

USER FRIENDLY

The Metaverse Explained

Host: Hanish Patel, User Friendly host and Digital Transformation leader, Deloitte Consulting LLP

Guest: Mic Locker, Deloitte Consulting Principal and U.S. Telecom, Media, & Entertainment Sector Leader for Deloitte Consulting.

Hanish Patel:

Welcome to User Friendly. I'm excited to kick off season six on a topic that's just about everywhere right now. And you can't escape it, and that is metaverse.

But what is the metaverse? And how should companies think about it? Well, that largely depends on what your business is and where it fits into the broader ecosystem. Whether you're a consumer company, a social media giant, a gaming company, an enterprise, or something else entirely, you're

likely to have a different take. In fact, we may see many metaverses in the coming years just because of that.

By most definitions a metaverse is immersive, interactive, with a community aspect at the core. It may or may not require VR or AR, also known as virtual reality or augmented reality. It can include user-generated content and ownership. It's collaborative, industrial, and can mirror real world objects and systems.

What we do know is the metaverse, a concept born out of science fiction, is now surfacing to express and address two key factors. One, people are spending more time engaged with digital systems and socializing through digital spaces, enough that some are starting to see virtual life equivalent to physical life. Two, technology's driving connectivity, communications, sharing, immersion, sensing, and simulation are all advancing rapidly and becoming more interconnected. It feels like we're at the steps

of the next big change, like when the mobile internet was about to erupt the world.

What does this all mean for the TMT industry and companies that support it? Well, joining me today to discuss the metaverse, its opportunities, challenges, and the future is Mic Locker, Telecom, Media, and Entertainment Consultant Leader for Deloitte US. Mic, so good to have you back on the show. Welcome to the pod.

Mic Locker:

Thanks for inviting me back. I'm really excited for the conversation today.

Hanish Patel:

So, Mic, we could go in so, so many directions when it comes to this topic, and as I mentioned, it's just about everywhere, and someone always has a different take on it, so I'd love to get your perspective. And as I've mentioned in introduction, the metaverse, or a metaverse, or many metaverses has different facets. So rather than spend our time defining it, I want to jump right into some examples for our listeners. So with that, what are some of the opportunities that you see for telecom and media and entertainment companies when it comes to the metaverse?

Mic Locker:

Well, Hanish, you said it in your intro, the digital spaces are already really quite popular, and more and more people are spending more and more time together in digital spaces for socializing, entertainment, productivity, and even to do research and development. And the tech is really moving quickly to make these worlds more immersive, interconnected, and innovative.

So I like to think about this in three different perspectives, from a sort of consumer applications, enterprise applications, and then I think there's also education and training applications. If we think of the consumer applications, there's a lot of telecom, media, entertainment companies already in the space, right? Gaming companies, social media companies, entertainment companies are already in this space. Consumers brands and creators,

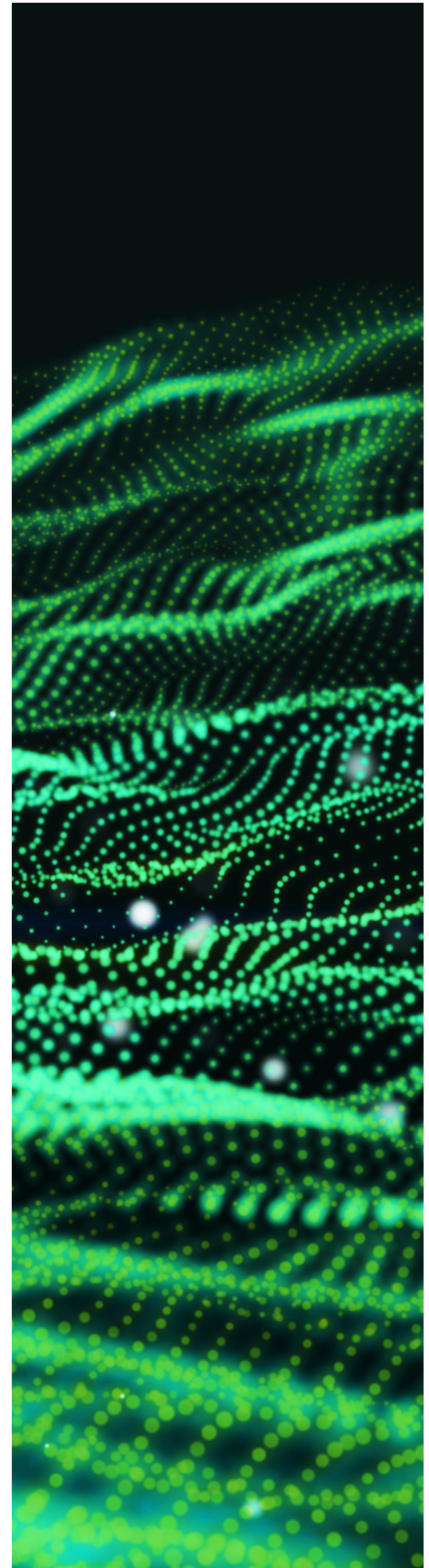
they're really interacting in virtual worlds in a lot of different ways. Concerts are taking place in gaming platforms, brands are selling digital goods in virtual worlds. I think of the Gucci in ROBLOX example, but there's tons of examples there. People are socializing in the virtual worlds, and they're increasingly personalizing their avatars in the virtual universes. And then, people are even buying virtual real estate and virtual art, so lots of consumer applications.

But there's a lot of enterprise applications too, and we see companies building hyper-realistic, physically accurate, digital twins that simulate natural environments, physical structures, industrial operations, and even transportation networks. And these include the humans' robots, and AI agents that work inside them, and they're using these worlds to accelerate design and planning cycles for all kinds of business paradigms.

And then there's learning applications, and these can range from employee onboarding and training, but also education applications that replace traditional classroom environment. We're actually doing this at Deloitte. So, we built a virtual campus for our Deloitte University for employee onboarding. It's an immersive space where our colleagues from all over the world can meet and collaborate. And in the first three months, we hosted more than 50 events for 4,000+ attendees from 15 different countries who got to experience a virtual onboarding with each other in this distributed unlimited reality, if you will. So lots of really cool applications.

Hanish Patel:

Mic, I'm really glad you touched upon the enterprise side, and, like you said, the training and the learning side because a lot of the examples that we're all seeing out there are very much on the consumer side. And again, part of that may well be that, if you excuse the phrase, we can kind of touch it and feel it all being virtual, and kind of get closer to it. But certainly the opportunities as you highlight in the enterprise and learning space are just as big, if not bigger, in certain instances.



What fascinates me around that and just as you were talking about the consumer side and the enterprise, as well as education, is it clearly seems to me that when we think about metaverse, it can't be owned by just, say, one platform or one company. Particularly when you talk about all of these areas that the growth and acceleration most likely would lean to being much more decentralized. So individuals and communities that are driving some of the most compelling trends that we're starting to see around metaverse, which is leading to that increased visibility, increased investment, frankly a part of the conversation that everyone is having right now.

Which really leads me to my next question. When it comes to that kind of creator economy that we're seeing so much about, and seeing that movement in that space, how do you think the metaverse will impact that creator economy?

Mic Locker:

Well, Hanish, I think there's a few factors to consider here. So, first, we know more people are making more purchasing decisions based on influencers and creators. Second, and we mentioned gaming before, game platforms are enabling tons of user-generated worlds, and they're enabling more people to be creators, or I guess at least creators of a sort, right?

Hanish Patel:

Mm-hmm (affirmative).

Mic Locker:

Third, content and buying experiences are converging. People are buying where they consume content, and they're consuming content where they buy things. It's getting more and more commonplace to purchase products directly on social media, in video streamings, in gaming environments, in virtual worlds. And then fourth, products aren't just physical, they're also virtual. In games, for example, with innovations in non-fungible tokens, or NFTs, and in digital

ownership. So I think these four factors are driving more, and will continue to drive more influencers and creators into virtual spaces, and so I think we'll continue to see that increase. And in turn, I think we'll see more user-generated content that is 3D, immersive, and interactive, more people buying virtual goods with virtual currency, fueling the virtual economy. So we could maybe call it a virtual virtuous cycle, or a virtuous virtual cycle.

Hanish Patel:

Yeah, and certainly as you're describing, again, it kind of makes me think of how the internet first started and with everyone creating things around that and it certainly feels that this is very much akin to that, that we're in a very similar moment around the ability for individuals, as I mentioned, or communities to really be creating content for the metaverse, which really brings me to that focus around, say, media and entertainment and content that has been mentioned. But what does this mean for companies not directly involved in media and entertainment but very much tangential, such as telecom and the tech sectors. Where do you see the play for them?

Mic Locker:

Unlimited reality and the virtual immersive worlds with this 3D content and digital goods, it really constitutes a form of content that's heavier than video in terms of share bytes. So, getting all this content to all the users and consumers, it's gotta be enabled by edge computing, faster connectivity from technologies like 5G and Wi-Fi 6, faster processors. So, that's gonna require investment in compute-specific hardware like GPU chips and servers, as well as investment in networking specific hardware like fiber optic cabling and wireless chip sets. And then, we think about all the hardware devices that are used to access, interact with, and develop the metaverse.

So, again, if we think consumer and enterprise, from a consumer perspective

we've got VR headsets, mobile phones, haptic gloves, smart watches where we're seeing all sorts of investment to develop better sensors, longer lasting batteries, better screens, better cameras. I mean, just think of how much the camera in the iPhone has advanced in the last couple of iterations of the iPhone. It's pretty amazing. And then of course, we're just gonna see more devices that consumers can use to access these worlds. And on the enterprise side we see investment in industrial cameras, sensors, and the tracking systems that are used to build these enterprise environments where you can capture entire rooms or even buildings to create the digital twins that we talked about before.

And then we can't forget all the investment that's going into distributed ledger and blockchain technologies, right? So, in summary, I think the metaverse means a lot more or I should maybe say continued investment in technology and technology innovation.

Hanish Patel:

So, let's stick with that train if I may, Mic. Some of the examples that you cited there, they're still on their way. Some are already here and some are continuing to evolve and improve that will either be faster, greater, allowing for more to take place. Do you think that we're still some way away from metaverse as being defined and has been defined openly to actually be here or is it here or is it gonna be a while before it's adopted in a much more meaningful way? Let's put it that way.

Mic Locker:

Well, that's a question that we could debate for a long time. So I think that there are aspects of the metaverse here and there that are certainly virtual worlds that people can experience both from a consumer side and a price side. There are companies that have built their digital twins and they're optimizing their manufacturing line or predicting when there might be wildfires. So, that's happening.

What isn't here yet is the one interconnected world that everyone participates in. And I think that could take some time. I think that there are a number of factors or maybe uncertainties that are sort of impacting the timeline. So, things like the speed of innovation of the business models that companies are gonna use. But also, around the base technologies that are enabling this, as well as innovation on how users are going to want to interact with virtual worlds.

I think there's regulatory uncertainty in terms of the framework around security and privacy, as well as related to cryptocurrency, and if and how crypto is gonna be regulated. It's also not clear how much people actually want to adopt a decentralized finance and crypto. There's a lot of press, but it's not clear that that's actually yet translated to widespread adoption. And there's already some NFT and crypto scams, which could affect the broader public's willingness to adopt, at least right now. I think there's uncertainty on the interoperability of different tools and protocols and standards. So, I think there are some uncertainties that need to be solved before we get to one metaverse, if we ever get there.

And then I think, and I guess these aren't really uncertainties but something else that we should think about now, since we are in the early stages, is inclusivity. We see a lot of bullying and harassment on the internet today and if we think about younger generations spending more and more time socializing online and in these immersive environments, I think that we need to think about managing the downside of that. And then related to that, I also think there's a conversation to extend about the impacts of the amount of time that people do choose to spend in these worlds and if there is an impact on mental health.

Hanish Patel:

Mic, there's a lot to unpack there and I want to dig in deeper in a couple of those areas if I may. And I'll reel them off and then we'll go one by one.

Mic Locker:

Sure.

Hanish Patel:

You talked about crypto. In all fairness, we could probably do an episode or two on crypto on its own. So, I won't ask you to dig in heavy there. But I want to talk a bit around innovation because one would argue that a lot of the innovation that's taking place around metaverse is actually driven by the individuals, the consumers, the way they want to do different things. But I really do believe that enterprise has a big role to play on the innovation side. So, that would be my first question I'll come back to.

And then the second area, which I definitely want to spend some time with you on, and you touched upon it and it's so important, around inclusivity and the behaviors that we're seeing on the internet and potentially what that would mean in behaviors that we'll see in the metaverse. So, on the first one, around kind of innovation and when we think about enterprise innovation, what role do you see those enterprises playing in even the development of, like you said, maybe an interruptible common metaverse or maybe even their own kind of well-gardened metaverses?

Mic Locker:

Yeah, I guess I'm gonna split this again into companies that are building metaverses or virtual worlds for consumers and companies that are leveraging these technologies for enterprise-specific applications. So, I think the companies that are in the gaming space, the platform companies, the open source worlds, like Decentraland or something right there. Some of these companies are really focused on building a world that their consumers can interact in with other consumers in that world. But then there are others that are much more focused on interoperability. And there are some examples of spaces where you can start interacting across different games and things. Still mainly within platform.

And there's lots of complexity. I was reading an article about this the other day, they were talking about if you have an avatar, and you buy some avatar swag for your avatar in one gaming platform, the level of—the amount of technology required to get that swag into another gaming platform is nontrivial. So, for these companies to have an actual interoperable set of worlds, they're going to need to come together in consortiums and agree on standards and how things are going to work together, and it's going to take an awful lot of effort to get there.

Today, though, I think they're all focused on just building the most amazing experiences in their platform. Which is great, because the technology continues to advance, the experiences continue to get better.

If you think about enterprise-specific applications, it's less important, and in fact, maybe preferred for the enterprises not to be in interoperable worlds. So they're going to focus their innovation on creating the replicated, in-person look. Because eventually, you think about some of the enterprise use cases, this is what's going to enable things like remote surgery, or a group of people collaborating across several research facilities. Or fixing something on an oil rig that's in the middle of the ocean using real-time augmented reality visual collaboration with remote experts. That's just pretty cool.

Hanish Patel:

It's interesting how you mention around experiences. Quite recently I spent a little bit of time in, as you mentioned, Decentraland, and they set up this whole experience with the Australian Open, which is going on. And it was an actually interesting setup that they had in terms of the land they had, their own experience they had, and so many users were integrating with it. So, it was definitely very much focused on the experience side, which, again, was very interesting and worth checking out if anyone has time. But I want to go to that second part of the question

we talked about, and you mentioned, quite rightly so, about inclusivity and some of the behaviors that are taking place on the internet. And I imagine that this will be a potential challenge to the success of a metaverse, or some of the governance that will be required to make it a pleasurable experience for all, be that consumer level or enterprise level, that you've got the right structure in place to make it the positive environment that we would all want it to be.

Mic Locker:

Yeah, I think that's right. And it'll be interesting to see how this unfolds. And there is some discussion about, and I think there are some platforms today where you can shut off another player, if you will, or another character in a virtual world if you don't want to interact with them in the world. So, if someone is harassing you in a virtual world, that could be a good option for you to avoid that. If we think today that policing community standards is complicated, just on social media platforms, and in games today, it's only going to get more complicated as these worlds proliferate. I don't have the answers right now, but I am heartened by the fact that people are already having this conversation, and I think if we have the conversation today and address this head on, we can hopefully get ahead and create a better set of experiences for people in unlimited reality than we have today on web 2.0.

Hanish Patel:

Sticking with that thread, what other challenges do you see or obstacles do you expect to see, be that at a consumer or enterprise level, when we think about metaverse as a whole?

Mic Locker:

I actually think that the conversation we were just having, that's an obstacle for some people to want to be in these worlds. So, just, what is the experience that I'm going to have? Is it going to be a good experience? If it's not, then maybe I don't want to participate. So, I think that's number one. And then I think there's a lot of uncertainty

around crypto and NFTs, where there's been bad actors committing fraud. So I think that's going to hamper things. And then we just really don't know how regulation is going to play out.

Hanish Patel:

Right.

Mic Locker:

And then the whole interoperability thing and what's going to work with what else. And what kind of access devices are people going to want to use? How is the technology for VR headsets, for example, going to evolve? So I think there's a lot of different things to think about there.

Hanish Patel:

Perfect. So, with that in mind, let me turn it the other way, and maybe close with a two-part question. First being, what excites you the most about the future? And then, two, how are you personally involved in the metaverse?

Mic Locker:

I am so excited to work in the telecom, media, and technology space today, because there is so much change, and we actually don't know what the future is going to look like. I think it's super exciting and I love having conversations with my clients and in the market with people like you on these topics because we could revisit this conversation in five years (laughs) and none of the things we'd say may have happened. So, the thing that excites me the most about right now is that I don't know. We don't know how it's gonna unfold, and I'm super, super excited to see how things are going to unfold.

Hanish Patel:

Mm-hmm (affirmative).

Mic Locker:

And then the second part of your question, how am I involved in the metaverse. Well, great timing on that question, because last week Deloitte announced our new unlimited reality offering, and the launch of

our Dimension10 Studio. So, what does this mean? So our unlimited reality offering is our offering that helps our clients harness the next generation strategies, tools, technologies to create and connect the virtual worlds for all of these use cases that we've been talking about today. And then our Dimension10 Studio is really where it all happens. And it's both a physical and, of course, a virtual destination where we can bring our clients to innovate with these technologies and learn quickly, and advance their strategies on this topic. So, I'm really excited about the launch, and I'm really excited to be part of the unlimited reality team.

Hanish Patel:

That's brilliant. And, Mic, I share your excitement on that whole unlimited reality and what we can offer to our clients. And certainly, Dimension10, I really look forward to visiting it physically and virtually and then really kind of living that experience, which is going to be super exciting for everyone who gets the opportunity to do that.

And to what you mentioned earlier, I think you've just signed yourself up to be back on the pod, right? You said five years.

Mic Locker:

(laughs)

Hanish Patel:

But I would say I'm going to get you back on earlier than that, just to share pace of how things are moving. I'll even give you an example from my own. Metaverse has been a topic I know you and I have been discussing it for some time, but even my kids, they've been living and breathing it for quite a while with the amount of time they spend in digital spaces. And so like I mentioned in the past, the amount of time my kids spend curating and creating their avatars and the look they have is, it's unbelievable the amount of time they spend, compared to what they do in real life to curate and create their own looks (laughs) is phenomenal. So, you can certainly see the way that the wind is blowing with what's

happening with metaverse and the access points, as you talked about, be that devices or free services, it's a exciting time to be a part of what's taking place.

It's a tough one for me to sum up in terms of where we've been with this episode, and I think we could certainly do more parts and, Mic, we've got to get you back on to talk more as this evolves. But I'll try and close it with the fact of, I mean, certainly it's here, it's been here for a while, it's going to continue evolving. There're significant players at an enterprise level, there's significant advancement at an individual creator level. This really, really does feel like the early days

of the internet again. And I think there's phenomenal growth and potential in this space and a whole load of excitement. So, with that, Mic, I want to say thank you for joining me again today and engaging us, and helping us all understand a little bit about this term that we're hearing so much about, the metaverse. And for everyone out there, until next time, happy listening.

Explore more episodes of
User Friendly at:

userfriendly.deloitte.com

This podcast contains general information only and Deloitte is not, by means of this podcast, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. This podcast is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your business. Before making any decision or taking any action that may affect your business, you should consult a qualified professional adviser. Deloitte shall not be responsible for any loss sustained by any person who relies on this podcast.

About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as "Deloitte Global") does not provide services to clients. In the United States, Deloitte refers to one or more of the US member firms of DTTL, their related entities that operate using the "Deloitte" name in the United States, and their respective affiliates. Certain services may not be available to attest clients under the rules and regulations of public accounting. Please see www.deloitte.com/about to learn more about our global network of member firms.