How we helped our customers

Engineering excellence in product design & development for major US truck lift manufacturer

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End-to-end IP server development for industrial equipment major

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Contact
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AboutTata Consultancy Services (TCS)

Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development. A part of the Tata Group, India’s largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

For more information, visit us at www.tcs.com
In dynamic business scenario, the critical factor which holds the key to your market leadership is the ability to launch and develop new products and services in faster and cost-efficient manner, while facing the challenges like responding to scale, increased complexity, dynamics of globalization, reduced and restricted cycle times.

At Tata Consultancy Services (TCS), our New Product Development (NPD) offerings address these challenges spanning across the complete product development life cycle from ideation and design to manufacturing and production. Tapping into our technical skills and expertise across multiple domains, we enable you to bring innovative products to market quickly and efficiently to meet ever changing customer demands.

The TCS Advantage

For more than two decades, TCS has been working closely with leading original equipment manufacturers, vendors and suppliers as strategic partner for their product development, enhancement, customization and maintenance. Partnering with us will bring you value in form of:

- Centre of Excellence (CoE) and Solution Accelerators: In line with latest industry trends, we have invested significantly in developing assets and solution accelerators. Our various CoE's like Mechatronics, Metal Components and Precision Equipment, Semiconductors, WIFW/Max, Hybrid Technologies, Plastics, Value Engineering etc leverage the wide experience, expertise, processes and knowledge gained by our consultants over the years and build robust solutions tailored for customer's goals.
- Strategic Alliances: Our industrial alliances such as Dassault Systemes, Siemens, PLM Software, Symbian, Jaspur and Atoosar, and academic alliances with institutions like IISc Bangalore and IIT Chennai enable us to strengthen our capability and broaden our engineering expertise.
- Focus on Research and Innovation: TCS has special focus on selected areas like plastics, material science, software engineering, energy utilization and zero-defect firmware to develop next generation products.
- Global Network Delivery Model™: Our global presence ensures efficient delivery across continents, while our Global Network Delivery Model™ gives you cost, quality and capacity advantages.
- Flexible Engagement Model: NPD group has highly mature "art-to-part" offerings aimed at integrated engineering environment. We own complete responsibility from product evolution to product enhancement and support services. So you can now create and deliver efficient products that comply with regulations and industry standards, and thrive in an environment where evolution is the only constant.

Our solutions

The specialized areas of TCS' NPD integrated offerings are:

- Mechanical and Electromechanical Engineering (M&E): Includes end-to-end design solutions across the entire product development in the areas of requirement engineering, systems engineering, component engineering, value engineering, reliability engineering, green engineering and sustenance engineering. We undertake the responsibility of optimized cost of design ownership from requirement gathering, concept design, R&D support to prototype customer support and End of Life (EoL) support.
- Embedded Systems: Offers unique embedded systems designs addressing the wide array of available processors, cost-sensitivity, power-sensitivity, real-time constraints, resource constraints, and the need to perform an evaluation using a reliable real-time operating system in extreme environmental conditions.
- Real Time Solutions: Helps customer develop end-to-end real-time data acquisition, monitoring, control, automation solutions using various software technologies, COTS hardware and third party packages.
- Engineering Simulation: Facilitates customers to assess & improve product performance using advanced mathematical modeling and simulation tools. Simulations are carried out at different levels of fidelity either through physics-based models at components or sub-system level, to more abstract models at system or super-system level.
- Engineering Automation: Automate various product designs and development processes, leading to significant productivity gains and quicker time-to-market.
- Technical Publications: Create, manage and publish product documents which are synchronized to product development lifecycle and time-to-market.

"At Nissan, we were looking for a committed Engineering Services partner who would understand, capture and simulate our engineering processes meeting our constantly evolving design, quality and security scenarios. Nissan selected Tata Consultancy Services (TCS) as one of the key partners for Engineering Services in mechanical and embedded domain, as they provided us with trustworthy answers, predictably and reliably.

We have been working together since ’05 and TCS has consistently measured high on our expectations of quality, cost efficiency, flexibility, and process innovation for continuously raising the bar."

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