CYIENT

MAPPING A COURSE IN GLOBAL ROAD NETWORKS FOR TOMTOM

How we work with our clients to help overcome challenges for a better tomorrow



TomTom empowers movement. Every day millions of people around the world depend on TomTom to make travel smarter for them. TomTom designs and develops innovative products that make it easy for people to keep moving towards their destination. Best known for being a global leader in navigation and mapping products, TomTom also creates GPS sports watches, as well as state-ofthe-art fleet management solutions and industry-leading location-based products. Their business consists of four customerfacing business units: consumer, automotive, licensing, and telematics.

At Cyient, we collaborate with TomTom's map product unit, which is responsible for maintaining an accurate and up-to-date map of the world. TomTom's global map database covers nearly 46 million Kms and 4.3 billion people worldwide, and features full navigable coverage for 135 countries.

The Challenge

To meet the location demands of people on the move, TomTom needs to develop and maintain a high-quality, comprehensive map database that not only accurately routes users to their destinations, but also helps them choose the most efficient path.

Because the world around us is constantly changing, TomTom has the challenge of keeping its global map database up-to-date and accurate. By doing so, TomTom can ensure that the millions of people relying on their maps every day have access to a map that accurately reflects the real world. We play an important role in helping TomTom maintain a highly accurate map database.

Our Solution

We are a leading provider of geospatial data management services delivering digital database production support for TomTom maps. We are well-versed in maintaining huge digital map datasets and dynamic location content. We understand that no two roads are the same, that is why we ensure that any road data received is updated, and all relevant attributes are attached to it. We then revise the data as per TomTom's defined product cycle timelines. This process involves capturing of missing streets, modification of address information, capturing and correcting street names, and related information in a highly efficient and accurate manner. Our shared web-based portal, provides real-time project status dashboards to both the Cyient and TomTom engineers, ensuring that our agreed critical to quality (CTQs) metrics are constantly achieved.

To enhance efficiency, we also provide software development services in the form of application testing, verification and validation, production tools, efficiency improvement tools, and first line support services.

The array of inputs used for updating and maintaining the map database adds another dimension to the complexity of the collaboration. The inputs range from images (e.g. l-cubed/high-resolution imagery, proprietary bird's eye mosaic imagery, topographical maps) to mobile-mapping sessions, where we compare the real-world images to the existing vector and then update them with required changes. Other inputs include reality databases, digital document depot frames, and update reports where realtime screenshots captured by the field data collector are used.

We also interpret and update the location data for TomTom.



As part of an ongoing commitment to TomTom, we have also set up a center of excellence in Hyderabad, India, to support with mapping across the major global continents, including Europe, Latin and North America, Southeast Asia, and Africa.

THE FUTURE

Our relationship with TomTom continues to strengthen, and we are collaborating with them on new opportunities. For example, we are helping TomTom develop advanced map products that enable autonomous driving.

Key Business Benefits

With over two decades of collaboration with TomTom, we have become their strategic partner of choice for delivering locationbased solutions.

The benefits we have delivered include:

- We help TomTom maintain the most accurate and up-to-date global database
- We consistently delivery high-quality data updates on a periodic basis
- We deliver quality results using industry best practices and business excellence models like ISO, ISMS, and VDA
- We offer TomTom the flexibility to scale projects up or down on a short notice
- Our services have enabled efficiency savings and productivity improvements, thus improving the map database quality with every product cycle leading to higher end-user satisfaction.

About Cyient

Cyient is a global provider of engineering, manufacturing, data analytics, networks and operations solutions. We collaborate with our clients to achieve more and shape a better tomorrow.

With decades of experience, Cyient is well positioned to solve problems. Our solutions include product development and life cycle support, process and network engineering, and data transformation and analytics. We provide expertise in the aerospace, consumer, energy, medical, oil and gas, mining, heavy equipment, semiconductor, rail transportation, telecom and utilities industries.

Strong capabilities combined with a network of more than 13,100 associates across 38 global locations enable us to deliver measurable and substantial benefits to major organizations worldwide.

For more information about Cyient, visit our website.

Contact Us

NAM Headquarters

Cyient, Inc. 330 Roberts Street, Suite 400 East Hartford, CT 06108 USA T: +1 860 528 5430 F: +1 860 528 5873

EMEA Headquarters

Cyient Europe Ltd. High Holborn House 52-54 High Holborn London WC1V 6RL UK T: +44 20 7404 0640

F: +44 20 7404 0640

APAC Headquarters

Cyient Limited Level 1, 350 Collins Street Melbourne, Victoria, 3000 Australia T: +61 3 8605 4815 F: +61 3 8601 1180

Global Headquarters

Cyient Limited Plot No. 11 Software Units Layout Infocity, Madhapur Hyderabad - 500081 India T: +91 40 6764 1000 F: +91 40 2311 0352

cyient.com connect@cyient.com

© 2016 Cyient. Cyient believes the information in this publication is accurate as of its publication date; such information is subject to change without notice. Cyient acknowledges the proprietary rights of the trademarks and product names of other companies mentioned in this document.

Updated June 2016