



Today's automotive manufacturers are facing new pressures to design vehicles consumers will love, including body interiors and exteriors as well as the digital user experience. QuEST provides the proven design and development engineering services these companies need to bring new innovations to life.

Design and Development for the Automotive Industry

Designing the next-generation of vehicles consumers will love

The automotive industry is ready to reward manufacturers who can design and develop innovations that maximize performance, safety, efficiency, and style. The race is on and creates increased pressure to design the interiors, exteriors, and new systems consumers covet in new vehicles.

Yet how can automotive manufacturers manage end-to-end design and development processes – from early concepts to product launch – especially if they don't have the experience in these fields? In other words, how can they transition human-inspired designs into the manufacturing process and support the full product lifecycle?

Now there's an effective way to achieve all of these objectives: outsource automotive design and development engineering services to QuEST.

The right partner for the right results

Why QuEST? Because we bring the right combination of experienced engineers, a proven deployment model, and a passion for helping our clients design the very best automotive applications, products, and systems possible.

It starts with our team. QuEST has over 1,200 engineers currently working with today's automotive leaders, including more than 300 solely focused on design and development engineering. These teams have extensive experience and a proven track record of success in all areas of design and development, especially related to virtual validation and product launch, material cost reduction, and value engineering.

Engineering services that add up where they matter most: our clients' success

QuEST's design and development engineering services are helping our automotive clients produce many next-generation innovations:

- Body interiors and exteriors consumers love
- Award-winning in-vehicle infotainment (IVI) systems and human machine interfaces (HMIs)
- Multi-display cockpit systems, instrument clusters, and touchscreen displays
- Advanced driver assistance systems (ADAS) using deep learning and neural network technologies
- Self-learning intelligent driver information systems (IDIS)
- Seamlessly connected vehicles using built-in modems, WiFi hotspots, and sensors

We help our clients design new applications or re-engineer existing products to reduce development cycles and improve overall performance. Our engineering efforts can help take any product from early architecture design and development to deployment and post-production support. This framework enables our clients to bring new automotive innovations to life, while also overcoming resource constraints, improving product quality, reducing costs, and accelerating time to market.

Focused on our clients' success

What makes QuEST different is our commitment to our clients' long-term success. Our proven delivery model provides the valued onsite engineers they require, while still delivering the cost savings and 24/7 productivity advantages of a truly global workforce.

We take complete – and proactive – ownership of each project. This approach allows automotive manufacturers to offload all of their design and development engineering services, freeing them to focus on core competencies or other strategic initiatives.

OVERCOMING DESIGN ISSUES AND IMPROVING PERFORMANCE

A leading automotive manufacturer engaged with QuEST to find a better way to address known issues in its ventilation system, which were leading to excessive cabin noise.

The client was also looking for new design recommendations that would overcome these issues and improve performance.

QuEST engineers developed a computational fluid dynamics (CFD) model to virtually measure flow data, pressure distributions, and other information. As a result, QuEST helped identify regions where high losses occurred, which the team used to create a new design.

With these insights and recommendations, the manufacturer was able to improve ventilation flow, reduce cabin noise, and gain other performance enhancements.

Delivering tomorrow's innovations today

When it comes to designing and developing next-generation body interiors and exteriors and other systems, there's a reason why so many leading automotive manufacturers choose to partner with QuEST. Our time-tested, proven model balances costs and capacity, all while delivering maximum business results. Discover the QuEST advantage today.



NEXT STEPS

To learn how QuEST Global transformative engineering solutions can help you succeed, contact:

salesenquiries@quest-global.com

QuEST Global delivers advanced engineering solutions to market leaders in industries where engineering is central to success. 8,500 engineers strong, QuEST provides innovative product development and production engineering services that provide an ideal combination of capabilities, capacity and cost. QuEST proactively applies expertise at every phase of the manufacturing lifecycle, from concept to commercialization, so its customers can increase profitability and transform markets.