



## MEA

So today we are going to talk about eSIM, and we are going to do things slightly differently. You won't see any statistics. You won't see any big numbers. We're literally going to have a heart-to-heart conversation about eSIM, how to launch eSIM, what are the issues that an MNVO faces to launch eSIM and whose responsibility is it to fix it. So, that's what we're going to talk about. We're going to throw out some questions for you guys in the audience as well, especially to you guys that start looking at your phones. You will be singled out, so make sure that you keep your eyes up.

So, yeah, let's start with some intros. And because I'm talking, I'll just keep talking for a little bit longer. So, my name is **Mea Thompson**. I worked in the eSIM industry for seven years, so I've been with it for a while. I've been to a lot of MVNO conferences, and I've listened to a lot of eSIM talks. So, we thought we'd make this one slightly different. And with me on stage, who I'm interviewing today is Robin Major. So, give us a quick intro about yourself, Robin.

## ROBIN

Yeah, hi everybody. My name is **Robin Major**. I'm the Chief Revenue Officer of **Moflix Group**, which is a company based primarily in Finland. And [we were brought into being to help telcos really think about the way that we need to do business in the 21st century to service the 21st-century consumer with the thought process that if you were to start a telco in 2022, what would it look like? And the answer is probably very different to what it would look like in 1992 when I suspect many of the people in this room started rolling out mobile services to their customers.](#)

Really, what Moflix is giving the community is an All Digital Telco in an App that's ready to roll in less than 100 days. And [through the lens of the customer](#), is important to enable them to consume telco services with the low friction ways of onboarding and interacting with the operator that we've become used to from many other service providers in other industries, whether that be **Uber** in the ride service sector, whether that be **Revolut** in the mobile banking sector. We've all become very used to just being able to download an app, sign up for a service, and then continue to use it with very little hassle.

The mobile industry has made that difficult for us to do. **WhatsApp** is a really good example of how easy it is to sort of download and onboard for telecommunications service. And it's our firm belief that we as the MVNO community should be leading the way in disrupting that thought process and that market engagement and sharing the way with the rest of the mobile industry.



The reason we're on the stage talking about eSIM is we received an award earlier this year as the ["Consumer eSIM Solution of the Year"](#), together with one of our customers, which is **NiceMobil** in Norway. And the good folks at MVNO Nation here were kind enough to interview us about it and hence we're on stage talking about it today.

## MEA

Great intro. Okay, so let's look back on the eSIM industry without being boring. So, I've been speaking about eSIM on stage here since 2017. A lot has changed, but I'm still not that impressed with the progress and again, this is going to be an honest discussion, so let's keep it honest. So, looking back from your experience, what have you seen the difference in eSIM? If you look back in a few years, what has been the progression in your sense?

## ROBIN

It's a really good question. I think eSIM was launched as a set of specs in, what, 2016? The first devices we saw coming out in 2017 to great fanfare about how this was going to revolutionize the industry. And I think if we're all honest with ourselves, the sort of the penetration of eSIM as a vehicle for making it easier for customers to take advantage of mobile services or to switch between them - that penetration has been a lot slower than I think any of us would have expected. There are a bunch of different reasons for that, which I think we're going to get into in a bit more in the conversation.

I've personally spent the last ten years working with telcos, either as MVNOs or as the sub-brands of MNOs themselves, helping launch these kinds of **All Digital Telco-in-an-App** propositions. And there's no doubt we've seen more interest in that space, using eSIM as a way of acquiring customers, disrupting markets, rapidly increasing market share, and for others an enabler to really give that sort of **WhatsApp** ease of onboarding and management of the experience. There is no doubt it's a really powerful tool in the toolkit that operators have. But we really haven't seen it reach its full potential in the last five years. And it will be interesting to see whether some of the announcements we've seen in the market in the last couple of months are going to change that in a dramatic way.

## MEA

And I agree with you in many ways. So, I still get shocked when I speak to big MVNOs in the market and I'm kind of like sucked into the eSIM zone. So, my questions are always something like, "What's your eSIM strategy? Have you launched eSIM? What do you think about eSIM? Is your host operator eSIM ready?"

And I can't count the amount of times that MVNOs answer me, "Oh, well, we're going to get to that. We're looking at Q3 next year".

And I'm like, "Really? Like, have you seen where the market is going? "

And maybe it's just because I'm so into eSIM. It's good for you guys in the audience. If you don't agree with me, totally fine. Do ask questions in the end or when we call it out. So I don't feel like what we're saying up here is absolutely true because it's a question about how you feel about this.

Okay, so when you talk to operators as you do daily, some of them have no clue about eSIM, others want to do it - but maybe they can't because their operators in some cases can't provide them with that service. What are the three top or what are the top use cases for the MVNOs?

Why do they want to launch eSIM?

## ROBIN

Yeah, well, I think there's a bunch of different reasons that people are looking at eSIM. I'd like to think that eSIM is going to become the mainstream vehicle for customers onboarding with mobile subscriptions. The reality is that we're a long way from being there yet. And I think what we're seeing is a few corner cases - with apologies to the operators that run these kinds of business where they are not corner cases, they're absolutely core to their business! But in terms of the mass market of mobile, we're seeing edge cases like Travel use cases where people are using eSIM as a vehicle for giving people easy access to a local mobile number and data when they come abroad, or when they travel to a part of the world that's outside of an inclusive roaming agreement, and that's replacing the idea of the SIM store at the airport model.

We're obviously seeing eSIM being evaluated as a potential vehicle for mass deployment in things like IoT and M2M use cases. I think for me, the big one that's yet to be cracked properly is having eSIM really as a universal vehicle for enabling customers to onboard quickly, for disruptive operators like MVNOs to get to value quickly and not have to be dependent on large-scale logistics to be able to distribute plastic and manage the disposal of those legacy SIMs subsequently as well.

So those are sort of the cases that I think we're seeing at the moment. It'd be very interesting to get some sense from the community whether there are other things out there that we haven't been considering yet.

## MEA

Yeah. And I think this might be a good time to ask you guys because it's been a long day. I've had coffee, but not enough, and I haven't started drinking wine yet, so it's not there.

But what other use cases do you see for eSIM that you think is extra interesting? Are there any use cases that Robin didn't cover that you think this is key for us?

## AUDIENCE 1

Yes. Hi. I'm from the UK from a startup. And I think one of the fundamental questions (and also I think it's a very popular stat from GSMA) about the fact that when you ask about consumers, "What's eSIM?" I think from the story is about 20% have heard about eSIM, whereas when you talk about 5G, there's a lot.

The first question people ask is, "What is eSIM?" Because when you say eSIM, they think electronic, see? But then when you say embedded SIM, they really don't understand the concept



So the question is, why is it so difficult in the B2C space for consumers to really grasp the concept of eSIM? And I know this discussion is around whether Apple jumped the gun by something fundamental that's a lot about awareness and education. We have a bias because for some reason - people just don't really understand it. (When I say people, I mean people outside of our industry.... Consumers).

Because we're in the travel space (in mobile), and that's what we're trying to tap into. But part of the research we've done is that people are not really getting it... so part of what we need to do is actually educate them. Then it's about finding that good balance in terms of what do we say really resonates. That makes sense.

#### MEA

That's a really interesting question, and that falls well under the theme as well. And that brings us to another question of **how do we educate the general public about eSIM and who is responsible for educating the public.**

**So, if we see it as a triangle, it would be the OEMS, the public, and the Operators. And if two of the corners are moving, then we can see the third corner having to move. And I think the OEMs have really started to move which has forced the Operators to move, which is now getting the third corner of the public to move.**

That was a great question.

#### ROBIN

That was a great question. And is jumping ahead to what we wanted to talk about later as well. Within this industry, nothing happens unless you market it and throw some money at educating people about what is possible. We are going to be talking about Apple quite a bit in this conversation.

If you look at pre-2007 and post-2007 - pre-2007 there were plenty of touchscreen devices available in the market that were being pushed as smartphones. They were being made by OEMs like HTC on behalf of Microsoft and Nokia had its fingers in the fire playing around with touchscreen technology.

But it wasn't until Apple really hit the ground running in 2007 with a disruptive way of doing it and a lot of money that was put into marketing it, that it became a mainstream thought process for people and became a lifestyle choice for people really. In terms of being able to take advantage of these devices for doing everything you could do on a home computer but carry it in your pocket and use whilst on the move.

And we have a tendency in our industry to market technical features in a way that we all feel at home with because we are brought up with 3GPP specs, and R17, and 5G and 4G, etc. And eSIM is just another toy in our toolbox that we kind of like to throw around in these conferences and forget what's in it for the customer. What's important for the customer here. and how do we look through the lens of what's important for them and not through the lens of what's historically been important?

Unfortunately, I'm going to say this out loud in this conference full of MNOs. And the reason I think there's been very little money put into marketing eSIM properly is because it hasn't really been something that MNOs have been too excited about pushing because it opens up a whole load of cans of worms about their business model and how easy it is to move away from them as a service provider to potentially other people who are doing more disruptive things, potentially with more interesting outcomes for the consumer, potentially at more interesting price points.

So I think there's probably a bunch of reasons, but it really comes down to (for me, and this is only my opinion up on the stage) to the willingness of the industry to really invest marketing dollars in raising awareness of why that's good for people in the same way that we have with different types of different parts of the technology portfolio that we play with.

I mean, if we do this properly, the customer really shouldn't care whether it's a plastic SIM or an eSIM - they're getting a mobile service. And the less time they have to invest in getting that mobile service and the easier we make it for them to do that, the happier they should be. They shouldn't really care whether it's eSIM, pSIM (physical SIM) iSIM, whatever the variant of eSIM we're going to be seeing in the future, it's going to come down just marketing it properly.

**MEA**

I'll take more questions

**ROBIN**

And I'll take a few bullets, I'm sure.



## MEA

Yeah. After this you'll be attacked at the party later, drinks will be thrown. So, stepping back and looking a little bit on what we said there about Apple, so we're saying that Apple might be leading the way of pushing eSIM because what they're doing with their iPhones. Do you think other OEMs will follow? Well, it's a silly question. Say yes and I'll take the next question.

## ROBIN

I think there is a certain inevitability about Apple making a move in any of their markets that they work in. I'll include their computing vertical in this as well, but certainly in our industry, in the mobile devices that they brought to market and the features that they've brought to market on those devices and the changes they've made to features on those devices have precipitated a wholesale change in the market in general.

It may well be that Samsung and Nokia had touchscreen phones in the pipeline for a long time before Apple launched on the market, but Apple was the first and the most visible and suddenly everyone wanted touchscreen phones. Samsung was next to market with a whole portfolio of those coming quickly.

After that, Apple took away headphone jacks on their iPhones and now the market for wireless earbuds and wireless headphones has suddenly boomed in a way that wasn't really happening for the industry before that happened.



iPhone started taking away wired charging now and doing wireless charging. And although that was around for a good couple of years before Apple embraced it, that has really started making that a really popular choice for people as well.

And I think there's an inevitability that when Apple says our phones are not going to have a physical SIM in them anymore, that will introduce a move in the market that will force others to follow quickly, even if they didn't already have it in their plans.

At the moment we're only seeing it happening in the US and there are probably some good sound business reasons for that. But again, I think there's an inevitability that this will start to become a mainstream practice in other parts of the world, and it may well be that other device manufacturers trigger that quicker than Apple outside of the US market. It remains to be seen.

**MEA**

OK, so I will do hands-upng now, or a bit of a check on the audience. First of all, no one has left ...and so far, no one's looking at their phone. I've been keeping track.

**ROBIN**

Well, this one guy at the front is. *(Pointing to someone recording the session on his phone)*

**MEA**

*(Laughs)* Okay. So hands up everyone who thinks that the next iPhone released in Europe will be eSIM only. *(A few hands are raised)* Okay, that's a few hands up.

**AUDIENCE 2**

We give an option to Apple to take over all of the market in Europe - that any MNO or MVNO would not have a choice and all the Apple users would have to use an Apple SIM.

Example: what if next year say Apple launched the iPhone15 and you buy it and it includes two years contract with unlimited internet for the whole of Europe. Then the MNO don't have job here - MVNOs don't have job here - and our regulators don't understand what the F-- is going on the business.

No, that is actually what's going to happen because how the Facebook and Google colonised from US to whole European markets in maybe in two years - one or two years - abroad going to colonise all the telecom market, mobile telecom market in Europe. If we give access our regulator not clever enough to understand.

**ROBIN**

May I ask you a question back on that topic? Do you think there's anything really stopping either Apple or for that matter AWS or Google today from doing that if they really wanted to? Do you think that eSIM is a dependency there?



## AUDIENCE 2

Yeah, because our regulator, our European government, political people are not clever enough to understand the colonising system, but when they understand, then they can put it once and say No. Before all phones seemed to be locked. Ten years ago, if you get a telephone, you got a locked phone and you could not use a competitor Operator's SIM card. But now they all take it out and this is also the regulation of the country. But what now happening is that iPhone SIMs are coming? So for all iPhone users, operators like TMobile or Vodafone or Orange don't have a choice other than giving only wholesale deals to Apple?

## ROBIN

So I have a view that the piece of plastic isn't the thing that's saving the mobile industry.

## AUDIENCE 2

It is not a piece of plastic.

## ROBIN

I think whether it's a **pSIM (physical SIM)** or an eSIM, this risk has been around for a little while. I think in the previous sessions we've had here this afternoon, we've heard from MVNOs, who are providing global offerings by partnering with people who have sponsored deals in many, many markets around the world, including Europe. And I think if Apple or AWS wanted to start a global MVNO based on that premise today, with plastic SIMs and universal roaming agreements, they could very easily do so.

I think your point is valid in the sense that it takes away one more barrier and it makes it yet again easier for the customer to choose which way they want to go. And if Apple decided they wanted to leverage (and I think this is one of the points we wanted to cover today) leverage the fact that they're offering iPhones with eSIM, only to become the middleman, to potentially start to arbitrage the market or to become the single point of contact for the consumer in terms of their connectivity purchasing power, then there's no doubt that makes it easier for them. But I would say that that's something that's been an option for a while.

## MEA

And let's stay on that. It was a really valid question. So thank you so much. And we can discuss and say, okay, Apple is already pushing for eSIM coverage in their iPads. Are they going to do the same thing in their phones? Are they going to offer **TMobile, AT&T or Verizon** in some plans in their App Store? All these conversations are being held and they're really interesting. So let's go back and see what they're actually doing today.

So when we're looking at the MVNO market, and you know this because obviously you're speaking with the MVNOs all the time, if you want to ask an MVNO to become eSIM enabled, what is it behind it? Why is apple pushing this eSIM so hard? Is it because they want to revolutionise their hardware, making them cooler, and remove the SIM slot? Is it because they're providing a really good service to the MNOs and MVNOs?

But if you really want to utilise the apple services, if you really want to have those services, like click to install eSIM, you need to be pretty chummy with Apple to get that approval. You need to sell a fair bit of iPhones to be able to get that perfect user journey, which is a hurdle for MVNOs.

MNO is not so much, you get it MVNOs, you've got a problem. What's your thought...is that putting MVNOs behind the MNO.

Honest...honest thought.

## ROBIN

I'm never knowingly dishonest. I think this is a much more important thought, with respect to your question, than whether Apple's going to take over the world any time soon and offer its own connectivity. That's always an option, and it's not something that we should lose sight of. But I think the much more pressing and immediate risk is that this transition to doing everything eSIM only is going to strengthen the hold of the legacy MNOs, especially in the US Market, where it's a fairly focused market with three or four main providers. It's going to strengthen the power of those MNOs that are buying or enabling Apple to sell millions of iPhones. Those are the people that are going to be given priority access to the Apple capabilities that enable what we see as a core part of our onboarding journey, which is being able to take the customer from "I don't know you" to "Now your service is activated in the network" without having to send them a QR code -without having to make them jump through various off-network hoops to get there.

At the moment, Apple is only offering that service to Mobile Network Operators who can prove that they are a mobile network operator. And then there's some kind of arbitrary measure that one person in Cupertino applies to whether or not he thinks you're important enough to have access to those APIs. I think that the more pressing question is whether making iPhones eSIM only is going to exacerbate that problem and start to exclude MVNOs from the market who aren't giving Apple the buying power in terms of the number of devices they are shifting, and make what is already a fairly uneven playing field for MVNOs who want to be disruptive *even more* uneven.

I think we've got enough obstacles in our way in terms of our MNOs not really wanting us to disrupt their local markets too much, with them only offering us fairly limited packages that we can resell if we are going to be a thin MVNO. If Apple helps them, sort of "block" us from really providing a nice, seamless, digital, easy to use, easy to understand onboarding experience for the customers who want to use eSIM as an MVNO as well – that's just putting more fuel on the fire of the problems that the MVNOs have to face.

Again, apologies to the MNOs who are in this room, and if that's a completely wholesale misrepresentation of how you guys like to think you operate, then I'd love to hear the pushback today. But I think that's the more pressing concern that we as an MVNO community should be thinking about addressing and what that might mean in terms of what Apple's doing here.

## MEA

And I also think that the digital journey that we talk about, the seamless digital journey who's available to MNO, is a bit easier. We can talk about the cost of getting an SM-DP+ Platform, but obviously we see it across the market that the costs are coming down and it's really affordable to become eSIM enabled. It shouldn't be that much of a hurdle, really, to get there.

## ROBIN

And we're seeing interesting innovations in the DP+ space as well. We're talking to - because what Moflix effectively is doing is an ecosystem play, bringing together various components that you need to be able to step through an onboarding journey and then manage that customer relationship with you - We're looking at relationships with DP+ providers who provide an off-network DP+ as a service, served from a data centre somewhere in the cloud that enables you to basically run an eSIM business without having to have your own DP+ platform in your MVNO ecosystem.

So that's definitely taking that pain pressure away. I think we're also seeing one of the things that is stopping this becoming as ubiquitous as we'd like it in the MVNO community is the availability of devices to actually run these profiles. I think the reality is that most of the devices in the market now are high end devices. I think the cheapest one you can get is about €350 - I think 21,000 rupees in India - which is a lot of money for a Google Pixel 3a, a device which gives you an entry level eSIM device.

Most of the devices are out there at the moment, even if they're cheap Huawei smartphones or OnePlus smartphones, are not eSIM enabled. And that's also providing a bit of a barrier to mass adoption, especially in the ends of the market that we as MVNOs tend to want to target, which is the value segment; people who are looking for a cheaper, easier way of having a relationship with a connectivity provider. We tend to sort of be excluded from that by virtue of the people not having access to those high-end devices as well.

## MEA

Well, let's do a test. Yeah, let's do hands-up. I'm a fan of hands up for you guys that haven't realised that. So hands up to everyone that do have an E SIM enabled phone.

Well, this is kind of a misrepresented market. I'm sorry, but we had to do it. Hands up. No, I won't say hands up to you guys that don't because I don't want to call you out because that would be unfair.

Hands up to anyone who doesn't know if their phone is easy or no one's going to raise their hand, I think, on that one either. So, yeah, we got one hand. It's the guy in the back. And one more. Thank you. It always takes the first one to start.

I think the large majority of people in the stream have got eSIM enabled devices.

## ROBIN

Hands up. How many have their primary connection with their mobile operator as an eSIM rather than a plastic SIM. So I think about 10% of you.

## MEA

If that was a good question, you should ask questions.

## ROBIN

I think that's quite interesting. If we in this room, in this industry, whether you're an operator, a mobile operator, providing wholesale coverage to MVNOs or an MVNO operator, we haven't even embraced that as a way of doing things in our own lives, then there's clearly some work to be done to make that a mass market proposition that everybody else will buy into.

## MEA

And also, to my defence, because I didn't put my hand up there, even though I'm an eSIM geek, I did want to get an eSIM from my operator. I won't call out the name, they're not in this room, so I should, but I won't. I went into the store because I couldn't get any online, which is obviously the main use case for eSIM. And I said, hey, could I please get an eSIM to my new device? I got the new iPhone 13 and they gave me, lo and behold, a little packet printed out that I had to open and in it, it was a little pamphlet telling me how good they were. And then there was a printed-out QR code. So I thought, screw that, give me a physical SIM. I don't use eSIM this way.

But that is also proving that the digital user journey for eSIM is not really fully explored.

## ROBIN

It's not. And so just before we move on from that point... even when you get that right, when your focus is on trying to enable the right kind of journey and do everything in a seamless way, you don't always get that right.

So one of our customers targeted a value segment that they call "Minimalists" with an eSIM only proposition. And they were absolutely religious about the fact they weren't going to offer plastic SIMs, they weren't going to do things with QR codes. They're working with us to provide a seamless digital onboarding through which everything gets provisioned directly to the phone and it's a really easy journey for the customer.

What we found out during the onboarding process - because we automatically check at the start of the journey if your device eSIM compatible and if can we actually onboard you this way - we had a drop off of 70% in the funnel of people who did not have eSIM devices, and therefore we were losing 70% of the potential target market because they didn't have compatible devices.

So just to tie that back...to our previous conversation about having the right kind of experience and being willing to offer that as an operator. Those two sides of the triangle definitely need to move with some synchronicity in terms of the devices being available, the operators willing being willing to invest in marketing it, and not being afraid of that being a threat to their core business as they move forward with those sorts of propositions.

## MEA

It's really interesting. I was launching a handset in Sweden a while back with one of the OEMs with dual SIM, beautiful handset, fantastic stuff -the operator refused to sell it because they realised dual SIM is not good for them.

This was back in the day anyway, so yeah, I hear your point and the time is running so quickly. I know you guys, I bet you are looking to go and drink beer and I've got so many questions that I want to ask you, so I want to pass the microphone to the audience a little bit because I can see some of you are kind of moving around. So I'm thinking there might be some questions. So I want to give you an opportunity. Now if someone's got a question, otherwise I will keep asking questions up here. We've got 1...2...3...4 here. I'll be quiet with my questions for a while.

## AUDIENCE 3

In essence, strategy from Apple. I've met with the CEO and I'm quite clued about what's happening in the US at the moment. And I know how they're moving across other countries, but they seem to think that the adoption level (of eSIM) in the US at the moment is greater than what it was before. So in essence, the eSIM has been successful.

Now, the threat to Apple for sure is if Android actually capitalise on the opportunity, if Android does not move into the same direction. With our MVNO for instance, what we witnessed majority of the country is the typical client base or customer base. Call it this way, it's not the highest grade of iPhone user, it's just due to the fact that iPhone is a cost-saving exercise. So you tend to attract a lower band, as it were, which is more of Android user. So the threat to MNVOs is going to be far less than it is for MNOs. And hence the adoption rate at MNOs level is not really great at the moment. In some market, we see 1%, in some other market we see 2% and 3% at the vast majority.

So the education level will come across at MNO level. That's where the money is going to be pushed. MVNOs will ride on the back of MNOs when they see the adoption rates start becoming greater.

In fact, what we see is this is a great opportunity for MVNO because you can capture market they haven't tapped into. But in terms of risk, if you evaluate today, Apple would not actually allow sorry, MVNOs to move into 5G network offering on iPhone handsets. And typically because they need you to be consuming handsets. So you need to sign up to agreement of 100 or \$200 million dollar, which is the case, and not many MVNOs can do that. So the risk is not greater than what it is today for Apple to monopolise the market. Just picking on what mentioned previously. When I say I think we should look at this as an opportunity, but we should be quite careful how to approach it. MVNOs are not the first movers, and they should not be. We're just right on the back of network operators once we see the opportunity deems to be appropriate. So I just wanted to put that across.



## MEA

Love that. And what I do love about the MVNO industry - looking at all you guys - is the agility. The agility to move fast, to follow your audience. And like you said, even though they might not be the first mover, I don't think there should be a hinder for them to be that. We're looking at the MVNO's marketing strategies, and again, I'm more of an eSIM than an MVNO expert, but the marketing strategies that some of the really cool digital MVNOs are using out there to push eSIM are brilliant.

Like, they're putting campaign QR codes in airports, so anyone that walks past can scan the QR codes and download the next eSIM or ICC ID in the queue onto their phone. They're using all these digital acquisition methods because they're agile because they can move fast. I'm not saying to the MNOs out there that you're slow dinosaurs, but you get my point. So there are so many opportunities in this for the fast-moving, agile MVNO market and what we want to make sure is that we don't hinder them that do want to go for those opportunities. Would you agree?



## ROBIN

I would agree. I think I had to agree with *something* today. Yeah, I think that's a fair point.

To your point about not being able to be the first movers when it comes specifically to the enabling technology, I'd agree. I'd say I look to MVNOs as a community of people who are first movers when it comes to disrupting the customer relationship and the value proposition.

What you're doing with Salam, for example, it's not just about offering cheaper minutes, messages and megabytes, it's about "how do I create a sticky relationship with a customer that offers them value beyond that connectivity relationship, based on the fact that I've made it easy for them?".

In many ways, I'm willing to accept the fact that it's easy for them to leave as well. I've got to work now for my dollar and make that relationship sticky in a different way. And that's something that maybe the mass market MNOs are less comfortable with. It's something, as an MVNO community, we're much more aggressive about. How do we find the compelling value proposition that isn't just about the underlying connectivity?

## MEA

Yeah, one interesting point was I saw an MVNO that was posting eSIM advertising, eSIM Group QR codes outside and now they're competing MVNOs customer service shops because they thought that if the customers come out and they're pissed off for whatever reason, we're going to give them an easy way to swap carriers. It was a bit cheeky.

## ROBIN

I would say, on that point as well: We've got to be careful - and I've got a slight vested self-interest in making this point - we've got to be careful that by giving people easy access to an eSIM, just by pointing at a QR code and having it downloaded on the phone, that we're not sort of falling into the old prepaid trap of people just taking a SIM, taking your first gigabyte of free data than throwing it away.

We've got to have a mechanism from there to enable us to actually get those customers, get to know them, on board with us properly and give us a platform to really start to monetize a relationship with them over time in a way that again, doing it all digitally, doing it seamlessly, doing it in a way that doesn't require them to go to a store or a contact centre is intuitive for them, has a value proposition for them and gives us the right to have engagement with them based on an app that we've got on the phone for the rest of their relationship with us - without just throwing that opportunity away by burning a QR code and then forgetting about them.

That's the risk that we run if we're not careful.

**MEA**

Customer centric. Love it always. We had a question over there from **GiffGaff**. I called you out. I hope you remember your question.

**ROBIN**

It looks like he's bristling for a fight, actually.

**AUDIENCE 4**

Thank you. I recognised the "Q3 next year" dig as well, earlier on eSIMs.

**MEA**

And now we all know that, by the way. Mark that down.

**AUDIENCE 4**

That's not what my question is about, though. The CMA in the UK is very active in terms of making sure there's decent enough competition to keep prices down for customers. If you were to take the MNVOs out of the market, prices would pretty much double overnight. Do you think the CMA have Apple's potential dominance of the network selection on their radar? Do you think they would want to regulate that

**ROBIN**

Just for the non-UK representatives in the room - the CMA is the Competition and Markets authority. Right? So it's not the non-Telco specific body in the UK that regulates competition in various industries, not just ours. It's a very good question.

**MEA**

We can debate things we can debate. And I'm sure everyone in the audience has their own opinions. But let me tell yours

**ROBIN**

I would to think that they have their eye on that kind of - I won't call it a competitive threat but a power lever - as something that could move the market in one way or another. As I said earlier, when Apple moves, people tend to sort of sit up and take notice, and I think that it has the potential to move the market, whether that's beneficially if it's done the right way or negatively if it becomes, as I suggested, a vehicle for helping MNOs monopolise the eSIM opportunity, I couldn't tell you definitively. You're based in the UK, I don't know what's your view?

## AUDIENCE 4

I think it would be, how close the ecosystem is and more importantly, which features it would lock you out of if you didn't buy enough phones from them. You mentioned 5G. That's a government-underpinned level of connectivity that they're investing in themselves. So to lock people that can't afford MNO-type prices out of 5G connectivity, you'd think they'd have to want to have a say on that, but I don't know either.

## ROBIN

Did you want to address that one as well?

## MEA

No, I think you answered it really, really well and I think it's yet to be seen, to be honest and to be further discussed over a glass of wine in a little bit... And I saw some people cheering in the back

Any other questions? I know we're running out of time, so yes, sir.

## AUDIENCE 5

Thanks, Mea and Robin, very interesting chat. When you walk around the high street in the UK, the image of connectivity is still the SIM card, right? But you talk about these marketing examples of QR codes that's after Covid to "Check In here." or "I've been here" because you want to do contact tracing or something. So do you have any ideas about how we actually explain to users, without using those little gold icons of the SIM card that this is how you actually activate your mobile service? But what a marketer is going to do?



## ROBIN

Well, I think, for a start, I think QR codes have a bit more of a broad application since COVID than just, "I've been here, and you can now trace me". We use restaurants and bars to be able to order things as well, which has completely transformed the experience of most British people. If you get a pint of beer by scanning a QR code, then we're mainly in.

## MEA

Where? Where can I order a pint of beer from a QR Code?

## AUDIENCE

Everywhere in the UK

## ROBIN

(Laughs) Everywhere in the UK...exactly!



I think that speaks to a very interesting sort of transitional kind of journey, that it's probably a generational thing. It used to be ...well, still is...the **Save** icon on most Windows applications is a floppy disc. It is still the case that on my iPhone, when I open it up and look at the bottom there, I've got from my email, I've got an **Envelope** for my phone. I've got a **Phone Handset** from the 1970s that I don't think I've touched since I was a kid, right? And my kids and my nephews look at those and go, "Why is my phone that shape? Why is my email icon got an envelope on it? Why does my **Save** icon got some third world bit of plastic sort of thing, square box I don't recognise?"

And whilst those metaphors and those ways of appealing to our subconscious mind from a marketing perspective has been relevant for our generation where plastic SIMs have been their primary vehicle for onboarding a mobile subscription there - by definition - has to be some change.

Which, again, I think it's more about taking away the relevance of the SIM, the piece of technology that enables you to have access to a mobile network and make it much more about the other things that you're doing for the customer rather than "here's a sort of a little chip card that you can see on your debit card just as much as you can see on the SIM card nowadays". It's not particularly a relevant metaphor for marketing mobile services in general. I think as eSIM evolves, we're going to see that change.

I haven't got an answer as to what is a relevant way of doing it, but yeah.

## AUDIENCE 5

Well, yeah, I think that's the opportunity for MVNOs personally is that they actually are far more in touch with customers, able to communicate in their language, and actually explain this in a way that they can understand and move it forward.

## ROBIN

I couldn't agree more.

## MEA

And I think as things is becoming digital, you know, you listen to music on Spotify, you watch movies on Netflix, so it's all about digitalizing, each of these segments. And in eSIM is the digitalization component for the telecom sector.

I see so many hands up. This is great. I'm nervous about the time though. You have to stop us.

## ROBIN

They're not thirsty. They're not thirsty,

## MEA

Yeah, you're going to leave first in the bar.

## ROBIN

Any more questions?

Save the best for last.

## AUDIENCE 6

So one of the promises of eSIM or any digitalized version of something, it's cheaper. And secondly, of course, it's more environmentally friendly. How do you think eSIM actually measures in reality on those two promises?

## ROBIN

Well, in reality, it measures immeasurably. I think, like there's something like 4.2 billion plastic SIMs supposed to be produced in 2022. Is that about right?

## MEA

4.6. You've been corrected.

## ROBIN

Okay, it was supposed to be 4.6, but there's been a fall off because of SIM chips shortages...anyway...

## MEA

OK, now you've been corrected. (laughs)

## ROBIN

All right. But it's a large number of pieces of plastic. And I think that's the other point that we really haven't dwelled on enough here: that the generation of people who will be using mobile devices when we're dead and buried will have a much more sharply honed focus on the impact to the climate and to the planet of everything that they do, including "Why the hell am I putting a piece of plastic in my phone?" (the question will come why the hell have you even got a phone at some point, I'm sure), because that's just not something I want to have to have on my conscience when it comes to disposing of it. It's just another piece of tech waste that I don't need when I can just download a profile and have it on my phone. Why would I need to go through the pain of doing that? That carries with it a cost, of course, the cost of manufacture, distribution, disposal of plastic SIMs as well. And I think without getting absolute about the numbers, you are looking at a 90% reduction in the cost of delivering a mobile experience by using a virtualized subscriber identification module versus a piece of plastic that has it on a chip.

### eSIM Sustainable Operator Benefits



A fully digital eSIM eliminates plastic waste and CO<sub>2</sub> output, as well as plastic sourcing and distribution impacts throughout the entire production process.

#### No Raw Materials

eSIMs don't require any plastic, as the SIM chips are soldered into the device directly.

#### No Packaging Waste

eSIMs are digital, removing the need for any packaging.

#### No Logistics Footprint

With the eSIM, SIM physical logistics are eliminated. (No more legacy process of materials are taken to production sites, and plastic SIM cards distributed across the world, mostly by air.)

#### No Sales Footprint

MNOs can sell eSIMs digitally and so no need for a customer to travel to a shop. Customers order & activate eSIM directly from an app





Zero SIM Plastic



Zero SIM Transport



Zero SIM Carbon Footprint

**moflix**



## Good for Customers. Good for Business

### All Digital Experience

With an eSIM, consumers don't have to worry about the SIM being the right size. No need for additional tool needed to open SIM slot on phone.

### No Waiting. Instant Gratification

No delay from physical SIM delivered by mail. Frictionless User Journeys with new number activation in minutes. Faster onboarding with impact on higher customer satisfaction, improved brand perception, and higher NPS Scores

### Automatic Compatibility Check

User is immediately shown if device is eSIM compatible. No need for user to check a compatibility list.

### Multiple eSIMs on One Device

If a user has multiple SIM cards but just one device, an eSIM removes the irritation of having to swap over SIM cards.

### Better Security - Reduce Dependence on Wi-Fi & Tethering (Hotspot)

Download App

Select Offer & Payment

eKYC (ID)

Activate eSIM

Connected!

CONVENIENT

FRICTIONLESS

FLEXIBLE

MEA

So you're thinking about lower cost of acquisition potentially. And you're thinking about the cost of the actual SIM. And from what I've seen, the eSIM cost versus physical SIM costs are lower. And if it's not for you guys, you should look at your SIM provider

AUDIENCE 2

eSIM for us is more expensive

ROBIN

Is that from your DP+ provider. Is it the people that are providing your profiles? Yeah.

MEA

You should help him.

ROBIN

I think there's a question of scale economies there as well. And this kind of all feeds into the thing we've been talking about earlier. It's a relatively new capability. It's not adopted yet. In the mass market where the economics of that work, there are not 4.6 or 4.2, however many billion eSIMs being provisioned every year. And I think when you get to the point that they are, then you can talk about them being a commoditized capability. I don't want to make commercial aspersions about people who might be in this room, but I would ask the question as to whether or not there's a real commercial need for people to be charging €2 for each eSIM profile. If you can get them for €0.20 on a piece of plastic delivered to you in an aeroplane to your office, then something seems to be a little bit out of whack there for sure.

## MEA

And then you need to think about distribution costs, cost of storing these things, cost of the paper and the plastic waste.

## ROBIN

Yeah. I'm not sure if you're looking at it as the actual just purchase cost of the SIM versus the entire lifecycle cost. I'm sure on that level, if you look at it in some sort of five year total cost of ownership, I'm sure the eSIM profile does start to stack up again. But I think there's a sort of a balance of the total economics of it and the scale economics of it that needs to be bought more in line with the way that we see real plastic SIMs at the moment.

MEA, I think we need to close it off now

## MVNO NATION

Let's continue the conversation at the bar down the stairs on the first floor.

Thank you so much. Very insightful. Such a hot topic. Thank you.

