

ISSN: 0970-2555

Volume : 53, Issue 1, No. 2, January : 2024 USER EXPERIENCE AND THE CONCEPT OF DESIGN IN HCI

**Dr. Girish Deshmukh,** Professor, Dept of Mechanical Engineering, A C Patil college of Engineering, Navi Mumbai, India.

**Dr. Mona Deshmukh,** Associate Professor, Dept. of Master of Computer Applications, Vivekanand Education Society's Institute of Technology, (VESIT), Mumbai, Maharashtra, India

#### Abstract—

In this paper we read that the design concept in HCI is changing. For many years design as an engineering method has influenced the research and performance of HCI, now technological advances and new 'user' ideas require different design ideas. In particular, the opportunity for experience at HCI has led us to consider a design idea - like the handicrafts we show in this paper on digital art work. But our goal is not to remove the idea of designing another. On the contrary, we argue that the design of the experience requires a completely new kind of design that is completely different between different design ideas involving art, science and personality. However, such ethnic differences are not without its challenges and challenges. We conclude by explaining that not only new concept tools but also a new HCI curriculum could be instrumental in achieving this.

#### Keywords—

UX, Design, Human Computer Interaction, Concept of UX in HCI.

#### I. Introduction

For years to this day, the idea of design in HCI was taken lightly and not a point of concern or discussion. The design meant a process of modeling users and systems and defining the system's behavior in a way that suited user functions, was efficient, easy to use and easy to learn. the design in HCI was about the use of engineering. Research agendas in this concept include how to model the user and overcome technical problems by specifying a collaborative approach that promotes usability. Interpreting from user job descriptions to system design specifications has introduced significant technological interest and research opportunities but has not been seen as a major problem. It was easy to see that designing the behavior and visual appearance of the system to match user functions, objectives and action opportunities was a sensible suggestion, which could be developed not only as a human factor model, performance analysis, etc. and a legitimate software engineering business. But recently various technological advances have raised questions about this design idea at HCI. The combination of information and communication technologies, as well as interactive programs such as the new media brings a broad set of ideas about what it means to design a collaborative program and what it really is. that is built. Consider, for example, some common words.

Mord Design HCI Indicators:

-User-focused design

-Design of dialogue

- -Construction of knowledge
- Design communication

-Effective design

-Design experience

Obviously the design has always been a major concern, but when some introduced the concept of user-focused design there was little controversy as to what the computer communications were designed for. and the rest of the list is about changing concerns. It is as if we are no longer designing dialogue but interaction, information spaces, what you touch and now, and user information. Lowering the list also reveals a difference in our understanding of the 'user'. user as a participant in a design conversation to someone with technical or technical knowledge. This raises the pervasive question of



ISSN: 0970-2555

Volume : 53, Issue 1, No. 2, January : 2024

whether the design means the same thing to different users' ideas. Can we design a sense of humor in the same way we do conversations? The question is whether these research-based changes in HCI have implications for what our design idea is or should be. A recent research editor examining the theory and practice of design based on experience has led us to conclude that we need to change our ideas about design in HCI. In HCI research there is a tendency to simplify the design concept, the most common of which is to simplify a single line of the development line where in one way, tool or idea, you write over the previous one. For example,

• First came the batch processing, then the command line, then the GUI.

• First came the job analysis, then the design based on the situation, then the design based on the individual.

• First the user was a virtual alogia machine now the user is the consumer. First came the user as human factor then as human actor then.

• First came psychology, then ethnomethodology, then phenomenology.

These simple techniques are often helpful but can be misleading. It seems very fitting (certainly as we look at the HCI practice as it is in the world today) to understand this as existing ideas, but from time to time or in some cases, one metaphor, one idea or one practice is more important than another. and one argument or one speech is the dominant language. Such a multi-faceted view leads us to reconsider the boundaries between these accounts and to foster formation between them. The quality of that design will determine the effectiveness of our multi-sectoral approach. A design that seeks to reduce side views to other central ideas will tend to undermine intelligence, discussions that at least temporarily attempt to undermine the central space; and genes, or conversations that strive to avoid duplication of central boundaries, often promote

innovation. Several different ideas about HCI design already exist, from engineering to design such as art and crafts. If the experts and researchers with these different perspectives are not helped to work together in some way then the new challenges of the HCI design will be easily met. We want to argue that this can best be done with a kind of research radical interdisciplinary interdisciplinary program. great racial diversity, not just electronic engineers, psychologists and computer scientists who talk together and collaborate with these groups basically share the same design idea. means psychologists, computer scientists, and electrical engineers who talk to visual & active artists, industrial designers, product designers and much more. A type of cross faculty interaction that represents free design art. But for that strong diversity to work together and for us to participate productively and productively across all the boundaries of the different frameworks we need a deeper depth and a deeper understanding of what design thinking or design practice is both within the HCI discipline (as broad as it is) and within these other disciplines. . We should also consider the many ways in which complex design work can be accomplished across borders.

Over the 20 years google has changed it's UX to make it simple as possible for users.





ISSN: 0970-2555

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## II. The Ux Value Of Hci

HCI is a broad field that spans areas such as user-centered UCD design, UI user interaction design and UX user experience design.

In many ways, HCI became the forerunner of UX design. Besides, there are differences between HCI and UX design. HCI staff tend to focus more on studies. They engage in scientific research and develop users' understanding. In contrast, UX designers are almost consistently focused on the industry and are involved in building products or services — e.g., smartphone apps and websites. Aside from this fragmentation, the practical considerations of the products we as UX experts are concerned about are directly linked to the findings of HCI experts about user ideas. With a wide range of topics covered by HCI, UX designers have a wealth of resources from which to draw, although much research remains relevant to the educational audience. Those of us who are designers and do not have the comfortable time HCI professionals usually enjoy. Therefore, we must go beyond our industry-targeted barriers to achieving these additional academic achievements. If you do that right, you can use important information to get the best designs for your users. By "interacting" in this way with the HCI world, designers can drive change that has an impact on the market and society.

Keep your text and separate explicit files until the text is formatted and styled. Do not use solid tabs, and limit the use of hard recovery in only one restore at the end of the phase. Do not add any kind of scratch anywhere to the paper. Do not enter text numbers - the template will do just that for you.

## III. The Challenge Of Experience-Centered Design

Experience is becoming a very important issue in HCI research and in the last two or three years there has been a lot of writing about what a 'user experience' is and how to design it. For others, the transition to setting experience, 'feeling life', and technology within our theoretical and design space has led to the evaluation of different books according to different categories. For example, our approach draws inspiration from the pragmatist philosophy of John Dewey and the philosophy and theory of Mikhail Bakhtin's writings. In short our account can be seen in three themes

A holistic approach to experience where in the intellectual, sensual and emotional stand as equal partners in experience Continuous engagement and making sense where your identity is fundamental. of experience, he is already a participant in the experience and brings to life a history of explanations and the future that is expected to complete the experience through acts of understanding .The separation of form and content, morality and emotion, beauty and function, feeling and knowledge does not help in analyzing the experience as the level of experience emerges as an interaction between these elements..

#### **IV. Design-As-Engineering**

In this account design it appears from the statement of the fixed problem (or needs specification), to the invisible description of the solution which is then refined into a solution used in a sequence of well-defined steps. The design problem, which seems to be given when the design begins, can be divided into smaller parts to separate and overcome. This division is followed by an integration phase in which problem-solving component solutions are integrated into a general design solution. This approach is at the heart of software engineering and legitimate system design. Within this approach emphasis is placed on the singing process as much as possible of the design process to ensure that the information is independent of the individual designers and that is why the process is repeated. defines it as a backup account to emphasize the idea that the system structures and behaviors that are pre-specified at the abstract level are maintained in all of the following refinement steps:

" According to this account of design, the design process is supposed to progress gradually from the abstract (requirements specifications) to the concrete (resulting artifacts). Progress is achieved through following a

sequence of well-described, discrete and rational and structured methodological steps. A good designer

UGC CARE Group-1,



ISSN: 0970-2555

Volume : 53, Issue 1, No. 2, January : 2024

in this tradition is someone who is able to follow prescribed action. This tends to de-emphasize the role of the designer, striving towards a disembodied design process built on structured methods and externalized guidelines rather than on the skills and judgment of individual designers." Within HCI, the kinds of approaches to design that seem to fit this account very well are exemplified by methodologies such as MUSE and methods of applying engineering. In the world of HCI's official software engineering, an engineering account is defined in terms of user-specific definitions and the process allows for refinement to be used, in which the user's objectives are refined into sequential functions and drawn up for discussions. Even a particular design idea based on the design context. The key features that include these under the engineering approach are

• - User representation or use of context as a consistent set of well-defined objectives, functions or requirements

- -Invisible presentations for regular users
- - Adherence or direction of work or process procedure
  - -An attempt to compile a workable design in terms of principles, guidelines or methods
    - can also be produced by non-HCI professional engineers
  - -The tendency to see usability as an asset of the visual connector

• -An attempt to control user interaction with designThe design-as-engineering approach to HCI can be highly successful. Particularly where the domain of application is well regulated, relatively closed and the user's role and goals in the system can be well defined and adequately captured in for example, a task analysis of tractable size. In these situations, there are relatively uncontentious criteria as to what counts as an improved design. But there are limits to this approach and there are other disciplines which offer equally valuable perspectives on HCI. One new area of HCI research that offers challenges to the design-as-engineering approach, and illustrates the value of different perspectives is experience design

#### V. Human-Computer Interaction And User Experience Industry Trends

• Smartphones with touch screens are one of the ubiquitous HCI and UX models, but the field could expand as new technology trends like these change in the next decade:

• Voice Guided User Interface - As native language processing (NLP) technology develops, we will work more closely with the internet of things. People will be working with technology using only their voice in everything, from playing music with a home speaker to giving instructions to industrial robots.

• Touch-oriented user interface - We already use touches such as swipe, tap and touch to navigate to computers on touch screens. As technology such as human tracking, touch detection, and brain coordinates develop, we may use touch-alone to play games, allowing users with mobility problems to become more independent and direct robots to perform surgeries.

• Virtual / Augmented Reality - Non-virtual headset allows us to engage in truly immersive experiences. As technology advances, we may be able to do most of our daily activities using a headset instead of a portable computer and a keyboard. The unpopular reality of taxpayers we see allows us to feel the world while being assisted by technology. Instead of viewing your phone while driving, a real unpopular display can display directions in your windscreen.

Clothing / Injection Technologies - Devices like smart watches and fitness monitors allow us to track our vital signs, and there are technologies that allow diabetics to use implanted devices in their skin to monitor blood sugar. As medical technology advances, many of these technologies will go deeper, injected into the skin to monitor our health in more profound ways and bring about treatment.

As human-computer interaction extends beyond the keyboard and touch screen, HCI and UX will be needed to create future user links. That's why UX is designed as one of the top ten tough skills for 2019 and 2020 and you expect it to be needed for years to come.

Following is the Best Website Design of 2022 Award winner site. https://fpp.net/

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ISSN: 0970-2555

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## VI. Continuous Engagement and Sense Making

We argue that human knowledge is also shaped by ongoing interactions with the world through intellectual actions at many levels. Ongoing interaction involves the unstoppable relationship between the individual and the object, the affected person, the feeling of working with building materials and tools. In our approach, everyday experiences are primarily positive as meaning comes from a dynamic relationship between levels of arousal, emotions and intelligence at a time and place that bring a certain quality of experience that can be satisfying, enticing, frustrating or frustrating. In a logical and satisfying sense each action is related to the perfect act and is felt by the individual to have a complete unity or perfection.

This ongoing discussion means that the way a person makes an idea of a situation, interaction, episode or artifact is about what the person brings to the experience as it is about what the designer puts there. If we take for example the daily experience of watching a movie, different people may remove different things from watching the same film. Even the same person who watches a movie for the second

time may have different feelings about it and understand it differently. The two-person experience of the same film will have some similarities but also there will be differences because these two people bring a different experience to the movie. Not only is it a different experience from previous movies but it is also a different experience of the day they just had. The level of feeling one person feels after a bad day in the office may be completely different from another person after a day off at home for example. In addition, one person's feeling that he should be at home really preparing for what might be another difficult day tomorrow brings anticipation of a future experience to the present. But the way we deal with the film is not just about what we bring to it. A movie also brings something to us, it may temporarily remove the problems we bring or allow us to see it differently. We are not immersed in the narrative and the spectacle. We can sympathize with the characters. The movie also gives us new information, a new story to think about and share with others. When we tell others about our experiences, or the experiences of other people are related to us, a connection between the individual social and cultural experiences is made. These connections also affect the way we think and interpret our knowledge. It changes the mind we make about them. It allows us to see how other people might expect us to hear a movie that may or may not happen be how we actually experience it. Either way, we learn something about other people as well as ourselves.

## **VII.** Conclusion

In this paper we argued that as HCI has grown and developed to take on more complex challenges beyond practicality, more emphasis should be placed on radical interdisciplinary research across science and art, arguing that cross-sectoral dialogue is essential for 'critical problems' such as designing experience, and developing other emotions. which would be necessary to make this happen. If nothing else, we argue that HCI may be better understood as a design framework that combines research and performance in different fields.

"... It is no longer reasonable to view HCI as a computer science expert; HCI has grown wider,



ISSN: 0970-2555

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larger and more diverse than computer science itself. HCI has expanded from its original focus on individual and general user behavior to include social and organizational computer use, access to the elderly, the mentally and physically disabled, and all people, and a broad range of personal experiences and activities. It has expanded from desktop office applications to include sports, learning and education, marketing, health and medical applications, emergency planning and feedback, and community-based support programs. Extended from interactive user interaction to include a wide range of interaction tools and devices, multidisciplinary interaction, model-based application support tools, and a wide range of ubiquitous, hand-held and context-sensitive interaction. "

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