

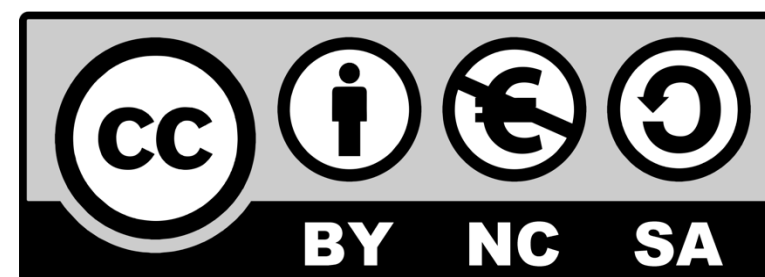
Futures Designed.

Module 2

Designing Advertising Campaigns for the Screen



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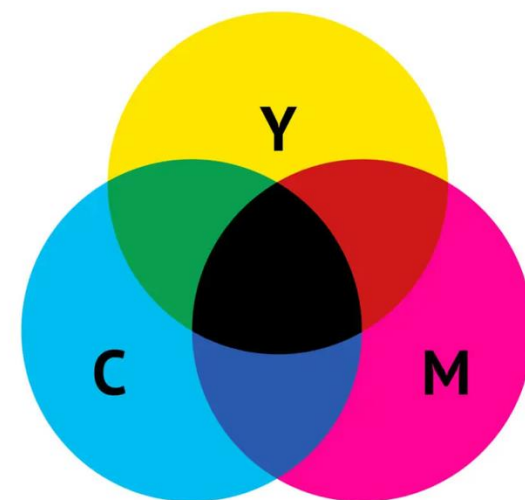
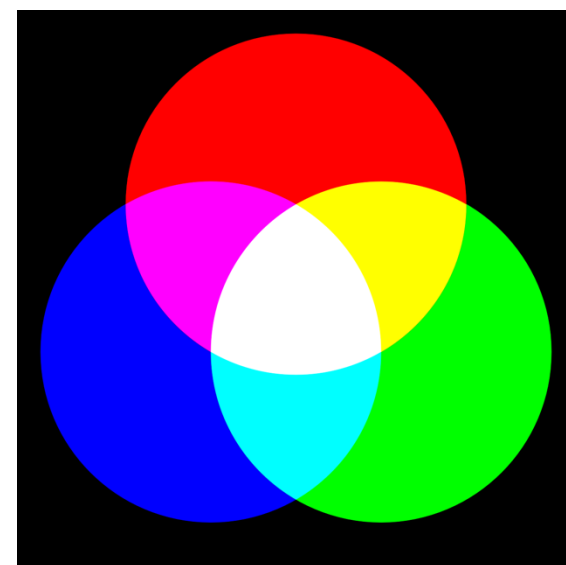


Overview

Designing for screens involves a combination of technical expertise and theoretical understanding. This includes knowledge of screen resolution, color theory, effective sizing principles, and the ability to adapt designs to accommodate various device variations such as desktops, laptops, tablets, and mobile phones. This module aims to equip individuals with the comprehensive information and skills necessary to create visually appealing and functional designs for digital screens.

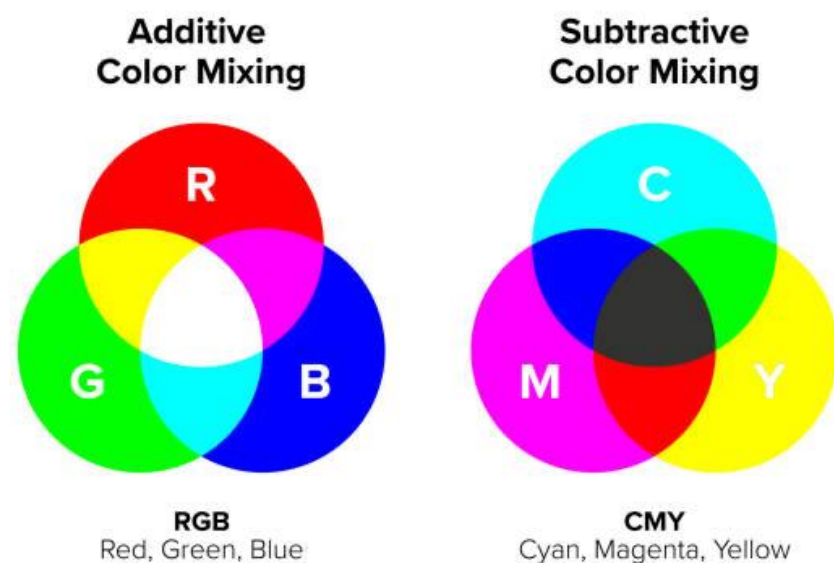
Screen Colour: The on-screen colour models explained

The two primary colour models used in the designing process are RGB (Red, Green, Blue) and CMYK (Cyan, Magenta, Yellow, Key/Black)



Screen Colour: The on-screen colour models explained

RGB colours are used for on-screen display, such as in televisions, computer monitors, and digital cameras. RGB is an additive colour model, which means that the colours are created by adding different intensities of red, green, and blue light. Each pixel on a screen is composed of red, green, and blue subpixels that light up at varying intensities to create a wide range of colours.



Screen Colour: The on-screen colour models explained

On the other hand, CMYK colours are used for colour printing. CMYK is a subtractive colour model, which means that colours are created by subtracting varying amounts of cyan, magenta, yellow, and key (black) ink. When combined at full intensity, these colours create black. When printed on white paper, the overlapping dots of cyan, magenta, yellow, and black ink create different colour combinations. It's important to note that RGB colours appear differently on paper than they do on a screen. Therefore, to accurately reproduce digital images or designs in print, it is necessary to convert the colours from RGB to CMYK



Screen Colour: The on-screen colour models explained

For instance, if you design a graphic for both digital use and print, you will need to convert the colours from RGB to CMYK to ensure that the printed version matches the intended colours. This conversion can be done by adjusting the colour profile in design software or by using an online colour converter tool.

Note that a typical file for print will look like this A4 size (297mmx210mm) 300dpi CMYK colour whereas a file for the screen will be 1080pixelsX1920 pixels 72dpi RGB colour

Screen Colour: The on-screen colour models explained

The RGB colour range encompasses the spectrum of colours that can be produced using the red, green, and blue colour model. Each colour component (red, green, and blue) has a range from 0 (representing black) to 1 (representing white). In the case of 8-bit colour depth, each component's value varies from 0 to 255, offering 256 levels for each colour. This results in a total of 16,777,216 possible colours ($256 \times 256 \times 256$).

Screen Colour: The on-screen colour models explained

In addition to RGB, digital design employs various other colour models, such as HSL (hue, saturation, lightness), HSLA (HSL with an Alpha channel for opacity), and RGBA (RGB with an Alpha channel). Nevertheless, hexadecimal (Hex) values have emerged as the standard for specifying colours in web development because they are represented by digits so they can be easily adopted within web coding. Another reason hex colours are preferred is that the codes behind these colours help websites load faster, ensuring users won't click away from a slow-loading site and that businesses won't lose customers due to poor web performance.

Here is a web link explaining the use of hex colours in more detail:

<https://www.istockphoto.com/blog/best-practices/design/hex-colors-guide#how-do-hex-colors-work>

Digital/Screen Colour Schemes: Importance and Applications

Numerous studies have demonstrated that colours powerfully influence consumers' cognitive and emotional responses. This effect spans various demographic groups and industries, highlighting the significant role of colour psychology in advertising design.

Selecting a colour scheme is a crucial aspect of design, whether it's for a website, digital campaign, or any other visual project. The chosen colours should not only be visually appealing but also reflect the brand's identity clearly and effectively. A well-executed branding strategy is essential for the success of an organization for several reasons. A unique brand identity is like a person with its distinct traits and characteristics, effectively conveying what the organization stands for.

Digital/Screen Colour Schemes: Importance and Applications

It's crucial to develop and integrate this identity into marketing materials and the website, with the colour scheme playing a key role in this process. A captivating colour scheme has the power to capture customer attention and leave a lasting impression, while a poor choice of colours may lead to confusion or disinterest. An effective colour palette not only encourages brand loyalty but also aids in setting the brand apart from its competitors. Brand loyalty is a crucial factor for both companies and customers, as it fosters long-term relationships and trust.

Digital/Screen Colour Schemes: Importance and Applications

Choosing a color for your brand's website or any other digital content involves considering several variables. One major variable you can't control is how your brand colors will look on various screens, given their different settings. New laptops, older devices, desktops, smart TVs, numerous mobile phones, and digital displays can create inconsistencies. A video that seems vibrant on your display might look dull or overly bright on another person's device. This leads to a varying brand experience, so it's important to recognize that discrepancies are unavoidable. Even with the same source material, how it appears on different screens remains unpredictable.

Digital/Screen Colour Schemes: Importance and Applications

As noted previously, properly applying colours and brand assets can be more challenging than expected. A key element of brand identity is often just a flat colour, like Coca-Cola red, used prominently in designs. While in print, maintaining consistency with this official colour is made possible by the Pantone matching system; for digital files, this is managed by using hex format. Hexadecimal codes begin with a # symbol followed by a sequence of numbers representing colour blends. Web designers and internet marketing specialists will tell you that hexadecimal colours are 'web-safe.' This means they consistently reproduce across different Internet browsers and displays, though this is not exactly accurate due to the various screen differences mentioned above.

Here is a link explaining these variables in depth

<https://medium.com/digital-x-brand/nightmares-in-screen-color-2f57fe26e1ed>

Screen Size & Screen Resolution:

Understanding device variations

Screen resolution refers to the number of pixels that make up the images on a display. It is usually represented as a combination of horizontal pixels and vertical pixels, such as 1920x1080, which is a common resolution for desktop monitors. Higher-resolution screens can accommodate more pixels, allowing for a sharper and more detailed display of content compared to lower-resolution screens.

Screen Size & Screen Resolution:

Understanding device variations

Understanding screen resolution and screen size is crucial for individuals working with on-screen media. Screen size refers to the physical dimensions of the display, usually measured in inches. On the other hand, screen resolution refers to the number of pixels that form the display, typically expressed as the width by the height in pixels (e.g., 1920 pixels x 1080 pixels). It's important to note that screen size and resolution are independent of each other, meaning that a larger screen does not necessarily have a higher resolution and vice versa.

Screen Size & Screen Resolution: Understanding device variations

When it comes to choosing the ideal file size & resolution for your digital content, it's crucial to consider the size of the display. Smaller screens can effectively display content with lower resolutions, while larger screens require higher resolutions to maintain image sharpness and visual clarity. This is why both screen size and resolution are important factors to consider when designing for screen display.

Screen Size & Screen Resolution: Understanding device variations

In modern web design, responsive design allows websites to adapt to different screen sizes, ensuring that the same content can be displayed across all devices with different styles based on the available space. Responsive design has become increasingly important with the widespread use of mobile devices for internet access. It has emerged as the standard solution for displaying content across various device sizes and resolutions. Responsive design offers numerous advantages over creating separate mobile website versions, including cost-effectiveness and simplified maintenance.

Screen Size & Screen Resolution: Understanding device variations

Moreover, responsive design has been integrated into web application design, enabling users to access information seamlessly across different devices. Tools like Bootstrap have significantly simplified the process of building responsive web applications, making it easier for developers to create applications that provide a consistent and user-friendly experience across various devices.

Here is a link explaining the use of responsive design:

<https://1902software.com/blog/screen-resolution/>

On-screen File Sizes, Resolution, Format standards, and considerations

Digital images can be encoded using a variety of file types, each with its own unique characteristics. Some of the most common file types for digital images include JPG, GIF, TIFF, PNG, BMP, and RAW. These file types are used to store and display images in digital format, and each has its own advantages and disadvantages

On-screen File Sizes, Resolution, Format standards, and considerations

Understanding the differences between file types and their respective compression techniques is essential for choosing the most suitable format for storing and sharing digital images. Each file type has its own unique features and use cases, and knowing how to select the right format can greatly impact the quality and efficiency of working with digital images.

When compressing data, it's important to understand the distinction between lossy and lossless methods. A lossless compression algorithm preserves all the original data in a file while finding the most efficient ways to represent it without sacrificing accuracy. This means that when the file is uncompressed, it will be identical to the original. On the other hand, lossy compression allows for some degree of data loss to achieve a smaller file size.

On-screen File Sizes, Resolution, Format standards, and considerations

A lossless compression algorithm often involves identifying repetitive patterns within the data and replacing them with shorthand representations, reducing the overall file size without compromising any information. Conversely, a lossy algorithm might achieve file size reduction by storing colour information at a lower resolution than the original image, as the human eye is less sensitive to minor colour changes over short distances.

Understanding the differences between lossy and lossless compression is crucial when choosing the right compression method for specific applications. Each has its own advantages and limitations.

On-screen File Sizes, Resolution, Format standards, and considerations

Images can contain a wide range of colours, with the simplest ones having just two colours, such as black and white, which require only 1 bit to represent each pixel. In the early days of personal computing, many video cards could only support 16 fixed colors. As technology advanced, later video cards were able to display 256 colors simultaneously, selected from a palette of 16 million colours. Today's video cards allocate 24 bits to each pixel, enabling them to display 16 million colours without any limitations. Some high-end displays can even show more than 16 million colours. The term "TrueColor" is often used to refer to images with 24-bit or 16 million colours, as the human eye has difficulty distinguishing between similar colours within this range. Furthermore, advanced modern cameras are capable of capturing an even wider spectrum of colours.

On-screen File Sizes, Resolution, Format standards, and considerations

Various features and purposes are associated with different types of image file formats. The following is a basic overview of the most frequently used formats:

TIFF: A flexible format that's mostly used for lossless storage of images. It doesn't compress files, so they tend to be large. Sometimes a compression algorithm called LZW is used, but not all programs support it. TIFF is the highest-quality output from a digital camera. It offers better quality than JPG but results in larger file sizes. TIFF is best used for editing and manipulating digital images as it prevents degradation with each save. However, it is not recommended for web images due to the large file sizes and compatibility issues with web browsers.

On-screen File Sizes, Resolution, Format standards, and considerations

GIF: Creates a table of up to 256 colors from a pool of 16 million. It can render images with fewer than 256 colors exactly, but for images with many colors, it uses algorithms to approximate the colors with a limited palette of 256 colors. It achieves compression by reducing the number of colors and replacing commonly occurring patterns with a short abbreviation. If your image has fewer than 256 colours and contains large areas of uniform colour, GIF (Graphics Interchange Format) was historically a popular choice for images on the web because of its small file size and ability to maintain high image quality. However, due to its limitation of 256 colours per image, it is not suitable for photographic images that require a broader colour spectrum and higher colour depth. As a result, other image formats like JPEG and PNG have become more popular for photographic images on the web. The only remaining GIF file is intended for use on the animations page.

On-screen File Sizes, Resolution, Format standards, and considerations

PNG is also a lossless format, but it compresses the file size by looking for patterns in the image. The compression is reversible, so the image is recovered exactly. If you have an image with large areas of uniform colour but more than 256 colours, PNG is the best choice. It's similar to GIF but supports 16 million colours instead of just 256. If you want to display a high-quality photo on the Internet without sacrificing quality, PNG is the best option. Modern web browsers support PNG, which is the only lossless format endorsed by web browsers. PNG surpasses GIF in nearly every aspect. It generates smaller files, permits more colors, and supports partial transparency. Partial transparency can be employed for numerous practical purposes, such as fades and antialiasing text (font smoothing).

On-screen File Sizes, Resolution, Format standards, and considerations

JPG: Optimized for photographs and continuous-tone images with many colours. It can achieve high compression ratios while maintaining image quality. The degree of compression is adjustable, and at moderate levels, it's difficult to discern any difference from the original. This is the preferred format for most images found on the internet. You can maintain high quality even with significant compression. When editing, utilize the software's specific format until the work is complete, and then convert it to a JPG. JPEG is the most common file format for storing images on digital cameras. While using TIFF or RAW may enhance image quality, it's often challenging to notice the difference. When capturing images in TIFF, there are two drawbacks compared to JPEG: decreased memory card capacity and longer processing times for transferring images. JPG format is not well-suited for line art because it has difficulty effectively capturing the details of solid colours and sharp edges. In such instances, formats like GIF and PNG are more appropriate.

On-screen File Sizes, Resolution, Format standards, and considerations

RAW: An image output option available on better digital cameras. It's lossless and smaller than TIFF files of the same image. However, there's a different RAW format for each manufacturer, and you may need the manufacturer's software to view the images. If your camera supports RAW, it's like having a digital version of a film negative containing all image data. However, RAW files are not ideal for sharing or printing. It's best to convert them to PNG or JPG. Keep a duplicate in JPG format and avoid relying solely on proprietary formats for long-term storage. While RAW is great for storing images in the camera and for temporary storage on your computer, it's important to create a TIFF, PNG, or JPG for long-term archival storage. Most cameras that support RAW allow you to save images in both RAW and JPG formats, which is recommended. RAW retains all the information captured by the camera and allows for more editing options without degradation compared to JPG or PNG..

On-screen File Sizes, Resolution, Format standards, and considerations

BMP: An uncompressed format invented by Microsoft. There's no good reason to use this format.

When working with graphics programs like Photoshop or Paint Shop Pro, it's important to save your working files in the software's proprietary formats, such as PSD or PSP. These formats retain all the editing capabilities of the programs. However, when you're done editing, make sure to save your final result in a standard format like TIFF or JPG. For web images, the most widely used formats are GIF, PNG, and JPG. Therefore, saving your final images in one of these widely supported formats is best.

Typography fundamentals in design for screens, Font selection and readability

When you look at a webpage or any visual content on a screen, whether on a phone or desktop, you are constantly absorbing the written text. No matter how visually appealing the content may be, it loses significance if the text is not presented in pleasing typography. This aspect is often overlooked in digital design, leading to much on-screen content failing to connect with its intended audiences.

When designing on-screen content, the fundamentals of type and layout are quite similar to those used in print. The major difference is the choice of type families when designing a website; several important considerations should be made when choosing a typeface for a website.

Typography fundamentals in design for screens, Font selection and readability

One crucial consideration is the user's device. It's important to remember that not all devices support or contain the exact typeface used on a website. When this occurs, the device will automatically replace the unsupported typeface with another, potentially leading to unexpected visual results.

Therefore, it's essential to select typefaces that are widely supported across different devices to ensure a consistent and visually appealing experience for all users. For example, using Google Fonts is highly recommended. Additionally, considering fallback fonts(which are used when the current font isn't available) and web font services can help lessen the risk of unexpected visual discrepancies across different devices.

Here is a link explaining why to use Google fonts:

<https://johnwolfecompton.com/10-reasons-to-use-google-fonts/>

Basics of motion graphics & sound

In today's advertising landscape, motion graphics have become indispensable for a variety of purposes, including promoting services and products or creating compelling blockbusters and motion titles. Advertising professionals and companies recognize the critical importance of incorporating motion graphics into their campaigns to distinguish themselves from their competitors.

Examples of successful digital motion advertisements and case studies.

<https://vidico.com/news/video-marketing-case-study/>

<https://www.socialmotionfilms.com/case-studies>

Basics of motion graphics & sound

There is a wide array of software packages, each offering its unique features and capabilities. Given the multitude of options available, making an informed decision about which software best suits individual needs can be a complex and overwhelming task.

Furthermore, it is crucial to understand that motion graphics, despite being impactful, constitute only a single aspect of the overall video production procedure. Apart from motion graphics, graphic designers and digital content creators also need to manage various technical aspects, including video editing, sound design, audio adjustments, color correction, and other enhancements—all of which are essential for producing a refined and professional end product.

Tools and software for motion design

Software like Adobe After Effects, Adobe Premiere, Adobe Photoshop, Blender, Maya, 3D Studio Max, Cinema 4D, Houdini, Da Vinci Resolve, and Motion are some of the most popular motion graphics creator tools.

Here is a link with more details on the above software:

<https://bottlerocketmedia.net/motion-graphics-software-tools-for-design/#:~:text=Adobe%20After%20Effects%20is%20a,illustrator%2C%20offering%20precise%20keyframe%20animation>

Incorporating sound in digital campaigns

Graphic designers and digital content creators often focus primarily on visual elements, but it's important not to overlook the impact of sound and audio enhancement. When utilized effectively, sound has the power to elevate engagement by creating a more interactive and immersive experience for the audience.

Incorporating sound in digital campaigns

Incorporating audio into content engages individuals both visually and aurally, capturing their attention and prolonging their engagement. To effectively integrate sound into motion graphics, it's important to choose the right audio that aligns with the tone, theme, and genre of the content. The choice of audio profoundly affects how audiences interpret and react to visuals. Sound can elicit emotional responses and harmonize with visuals to produce a seamless and consistent flow. It is important for sound and visuals to work together in order to enhance storytelling, message delivery, and emotion evocation. Hence, aligning them in timing, rhythm, and intensity is vital, making careful selection of audio imperative. This heightened level of engagement can lead to increased brand awareness and better retention of the message.

Incorporating sound in digital campaigns

Research has shown that including audio elements in advertising can significantly improve ad recall compared to ads that rely solely on visual components. Therefore, integrating sound and audio enhancement into digital content and graphic design can have a substantial impact on audience engagement and message retention

Examples and case studies of effective sound design in advertisements and digital interfaces.

<https://fastercapital.com/topics/successful-audio-branding-campaigns-from-top-brands.html>

<https://www.wearepowerhousestudios.com/the-power-of-sound-design-in-tv-ads/>

<https://educationalvoice.co.uk/sound-design-in-commercial-animation/>

<https://sonicminds.dk/the-role-of-sound-design-in-crafting-memorable-products/>



