



Connecting travellers with new road trip adventures

thl uses Databricks Lakehouse to optimise camper fleet utilisation



Discover how *thl* embarked on a data transformation with Azure Databricks, unlocking business analytics and machine learning opportunities to improve operations and customer experiences.

Challenge

Since 2020, there has been a surge in the popularity of RV travel. Because of this, *thl* experienced a rapid expansion, posing major data challenges for their legacy, on-premises platform.

The previous architecture struggled to scale, causing complications in data management and security. *thl* needed to simplify their approach and modernise their platform to support current and future business use cases.

Solution

thl collaborated with Fujitsu Data & AI to evaluate data platforms. Databricks Lakehouse stood out as the most promising candidate to address the multifaceted data challenges. Fujitsu Data & AI's Lakehouse Solution Accelerator provided a packaged offering that helps rapidly deliver value from data without worrying about the complexities of implementation.

Outcomes

- Databricks Lakehouse has served as a catalyst for optimised data processing, reducing time-to-insight for the business
- Prior to Databricks, data pipelines could take up to 2-3 weeks to run. Now the same pipelines can run in 45 minutes
- With data flowing downstream faster, the business is able to generate reports in a shorter amount of time — from daily to hourly.

“Databricks Lakehouse provided the foundation for us to embark on a journey of data-driven innovation, transforming the way we deliver travel experiences.”

Krishna Pathri, Head of Data and Insights, *thl*



45 minutes

to run a data pipeline
compared to 2-3 weeks



50%

reduction in TCO

With a mission to sustainably connect millions with personalised local adventures, Tourism Holdings Limited (*thl*) — New Zealand's premier tourism company specialising in campervan rental and motorhome hire across the world — looked to modernise its data platform to unlock new analytical capabilities to better serve its customers and meet growing demands as road trips and camper rentals surged.

As they continued to grow their operations across the world, their legacy on-premises SQL Server system buckled, creating data delays, inaccuracy and security issues. In collaboration with Fujitsu Data & AI, *thl* migrated to Azure Databricks via Fujitsu Data & AI's Lakehouse Solution Accelerator for its unified Lakehouse architecture, collaborative interface and lower total cost of ownership.

With the Azure Databricks Lakehouse in place, *thl* are able to tap into all of their operational and vehicle telematics data, opening new roads for analytics and machine learning (ML) use cases, from optimising fleet management to improving daily operations, that will help them steer toward data-driven success and continue connecting millions with unforgettable travel experiences.

A roadblock to operationally efficient growth

Since the COVID-19 pandemic, the love for local exploration and adventure has been rekindled with road trips surging in popularity around the world. Camper travel, in particular, has emerged as a favoured mode of embarking on journeys that blend freedom, flexibility and immersive experiences. Amid this travel renaissance, *thl* stands as a trailblazer, orchestrating the transformation of road trip aspirations into tangible realities with their fleet of motorhomes, campervans and caravans. With thousands of vehicles around the world generating data every two seconds per vehicle, their rapid expansion posed major data challenges for their legacy, on-premises platform built on SQL Server. "Our ambitious growth strategies were hindered by a range of data-related obstacles that called for innovative solutions," said Krishna Pathri, Head of Data and Insights at *thl*.

One significant hurdle created by their rigid and complex infrastructure was the delayed availability of data for business reporting, resulting in incident calls reported to the data team. The acquisition of various companies over time compounded the issue, leading to a fragmented data infrastructure characterised by data silos and a lack of cohesive strategy. The integration of additional regions was a time-consuming endeavor, further exacerbated by maintenance, security and bug-related challenges. The complexity of semi-structured data worsened the situation, making it difficult to manage within their previous infrastructure. "Our previous architecture struggled to scale, causing complications in data management and security," explained Krishna. "Furthermore, its inability to support ML blocked the potential for us to extract the most value from our data."

Slow time-to-value, data accuracy and adequacy emerged as an additional set of problems that impacted decision-making. Departments like finance and marketing weren't able to make confident decisions, which was evident from documented problems and anecdotes shared within the organisation. The complexity of data integration forced the addition of layers of logic, resulting in a convoluted system that affected data accuracy. Slow data onboarding further jeopardised accuracy, posing a formidable challenge for *thl*. "Our legacy platform's limitations held us back from expanding our data capabilities," said Krishna. "We needed to simplify our approach and modernise our platform to support current and future business use cases."

Industry:
CME

Cloud:
Azure

Solution:
Lakehouse

Platform use case:
Azure Lakehouse

About the customer

thl is a global family of RV brands, championing a way of traveling that creates true value for the people, places and environments.

thl delivers to hundreds of thousands of customers every year across their operations in New Zealand, Australia, United Kingdom & Europe, USA, and Canada; and have franchises in Southern Africa and Japan. Amplified by their connections into the broader tourism industry and manufacturing sectors.

Collectively *thl* represents over 30 brands, each with strong brand equity and local heritage in the markets they operate.



Hourly
reporting compared
to weekly

Navigating more efficient data and analytics with Lakehouse

To facilitate their strategic vision to be more data-driven across the business, *thl* collaborated with Fujitsu Data & AI to evaluate leading data platforms and tooling including a multicloud data warehouse and AWS native services. While these alternatives presented certain advantages, *thl* found them falling short of the holistic solution they required. Krishna Pathri recalled, "While each option had its merits, Databricks Lakehouse stood out as the most promising candidate to address our multifaceted data challenges. Ultimately, we wanted a single platform that was future-proof and unlocked new innovations with AI." Making the choice easier, Fujitsu Data & AI's Lakehouse Solution Accelerator provided a packaged offering that helps rapidly deliver value from data without worrying about the complexities of implementation.

Leveraging the comprehensive capabilities of Databricks Lakehouse, *thl* has witnessed a transformative impact on their data operations. Databricks SQL empowers analysts to easily explore and query data with their language of choice. Databricks Workflows has streamlined job orchestration, affording greater control over job dependencies and notifications for more efficient data processing. Delta Lake's ACID transactions and version control have fortified data integrity, providing the ability to revert to previous data states when necessary. The integration of PowerBI has elevated reporting and visualisation capabilities, currently driving over 15 operational dashboards and reports, with a vision to expand to more in the near future. And with Unity Catalog, Krishna's team is able to implement fine-grained access controls, an essential requirement for *thl*'s multi-brand, multi-region setup.

Driving toward operational success and AI innovation

In the ever-evolving landscape of road trip adventures, *thl* has leveraged Databricks Lakehouse and Fujitsu Data & AI's expertise to transcend data limitations. "Fujitsu Data & AI's collaboration with Databricks has helped *thl* to harness the full potential of their operational and telematics data, paving the way for transformative data-driven use cases and unlocking exciting new opportunities through AI," said Shane Kavanagh, Associate Director - Fujitsu Data & AI.

From a data management standpoint, Databricks Lakehouse has served as a catalyst for optimised data processing, reducing time-to-insight for the business. Prior to Databricks, data pipelines could take up to 2-3 weeks to run. Now the same pipelines can run in 45 minutes. With data flowing downstream faster, the business is able to generate reports in a shorter amount of time — from daily to hourly.

Looking ahead, Krishna is excited about the prospects of deploying ML use cases to the market that will capture new customers and revenue. "Now that we have a unified platform at our disposal, we are looking at new ML use cases including optimising fleet utilisation by connecting the right vehicles to the right customers, predicting when to repair vehicles to maximise availability, and dynamic pricing that responds to real-time signals." With Databricks Lakehouse as its foundation, the road toward data-driven innovation is wide open.