

BIKE RENTAL SERVICE RIDES TO FASTER GROWTH AND EXPANSION WITH GLOBAL CLOUD PLATFORM

First-of-its-kind solution on Microsoft Azure supports sustainable public bicycle transportation system through innovations in digital, Internet of Things and cloud.

# The Challenge

With its legacy platform, the client was finding it challenging to meet rapidly growing demand and to offer rental subscribers high quality customer service. Bringing new cities onto the program took more than four months, while the costs of maintaining the legacy platform across multiple, disjointed installations were eroding margins.

The client needed more effective administrative management, including billing. It also wanted more insights into subscriber usage patterns in specific markets. System availability and support were critical.

Finally, all of these capabilities had to be available in every new market the client planned to enter, a list which spanned from Europe to Latin America.

### AT A GLANCE

An innovative urban bike rental service saw rapid growth in existing markets and planned to expand into new territories. Yet the limitations of its original infrastructure made customer service difficult and required months to launch service in new markets. The company turned to Cognizant for a solution based on Microsoft Azure to streamline its processes, improve customer service and rapidly launch in new cities and countries.

# The Solution

Cognizant developed an end-to-end cloud-based solution validated and certified by Microsoft on Microsoft Azure. With a goal of maximum automation, Cognizant designed the new platform to deal with a wide range of core operational and customer processes, including remote station upgrades, remote troubleshooting, bike reservations, subscriptions, invoicing, billing, offline operations, customer service, ticketing, alerts and more. Each station functions as a sensor, with the system collecting real-time data on bike usage based on check in/ out for later analysis.

When fully deployed, the platform will support the client's subscribers across 16 cities in Europe and Latin America. Through a combination of process automation and the platform's simplified Azure-based architecture, the rollout time for new cities has been cut to just two weeks (an 80% improvement), and system maintenance costs have been greatly reduced.

# The Approach

Cognizant designed the client's new bike rental platform from the ground up to an advanced multi-tenant, multigeography cloud-based Azure architecture that easily scales to accommodate growth into new cities. Cognizant's own S3P subscription billing engine integrates into the client's back-office systems for simplified billing operations. The real-time data collected from each station is used to charge subscribers on an actual usage basis as well as for analytics to enhance the service.

The ease of scaling the solution was critical to the client's decision to work with Cognizant on this highly strategic initiative. The architecture easily supports multiple rental locations in more than a dozen cities across two continents. Its service-oriented, plug-and-play capabilities and service

## Project Highlights

- Support for multiple rental stations in multiple cities across two continents
- New market rollout time cut to two weeks from four months
- On demand infrastructure for near real-time scalability
- Reduction in system maintenance costs
- Significant process automation improves customer service, streamlines operations and reduces costs
- Steady state operations at optimal costs

bus messaging ensure that it is easily extended and maintained.

High availability and steady state management are critical to the client's success. Cognizant initially deployed its OctaneHub, a rapid delivery platform with prebuilt tools, solutions, frameworks and guidelines that help expedite delivery of the solution. Azure-based features, including VSO Release Manager, Automation and Run books, were integrated as the solution matured. Cloud provisioning and infrastructure monitoring are provided through Cognizant's Cloud360. Geo-redundant storage ensures a shorter disaster recovery period. The solution supports offline and online modes of communication among bike stations and the cloud application.

The client may now generate analytical reports by region and cities to glean insights to use in expanding markets and tailoring services to local usage patterns. Infrastructure resources essentially are ready on demand to support the client's expansion, whether it is adding a rental station in an existing market or moving into a new country. The client can launch service in new cities and countries in as little as two weeks vs. the four months required by its legacy platform. This scalability ensures the client always has the infrastructure resources and steady state support it requires at optimal costs.

### ABOUT COGNIZANT

Cognizant (NASDAQ-100: CTSH) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps clients envision, build and run more innovative and efficient businesses. Headquartered in the U.S., Cognizant is ranked 205 on the Fortune 500 and is consistently listed among the most admired companies in the world. Learn how Cognizant helps clients lead with digital at www.cognizant.com or follow us @Cognizant.



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