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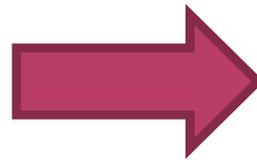
Design & Manufacture

Evaluating Existing Products



Why do we Evaluate products that are already on the market?

When designers are trying to design new products to put on the market, it is very important for them to look at other products that already exist. By **analysing** current products, designers can develop and improve these products and **learn lessons from earlier mistakes or design faults** to make their designs better.



How do we Evaluate Existing Products?

There are a number of ways to evaluate existing products:

- **User Trials** - where a group of users test/trial versions of products under controlled conditions and give their opinions on the products.
- **Focus groups** - Small number of people (usually between 4 and 15, but typically 8) brought together with a moderator to focus on/discuss a specific product.
- **Questionnaires/surveys** - a list of research or survey questions asked to a larger group of people, designed to extract specific information.
- **Test Rigs** - test that are carried out to facilitate, identify and rectify any operational problems of a product before they are put into production. These are normally carried out on a prototype of the final product.
- **Product Comparison** - The product is compared to similar products already on the market. This could be looking at specifications, cost, etc.

How do we Evaluate Existing Products?

Things that can be discussed when evaluating existing products:

- **Function** - Primary and Secondary functions, is the product fit for purpose.
- **Performance** - Is the product easily maintained, is it good/bad for the environment, does it use quality materials is it difficult/expensive to produce?
- **Market** - Is this product what consumers are looking for, does it meet social expectations, does it have a niche market?
- **Aesthetics** - factors that affect the way the product looks.
- **Ergonomics** - Anthropometrics (Human Sizes), Psychology, Physiology.
- **Economics** - Cost, safety, British Standards, value for money.