

Product Analysis

Researching existing products or products that are available on the market is a good place to look for inspiration for new products. Why?
You can determine how to make your product better than what is currently available on the market.
You can find problems with existing products and design a new product that solves these problems.
Most products that you buy are very rarely products that are a completely new invention.
Often the products that you buy are simply improved versions of later products.

Dyson Case Study:

Through product analysis James Dyson found a problem with old vacuum cleaners. What was that problem



The Problem

These vacuum cleaners collected dust in a paper bag. When the bag got fuller the vacuum cleaner lost suction power. What was the solution?

The Solution



The Problem

It was difficult to turn the cleaner because of its fixed wheels. What was the solution?

World's first bagless vacuum cleaner and Dyson's cyclone technology. However Dyson continued product analysis on his own design and found a further problem. What was that?

The Inspiration



The *Ball barrow* was one of Dyson's early designs released in 1974

The Solution



The Dyson Ball was introduced to make the cleaner more maneuverable. What could be the possible problems with this cleaner and what could be the solutions?

Product Analysis Rankings

Product Name

Image Here

Research 5 different products related to your brief and write as much information you can about each one here.

Product Name

Image Here

Product Analysis Ranking

You are going to research a range of products related to your brief, consumer, pro-design words and key words. You will need to research 5 products and write about them here. Collect images and information regarding price, manufacture, packaging, assembly instructions, materials, how well can it be recycled etc.

To find a range of varied and interesting products use the words below to help for example

Innovative, space saving, modular, flat packed, form, multifunctional, sculptural, funny, recycled, retro .

	Aesthetics	Suitability for the Consumer	Cost	Environment	Safety	Size	Function	Materials	Product Life Cycle	Ease of Use and Clarity of Function	Packaging	Production
1 st												
2 nd												
3 rd												
4 th												
5 th												
Analysis	<div><u>Analysis:</u><ul style="list-style-type: none">Analyse each one of the columns identifying key features of the products that makes them the most and least successful for that heading and that you should take into account and use to influence your own designing</div>											

Product Analysis Ranking

Using your research information rate the products you found using the headings above and rank the products in order how well they meet your consumers needs, design brief and your own design philosophy for the given headings

Hopefully you will start to see patterns which products score high and why..

Once completed analyse them in the column below

Then redesign the top five with improvements you would make and why?

Product Analysis

Researching Existing Products involves the following:

- Examining commercial products in detail
- Little value in just using photographs from the internet
- Consider this as inspirational as well as an investigation

How to Carry out Product Analysis

1. Using ACCESS FM it is easy to undertake a detailed analysis of an existing product.
2. It is very important that you DO NOT simply describe what features the product has but rather explain and analyse the success or failure of those features.
3. State how your analysis has inspired you.
4. Use different images or preferably your own photographs to highlight your analysis.
5. Use a number of images to highlight the different aspects of ACCESS FM
6. Which of the images below would best show the: Aesthetics, Cost, Consumer, Environment, Safety, Size, Function, Materials



WHEN ANALYZING

DO NOT say:

“this Ipod has a touch screen and is very thin, it has a camera and a built in speaker. I don ’t like it.”

DO say:

*“the Ipod has a touch screen which **I THINK** is an excellent design feature **BECAUSE** it eliminates the need for buttons to carry out functions and in doing so allows the screen to be a big as possible. This makes it a lot better for watching films and playing games on. **However** the screen is prone to becoming dirty as it is contently being touched. **I THINK** that it will become annoying to keep clean. It would be a good idea if I could design my MP3 with a touch screen that didn ’t mark so easily.”*

How to Carry out Detailed Product Analysis

When carrying out product analysis you need to be analytical. You need to add your own opinions and give explanations and reasoning for your suggestions. Below is a list of questions that you can use to help construct a statement for each ACCESS FM heading. DO NOT ANSWER THESE QUESTIONS DIRECTLY, THEY ARE THERE TO HELP YOU TO CONSTRUCT A PARAGRAPH.

Aesthetics (colour, shape, styling)	What do you think about how the product looks? Is it successful or not? Why? Are the looks (colour, shape, styling) suitable or not for the end user? How and why? How could they be improved in your design?
Cost	Is the product cost effective? Is it too expensive, too cheap, priced correctly? How much would you be willing to pay? Why is the product priced as it is? Is it because of its brand name, its quality, the materials used? What do you think, anything to add? How will this effect your design?
Consumer	Who is the intended end user? What is the intended consumer profile? Has the product been designed appropriately for he intended user or not? How and why? Have the ergonomics/anthropometrics been designed correctly for the intended end user? Explain.
Environment	How does the product effect the environment: •When it was made (manufacturing process) , materials used, energy used •When its being used, does it give off any emissions or pollution? •When it is disposed of, is it recyclable, can it be reused?
Safety	How safe is the product to use? Are any parts of it dangerous, what are they and how are they dangerous. Is it safe enough for the end user to use?
Size	How big is the product generally? For example: <i>“its too big to fit in a pocket which makes it difficult to transport.”</i> therefore how could the size be improved? Is it too big, too small or correctly sized for the intended user? How? Think about anthropometrics?
Function	What are the main functions for the product, what does it do GIVE FULL DETAILS FOR THIS? For example: <i>“This chair allows the user to sit down at a desk. The user is able to swivel on the chair to change position as the main support post is not fixed. The user can also move around the room whilst sitting on the chair as it has caster wheels on the base of the legs.”</i> How well does the product perform these functions? How could you use these suggestions as inspiration to design a BETTER product i.e. What ?
Materials	What are the materials that have been used to make the product? Are the materials suitable? Are they strong enough? Do they have the properties that are required for that product? Are they good or bad quality? Do the materials add any aesthetic qualities? What do you think?

Detailed Product Analysis

Aesthetics

Cost

Suitability for
Consumer

Environment

Consumer Opinion

Ease of Use and Clarity
of Function

Ease of Use and Clarity
of Function

Product Life Cycle

Packaging

Materials

Function

Images of Product

Safety

Size

Product Analysis Concept idea