Avoiding losses from obsolete inventory

Replacing an inefficient, cumbersome and manual two-week process

Automotive Holdings Group (AHG) is a diversified automotive retailing and logistics group headquartered in Perth, Western Australia. As Australia’s largest motor dealership group, AHG owns over 180 car and truck franchises and offers a wide range of services including finance, after care, insurance and equipment. The National Trucks Division regularly undertakes analysis to identify opportunities to transfer spare parts between dealerships in order to minimise the write-downs that occur when parts age without being utilised. Historically the analysis was completed on a monthly basis via an inefficient, cumbersome and manual two-week process that originated with CSV extracts. AHG needed a scalable, flexible, transparent, and easy-to-update solution was needed, which also significantly accelerated the time to insight.

An end-to-end, automated solution

Forest Grove developed an end-to-end automated data wrangling and reporting engine to expand AHG’s capabilities in deep analysis through the process of data extraction, transformation, reporting and visualization. The solution is scalable, flexible and transparent, and can be easily updated to suit changes to the data environment and user requirements. It comprises five components:

1. Automation of data aggregation from the dealer management system
2. Cleansing, blending, and transforming of raw data
3. Storage of raw data in a cloud data warehouse
4. Creation and update of warehouse tables for reports
5. Presentation of data in interactive and scheduled dashboards

Results

This solution has vastly expanded AHG’s deep analysis capabilities and represents a major milestone in its journey from descriptive to predictive analytics. By automating the data interpretation process with KNIME, managers are now able to identify potential transfer opportunities in minutes rather than weeks through:

- Single data repository for all reports
- Scheduled data extraction and aggregation process with detailed governance (validation) checks
- Significantly accelerated time to insight with an infrastructure solution that supports deeper analytical dives

KNIME Software

The open nature of KNIME Analytics Platform made the development, access, and management of the solution much easier as integrations with other technologies were made possible. Specifically Snowflake for cloud-based data storage and PowerBI for the dashboards.

Fig. 1: High-level KNIME workflow