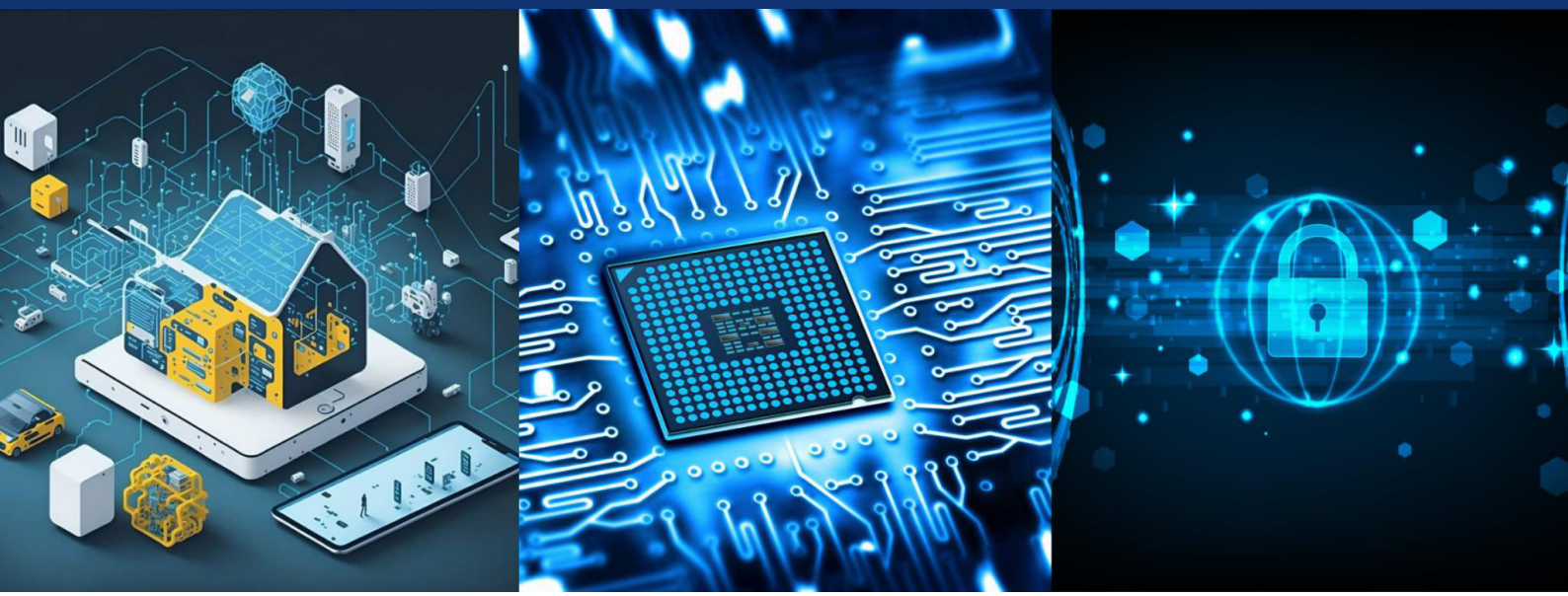
IJIRCCE

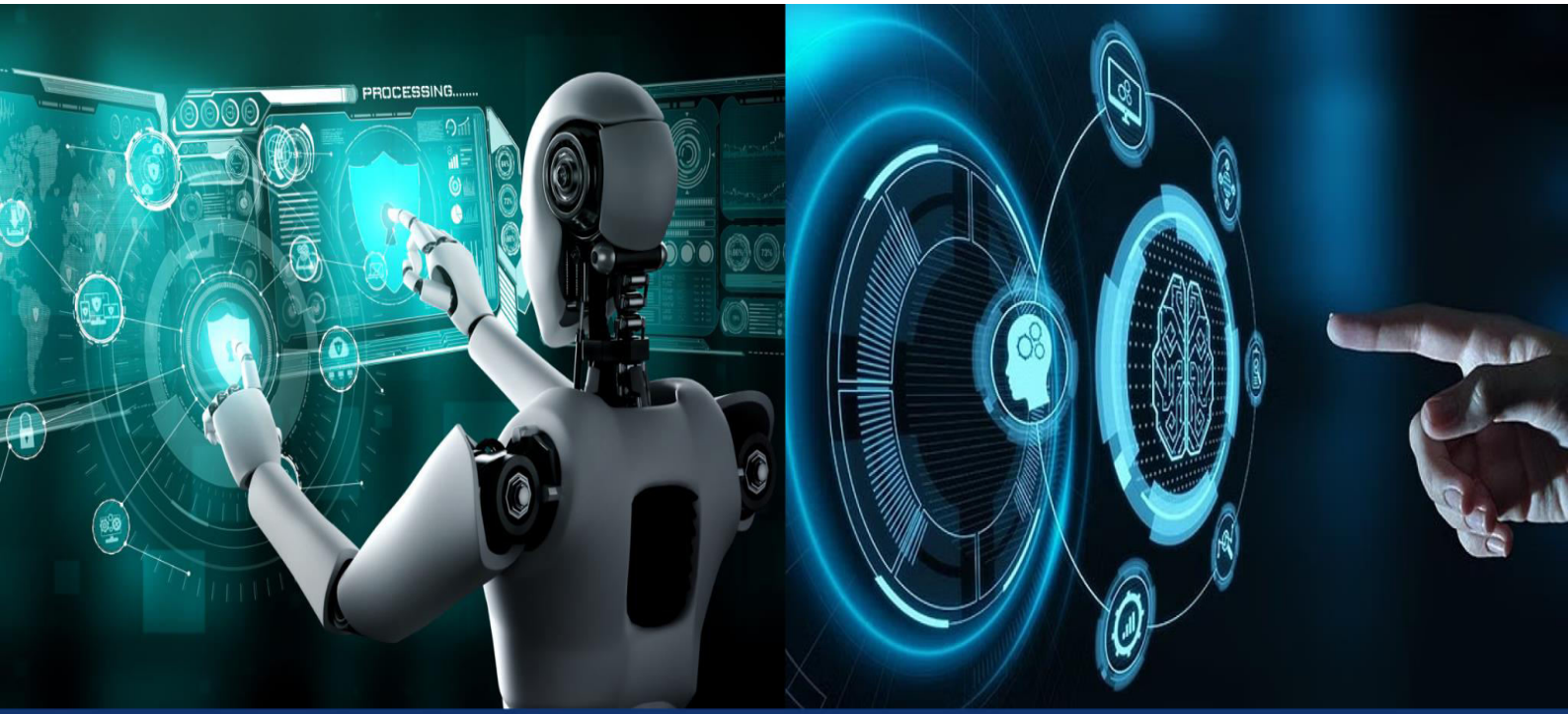
ISSN(O): 2320-9801

ISSN(P): 2320-9798



International Journal of Innovative Research in Computer and Communication Engineering

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)



Impact Factor: 8.771

Volume 13, Issue 3, March 2025

© 2025 IJIRCCE | Volume 13, Issue 3, March 2025| DOI: 10.15680/IJIRCCE.2025.1303095

www.ijircce.com | e-ISSN: 2320-9801, p-ISSN: 2320-9798| Impact Factor: 8.771| ESTD Year: 2013|

International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCE)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

From Theory to Practice: Evaluating UI/UX Trends and user Engagement through Internship Experience

Preet Pandya[1], Prof. Milad Saiyed[2]

Student, Department of Information & Technology, Parul University, Vadodara, Gujarat, India[1]

Assistant Professor, Department of Information & Technology, Parul University, Vadodara, Gujarat, India[2]

ABSTRACT: In the competitive digital world of today, advanced UI/UX design is crucial to driving user interaction and product success. This research delves into existing UI/UX design trends—minimalism, micro-interactions, and adaptive layouts—via the blending of theoretical concepts and experiential learnings upon internship. The research process involves user research, iterative prototyping, and strict usability testing to verify the hypothesis that prioritizing clarity and accessibility in design results in higher user satisfaction and retention

KEYWORDS: UI/UX design trends, minimalism, micro-interactions, usability testing, user research.

I. INTRODUCTION

The sudden growth of digital platforms has made UI/UX design even more crucial in making successful user interactions. Successful digital products nowadays require not just beautiful-looking interfaces but also easy-to-use interfaces. This paper explores how new trends—minimalism, adaptive interfaces, and interactive micro-details—help make users more engaged. The discussion is structured around five basic building blocks:

Usability: making navigation easier to reduce cognitive load and enable intuitive use[2].
Visual aesthetics: employing clean and minimalist design techniques to maximize clarity[4].
Accessibility: applying inclusive design methods based on international standards [3].
Interaction design: adding micro-interactions to enhance user experience [5].
Responsiveness: creating interfaces that look stunning on every device [6].

II. LITERATURE REVIEW

Early research on human-computer interaction emphasized the role of usability in measuring user satisfaction [1][2]. Subsequent research extended the focus to visual and interactive design aspects and emphasized the requirement of an integrated user experience [4][7]. Current research has recognized the revolutionizing impact of micro-interactions and responsive design, supporting the fact that an integrated design strategy can have a major impact on user engagement and retention rates [5][6][8].

III. METHODOLOGY

This research integrates theoretical frameworks with empirical observations gathered during a UI/UX internship. Research methods used in this research included:
User Research: Performing interviews and interviewing the users to ascertain user interests and identify usability problems, following HCI best practices [2][7].
Wireframing and Prototyping: With the aid of software like Figma and Adobe XD to create low-fidelity and high-fidelity prototypes that mimic real user interactions [4][8].
Usability Testing: Performing A/B testing and heuristic evaluation to measure design effectiveness, as per ISO 9241-11 standards [3].
Accessibility Evaluation**:** Using WCAG principles to ensure that designs are accessible to people of varying abilities [3][7].

www.ijircce.com | e-ISSN: 2320-9801, p-ISSN: 2320-9798| Impact Factor: 8.771| ESTD Year: 2013|

International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCE)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

IV. FINDINGS & DISCUSSION

The internship experience highlighted key insights:
Minimalist design enhances usability by simplifying navigation and improving user interest [4][8]. Micro-interactions boost engagement through small animations and haptic feedback [5][6]. Responsive design ensures consistency across devices, enhancing accessibility [6][8]. Iterative user feedback refines design, making it more user-centric [7].
Integrating user-centric design and iterative development creates effective digital experiences. Sophisticated prototyping tools enable rapid testing and improvement, ensuring a balance between aesthetics and usability. This approach not only meets current user needs but also sets the stage for future UI/UX advancements [1][2][6].

V. CONCLUSION AND FUTURE WORK

This study supports the significant contribution of UI/UX design in improving user experience and product success. Future research can investigate how emerging technologies, including AI-based personalization, voice user interfaces (VUIs), and virtual reality (VR), are integrated into UI/UX. Continued innovation in these technologies will be critical in staying competitive in a constantly changing digital landscape [6][8].

REFERENCES

[1] A. Dix, J. Finlay, G. D. Abowd, and R. Beale, *Human Computer Interaction*, 1993.
[2] N. Bevan, "Usability is quality of use," in *Proceedings of the 6th International Conference on Human-Computer Interaction*, Yokohama, Japan, July 1995.
[3] International Organization of Standardization (ISO), "Ergonomic requirements for office work with visual display terminals (VDTs) – part 11: guidance on usability, *ISO 9241-11:1998*."
[4] Y. Rogers, J. Preece, and H. Sharp, *Interaction Design: Beyond Human Computer Interaction*, John Wiley & Sons, West Sussex, UK, 2007.
[5] K. B. Perry and P. Hourcade, "Evaluation of one-handed thumb tapping on mobile touchscreen devices," in *Proceedings of the Graphics Interface (GI'08)*, Ontario, Canada, May 2008.
[6] S. C. Lee and S. Zhai, "The performance of touch screen soft buttons," in *Proceedings of the 27th International Conference Extended Abstracts on Human Factors in Computing Systems (CHI '09)*, Boston, MA, USA, April 2009.
[7] J. Lazar, J. H. Feng, and H. Hochheiser, *Research Methods in Human Computer Interaction*, John Wiley & Sons, West Sussex, UK, 2010.
[8] S. Hoober and E. Berkman, *Designing Mobile Interfaces*, O'Reilly Media, Ontario, Canada, 2011.

INTERNATIONAL STANDARD SERIAL NUMBER INDIA

INNO SPACE SJIF Scientific Journal Impact Factor

doi crossref

निस्केयर NISCAIR

INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

9940 572 462 6381 907 438 ijircce@gmail.com

www.ijircce.com

Scan to save the contact details