INVESTIGATING ENGINEERING VALIDATION PRACTICES TO IMPROVE PRODUCT DEVELOPMENT PROCESSES

A Global OEM in the Automotive Space

The Client was seeking to identify best practices and tools for engineering validation by studying its implementation in other companies with similar product development complexity in order to improve their own approach to validation and verification and enhance product development.

CHALLENGE

PreScouter's goal in this Research Support Service License was to analyze how companies in the automotive and other industries were tackling the validation challenge and extract key insights for the Client.

APPROACH

PreScouter looked at leading companies in the A&D, high tech, automotive, and equipment manufacturing industries to understand their approaches to validation and verification and identify best practices, covering the following areas:

- Virtualization for validation
- Model-based systems engineering
- The AGILE process for validation
- Organizational structures for validation and verification
- Digital twins & AI

Additionally, the PreScouter team brought on 4 Subject Matter Experts and interviewed 4 others to provide deep-level insights and also investigated the academic literature to identify key trends and centers of excellence in the areas of interest to the Client.

OUTCOME

PreScouter shared the insights and recommendations from their investigation with the Client company executives and senior management, and they were leveraged to benchmark the company's efforts to other organizations.