

# 5 QUESTIONS TO€¦ THOMAS HARRING, HEXAGON

# Towards Valuable Data that Works in an Autonomous Way





In this interview, Thomas Harring, president of Hexagon's Geosystems division and CEO of Leica Geosystems, shares his thoughts on the present and future of the geospatial industry, including his views on the key market trends, technology drivers and challenges, and the impacts of COVID-19 and climate

change on his organization and the sector in general.

### What has been the impact of COVID-19 on your business?

Even before the current COVID-19 pandemic, digitalization was a major trend within the geospatial industry. The COVID-19 pandemic has accelerated this development and the trend will continue once the crisis has passed. The adoption of digital solutions in more traditional areas has increased, and the crisis has not delayed planned investment projects. The power of digitally enabled workflows has also shown the benefits transparently to those decision-makers who had previously not been aware of solutions from the geospatial industry. Due to the ongoing convergence of the real and digital worlds, the geospatial industry – with its solutions that capture, measure and visualize the physical world – is ideally positioned to facilitate automation and to provide autonomous decision support. There are several topics which have gained relevance due to COVID-19, such as real-time collaboration between office and field using digital tools, frequent remote progress monitoring as well as increased demand for accurate and reliable digital realities. We, and everyone interested in the geospatial industry, should use the momentum of the 'next normal' to further strengthen the geospatial industry and move towards more customer-centric, sustainable and autonomous digital solutions.

### What do you regard as the key market trend in the years ahead?

Autonomy is a key trend that we see and actively shape. Our autonomous technologies 'autonomize' any task or process in a workflow for entire operations or industries. Consider our newly launched products in the BLK series. The Leica BLK ARC, an autonomous laser scanning module for robots, integrates with robotic carriers and enables scanning with minimal human intervention. The Leica BLK2FLY is an autonomous flying laser scanner and easily captures building exteriors, structures and environments from the sky, creating 3D point clouds while flying. The BLK ARC and BLK2FLY connect directly to Hexagon's cloud-based visualization platform HxDR, where immediate upload, Al-enabled cloud processing and storage of the captured data provide instant delivery of a purpose-built intelligent digital reality to collaborators anywhere. Smart digital realities already help make informed decisions by visualizing as-is conditions and modelling scenarios. However, self-learning digital twins are increasingly autonomous; think, for example, of monitoring systems whose sensors detect minimal movements and, in the event of danger, automatically switch a traffic light to red to close off sections of the road to protect drivers.

### Which technological driver do you expect to be most important in the coming years?

Technology has delivered on the promise of vast amounts of useful data. But instead of generating trillions in value, the data deluge is confronting industry with a new challenge. I consider the most important technologies to be those that allow us to put all

this valuable data to work in an autonomous way. Exciting technologies, such as 5G, edge computing, cloud processing, artificial intelligence (AI), machine learning, IoT and AR, are all making an impact. I don't see one single technology driving the industry, but rather the interplay of all of these. However, AI has already transformed machine visualizations and image processing, and pervades our solutions and platforms. Customers are benefiting from the use of AI in our smart digital reality solutions to gain previously unobtainable insights.

### What do you see as the main challenge in the near future?

I see a bright future for the geospatial industry. However, a talent shortage might become challenging in view of the increasing demand for geospatial data and the growing number of applications. Fewer talented youngsters are entering the industry, while seasoned professionals are retiring. Our innovations respond to that challenge in two ways. Firstly, our developments help surveyors and other geospatial professionals be more efficient. With our robotic total stations, for example, such as the Leica Viva TS16 with DynamicLock, one person suffices to get the job done. Another example is the Leica GS18 I; with the GNSS rover with visual positioning, surveyors can quickly and efficiently capture areas in images and measure points in the field or later in the office. Secondly, innovative technology such as laser scanners, mobile mapping technology, UAV systems and increasingly powerful software also make the industry more attractive to a tech-savvy younger generation.

## Due to the climate crisis, companies and organizations urgently need to contribute to a safer and more sustainable world. What is your vision on this?

We believe that the geospatial industry has a responsibility to contribute to making our world safer and more sustainable. In fact, at Hexagon, sustainability is at the core of our strategy. We envision an autonomous, sustainable future in which industry, humanity and the environment sustainably thrive. We constantly strive to minimize our own environmental footprint and that of our value chain. And we see a great opportunity in supporting customers to become more sustainable. Our solutions contribute to making renewable energy farms more productive, coastal areas more resilient, cities greener, mining and heavy construction more efficient, building construction leaner and building maintenance smarter.

### **About Thomas Harring**

Thomas Harring is the president of Hexagon's Geosystems division and CEO of Leica Geosystems. In 2011, he was appointed COO/CFO of Hexagon's Geosystems division and Leica Geosystems. Prior to that, he held various management positions at Leica Geosystems. Before joining Leica Geosystems in 2003, Harring worked for many years in international consultancy and served on the academic council at the Technical University of Cottbus, Germany. He holds a degree in technically oriented economics from the Technical University of Stuttgart, Germany.

Thomas Harring ,president of Hexagon's Geosystems division.

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