

TCS: Adopting frugal engineering to customise product for entry into emerging markets

<p>Service Provider: Tata Consultancy Services Ltd. Customer Name: A Global Building Safety Equipment Provider Vertical: Construction Machinery</p>	<p>Customer Profile: Designs and supplies a complete range of fire suppression systems to industrial, commercial and marine facilities</p>
<p>Project Profile: This project intended to reduce the cost of goods by Value Analysis/Value Engineering (VA/VE) for fire safety equipments so as to be price competitive. This frugal engineering framework helps client to expand into emerging markets such as India, China</p>	<p>Business Objective: Frugal engineer products to achieve price reduction and gain emerging market (India, China) entry</p>
<p>Duration of the Project: 36 months Team Description: Manufacturing engineers, value engineers, design engineers</p>	<p>Tools/Technologies Used: VA/VE, function cost worth analysis, pareto analysis, should costing, simulation, new product definition applications</p>
<p>Methodology: Global engineering development using TCS' proprietary Global Network Delivery Model. Compliance to ISO and client's standards. Replication of client methodology and processes at TCS development centre but with greater flexibility and cross functionality</p> <ul style="list-style-type: none"> • TCS adopted the VA/VE methodology along with in-house developed tools and techniques • Decision on alternate design changes arrived through various analysis and decision making techniques, overcoming challenges such as: <ul style="list-style-type: none"> - Constraints imposed by the stringent regulatory norms posed in material selection - Constraints imposed on towards aligning to customer patented design 	
<p>Results Achieved</p> <p>Technical Benefits: Identification of alternate material for a key component, product design and development, product weight reduction (approx 15 per cent) and associated benefits</p> <p>Business Benefits: Reduced cost of the product to the tune of 12 per cent and hence pricing advantage for emerging markets</p> <p>Innovations: Introducing VA/VE as a process step in the new product development process</p>	