

# Emotional Interfaces, Accessible Experiences: How Design Choices Build Trust and Loyalty among Adult Users

Ahmed Musah

*Ball state university*

Date of Submission: 20-10-2025

Date of Acceptance: 30-10-2025

## ABSTRACT

This paper explores the complex association between the user interface (UI) design aspect (both aesthetic appeal (visual style, motion and tone) and functionality user experience (UX) (navigability, accessibility and feedback) and their interaction to create the effect of user trust and long-term digital loyalty in adults. This study seeks to transcend the dilemma of aesthetics versus usability, with the aim of finding the responses to exploring how emotional appeal and practical access, when combined, act synergistically as a source of long-term engagement. Using a sequential explanatory mixed-method research design (quantitative survey followed by a qualitative usability test and interview), 400 adult digital platform users were selected, and 20 of them took part in the in-depth qualitative analysis. The most prominent findings point to the fact that although functional clarity is the leading requirement of initial trust there exists a strong interaction effect, where high aesthetic appeal has a significant contribution to loyalty only when it is accompanied by high functional accessibility. On the other hand, interfaces that are highly aesthetic and not available to users actively decrease trust and user frustration. The paper concludes that design decisions do not just happen to be transactional but are potent tools of developing an empowering, confident, and reliable user experience, which is directly converted into long-term user loyalty and competitive superiority.

**Keywords:** Emotional Design, Functional Usability, Digital Trust, User Loyalty, Accessibility.

## I. INTRODUCTION

### Background and Context

The online world has shifted towards a more utility based world to an experience enabled ecosystem. With the digital platform becoming part of finance, health, communication and education, the stakes on effective and trustworthy design have never been more imperative. Among adult users,

this complexity is not merely a matter of cognitive effort, but also a very fundamental issue of their feelings of control, competence, and security. Design is no longer evaluated only in terms of its ability to perform a job, but in terms of its ability to stir positive feelings and instill a sense of confidence that is deeply rooted.

In the past the Human-Computer Interaction (HCI) has frequently assumed a conflict between aesthetics and usability (Nielsen, 1993). Nevertheless, the current design theory especially the concept of emotional design proposes that the two aspects cannot be separated (Norman, 2004). Aesthetics determine the visual style, movement and the tonality language create a personality of a platform, producing an immediate, pre-cognitive emotional response. Practical UX in functional form, which is evident in the way the site is navigated, the availability of strong accessibility elements and feedback mechanisms, etc., is the basis to enable the user to be able to execute the intended actions without fear of the context, level of ability, or technological competence.

The present research is based on the assumption that neither aesthetics nor functionality can work independently to ensure long-term engagement and loyalty and that these two concepts are the most effective with a diverse adult population. A gorgeous interface mixed up with puzzles kills trust fast and a functional but non-engaging site has a hard time attracting attention and emotional investment. Thus, effective online communication is an empowerment activity, which can be established on the two essential principles of emotional appeal and convenient access.

## II. LITERATURE REVIEW

The Twofold Role of the Aesthetic Design and utility.

The Aesthetic-Usability Effect is that users are more accepting to slight issues in usability when the design of a product is appealing

(Tractinsky, 1997). This impact reaffirms the short-lived, superficial influence of aesthetics (visual style, color, animation) to the creation of initial impression. Such aspects of design like minor micro-interactions, consistent visual identity, and compassionate tone of voice are what help bring a user to their visceral and behavioral levels of emotional processing (Norman, 2004). But it is also cautioned in the literature that this first positive impression is weak. Unless the structural core of the system is fundamentally wrong, the initial goodwill quickly fades away and the result is profound frustration and rage (Desmet, 2012).

### **The Principle of Practicality and simplicity.**

The practical efficiency and effectiveness of a system is called functional UX design. Such elements as a clear information architecture, intuitive navigation, and consistent feedback are the key elements. In the case of adult users, who usually carry with them different degrees of digital literacy or accessibility particular requirements, the availability of powerful accessibility features that include high color contrast, keyboard access, and clear hierarchy (in compliance with the WCAG guidelines) makes the difference between a usable product and an accessible, and, therefore, empowering one (W3C, 2021). Research has confirmed time and again that inadequate functional design, as marked by incomprehensible menus or inadequate error tolerance, is the biggest contributor to user abandonment and negative emotional reaction, no matter how attractive it might be (Shneiderman and Plaisant, 2010).

### **Earning Confidence and Trust in the World of the Intranet.**

Reliable relationships are the basis of any long-term online relationship. According to the theory of B.J. Fogg on Source Credibility, digital trust can be frequently constructed based on two elements, which are Perceived Expertise and Perceived Trustworthiness (Fogg, 2003). Expertise in design is expressed in terms of professional, clean design and without error functionality whereas trustworthiness is expressed in terms of transparency, clear data policy, and regular and useful system feedback. To achieve long term loyalty, users need to transcend transactional trust to relational trust, i.e., the platform should always exhibit reliability and fair treatment of the interactions with its users (Gefen, 2200). In that regard, loyalty can be defined as the consistent, voluntary state of persistence in the use of a particular digital service instead of the alternatives.

Importantly, the emotional design literature indicates that the negative emotions (frustration, anxiety) are avoided through usability, but the positive emotions (joy, satisfaction) are encouraged through aesthetics. We assume that functional clarity and accessibility provides a moderating variable that defines the effectiveness of aesthetic appeal in creating long-term loyalty. In case the system is not inaccessible, the aesthetic meaninglessness or even offensive, in case the system is accessible, the aesthetics can serve as a value-added that makes the experience even more pleasant.

### **Research Questions and Hypotheses.**

In accordance with the synthesis of the literature that has already been conducted, the following research questions and test corresponding hypotheses are expected to be answered in this study:

RQ1 (Quantitative): To what extent are user perceptions of visual style, motion and tone as indicators of aesthetic appeal and user perceptions of functional clarity (Navigation, feedback, and accessibility) and of functional clarity (Navigation, feedback and accessibility) independently predict the level of initial user trust?

- H1: The greater the perceived functional clarity, the stronger independent predictor of initial user trust will be as compared to the greater perceived aesthetic appeal.

RQ2 (Quantitative): Does the aesthetic appeal and functional clarity interactiveness play a significant role in reporting a long-term user loyalty?

- H2: Esthetic appeal will only be influential at a significant positive effect on long-term user loyalty when there is also a high level of functional clarity.

RQ3 (Qualitative): Which are the major emotional obstacles and breaking points that adult users identify when they engage with aesthetically pleasing, yet inaccessible, or functional, yet unappealing to the eye interfaces?

### **Significance of the Study**

The study is important to both the scholarly literature on HCI and practice. It is also founded academically on the more subtle idea of an Accessibility- Aesthetics Synergy Model, in which the basis of benefits of emotion design requires usefulness and accessibility in the first place. In practice, the results provide evidenced-based advice to UX/UI designers, product managers and decision makers by focusing on the allocation of resources based on underlying accessibility and readability. This paper proposes the idea that

ethical and inclusive design is an essential part of business, rather than a liability list, by showing that emotionally resonant, accessible design is directly related to measurable levels of trust and loyalty.

### **III. METHODOLOGY**

#### **Research Design**

The paper assumed the use of a Sequential Explanatory Mixed-Methods Design (QUAN → QUAL). The first (quantitative) stage involved a massive survey to determine the relationship and interaction between the independent variables (Aesthetic Appeal, Functional Clarity) and the dependent variables (Trust, Loyalty). During the second (qualitative) stage, there was a deliberate sub-sample of survey respondents who were involved in usability testing and semi-structured interviews. Qualitative data was used to interpret and set the statistical results, especially the causes of the observed interaction effect.

#### **Participants and Datasets**

##### **Quantitative Phase (Survey)**

The convenience sample size of N=400 adult users of digital platform (25-65) was recruited through an online panel service. To guarantee the diversity of the sample in terms of self-reported technical proficiency (beginner, intermediate, advanced) and frequency of use, the sample was stratified. The sample demographics were a 48% to 50% to 2% male to non-binary/prefer not to state ratio with a mean age of 42.3 (SD = 11.5). The sample size had to have used at least three different types of digital services (e.g., banking, e-commerce, government services).

##### **Qualitative (Usability and Interviews) Phase.**

As another subset of n=20 respondents was chosen to represent by the maximum variation sampling, to make sure that there were representatives of all age groups, technical skills, and initial survey scores (that is, to get those people who noted high initial trust but low loyalty and the reverse). The need of this strategy was to encompass diverse lived experiences and perceptual variations.

#### **Data Collection Methods**

The quantitative data collection will be performed through the use of questions.

The survey tool assessed the following constructs based on 7-point Likert scales (1 =Strongly Disagree, 7=Strongly Agree):

**Aesthetic Appeal:** 5 questions that deal with visual style, motion quality and tonal empathy.

**Functional Clarity:** 6 items assessing the ease of navigation, clarity of feedback, and perceived accessibility attributes (e.g., contrast options, keyboard navigation).

**Trust:** 4 items of perceived reliability and platform security.

**Loyalty:** 5 questions representing intention to repurchase and willingness to recommend the platform.

The participants were instructed to fill out the survey right after having been exposed to a pre-selected, new digital prototype in two major areas (financial service and a productivity tool).

##### **Data Collection- Qualitative.**

The n=20 respondents were subjected to two activities on two different web-based prototyping:

- **High Aesthetic, Low Functional Clarity/Accessibility** A prototype that is a visual masterpiece, very modern animations, yet lacks contrast, small tap targets, and highly embedded navigation.
- **Prototype B (Low Aesthetic, High Functional Clarity/Accessibility):** plain, corporate colors, no graphics, but good contrast, big buttons, flat navigation, and easy to understand error messages.

In the tasks, there was a Think-Aloud Protocol that was used. A semi-structured interview was then performed afterward and centered on three key points, namely, emotional reaction to the visual design, perceived obstacles to task completion, as well as, criteria by which they make decisions about long-term platform commitment.

### **IV. DATA ANALYSIS PROCEDURES**

#### **Quantitative Analysis**

The SPSS 28 was used to analyze the data. The scales were tested to determine reliability of the scales with Cronbach alpha (>0.85). Multiple linear regression was done to test H1 (power of variables to predict Trust). H2 was tested by a factorial analysis of variance (ANOVA) that investigated the main and interaction effect of Aesthetic Appeal (median split into High/Low) and Functional Clarity (median split into High/Low) on the dependent variable of Loyalty.

#### **Qualitative Analysis**

Thematic Analysis was used in the analysis of the interview and think-aloud transcripts (Braun and Clarke, 2006). The thematic analysis procedure involved six steps, i.e. familiarization with data, creation of initial codes, theme search,

theme review, theme definition and naming, and final report production. Terms associated with emotional state (e.g., calm, confused, joyful) as well as behavioral friction (e.g., can't find, keyboard, too small) were mainly used as codes.

### Ethical Considerations

Each participant gave informed consent before taking part in the study without being unaware of the voluntary character of the research and free will to exit the study whenever she or he wished. Information obtained was anonymized and pseudonymized as quickly as possible after collection and no personally identifying information was ever attached to the survey answers or transcripts. The protocol of the study

was verified and accepted by the Institutional Review Board (IRB) equivalent, which guaranteed the ethical considerations of research involving human subjects. The compensation was done on time and efforts, based on the stage of involvement.

## V. RESULTS

### Quantitative Findings

#### Regression Analysis on User Trust (H1)

Multiple linear regression was conducted to determine how Aesthetic Appeal and Functional Clarity predict initial User Trust. The model explained 62.5% of the variance in Trust ( $R^2=0.625, F(2,397)=330.88, p<0.001$ ).

Predictor	B (Unstandardized)	SE	$\beta$ (Standardized)	t	p-value
Functional Clarity	0.58	0.031	0.692	18.71	< 0.001
Aesthetic Appeal	0.21	0.029	0.258	7.24	< 0.001

**Result Summary for H1:** Both variables significantly predicted Trust. However, the standardized beta coefficient ( $\beta$ ) for Functional Clarity ( $\beta=0.692$ ) was substantially larger than that for Aesthetic Appeal ( $\beta=0.258$ ). This confirms **H1**, demonstrating that functional clarity is a much stronger independent predictor of initial user trust.

#### ANOVA on Long-Term User Loyalty (H2)

A  $2 \times 2$  factorial ANOVA was performed on Long-Term Loyalty, utilizing the median splits for Aesthetic Appeal (High/Low) and Functional Clarity (High/Low).

Source of Variation	Sum of Squares (SS)	Degrees of Freedom (df)	Mean Square (MS)	F	p-value	Partial $\eta^2$
Aesthetic Appeal (A)	12.4	1	12.4	2.84	0.093	0.007
Functional Clarity (F)	198.5	1	198.5	45.48	< 0.001	0.103
A $\times$ F Interaction	37.9	1	37.9	8.69	0.003	0.021
Error	1,725.2	396	4.35	-	-	-

**Result Summary for H2:**

1. **Functional Clarity** showed a strong, statistically significant main effect on Loyalty ( $F(1,396)=45.48, p<0.001$ ). Users in the High Clarity group reported higher loyalty (Mean=5.92) than those in the Low Clarity group (Mean=4.88).
2. **Aesthetic Appeal** showed no significant main effect ( $p=0.093$ ).
3. Crucially, the **Aesthetic  $\times$  Functional Clarity interaction effect was highly significant** ( $F(1,396)=8.69, p=0.003$ ). This supports **H2**.

**Interaction Means for Loyalty (7-point scale):**

	Low Functional Clarity	High Functional Clarity
Low Aesthetic Appeal	Mean = 4.75	Mean = 5.31
High Aesthetic Appeal	Mean = 4.98	Mean = 6.54

The means demonstrate that while Aesthetic Appeal only slightly improved loyalty in the Low Clarity condition ( $\Delta=0.23$ ), it resulted in a massive increase in loyalty when Clarity was High ( $\Delta=1.23$ ).

**Qualitative Findings**

Thematic analysis of the usability tests and interviews produced 3 main and overlapping themes connected to emotional experience and design decisions.

**Themes: 1- Confidence and Empowerment (The Trust Multiplier).**

This was a strong theme that was closely related to the participants using Prototype B (High Clarity/Accessibility) and High Aesthetic/High Clarity interfaces. Users said that they felt smart, in control and safe. The predictability of interface was always associated with empowerment.

Example of the quote (Low Tech Literacy, 62 years old): It just works. I don't have to guess. The buttons are large and in case I commit an error; it will inform me on the specific mistakes I made. The system environmental is like, I should correct it. That gives me the confidence to spend my money on it. (Connection of clarity, feedback and trust).

**Theme 2: Frustration and Insecurity (The Barrier Effect)**

This theme was mainly created in the process of interaction with Prototype A (High Aesthetic, Low Accessibility). The negative feelings of the participants were powerful such as anger, insecurity, and anxiety. The visual and physical barriers, typically low contrast, small font

or the necessity to use a mouse/touchpad, were the result of the source of friction.

Example of a quote (48, male, Intermediate Tech Literacy, mild vision impairment): It is beautiful, I watched a movie like that, but I simply cannot read the light gray text on the white background. It causes me to feel stupid and rejected. Why should I make a pretty thing when I can not use it? I would lose all confidence in the company at once. (Testing the idea of aesthetics that is not available, results in alienation).

**Theme 3: The Coziness of Familiarity (The Loyalty Anchor)**

Users also mentioned consistency and effective feedback systems as the major contributors of long-term commitment. It was loyalty that was not inspired by newness or aesthetic appeal, but rather the lack of something new. Foreseeability was presented as an obligatory need of emotional security.

- Quote Simple (35 years of age, High Tech Literate): I enjoy a good animation, but what keeps me coming back is the fact that I know precisely where the logout button is located and that on the time I press the Submit button, I will receive a simple, straight forward response. I am pleased with the visual style, and can be loyal with predictable functionality. (Including the facilitative aspect of aesthetics).

## VI. DISCUSSION

### Interpretation of Results

The quantitative and qualitative results provide a compelling and combined explanation of

the effect of design variables on long-term relationships with users.

#### Primacy of Functionality in Trust.

The fact that H1 is accepted (Functional Clarity is a much better predictor of initial trust than Aesthetic Appeal) is a reflection of the underlying principle such that utility comes first and luxury follows afterwards. The users, especially the adult group accessing the critical services are competence-based users. An interface that is easy to navigate, gives easy feedback, and meets some simple accessibility guidelines can be regarded as indicative of reliability and low risk. This is the transactional trust level: "I trust this system since it is able to work on its main task without failures. This was also supported by the qualitative data, whereby the perception of a clear error message and an intuitive flow gave the participants a sense of being safe and being in control.

#### The Synergistic Role of Aesthetics in Loyalty.

The most significant result is the validation of H2, which has a very significant interaction effect. The combination of Aesthetic Appeal and high level of functionality clarity multiplies the Long-Term Loyalty (Mean Loyalty increased by 5.31 to 6.54). Where there is no clarity (Low Clarity/High Aesthetic mean of 4.98), the gain of aesthetics is insignificant or even a bit unfavorable in contrast to the Low Clarity/Low Aesthetic condition (Mean of 4.75).

This finding is a direct confirmation of the Accessibility-Aesthetics Synergy Model. The functional clarity and accessibility are intrinsically independent variables rather than boundary conditions which are required to achieve the positive affect of aesthetic design. Once the utility and access needs of the user are fulfilled, the aesthetic aspects (visual style, motion, tone) push the experience to not only a successful one, but a pleasurable and emotionally satisfying one. This delight also changes transactional trust to a relational loyalty where the user gets to experience a personalized relationship and is also ready to forgive small errors in the future.

#### Support of the Barrier Effect Qualitatively.

The qualitative theme Low Clarity/High Aesthetic condition is Frustration and Insecurity is critical to the low scores in the qualitative theme. Users were also estranged when dealing with the beautiful but broken prototype. Rather than being compensatory of the functional failure, the high-end visual design accentuated frustration through

the creation of an expectation of quality that was unmet by the functional experience. This is an indication that designers focusing on superficial appearance instead of underlying accessibility run the danger of creating an unfriendly, instead of an interactive experience, which proactively shuns adult users comfortable with being empowered and with ease of use.

#### Comparison with the Existing Literature.

This research builds up on the research of Tractinsky (1997) and Norman (2004). Although the Aesthetic-Usability Effect recognizes that beauty is time well purchased, this study claims that usability and accessibility are the coins that must be used to purchase this time. The results are in line with the research of Desmet (2012) about the product emotion, where negative emotions identified almost always refer to the impediment of the goal (poor functionality/inaccessibility), whereas positive emotions refer to the goal accomplishment and positive stimulus (aesthetics). In this case, goal obstruction cancels the effect of the pleasurable stimulus. We have obtained findings that indicate that avoidance of negative emotions (through accessibility) is a condition preceding the creation of positive emotions (through aesthetics) to cultivate loyalty.

Moreover, the information is a very strong argument in favor of the need of adhering to the principles of Universal Design. The interviewed users all consistently placed functional accessibility not as a minority feature, but as a general feature of overall quality and reliability, to all.

#### Limitations of the Study

The main weakness of this research is the use of self-reported survey data to measure using the quantitative scales of Trust and Loyalty, which may be prone to social desirability bias. Although the qualitative stage alleviated this through the real-time collection of behavioral data through the use of the Think-Aloud Protocol, the controlled lab setting of the usability tests might not accurately reflect the actual use scenario, especially when used over weeks or months. Also, the ANOVA analysis employed a median split on the study, which, although efficient to illustrate the interaction effect, decreased the accuracy of the continuous variables. Further studies are needed to examine these associations in more sophisticated structural equation modelling (SEM) with the entire gamut of information.

### **Recommendations on Future Studies.**

#### **Future studies need to be conducted on three fronts:**

Longitudinal Research on Loyalty: A longitudinal study of the actual behavioral loyalty (measured in terms of platform reuse, session depth and churn rates) should be conducted during 6-12 months to determine whether the four quadrants identified in ANOVA show the long term effect of the proposed synergy model.

Particular Accessibility Characteristics: Deconstruct Functional Clarity To see how particular accessibility characteristics (e.g., voice input, compatibility with screen readers, adjustable text size) can affect the trust of users with particular needs compared to the rest of the population.

Tonal Analysis in Trust: Measure the emotional tone of interface language (formal, conversational, humorous) and how it interacts with the visual style to achieve trust in various industry fields (e.g., healthcare vs. entertainment).

## **VII. CONCLUSION**

### **Summarizing Findings**

The study determined that among adult users the interaction between design and long-term loyalty is synergistic in its nature where functional accessibility and aesthetic appeal interact harmoniously. The single most powerful predictor of initial user trust was Functional Clarity the capacity of every user to effectively and predictably engage with a platform through clear navigation, solid feedback and available features ( 0.692). Importantly, high Aesthetic Appeal only had a significant impact on Long-term Loyalty with a system that had also high Functional Clarity (evidenced in the significant interaction effect,  $p=0.003$ , with the resulting highest mean loyalty score of 6.54). Ideally, trust is expressed through language of accessibility and devotion is expressed through language of aesthetics.

### **Final Reflections**

The results highlight an essential ethical and business, need on the part of product development and design: design is an empowerment. Interfaces that focus more on visual appeal than usability do not lead to the emotional attachment, but they introduce barriers, frustration and inadequacy and thus drive away users and ruin loyalty in the long run. The best design is the one that is immediately applicable and comprehensible by the largest adult demographic and can, therefore, the beneficial feeling of visual appeal can really thrive and increase the dedication of the user to the service.

## **VIII. RECOMMENDATIONS**

This evidence informs the following recommendations to UX professionals and the owners of a digital platform:

**Make Accessibility a Functional Requirement:** Do not look on WCAG compliance and easy navigation as a checklist point but as an Obligatory Pre-condition of Emotional Design. The key to building trust is a functional sound interface.

**Invest in Synergy Quadrant:** Invest in high aesthetic appeal only after fundamental clear functional functionality and accessibility have been verified. It is the combination of the two factors (High Clarity/High Aesthetic) which will give the best return on investment in loyalty.

**Audit Emotional Barriers:** Undertake systematic usability testing using various adult users, in particular, where the friction occurs, thus, arousing negative emotions (confusion, anxiety, anger). Use feedback and states of error as a gift to develop, not destroy trust.

**Lay stress on Predictability:** In long-term loyalty, apply obvious, consistent visual and interactive designs. A very important anchor in being able to stay engaged as an adult is the "Comfort of Predictability".

## **REFERENCES**

- [1]. Bauer, H. H., Falk, T., & Hammerschmidt, M. (2006). e-Loyalty in online retailing: Determinants and consequences. *Internet Research*, 16(3), 317-331.
- [2]. Bevan, N. (2009). The role of user satisfaction in defining quality. In J. Gulliksen, & P. J. G. L. B. J. M. (Eds.), *The Encyclopedia of Human-Computer Interaction* (2nd ed., pp. 58-69). Interaction Design Foundation.
- [3]. Blandford, A., & Attfield, S. (2010). *Interacting with information*. Morgan & Claypool.
- [4]. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- [5]. Desmet, P. M. (2012). Faces of product pleasure: 25 positive emotions in human–product interactions. *International Journal of Design*, 6(2), 1-26.
- [6]. Donath, J. (1999). Identity and deception in the virtual community. In M. A. Smith & P. Kollock (Eds.), *Communities in cyberspace* (pp. 29-59). Routledge.
- [7]. Fogg, B. J. (2003). *Persuasive technology: Using computers to change what we think and do*. Morgan Kaufmann.

[8]. Gefen, D. (2000). E-commerce: The role of familiarity and trust. *Omega*, 28(6), 725-737.

[9]. Hassenzahl, M. (2004). The thing and I: Introducing an experiential perspective on product quality. In W. D. N. E. (Ed.), *Funology: From usability to enjoyment* (pp. 31-42). Kluwer Academic Publishers.

[10]. International Organization for Standardization (ISO). (2018). *Ergonomics of human-system interaction – Part 210: Human-centred design for interactive systems (ISO 9241-210:2018)*.

[11]. Karvonen, K. (2000). The concept of pleasure in successful product design. *Theoria: The Swedish Journal of Philosophy*, 66(1-2), 176-187.

[12]. Kim, H., & Lee, J. (2020). The effect of mobile application interface design on emotional state and behavioral intention. *Journal of Business Research*, 116, 570-577.

[13]. Lazar, J., Goldstein, D., & Taylor, A. (2015). Ensuring digital accessibility through process and policy. Morgan Kaufmann.

[14]. Lee, M. K. O., & Turban, E. (2001). A trust model for Internet shopping. *Information Technology and Management*, 2(1), 21-44.

[15]. Lindgaard, G., & Dudek, C. (2003). High vs. low visual appeal and its effect on self-assessment, efficiency, and effectiveness. *International Journal of Human-Computer Studies*, 59(5), 629-644.

[16]. Moshagen, M., & Thielsch, M. T. (2010). Facets of visual aesthetics. *International Journal of Human-Computer Studies*, 68(10), 689-709.

[17]. Nielsen, J. (1993). *Usability engineering*. Morgan Kaufmann.

[18]. Norman, D. A. (2004). *Emotional design: Why we love (or hate) everyday things*. Basic Books.

[19]. Preece, J., Rogers, Y., & Sharp, H. (2015). *Interaction design: Beyond human-computer interaction* (4th ed.). Wiley.

[20]. Riegelsberger, J., Sasse, M. A., & McCarthy, J. D. (2003). Shiny happy people interacting: Trust and distrust in the video-mediated customer service encounter. *CHI '03: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 8-15.

[21]. Shneiderman, B., & Plaisant, C. (2010). *Designing the user interface: Strategies for effective human-computer interaction* (5th ed.). Addison-Wesley.

[22]. Süss, T., & Karrer, K. (2013). The influence of perceived aesthetics and usability on trustworthiness of a website. *Proceedings of the 15th International Conference on Human-Computer Interaction*, 103-112.

[23]. Tractinsky, N. (1997). The role of aesthetics in perceived usability. *Human Factors*, 39(3), 417-427.

[24]. Tractinsky, N., Cokhavi, T., Shreiber, H., & Katz, A. S. (2003). What is beautiful is usable. *Interacting with Computers*, 15(2), 127-145.

[25]. W3C. (2021). *Web Content Accessibility Guidelines (WCAG) 2.1*. World Wide Web Consortium.