Automotive Digital **Incident Management**

The application helps automotive clients to track, store, and retrieve legal and technical vehicle incident data while facilitating emails and appointments with the end user and support teams.

Overview

The application digitalized the workflow of the automotive client’s incident management team. We revamped and replaced their existing application with a new web application built using new and emerging technologies. The application primarily tracks the various stages of a vehicle's legal and technical incident history.

Client Profile

Headquartered in Germany, our client is the research and development center for the world’s largest manufacturer of premium and commercial vehicles. The center focuses on research, IT engineering, and product development.

Business Requirement

The client wanted to develop an incident management application to view, track, and manage the technical and legal incident history of vehicles. The application would provide the incident management and business/legal teams with detailed insights into the incidents associated with vehicles while meeting specific requirements.

- Track and manage incident details from occurrence to closure, enabling the concerned support teams to update status at various stages of incident resolution.
- Enable all parties involved in the incident resolution workflow to collaborate and work on incident-related emails and appointments.

- Share incident information with the SharePoint-based application used by various business/legal teams.
- Search and filter incident history.
- Categorize incidents based on process categories; for example, insurance claims.
- Store all incident-related documents securely.

QBurst Solution

We developed an application that was securely deployed on-premises on a virtual machine (VM). The application features a process workflow with scheduled jobs using a .NET backend to import vehicle incidents from the SharePoint application used by various business and legal teams. Vehicle details and other incident-related information are collected for the incident response team from an on-premise vehicle documentation data warehouse using Oracle procedures. Any changes to the vehicle due to the incident are registered back through the APIs. The full life cycle of an incident can be captured and tracked by various parties from different organizational teams by updating detailed status in the ReactJS-based web application frontend.

Key Features

- The legal or customer care teams can raise vehicle incidents while the data gets uploaded to an on-premise SharePoint system.
- The incident data includes details of vehicle, owner, and incident, incident responsibility (legal or technical), and information on market/legal/insurance personnel who will be working on the case once the incident workflow starts.
- Vehicle details and related information are collected for the incident response team from a vehicle documentation on-premise data warehouse.

- First-level respondents will assign the incident to the concerned teams. Incident tickets are manually analyzed if they are received through email.
- Every team involved in the incident workflow can use the application to update status and communicate with others regarding the incident.
- Incident information is imported into the application by periodically scheduled jobs and is raised as an incident in the application. If it cannot be imported, then it is marked for manual review.
- All incidents created in the application are also uploaded into the SharePoint space for the legal team. Thus, SharePoint and the application are always kept in sync.
- Incident details are augmented by vehicle details from the vehicle documentation on-premise data warehouse.
- Any changes to the vehicle details as part of an incident will also be passed on to the vehicle documentation warehouse for updates.
- Incident-related timeline information captured by the application is stored in the application database.

Technologies Used

Microsoft .NET

ORACLE

React Js

SharePoint

sonarqube

BLACKDUCK

Business Benefits

Efficient Tracking and Communication: Business and legal teams can track and document incidents, while communicating with incident support teams on a common platform, avoiding the need for emails.

Increased Productivity: Emails and meeting appointments can be sent to the end user and support teams via the application without users having to leave the platform.

Seamless Data Sharing: Integration with SharePoint enabled business and legal teams to easily collaborate on incident data.

Enhanced Searchability: Incident history is categorized and stored in the application enabling users to quickly retrieve past incidents by category, date, or keyword.