Jürgen Schomakers

CEO
Esri Deutschland GmbH

Interview von Christiane Salbach, DVW

1 Nachhaltigkeit – sei es im Bereich des Klimaschutzes, des Bauens oder auch bei der Einhaltung von Lieferketten – ist bereits jetzt ein ganz wesentliches Thema, wird in Zukunft aber weiter an Bedeutung gewinnen. Wie geht Ihr Unternehmen damit um? Welche Chancen ergeben sich daraus?

Nachhaltigkeit ist seit Ende der sechziger Jahre ein Teil der Mission von Esri und liegt in unserer DNA.

GIS ermöglicht es den Menschen, Zusammenhänge in der physischen Welt herzustellen, die sonst vielleicht nicht sichtbar wären. Durch die vielen Möglichkeiten der Integration von GIS mit anderen Technologien entstehen innovative Anwendungen. GeoAI, GeoBIM und GIS-basierte digitale Zwillinge, die durch IoT und Bilddaten unterstützt werden, liefern völlig neue Möglichkeiten, sich proaktiv und kollaborativ mit dem Thema »Sustainability« auseinanderzusetzen.

Die Anwendungen sind zahlreich: Vom ESG Reporting und der Umsetzung der SDGs bis hin zu verbesserten nachhaltigen Betriebsabläufen im Public und Private Sector, Umweltmonitoring, Planung grüner Städte und Infrastrukturen, Visualisierung klimatischer Veränderungen und deren Auswirkungen und, und, und …

2 Der Ressource Wasser (einschl. Weiternutzung von Abwässern) wird zukünftig größere Bedeutung zukommen. Wie positionieren Sie Ihr Unternehmen mit Blick darauf?

Mit GIS versetzen wir Menschen in die Lage, ihre Umwelt besser zu verstehen und knappe Ressourcen effizienter einzusetzen. In der Wasserwirtschaft wird unsere GIS-Technologie zur Visualisierung und Analyse topografischer, hydrographischer und hydrologischer Daten für verschiedene Aufgaben verwendet, z. B. zur Bestimmung der Wasserqualität und der geschätzten Wasserverfügbarkeit, zum Hochwasserschutz, zum Verständnis von Natur und Umwelt und zur Bewirtschaftung der Wasserressourcen.

Auch ein anderes Thema rund um Wasser beschäftigt uns: Die Ozeane sind einer unserer wichtigsten und schützenswertesten Lebensräume. Mit Digitalen Zwillingen des Ozeans verknüpfen wir wirtschaftliche, ökologische und soziokulturelle Aktivitäten, die auf und in den Meeren passieren. So können wir Zusammenhänge und potentielle Risiken sichtbar machen – und »Was-wäre-wenn«-Szenarien untersuchen. Durch GIS-basierte digitale Zwillinge können wir unsere Ozeane besser verstehen und schützen.

3 Welche technologischen oder auch soziokulturellen Entwicklungen sehen Sie in den kommenden drei bis fünf Jahren als Impulsgeber für die Branche?

Technologisch gesehen: Der technologische Fortschritt treibt den flächendeckenden Einsatz von GIS und Digital Twins voran. Durch hoch performante Cloud-Dienste, nutzerorientierte mobile Anwendungen, modernste Bild-, Sensor- und Echtzeitdaten und deren Verarbeitung und durch erweiterte Analysen und künstliche Intelligenz werden Digitale Zwillinge allgegenwärtig. Bedeutend für uns alle hier ist die Entwicklung von GIS als Standard innerhalb der Enterprise IT.

Sozio-kulturell: Wir leben in einer Welt, die vor großen Herausforderungen steht: Armut, Bevölkerungswachstum, Urbanisierung, Umweltverschmutzung, Erschöpfung der natürlichen Ressourcen und Klimawandel. Diese Herausforderungen betreffen nicht nur uns als Individuen, sondern wirken sich auf alles aus, auch auf unsere sozialen und kulturellen Entwicklungen in Form von sozialen Konflikten.

Die Lösungsansätze hierzu liegen auf der Hand: Es geht darum, die Natur wiederzubeleben, die Effizienz von Unternehmen zu verbessern, die Umweltverschmutzung zu verringern, weniger zu verbrauchen, nachhaltige Städte zu gestalten und vieles mehr. Was werden wir dazu benötigen? Wissenschaft, unser aller Know-how, Technologie und Kreativität. Geografie und geografisches Denken werden somit unerlässlich sein.

4 Bedingt durch die demographische Entwicklung in Europa zeichnet sich der Fachkräftemangel immer deutlicher ab. Welche Maßnahmen ergreift Ihr Unternehmen? Welche Bedeutung kommt unbemannten Systemen zu? Welche Unterstützung kann eine Expo wie die INTERGEO liefern?

Es besteht ein ständiger Bedarf an Innovation, um relevant zu bleiben, und qualifizierte Mitarbeitende sind eine notwendige Voraussetzung, um das Tempo dieser Innovation beizubehalten. Geoinformatik und GIS sind Spezialgebiete, denen es traditionell an ausgebildeten Arbeitskräften mangelt. Mit fortschreitenden Technologien verschärft sich dieses Problem. Die wachsende Einbindung von Technologien wie z. B. KI und Drohnen machen die Suche zunehmend schwieriger. Nicht nur die Gewinnung neuer Talente stellt also eine Herausforderung dar, sondern auch die Schulung vorhandener Mitarbeitender. Beides sind zentrale Bausteine unserer Unternehmensstrategie: Wir investieren konsequent in die Weiterbildung unserer Kolleg:innen und bilden junge Talente z. B. durch unser eigenes Karriereprogramm *Esri Graduate Program* aus. Die INTERGEO trägt ebenfalls dazu bei, die GIS-Community zu beleben und weiterzubilden. Neue Tech-Formate, internationaler Austausch und Nachwuchsförderungsprogramme spielen dabei eine entscheidende Rolle.

5 Und eine persönliche Frage zum Schluss: Worauf freuen Sie sich bei der kommenden INTERGEO in Stuttgart am meisten?

Das breite Teilnehmer-Spektrum der INTERGEO versetzt uns in die Lage, gemeinsam Lösungen zu entwickeln, um den Weg Richtung nachhaltige Zukunft zu formen und zu ebnen. Die Verwirklichung dieser hängt von dieser gemeinsamen Aufgabe ab, der wir uns als Geodatengemeinschaft stellen. Die INTERGEO ist deshalb einer der wichtigsten Anlaufpunkte im Jahr.

Thomas Harring

President of Hexagon's Geosystems Division

Interview by Christiane Salbach, DVW

1 Sustainability – whether in the realm of climate protection, construction, or supply chain integrity – is already an important topic, but will gain even more significance in the future. How is your company addressing this? What opportunities arise from it?

We consider Environmental, Social and Governance (ESG) impact in every decision. We divide this into two categories: the change we make and the change we empower. We adapt our processes and collaborate with suppliers and dealers to lower emissions, use resources smarter, and be more responsible when buying materials and services.

On the other hand, our solutions really help move towards a more sustainable future. Our innovative technology assists new and existing customers to boost efficiency, productivity, quality, and safety. Because our data is precise and easy to understand, customers can make quicker, data-driven decisions that are also good for the environment. Hexagon's sustainable investment arm R-evolution shows that green-tech solutions aren't just good for the planet but also good for business.

At INTERGEO, we look forward to discussing customer use cases in detail and have conversations that help us understand sustainability challenges at a granular level. That way, we can really push sustainability and make change happen faster. These changes are crucial for us as a company, and we continually strive to better ourselves and our impact on the world.

2 The resource of water (incl. the reuse of wastewater) will become more significant in the future. How is your company positioning itself in response to this?

Hexagon technologies aid global efforts to manage water responsibly and reuse more wastewater. Let me give you two examples: R-evolution is working to support sustainable desalination, helping tackle water scarcity on a global scale. In a partnership with the Dutch company Desolenator, they optimise solar thermal desalination solutions using digital twin technology.

We also support water sustainability work in Southern California: To manage water usage during drought conditions, the Rancho California Water District efficiently classifies and measures different types of land cover using Hexagon's high-detail aerial imagery and elevation data from the HxGN Content Store.

3 What technological or socio-cultural developments do you see as drivers for the industry in the next three to five years?

Key trends are shaping the geospatial industry just as it is shaping them.

AI and machine learning are changing faster than ever. Every day, they offer new potential to sectors that already use geospatial data, and to those sectors just finding out how useful geodata can be. We're right there at the cutting edge, weaving AI and machine learning into our own workflows and software solutions, driving the push towards AI-enhanced digital solutions.

Also, cloud and edge computing are making it easier than ever to work with big datasets and to get to the insights you need for better, greener decisions. More companies than ever can tap into the power of geodata. Hexagon's own cloud-optimised ecosystem actively supports these advancements and enhances collaboration and data management to make client solutions scalable.

4 Due to demographic changes in Europe, the shortage of skilled workers is becoming increasingly apparent. What measures is your company taking? What role do unmanned systems play? How can an Expo like INTERGEO provide support?

It's vital to make our industry exciting and attractive to young people. That's why we're making our solutions easier to use and our software workflows simpler to understand. This way, capturing and processing geodata becomes something not only geospatial pros can do, but also those working in related areas. We also make things connect better across ecosystems, which really helps people get more done in less time.

The younger generation is drawn to robotics, and some of our products pique that interest. Our Leica BLK ARC, which can be attached to different robotic carriers, and the flying laser scanner Leica BLK2FLY appeal to tech-minded young people, so they are one more gateway into our field.

Expos like INTERGEO are so important. They showcase innovative solutions and really spark interest among potential professionals who are looking at what we do.

5 And a personal question to conclude: What are you mostly looking forward to at the upcoming INTERGEO in Stuttgart?

"In the middle of life" — Stuttgart's motto fits well with the INTERGEO, which is in the middle of geospatial life. I very much look forward to coming back to Stuttgart to connect with long-standing customers and partners and to meet new people. We'll discuss long-term trends, explore concrete business and sustainability ideas, reimagine surveying and construction, and share opportunities in face-to-face conversations. Stuttgart is particularly close to my heart, as I studied at its Technical University. It's where I first encountered geospatial tech. One thing is for sure: The days in Stuttgart will be refreshing, and I will share my enthusiasm for the geospatial industry with many people.

Boris Skopljak

Vice President Survey & Mapping and Building Construction Field Solutions, Trimble

Interview by Christiane Salbach, DVW

1 Sustainability – whether in the realm of climate protection, construction, or supply chain integrity – is already an important topic, but will gain even more significance in the future. How is your company addressing this? What opportunities arise from it?

Sustainability is really at the core of what Trimble's hardware and software solutions do – produce accurate and reliable geospatial data that help industries such as transportation infrastructure, building construction, utilities, mining and agriculture become more efficient and conserve resources. By connecting the physical and digital worlds through geospatial data, our positioning, connectivity, modeling and data analytics capabilities enable our customers to meet their sustainability goals.

Trimble is committed to sustainability and is taking steps to reduce our carbon footprint. We joined the Science Based Targets initiative and set aggressive goals to reduce our greenhouse gas emissions across our value chain by 2030. We also plan to source 100 % renewable electricity by 2025.

2 The resource of water (incl. the reuse of wastewater) will become more significant in the future. How is your company positioning itself in response to this?

Trimble's asset lifecycle management solutions are widely used by water and wastewater utilities. By capturing rich asset data, we provide the intelligence utility companies need to optimize their operations and capital planning. Integrating geospatial data with asset and project data gives unique insights to prioritize work, reduce leaks and maximize conservation efforts. Our field data capture and inspection tools ensure timely, accurate data collection that feeds into those optimized workflows. System solutions like Trimble Catalyst and Trimble Unity help reduce capital investment costs with seamless integration between field apps and asset lifecycle management systems in the office.

3 What technological or socio-cultural developments do you see as drivers for the industry in the next three to five years?

Our need to balance human needs with environmental protection is driving demand for better data and analytics. The expansion of connected devices and IoT will provide an increasing amount of data, while the evolution of positioning technology and sensor fusion, along with increased computing power, allows for more precise and rich information. An increasing number of "fit for purpose" reality capture solutions are encouraging widespread adoption and data use. The use of AI is dramatically accelerating processes such as point cloud classification and feature extraction to turn large datasets into actionable information for an endless number of applications.

Cloud-based common data environments, like Trimble Connect, enable global collaboration and sharing of data across teams. Ultimately, the connectivity and interoperability enabled by these technologies is key to driving sustainable practices across every industry.

4 Due to demographic changes in Europe, the shortage of skilled workers is becoming increasingly apparent. What measures is your company taking? What role do unmanned systems play? How can an Expo like INTERGEO provide support?

Trimble's integrated, intuitive solutions are designed to boost efficiency, which mitigates the impact of skilled labor shortages. Technology guides both new and experienced workers to accomplish more, while AI and automation speed up tedious office tasks. And of course, new technology roles are created in the process.

Trimble is heavily involved with educational institutions and trade organizations across the world. We've established Trimble Technology Labs with educational partners on five continents and support the work of educational organizations through our global distribution partners and the Trimble University Partnership Program. We feel proud to invest back into the industry and the next generation of geospatial professionals.

Shows like INTERGEO play an important role in attracting the next generation to the geospatial industry. The "INTERGEO School Day" is a great program that aims to get young students excited about the innovative technology in our industry.

5 And a personal question to conclude: What are you mostly looking forward to at the upcoming INTERGEO in Stuttgart?

For me, the ability to directly interact with customers and partners across the geospatial community is always valuable. With increasing interoperability being such a focus, these in-person conversations provide an opportunity to exchange ideas and accelerate integration between complementary solutions. Every year, we leave INTERGEO inspired to keep pushing the boundaries of our geospatial solutions and influence the industry in a positive way.