L&T IES: Value engineering services leading to cost reduction while retaining functionality and quality

Service Provider: L&T Integrated Engineering Services **Customer:** Customer develops, manufactures and markets medical solutions, headquartered in Europe **Vertical:** Medical Equipments	**Customer Profile:** Customer is engaged in the development and production of high quality diagnostic ultrasound systems. Parent organisation specialises in precision signal acquisition and medical imaging
Project Profile: Providing value engineering services to their newly developed product cart for ultrasound machine. Scope – cost reduction for mechanical areas only without compromising quality and functionality and aesthetics	**Business Objective:** To reduce the overall cost of cart (mechanical parts) **Technical Objective:** Generate ideas related to alternate mechanisms, material, source, etc.
Duration of the Project: 6 months **Team Description:** Size: 5 members Profile: CAD Engineers, FEA Engineers, Sourcing Expert	**Tools/Technologies Used:** **CAD** – Inventor **FEA** – Ansys, Hypermesh **Costing & Sourcing** – Standard internal costing & sourcing templates
Methodology: Step 1 – Techno-commercial Feasibility from Offshore Step 2 – Onsite Presence for Requirement Gathering Step 3 – Idea/Concept Generation Step 4 – Shortlisting of Suitable Options Step 5 – Engineering Analysis of all Options for Optimum Solutions Step 6 – Detail Engineering of Ideas Step 7 – Cost & Investment Estimation Step 8 – Vendor Identification Step 9 – Regular Sourcing Support	**Results Achieved** **Technical Benefits:** Reduction in number of parts, production time, assembly time, etc. **Business Benefits:** Reduced 60 per cent of initial component cost, against a target of 30 per cent. Additionally, our solutions also reduced cost of inventories, which is a recurring cost advantage **Innovations:** Redesigned various mechanisms and integrated multiple parts