A bold new reality. Is it purely virtual? with Thomas Bedenk

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Speaker 1: Tech Reimagined. Redefining the relationship between people and technology, brought to you by Endava. This is Tech Reimagined.

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Bradley Howard : Hello and welcome back to Tech Reimagined. I'm Bradley Howard and I'm glad to welcome you to the latest episode of our show. We're now full steam into season three in which we explore how technology is influencing the fabric of our society, how we live, the way we work, and how we do business. If you enjoyed today's episode, then please follow us on your favorite podcast platform to stay up to date. It's a true pleasure for me today to introduce you to my colleague Thomas Bedenk. Hello, Thomas, how are you?

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Thomas Bedenk: Hi Bradley, how are you?

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Bradley Howard : So Thomas is our VP of Extended Reality here at Endava, who helps lead and counsel most of our augmented reality and virtual reality projects. He was recently on stage at the AUREA Awards where he represented Endava and our client called Colnaghi with their virtual art gallery. We then won the prize for the Best Immersive Project of the Year. We're going to hear more about this from Thomas later. So, welcome to Tech Reimagine. Can you describe more about your role at Endava as the VP of Extended Reality? Sounds an amazing job title.

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Thomas Bedenk: Yeah, thanks. It is. It is an amazing job title, but it's also a very interesting job. It involves quite a lot of different things usually around explaining this technology, but also networking internally as well as externally about these topics, as well as connecting the dots between our different locations on this topic around the world, and

of course every now and then also talking to clients, being at trade shows, speaking at conferences, or working on projects directly with my team.

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Bradley Howard : Well again, thank you very much and welcome to the show. So well done for the AUREA Awards. Can you tell us more about that particular project?

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Thomas Bedenk: Yeah, it was a great project with our client called Colnaghi. They wanted to do a virtual version of their gallery for the London Art Week earlier this year, and we brought an old master painting into this virtual space. But rather than just looking at a picture, you could experience the background about Colnaghi's it's 300 year history in selling art, as well as find out all the information about the painting and other versions that are, for example, hanging the Louvre and look at x- rays and high resolution versions, listen to a podcast with experts talking about this painting. It's really interesting way to explore it in a virtual way and it brings in people from around the world. And in fact, there were people from 50 countries using this experience, which would've not been able potentially to come to London just to see this piece of art.

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Bradley Howard : Well done again on the awards. In today's episode, we're going to be focusing on the rise of virtual reality and its impact on our lives. So jumping from the work that we did with Colnaghi to a wider look at the whole concept of augmented and virtual reality. Can you talk a bit about the value that you see these technologies bringing to different industries?

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Thomas Bedenk: Yeah, it is important to distinct between virtual reality and augmented reality, even though they're often thrown in the same kind of pot and the advantages can overlap, but they're also very different in how it's used and how ready they are for the market. It's already very established in the industry to use virtual reality by now as a method of training, for example. Generally things that are dangerous or highly expensive or impossible in the real world can be trained very well or experienced very well in virtual

reality. Things that would involve, for example, turning off a whole gas turbine like we did for our client Siemens. I can give you two examples.

One, in virtual reality, you are learning how to maintain and install a burner into a gas turbine step by step. But you also do it where you physically and you also do it very spatially that way it's much more efficient as a training. Still, it's being used in context of other forms of training. So you always have to think about which part lends itself very well for virtual reality, which parts are still better taught in the classroom. Some math calculations for example.

And on the other hand there's augmented reality and we used it in this specific case for Siemens to install heat shields in mockup of the gas turbines. So it's an actual hardware that you're working on and therefore it helps a lot to get the additional information of how to do this properly, get tips and the right order, the right sequence of using your tools in augmented reality, overlaid on that real object. But you can still use your hands freely. You can still perceive reality and people that are standing next to you. So that's a distinction between augmented and virtual reality. Also for augmented reality, it's usually highly important to understand the intention as well as the context of the person. So you have to capture that with a lot of data sensors and understand what the person's really doing to get a good use case out of it.

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Bradley Howard : So how much time in your working day do you spend with a headset on?

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Thomas Bedenk: Yeah, not as much as you would think. It really depends if we're currently working on a project where I'm highly involved in also looking and figuring out what we do on a strategy level, but also on an execution level, getting the experience right and things like that. Or if I am, for example, starting my day and experiencing some virtual reality at Beat Saber where you're slashing through music notes with your lightsaber, that's a really interesting way to start your day because first of all, with all our day being fed by all kinds of media, constantly from emails to LinkedIn to social media, you're never save of any incoming information. When you take this step into the virtual reality, you can actually, I'm using it that way. I reflect on what am I going to do today?

Sorting my thoughts, also going into an interview like this while doing this very visceral exercise of slashing those notes with music.

It's also very interesting in a way that you realize if you find the right level of difficulty, it's a very visceral exercise and your you mind is free to explore those thoughts and then once you suddenly hit that threshold and it's getting harder, you can almost feel the cognitive load kicking in and pulling you back into that experience, which is also very interesting study about how VR works and how it can really capture us with our mind, but also our body. And I think there's a huge untapped potential for how we can use this for entertainment but also for an industrial context.

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Bradley Howard : So is Beats Saber your favorite activity in the Metaverse a headset?

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Thomas Bedenk: As far as entertainment goes, this is really my go- to applications. It's a lot of fun and I can only recommend to try this out, but as it goes, when people usually ask what should you do in virtual reality first? Or the question used to be, what kind of apps can my kids play? Like with every new kind of media generation, you have these kind of questions. My tip is always try it out yourself, but don't just watch someone play a game. Really try to understand that game and try get to get into it. And then it opens up a lot of answers to some questions you wouldn't understand otherwise and how this medium works, how you can operate in this and what might be challenges or opportunities for the future by using this.

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Bradley Howard : So we found this quote of yours earlier last year when talking about the Metaverse and it really makes sense now. Here's the quote, " As with many other experiences, feeling is believing with the Metaverse and you should not expect to be able to integrate it into your digital strategy if you do not experience its promise and its limitations yourself." So what would you recommend as a starting point VR experience to a skeptical early adopter of the Metaverse? Also, can we just start off with another question, which is how would you describe Metaverse to the people listening who don't know what it is?

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Thomas Bedenk: Okay, that's a whole big new, big topic. Metaverse is a very narrative term. It's being used in different ways depending on what your current mission is, what you want the public perceive, what goals you want to reach. But essentially it is or will be a place which is connecting people globally in a virtual environment and it's powered by 3D real-time engines, meaning you can't perceive something generated on the spot similar to how a game works, and that can be applied in different contexts. It could be displaying your new brand, showcasing something to your specific audience of customers. It can be a meeting with your client to look at all the machines that you're offering in an industrial context. It could be really just the next generation of managers of the future not coming together at a local golf court, but meeting in some virtual reality equivalent of it. You're suddenly connected globally to the decision makers rather than just in your local area.

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Bradley Howard : And we did that recently at Endava, didn't we? There was a company event inside a Metaverse environment for the completion of a merger and acquisition.

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Thomas Bedenk: See, that's also a bit of what I mean with narrative term, and we are guilty of that as well. We say we had a Metaverse event. You can say it's a Metaverse event. You can say it's a social VR event depending on who you want to address because it's a question if the metaverse as a construct that's really interconnected and across applications is really there already. Or if we just did a, which is still amazing, a virtual reality event where we invited our clients into Altspace VR as a platform. We sent them headsets, they got to explore this together with us. It felt a much more like we're standing in the same room exchanging thoughts after the presentation. You can feel that power of connecting people, but it's maybe still the precursor to something called the Metaverse.

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Bradley Howard : For the original question as well now. So for someone in a business context, what do you think should be a good starting point for them to try out a headset maybe if that person is a bit of a skeptical early adopter?

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Thomas Bedenk: Yeah, like I said, personal experiencing this medium is going to open your eyes in certain ways. That doesn't solve actually looking at your business and the opportunities you have and making this part of your strategy, thinking about a digital strategy first and then how does 3D data, metadata about your customers and all this new information potentially with virtual reality, you have biometric data that you can capture and things like attention. So there's a lot to consider when you think about where this might lead your business in the future. And then you can make a plan that's looking at near term, what's the long-term change to my business with this coming? But you won't be able to reflect on those thoughts if you haven't experienced it yourself. And that's why I'm saying feeling is believing in the metaverse and the virtual reality because you certainly understand these new aspects of the medium on a whole different level than just hearing or seeing about it.

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Bradley Howard : So I don't want to particularly plug a particular device here, that's not really what we are here for. But if we do have someone who's listening to this podcast right now and is thinking, okay, I want to give this a try, which device would you recommend that they should start looking into to try out a virtual reality environment?

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Thomas Bedenk: Well, the Meta Quest too is definitely a go-to device that's affordable and has most of the capabilities that you can also have on an industry grade headset or the newly, I have the Quest Pro here. It's a very similar headset. It adds a couple of different functionalities, it's a bit lighter, and so it's really interesting to also see where this is heading. I really think when it comes to VR, AR is a different story. We're really coming to a level of the quality of the hardware that that is not necessarily the limiting factor. It's more the cultural discussions you have to have, the impact on using this. Also interfacing with the rest of your software that you're operating and making it really seamless as an experience. So I think there are much more software challenges ahead for the next years to come than hardware challenges when it comes to virtual reality. Augmented reality is a bit of a different story. You still have massive research to be done to make this really wearable all day and really impact our lives. But when we're

getting to that threshold of doing AR, not just with our phones where it's always like a little screen look into that different world by this really surrounding you at any time, that will have massive impact to how we think about digital media and how we operate and traverse in this world.

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Bradley Howard : Definitely. And let's talk about some good for humanity outcomes in virtual reality and AR. Do you have any examples where there's some really nice initiatives that helps the rest of the world greater humankind?

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Thomas Bedenk: I think it is important to think about these things and I was just recently at this event that you mentioned, the beginning of the podcast, NTR event. We also talked about the good Metaverse and of course how can we influence this now in its inception point kind of to become a better version of connecting humans than other media. On the same time, we cannot attach our hopes of changing humanity onto a technology. It's still to be solved on a different level than technology, but it can help and giving you a just example of something we did, we, a couple years ago, reconstructed Syrian locations, a mosque that was destroyed in the war, for example, from Instagram pictures of before it was destroyed. So we used machine learning and algorithms to dig through old Instagram photos and try to sort them, which do have that location in it, which to have people and people in it, what daytime is it? And then used best pictures as a dataset to reconstruct the location.
We did it in that contest more in an artistic way, but it was still really interesting to see actually refugees trying it out and going back in memories of how they've actually experienced this for real. Things like that can of course make a huge impact on the individual, but also to all of us as a society.

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Bradley Howard : Definitely. And there's a YouTube video available on I think the Endava channel, which talks about the recreation of that mosque and the entire marketplace that was next to it. It's just amazing and I'd really recommend anyone who's listening to this statute watch that video.

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Thomas Bedenk: It was called Rebuilt by Memory.

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Bradley Howard : Excellent. Thank you very much for that. So if any of our listeners have got any other questions or want to get in contact with you, Thomas, what's the best way of doing it? Whether that's on the Metaverse, social media and any other communication?

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Thomas Bedenk: Yeah, so far it's still the best to reach out on LinkedIn rather than try to find me on any of the different virtual reality platforms because that's the state of where we are. We are not really connected between those different social platforms on the Metaverse yet. It's still to come and almost everyone is on LinkedIn, so that's definitely a good way to get in contact.

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Bradley Howard : Yeah, so to be really clear, that's Thomas T- H- O- M- A- S Bedenk B- E- D- E- N- K on LinkedIn. So thank you very much. Thank you so much, Thomas, for sharing these insightful views on such an exciting range of technologies.
To all of our listeners, if you found this episode insightful, please spread the love and share it with your network, with your friends, your family, or just follow us on any of the major podcast platforms. We're always interested in your feedbacks. Please either go to endava. com and click on the contact button or contact us at Endava on pretty much all of the major social media platforms. Until next Thursday, I'm Bradley Howard and this has been Tech Reimagined.