CHAPTER II

LITERATURE REVIEW

2.1 Visual Design

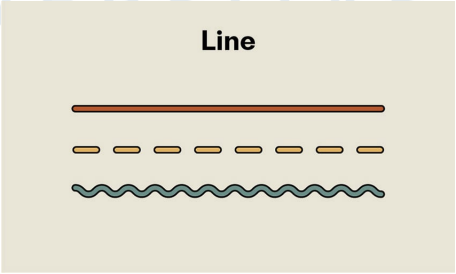
Visual design is more than just aesthetic looks; it is a unique form of language. A good visual design should convey a clear message and provide a useful experience (Samara, 2020). To effectively convey the message, it is essential to understand design elements and principles, which serve as the vocabulary and grammar of the visual language (Poulin, 2018).

2.1.1 Design Element

The basic vocabularies of visual design are design elements. To create a good visual design, the design elements must be interconnected (Samara, 2020). Landa (2010) categorised the design elements in two-dimensional form into four main components, which are line, shape, colour, and texture.

1) Line

Line is one of the most fundamental elements in visual design; it is a track formed by a moving point or, in digital media, pixels. Lines come in various shapes; they can be either straight or curved, and continuous or broken (Lupton & Phillips, 2015). The emotions expressed by lines depend on the tool used and the pressure applied (Poulin 2018).



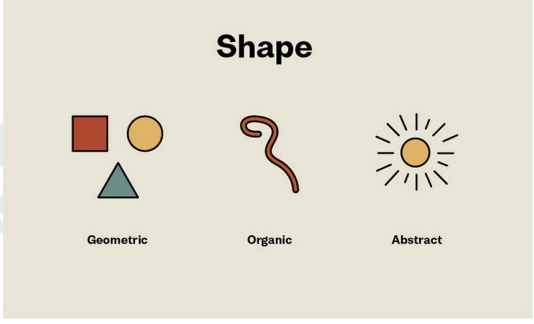
Picture 2.1 Line
Source: https://design.tutsplus.com/articles/the-basic-elements-of-design--cms-33922

In web design, the role of lines goes beyond their function as dividers or borders. Lines can be used in various ways to enhance the looks of the interface (Beaird & George, 2016). When used as backgrounds, horizontal lines are preferred over diagonals for drawing the user's attention to the text.

Picture 2.2 Horizontal Line in Web Design
Source: https://brunoarizio.com

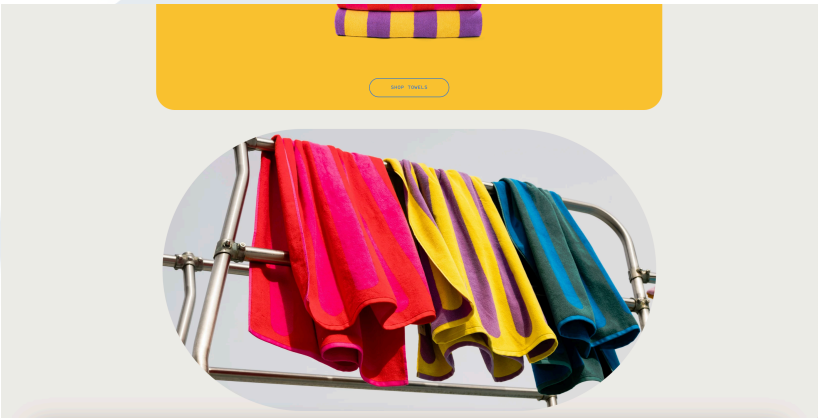
2) Shape

Shape is a two-dimensional surface, formed by enclosing lines, colour, value, or texture. Shapes can be classified as either geometric, organic, or abstract. The characteristics of a shape, including its solidity, transparency, and texture, determine the message it conveys (Poulin, 2018).



Picture 2.3 Shape
Source: https://design.tutsplus.com/articles/the-basic-elements-of-design--cms-33922

The layout shapes on websites are inherently geometric. To create a smoother feel in web design, Beaird & George (2016) suggested two basic techniques, which are rounding the corners and rotating the shapes. Moreover, it is possible to combine a wide range of organic shapes in a web design to guide the user's eye movement towards specific objects.



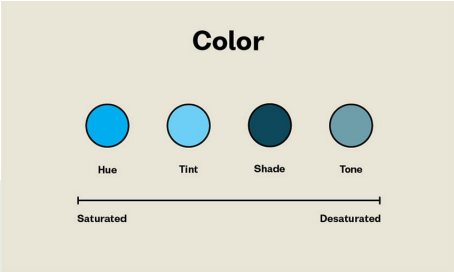
Picture 2.4 Organc Shapes in Web Design
Source: https://publicpool.co/?ref=maxibestof.one

3) Colour

Colour is created when a wavelength of light reflects off the surface of an object (Samara, 2020). Colour serves many purposes beyond just enhancing visual attraction; it is a powerful element for conveying messages and creating emphasis in a design. As Kandinsky said, "colour is a medium that has a direct impact on the soul," (Poulin, 2018).

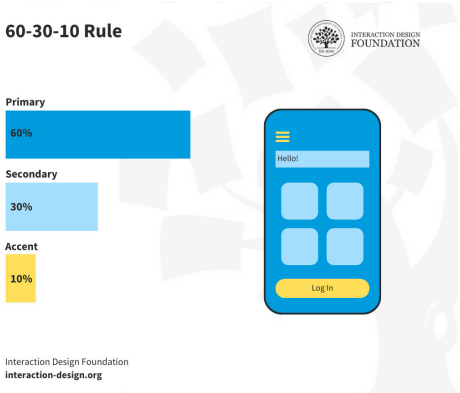
There are three main aspects of colour, namely hue, value, and saturation. Hue is the purest form of colour. Value is the lightness or darkness of a hue. Adding black to a pure hue will create a shade. Meanwhile, adding white to a pure hue will create a tint, which is lighter than a shade. The last aspect of colour, saturation, refers to the brightness or dullness of a hue. Adding grey to a pure hue can reduce its saturation. Conversely, adding more of a pure

hue to the colour will increase its saturation, making the colour appear more vibrant.



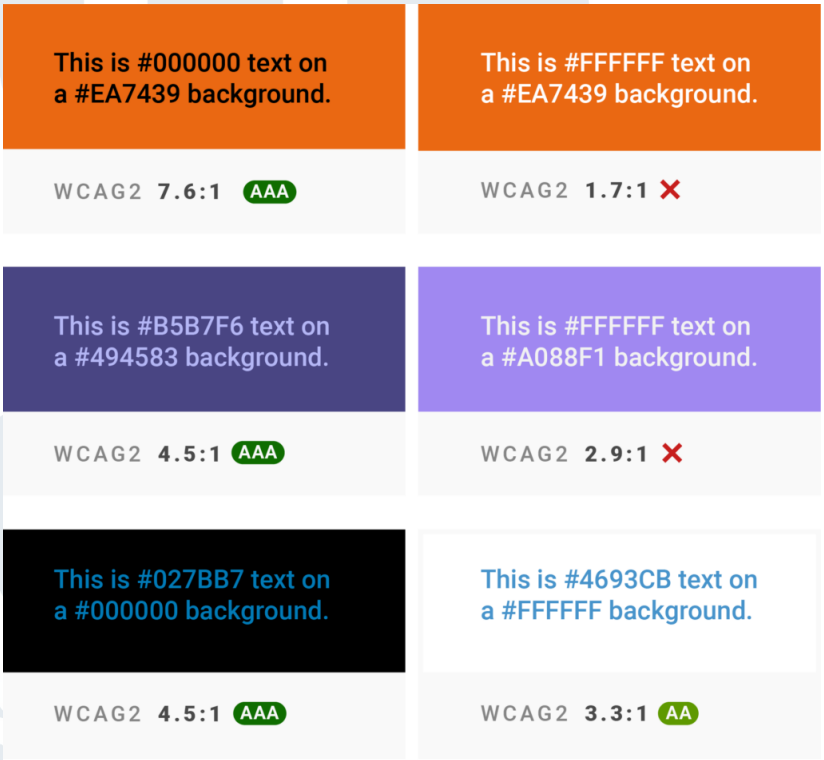
Picture 2.5 Colour
Source: https://design.tutsplus.com/articles/the-basic-elements-of-design--cms-33922

According to Soegaard (2023), to achieve a user-friendly interfaces, it is important to choose the right primary, secondary, and accent colours. A primary colour in interface design is the one that is most frequently used, typically associated with the brand. To ensure a visual balance in the design, primary colours should take up to 60% of the space. Conversely, secondary and accent colours are the colours that appear less frequent in the interface design. They are used to emphasise and distinguish different elements within the interface. While the primary colours should occupy 60% of the space, secondary and accent colours should take up to 30% and 10%, respectively. This rule is also known as the 60-30-10 rule.



Picture 2.6 60-30-10 Rule
Source: https://www.interaction-design.org/literature/article/ui-color-palette

In addition to choosing the right colours, Soegaard (2023) highlighted the importance of colour contrast. For backgrounds and texts in web design, colours are required to have adequate contrast to ease the user in reading the site (Beaird & George, 2016). According to Web Content Accessibility Guidelines (WCAG), a recommended contrast ratio for normal texts is 4.5:1 and 3:1 for large texts. Furthermore, Soegaard pointed out the need to avoid using absolute white or black for backgrounds because of their high contrast, which may lead to eye strain for users.

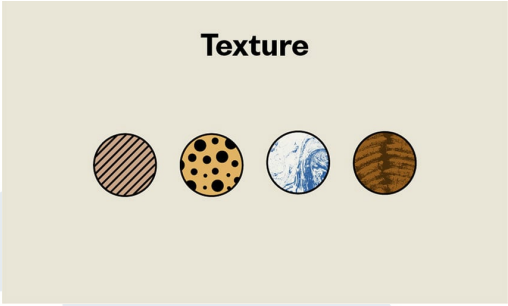


Picture 2.7 Contrast Ratio
Source: https://blog.datawrapper.de/color-contrast-check-data-vis-wcag-apca/

4) Texture

The texture is the surface characteristic of an object. In visual design, texture is either physical or virtual. Utilizing texture can communicate a wide range of emotions and messages. To achieve

a professional look for a website, it is advisable to keep texture to a minimum (Beaird & George, 2016).



Picture 2.8 Texture
Source: Beaird & George (2016)

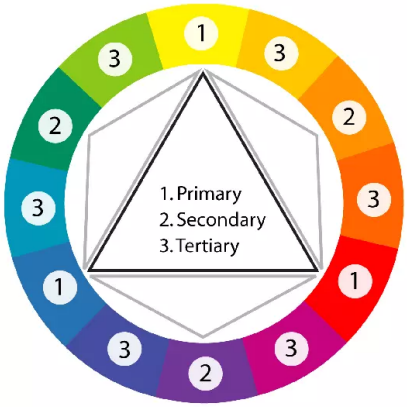
In web design, the minimal use of textures in visual elements can differentiate them from the others. Textured elements can also attract users to click them. Moreover, textures can be applied to backgrounds and logos to enhance the overall looks. However, it is essential to use textures intentionally as an excessive amount of texture can disrupt the visual balance.

Picture 2.9 Textured Logo in Web Design
Source: https://uxdesign.cc/web-design-theory-texture-1e07c29b10e5

2.1.2 Colour Theory

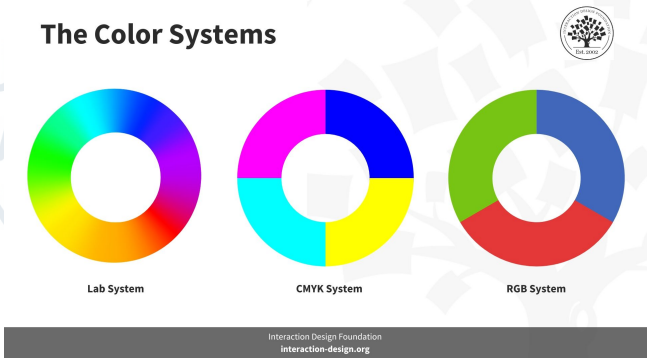
The traditional colour wheel is divided into 12 segments, each falling into one of three groups: Primary, secondary, and tertiary colours (Beaird & George, 2016). The primary colours consist of red, yellow, and blue. When two primary colours are combined, they produce secondary colours, namely

orange, green, and purple. Meanwhile, tertiary colours are the results of the combination of two secondary colours. There are six tertiary colours, namely vermilion, marigold, chartreuse, aquamarine, violet, and magenta.



Picture 2.10 Colour Wheel
Source: Beaird & George (2016)

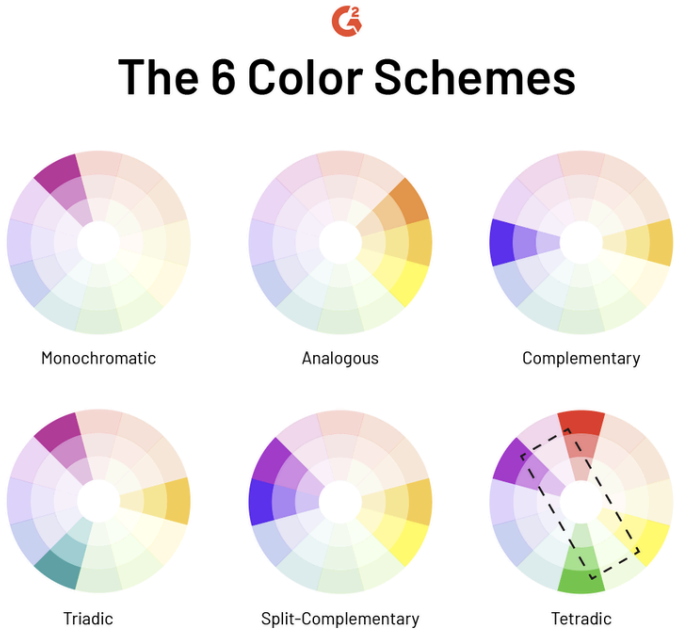
A set of colours chosen from a particular visual spectrum is called a colour system. The two most common colour systems are RGB and CMYK. The RGB (red, green, blue) colour system is commonly used for on-screen designs. Red, green, and blue are the additive colours resulting from light being emitted from the computer screen. Each RGB colour has a total of 256 levels, represented in hexadecimal from 00 to FF. Conversely, CMYK (cyan, magenta, yellow, black) is the set of substractive colours used for print designs.



Picture 2.11 Colour System
Source: https://www.interaction-design.org/literature/article/ui-color-palette

2.1.2.1 Colour Combination

The use of colours in interface design should aim to elevate visual appeal and enhance the overall user experience. Following the colour wheel and the colour systems, it is essential to understand the combinations of colour, known as, colour schemes, to achieve a visual harmony in design. According to Bleicher (2011, as cited in Interaction Design Foundation, 2020), there are five main colour schemes, namely monochromatic, analogous, complementary, triadic, and tetradic colour scheme. As design theory evolves, combinations of these colour schemes emerge, such as split-complementary and "high-key" analogous colour scheme.

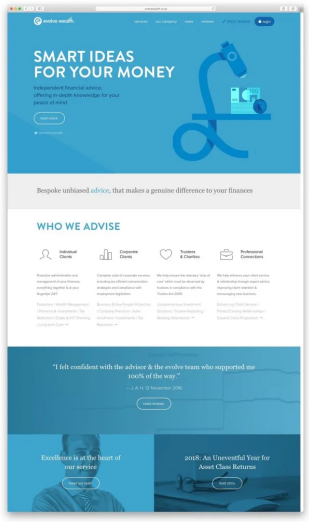


Picture 2.12 Colour Schemes
Source: https://www.linkedin.com/pulse/6-color-schemes-keep-everything-picture-perfect-monica-jeferson-

1) **Monochromatic**

A monochromatic colour scheme is a scheme that uses different variations of one colour. It involves using different shades and tints of one colour while keeping its

purest form. This colour scheme is commonly used in minimal designs to avoid visual distractions.



Picture 2.13 Monochromatic Colour Scheme in Web Design
Source: https://uxportfolio.cc/monochromatic-websites/

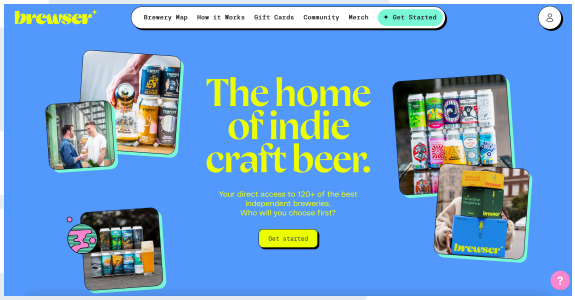
2) Analogous

An analogous colour scheme is a combination of colours that are positioned next to each other on the colour wheel. A variant of this scheme, known as a "high-key" analogous colour scheme, involves adding white to the colours. This colour scheme is typically found in early impressionist art.

Picture 2.14 Implementation of Analogous Colour Scheme
Source: Lupton & Phillips (2015)

3) Complementary

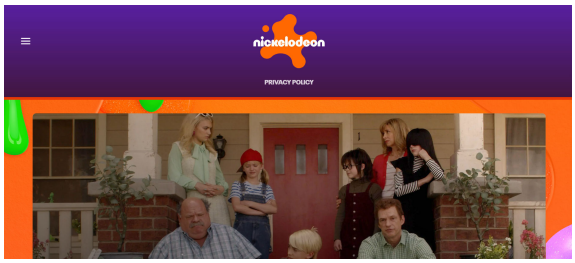
A complementary colour scheme is a scheme that uses colours that are opposite each other on the colour wheel. Therefore, this scheme is also known as the "opposite colour" scheme. Complementary colours are known to have great contrast when used together in a design. Combining this scheme with the analogous colour scheme will create a split-complementary colour scheme.



Picture 2.15 Complementary Colour Scheme in Web Design
Source: https://brewser.beer/?ref=maxibestof.one

4) Triadic

A triadic colour scheme is a combination of three colours that are located at equal distances from each other on the colour wheel. Choosing these three colours on the colour wheel will create a triangle, which defines it as a triadic colour scheme. Using this colour scheme in a design will maintain visual harmony and high level of contrast.



Picture 2.16 Triadic Colour Scheme in Web Design
Source: https://www.interaction-design.org/literature/article/triadic-color-scheme

5) **Tetradic**

The fifth colour scheme is tetradic. A tetradic colour scheme involves using two sets of complementary pairs. When using this colour scheme in a design, it is important to keep one colour more dominant than the others to avoid users feeling overwhelmed.

Picture 2.17 Implementation of Tetradic Colour Scheme
Source: https://brewser.beer/?ref=maxibestof.one

2.1.2.2 Psychology of Colour

Different colours can evoke different emotions in humans. Human perceptions and reactions to colours are shaped by a combination of biological, cultural, and personal factors. Before choosing colours for the colour palette, it is important to understand the target audience. Interaction Design Foundation (2021) established colour symbolism based on commonly accepted associations as follows:

1) Red is associated with love, danger, excitement, energy, strength, power, and passion.
2) Yellow is associated with optimism, caution, energy, intellect, warmth, happiness, and cheer.
3) Blue is associated with trust, loyalty, depth, authenticity, peace, sadness, and calm.
4) Orange is associated with warmth, happines, attraction, success, freshness, adventure, and creativity.

5) Green is associated with nature, envy, freshness, quality, luck, wealth, and growth.

6) Purple is associated with royalty, imagination, mystery, spirituality, luxury, wisdom, and nobility.

7) Black is associated with sophistication, elegance, death, mystery, boldness, formality, and formal.

8) White is associated with purity, cleanliness, emptiness, goodness, peace, innocence, and simplicity.

2.1.3 Design Principle

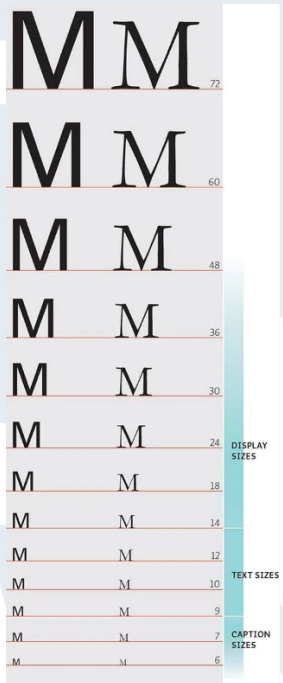
While design elements are the vocabularies of visual design, design principles serve as the structure of the sentence. The use of design principles is essential for effectively incorporating design elements. There are five principles of design in UI/UX, namely scale, visual hierarchy, balance, contrast, and Gestalt principles (Gordon, 2010).

2.1.3.1 Scale

Scale refers to the size of an object as perceived by an individual. It can be either objective, as seen in maps, or subjective, where measurements may vary according to one's perception (Lupton & Phillips, 2015). The principle of scale is used to create emphasis on important objects in visual design.

Picture 2.18 Scale
Source: https://www.nngroup.com/articles/principles-visual-design/

In digital typefaces, there are a variety of options for scale, including but not limited to size, weight, width, and value scale. Samara (2020) highlighted three factors that should be considered before implementing the principle of scale in types: the complexity of the text, the pace of information delivery, and the format size. The size of the type for texts typically falls within the range of 9 to 14 points. Yet, it depends on the other variables, such as the type style, the medium, and the audience.

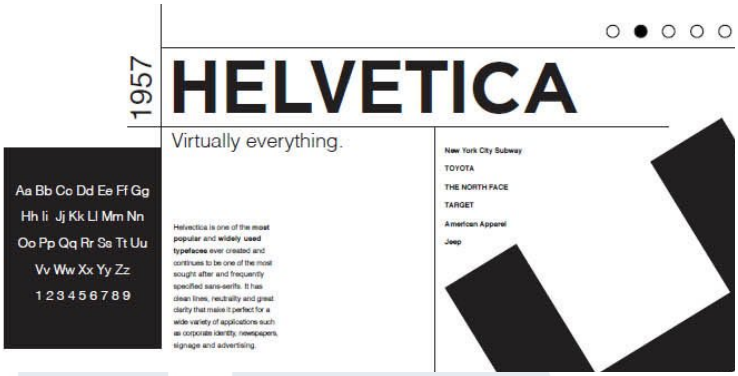


Picture 2.19 Size Variations in Typefaces
Source: Samara (2020)

2.1.3.2 Visual Hierarchy

Visual hierarchy is the order of importance given to design elements with the aim of helping the readers in finding relevant information. An effective visual hierarchy can be achieved through numerous ways, such as using a scale, varying placement, and adding distinct colours. In interaction design, menus, texts, and images can

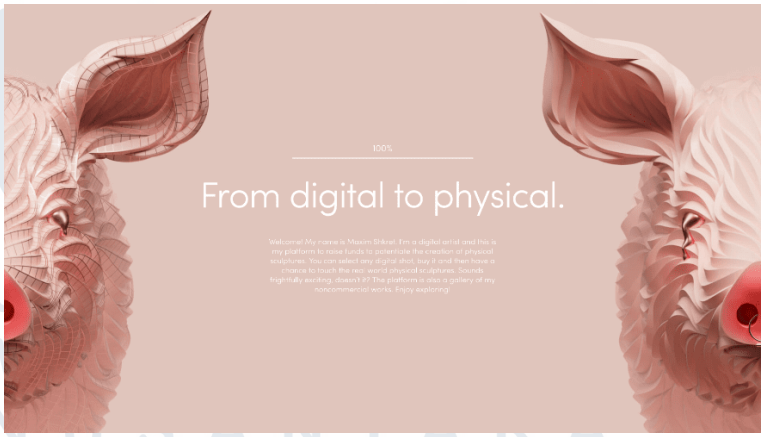
be visually organised through strategic placement and maintaining consistent storytelling (Lupton & Phillips, 2015).



Picture 2.20 Visual Hierarchy
Source: Lupton & Phillips (2015)

2.1.3.3 Balance

Balance refers to the proportion of elements in visual design. Achieving balance involves evenly distributing design elements to create a sense of stability. However, the principle of balance is not necessarily symmetrical; it can be asymmetrical and radial (Lupton & Phillips, 2015).



Picture 2.21 Symmetrical Balance in Web Design
Source: https://www.elegantthemes.com/blog/design/making-the-most-of-symmetrical-and-asymmetrical-balance-in-your-web-design

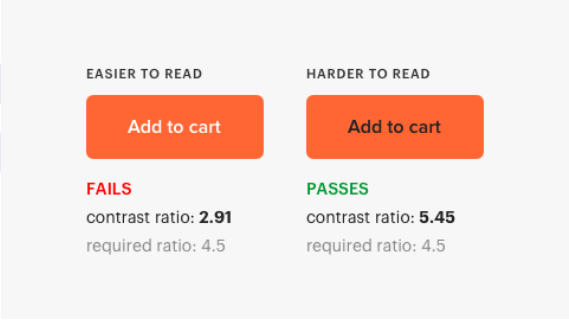
Asymmetrical balance is commonly utilised in web design. Websites with two-column layouts typically feature wider columns

used for the main content, as shown in Picture 2.10. Moreover, the application of asymmetrical balance is shown in the placement of navigation menus, often achieved through the use of contrasting colours or borders to enhance visibility (Beaird & George, 2016).

Picture 2.22 Asymmetrical Balance in Web Design
Source: https://www.elegantthemes.com/blog/design/making-the-most-of-symmetrical-and-asymmetrical-balance-in-your-web-design

2.1.3.4 Contrast

Contrast refers to the juxtaposition of opposing design elements. Contrasts in scale, colour, shape, and direction can be quickly perceived by the human eye (Poulin, 2018). In web design, important elements, such as call-to-action (CTA) buttons, typically have distinct colours and are bigger in size to grab the user's attention (Beaird & George, 2016). Oftentimes, the colour red is used to signify warning, while green is used to signify confirmation.



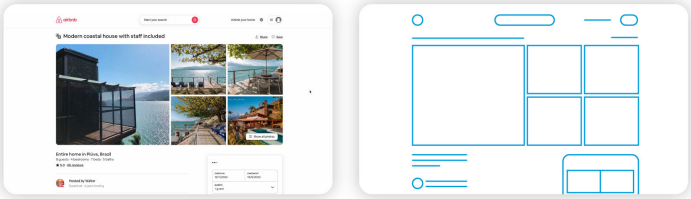
Picture 2.23 Contrast in Buttons
Source: https://uxmovement.com/buttons/the-myths-of-color-contrast-accessibility/

2.1.3.5 Gestalt Principles

The Gestalt principles refer to the inherent tendency of humans to group similar elements and perceive complex design elements as a unified whole. This principle suggests that human perception not only combines elements but also separates them. The Gestalt psychologists identified six common Gestalt principles, namely simplicity, similarity, proximity, closure, continuity, and symmetry (Lupton & Phillips, 2015)

1) **Simplicity**

Humans have a limited capacity to process complexity. They inherently tend to simplify complex design elements. Therefore, visual elements commonly used in interface design are geometric shapes, such as rectangles and circles.

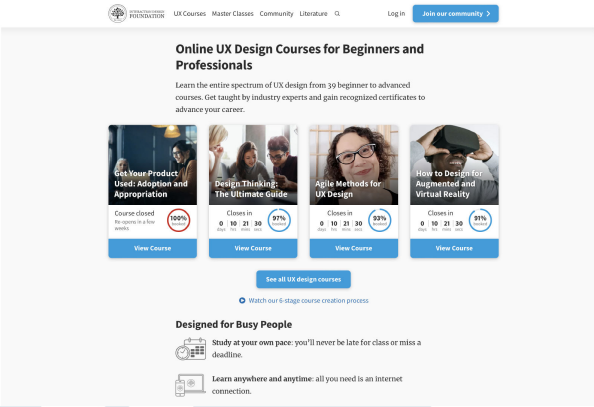


Picture 2.24 Simplicity
Source: https://www.interaction-design.org/literature/topics/gestalt-principles#11._symmetry_and_order-13

2) **Similarity**

When faced with numerous visual elements in a composition, humans tend to group similar ones. Therefore, it is necessary to have design systems in place before designing interfaces. Implementing design systems can ensure consistency throughout the interface. This not only enhances the overall user experience but also facilitates users in processing information efficiently

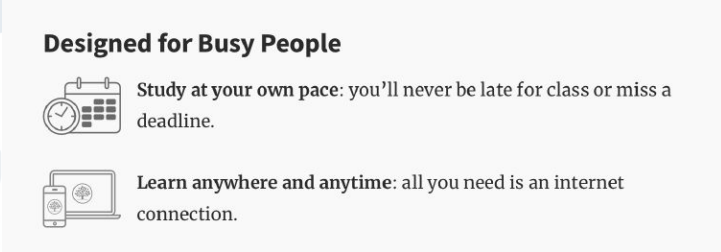
as they perceive elements with similar characteristics as a group.



Picture 2.25 Similarity
Source: https://www.interaction-design.org/literature/topics/gestalt-principles#11._symmetry_and_order-13

3) Proximity

Proximity refers to the principle of grouping design elements based on closeness. When elements are placed close to each other in a composition, it draws the viewer's eye towards a central focal point. In web design, placing headings, paragraphs, and relevant images closely together will help the users in locating the information they need.



Picture 2.26 Proximity
Source: https://www.interaction-design.org/literature/topics/gestalt-principles#11._symmetry_and_order-13

4) Closure

Closure refers to the human tendency to perceive incomplete elements as complete. The implementation of this principle can reduce complexity in a composition by utilising simple yet identifiable elements to communicate information. The logos in Picture 2.16 depict the principle of closure; they consist of incomplete shapes, yet viewers can interpret them.

Picture 2.27 Closure
Source: https://www.interaction-design.org/literature/topics/gestalt-principles#11._symmetry_and_order-13

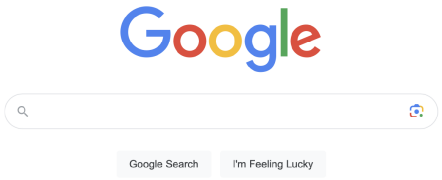
5) Continuity

Humans tend to view objects in a single direction. In Gestalt theory, this principle is referred to as continuity or continuance. The principle of continuity is one of the most common methods used in web design. Elements on websites typically start from the left edge and cascade downwards in a vertical manner.

Picture 2.28 Continuity
Source: Beaird & George (2016)

6) **Symmetry**

The principle of symmetry states that humans tend to perceive elements that are symmetrically arranged as a unified whole. Consequently, the use of a grid system becomes necessary in web designs. Grid systems facilitate the placement of design elements in a symmetrical manner.



Picture 2.29 Symmetry
Source: https://www.interaction-design.org/literature/topics/gestalt-principles#11._symmetry_and_order-13

2.2 Interactive Information Media

Interactive design and information design are different fields of design. According to Wright's (1960) media function classification, information media serves to deliver information on current events and conditions, as well as to foster progress and innovation in society (as cited in McQuail & Deuze, 2020). Along with this, Landa (2010) highlighted that information media should have the ability to present complex information in an easily understandable way. The diverse categories of information media include print, information graphics, interactive, environmental, and transformative designs (Baer, 2021).

Expanding on the notion of interactive information media, Landa (2010) defined interactive design as the design of screen-based media that involves user engagement. Creating an interaction design means designing experiences that facilitate individuals in their work, communication, and interaction. A good interaction design is one that has both good utility, meaning it meets users' needs,

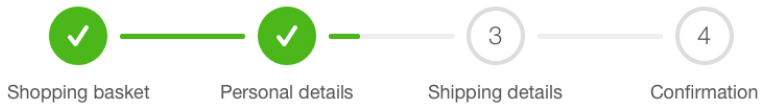
and good usability, meaning it is easy to use (Komninos, 2020). The interface of interactive media can vary depending on the platform used—mobile, PC, tablet, or wearable device; however, this chapter will focus on the interfaces of websites.

2.2.1 Heuristics Theory

Nielsen (2024) established ten principles for interaction design. These principles are known as usability heuristics, which are used as rules of thumb to design interfaces. The ten usability heuristics are:

1) **Visibility of System Status**

The first heuristic explains that a product should keep the users informed of the current status. This can be achieved by providing appropriate and timely feedback. For instance, changing a button's colour when clicked, or adding a progress indicator for tasks that require more time to complete.

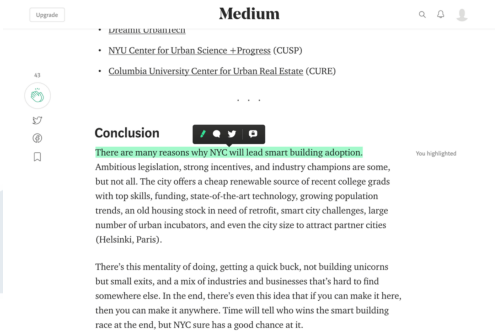


Picture 2.30 Visibility of System Status
Source: https://uxplanet.org/progress-trackers-in-ux-design-4319cef1c600

2) **Match Between the System and the Real World**

The choice of words, phrases, and concepts in a design should be familiar to the target users. To help users understand the content of a design efficiently, it is also possible to incorporate objects that resemble real-world objects and align with the users' expectations. For instance, a mobile application named Compass has a similar function to a real compass. The second heuristic applies not only to language and objects but also to interactivities between the product and the users. For example, highlighting

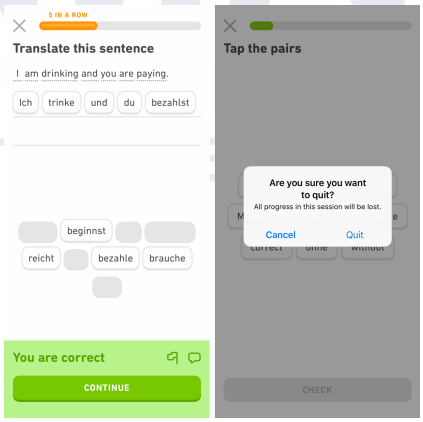
words on Medium resembles the real-world experience of using a bright-coloured marker to highlight important text in a book.



Picture 2.31 Match between System and the real world
Source: https://www.nngroup.com/articles/match-system-real-world/

3) User Control and Freedom

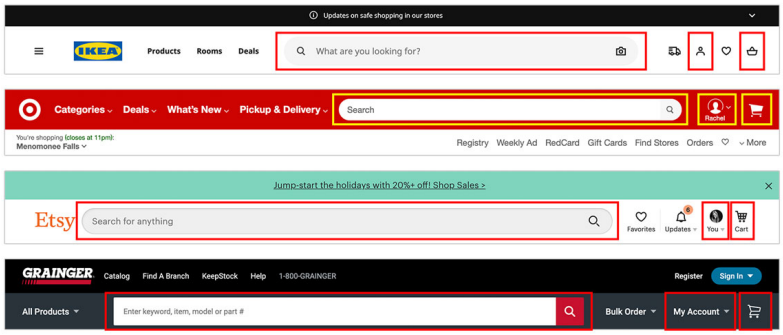
Oftentimes, users perform actions by mistakes or change their minds while doing tasks. Therefore, a great product should ensure that users feel they have control over the system they are interacting with. Users should have the option to exit a process or an unwanted state. This can be achieved by providing a *back* button that links to a previous state or a *cancel* button that allows the user to back out of a process. To avoid users feeling uncertain, a *cancel* or *close* button can include a confirmation dialog, ensuring that they intends to exit the process.



Picture 2.32 User Control and Freedom
Source: https://www.nngroup.com/articles/cancel-vs-close/

4) Consistency and Standards

Consistency is essential for minimising the learning curve of a product, allowing users to focus on its content and services. A good product should maintain consistency both internally and externally. Internal consistency refers to consistency within a product or a family of products, such as Microsoft Office. Internal consistency should be applied not to visual elements but also to page layout, buttons, and content. Conversely, external consistency refers to the common standards that are widely used across an industry. To illustrate, in e-commerce websites, external consistency means that similar features, such as search bars and shopping cart buttons, function consistently across different brands.

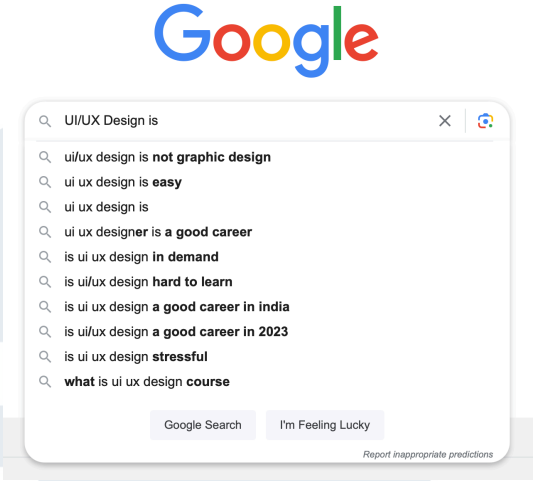


Picture 2.33 Consistency and Standards
Source: https://www.nngroup.com/articles/cancel-vs-close/

5) Error Prevention

Users can make errors consciously and unconsciously when interacting with a product. There are two types of errors that users can make: Slips and mistakes. Slips, or unconscious errors, refer to errors that happen when users intend to do one action but end up doing another. Conversely, mistakes happen when the user's mental model or understanding of a product does not align with how it actually works. While it is necessary to add error messages, a good product should prevent errors from happening. There are

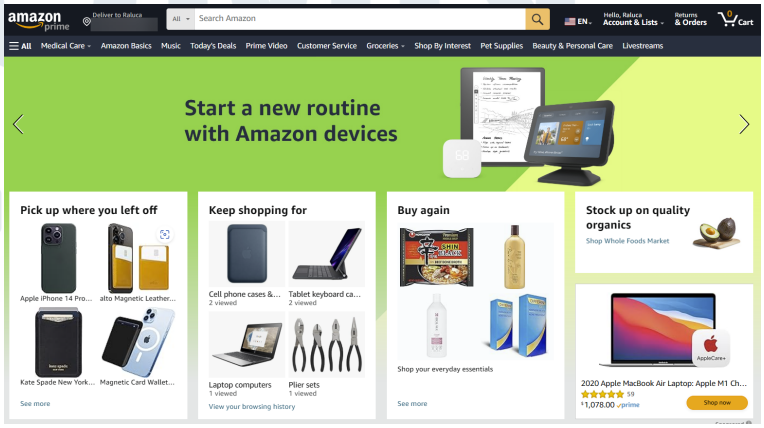
numerous ways to prevent users from making errors as suggested by Laubheimer (2015), such as offering suggestions on search bars and adding default options to provide guidance to users.



Picture 2.34 Error Prevention

6) Recognition Rather than Recall

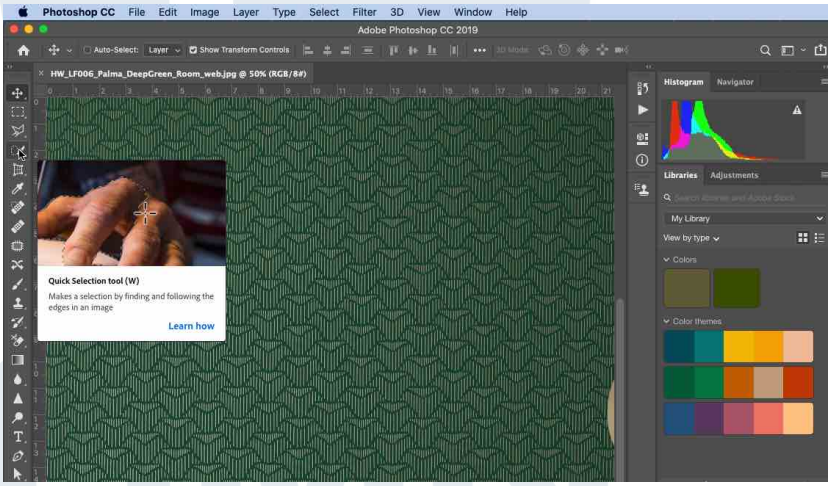
Humans' short-term memory has a limited capacity. Therefore, user interfaces should promote recognition. Recognition involves more visual cues linked to the user's memory than recall does. An example of recognition is the lists of items users have recently viewed on e-commerce websites.



Picture 2.35 Recognition Rather than Recall
Source: https://www.nngroup.com/articles/recognition-and-recall/

7) Flexibility and Efficiency of Use

Users of a product can be divided into two categories: Experienced users and inexperienced users, each with different needs. Users who are new to a product commonly need direction when using a product because they have not developed a mental model of how the product works. Conversely, more experienced users typically use shortcuts while doing their tasks. Therefore, a good product should cater to users with a wide range of competencies. For instance, incorporating keyboard shortcuts next to menu commands to help advanced users complete tasks faster, without confusing new users.

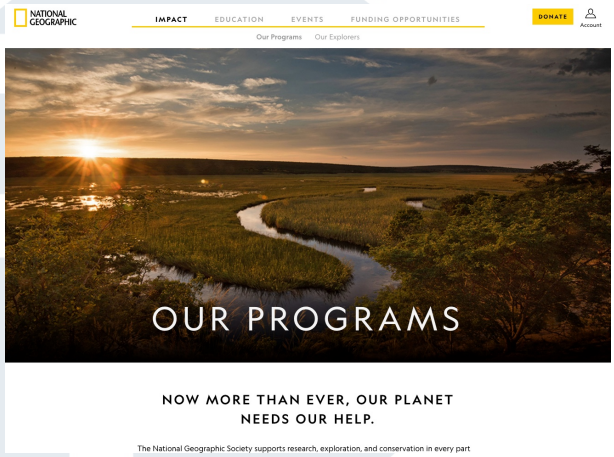


Picture 2.36 Flexibility and Efficiency of Use
Source: https://www.nngroup.com/articles/flexibility-efficiency-heuristic/

8) Aesthetic and Minimalist Design

Visual design plays an important role in forming users' first impressions. Therefore, a product should strive to be both useful and aesthetically pleasing, as emphasised in the first heuristic. Aesthetic designs are often considered as easy to use. Furthermore, consistent use of aesthetics can enhance the brand's credibility.

In addition to the first heuristic, the second heuristic suggests that a product should maintain a minimalist interface design. Minimalism in design does not always call for a clean and uncluttered look. Instead, it means that visual elements should be intentionally placed to prevent distractions and enable users to focus on the necessary content.



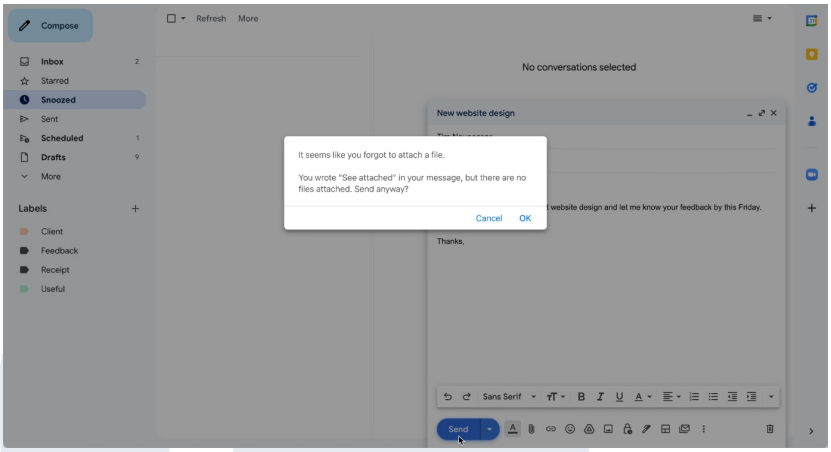
Picture 2.37 Aesthetic and Minimalist Design
Source: https://www.nngroup.com/articles/aesthetic-minimalist-design/

9) Help Users Recognise, Diagnose, and Recover from Errors

As aforementioned, users often make errors when interacting with a product. The ninth usability heuristic refers to the importance of good error messages. Neusesser & Sunwall (2023) suggested three key guidelines for error messages: Visibility, communication, and efficiency guidelines.

Visibility guidelines outline that error messages should be easily recognised by users. This can be achieved by using red colours to indicate mistakes. The second guideline is communication. Communication guidelines explain that error messages should be concise and use language that is familiar and nonjudgmental to the users. The third guideline, efficiency, outlines that users should be able to quickly fix the errors. This can be achieved by providing feedback when errors occur as well as offering

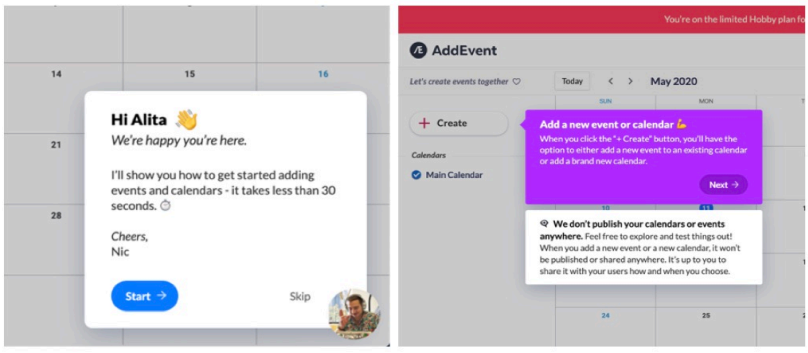
solutions to resolve the errors. The picture below illustrates an error message that follows efficiency guidelines by detecting common mistakes and providing warning messages.



Picture 2.38 Help Users Recognise, Diagnose, and Recover from Errors
Source: https://www.nngroup.com/articles/error-message-guidelines/

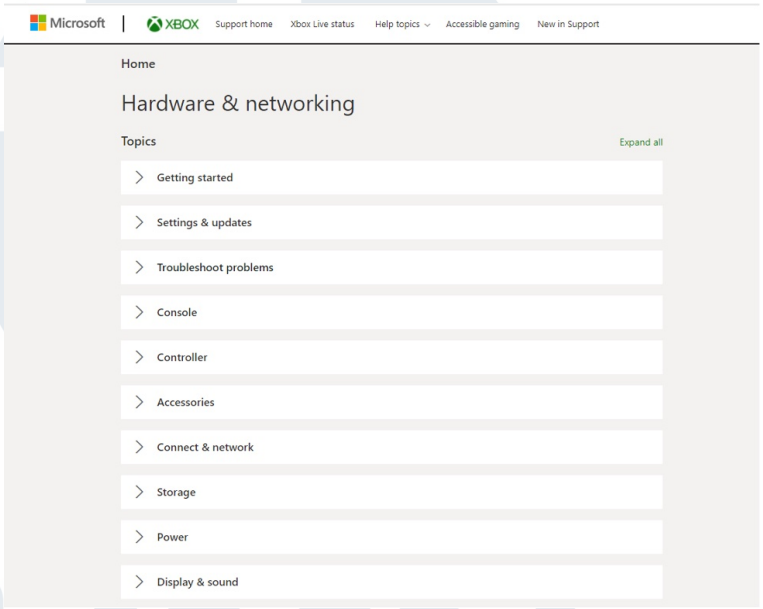
10) Help and Documentation

The tenth usability heuristic refers to the importance of providing help documentation in a product. There are two types of help in digital products, such as websites and applications, namely proactive help and reactive help. Proactive help aims to familiarise users with an interface to prevent issues. It can take the form of onboarding tutorials, templates, and tooltips.



Picture 2.39 Proactive Help
Source: https://www.nngroup.com/articles/help-and-documentation/

Conversely, reactive help is provided when the user runs into a problem. The objective of reactive help is to answer questions and solve user problems. Reactive help can take the form of frequently asked questions (FAQs), training modules, and technical documentation or tutorials. While providing help documentation in a product, it is important to keep the message clear and concise.



Picture 2.40 Reactive Help
Source: https://www.nngroup.com/articles/help-and-documentation/

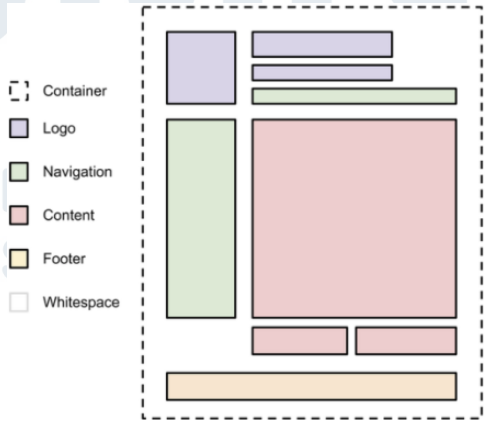
2.2.2 Website

Websites need to be both user-friendly and visually attractive (Rogers et al., 2023). To facilitate website usability, Rogers et al. (2023) highlighted two techniques, namely responsive website design and infinite scrolling. Responsiveness refers to the website's ability to adapt its appearance to fit different screen sizes, while infinite scrolling involves displaying content on a single, endless page (Rogers et al., 2023). Furthermore, Landa (2010) emphasised the importance of well-organised content for website usability. The process of organising the content and flow of the website is known as information architecture (IA).

2.2.2.1 Website Anatomy

Understanding the anatomy of a website is the building block of developing its layout. The components of websites can differ depending on the dimensions and subject matter of the site. According to Beaird & George (2016), there are six primary elements typically seen on websites as follows:

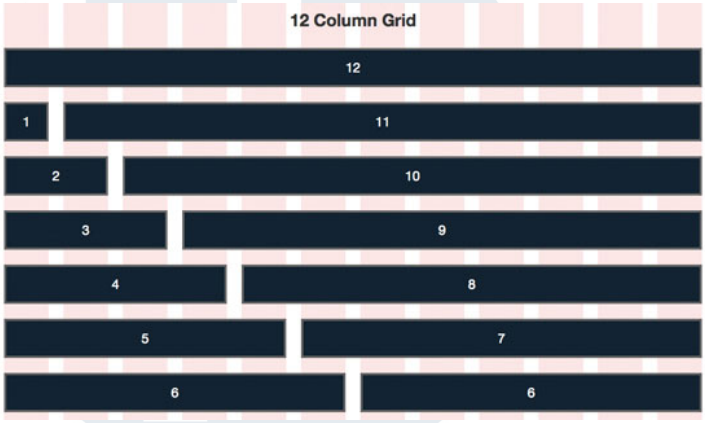
1) Containing block, the place to put the content of the website.
2) Identity block, the place to put the organisation's logo or name, which is typically located at the top of a web page.
3) Navigation, the visual design of information architecture, which is typically located at the top of a web page.
4) Content, the information displayed on a website that can take the form of text, images, or videos.
5) Footer, the bottom section of a web page that typically includes copyright information, contact details, legal notices, and links to the main sections of the site.
6) Whitespace or negative space, the empty area of a web page that is used to allow the visitor's eye to *breathe* as well as to create balance in the overall design.



Picture 2.41 Website Anatomy
Source: https://quo.agency/research/the-saas-footer-and-its-taxonomy

2.2.2.2 Grid System in Web Design

The most used grid system in web design is the 960 Grid System introduced by Nathan Smith (Beaird & George, 2016). This system's column layout is designed to accommodate a width of 960 pixels, which is considered the ideal number for grids. There are three grid variants in this system, which are 12-column, 16-column, and 24-column grid.



Picture 2.42 12-column Grid
Source: https://www.webfx.com/blog/web-design/the-960-grid-system-made-easy/

2.3 Non-Governmental Organisation

A non-governmental organisation (NGO) is a third-sector organisation that provides basic social services or works towards community development (World Bank, 1995). NGOs are also known as third-sector, not-for-profit, and private voluntary organisations. NGOs can operate either through direct involvement with the community or indirectly through partnerships and campaigns (Lewis, 2014). There are two main categories of NGOs according to the World Bank (1995), namely:

1) **Operational NGOs**

   Operational non-governmental organisations (NGOs) primarily focus on designing and implementing development-related projects. This category of organisation typically provides services directly to people suffering from social issues, such as poverty, public health crises, and climate

change. There are three types of operational NGOs based on the operational scope: Community-based organisations (CBOs), national organisations, and international organisations.

CBOs serve a particular community within a small geographical area. CBOs are referred to as "membership" organisations, formed by a group of individuals who share the same interests. Meanwhile, national and international organisations are known as "intermediary" organisations which are formed to serve other people. The difference between these two organisations lies in the level of operation. National organisations carry out operations in individual developing countries, while international organisations operate in many countries, with their headquarters located in developed countries.

2) Advocacy NGOs

Advocacy non-governmental organisations (NGOs) primarily focus on defending or promoting a particular cause. Unlike operational NGOs, advocacy NGOs do not always provide direct services to communities. They typically lobby local governments or civil society organisations to influence policy on a particular topic.

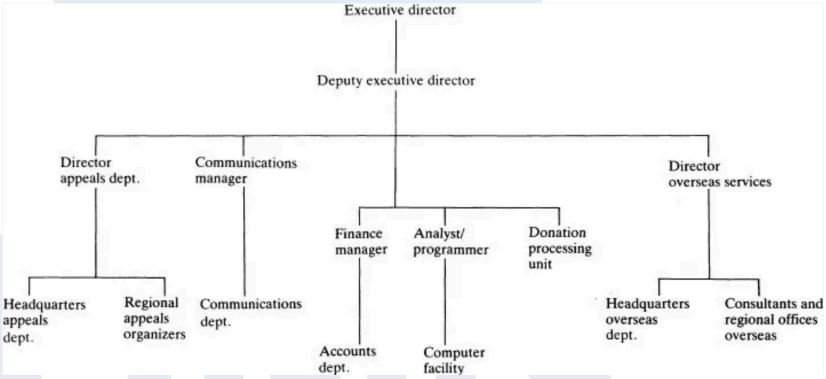
2.3.1 Organisational Structure

The organisational structures of NGOs can vary depending on their size, formality, and whether they are bureaucratic or flexible (Lewis, 2010). In relation to management and decision-making activities, smaller community-based organisations tend to adopt decentralised structures (Claeyé, 2014). Decentralised structures are characterised by their flat structures, where workers from all levels are involved in decision-making activities (Fiol & Lyles, 1985). On the other hand, larger organisations typically adopt centralised structures. Centralised structures are characterised by the presence of different hierarchy levels, where key decisions are made by managers or individuals with higher authority.

In terms of tasks and responsibilities, there are two types of organisational structures according to Butler & Wilson (2015), namely:

1) **Functional Strucutre**

In organisations with functional structures, organisational activities are grouped based on common functions, such as R&D, production, and marketing. Communication within the organisation flows hierarchically from lower-level divisions to managers and executives. Organisations with functional structures are more focused and specialised compared to organisations with divisional structures as each department focuses on its area of expertise (Sebastian et al., 2023). The picture below illustrates a functional structure within an organisation.

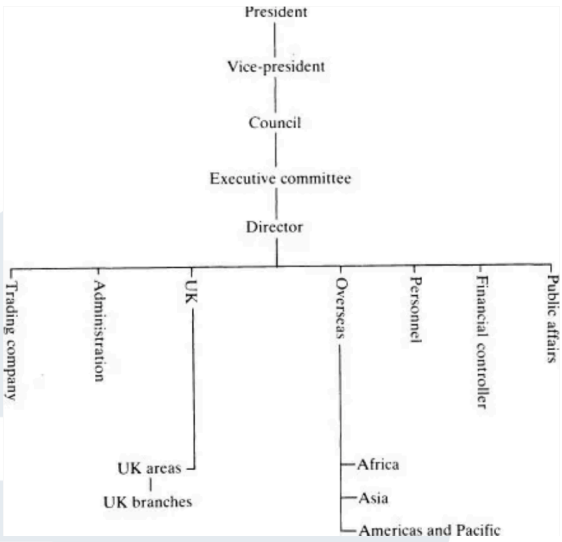


Picture 2.43 Functional Structure of Royal Commonwealth Society for the Blind
Source: Butler & Wilson (2015)

2) **Divisional Structure**

In organisations with divisional structures, organisational departments are grouped according to certain industries, products, and markets. Therefore, divisional structures typically foster broader and multidimensional information processing. Organisations with divisional structures are shown to narrow

perception gaps in executives (Sebastian et al., 2023). The picture below illustrates a divisional structure within an organisation.



Picture 2.44 Divisional Structure of Save the Children Fund
Source: Butler & Wilson (2015)

2.3.2 Organisational Role

In many developing countries, non-governmental organisations (NGOs) play an important role as catalysts for promoting sustainable educational development (Reza, 2022). The catalyst role refers to the ability of an organisation to motivate, facilitate, or contribute to developmental change among other actors, whether at the organisational or individual level (Lewis, 2014). The functions of NGOs can vary depending on the needs of the society they serve. In general, there are three key catalyst roles of NGOs according to Lewis (2014), which are:

1) **Empowerment**

   Empowerment refers to the role of NGOs in addressing power dynamics in the communities they serve. There are three kinds of power according to Friedmann (1992, as cited in Lewis, 2014), which are social—referring to access to knowledge and skills, political—referring to access to decision-making processes, such as voting, and psychological—referring to an individual's self-

confident behaviour. The process of empowering typically involves transforming insight into collective action.

2) **Advocacy**

Advocacy refers to the role of NGOs in influencing public policies. The advocacy role often involves lobbying governments, public sectors, or institutions in social and political aspects. The primary objective is to improve access and voice in the decision-making process for institutional change.

3) **Innovation**

Innovation refers to the role of NGOs in developing alternative approaches to solve local development issues. This includes developing new technologies, creating new management practices, or designing new approaches to learning. An innovation can be considered a success if the practices are implemented, spread, or replicated (Chambers, 1992, as cited in Lewis, 2014).

2.3.3 Funding Source

The funding for non-governmental organisations (NGOs) can differ between each organisation. Some NGOs rely on external funding, while others generate funds internally through fundraising activities or membership fees (Lewis, 2014). Tschirhart & Bielefeld (2012) outlined the most common sources of funding for NGOs, which are:

1) **Government Grants**

Government grants are financial support given by the local government that do not require to be returned. Government grants are usually obtained by competing with other organisations. There are disadvantages to receiving funding from the government, such as reimbursement delays, reporting obligations, and uncertainties that may arise from unpredictable political processes.

2) **Earned Income**

Non-governmental organisations (NGOs) can earn revenue from selling merchandise or services. Funds generated through this activity are known as earned income. For NGOs that focus on job training or skill building, the earned income strategy is considered effective when their product or expertise is in demand and their users are able to pay for it. On top of that, the strategy should align with the organisation's values, potential markets, competitor relationships, and financial stability to ensure long-term success.

3) **Membership Fees**

The membership fees model is typically used by organisations like social clubs, unions, and professional associations. Membership fees often include benefits, such as discounts on programs and merchandise. A well-executed membership fee strategy can foster greater loyalty and retention in members.

4) **Partnerships**

NGOs can make money through licensing partnerships with businesses. When choosing business partners, it is important to choose reliable partners who share a similar level of commitment and whose culture and values align with the organisation's. Two common forms of this strategy are sponsorships and collaborative joint ventures.

5) **Investment Income**

Investment income is the fund generated from the investment of assets. NGOs commonly adopt this approach to use generated returns to support their operations in the long run. When using investment funds, it is necessary to set policies regarding endowment spending minimum.

6) Donations

Donations are voluntary gifts from individuals or organisations that typically come in the form of money. Donors may expect the recipient NGO to provide them with special treatment and protect their interests. Therefore, it is crucial for organisations that depend on donations as their source of funding to implement ethical codes of conduct.

2.4 Gerakan Mengajar Desa

Gerakan Mengajar Desa (GMD) is a non-governmental organisation (NGO) formed in 2018 under the Generasi Sahabat Pendidikan Foundation. GMD was first established in Cianjur, West Java, by a group of young individuals concerned about education qualities in village areas. The organisation then started to spread its wings in the national scope in 2021 and has had around 30 subsidiaries across Indonesia as of 2024.

Picture 2.45 Logo of Gerakan Mengajar Desa (GMD)
Source: https://linktr.ee/gerakanmengajardesa

The organisation's goal is to maximise the enhance the quality in villages in Indonesia through community service initiatives. There are two main work programs, namely *Pengabdian Formal* and *Pengabdian Desa Binaan*. *Pengabdian Formal*, or formal service, focus on improving the quality of education in schools, while *Pengabdian Desa Binaan*, or village development service, has a wider scope, including environmental and economic aspects. These two programs involve Indonesian young individuals to serve as volunteers, which are referred to as *Tutor*

Inspiratif (inspirational teachers). In the implementation of the work programs, GMD has its own "curriculum," which is designed to complement the national curriculum. Since its establishment in 2018, GMD has had approximately 15,000 *Tutor Inspiratif*.

2.4.1 Work Program

Gerakan Mengajar Desa (GMD) has two main programs nationwide, namely the formal service program and the foster village service program. The formal service program focuses specifically on the education quality in villages, while the second one focuses on developing the potential of villages in a wide range of sectors, from the economy to the environmental aspects. Volunteers in this organisation are also known as *Tutor Inspiratif* (inspirational teachers). As for the requirements, the organisation requires only Indonesian citizens aged 17 – 23 years old.

2.4.2 Funding Source

Gerakan Mengajar Desa (GMD) offers fully-funded and self-funded opportunities for volunteers, with the organisation's funding primarily relying on commitment fees from the volunteers. To supplement the current funding, the organisation also explores alternative sources such as sales of merchandise and donors from regional banks. Moreover, the organisation also seeks collaboration with other organisations or businesses; however, GMD has not established any partnerships.