

TELVAVE- TATA ELXSI VALUE ANALYSIS & VALUE ENGINEERING

Extend | Optimize | Localize

Trending

With the trends of digital health technologies and newer manufacturing methods surfacing the medical device space, optimizing and innovating products and processes is the key to gain higher market share.

OEMs are set to enhance their capabilities and extend their product lines, launching technologically advanced and safer devices, with the vision to differentiate themselves from their competition.

Medical device brands are targeting emerging markets to seek greater market penetration, bringing in quality products aligning with the market needs and cost sensitivity of the region.

Moreover, extending product lifecycle and end-of-life support for high revenue generating product portfolio through new technology integration and by complying with the latest standards, thereby maintaining competitiveness.

Opportunities & Challenges

Identification of usage gaps

Customization of a product according to the needs of different markets/market segments is a challenge. It is important to highlight or downplay the correct set of features considering the consumer behavior and needs.

Constraints in emerging markets

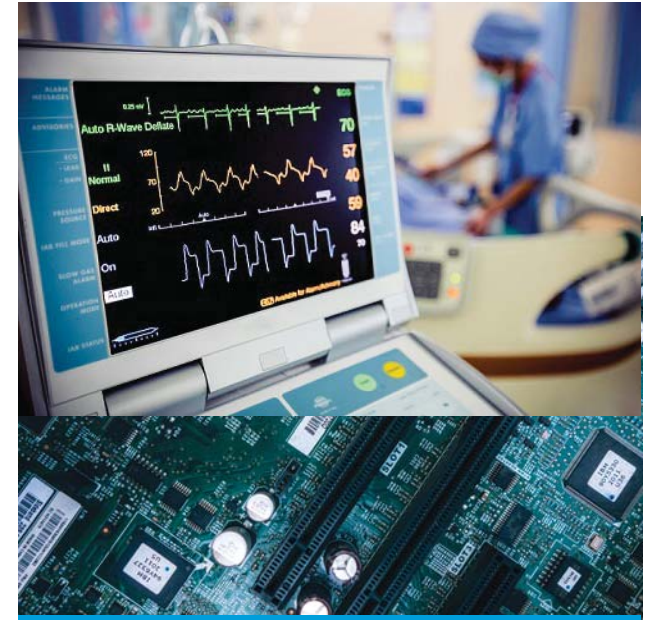
OEMs are constantly in a competitive need to align product cost for the emerging markets while ensuring benchmarked product quality and performance.

Tracking ROI of value engineering investments

The rigorous process of reiterating the entire product development lifecycle for cost and performance assessment makes it difficult to keep track of the ROI, both in terms of efforts and expenses.

Inability to improve product performance on all aspects

With the OEMs' set of systems, processes, and pool of resources, it may be restraining to be able to improve on specific characteristics of the product. Weighing possibilities and efforts required to achieve desired results is of key importance.

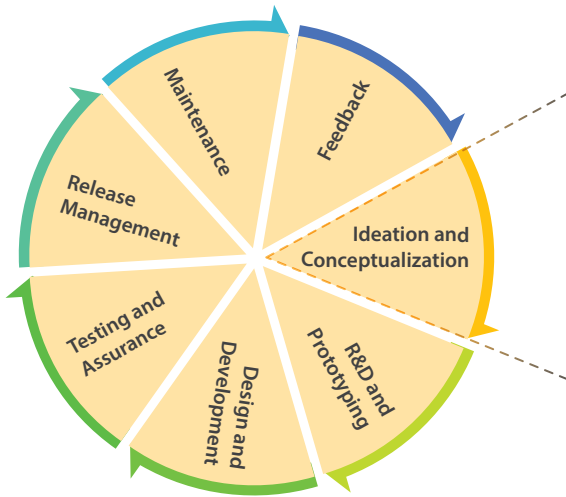


Benefits Sought by the OEMs

- High performance and technologically advanced devices significantly improve patient outcomes
- Cost-sensitive devices enable a reduction in overall healthcare service cost
- Risk minimization through quality and reliability enhancement

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TELVAVE Methodology



PHASE	INPUT	TOOLS	OUTCOME
Value Analysis	Product Related <ul style="list-style-type: none"> PRD Product specification doc. CAD Data PDF Drawings Cost BoM Annual Volume Physical Unit 	Data Analysis <ul style="list-style-type: none"> Pareto Analysis BOM Analysis Function Analysis <ul style="list-style-type: none"> Tear Down Benchmarking Creativity <ul style="list-style-type: none"> Brainstorming Functional Analysis 	<ul style="list-style-type: none"> Concepts Quick Financials Assessment Report



Differentiators

- Experience of various markets across the globe
- Strategic partnerships with a large group of suppliers
- In-house prototyping and testing facilities

Cases

X-ray generator evaluation for legacy imaging and therapeutic device

Systematic approach towards replacing existing high-frequency x-ray generator with an alternate generator compatible with existing flat panel detector-based lithotripsy system

Localization of in-vitro device for emerging markets

Enclosure redesign for size and weight reduction for increased portability, achieving 25% reduction in BOM cost and addressing obsolescence issues

Re-engineering of a home care therapy device

Optimized tear down approach to re-engineer device to achieve cost reduction and feature enhancements ensuring robust design with zero tolerance on exceeding clinically set parameters

Advantages

