

A background image showing two men in business suits standing next to a silver car. The man on the right is holding a tablet and gesturing with his hands while talking to the man on the left. They are in a modern building with large windows.

HEXAWARE

Data Modernization with Google Cloud Platform for an Automotive Retailer

Cloud Synergy for a robust data foundation and
efficient managed services

Case study

Client

| Client

Challenge

Solution

Benefits

Summary

Our client is a Fortune 500 US-based automotive retailer offering an extensive selection of auto parts, accessories, and diagnostic software. Over the last four decades, they have maintained a commitment to providing quality parts, competitive prices, and excellent customer service, positioning them as a reputable player in the automotive aftermarket sector. They have a strong presence across 50 US states and five countries, serving a diverse customer base, including individual consumers and automotive industry professionals.

Spanning 5 Countries and
50+ US States



Challenge

Client

Challenge

Solution

Benefits

Summary

The case study with our client reflects a classic business modernization initiative that could be addressed with cloud services. This was primarily necessary due to the dynamic nature and unique variety of its data and the massive scale at which its data was being generated.

As a global retailer managing terabyte-scale data with millions of store records, the constraints of an on-premises setup hindered their ability to scale effectively, enhance service efficiency, and introduce new initiatives—all of which could be achieved with an optimized data ecosystem.

They required a modern data ecosystem that could help manage their data from various business operations, including their vast inventory spanning automotive parts being sold across five countries, B2B and B2C sales services, payments, people management processes, its wide variety of partner websites and e-commerce portals, and aftersales warranties and loyalty programs.

Its new data ecosystem was expected to drive data analytics processes for actionable insights and deliver them to the right decision-makers. Moreover, they needed data cloud services to handle the influx of data and prepare it for the analytics processes needed to drive informed decisions.

What they required:

- They required a modernized data landscape, which we looked to blueprint by revisiting their data architecture, aligning their tech stack, and optimizing their existing data processes.
- Our client's data landscape involved jobs running continuously 24/7, receiving files, and streaming data loaded into BigQuery tables. We were to be their strong support team to manage batch and streaming job failures round the clock, ensuring their BigQuery tables remained updated and operational.



Solution

- Client
- Challenge
- | Solution
- Benefits
- Summary

Google Cloud Platform for Modernized Data Ecosystem
We chose Google Cloud Platform (GCP) as the foundation for our client’s data infrastructure due to its robust capabilities that enable effective scaling and advanced analytics. Its powerful cloud services and tools provide the ideal environment for efficiently handling large volumes of data, ensuring scalability as the client’s data grows.

By leveraging this solution, our client experienced faster data load and processing, improved real-time inventory management, and easier access to comprehensive data for its data-driven teams. These enhancements significantly improved business reporting and empowered them with strategic know-how.

For the transformation, our team implemented a metadata-driven Data Ingestion Framework on Google Cloud Platform (GCP). This framework streamlined data processing and scheduling across environments, establishing batch, mini-batch, and real-time data pipelines on GCP while incorporating configurable data quality checks. We established the foundation for a data lake and orchestrated seamless data scheduling across on-premises and cloud environments, ensuring data

availability for accelerated sales decisions. The Google Cloud Platform tools we used:

- 1. **Google Cloud Storage:** Secure and scalable object storage.
- 2. **BigQuery:** Fast and efficient data analysis for large datasets.
- 3. **Composer (Airflow):** Workflow automation and task scheduling.
- 4. **Cloud Function:** Event-driven serverless computing.
- 5. **Workflows:** Automation of multi-step business processes.
- 6. **Cloud SQL:** Managed relational database service.
- 7. **Dataflow:** Real-time data processing and transformation.
- 8. **Monitoring and Alerting:** Proactive resource health monitoring.
- 9. **Cloud Pub/Sub:** Real-time messaging and event streaming.

Building a foundation for downstream consumption by analytics and BI applications: This new data ecosystem successfully supported advanced analytics tools for all its reporting purposes. Their data ecosystem now accommodates powerful reporting tools, visualization,

advanced analytics functionalities, and an intuitive interface that simplifies and democratizes data access within their organization.

Google Cloud Managed Services for Improved Data Management
In addition to our comprehensive data management services, we also offer Cloud Managed Services with Google Cloud Platform (GCP). Our GCP experts provide end-to-end support for deploying, managing, and optimizing cloud infrastructure for in scope services on GCP. This includes setting up scalable and secure cloud environments, implementing data storage and processing solutions, leveraging GCP’s advanced analytics capabilities, and ensuring continuous monitoring and optimization for cost efficiency and performance. With our cloud-managed services on GCP, clients can leverage the power of cloud computing to drive innovation, improve agility, and achieve their business objectives seamlessly.

Solution

Client

Challenge

Solution

Benefits

Summary

- **Managed diverse data loads:** Handled batch, real-time, and ETL tasks on GCP.
- **Provided 24/7 batch incident support:** Ensured high availability on GCP.
- **Resolved upstream data issues:** Maintained high data quality on GCP.
- **Prioritized critical data loads:** Guaranteed timely delivery and optimized resources on GCP.
- **Continuous 24/7 monitoring:** Proactively detected and addressed issues on GCP.
- **Utilized GCP's niche tech skills:** Leveraged BigQuery, Cloud Storage, Dataflow and Composer (AirFlow).
- **Addressed talent retention challenges:** Provided GCP training for skilled cloud operations.
- **Dedicated support team:**
 - We manage production issues, analyze root causes, and offer permanent solutions.
 - We ensure 24/7 support across time zones.
 - We monitor job statuses for efficiency.
 - We identify automation opportunities and streamline manual processes.
 - We analyze and optimize job performance for timely completion.
 - We manage changes in GCP pipelines.
 - We onboard new users and address business queries.



Benefits

- Client
- Challenge
- Solution
- Benefits**
- Summary

A Comprehensive Data Foundation with Google Cloud
The new data ecosystem helps manage data and drive efficiency for operations by overseeing inventory management for automotive parts sold across five countries, customer data for B2B and B2C sales services, payments, people management processes, its wide variety of partner websites and e-commerce portals, and aftersales warranties and loyalty programs.

This ecosystem also enhances decision-making through real-time analytics, improves data security and compliance measures, and facilitates seamless integration with third-party systems for a holistic and streamlined approach to data management. Additionally, it enables predictive maintenance for automotive parts, personalized customer experiences based on behavior analysis, and data-driven optimization of marketing campaigns for increased ROI.

Cloud-driven Efficiency for Operations
Ticket reduction by 30% year-on-year: Our streamlined processes and proactive approach lead to a significant decrease in support tickets, ensuring smoother operations across all business verticals.

Reduction of job failures by 40%: Our focus on permanent fixes minimizes disruptions, resulting in fewer job failures

and improved system reliability.

Continuous improvement in resolution turnaround time:
With an average resolution time of approximately 30 minutes per incident, we ensure swift problem-solving and minimal downtime.

Automated Data Operations
Availability of timely reporting data: We empower informed decision-making and business agility by delivering timely reporting data to end users.

24/7 production support: Our round-the-clock support ensures proactive monitoring and swift resolution of job failures, maintaining uninterrupted operations.

Automation for improved disk space management:
Our automated solutions optimize disk space usage, enhancing system performance and resource utilization.

Efficient Data Operations Management
Efficient handling of onboarding: We seamlessly onboard new pipelines and data users, ensuring smooth transitions and minimal workflow disruptions.

24 x 7 SLA-enabled production support: Our SLA adherence guarantees continuous support and high-

performance standards, fostering client trust and satisfaction.

Zero incident backlog: Our proactive approach eliminates incident backlogs, ensuring a smooth operational environment.

100% support coverage & resolution SLA compliance: We provide comprehensive support coverage and consistently meet resolution SLAs, ensuring reliable and efficient operations.

Summary

- Client
- Challenge
- Solution
- Benefits

| Summary

In partnering with Hexaware, our client underwent a transformative journey that catapulted them to the forefront of their industry’s global landscape. Leveraging Hexaware’s Google Cloud data foundation and managed services, they experienced transcendence in their data management approach, unlocking unprecedented insights and efficiencies that drove their business forward.

A notable achievement was the seamless integration of diverse data sources, empowering the client to conduct real-time analytics and deliver personalized customer experiences. Hexaware’s managed services ensured high availability, robust data security, and compliance, enabling the client to remain agile and responsive in a fast-paced data environment.

Our comprehensive approach, building synergy between a data foundation and cloud-managed services, enhanced the client’s operational efficiency and positioned them to anticipate market trends, seize opportunities, and maintain their competitive edge. The partnership proved a game-changer, propelling the client into a new era of data-powered success.



About Hexaware

Hexaware is a global technology and business process services company. Our 27,000 Hexawarians wake up every day with a singular purpose; to create smiles through great people and technology. With this purpose gaining momentum, we are well on our way to realizing our vision of being the most loved digital transformation partner in the world. We also seek to protect the planet and build a better tomorrow for our customers, employees, partners, investors, and the communities in which we operate.

With 40+ offices in 19 countries, we empower enterprises worldwide to realize digital transformation at scale and speed by partnering with them to build, transform, run, and optimize their technology and business processes.

Learn more about Hexaware at www.hexaware.com.

Get in touch