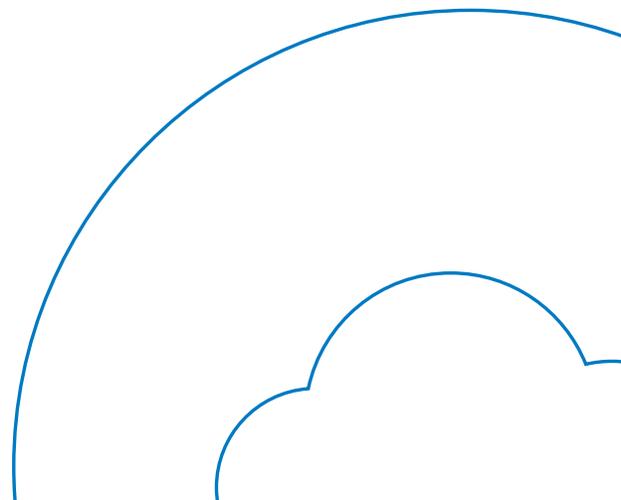# UNITAS GLOBAL

GLOBAL AUTOMOTIVE MANUFACTURER

Leading Car Company Adopts
Hybrid Cloud Solution

UNITAS CASE STUDY : AUTOMOTIVE MANUFACTURER

THE CHALLENGE

BY 2022 THERE WILL BE 700M CONNECTED VEHICLES ON THE ROAD - Telefonica Connected Car Report, 2015

CONNECTED CAR SERVICES MARKET WILL BE WORTH $40B BY 2020 - Connected Car Ecosystem: 2015-2030 – Opportunities, Challenges, Strategies & Forecasts, SNS Telecom & IT, 2017

85% OF C-LEVEL AUTOMOTIVE COMPANY OFFICERS ADMIT TO BREACHES IN THE LAST 2 YEARS - Clarity on Cyber Security, KPMG, 2016

UNITAS GLOBAL

THE CHALLENGE

WITH THE RISE OF THE CONNECTED CAR, AUTONOMOUS VEHICLES, AND BIG DATA TRANSFORMING THE AUTO INDUSTRY, UNITAS' CLIENT HAD TO CHANGE WITH THE TIMES. IF THEY WANTED TO SURVIVE, THEY NEEDED TO BOTH PRODUCE THE SOFTWARE RUNNING ON THE CARS AND PROVIDE SERVICES BASED ON THE DATA COLLECTED. THIS REQUIRED A FUNDAMENTAL REDESIGN OF THEIR BUSINESS PROCESSES AND TECHNOLOGY STACK AROUND THE CLOUD — SOMETHING THE CLIENT KNEW THEY COULDN'T NAVIGATE ALONE.

KEY CHALLENGES

• Existing technology and business processes not aligned with new market demands

• Lack of internal expertise in cloud and big data solutions

• Global scale of client's business created huge real-time data transmission, storage, and processing requirements

The client had to make the journey from manufacturing company to technology firm, and they had to do it quickly. This presented something of an issue, as they had little experience with the cloud or big data analysis.

A modern car company has to manage immense amounts of data. Each connected vehicle has hundreds of sensors producing gigabytes of data per hour. Global companies like Unitas' client have tens (if not hundreds) of thousands of these vehicles on the road at any given time. The challenges of simply storing all that data are evident, let alone processing it in real time and offering services based on the data for everyone from customers to insurance companies.

Even if a solution was decided upon, there was the problem of how to practically implement it at the requisite scale, and how to best adapt the company's structure for its new mission.

THE SOLUTION

UNITAS WORKED CLOSELY WITH MANAGEMENT PERSONNEL ACROSS THE ORGANIZATION TO PLAN OUT A STRATEGY WHICH SUPPORTED THE COMPANY'S BUSINESS OBJECTIVES AND NEW MARKET DIRECTION. AFTER THIS CONSULTATION PROCESS AND A FULL ASSESSMENT OF THE CLIENT'S EXISTING INFRASTRUCTURE, A HYBRID CLOUD SOLUTION WAS DESIGNED AND A POC PROJECT WAS UNDERTAKEN BEFORE FULL DEPLOYMENT TO ENSURE CLIENT SATISFACTION AND ROI.

Unitas' four-stage methodology ensured prompt delivery and client satisfaction throughout the project:

DISCOVERY
Unitas' team worked with every department to define project parameters, goals, and budget. The priorities were addressing the gaps in institutional expertise, real-time data storage and processing, return on investment, and development speeds for new applications.

DESIGN
Unitas then designed a hybrid IaaS cloud solution combining an OpenStack-based private cloud with public cloud providers. Apache Hadoop was used to support big data processing, while commodity servers for compute and storage nodes helped reduce costs.

DEPLOYMENT
To allow the client to test out the design before full deployment, ensure buy-in, and iron out any potential snags, Unitas initially deployed a proof-of-concept system. When this proved successful, the client engaged Unitas to help them deploy the solution in full.

MANAGEMENT
To support the new cloud system, Unitas trained client personnel in an architecture-as-code approach as well as embracing a more collaborative attitude to development. Using a modern CI/CD toolchain and encouraging code sharing between teams was critical to instilling the agile, continuous development culture necessary to build software for the cloud.

THE RESULTS

RESULTS

The client was able to deploy a fully-functional cloud solution which provided the basis for future operations and software development, allowing them to keep up with an evolving market.

With Unitas as a guide to the complexities of the cloud, and the design for their new system proven, the client's IT staff was able to quickly proceed with the deployment project. Maintenance and use of the system were facilitated by the processes and workflows now in place, and developers were soon collaborating around a shared codebase for applications.

The solution also dramatically improved the client's existing big data analysis capabilities, with the new system beating out the client's legacy tools on every benchmark in the PoC. With full deployment, storage and processing of connected car data — critical to the client's long-term survival — has become a reality. The client is now able to offer market-leading data services to their customers and are in a position to profit no matter what the future of the market holds.

BENEFITS DELIVERED:

- COMPREHENSIVE HYBRID CLOUD SOLUTION SUPPORTING BUSINESS OPERATIONS
- GREATLY IMPROVED, REAL-TIME BIG DATA ANALYSIS CAPABILITY
- SHARED CODEBASE AND BETTER COLLABORATION BETWEEN DEVELOPERS
- TRAINING IN AND ADOPTION OF AGILE METHODOLOGIES

WWW.UNITASGLOBAL.COM

Find out what a hybrid cloud solution looks like for you.

sales@unitasglobal.com