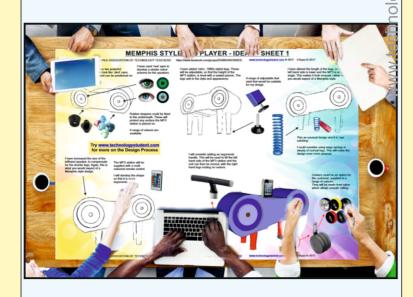
WORLD ASSOCIATION OF TECHNOLOGY TEACHERS

https://www.facebook.com/groups/254963448192823/

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COLLABORATION - 1

A **DESIGN TEAM** - sometimes a team of people will work on the design and development of a product. A design team working on a design problem, are more likely to develop a solution, in a shorter time, than an individua



COLLABORATION - 2

USER CENTRED DESIGN - E.G. A focus group, is a small group of people, who are asked a series of questions about a product or service. The group may consist of a cross section of people from society or be made up specifically of potential customers OR clients.

They provide feedback on designs, ideas, design concepts etc.....

Suggest changes to a design or product, the way it looks, the materials it is manufactured from, the colour scheme etc.....

Express their likes and dislikes regarding the product or aspects.

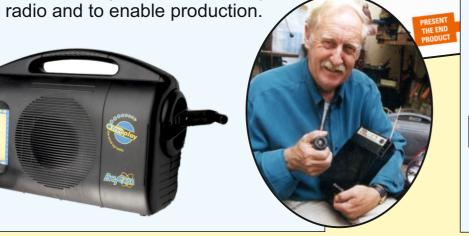
Suggest methods of advertising the product and which types of advertising are likely to be the most successful.



LONE INNOVATOR / INVENTOR

Sometimes an individual will work by himself / herself, on the design of a product. **EXAMPLE:** Trevor Baylis (1937-2018) invented a prototype for a wind-up radio. In the late 1980s, he realised that people in Third World Countries, could not afford or did not have access to replacement batteries. He developed the worlds first wind-up radio - could be used in remote areas, and wound-up when required. An investor, made it possible to develop the





THE SYSTEMS APPROACH

This is a **LINEAR** approach to design. One stage follows another, As outlined below. The opposite to iterative design.

> 1. DESIGN PROBLEM 2. DESIGN BRIEF 3. IDEAS

4. DEVELOPMENT

5. WORKING DRAWING

6. MANUFACTURE 7. EVALUATE

The systems approach is often applied to the design of electronic and programmable circuits.

INPUT

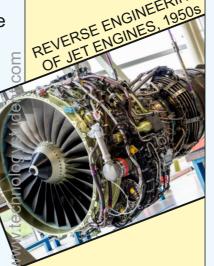
PROCESS

sensors / switches

circuit layout / design

desired outcome

OUTPUT



A 'LAND WIND', COPY OF A RANGE ROVER?



REVERSE ENGINEERING - THEFT?

Some companies operate illegally, taking the work of others and copying their ideas, breaching copyright / patent laws. This is illegal, but it still happens.

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EXAMPLE: A company develops an innovative electronic device, that is a commercial success. A competitor company, dismantles the device and learns its secrets (reverse engineering), avoiding years of development costs. They manufacture their version of the device. selling it at a lower cost. Please note - The USA has complained

repeatedly, that some Chinese companies have copied and marketed products, developed by companies in the USA. Foreign companies have little chance of winning lawsuits in China.