

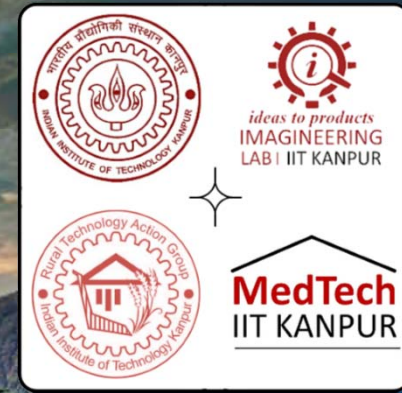
Week-01-L-04

Value Engineering Agricultural Plan

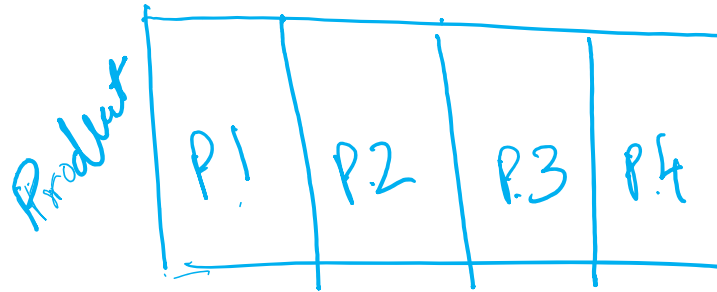
Introduction to Value Engineering (VE)

Why use Value Engineering?

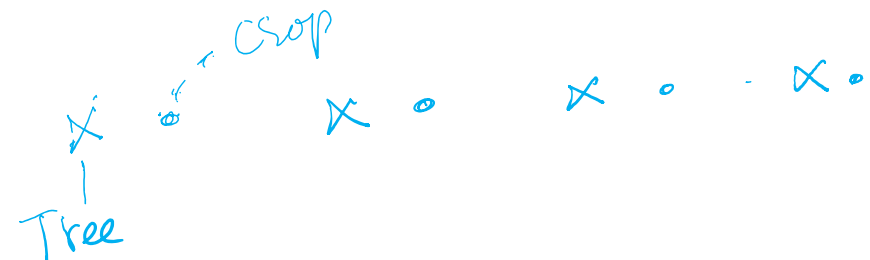
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Phases of VE

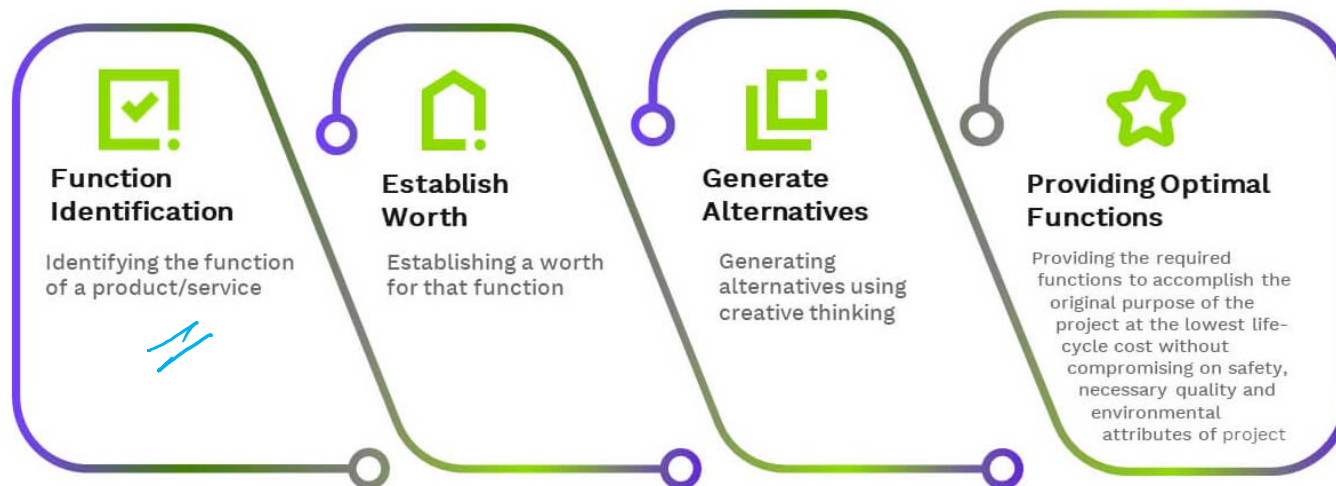


- Value engineering consists of three main phases:
 - Planning: This involves collecting product details, understanding its core goals, and defining its functionality.
 - Design: In this phase, alternative methods are devised to enhance the product's value while maintaining its function and quality.
 - Methodology: This step involves simplifying the action plan, creating viable alternative strategies, and allocating costs accordingly.



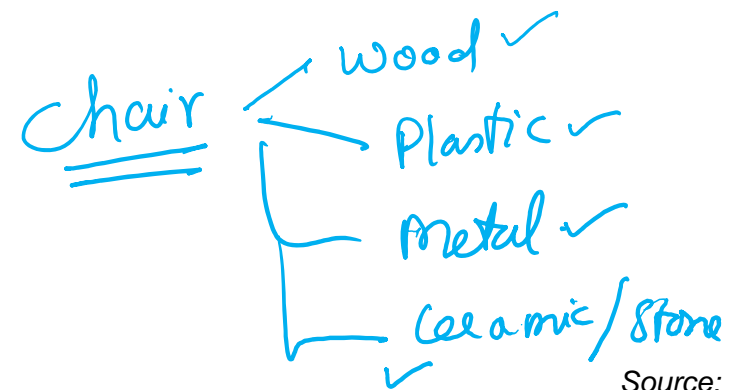
Reducing Operation and Maintenance Costs

- VE can help reduce operation and maintenance costs.
- Optimizes processes and eliminates inefficiencies.
- Identifies and removes any type of unwanted expenses. *Smart Bulb*
- Increases value for customers and manufacturers alike.
- Offers a mixture of optimal costs and performances within any system output.



Improving Quality Management

- Enhances quality management by focusing on improving the function of a product or system while reducing costs.
- Focuses on adopting a streamlined approach to covering the necessary functions within a project at the lowest possible cost.
- Substitutes materials and opts for less expensive choices without compromising performance or functionality.
- Enhances the value of a particular product or service.



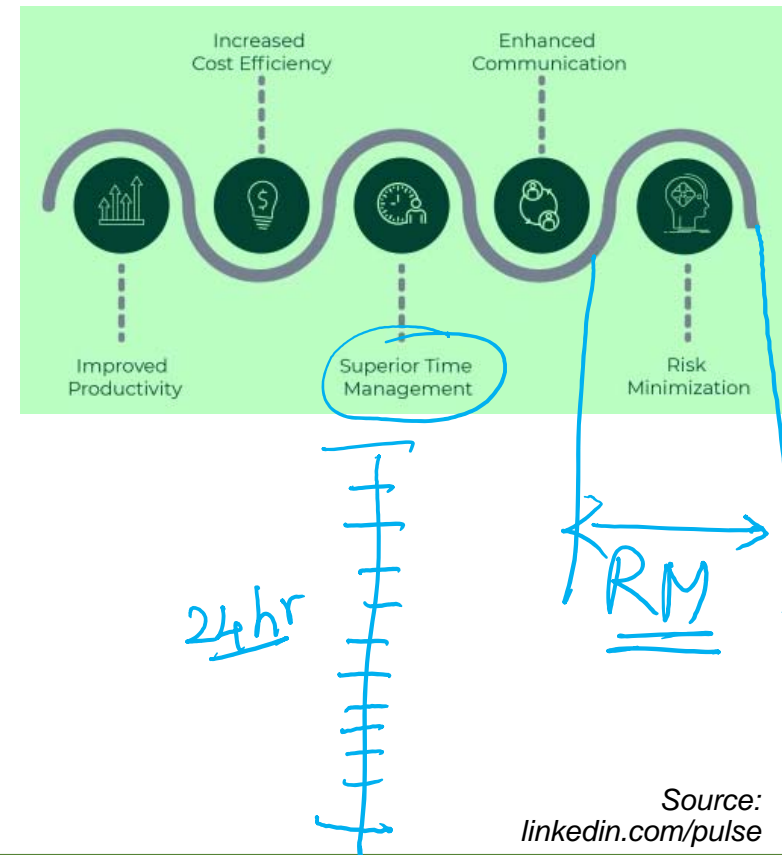
Enhancing Resource Efficiency

- Enhances Resource Efficiency as it ensures optimal resource use and minimizes wastage. → Refuse; Reduce; Reuse; Recycle
- Adds Value to Functions as it improves performance or reduces costs in existing functions. Mainly used to minimize costs while maintaining function.
- Adapting to Obsolescence as it uses value analysis to reduce costs without compromising functionality for products or services with limited lifespans.



Streamlining Procedures

- Enhances productivity by identifying and resolving procedure inefficiencies.
- Applicable in both business and technical contexts for informed decision-making.
- Often initiated reactively due to market pressures like competition and customer feedback.
- For instance, if a competitor offers similar or better quality produce at a lower cost post-launch, re-evaluating procedures becomes crucial to stay competitive.



Conclusion

- Projects that have already experienced benefits in cost, schedule or scope from VE analysis, but the star benefit of VE is in the R&D phase where it can potentially improve the efficiency of the process by 20%-35%.
- Overall, value engineering provides a strategic approach to optimizing project costs while maintaining quality, functionality, and performance.
- It's a valuable tool for modern businesses aiming to stay competitive and efficient.

Thank You

