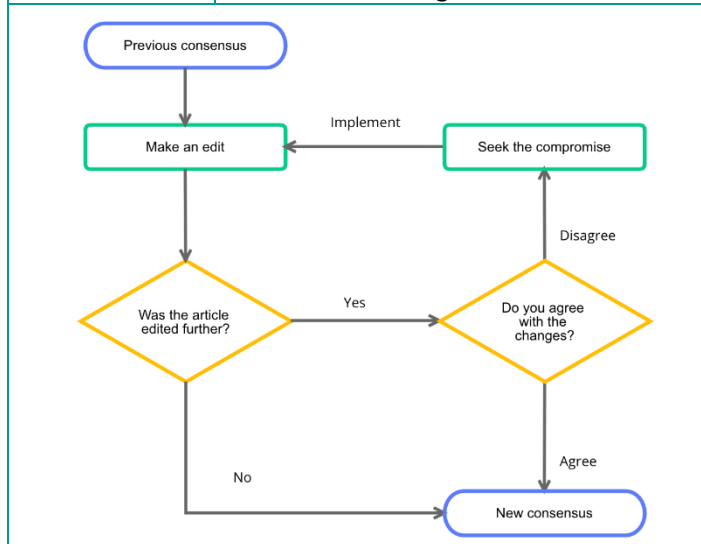
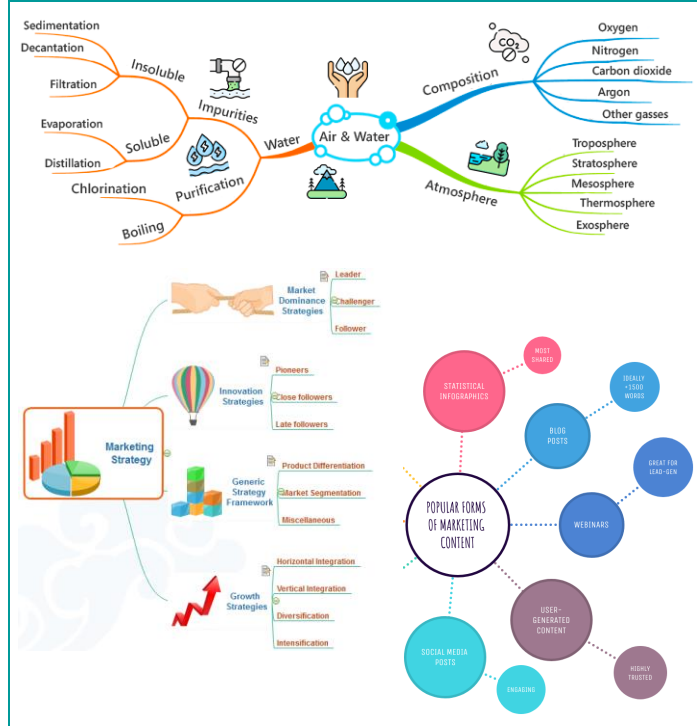


1.1. Types of design tools

Flow charts	
Purpose	Shows the steps, decisions and outputs in a process.
Components	<ul style="list-style-type: none"> – Start point – End point – Decisions – Processes – Input/output – Connecting lines with directional arrows
Advantages	<ul style="list-style-type: none"> – Can be useful for simple designs with a small number of tasks and decisions. – Does not need any specialist knowledge to understand the flow chart. – Can show sequences/steps that need to be followed in order.
Disadvantages	<ul style="list-style-type: none"> – The processes and decisions are shown sequentially so does not show concurrent tasks. – Can become complicated if a lot of decisions need to be shown. – Cannot be used to create visual designs.



Mind maps	
Purpose	To generate outline ideas or to present ideas to an audience. Types: <ul style="list-style-type: none"> – Library (sort/organise information) – Tunnel timeline (problem solving) – Presentation (present ideas).
Components	<ul style="list-style-type: none"> – Nodes – Sub-nodes – Connecting lines (branches) – Key words – Colours – Images
Advantages	<ul style="list-style-type: none"> – Easy to add ideas at any time – Can help focus on the ideas and links between them – Show dependent ideas
Disadvantages	<ul style="list-style-type: none"> – Can be difficult for others to understand – The correct type of mind map needs to be used



Visualisation diagrams	
Purpose	Usually used when a static product is being created to show what the final solution will look like.
Components	<ul style="list-style-type: none"> – Multiple images/graphics – Size and position of images/graphics – Position and style of text – Fonts – Labels/annotations – Colours – Themes
Advantages	<ul style="list-style-type: none"> – Simple to produce – Non-technical so most people can understand them – Ideas can be clearly shown – Can clearly show the layout of documents – Can see if the layout will work before building a prototype
Disadvantages	<ul style="list-style-type: none"> – Can lack detail – A lack of technical details can cause issues, confusion and misinterpretation



1.1. Types of design tools

Wireframes

Purpose	Focuses on what the product will do, rather than what it will look like. Types: – Low-fidelity wireframe (uses basic shapes and image placeholders with limited specific details) – High-fidelity wireframe (shows actual content, fonts, colours, image, dimensions and branding)
Components	Low-fidelity wireframe: – Boxes – Box labels – Image placeholders – Layout grids High-fidelity wireframe: – Branding – Colours – Fonts – Text – User interaction functionality
Advantages	– Information and graphical elements can be positioned and moved around – The size of the elements can be changed – The design can be finalised in a low-fidelity without the clutter of, for example, font types/colours – High-fidelity can be used in the testing process – Changes can be made efficiently
Disadvantages	– Interactive features cannot be shown in low-fidelity – High-fidelity can become over designed

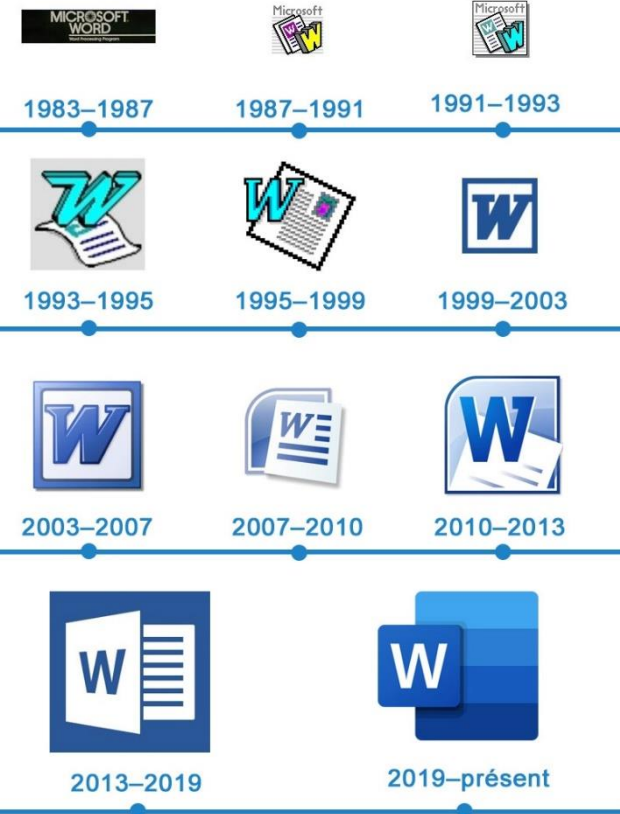


1.1. Types of software used to create design tools



Desktop Publisher (DTP)

Used to create:	– Visualisation diagram – Mind map – High-fidelity wireframe
Advantages	– The software allows elements from different files to be combined – Images can be imported from, for example, a scanner or a graphics package – Different elements can be grouped, which means that a group of elements can be moved as one – Elements can be positioned by using a 'drag and drop' feature which will enable precise positioning to be used



Word

Used to create:	– Flow chart – Mind map – Low-fidelity wireframe
Advantages	– There are in-built tools and features which allow shapes and lines to be used to create these design tools