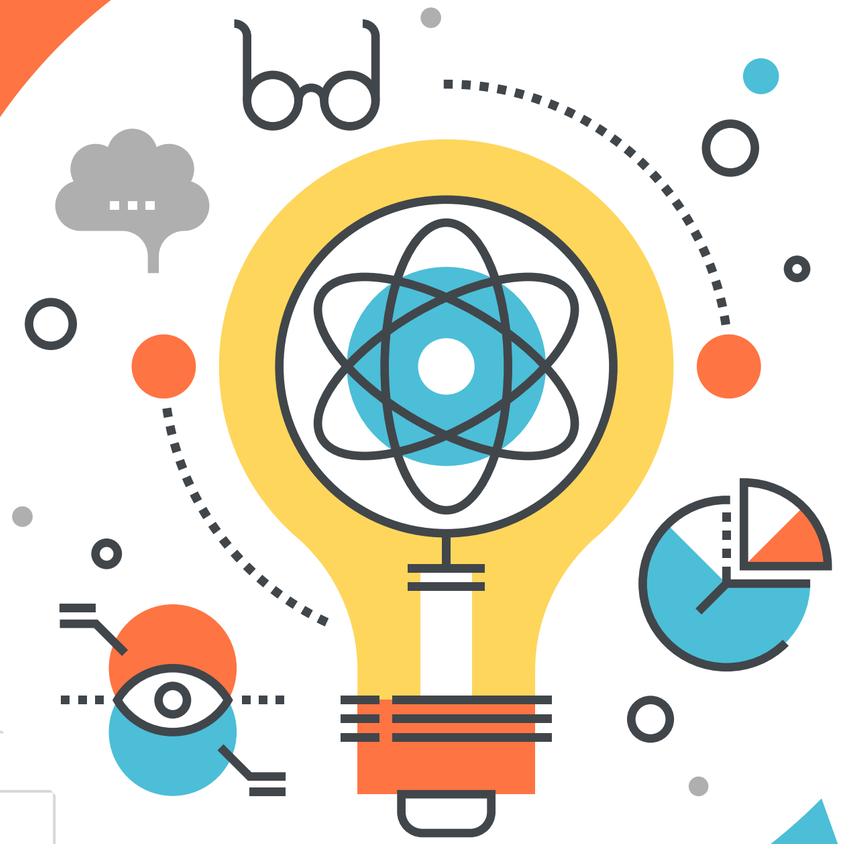
GROUP - 6



BALANCING AESTHETICS AND ECONOMY IN INDUSTRIAL DESIGN: STRATEGIES FOR AESTHETIC, FRUGAL PRODUCTS

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Introduction and background | **Findings and Results** | **Conclusion, Summary and Remarks**

Context

- 2008 economic crisis sparked need for cost-effective design
- Frugal innovation concepts gained traction
- Challenge: Create affordable products without sacrificing quality or appeal

Research Focus

- Balancing aesthetics, cost-effectiveness, and perceived value
- Identifying strategies for cost reduction without compromising quality
- Exploring material selection for visual appeal and affordability

Methodology

- Systematic literature review (2008-2023)
- 23 highly-cited papers from Scopus, Google Scholar, ResearchGate
- Keywords: "industrial design," "product aesthetics," "cost-effective design"
- Thematic analysis to identify key strategies and trends

Utilize Aesthetic Design Principles : The application of **symmetry**, **balance**, and **proportion** enhances visual appeal without increasing complexity.

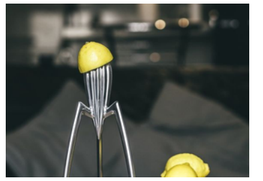
Simplified Form and Function : By focusing on **minimalist designs**, unnecessary features or complex components are eliminated, reducing production costs while maintaining a sleek appearance.

Material Optimization : Choose materials that offer both **durability** and a **premium finish** at a **lower cost**. For instance, alternatives like plastic composites or coated metals can mimic the look of expensive materials.

Design for Manufacturing (DFM) : Simplify assembly, reduce components

User-Centered Design : Focus on core user needs, eliminate unnecessary features

Smart Material Selection : Use engineered materials, **sustainable alternatives**



Philippe Starck's Juic Salif Squeeze **Balance and Proportion.**

Tesla Model 3 **symmetry and simplicity**

Muji Products (Furniture and Homeware): **Minimalist & Functional**

IKEA : low-cost wood veneer **mimic the expensive hardwood**

Polycarbonate in **Consumer Electronics**

KEY INFERENCES:

- Holistic approach crucial: Consider aesthetics, cost, functionality, sustainability together
- Technology as key enabler: New manufacturing and material technologies create opportunities
- Shift towards value-driven design: Focus on entire product lifecycle and user experience
- Sustainability as central consideration: Influences both aesthetics and production methods
- Context-dependent trade-offs: Vary based on market, brand, and product category

MERITS

- Potential for creating premium products at EFFECTIVE costs
- Enhanced ECONOMIC sustainability in design practices
- Improved user experience and perceived value

DEMERITS

- Increased complexity in design process
- Potential for higher initial design and development costs
- Challenges in changing established industry practices

THANKYOU