:0:41.730 Lucy Thatcher This is the afternoon version of the latest Open Gateway community.

0:0:41.740 --> 0:0:56.70

Lucy Thatcher

Call this one is going to be focused on exploring innovation in the digital landscape and this is our third in a series of events and and if we could just flick onto the agenda.

0:1:0.920 --> 0:1:9.970

Lucy Thatcher

So yes, first of all, I must remind you that this is a GSMA led call and therefore must abide by the following antitrust policy.

0:1:10.800 --> 0:1:19.290

Lucy Thatcher

You should clearly identify the positive purpose of each project and follow it, and should consult with legal in areas where you are and sure.

0:1:19.340 --> 0:1:25.630

Lucy Thatcher

And please do not enter into agreements that restrict other parties actions or creates barriers to market to entry.

0:1:25.720 --> 0:1:32.400 Lucy Thatcher Don't discuss or exchange information on pricing, business plans or commercial information.

0:1:32.750 --> 0:1:44.640

Lucy Thatcher

And please also don't discuss or recommend any reference prices or pricing policy and if you require For more information on that then you can find the antitrust policy on the GSMA website.

0:1:48.400 --> 0:1:52.190 Lucy Thatcher And also today, uh, there's quite a lot of people on the course.

0:1:52.200 --> 0:2:13.220

Lucy Thatcher

I would encourage you to make use of the chat function and our team are all over that like a rash and will endeavour to either answer your questions in the chat or will follow up with people either on the

call or afterwards as needs be, we will make time for questions after some of the slots and also at the end.

0:2:13.230 --> 0:2:19.200 Lucy Thatcher So if you would like to raise your hand, then please do so when we open up for questions.

0:2:19.970 --> 0:2:21.430 Lucy Thatcher Now we can go to the agenda.

0:2:23.840 --> 0:2:24.360 Lucy Thatcher Yes.

0:2:24.370 --> 0:2:24.950 Lucy Thatcher Brilliant.

0:2:25.40 --> 0:2:27.370 Lucy Thatcher Uh, so I'm going to hand over to my colleague.

0:2:27.380 --> 0:2:32.890 Lucy Thatcher Uh Mark, who is going to talk to us about API certification to begin with?

0:2:33.140 --> 0:2:44.130 Lucy Thatcher I'm going to pop back up to talk about the Open Gateway challenge and then I'm going to start handing over to some of our market champion and members of the Open Gateway initiative.

0:2:44.580 --> 0:2:54.110 Lucy Thatcher So first of all, we're going to have some reflections from our two most recent emblem, WC events, Las Vegas, with Nokia and Kigali with Chenosis.

0:2:54.850 --> 0:3:1.930 Lucy Thatcher And then we're going to hear from three of our market champions in Argentina, Germany and Indonesia.

0:3:2.550 --> 0:3:7.850 Lucy Thatcher So Mark, if I could hand over to you, first of all to talk about API certification.

0:3:9.90 --> 0:3:9.390 Mark Cornall Sure.

0:3:9.400 --> 0:3:9.980 Mark Cornall Thank you. 0:3:9.990 --> 0:3:10.690 Mark Cornall Thank you, Lucy.

0:3:10.700 --> 0:3:12.880 Mark Cornall Hello everybody and thank you for your time this afternoon.

0:3:13.830 --> 0:3:17.350 Mark Cornall So opening up with certification, this is exactly this.

0:3:17.360 --> 0:3:18.440 Mark Cornall This slide says so.

0:3:18.450 --> 0:3:23.920

Mark Cornall It's having that North star around, the developer should only need to change their credentials for global mobility.

0:3:24.350 --> 0:3:25.860 Mark Cornall That's exactly where we want to go.

0:3:25.870 --> 0:3:34.120

Mark Cornall

That's exactly where we failed in the past, and this is exactly why we need to have the certification in place for open Gateway going for you going forwards.

0:3:34.490 --> 0:3:50.730

Mark Cornall

So everything we do and all the decisions we made around that make around that specification should all be aiming towards that North Star to be able to give the developers and give you guys, umm, that's a single solution, not something you need to amend every time you engage with a new operator.

0:3:51.630 --> 0:3:53.890 Mark Cornall So I know if you like to go on to the next slide, please.

0:3:56.800 --> 0:4:21.850

Mark Cornall

So the certification is then the way we're going to approach it is, is really in this way and and no matter which way operators have gone to market and which way that developers engage, whether they're engaging as a standalone deployment with a single operator, they're going through a channel partner such as a hyperscaler or an aggregator or even as an operator working as aggregator though it's Federation deployment, maybe it's a mixture of all of them.

0:4:22.20 --> 0:4:31.780 Mark Cornall Independently of that the certification, what that will bring is we'll bring and principally consistent API deployments, but also brings these other important things as well.

0:4:31.790 --> 0:4:34.700 Mark Cornall It brings that reduction in your integration testing.

0:4:35.90 --> 0:4:36.560 Mark Cornall You've done it with one market.

0:4:36.570 --> 0:4:44.50

Mark Cornall

That means the rest of the market are going to be the same and the same when the markets are looking at the operators are looking or the aggregators are looking or developers are looking.

0:4:44.60 --> 0:4:47.60 Mark Cornall It doesn't matter that integration testing becomes shorter.

0:4:47.190 --> 0:4:52.80 Mark Cornall

We should reduce costs through from prove our time to market, and also enables global catalog as well.

0:4:52.90 --> 0:4:52.860 Mark Cornall For the first time.

0:4:53.110 --> 0:4:59.670 Mark Cornall So the idea that you know and you can go to a certain place and say right, where can I use SIM swap and I can see that globally.

0:5:0.400 --> 0:5:3.680 Mark Cornall Now, the way we're approaching certification is a balanced way of looking at it.

0:5:4.890 --> 0:5:19.180 Mark Cornall There's a few things we've based the principles on, so the first one of those is that pure adoption that Camara API, so a pure Camara API, no and if S but additional fields, extra parameters, nothing like that.

0:5:19.190 --> 0:5:21.460 Mark Cornall But it's just a pure Camara API.

0:5:22.190 --> 0:5:25.640 Mark Cornall Initially, we'll have flexibility of the authorization flows. 0:5:25.710 --> 0:5:35.410 Mark Cornall We know we're all heading for the next six months and getting things out to market, but that gives us a lot of, I guess, old baggage in terms of our old authorization flows that we used to.

0:5:35.880 --> 0:5:39.10 Mark Cornall We're used to having two legged authorization flows.

0:5:39.60 --> 0:5:43.910 Mark Cornall We haven't got too much experience of three legged flows, but that's the way we need to move in.

0:5:44.60 --> 0:5:57.510

Mark Cornall

So initially to make sure we can all push in the same direction, we can be flexible on the authorization flows as long as you have the adoption of a standard Command API and the last part of this is that definitive migration.

0:5:57.660 --> 0:6:4.310 Mark Cornall So the move, if you go out over six months in the future, we need to be looking at those three leg flows on news data.

0:6:4.440 --> 0:6:23.680

Mark Cornall

So there's quite simple and I guess guidance within Camara, which is as soon as an API touches user data it should use a three leg flow and that's the flow and the choice that we're making and we need to have that definitive migration to those three leg flows for all the APIs that that applies to.

0:6:24.270 --> 0:6:25.20 Mark Cornall So that's it.

0:6:25.30 --> 0:6:32.140

Mark Cornall

So it's a way of taking where we are now, making sure we have standard comma APIs, flexibility and adoption.

0:6:32.150 --> 0:6:49.450

Mark Cornall

If we're trying to hit roll out targets, but then going forward to make sure we've got that, that direction, that move, that travel towards three leg flows and having the the flows are the ones which are in Camara as well that authorization flows and we go to the next slide, it's got a nice picture.

0:6:49.460 --> 0:6:50.510 Mark Cornall Everyone likes picture.

0:6:50.800 --> 0:6:54.830 Mark Cornall If you break down open Gateway, you can break it down into into this. 0:6:54.880 --> 0:6:58.490 Mark Cornall This diagram, essentially on the left hand side, we've got the application.

0:6:58.570 --> 0:6:59.690 Mark Cornall There haven't been specific.

0:6:59.700 --> 0:7:1.90 Mark Cornall It could be a back end application.

0:7:1.380 --> 0:7:13.840

Mark Cornall

It could be a handset application, but you got an application on the left hand side that connects through to an aggregator and it's either a pure aggregator or it could be an operator in their as an aggregator and that's in that blue box.

0:7:14.30 --> 0:7:15.990 Mark Cornall And then the next one is the operator.

0:7:16.0 --> 0:7:18.220 Mark Cornall So the operator that's actually gonna answer the API.

0:7:18.990 --> 0:7:19.590 Mark Cornall So that's that.

0:7:19.600 --> 0:7:24.200 Mark Cornall That's that red box is the next one, and there's there's six flows essentially.

0:7:24.300 --> 0:7:25.480 Mark Cornall You could say there's four.

0:7:25.650 --> 0:7:28.520 Mark Cornall So first of all, the purple flow and that's the authorization flow.

0:7:28.650 --> 0:7:32.860 Mark Cornall The thing we talked about being variable and that's slightly different.

0:7:32.910 --> 0:7:37.720 Mark Cornall So you can have that authorization flow and then the next one is the API flow itself.

0:7:37.730 --> 0:7:39.360 Mark Cornall So that's the blue flow. 0:7:40.310 --> 0:7:41.800 Mark Cornall The third one is the operate API.

0:7:42.260 --> 0:7:53.890 Mark Cornall These are more the in the remit of the aggregator or the interest of the aggregate or the operator and these around on boarding around making umm making catalogs available and things like that.

0:7:53.940 --> 0:8:6.590

Mark Cornall

So it's between the operator and whoever's acting as an aggregator and the last one is the tile Co Finder and it's an internal API and an internal flow about how do I know where to route this API call?

0:8:6.700 --> 0:8:7.630 Mark Cornall It's not for me.

0:8:7.700 --> 0:8:8.310 Mark Cornall Who's it for?

0:8:8.320 --> 0:8:15.140

Mark Cornall

I know where it's for and I can reach it the right person, so our initial focus is on flows 2 and four rather than any further.

0:8:17.210 --> 0:8:19.480 Mark Cornall I'm just two seconds 2 seconds.

0:8:35.70 --> 0:8:35.360 Mark Cornall Sorry.

0:8:35.370 --> 0:8:36.540 Mark Cornall Can you come back to me in a minute?

0:8:36.550 --> 0:8:37.710 Mark Cornall I need to go and do something.

0:8:39.990 --> 0:8:41.190 Lucy Thatcher No problem at all.

0:8:41.240 --> 0:8:46.220 Lucy Thatcher I shall, uh if we skip over to my section. 0:8:47.790 --> 0:8:49.320 Lucy Thatcher And then we can come back to Mark.

0:8:53.420 --> 0:8:54.210 Lucy Thatcher Thank you.

0:8:54.700 --> 0:9:0.730 Lucy Thatcher So I'm moving swiftly on to briefly talk about the Open Gateway challenge.

0:9:0.790 --> 0:9:11.290 Lucy Thatcher So some of you may have come across this already, and if you haven't, be delighted to share with you what is live and open at the moment.

0:9:11.300 --> 0:9:12.720 Lucy Thatcher If you go on to the next slide only.

0:9:15.690 --> 0:9:22.880 Lucy Thatcher So the Open Gateway Challenge is part of the GSMA's GLOMO Awards, which are the Global mobile awards.

0:9:22.990 --> 0:9:33.120

Lucy Thatcher There's something that we've been running every year as part of Barcelona and MWC event that we hold every year in February and this year.

0:9:33.130 --> 0:9:38.70 Lucy Thatcher We're delighted that we have in brand new category called the Open Gateway Challenge.

0:9:39.380 --> 0:9:40.60 Lucy Thatcher Next slide please.

0:9:43.110 --> 0:9:43.740 Lucy Thatcher Thank you.

0:9:43.850 --> 0:9:52.880

Lucy Thatcher

And so here's a brief overview of the challenge and the description that you can find on the GLOMO website, which I will provide a QR code for shortly.

0:9:53.330 --> 0:10:4.520

Lucy Thatcher

But, umm, this is effectively looking uh for developers who can use public comara API is to create a commercial cloud based service which uses multiple APIs.

0:10:4.690 --> 0:10:12.360

Lucy Thatcher

Is a solution for either your local or international markets and demonstrate some business value in a specific vertical industry.

0:10:13.430 --> 0:10:33.950

Lucy Thatcher

Now we do have a test bed which is available and you can request that via the the link that is on your screen, but also we're happy to accept web pages, presentations, videos, you name it, but we're really looking for people to really start using these APIs and to to create things of value.

0:10:35.90 --> 0:10:37.320 Lucy Thatcher And what's the point, you may ask?

0:10:37.870 --> 0:10:54.410

Lucy Thatcher

It is if you go on to the next slide, the prize that we have as part of this is for you to be, uh, receiving your winners trophy on stage at our Open Gateway Dev Con event as part of MWC Barcelona.

0:10:54.630 --> 0:11:4.370

Lucy Thatcher

And that's a developer focused event, specifically around Open Gateway which I would be encouraging you all to be looking to attend in February.

0:11:4.860 --> 0:11:25.360

Lucy Thatcher

You also obviously get a whole load of other things in terms of social posts being up on the website, part of media announcements, so it should be really good opportunity for those of you who may be part of early adopter programs who are and kind of doing testing part of labs to really start having a go and to kind of get this going.

0:11:26.710 --> 0:11:29.280 Lucy Thatcher Most important line is that line at the bottom.

0:11:29.550 --> 0:11:53.780

Lucy Thatcher

Umm this is a challenge which is free to free to enter, so it is something that you can can kind of sign up for via the GLOMO website free of charge did have a question earlier from someone who thought that they had paid for this and it actually there are other categories which you have to pay for but not this one.

0:11:53.790 --> 0:11:57.590 Lucy Thatcher You'd be relieved to hear and the next slide.

# 0:12:1.790 --> 0:12:23.860

Lucy Thatcher

If you're not sure where to start, our colleagues at Nokia have very kindly provided some starters for 10 for you and they can be found via our website as well, and I'd recommend having a look at those if you're yes or stuck for ideas of of things that you could create APIs for and the final side.

0:12:27.990 --> 0:12:29.500 Lucy Thatcher Here's that magic you R code.

0:12:29.510 --> 0:12:32.610 Lucy Thatcher Who'd have thought that QR codes would have been quite as successful as they have been?

0:12:32.620 --> 0:12:37.380 Lucy Thatcher But anyway, here's the QR code for you, which will send you straight to the GLOMO website.

0:12:37.390 --> 0:12:49.120 Lucy Thatcher So you can find out more about the Open Gateway challenge and you can also find out some of the kind of judging criteria and all of the specifics that you need for for that event.

0:12:49.350 --> 0:12:54.60 Lucy Thatcher For that challenge, the closing date is November the 16th.

0:12:54.70 --> 0:13:2.200

Lucy Thatcher

So you've got a week, although I will give you a nod and a wink and say that there is a high chance that that will be extended very slightly.

0:13:2.210 --> 0:13:15.110

Lucy Thatcher

So don't pay like if you have only just started clicking onto the the link, but I would recommend that you go and have a little lick and get those submissions in so you're not trying to do it at the last minute like everybody else.

0:13:15.680 --> 0:13:18.740 Lucy Thatcher But yeah, have a look and it would be great if you can enter that.

0:13:20.690 --> 0:13:25.430 Lucy Thatcher And with this, we're going back to back to talk briefly about certification, mark.

0:14:6.160 --> 0:14:7.740 Mark Cornall Additional focus on flows 2 and four.

0:14:7.750 --> 0:14:20.480

Mark Cornall

So it's the authorization and then with flexibility in that and encouraging adoption of the three legged flows where possible where where we get to them when they're defined and then the 100% adoption of the Camara API test, that's this one.

0:14:20.490 --> 0:14:26.330 Mark Cornall And this is really what open Gateway looks like if you go to the next one, it simplifies this down a bit further.

0:14:27.100 --> 0:14:28.680 Mark Cornall This time we've got next slide Olu.

0:14:34.60 --> 0:14:49.310

Mark Cornall

So this one we've got the the application on the left hand side and then I haven't put the the aggregator in there and on the bottom of this on the blue line, we've said that if you want to be fully compliant, you need to have that 100% Camara API adopted your API.

0:14:49.450 --> 0:15:3.670

Mark Cornall

If so, butts on the authorization flow, we can be a bit more lenient I guess, or balanced and we can authorization flow according to Camara, and that's either fully compliant or partially compliant.

0:15:3.750 --> 0:15:13.180 Mark Cornall A lot of people are coming from where they're using client credentials and and we need those of the and it's touching personal information to move that to A3 legged flow.

0:15:13.190 --> 0:15:22.100

Mark Cornall

So for the moment you can be partially compliant and moved fully compliant and that partially compliant will drop off when we go past.

0:15:22.470 --> 0:15:26.30 Mark Cornall So this Q2 next year, so that's the way we're approaching it.

0:15:26.40 --> 0:15:29.860 Mark Cornall That's where we're trying to move everyone to this North Star.

0:15:29.870 --> 0:15:34.780 Mark Cornall Of the only thing that the developer needs to do is to change their login detail.

0:15:34.790 --> 0:15:35.950 Mark Cornall If you go on to the next one.

0:15:39.700 --> 0:15:40.890 Mark Cornall And this is the same message.

0:15:40.900 --> 0:15:46.790

Mark Cornall

So on the left hand side you've got the testing matrix, so we've got the different APIs that we've got at the moment.

0:15:46.860 --> 0:15:48.970 Mark Cornall Within those APIs, there are different functions.

0:15:48.980 --> 0:15:59.510 Mark Cornall

If I look at SIM sort for example, which is about 3 courses the way down, there's a retrieve date and there's a check so I can retrieve the date that's in what swapped or I can check to find out in the last 24 hours if it was swapped.

0:15:59.900 --> 0:16:1.50 Mark Cornall Those are both using SQL.

0:16:1.200 --> 0:16:3.80 Mark Cornall That's the three legged token.

0:16:3.580 --> 0:16:14.990 Mark Cornall Uh E those, that's the testing matrix and these the API that we will test we will test per API per developer and we'll to test every version of it as well as Kamara and the release particles mature.

0:16:15.200 --> 0:16:20.130 Mark Cornall Then that will become less and less, but there will be definitive pieces.

0:16:20.740 --> 0:16:27.750 Mark Cornall You see that going from we're very point release at the moment and it will be much more structured as that develops.

0:16:28.740 --> 0:16:33.130 Mark Cornall The TIP certification is per API as is and on the right hand side is the same message again.

0:16:33.880 --> 0:16:36.730 Mark Cornall We need to have 100% adoption of the Camara definition.

0:16:37.380 --> 0:16:58.310

Mark Cornall

We accept any authorization flow until Q 224 and that would be partially compliant and then once you have adopted the I guess the nominated Kumar authorization flow, the one that's recommended in Camara, then that would become then fully compliant and that's really where we're heading to and that's the North Star and everything we do will be around that.

0:16:58.420 --> 0:17:6.340

Mark Cornall

It's going to be very balanced, it's going to take a balanced approach to it, limitations with people's umm, development environment.

0:17:6.350 --> 0:17:24.310

Mark Cornall

So we need to be mindful of that, but we need to get to the point where we have exquire delivering exactly what it needs to do, which we've never managed before, which is that North Star or anything you gotta change is your credentials and then it's the same piece of code testing special software.

0:17:24.410 --> 0:17:29.70 Mark Cornall The specification will be within Camara, so there's a question in the in the chat.

0:17:29.640 --> 0:17:37.210 Mark Cornall The specification is the one defined in Camara, so within Camara every API is going to have a series of tests.

0:17:37.500 --> 0:17:38.580 Mark Cornall Those are written in.

0:17:40.650 --> 0:17:42.620 Mark Cornall Gerkin format, which is human readable.

0:17:42.730 --> 0:17:44.740 Mark Cornall Best format if this, then that?

0:17:47.80 --> 0:17:48.730 Mark Cornall Then we will take those tests.

0:17:48.740 --> 0:18:2.790 Mark Cornall

We will turn them into back end tests or front end tests using things like postman and we will provide those tests to operators so that they can do their self test to make sure it's there in some sort of self testing way.

0:18:2.960 --> 0:18:4.870 Mark Cornall But then we will run those tests ourselves.

0:18:5.460 --> 0:18:18.900 Mark Cornall So that spec and the software standard

So that spec and the software standard software, the spec and the scripts we will provide as part of what we do and that same towards the operators to make sure that the Camara implementations are using Camara APIs, Camara UMLS.

0:18:19.80 --> 0:18:22.670 Mark Cornall And there were replying in both success and failure. 0:18:22.680 --> 0:18:25.840 Mark Cornall And the same way and then also using the same flows as well.

0:18:27.100 --> 0:18:33.0 Mark Cornall Umm for my all the aprons use 3 lactose or just the ones that you can send to the user consent. Interesting.

0:18:35.920 --> 0:18:44.20 Mark Cornall The rule that's in Camara is that it, whether it's concerned with customer data, you end up with a situation, something like SIM swap.

0:18:45.470 --> 0:18:47.910 Mark Cornall Simswap in the past has been legitimate interest.

0:18:48.670 --> 0:18:51.580 Mark Cornall When you say legitimate interest, we don't necessarily need consent.

0:18:52.570 --> 0:18:56.440 Mark Cornall However, there is the chance that a user can opt out and it is user data.

0:18:56.490 --> 0:19:2.350

Mark Cornall So the way we've chosen is to say that where user data is involved, A3 legged tokens should be used.

0:19:2.550 --> 0:19:5.700 Mark Cornall Now you don't necessarily use go in and explicitly ask for that three.

0:19:5.710 --> 0:19:6.940 Mark Cornall Let that consent.

0:19:7.270 --> 0:19:11.410 Mark Cornall Certainly on SIM swap in your local market, it may make it may not.

0:19:12.70 --> 0:19:19.150 Mark Cornall So you have the chance in that three legged token to then shortcut that final leg and not actually ask for explicit consent.

0:19:19.240 --> 0:19:26.430

Mark Cornall

You can know by the way that the API is called that it's for something which is legitimate interest and you don't need to call for that consent.

0:19:26.560 --> 0:19:30.170 Mark Cornall So that's probably the wider answer to that one.

0:19:30.250 --> 0:19:31.770 Mark Cornall Another question that's from George.

0:19:31.920 --> 0:19:32.950 Mark Cornall Hopefully that answered it.

0:19:36.100 --> 0:19:36.910 Mark Cornall Any other questions?

0:19:41.340 --> 0:19:43.240 Lucy Thatcher Not that I can say at the moment, Mark.

0:19:43.250 --> 0:19:44.50 Lucy Thatcher Thank you for that.

0:19:44.300 --> 0:19:44.640 Mark Cornall Cool.

0:19:44.650 --> 0:19:45.10 Mark Cornall Thank you.

0:19:44.60 --> 0:19:48.250 Lucy Thatcher So yes, if there are, are there any questions for either Mark or myself?

0:19:48.300 --> 0:19:55.30 Lucy Thatcher And then please do continue to pop those in the chat and and we will answer those.

0:19:55.90 --> 0:20:0.820 Lucy Thatcher I won only if we can test your.

0:20:1.850 --> 0:20:3.400 Lucy Thatcher Clicking again I'm afraid.

0:20:5.470 --> 0:20:19.580 Lucy Thatcher

And we'll hand over and well, I will introduce Mikko who will give us a bit of a view of Nokia as Co as a code network as a code and talk to us a little bit about what they were talking about in Vegas.

0:20:19.950 --> 0:20:21.160 Lucy Thatcher So, Mikko, over to you.

0:20:21.170 --> 0:20:21.600 Lucy Thatcher Thank you.

0:20:22.630 --> 0:20:23.180 Mikko Jarva (Nokia) Yeah.

0:20:23.270 --> 0:20:24.10 Mikko Jarva (Nokia) Thank you everybody.

0:20:25.600 --> 0:20:28.850 Mikko Jarva (Nokia) Good, good evening, afternoon and good morning to me.

0:20:29.600 --> 0:21:4.430

Mikko Jarva (Nokia)

I'm Mikko Yava Fen Fen, but based in Sunnyvale, CA in Silicon Valley have been Nokia with five five last five years before that in sort of a software software industry and and then I in Nokia I had the portfolio in ARCHITECTURE for our new network monetization platform business unit and in that business unit we are building also and this is my responsibility, it's building a aggregated platform we call network as code platform.

0:21:5.260 --> 0:21:52.30

Mikko Jarva (Nokia)

I will not only talk about product or product today or our platform that we're building, but what I'm going to talk about, what we're doing and how it's reflecting the industry momentum and that momentum we saw culminating in in Mobile World Congress in Las Vegas, we actually launched our platform in there and we discussed a lot about the use cases and applications for network programmability, APIs and of course, we see the momentum now service providers like we discussing here opening the API for programmability, aggregated platforms coming aboard like us and then then most importantly the application is having a new type of demand and require network programmability.

0:21:52.520 --> 0:21:53.130 Mikko Jarva (Nokia) So.

0:21:53.180 --> 0:21:55.670 Mikko Jarva (Nokia) So thanks Lucy for the introduction.

0:21:56.310 --> 0:21:58.870 Mikko Jarva (Nokia) Let's go to the next slide, Olu. 0:21:58.940 --> 0:22:2.530 Mikko Jarva (Nokia) And so why do we need programmable networks?

0:22:3.210 --> 0:22:20.820

Mikko Jarva (Nokia)

We want to change the relationship between the applications and the networks and that is to change the applications that run only on the device and run over the top, which means that they are largely unaware of the network and largely unable to control the network.

0:22:20.830 --> 0:22:37.800

Mikko Jarva (Nokia)

The moving to the application to which have this meshed relationship between the application and the network, meaning that the network can exchange information towards the application and application can request capabilities from the network and exchange information with that as well.

0:22:38.220 --> 0:22:57.530

Mikko Jarva (Nokia)

And the applications, we will change the OR expand the concept of the application, not only those running on devices, but those running on edge clouds, connected cars managing drones or or industrial and enterprise or consumer metaverse applications.

0:22:57.740 --> 0:23:1.730 Mikko Jarva (Nokia) Why we would change this relationship between the application and the network?

0:23:1.740 --> 0:23:6.130 Mikko Jarva (Nokia) Well, there are limitation for application which run over the top.

0:23:6.140 --> 0:23:26.410 Mikko Jarva (Nokia) So this model enables first of all better new application and experiences also in the this way of consuming the network from the application point of view leads into more optimized use and then monetization of the network by by the use of the applications in new ways.

0:23:26.780 --> 0:23:33.450 Mikko Jarva (Nokia) But then there is also the unknown unknowns, which the new innovations and agility of the developer ecosystem.

0:23:33.460 --> 0:23:42.260 Mikko Jarva (Nokia) When we make the network capabilities easily consumable for them, then we will then see what kind of new innovations and use cases.

0:23:42.580 --> 0:23:52.950 Mikko Jarva (Nokia) So we'll we'll be spun up and mushroom in the industry and what we've been doing is a start looking in this new U tab. 0:23:52.960 --> 0:24:2.820 Mikko Jarva (Nokia) If you use cases, building them within ecosystems and exploring the promise and the potential of programmable networks so we can go to the next slide, please, alum.

0:24:6.660 --> 0:24:13.270 Mikko Jarva (Nokia) So one of the such use cases is the remote operations of drones over programmable network.

0:24:13.280 --> 0:24:22.650 Mikko Jarva (Nokia) This is a collaboration we did with Deutsche Telecom sometimes as the drone operator and chronic who provided the integration into Germany space.

0:24:23.220 --> 0:24:25.230 Mikko Jarva (Nokia) This is the best to be seen through a video.

0:24:25.240 --> 0:24:25.690 Mikko Jarva (Nokia) So.

0:24:25.960 --> 0:24:27.310 Mikko Jarva (Nokia) So let's go to the next slide.

0:24:39.680 --> 0:24:40.890 Olu Omobitan My name is Noel Wirzius.

0:24:42.920 --> 0:24:49.170

0:24:40.900 --> 0:24:42.730 Olu Omobitan I'm product manager for network APIs.

Olu Omobitan Today we are here at Lancome big Bond at one of the telecom buildings and we testing network APIs together with Nokia.

0:24:54.330 --> 0:24:59.770 Olu Omobitan The stone what we have seen in this videos is not operated by people near hereby it's operated from Belgium.

0:25:2.70 --> 0:25:11.690 Olu Omobitan We are operating the first BVLOS flight cross country in Europe over the public 5G network of Deutsche Telecom.

0:25:11.770 --> 0:25:18.640 Olu Omobitan Operating vivos drone means that you're going for the full with doesn't see what you often see is that the network is. 0:25:18.650 --> 0:25:27.10

Olu Omobitan

If I really crowded so it's very crucial, then that's the safety drone can be programmed that they can have the bandwidth they need.

0:25:28.590 --> 0:25:38.630

Olu Omobitan

This is the world is moving into and I knew type of applications and these applications also they will have a very high dependency on the network performance and network specialization.

0:25:39.30 --> 0:25:47.200

Olu Omobitan So the key to make this kind of applications work is the ability for the application developers to program the network.

0:25:47.450 --> 0:25:50.340 Olu Omobitan It's that one company that can make all this work.

0:25:50.470 --> 0:25:52.280 Olu Omobitan And what happened here today?

0:25:52.290 --> 0:25:55.190 Olu Omobitan We had an ecosystem of companies working together.

0:25:58.430 --> 0:26:2.90 Olu Omobitan It's a kind of European partnership we do here.

0:26:2.600 --> 0:26:21.80

Olu Omobitan

Nokia has prepared this this excellent drone using or making use of the complete 5G capabilities of the network, so that also we are able to see the drone in the unmanned traffic management systems so that we're really able to properly integrate this drone into the air space.

0:26:21.390 --> 0:26:31.10

Olu Omobitan

So in this use case, our two network APIs quality on Amanda location verification are used by Nokia platform network as a code which is more or less an aggregator for network APIs.

0:26:31.170 --> 0:26:37.300 Olu Omobitan So they integrating O APIs into their platform, offering them wire different services like SDK's to developers.

0:26:37.570 --> 0:26:43.660

Olu Omobitan

So in this use case here what we're seeing today at Lincolnville is a drawing which is flying using our both APIs.

0:26:43.770 --> 0:26:50.100

Olu Omobitan

The first one verifying that the one is really in displays here and the second one is quality on demand for the flight level.

0:26:50.190 --> 0:27:2.400

Olu Omobitan

So even in congestive area, it's then possible for a defined time to getting more polarization over the network so that you use cases even working if there are thousand people around you, your life will depend on these QID.

0:27:2.410 --> 0:27:5.780 Olu Omobitan So you want to test it up front, and that's what we actually did today.

0:27:5.790 --> 0:27:12.10 Olu Omobitan We made sure that these program will quality demands are possible.

0:27:13.110 --> 0:27:24.130

Olu Omobitan

There are so many use cases which can be perfectly done with a drone over longer distances with the ability of the network of Deutsche Telecom with the true European player like Nokia.

0:27:24.460 --> 0:27:26.940 Olu Omobitan So I really think the market is seeking for a solution like that.

0:27:29.750 --> 0:27:48.0 Mikko Jarva (Nokia) So hope you enjoyed that and I like to highlight in here that this is not only a futuristic use case, but the drone operator here said the mesh is actually going live with the service that provide remote operations and remote feed of from drones.

0:27:48.250 --> 0:27:55.860 Mikko Jarva (Nokia) In the case of fires, so whenever there is a fire, drone will be always dispatched in there provide also a real situational awareness of the flight.

0:27:55.870 --> 0:27:57.620 Mikko Jarva (Nokia) So of the fire.

0:27:57.630 --> 0:27:59.610 Mikko Jarva (Nokia) So this is actually already become reality.

0:28:0.40 --> 0:28:7.390 Mikko Jarva (Nokia) The other type of use cases that we see becoming reality is the remote Rd legal driving of cars. 0:28:7.400 --> 0:28:8.710 Mikko Jarva (Nokia) Of course we know.

0:28:8.720 --> 0:28:21.120 Mikko Jarva (Nokia) So the connected and self driving cars have become reality, but working function use case is the ability to drive a car to a renter and doing that driving remotely.

0:28:21.130 --> 0:28:25.890 Mikko Jarva (Nokia) So that means that the car can be driven to any place where the car rent is.

0:28:26.80 --> 0:28:29.20 Mikko Jarva (Nokia) This is a example of such a service is being provided.

0:28:30.50 --> 0:28:42.840 Mikko Jarva (Nokia) This El Moro, who provides a startup in Estonia, put bro estate services in in Italian and and Helsinki and then in mobile Congress Last Vegas.

0:28:42.850 --> 0:28:52.180

Mikko Jarva (Nokia)

We also heard about company called Halo that car which is enabling providing similar kind of service in in in Las Vegas.

0:28:52.650 --> 0:29:1.230 Mikko Jarva (Nokia) Now when a remote Rd legal driving is being done then it's to be specific redundancy on the connectivity part.

0:29:1.450 --> 0:29:20.910

Mikko Jarva (Nokia)

So typically this rote remodel wrote remote Dr driven Rd legal cars have at least three to four Sims they which those SIM cards then balance the connectivity between different kind of networks and also provide some of the connectivity for low latency control of it.

0:29:22.220 --> 0:29:45.810

Mikko Jarva (Nokia)

And now there is a definitely need for quality of service on Demand API as well as then upcoming camera API on the network insights which is needed as well this drivers when they try remotely they rather go around the congestion than drive through congested area of the network because there is a likelihood they might lose the control of the car and then have to park a side.

0:29:45.980 --> 0:30:12.480

Mikko Jarva (Nokia)

So these are the kind of use cases and examples that we are seeing and since we are seeing and building also helping ecosystem to build these use cases, we also see saw business case to to build an aggregated platform and that is also helped by the fact that the networks are being providing open and standardized APIs for consumption of the aggregated platforms and the application. 0:30:12.540 --> 0:30:12.750 Mikko Jarva (Nokia) So.

0:30:12.820 --> 0:30:30.570 Mikko Jarva (Nokia) So let's go to the next slide in mobile or Congress, Las Vegas, we launched our Net Vegas scope platform and we announced the availability of that by this year, December for application developers connecting then their application into capabilities and selecting networks.

0:30:30.840 --> 0:30:34.110 Mikko Jarva (Nokia) And then let's have a quick look on the platform.

0:30:34.120 --> 0:30:35.980 Mikko Jarva (Nokia) So next slide please home.

0:30:37.220 --> 0:30:40.150 Mikko Jarva (Nokia) So this is just the introduction we tried to minimize.

0:30:40.430 --> 0:30:47.100 Mikko Jarva (Nokia) Uh, maximize the experience is the experience of the developers and enterprises and then minimize the friction.

0:30:47.250 --> 0:30:51.280 Mikko Jarva (Nokia) How they can get network capabilities in their application?

0:30:51.290 --> 0:30:52.310 Mikko Jarva (Nokia) Let's go to the next slide.

0:30:53.730 --> 0:31:4.840 Mikko Jarva (Nokia) The proud platform provides easy developer experience, so it will be quick for the developers to build their application and integrate network capabilities into their application.

0:31:4.850 --> 0:31:17.520 Mikko Jarva (Nokia) Will see very soon a little bit about that and then in the runtime, when the applications required network capabilities, they communicate through the platform and the platform does the things that Mark was doing.

0:31:17.570 --> 0:31:23.470 Mikko Jarva (Nokia) For example, telco routing teleco finding authorization of the capabilities.

0:31:23.620 --> 0:31:27.980 Mikko Jarva (Nokia) So all these components are available in here the platform provides. 0:31:28.260 --> 0:31:46.840

Mikko Jarva (Nokia)

A network capabilities as APIs, but there is also SDK which enabled to to integrate those APIs quickly into the applications and we support Qo D device reachability, device location, specialized network and other capabilities into.

0:31:47.50 --> 0:31:55.700 Mikko Jarva (Nokia) It's very much an aggregated platform, so it aggregates over public networks, but eventually also private networks.

0:31:55.910 --> 0:32:3.180 Mikko Jarva (Nokia) And the reason for that is we see the applications enterprise application will be will be roaming or Dennis to be channel.

0:32:5.530 --> 0:32:9.200 Mikko Jarva (Nokia) Experience for the application development across all of the networks.

0:32:9.530 --> 0:32:19.110

Mikko Jarva (Nokia)

We are very much believers into the same kind of principle that Mark mentioned earlier in this presentation that developers should only need to change the credentials.

0:32:19.120 --> 0:32:43.230

Mikko Jarva (Nokia)

So if a developer uses network as code platform and SDK's integrate their application into network capabilities with this platform, we support northbound camera apps as well as sound bound, which means that then the application developer can change their credentials and use their application also with the other platform or even networks.

0:32:43.240 --> 0:32:43.710 Mikko Jarva (Nokia) So.

0:32:43.760 --> 0:32:52.710 Mikko Jarva (Nokia) So we're very much into the portability, openness and compatibility and standardization of open gateway and Camara initiate this.

0:32:52.860 --> 0:32:55.10 Mikko Jarva (Nokia) Let's have a quick look on the platform.

0:32:55.20 --> 0:33:9.420 Mikko Jarva (Nokia)

How easy it is to develop application as mats and we want to minimize the friction in the depth, so we'll go to the next slide and then see how the application developer kids, the first application connected to the network in here.

0:33:9.550 --> 0:33:13.120 Mikko Jarva (Nokia) So here what is being used is the network is called STK.

0:33:13.530 --> 0:33:23.960 Mikko Jarva (Nokia)

The benefit of the SDK approach is that the developers don't even have to remember how to quote specific kind of an APIs, but they can use functions in the SDK to.

0:33:24.770 --> 0:33:31.750

Mikko Jarva (Nokia)

Go to, connect to the network and that's what actually happening here in this application, so it will offer quickly, builds an application.

0:33:31.760 --> 0:33:43.10

Mikko Jarva (Nokia)

Then make sure that the application is connected to the underlying network and that just takes a couple of minutes to build that application using autocomplete, which is supported by the SDK.

0:33:43.20 --> 0:33:44.980 Mikko Jarva (Nokia) And then here we are running the application.

0:33:44.990 --> 0:33:48.460 Mikko Jarva (Nokia) That testing that there is a network connectivity available.

0:33:48.800 --> 0:33:49.210 Mikko Jarva (Nokia) All right.

0:33:49.220 --> 0:34:2.880

Mikko Jarva (Nokia)

So that was a little bit of a news from Nokia and also on the momentum that we are seeing and building up or mobile phone dress last week as and then of course, we're gonna see much more impartial and looking forward that.

0:34:3.70 --> 0:34:3.680 Mikko Jarva (Nokia) Thank you.

0:34:4.150 --> 0:34:4.660 Mikko Jarva (Nokia) Back to you.

0:34:6.160 --> 0:34:6.950 Lucy Thatcher Thank you.

0:34:5.960 --> 0:34:7.740 Mikko Jarva (Nokia) They, Lucy or yeah. 0:34:7.870 --> 0:34:8.200 Lucy Thatcher Yep.

0:34:8.210 --> 0:34:9.290 Lucy Thatcher No, that that's fine.

0:34:9.300 --> 0:34:10.120 Lucy Thatcher Hand back to me.

0:34:10.230 --> 0:34:11.720 Lucy Thatcher Uh, there is a question in the chat.

0:34:11.730 --> 0:34:25.10

Lucy Thatcher Actually, I'm not sure Mark whether it is for you or for Mikko, but how does programming the network using Camara API differ from programming the network using the 5G application function through the N5 interface?

0:34:28.660 --> 0:34:32.980 Lucy Thatcher Does anybody want to will add to that one via chat?

0:34:32.770 --> 0:34:33.690 Mark Cornall That's a good question.

0:34:35.450 --> 0:34:40.640 Mark Cornall Umm so the the Camara APIs are all northbound from out of the network.

0:34:40.850 --> 0:34:44.600 Mark Cornall I think that's probably the answer that you probably are looking for knitting.

0:34:45.350 --> 0:34:48.520 Mark Cornall So the Camara API is are all developer focused.

0:34:48.530 --> 0:34:49.420 Mark Cornall I haven't got my camera.

0:34:50.330 --> 0:35:1.190 Mark Cornall They're all developer focused APIs and they come from untrusted people from outside the network rather than something in trusted between application functions within a network. 0:35:2.980 --> 0:35:4.190 Mark Cornall If that answers your question.

0:35:3.850 --> 0:35:4.330 Lucy Thatcher Thank you.

0:35:6.50 --> 0:35:7.30 Lucy Thatcher Thank you very much, Mark.

0:35:5.880 --> 0:35:17.80 Mikko Jarva (Nokia) Yeah, and yeah, and and of course the the difference is that the the N 5 is just between the application and the PCF policy controller function.

0:35:17.90 --> 0:35:31.260 Mikko Jarva (Nokia) While then Camera API provide much more simplified experience over other different kind of capabilities, not only chasing policies which results into the key code changes but the other capabilities.

0:35:31.290 --> 0:35:32.280 Mikko Jarva (Nokia) That's this location.

0:35:32.290 --> 0:35:33.390 Mikko Jarva (Nokia) Check uh.

0:35:34.70 --> 0:35:35.840 Mikko Jarva (Nokia) Seems to have carrier billing.

0:35:35.850 --> 0:35:39.620 Mikko Jarva (Nokia) Check out reachability status and all that kind of thing.

0:35:39.630 --> 0:35:42.180 Mikko Jarva (Nokia) So easy access to much more capabilities.

0:35:42.190 --> 0:35:49.440 Mikko Jarva (Nokia) I think that's the difference between camera apps and then the ohh and five interface for application functions.

0:35:51.810 --> 0:35:52.920 Lucy Thatcher Thank you very much. 0:35:59.850 --> 0:36:9.60 Lucy Thatcher But he you are if I could hand over to you and the Chenosis team to hear about MWC, Kigali and what you have been up to.

0:36:9.70 --> 0:36:12.670 Lucy Thatcher I heard amazing things about your presentation, so I'm looking forward to this.

0:36:14.870 --> 0:36:16.660 Waseem Amra [ MTN Group - South Africa ] Umm, thank you very much.

0:36:16.720 --> 0:36:19.320 Waseem Amra [ MTN Group - South Africa ] Hello everyone my name is Waseem Amra.

0:36:20.10 --> 0:36:23.850 Waseem Amra [ MTN Group - South Africa ] I am the head of product and platforms for CHENOSIS.

0:36:23.860 --> 0:36:26.670 Waseem Amra [ MTN Group - South Africa ] For those of you that don't know, chenosis is a captive startup.

0:36:26.680 --> 0:36:31.740 Waseem Amra [ MTN Group - South Africa ] But at the MTN Group family, we are responsible for making code accessible.

0:36:32.620 --> 0:36:33.20 Waseem Amra [ MTN Group - South Africa ] Umm.

0:36:33.40 --> 0:36:41.260 Waseem Amra [ MTN Group - South Africa ] Within Africa, and we do that in two forms, either through API's and these are this is building the MTN API portfolio for monetization.

0:36:42.810 --> 0:36:44.400 Waseem Amra [ MTN Group - South Africa ] Or or partner apps.

0:36:44.410 --> 0:36:52.140 Waseem Amra [ MTN Group - South Africa ] And these are APIs outside of of just telco APIs where we partner with certain startups and enterprises and offer them within our platforms.

0:36:52.850 --> 0:37:7.200 Waseem Amra [ MTN Group - South Africa ] The second point that we have is a platform capability where in the mandate of making code accessible, we're also playing around and offering low code, no code tools to to the to the ecosystem. 0:37:7.550 --> 0:37:10.960 Waseem Amra [ MTN Group - South Africa ] Today, what I'm going to share with you guys, the Lucy, I don't think I have.

0:37:12.160 --> 0:37:31.780

Waseem Amra [MTN Group - South Africa]

You know the presentation that that our CEO took the team through, but more reflections and effect that that our presence and our participation Act, MWC Ali had on our business and take you through some of the topics that we discussed in discussed in the pattern in the panel discussions.

0:37:32.80 --> 0:37:33.880 Waseem Amra [ MTN Group - South Africa ] So all of you can go to the next slide please.

0:37:36.560 --> 0:37:36.970 Waseem Amra [ MTN Group - South Africa ] Umm.

0:37:37.260 --> 0:37:43.80 Waseem Amra [ MTN Group - South Africa ] From our perspective within the South African market, we are involved with the GSMA in in two working streams.

0:37:43.90 --> 0:37:48.470 Waseem Amra [ MTN Group - South Africa ] The first is an open gateway stream and the second is is a fantex stream and.

0:37:50.440 --> 0:37:51.30 Waseem Amra [ MTN Group - South Africa ] For U.S.

0:37:51.80 --> 0:37:59.150 Waseem Amra [ MTN Group - South Africa ] Open Gateway and I'm the GSMA is is a great mechanism within the local market to steer the industry in a positive direction.

0:38:0.40 --> 0:38:0.690 Waseem Amra [ MTN Group - South Africa ] Umm.

0:38:0.800 --> 0:38:9.620 Waseem Amra [ MTN Group - South Africa ] And that's because it gives us 2 capabilities #1 it helps us to do good for society through solving real customer problems.

0:38:9.720 --> 0:38:22.730 Waseem Amra [ MTN Group - South Africa ] And if I use the Fintech workstream as an example, it allows us to enter into customer discussions without umm, you know, breaching any competition policies.

0:38:22.740 --> 0:38:44.390 Waseem Amra [ MTN Group - South Africa ] With the GSMA being present so it allows all the MNO to meet with with banks and banking associations and solving real customer problems that that financial services is facing, we use the Fintech stream as a demand generation stream to gather, umm, gather demand and to solve problems in the market.

0:38:44.680 --> 0:39:1.400

Waseem Amra [ MTN Group - South Africa ]

And the principle discussion for us in the open Gateway stream is then to see the open gateway stream with, umm, the demand that we've seen in the market to align a standardized the APIs and the standardization is great for our customers because it's it's one, it's one integration point for them.

0:39:1.830 --> 0:39:12.600 Waseem Amra [ MTN Group - South Africa ] It's important to us because there's, we know our different connectivity streams are facing incumbents and losing losing revenue, which seems to be normal nowadays.

0:39:12.610 --> 0:39:17.380 Waseem Amra [ MTN Group - South Africa ] But Open Gateway allows us to establish new revenue streams and it's helping us.

0:39:17.470 --> 0:39:23.20 Waseem Amra [ MTN Group - South Africa ] It's helping us build a Better Business within chenosis or you can move to the next slide.

0:39:27.610 --> 0:39:27.830 Waseem Amra [ MTN Group - South Africa ] OK.

0:39:27.840 --> 0:39:31.890 Waseem Amra [ MTN Group - South Africa ] I guess I guess I didn't lender lend it too well, but that's fine.

0:39:31.900 --> 0:39:40.660 Waseem Amra [ MTN Group - South Africa ] So all participation at at MWC Kigali was through was through 44 elements.

0:39:40.710 --> 0:39:50.820 Waseem Amra [ MTN Group - South Africa ] Number one, we will present within M obviously really with the stat with a stand and and that's important to us because it allowed us to do 2 things.

0:39:50.830 --> 0:39:58.440 Waseem Amra [ MTN Group - South Africa ] Number one, we could engage with the customers that were that were part of that were part of the channels is ecosystem.

0:39:58.590 --> 0:40:8.130 Waseem Amra [ MTN Group - South Africa ] We brought one of our partners with us and they could expand their reach and this is a young startup in Africa that found opportunities outside of South Africa.

0:40:9.750 --> 0:40:19.300 Waseem Amra [ MTN Group - South Africa ] And secondly, we were able to use the platform within MWC Kiraly as a way to acquire new partners and get into new conversations.

### 0:40:19.930 --> 0:40:41.100

Waseem Amra [ MTN Group - South Africa ]

And if I can add another point to that is we, we also we also believe in giving exposure to the young talent within our team and it allowed us to, you know bring in some younger talent to Kigali to really flex a different muscle and and be part of the ecosystem and try different discussions and learn from different industry events that's happening at at Kigali.

#### 0:40:42.650 --> 0:41:12.810

Waseem Amra [ MTN Group - South Africa ]

The second piece was our CEO was presentation of what Chenosis and the vision of Chenosis, which is making the code accessible and how we as chenosis are monetizing different elements on the network through data monetization focusing on financial inclusivity within Africa starting in South Africa and fraud prevention and that then that leads me into the Third Point which I was part of a panel discussion on the fraud threat landscape under the Fintech group where we could discuss would like minded individuals.

0:41:13.760 --> 0:41:22.400 Waseem Amra [ MTN Group - South Africa ] What are the key trends we're seeing in our market in South Africa, we still have 22 million USD worth of fraud.

0:41:22.460 --> 0:41:27.730 Waseem Amra [ MTN Group - South Africa ] That student, through some swap challenges some sort of problems in the mobile banking ecosystem.

0:41:28.500 --> 0:41:32.410 Waseem Amra [ MTN Group - South Africa ] And and and umm to put that into perspective.

0:41:33.70 --> 0:41:35.890 Waseem Amra [ MTN Group - South Africa ] Umm in South Africa, a SIM swap.

0:41:38.350 --> 0:41:45.170 Waseem Amra [ MTN Group - South Africa ] Uh, some top loss amounts to 17,000 land, where the average salary is actually 15,000 grand.

0:41:45.180 --> 0:41:52.480 Waseem Amra [ MTN Group - South Africa ] So you have the potential to really clean out a customers entire bank account and and give them quite dry for for that month.

0:41:53.220 --> 0:41:57.70 Waseem Amra [ MTN Group - South Africa ] Umm, another great topic that Samuel Tenga took from.

0:41:58.770 --> 0:42:9.780 Waseem Amra [ MTN Group - South Africa ] Umm from TransUnion was on the key industry for prevention of fraud trends that's happening within Africa as a whole and there was great learnings for us from that from that discussion.

### 0:42:10.280 --> 0:42:55.730

#### Waseem Amra [ MTN Group - South Africa ]

What was key for us in this discussion and why I think the GSMA and MWC is so important, especially for a nascent business like ourselves, that's a captive startup within a large enterprise, is that it gives us great reach and exposure by way of example, out of this session off the four panelists was on stage where where in discovery discussions right now and opening opportunities with the with two of them at this point in time, UMM and the reach that we've we've gotten outside of the people that are on the panel but within the audience it has been phenomenal and we could we saw that many people reaching us out from our social media accounts and and it's opened many different discussions and you have an use open opportunities.

#### 0:42:56.560 --> 0:43:3.320

Waseem Amra [ MTN Group - South Africa ]

The last piece for us was a closed group working session with all your you can go to the next slide please.

0:43:6.220 --> 0:43:6.530 Waseem Amra [ MTN Group - South Africa ] Yeah.

0:43:6.550 --> 0:43:9.890 Waseem Amra [ MTN Group - South Africa ] Was a closed group working group session with number one?

### 0:43:9.960 --> 0:43:43.920

Waseem Amra [ MTN Group - South Africa ]

Uh banks across Africa and trade association such as banking associations, where we could get into the nitty gritty of what challenges does the banks and the banking associations are facing use South Africa as one of the use cases and key challenges that we are solving for here you can see in slide two, we went into in depth detail on how identity protection can assist four through some swap API KYC API such as KYC verification and KYC detail.

#### 0:43:44.550 --> 0:43:57.480

Waseem Amra [ MTN Group - South Africa ]

The scam call API that we're we're still positioning in our market and then number verification, but one of the topics that we spent a lot of time on is the data sharing and the consent framework.

## 0:43:57.750 --> 0:44:19.490

Waseem Amra [ MTN Group - South Africa ]

And I think it's important as as Mark previously explained, the two legged and three legged framework and because Africa does not have the GDPR, it does complicate, it does complicate things for us because we're presenting 16 different jurisdictions and each has their own data privacy laws and that that has created you know a lot of operational work for us.

# 0:44:20.40 --> 0:44:42.950

Waseem Amra [ MTN Group - South Africa ]

But we we want you to use that forum to discuss with different Mnos in the room with the banks, how we approach this and how we can actually aid in their market from a constant approach with

both explicit and implicit consent as as Mark mentioned, implicit consent falls under legitimate interest and how we work with legitimate interest.

0:44:42.960 --> 0:44:48.780 Waseem Amra [ MTN Group - South Africa ] But we're personally identifiable information is actually exchanged through the API.

0:44:48.990 --> 0:44:49.560 Waseem Amra [ MTN Group - South Africa ] What was that?

0:44:49.570 --> 0:44:54.400 Waseem Amra [ MTN Group - South Africa ] Are the type of three leg flows that we have for gaming consent.

0:44:55.310 --> 0:45:11.80

Waseem Amra [MTN Group - South Africa] We also explored some of the discussion points on how we we de identify information and in some markets a deidentification of information and the transmission of information that's being deidentified is not considered processing of personal information.

0:45:11.640 --> 0:45:22.500 Waseem Amra [ MTN Group - South Africa ]

The key point for us in this discussion was just having an discussion with the again with the different players in the room and working through these.

# 0:45:22.550 --> 0:45:38.320

Waseem Amra [ MTN Group - South Africa ]

I think for me, what was important was I'm looking at the nuances that the different markets have and getting great, learning a lot of the nuances and and building some of those opportunity and then leveraging some of the opportunity to build newer products and think differently.

0:45:38.770 --> 0:45:54.230

Waseem Amra [ MTN Group - South Africa ]

So it's it's it's been, it's been a great journey for us and and we we we totally enjoyed that session, we wouldn't have happened if we weren't part of the Fintech stream and it's given us some a good platform to to bounce ideas off through different participants.

0:45:55.390 --> 0:45:57.600 Waseem Amra [ MTN Group - South Africa ] Well, you can go to the next to the next slide please.

0:46:0.90 --> 0:46:0.840 Waseem Amra [ MTN Group - South Africa ] Love me.

0:46:0.890 --> 0:46:7.680 Waseem Amra [ MTN Group - South Africa ] Me, we used MWC quickly as as a great way to announce some key partnerships for CHENOSIS.

0:46:8.30 --> 0:46:10.470 Waseem Amra [ MTN Group - South Africa ] As I mentioned where one sizing.

# 0:46:12.170 --> 0:46:27.610

Waseem Amra [ MTN Group - South Africa ]

Data on the network and and monetizing the network and two key partnerships that we formed at at igali, we had the CEO of experience with our experience with us for the whole event at us at our stand and also joining the different.

# 0:46:29.400 --> 0:46:39.210

Waseem Amra [ MTN Group - South Africa ]

The different talks that were that were that were set up, we launched a partnership with experience and TransUnion because we're solving for that for financial inclusivity.

0:46:39.580 --> 0:46:46.540 Waseem Amra [ MTN Group - South Africa ] To put this into perspective, within South Africa, 27 million adults, I'm do not have access to credit.

### 0:46:46.610 --> 0:47:31.530

Waseem Amra [ MTN Group - South Africa ]

We believe from our analysis and from our partnership that using the different data that we get from the network and the way a person tops out the air time and the way the person has changes the device if they have a mobile money account, we can actually fill in a gap that and that helped that 27 million adults be seen in the in the environment of of South Africa and then extending into into Africa afterwards as an example, 470,000,000 by our calculation 470 million people, adults within Africa don't have access to credit and we're trying to solve this as one of the problems that we're that that that we think is is large in Africa.

### 0:47:32.260 --> 0:47:39.230

Waseem Amra [ MTN Group - South Africa ]

One of the benefits that we we've seen through the Fintech group and would Brian Gorman having the CEO of experience with us in the session.

#### 0:47:41.340 --> 0:47:48.610

Waseem Amra [ MTN Group - South Africa ]

Bringing a Bureau to MWC, they saw the benefit of being part of an ecosystem and how they can leverage the ecosystem and value into the ecosystem.

# 0:47:48.880 --> 0:48:8.30

#### Waseem Amra [ MTN Group - South Africa ]

So I think it's another, it's another good opportunity to to actually bring your customers with and the last partnership that I announced was that we announced was with a natural language processing partner of ours called PETRALIA I and they are offering special tag and text to speech APIs for Africa.

# 0:48:8.390 --> 0:48:22.260

Waseem Amra [ MTN Group - South Africa ]

And what was key in this discussion was bringing them to WTT Kali and then being present meant that they got to meet a different set of of potential clients for them.

# 0:48:22.270 --> 0:48:32.280

Waseem Amra [ MTN Group - South Africa ]

The biggest the biggest take from that was because they're in the NLP domain and they focus on South Africa and looking into expanding to Africa.

0:48:32.290 --> 0:48:42.180 Waseem Amra [ MTN Group - South Africa ] They got to meet with two different NLP communities and they're now actively in central and West Africa, leveraging off the communities that they've they have created.

0:48:42.190 --> 0:48:46.590 Waseem Amra [ MTN Group - South Africa ] So umm MWC calling for us was a quite a leap frog.

0:48:46.640 --> 0:49:1.280 Waseem Amra [ MTN Group - South Africa ] And it's given us quite good platform it's and I think it's an Olympics of of networking opportunities and it gives you a good place to really understand different industry insights and leverage that within your business.

0:49:2.150 --> 0:49:4.710 Waseem Amra [ MTN Group - South Africa ] So yeah, I think that's it for my end.

0:49:6.630 --> 0:49:7.300 Lucy Thatcher Fantastic.

0:49:7.310 --> 0:49:7.740 Lucy Thatcher Thank you.

0:49:7.750 --> 0:49:18.740 Lucy Thatcher And slightly worried, if you describe Kigali as the Olympic one, what I'm going to experience at Barcelona, because it be the first time that I've been, so it'd be a Olympics plus.

0:49:19.10 --> 0:49:20.180 Lucy Thatcher But thank you for that.

0:49:21.200 --> 0:49:25.580 Lucy Thatcher I haven't seen any questions pop in specifically for you.

0:49:25.590 --> 0:49:32.500 Lucy Thatcher There are a few sort of general ones and ones for me Co and and looking at the demo that he showed.

0:49:32.510 --> 0:49:36.60 Lucy Thatcher So I think if it's OK with you, we'll move on.

0:49:38.220 --> 0:49:38.530 Waseem Amra [ MTN Group - South Africa ] Thank you. 0:49:36.70 --> 0:49:39.870 Lucy Thatcher And if there are any questions, it was aimed them, please do pop them into the chat.

0:49:40.20 --> 0:49:41.110 Lucy Thatcher So thank you.

0:49:41.680 --> 0:49:47.420 Lucy Thatcher So we're going to change tax slightly now to look at and talk, hear from some of our market champions.

0:49:47.430 --> 0:49:57.670

Lucy Thatcher

So these are operators who are working closely with other operators in a specific market and to look at at APIs across that market.

0:49:57.680 --> 0:50:4.20 Lucy Thatcher So first of all, Damian, I believe you're up first with what's happening in Argentina, so.

0:50:5.930 --> 0:50:6.910 Lucy Thatcher There you are. Wonderful.

0:50:7.830 --> 0:50:8.640 Damian Sanchez Thank you, Lim.

0:50:12.170 --> 0:50:18.970 Damian Sanchez Well, and here I'm going to take a look at the Open Gateway progress in our country.

0:50:19.280 --> 0:50:20.960 Damian Sanchez Next slide, please. Hello.

0:50:23.670 --> 0:50:28.880 Damian Sanchez Well, I have to tell you that we had our kickoff in September.

0:50:28.940 --> 0:51:9.470 Damian Sanchez

From that moment, we are having meetings every two weeks with the representative from all the operators and the GSMA, and in that business discussion we were working in our uh objectives and the first goal we have to take in account was to identify the first API we will launch in and we all agree that that was, it seems, swap SIM top as you know is an easy and clear valuable position API and it's a great start for monetization for us.

0:51:9.720 --> 0:51:26.590 Damian Sanchez So in telecom, we already launched this SIM this API in September, uh, nowadays we are running some POC with an aggregator uh on the other operators.

0:51:26.600 --> 0:51:38.530

Damian Sanchez Claire is working as well in the same API and they are reaching this quarter to launch it to be launch and last Telefonica.

0:51:38.540 --> 0:51:50.950 Damian Sanchez They already had a sync version API in a non Camara version and they are working to upgrade to the Camara versions in sub.

0:51:51.400 --> 0:52:4.530

Damian Sanchez So as you can see, the full market will be ready this quarter to give the developers an the B2B customer, the possibility to use seems up for the full coverage.

0:52:5.750 --> 0:52:6.850 Damian Sanchez Next slide please.

0:52:9.100 --> 0:52:12.50 Damian Sanchez The second point to discuss was integration model.

0:52:12.60 --> 0:52:15.570 Damian Sanchez We all agreed to work with the aggregators.

0:52:16.410 --> 0:52:30.540 Damian Sanchez Uh to reach the market and developers and B2B customer we are having in the meetings a A participation from different uh and the mains aggregators and platforms.

0:52:31.460 --> 0:52:45.490 Damian Sanchez And we are already using the GSMA template to agreed with each one to use for the full coverage next point, uh.

0:52:45.540 --> 0:52:50.630 Damian Sanchez On the second point, we are now discussing is the API road map.

Damian Sanchez As you know, for get a great adoption and to increase the usage of the API we have to cover to cover the the maturity or the whole market.

0:53:2.440 --> 0:53:5.990 Damian Sanchez So it's important to agree in the same API.

0:52:50.740 --> 0:53:2.430
0:53:6.0 --> 0:53:8.270 Damian Sanchez So and to be aligned in that point.

0:53:8.280 --> 0:53:19.600 Damian Sanchez So, thanks God beyond any difference in in the plannings we are all talking about number verification, device status and device location.

0:53:21.280 --> 0:53:22.320 Damian Sanchez Next slide please.

0:53:25.400 --> 0:53:43.670

**Damian Sanchez** 

So the next step for the industry we have to continue being involved in the technical business and and product works in with the GSMA in the local meetings, we have to include in to the our technical and legal teams.

0:53:45.570 --> 0:54:23.310

Damian Sanchez

We have to keep working in the process alignments and via pay attention to things like data protection and consent management according to our regulations and legal recommendations, unless we have to work in our earlier doctor program to assist the digital ecosystems in the aminos dimension, we have to we have to work in accomplish our API releases and we have to go work with the on boarding for the platforms and agregators as well.

0:54:24.540 --> 0:54:35.30

Damian Sanchez

Then we have to work in the open gate with platforms or and capabilities to bring this product successful to the market.

0:54:35.560 --> 0:54:41.360 Damian Sanchez And last but not least, we have to work in the Open gateway CSA certification for the next year.

0:54:44.0 --> 0:54:44.610 Damian Sanchez That's it.

0:54:44.620 --> 0:54:46.390 Damian Sanchez All next slide.

0:54:50.720 --> 0:54:51.550 Lucy Thatcher Thank you, Damian.

0:54:52.430 --> 0:54:52.930 Damian Sanchez Thanks to you. 0:54:51.560 --> 0:54:53.750 Lucy Thatcher Any questions for Damian at this stage?

0:54:58.970 --> 0:55:0.460 Lucy Thatcher I I don't think so.

0:55:1.210 --> 0:55:1.530 Damian Sanchez Thank you.

0:55:0.690 --> 0:55:10.970 Lucy Thatcher We will carry on our little tour of the world and and say if we could go to Germany next and Marcus at DT, Deutsche Telekom.

0:55:12.160 --> 0:55:12.530 Kümmerle, Markus Yeah.

0:55:12.540 --> 0:55:14.680 Kümmerle, Markus Good morning, good afternoon from Germany.

0:55:16.390 --> 0:55:36.690 Kümmerle, Markus Those points from Germany today, I'm not in in my Camara role so I have dropped off my camera shot immediately from the from the all hands call which is in parallel running and now I'm wearing my DT hat so you can see the magenta shirt and happy to present the current status of our open gateway.

0:55:36.700 --> 0:55:38.490 Kümmerle, Markus Local champion Germany activity.

0:55:39.560 --> 0:55:42.370 Kümmerle, Markus Umm, we're trying to activity a little bit late.

0:55:42.380 --> 0:55:43.550 Kümmerle, Markus So it was in July.

0:55:43.560 --> 0:55:45.940 Kümmerle, Markus So if you can go to the next page, please Olu.

0:55:47.650 --> 0:55:48.920 Kümmerle, Markus We were a little bit delayed. 0:55:48.990 --> 0:56:5.340 Kümmerle, Markus We have the whole thing, but our ambitious target is and was that we have a first commercial customer on an aggregated API by Mobile World Congress 24 and to have a presentation in the Open gateway, it's not a summit anymore.

0:56:5.400 --> 0:56:8.10 Kümmerle, Markus I think it's now named DEFCON.

0:56:8.960 --> 0:56:9.450 Kümmerle, Markus Defcon, yes.

0:56:10.970 --> 0:56:21.190 Kümmerle, Markus Umm, I know it's a very tough target and for that we decided to have a safe path and and more challenging extended path.

0:56:21.650 --> 0:56:26.430 Kümmerle, Markus And on the next slide, you can see what we have included in the safe path.

0:56:28.30 --> 0:56:44.380 Kümmerle, Markus So we tried to avoid all this three legged concert management topics in the first step and only focus on the APIs and so we thought it's a good idea to use the mobile connect APIs and create a Camara version out of it.

0:56:44.450 --> 0:56:50.440 Kümmerle, Markus So it's SIM swap, it's number verification and it's know your customer match.

0:56:52.550 --> 0:56:54.600 Kümmerle, Markus You can see the timeline below.

0:56:54.690 --> 0:57:0.260 Kümmerle, Markus So our intent was to have a first API definition beginning of September.

0:57:0.630 --> 0:57:10.850 Kümmerle, Markus We have the API live around the time now, then work on the aggregation until end of the year and then finally have a customer in next year and preparing something Nice for Mobile Congress.

0:57:12.240 --> 0:57:17.480 Kümmerle, Markus In parallel, we are driving the extended path which is on the next slide.

0:57:18.150 --> 0:57:26.40 Kümmerle, Markus Here you can see all again 3 APIs, so it's quality on demand to improve the mobile connection. 0:57:26.450 --> 0:57:34.900 Kümmerle, Markus It's a location verification and it's device status and we think we need consent management for this.

0:57:34.910 --> 0:57:40.180 Kümmerle, Markus So we are working on A3 legged flow here and that's quite more challenging.

0:57:40.650 --> 0:57:47.60 Kümmerle, Markus So you can see we try to make the same timeline with it, but with a strange target.

0:57:48.370 --> 0:57:51.660 Kümmerle, Markus And yes, what what do we have learned?

0:57:51.730 --> 0:57:53.780 Kümmerle, Markus You can see in the next slide.

0:57:56.480 --> 0:58:10.310 Kümmerle, Markus Productizing an API is much bigger than providing simpler technical service, because you you nevertheless run in discussions about negative interest adopt delegated consent versus user consent.

0:58:11.230 --> 0:58:26.200 Kümmerle, Markus UH-2 legged authentication for three legged authentication which use cases require what and we also get into this discussion in our safe path, so it's good to have this discussion.

0:58:26.210 --> 0:58:28.830 Kümmerle, Markus It's important we have to talk.

0:58:28.840 --> 0:58:32.750 Kümmerle, Markus We have to solve it, but it takes more time than expected.

0:58:34.10 --> 0:58:38.580 Kümmerle, Markus Also said the second area is uh, having up very interesting.

0:58:38.670 --> 0:58:39.750 Kümmerle, Markus So it's about naming?

0:58:40.740 --> 0:58:49.690 Kümmerle, Markus Umm naming is very important that we also have learned it's one from a commercial point, so finding the right names. 0:58:49.880 --> 0:58:51.470 Kümmerle, Markus Are there any reserved names?

0:58:51.480 --> 0:58:59.30 Kümmerle, Markus Are there any trademarks up to things that some terms are already regulated?

0:58:59.200 --> 0:59:4.330 Kümmerle, Markus So for example, the term know your customer, it's a regulated term.

0:59:4.800 --> 0:59:16.690 Kümmerle, Markus For example, in the UK market, so we should consider that and try not to use such a term for API so that we can use it globally.

0:59:17.360 --> 0:59:26.90 Kümmerle, Markus It's also very interesting and and new for us and we learned it and we have also a lot of discussions around that in both halves.

0:59:26.260 --> 0:59:32.200 Kümmerle, Markus But as I said, it's important to align here to discuss it and to learn this.

0:59:32.640 --> 0:59:40.620

Kümmerle, Markus It's necessary to have commercial products, but it takes time and the last thing is also about decision making.

0:59:41.130 --> 0:59:50.560 Kümmerle, Markus So it's not in every case possible to get a clear alignment and so we need clear decision structures to move forward also.

0:59:50.570 --> 0:59:55.780 Kümmerle, Markus That is a learning process in local champion in open gateway at all.

0:59:55.790 --> 1:0:4.360 Kümmerle, Markus In Camara in all parts of the organizations, so we are trying to work on processes to be very fast and efficient.

1:0:5.230 --> 1:0:9.850 Kümmerle, Markus Yeah, but in the end it's a good thing we are on the right way.

1:0:9.940 --> 1:0:17.10 Kümmerle, Markus It takes a little bit more time, but we try to keep our targets and make something wonderful for Mobile World Congress. 1:0:18.10 --> 1:0:18.620 Kümmerle, Markus Thanks a lot.

1:0:18.670 --> 1:0:21.540 Kümmerle, Markus That's, umm, the part of Germany.

1:0:22.850 --> 1:0:23.940 Lucy Thatcher Thank you very much.

1:0:23.950 --> 1:0:24.620 Lucy Thatcher Thank you.

1:0:25.0 --> 1:0:28.680 Lucy Thatcher And then let's go to Indonesia finally.

1:0:31.590 --> 1:0:33.750 IGusti\_N\_Panca Finally, we had the last one.

1:0:36.190 --> 1:0:37.410 Lucy Thatcher Last but not least.

1:0:36.660 --> 1:0:37.570 IGusti\_N\_Panca It's already.

1:0:38.60 --> 1:0:41.40 IGusti\_N\_Panca It's already 11:11 PM now in Jakarta.

1:0:40.860 --> 1:0:41.630 Lucy Thatcher Thank you.

1:0:41.700 --> 1:0:42.170 Lucy Thatcher Thank you.

1:0:41.980 --> 1:0:42.970 IGusti\_N\_Panca Could evening.

1:0:42.980 --> 1:0:43.810 IGusti\_N\_Panca Good afternoon. 1:0:43.820 --> 1:0:45.830 IGusti\_N\_Panca Good morning for all of you gentlemen.

1:0:47.70 --> 1:0:48.60 IGusti\_N\_Panca My name is panca.

1:0:48.70 --> 1:0:55.780 IGusti\_N\_Panca I'm from Indonesia, actually right now I'm in telecom sell as a one of the biggest operator in the Southeast Asia.

1:0:56.540 --> 1:1:3.700 IGusti\_N\_Panca So in terms of our progress, because the Council has been assigned as a market champion, Indonesia.

1:1:5.880 --> 1:1:11.290 IGusti\_N\_Panca For your information, actually in Indonesia there are four operators running right, right now.

1:1:11.700 --> 1:1:19.550 IGusti\_N\_Panca Capcom sell Excel Axiata in the South or in doing also smart friend by uh, early September.

1:1:19.560 --> 1:1:36.740 IGusti\_N\_Panca I think we have like a discussion and gagement together with all parties and then what united by GSMA to have like a one open FBI national gateway that we call it as something like that.

1:1:37.320 --> 1:1:50.370 IGusti\_N\_Panca So then, Telkomsel being assigned as a market champion and then uh, after stick on meeting and then we decide, there will be like A3 use cases that we are going to the flop.

1:1:50.380 --> 1:2:2.210 IGusti\_N\_Panca But the first ultimate goal is gonna be for the MWC Barcelona in next year, February 2024, so it's about the same swap right now.

1:2:2.220 --> 1:2:8.40 IGusti\_N\_Panca They're counsel because we just pointed as a market champion then with the flow.

1:2:8.600 --> 1:2:12.410 IGusti\_N\_Panca Uh, uh, I will come back and gateway if you can go to the next slide please.

1:2:15.220 --> 1:2:39.730

IGusti\_N\_Panca

Yeah, this is our initiative, but previously allow me also to explain that the Council since 2020, we already a how far our commercial for the Open API a business, yeah that we call as a mobile inside and using our platform that we call as a digital platform.

1:2:39.840 --> 1:2:50.210

IGusti\_N\_Panca

So right now there are around 55 API that already being commercialized and just by the developer in this year.

1:2:51.20 --> 1:3:5.820

IGusti\_N\_Panca Well, some API use cases that a proposed by Camara, like a simswap and also device status number, verification, device location and also identity including content manager.

1:3:5.830 --> 1:3:13.130 IGusti\_N\_Panca Mantis is part that actually already being the flow as a non Camara Pi in in our digihub.

1:3:13.310 --> 1:3:18.610 IGusti\_N\_Panca So we just only put something like a translation into our gateway.

1:3:18.620 --> 1:3:18.990 IGusti\_N\_Panca We just.

1:3:19.0 --> 1:3:43.270

IGusti\_N\_Panca

That's why in in this development Miss 4 aspect that with the flop right now it's about the uh telcofinder and quitting also for you're not born interface including also for the translator service in terms of the telco Finder itself because like Mark said already in the morning that it is not been standers yet standardized yet.

1:3:43.280 --> 1:3:46.610 IGusti\_N\_Panca So they'll come sell and also with other operators.

1:3:46.620 --> 1:3:55.130 IGusti\_N\_Panca And Alysia, we just define based on the prefix number, including also the white list of the IP address from each operator.

1:3:55.600 --> 1:4:2.140 IGusti\_N\_Panca But I think I if I can suggest to the GSMA.

1:4:2.150 --> 1:4:23.140

IGusti\_N\_Panca

Maybe Mark, we can discuss later about the opportunity to have like a one single uh, their goal Finder discovery that built may be by GSMA, just like what GSMA has done before in the preference for the this communication service.

1:4:23.150 --> 1:4:23.810 IGusti\_N\_Panca RCS. 1:4:23.820 --> 1:4:23.930 IGusti\_N\_Panca Yeah.

1:4:24.710 --> 1:4:34.940 IGusti\_N\_Panca Or operator that they are going to launch the RCS, then they have to connect first into the domain that built by the GSMA.

1:4:35.410 --> 1:4:41.620 IGusti\_N\_Panca So maybe this is something that maybe we can discuss later about the the Co Finder concept.

1:4:43.390 --> 1:4:44.30 IGusti\_N\_Panca Next slide please.

1:4:47.160 --> 1:5:4.270

IGusti\_N\_Panca

In terms of the business case scenario, which is which is this is something that already explained that we have that we have right now running in Ivan already create revenue around 10 million US after being launch commercially in the 2020.

1:5:4.280 --> 1:5:12.340 IGusti\_N\_Panca So only three years from now, uh, then we already grew 2 digits, around 10 millions already, purposely only around.

1:5:14.390 --> 1:5:23.980 IGusti\_N\_Panca Yeah, a couple of 1000 US in the beginning, it's very tough actually in the beginning to convince the developer everything.

1:5:23.990 --> 1:5:34.720

IGusti\_N\_Panca

But because, uh, we have the belief that their com cell as the biggest one with the the biggest customer, then maybe they will require our our capability.

1:5:35.230 --> 1:5:41.460 IGusti\_N\_Panca So that's why we have very lot intention for this camera.

1:5:42.450 --> 1:6:13.660

IGusti\_N\_Panca

So with this, uh, development was led by uh actually for the pre production for the four function is already there already being developed but not in in only in the in the testing right now trial together with the one of the operators and also with the phone which we we have a plan also with the phone edge to have like a a discussion and then they they have planned to use our same swap Camara at the next slide please.

1:6:16.160 --> 1:6:18.930 IGusti\_N\_Panca So the last one is about the business.

1:6:18.940 --> 1:6:21.630 IGusti\_N\_Panca Can that already being discussed?

1:6:21.900 --> 1:6:28.100 IGusti\_N\_Panca It is not being decided yet, so there are three kind of model actually here.

1:6:28.920 --> 1:6:32.120 IGusti\_N\_Panca First, he is a it's a let me call.

1:6:32.130 --> 1:6:32.700 IGusti\_N\_Panca It's a single.

1:6:32.710 --> 1:6:33.640 IGusti\_N\_Panca I'm gonna get the model.

1:6:33.730 --> 1:6:38.620 IGusti\_N\_Panca They save them from selling work, as I'm gonna get there, which is this one.

1:6:38.630 --> 1:6:39.640 IGusti\_N\_Panca Or they being discussed.

1:6:40.210 --> 1:6:46.330 IGusti\_N\_Panca The second one is a Federated model, but unfortunately no.

1:6:46.730 --> 1:6:52.880 IGusti\_N\_Panca The other operators right now, they don't develop their own command, they just only like a profile.

1:6:52.890 --> 1:7:4.360 IGusti\_N\_Panca Their southbound API to one of the uh Camara aggregator uh from a CATA headquarter atronic.

1:7:4.810 --> 1:7:54.180

IGusti\_N\_Panca

So maybe later, if we are going to use this model for directed this gonna be like how come sell to exonic and maybe also talk on cell to our subset our uh, Singtel set holding a bridge mobile from most probably and then the third one is a join venture model but this is not like uh become a like a our our our ultimate maybe the the the second option is gonna be our potential model yeah to have like a Federated model of each other but the concern is gonna be in the customer concern is this something that we are going to discuss with the regulatory in terms of the customer that have protection yeah.

1:7:54.250 --> 1:7:55.800 IGusti\_N\_Panca Hopefully umm.

1:7:56.240 --> 1:7:58.780 IGusti\_N\_Panca By then off.

1:7:58.830 --> 1:7:59.900 IGusti\_N\_Panca Uh, early.

1:7:59.910 --> 1:8:18.710

IGusti\_N\_Panca

I mean, early of early December, we have a one final simswap that we can launch together maybe by next week we will have like a the first person list about our commitment together with the GSMA that we are going to publish like a telco Open API together in a mission.

1:8:19.500 --> 1:8:21.290 IGusti\_N\_Panca That's all from Indonesia.

1:8:21.740 --> 1:8:22.770 IGusti\_N\_Panca Thank you so much.

1:8:22.880 --> 1:8:23.250 IGusti\_N\_Panca Yeah.

1:8:23.320 --> 1:8:25.280 IGusti\_N\_Panca For all of our audience here, thank you.

1:8:26.940 --> 1:8:27.520 Lucy Thatcher Thank you.

1:8:27.600 --> 1:8:28.960 Lucy Thatcher There's a question for you there.

1:8:28.970 --> 1:8:29.740 Lucy Thatcher We'll talk himself.

1:8:29.750 --> 1:8:36.260 Lucy Thatcher Provide a single API access point for all operators in in in Indonesia for data attributes.

1:8:38.160 --> 1:8:41.40 IGusti\_N\_Panca Yeah, best, very interesting. 1:8:41.50 --> 1:8:57.30 IGusti\_N\_Panca Actually, that's already explained and there will be like a issue in terms of the customer consent if let's say the concern being signed as a single aggregator because it is not being a low right now.

1:8:57.40 --> 1:9:5.310 IGusti\_N\_Panca If they say we open the encryption of the data, actually both and then then after that we wrote into the the the specific operator.

1:9:5.320 --> 1:9:9.50 IGusti\_N\_Panca So there is a a customer conscience issue.

1:9:9.60 --> 1:9:12.550 IGusti\_N\_Panca I think Germany also the they have the same concern.

1:9:12.620 --> 1:9:13.620 IGusti\_N\_Panca So this is something that.

1:9:15.230 --> 1:9:18.660 IGusti\_N\_Panca Become like a our concern with the regulatory right now.

1:9:18.950 --> 1:9:23.230

IGusti\_N\_Panca Yeah, how actually we can have the, the, the, the resource for this one.

1:9:24.540 --> 1:9:25.390 IGusti\_N\_Panca That's not my answer.

1:9:25.500 --> 1:9:25.810 IGusti\_N\_Panca Thank you.

1:9:26.860 --> 1:9:27.320 Lucy Thatcher E thank you.

1:9:28.960 --> 1:9:29.550 Lucy Thatcher OK.

1:9:29.560 --> 1:9:34.570 Lucy Thatcher With that, that concludes the content that we had to share with you today.

1:9:34.580 --> 1:9:41.170 Lucy Thatcher And I think most of the questions that I've seen in the chat have been answered. 1:9:41.520 --> 1:9:48.710 Lucy Thatcher So thank you particularly to Mark and Nico, who have been doing a lot of question answering.

1:9:48.720 --> 1:9:51.270 Lucy Thatcher Whilst we've all been talking, so thank you.

1:9:51.900 --> 1:9:57.610 Lucy Thatcher And with that, uh, we do have a couple of minutes left for questions.

1:9:57.620 --> 1:10:4.230 Lucy Thatcher If there's anything else that people wanted to ask, have a momentary pause rather than a tumbleweed moment.

1:10:6.900 --> 1:10:8.830 Lucy Thatcher Especially as it's late for some of you.

1:10:12.380 --> 1:10:16.680 Lucy Thatcher Doesn't look like there are, so if we could go to the final slide only.

1:10:18.800 --> 1:10:20.570 Lucy Thatcher It just reminds uh.

1:10:20.620 --> 1:10:44.570

Lucy Thatcher

It's sort of, uh, just for me to thank you for all for joining this call and for those of you who also joined our call earlier on today and we will be having an open gateway Dev con as a couple of them, the speakers and presentations mentioned at MWC Barcelona and I would urge you all to keep an eye out over the next couple of weeks when we used aren't launching and and truly promoting that.

1:10:45.690 --> 1:10:46.840 Lucy Thatcher Thank you very much.

1:10:46.850 --> 1:10:55.350 Lucy Thatcher There may be another community called before MWC, but if not, there will certainly be one just afterwards to share with you all of the updates.

1:10:55.360 --> 1:10:59.160 Lucy Thatcher All of the news and and all of the amazing things that I know are going to be launched there.

1:10:59.230 --> 1:11:1.320 Lucy Thatcher So with that, thank you very much. 1:11:1.330 --> 1:11:2.370 Lucy Thatcher Have a good afternoon.

1:11:2.650 --> 1:11:5.850 Lucy Thatcher Evening or morning, wherever you are, and thank you.