

Comparative Analysis of Corrugated Fillers and Molded Paper Packaging Solutions: A Case Study at IKEA

In our everyday lives, packaging plays a crucial role in protecting products and ensuring they reach us in perfect condition. Companies like IKEA constantly seek the best packaging solutions to balance cost, efficiency, and sustainability. This study, led by Rohan Dhanore and Deepen Kohli, explores the strengths and weaknesses of two popular packaging solutions: corrugated fillers and molded paper.

Why It Matters

The way products are packaged affects not just the company but also the environment and the overall customer experience. Choosing the right packaging can lead to significant cost savings, faster packing times, better product protection, and a smaller carbon footprint.

Key Findings

- 1. Weight and Volume:** Molded paper packaging tends to be lighter, which can reduce shipping costs. However, the volume efficiency (how well items fit into packaging) showed only slight differences between the two materials.
- 2. Packing Time:** Molded paper packaging can speed up packing processes, making operations more efficient and reducing labor costs. This means products can be packed faster and more workers can focus on other tasks.
- 3. Cost:** While molded paper often has lower material costs, it requires a significant investment in tooling (specialized equipment for creating the packaging). This cost varies depending on the region and the specific product.
- 4. Quality:** Products packaged with molded paper generally had fewer defects, leading to higher customer satisfaction. This means fewer items are returned or damaged during shipping.
- 5. Environmental Impact:** Both packaging materials have varying CO2 emissions depending on the source and production methods. While molded paper is often seen as more eco-friendly, the actual emissions can differ widely.

Recommendations

For IKEA, using molded paper packaging is particularly beneficial for high-volume products sourced from Asia. This approach aligns with their sustainability goals and helps reduce costs and environmental impact.