

Beyond the Realm of Geospatial Imagination



Editorial manager Wim van Wegen recently got a tantalising glimpse of the not-too-distant future during his visits to [GEO Business](#) in London and [The Next Web Conference](#) in Amsterdam. Both events displayed an abundance of technological triumphs and futuristic solutions. You could argue that the first can be defined as a geomatics event and the second can't, but there can be no doubt that internet-related advancements, such as the Internet of Things (IoT), will have a revolutionary impact the geospatial sector.

(By Wim van Wegen)

And there are more examples of state-of-the-art technology that will be game-changing for the geomatics industry. The biggest buzz right now is around virtual reality (VR) and

[augmented reality](#) (AR). Many 3D city models were transformed into VR and GIS some ten years ago. Now, a decade later, the interest in VR has exploded thanks to the recent launch of new devices – e.g. the [Oculus Rift](#) – making the technology more accessible to a broader audience. Today we're also seeing a boom in VR applications in the geospatial sector, catapulted by the added sense of reality that accurate data provides in a virtual world. This is great news because VR can be used in our industry in numerous ways, with countless applications for the built environment alone. For example, imagine conducting an airborne survey flight wearing a headset that allows you to see exactly what the UAV can see. I tried it out for myself at GEO Business...to be honest, it made me feel a little dizzy (and I'd not even had my morning coffee!), but I probably just need to spend a bit more time 'getting my sea legs'.

After a few cups of coffee, I realised that VR and geomatics are truly a great pairing. Just think of all the possibilities that the combination of VR and BIM opens up. Visualisation technology has reached the point where you can walk around a virtual building model and feel as if you're actually there inside it, and that adds an exciting new dimension to our dynamic industry. As [Tom Cheesewright](#), an applied futurist from the UK, said during his keynote at GEO Business: "Today, we see the digital world through a small window; tomorrow we will be immersed in it. We are entering a new era of the synthesis of physical and digital." VR, [artificial intelligence](#) (AI) and robotics will have a strong societal impact. Cheesewright painted a picture of a living city populated by autonomous organisms, both real and virtual, where everything is connected with everything else. But there's no cause for concern for the geomatics world – the foundation for these mind-boggling developments is reliable geospatial data that has to be captured, stored, processed and shared. Although these are changing times for our industry, the need for geospatial professionals remains rock solid. Future opportunities may be beyond the realms of our current geospatial imagination, but virtually anything is possible – especially in a world where virtual and reality become one.

Follow Wim van Wegen on Twitter: [@wimgeomares](#)