

MARCO JANMAAT

Founder and Director of VR Owl, Netherlands

Patrick NICOLET

We will now explore the impact of three different technologies, starting with augmented and virtual reality (AR and VR) with Marco from Dutch company VROwl. Then we will continue with Natasha from EON Group a company based in the U.S. and Tarek who co-founded Proglove, a German start-up, both of them leveraging the power of the Internet of Things.

Marco JANMAAT

I am the founder of a company called VROwl, and the company basically does two things. Firstly, we build VR and AR applications for companies and we help to implement them in the organisation, and secondly, we have built an urban planning tool which allows us to generate 3D maps from geographical data and translate them into VR. Therefore, we can show people their future environment, we can show them what happens to the traffic if a windmill is placed in their environment. I see from what I have experienced in my personal life that technology has a lot of impact, especially seeing business models like Airbnb and Uber and the growth in the use of smart phones, and now we cannot even live without a smart phone anymore.

Looking at the experience of my professional life, working with governments on urban planning and with municipalities, we are always busy with the current status of technology. We are always looking at how we should regulate or handle the current fields of technology or the current playing fields. The moment we try to talk to them or open up on a level to see where we will be in five or 10 years, there is always quite a big gap between the technology world on the one hand and the governance world on the other.

I will give you an example of that. Which of you expects to have a smart phone in 15 years? It is half of the room. Looking at the other half, have you ever thought about what will replace your smart phone? What will this replacement of the smart phone look like and how will this impact me? I work in the AR industry, and AR has the possibility to replace all the digital screens we have now. Currently, we have built up a digital system with screens everywhere. We have an iPad at home, we have a computer at home, we have two televisions, we have projection boards, but in the future with AR, we have the possibility to replace this digital information and show it via a glass, so we do not need all this physical hardware. The awkward thing about all this physical hardware is that, when it is not displaying any digital information, it is just standing there, it is just using resources, which is actually a fatal flaw in our digital system.

Basically, what AR allows us to do is, we put in the glass, and instead of seeing our phone or looking at a screen, we could literally just open our hands and literally display the digital information on them. We could literally decide that we want to have our TV this big tonight, and place it on the wall. Starting to think in terms of these constructs brings in a lot of elements. Who owns this digital space? What if you were walking in the street and you received a whole stream of ads in your face?

These questions live, on the one hand, inside the technology world. How will we shape this world? How will the AR world look? Regarding governance, how will we regulate this? There is still quite a gap there, and in the future, I hope we will be able to bridge it.

Patrick NICOLET

This is a very important element that we will have to address, the fact that this virtualisation will be a complete abstraction of interaction. Not only will we still be facing the issue of abstraction in terms of human-to-human and human-to-machine communication, but the machine layer will be abstracted to AR and VR and we will deal with representation of a set of data without knowing exactly where it comes from. In turn, this level of abstraction will itself create questions of how you govern these elements, because the question is who will understand what is behind. All the citizens will want to engage with technology this way because it is extremely intuitive, you are immersed in the



data, and it is very easy to understand what is happening in your environment, but then you have these different layers below that will need to be governed. That is the point about AR and VR.