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# Information design, UX, UI, and marketing design QR Code

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Information design, UX, UI, and marketing design QR Code

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#### Abstract

The practice of displaying data in an understandable, useful, and accessible way is known as information design. The current term for a branch of graphic design focused on information delivery is information design. Data visualization, communication design, and information architecture are all closely related to information design. Technical communicators and graphic artists, for example, who are particularly engaged in diagramming and presenting quantitative data, use the phrase "information graphics". Information design, as used in technical communication, is the act of creating an information structure with a particular audience in mind. This means choosing material and organizing it into several guides based on the topic, target audience, goal, illustrations, and citations. Experts in graphic design refer to one another as "information designers."

Keywords: QR code, information design, user experience, UX design, user interface, UI design, marketing design, digital marketing, mobile technology

#### Introduction

Providing individuals with pleasant digital experiences requires the integration of information design, user interface (UI) design, marketing, and user experience (UX) design. Clear, visually acceptable data presentation and organization are the goals of information design, which aims to increase understanding. Typeface, color, and layout should be used as navigational aids for users, and the content should be logical and user-organized to do this. On the other hand, the goal of user experience (UX) design is to facilitate easy and enjoyable user interaction with software or products. This means designing interfaces that are easy to use and intuitive while also taking into account the needs, habits, and preferences of the user.

To attract new clients and promote goods and services, marketing is essential. QR codes are matrix barcodes that are increasingly being utilized in marketing campaigns. They may be scanned with a smartphone camera to access websites or information. QR codes are used to lead visitors to websites or social media pages, offer further information or discounts, and can be found on print materials, packaging, and digital platforms. When utilizing QR code marketing, information design standards should be taken into account to guarantee that the content is comprehensible and easy to read.

User interface design concepts to create a visually beautiful and user-friendly QR code, and UX design principles to ensure a seamless scanning procedure. By incorporating these design aspects into marketing QR codes, businesses can create engaging and effective marketing campaigns that attract their target demographic and promote user interaction.

#### The following are some essential elements of graphic design information design:

1.1 Visual Hierarchy: To direct the viewer's attention across the text and highlight important areas, information designers establish a visual hierarchy. To do this, utilize a variety of font sizes, weights, colors, and spatial arrangements to draw attention to key material and create an organized flow of writing.

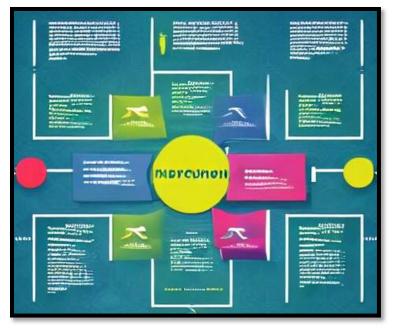


Fig 1 Visual Hierarchy

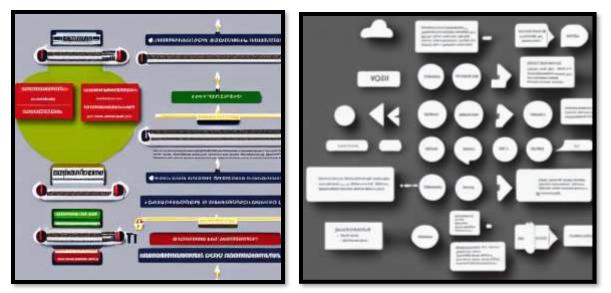
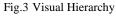


Fig.2 Visual Hierarchy



1.2 Data Visualization: To convey data and complicated information in a more readable and visually attractive fashion, information designers employ a variety of visual representations, including charts, graphs, diagrams, maps, and infographics. Users may more quickly see patterns, trends, and correlations within the information with the use of data visualization tools.



Fig.1 Data Visualization

Fig.2 Data Visualization

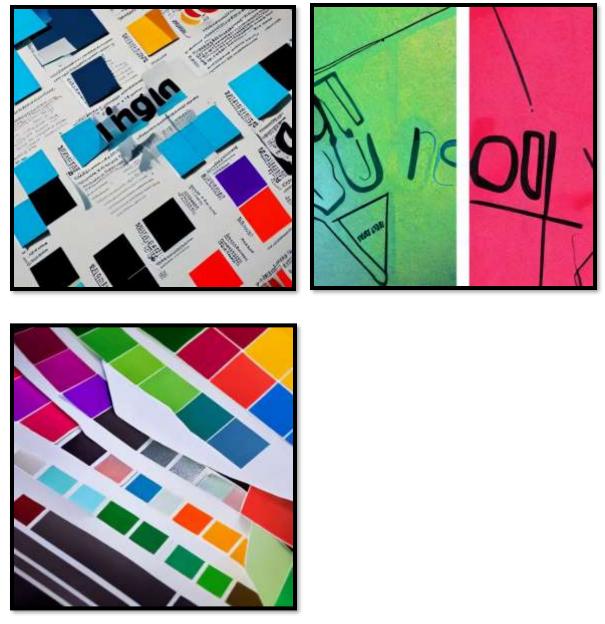
1.3 Typography: Because font selection may impact readability, emphasis, and overall visual appeal, it is important in information design. Information designers take into account elements like hierarchy, contrast, and consistency in typography usage when choosing typefaces, in addition to making sure the fonts are readable and suitable for the content.



1.4 Color and Contrast: Color is an effective information design technique that may be utilized to identify pieces, improve the visual hierarchy, and provide visual appeal. Information designers use color theory to produce contrast between pieces, create aesthetically pleasing color schemes, and elicit certain feelings or connections with the material.



1.5 Layout and Composition: Information is arranged logically and intuitively through the thoughtful arrangement and composition of visual components. Information designers efficiently arrange material and create a coherent visual narrative that promotes comprehension through the use of grid systems, alignment, spacing, and visual balance.



1.6 Interactive Design: Information designers include interactive elements and user-friendly interfaces in interactive graphic design to captivate viewers and improve user experience on websites, applications, or digital presentations. Users are encouraged to dynamically explore material, engage with the information, and customize their viewing experience through interactive components.



In general, information design in graphic design is concerned with the deliberate and strategic placement of visual components to efficiently and succinctly communicate information. Through the integration of visual hierarchy, data visualization, typography, color, layout, and interaction, graphic designers may produce visually stimulating and educational designs that captivate viewers, effectively convey messages, and improve the user experience in general.

2. UX (User Experience): The goal of UX design is to give people satisfying and enjoyable interactions with goods, services, or systems. To create intuitive and fulfilling experiences, UX designers take into account the demands, behaviors, objectives, and emotions of the user. This covers features like usability, accessibility, simplicity of use, and the whole satisfaction a user gets from interacting with a good or service.



3. UI (User Interface) design: This field of study focuses on the interactive and visual elements of digital products, such software interfaces and websites. Interface designers create visually beautiful, intuitive, and user-friendly interfaces. In order to produce a unified and aesthetically beautiful user interface, they concentrate on components like layout, typography, color schemes, buttons, icons, and other interactive elements.



4. Quick Response Code (QR): A QR code is a kind of two-dimensional barcode that can be scanned with a QR code reader or smartphone to get information. QR codes are frequently used to connect tangible items or printed documents to digital content, including webpages, contact details, advertisements, and multimedia files. With only a fast scan, they provide a rapid and practical method to interact with digital material and obtain information.



All things considered, these ideas come together during the design process to produce usercentered and efficient experiences. Information design, for example, arranges and displays content, UX concentrates on the user's overall experience, UI creates the user interface, and QR codes link digital and physical information.

## Perception and impact of information design, UX, UI, and QR code

The impression of QR codes, information design, user interface (UI), and user experience (UX) can all be greatly impacted by many circumstances. The following are some variables that may affect how users view these elements:

1. Context: Users' perceptions of information design, UX, UI, and QR codes can be significantly impacted by the context in which they are presented. Users dealing with a website on a desktop computer could anticipate and desire different things from those interacting with it on a mobile device. Similar to this, users' perceptions of the information they receive can be affected by the setting in which QR codes are read, such as a busy event or a peaceful library.

2. Visual appeal: Users' perceptions of information, UX, UI, and QR codes are greatly influenced by their visual design. While poorly designed designs can cause confusion and annoyance, aesthetically beautiful designs can improve usability and engagement. Users' interactions with and interpretations of digital material can be influenced by several factors, including color, font, and layout.

3. Functionality: A digital experience's usability, which includes QR code efficacy and UI element usability, may have a big influence on how users perceive it. A favorable user experience is enhanced by responsive design, intuitive navigation, and clear labeling. When consumers come across obstacles like malfunctioning links, sluggish loading speeds, or challenging QR code scanning, their impression of the design and usability could be adversely impacted.

4. User expectations: How users view information design, UX, UI, and QR codes can be influenced by their prior experiences and expectations. For instance, people could have higher expectations for digital experiences if they are used to frictionless interactions with attractive websites and applications. On the other hand, consumers may approach new interactions with mistrust if they have already encountered unpleasant encounters with unclear interfaces or broken QR codes.

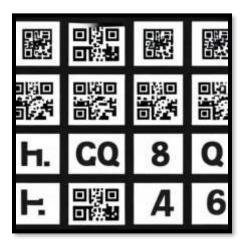
5. Accessibility: Taking into account accessibility factors, such as creating material for users with impairments or adding alternative language to QR codes, can affect how people view and engage with digital content. Ensuring that all users have access to and can interact with the information offered is possible by designing with inclusiveness in mind.

In conclusion, consumers' perceptions of information design, UX, UI, and QR codes can be influenced by a variety of factors, including accessibility, user expectations, visual appeal, usefulness, and context. In order to create digital experiences that successfully transmit information, offer a favorable user experience, and meaningfully engage people, designers must take these things into account.

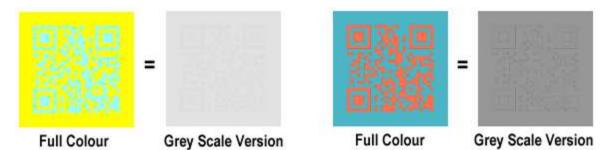
### Integrate the QR code.

Incorporating QR codes into UI design requires careful consideration to maintain visual consistency. You may effectively use QR codes in UI design by using the following advice:

1. **Placement:** Ensure that the QR code is positioned inside the interface in a way that both makes it visible and doesn't interfere with the overall visual flow. Consider locations such as corners, edges, or designated areas for further information or follow-up tasks.



- 2. Size and Visibility: Verify that the QR code can be seen clearly and is large enough to scan without being overly noticeable. The code should be easily legible and identifiable, even from a distance. Avoid making it too large or little as this might reduce its usefulness. Make sure the QR code is large enough to be easily scanned. A general rule of thumb is to ensure the QR code is at least 2 x 2 cm (0.8 x 0.8 inches) in size.
- 3. **Contrast and Color:** Maintain a sharp contrast between the QR code and its surrounds to ensure readability. Use colors that complement the overall color pattern of the UI design to ensure that the QR code stands out. To get the perfect harmony, experiment with different color combinations.



- 4. **Visual Integration:** To attain visual harmony, consider integrating the QR code into the overall design style. This can be accomplished by utilizing stylistic components that go well with the overall design concept or by ingeniously integrating the code into a relevant graphic element.
- 5. **Call to Action:** Clearly state the purpose of the QR code in a brief and straightforward call to action. Use language or images, for example, to draw readers in and encourage them to scan the code for more details or to reach a certain function.



6. **Testing and Feedback:** Make sure the installation of QR codes doesn't adversely affect the overall usability or visual appeal by prioritizing user testing and gathering feedback. Depending on user feedback, the location, size, color scheme, and overall integration of the QR code may all be enhanced through iterative design.



To improve the user experience rather than cause distractions, keep in mind that the aim is to smoothly integrate the QR code into the UI design. You may successfully include QR codes into your UI design while preserving visual harmony by using these pointers and keeping in mind the general design rules.

## What's an example of a well-designed UI that makes use of QR codes?

Of course! An instance of a user interface design that skillfully incorporates QR codes is the financial institution's mobile banking application. In this case, QR codes are seamlessly included in the UI design to give consumers a quick and safe method to get more information or complete transactions.

Here's how to successfully use QR codes in the UI design:

1. Login and Authentication: Users may be able to utilize a QR code to log in using the mobile banking app. Users can securely authenticate their identity by scanning a QR code presented on the bank's website or branch, as an alternative to manually inputting their login and password.

2. Transaction Verification: Users can utilize a QR code to confirm sensitive operations, such as money transfers or payment transactions. Users may safely confirm and authorize the transaction by using their mobile device to scan a unique QR code generated by the app for the transaction information.

3. Account Information Access: Customers may obtain comprehensive account information or statements quickly by using QR codes. Instead of having to go through several screens in the app, users may check their transaction history, account balance, or other financial facts by scanning a QR code that is printed on a bank statement or sent to their phone.

4. Branch Locator and Contact Information: The app may have a function that lets users instantly access branch contact details, location maps, or exclusive deals by scanning QR codes on advertising materials or at actual branch locations. Users may easily locate neighboring branches and obtain relevant information while on the go thanks to this connection.

5. Promotional Campaigns: Marketing materials or promotional campaigns inside the app may use QR codes that the UI design incorporates. Users can access special deals, discounts, or incentives by scanning QR codes on adverts, merchandise, or documents related to loyalty programs. This increases user engagement and encourages interactions with the app.

Overall, consumers have a quick, easy, and safe method to obtain information, confirm transactions, and interact with the financial institution's services thanks to the seamless integration of QR codes into mobile banking apps' user interface designs. Through the efficient use of QR codes, the software improves customer pleasure and loyalty by encouraging user involvement, streamlining interactions, and improving user experience overall.



Are QR codes particularly useful in UI design for any particular sectors or use cases?

Yes, there are several industries and use cases where QR codes are particularly effective in UI design. Some of these industries and scenarios include:

- 1. Retail and E-commerce: Product descriptions, prices, discounts, and promotions may all be found via QR codes in the retail sector. Consumers may access product details, reviews, and purchasing information by scanning QR codes found on product packaging or in-store displays. Additionally, contactless payments and the ability for customers to swiftly add things to their shopping cart for online transactions are made possible by QR codes.
- 2. Hospitality and Travel: By making hotel information, room keys, check-in and check-out processes, restaurant menus, and concierge services easily accessible, QR codes in this industry help expedite client experiences. QR codes can also be used for digital boarding tickets, travel itineraries, and booking confirmations by airlines, rail stations, and automobile rental firms.
- 3. Healthcare and Pharmacies: By facilitating quick access to patient data, prescription information, appointment scheduling, and health education materials, QR codes can improve patient care and safety in healthcare settings. On pharmaceutical packaging, QR codes can provide patients with safety advice, medication interactions, and dose directions.
- 4. Marketing and Advertising: Using QR codes to track campaign effectiveness, engage audiences, and encourage conversions is a smart marketing and advertising strategy. Businesses may give easy access to promotional discounts, movies, surveys, and product information by embedding QR codes into print advertising, billboards, flyers, and online content.
- 5. Events and Ticketing: To expedite participant registration, access control, and ticket validation, QR codes are frequently utilized in event management and ticketing. Event

planners can create distinctive QR codes that guests may scan at entrances, monitor attendance, and provide customized event experiences.

6. Education and Training: QR codes can make it easier to access online resources, interactive tests, instructional films, and digital learning materials in the education and training industry. QR codes may be used by educators to improve student engagement in the classroom, give prompt feedback, and facilitate self-paced learning.

For the most part, QR codes may be efficiently incorporated into UI design in a variety of fields and use cases to improve user experiences, expedite procedures, and offer insightful data and interactions. Businesses and organizations may use QR codes to increase productivity, tailor experiences for their target audiences, and maximize user engagement. QR codes are versatile and convenient.

Using QR codes to improve the entire visual experience may be done in a variety of inventive ways, as these examples show:

1. Interactive Menus: QR codes have becoming more common on menus at cafés and restaurants. The menu is available on clients' cellphones by scanning the QR code, in place of traditional paper menus. This facilitates simple menu changes and personalization in addition to lowering physical touch.



Fig. Qr-code-print

Fig Qr-code-print-example

2. Design and Art: QR codes have been used by designers and artists in their designs and artworks. A layer of interaction and engagement is added when viewers scan these QR codes to be taken to extra information, movies, or interactive experiences relating to the artwork.

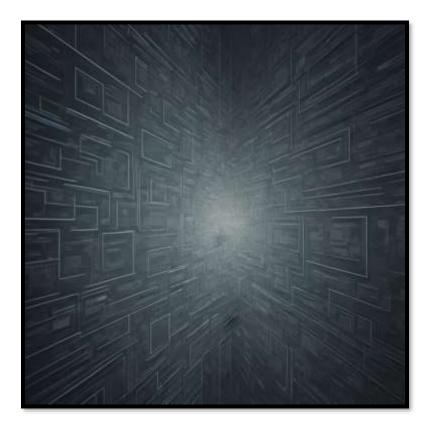




3. Marketing Campaigns: To engage people, marketers have cleverly incorporated QR codes in their campaigns. One way to improve the user experience is by using QR codes integrated in outdoor ads or product packaging. These codes can direct consumers to unique content, contests, or special deals.



4. Learning Resources: To give students access to more information or interactive items, QR codes are frequently utilized in learning resources. Students might access pertinent videos, articles, or quizzes to enhance their study by scanning a QR code in a textbook, for instance.



5. Product Packaging: To enable consumers access to customer support services, use guidelines, and product information, brands have begun putting QR codes on product packaging. By offering practical and conveniently available information, this improves the user experience overall.



6. Event Tickets: QR codes are becoming a well-liked option for event tickets. Instead of bringing paper tickets, attendees may check in more quickly by just scanning the QR code with their smartphone at the event entry.



7. Augmented Reality (AR): To create immersive and engaging experiences, QR codes are occasionally combined with AR technology. When a QR code is scanned, an augmented reality overlay may appear, offering further details or a virtual experience linked to the real world.



7. Business Cards: Some professionals have started utilizing QR codes on their business cards in place of conventional paper cards. Receivers may communicate with you more easily by scanning the QR code, which might take them to their contact details, portfolio, or website.



From improving the overall visual experience to offering customers more value, these examples show how QR codes may be ingeniously incorporated into user interfaces.

## **Design for Marketing**

Design is essential to marketing because it can capture, hold, and impact consumers' attention. Several design areas for marketing address aspects of branding and visual communication. Common categories consist of the following:

1. Brand Identity Design: This entails developing a visual identity for a company that conveys its essence, values, and personality. Creating logos, color palettes, typography, brand standards, and other visual components that support brand differentiation and establishment in the eyes of customers are all included in this.

2. Package Design: The goal of package design is to make items' packaging both aesthetically pleasing and useful. Products may stand out on the shelf, communicate important information to customers, establish brand awareness, and improve the whole product experience with well-designed packaging.

3. Print Design: The print design includes a broad variety of printed items including business cards, flyers, posters, brochures, and stationery that are used for marketing. Layout, typography, photography, and color selection are all used in print design to produce aesthetically pleasing and educational printed products that successfully convey a brand's message.

4. Digital Design: Creating visual components for digital platforms including websites, social media, email marketing, and digital ads is referred to as digital design. To draw in and keep online audiences interested, digital design prioritizes producing user-friendly interfaces, captivating visual content, and consistent branding throughout digital platforms.

5. Advertising Design: The goal of advertising design is to provide eye-catching images for campaigns that are promoted through print, internet, broadcast, and outdoor media. The objectives of advertising design are to draw in viewers, convey important ideas, and inspire buyers to act.

6. Environmental Design: Creating a consistent brand experience via the design of physical locations and experiences is known as environmental design. This entails creating physical spaces such as retail storefronts, trade show booths, events, signage, and other venues that represent the brand's identity and meaningfully interact with consumers.

7. Motion Graphics and Animation: To produce dynamic and captivating material for social media, digital advertising, presentations, and video marketing, motion graphics and animation combine moving images, visual effects, and sound. Marketing campaigns may benefit from the use of motion graphics and animation to improve narrative and breathe life into static design components. Every one of these design categories has a special function in marketing, serving to engage consumers, convey brand messages, and produce lasting impressions. Marketers may successfully convey their brand identity, draw in target audiences, and produce commercial outcomes by utilizing effective design tactics in these areas.

Equally important are some other factors that influence marketing design, as we can enumerate below:

- The medium that advertises.
- What Role Does Media Advertising Play?
- YouTube and TV commercials with videos
- Benefits of Video: Promotion on the Web and TV
- Drawbacks of Video: Internet & TV Commercials
- Radio and podcast advertising's drawbacks

Advertising media is any mass media or alternative media platform that allows businesses to publicize their products, services, or brands. Getting a competitive advantage may mostly depend on determining which advertising media outlets are best for your company, as not all customers may be aware of every brand's offerings.

#### What Role Does Media Advertising Play?

When marketers use the right sort of advertising medium, they may engage with different audiences in novel ways. Social media, for example, encourages people to strike up discussions, whereas television only permits one-way communication. The channels that offer the most benefits at the lowest relative cost are the ones that media strategists need to pay close attention to. Every advertising media should be chosen with the campaign's goals—like raising brand awareness or boosting direct sales—in mind, as well as the channel's ability to reach the desired market. Before airing any commercials, media planners must choose the overall objective and course of action for their media campaign. It's crucial to consider the pros and disadvantages of each type of advertisement to maximize campaign effect and optimize media placements. Consider the benefits and drawbacks of these five well-known media outlets:

#### YouTube and TV commercials with videos

The Popularity Marketing of Television and Mass Media - One of the most popular media platforms for marketing today is television, particularly with the introduction of linked TV advertising, which employs viewer data to enable more precise segmentation. YouTube and online video have helped video commercials transcend traditional cable boxes as well. Media planners may target consumers online by putting their ads on many websites.

#### Benefits of Video: Promotion on the Web and TV

Visual and auditory aspects are combined in television. By doing this, you provide them a multisensory marketing experience that highlights the benefits of your product. Additionally, television may foster the development of personal connections with viewers. One of the best mediums for increasing brand recognition is television. When brands combine the reach of YouTube with television advertisements, they stand to gain from consumers seeing their commercials long after they have aired. Nonetheless, brands need to make sure that their message is understood.

A commercial will never go viral if it doesn't connect with viewers. It might be beneficial to run advertisements on YouTube itself in addition to a specific channel. With two billion individuals

logging in to watch videos, demographic data may be combined with the content being viewed to make sure the right people see the right content.

## **Drawbacks of Video: Internet & TV Commercials**

Television advertising may be costly for businesses. The cost of the commercial's creative content production is in addition to the slot. Media planners must forecast which shows in the next several months will attract a larger audience than expected. An estimate that is not accurate might compromise marketing ROI. Furthermore, since television ads frequently receive a lot of attention, bad advertising may drastically harm a company's reputation.

When there are more people viewing an advertisement, it is important to make sure its creative is successful. The tendency of television viewers to fast-forward or ignore ads is one drawback of the medium. Furthermore, not every viewer may fall into the target group you have in mind. Daytime or late-night television may be more cost-effective and focused, whereas primetime television may draw a wider audience. Furthermore, wherever feasible, we advise scheduling live television for your advertising period. Customers won't be able to skip the ad breaks if they want to watch a live sporting event. Radio and Podcast Audio Stations Further demonstrating the financial potential of radio broadcasts, the rise of Internet radio suggests that audio-only advertising will remain popular throughout the digital revolution. Today, traditional radio remains incredibly popular with listeners and marketers alike. In addition, especially when compared, radio is a less expensive medium than television. Radio allows advertisers to regularly interact with consumers without using up all of their funds on more expensive commercials. In comparison to television, radio is a very cost-effective medium. Radio allows advertisers to regularly connect with consumers without using up all of their funds on pricey advertising. It has been demonstrated that combining radio and television commercials can improve listeners' perceptions of a brand. Recent polls indicate that 90% of listeners will stay tuned in during a commercial break. An additional benefit of radio advertising is the opportunity for DJs to sometimes make direct references to the product. A relatively new medium for audio media is podcast advertising. 54% of consumers are more likely to consider a product after listening to a podcast about it. According to estimates, one in four people listen to podcasts, and over the next years, that number is expected to increase. Additional commercials might be beneficial for both podcasts and radio. They frequently establish a strong relationship with their audience since they market using their own words.

#### Radio and podcast advertising's drawbacks

Radio marketers have a big obstacle since listeners frequently become distracted while listening to the radio—they might be driving, shopping, working, etc. Radio can only communicate vocally. This makes it harder to maintain the listener's interest and harder to communicate the message without using a visual medium. Thus, crucial information should be repeated several times in advertisements and made simple to understand. It may also be advantageous to combine one kind of advertising with one that is more visually focused, such as television. Furthermore, since viewers can flip between stations, media managers need to consider when to book the first or last slots after a commercial break.

#### **Social Networks**

One of the newest resources accessible to media strategists is social media. Digital banner advertisements gave way to social media ads, with Facebook serving as the platform for distribution. These days, the majority of social media firms' revenue comes from bringing in new users and targeting them using user data that is already accessible.

#### The Benefits of Social Media Marketing

Social media advertising that is well-targeted may increase brand loyalty and attract new followers. Media planners can use several factors to target viewers, including work title, interests, marital status, past locations, and more. Moreover, social media marketing is quite reasonably priced. Clicks on Facebook often cost twenty-eight cents, but impressions typically cost less than one cent. Social programs may readily be monitored and adjusted throughout their active phase. Media strategists have the option to immediately halt the campaign or reallocate expenditures if one of the advertisements isn't performing. Certain marketing messages are easy to assess for efficacy.

#### Negative Aspects of Social Media Advertising

Targeted advertisements need to adjust to the many social media platforms, each with its own rules and regulations. Although customized advertisements are advantageous to the social network, too detailed or obtrusive marketing may upset or frighten certain users. Because social media is so widely accessible, it is an extremely competitive medium. Businesses must try to set themselves apart from the competition by producing engaging content. It's critical to keep your social media pages updated because a dormant page may turn off potential customers. Keeping up to date is also essential because there are several platforms. New technologies are continuously needed, and alternative media could be more effective for certain audiences.

#### Conclusion

Finally, to create compelling user experiences and successful visual communication, information design, user experience (UX), user interface (UI), and marketing design are all essential components. These fields have a significant impact on how information is displayed, how people utilize digital interfaces, and how people talk about and promote businesses. To improve comprehension and communication, information design focuses on arranging and presenting data in a clear, aesthetically pleasing manner. Understanding user demands, habits, and motivations is the foundation of UX design, which aims to create intuitive and user-friendly experiences. Using a variety of design ideas and strategies, marketing design aims to draw in, hold on to, and convert consumers. It facilitates the successful dissemination of a brand's message, core principles, and products to target markets. With the use of this adaptable tool, customers may quickly access promotions, information, and interactive experiences using QR codes integrated into a variety of design components and marketing materials. Businesses may provide customers with successful and engaging experiences by implementing information design, user experience (UX), user interface (UI), and marketing design concepts while using QR codes. This entails producing visually appealing and simple-to-scan QR codes, offering pertinent and useful information, assisting users with simple interactions, and establishing smooth linkages between physical and

online marketing initiatives. All things considered, companies may increase user engagement, boost conversions, increase brand awareness, and ultimately give their target audience a more engaging and memorable brand experience by combining these design disciplines with QR codes.

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