





# A conversation with Executives at umlaut and Infovista

Customer experience is a key metric for mobile network operators (MNOs). It has become an essential part of strategic reporting, customer retention programs, and their marketing to recruit customers. MNOs need to be able to obtain objective measures of network quality, to substantiate claims and to ensure that they can deliver the required service performance.

That is why benchmarking is so important. The collection of objective information, following standardized processes, is a key tool for providing MNOs and other parties with relevant performance data that can be used to evaluate performance, make appropriate comparisons with industry peers and norms, for internal review and for external promotion.

umlaut is a leading provider of such data, performing rigorous testing, to advanced and well-proven standards that results in clear, consistent – and objective – benchmarks for MNOs, globally. umlaut and Infovista have a long history of collaboration. Their alliance ensures the consistent provision of high-quality benchmarking data for the mobile industry.

In this short interview, Hakan Ekmen, CEO from umlaut and Faiq Khan, SVP Infovista, explain their partnership and the unique contribution to the mobile industry it offers.



Together, umlaut and Infovista are providing the most comprehensive network benchmarking services globally.

Hakan Ekmen, umlaut







### CAN YOU EXPLAIN WHO UMLAUT IS AND YOUR ROLE IN THE INDUSTRY?

umlaut is a leading international consulting, engineering and testing services company. We have a team of more than 3,500 consultants and engineers working to develop and implement innovative solutions to today's complex technology challenges.

In the telecommunications sector, umlaut communications (previously known as P3 communications) provides independent technical and management consulting services including network planning, end-to-end optimization, security, QoS and QoE testing, international benchmarking, device testing and acceptance services.

umlaut addresses all industries with connectivity needs. Our clients include network operators, equipment vendors, device manufacturers, public safety organizations and regulatory authorities around the world. umlaut is able to efficiently and cost-effectiveley help mobile operators enhance and evolve their networks to address the growing demand for more data and more connections as the industry edges closer to 5G.

Faiq Khan, Infovista

#### WHAT IS YOUR METHODOLOGY AND WHAT RESULTS ARE OBTAINED?

In mobile benchmarking, umlaut is the global industry-leader. The framework we use is based on a rule set that is applied in all countries. It provides a fair, transparent and independent evaluation of all networks. We call it the umlaut score.

We conduct benchmarks in 70 countries with more than 180 mobile networks being evaluated with the umlaut score.

This umlaut score has become the global de-facto industry standard and is a unique measure for management and supervisory boards to compare their networks with others all over the globe and by that, enhance strategic decisions.

Our independent framework is the basis for measuring the actual customer experience as well as mobile network performance and capability. It allows a technical analysis that is unprecedented in its level of detail, thus, enabling to compare the network performance and capability as no other methodology.

Our benchmarks help network operators to demonstrate how well they are delivering wireless connections to consumers, business users and enterprises. Operators, managements and supervisory boards know where they stand in international comparison.

umlaut constantly adjusts the testing methodology and scoring models to the progressing technical development. Still, most operators manage to improve their performance. This clearly demonstrates that umlaut's challenging network tests contribute to the improvement of the networks.

The umlaut methodology takes into account growing customer expectations, expanding data volumes and rising data speeds by raising the requirements and thresholds of the tests each year.







#### WHAT IS UNIQUE ABOUT YOUR APPROACH?

We combine drive, walk and crowd tests - thus giving operators a full 360-degree view of their networks. We use our analytical skills to slice and dice the data in a way that produces actionable insights into network performance and the user experience, helping operators optimize service delivery and make better, more informed investment decisions.

We have extended our testing schedule with a crowdsourced component rolling out our metrics for coverage, connectivity, latency, speed and performance. Over the top content services, technologies like carrier aggregation or voice over LTE and IoT will become more important in the benchmark year 2020. This will make the future benchmark results even more exciting.

### WHAT IS THE NATURE OF THE RELATIONSHIP BETWEEN UMLAUT AND INFOVISTA?

Together, umlaut and Infovista are providing the most comprehensive network benchmarking services globally. We supplement our proprietary services with Infovista's complementary network testing and data collection tools – which is a perfect fit.

Through this alliance, we are excited to take advantage of the TEMS brand's highly reputable service quality insights, in addition to Infovista's international footprint which does grant us exceptional market access across the globe.

Within the last years, we have established a real partnership intensifying the level of effort and commitment from both companies. Infovista's leading network benchmarking tools are the perfect match for umlaut's leading benchmarking services.

## WHAT IS THE NATURE OF THE RELATIONSHIP BETWEEN UMLAUT AND INFOVISTA?

At Infovista, we are proud to be a partner with umlaut Communications, the leading international consulting, engineering and testing services company for the telecommunications sector.

Through their exclusive use of Infovista's TEMS
Portfolio of solutions for testing, measuring,
benchmarking, and optimizing network service
performance and subscriber experience, umlaut is
able to efficiently and cost-effectively help mobile
operators enhance and evolve their networks to
address the growing demand for more data and more
connections as the industry edges closer to 5G.

At Infovista, our TEMS Portfolio is constantly evolving to make network testing operations more efficient through remote administration, real-time analytics, and fully-automated testing capabilities. We are committed to umlaut's success as they use our TEMS solutions to help mobile operators worldwide provide a competitive mobile network and deliver a superior customer experience.





# About Infovista

Infovista is the leading provider of cost-effective network performance orchestration solutions at the service of a better connected and collaborative world. Our award-winning solutions empower communications service providers and large enterprises to ensure a high-quality user experience by achieving optimal network performance and guaranteeing business-critical application performance. Infovista's expertise and innovations provide a new level of actionable network, application and customer intelligence, visibility and control across all services, all technologies, and all domains of both the fixed and mobile networks. Using our solutions, eighty percent of the world's largest service providers and leading global enterprises deliver high-performing and differentiated services, plan and optimize networks to match application and service demands, and streamline network operations while keeping total cost of ownership as low as possible. For more information, please visit www.lnfovista.com.