

Human Empathy

By Ali Zafar Iqbal 40076898

1.Name of Skill

1.1 Introduction

This paper aims to discover the need for **Human Empathy** as a skill in software engineering, more importantly, Human interface Design.

2.Classification of Skill

Before delving into how Human empathy as a skill can be related to UI design,

2.1 Describing Empathy

Empathy is our ability to see the world through other people's eyes [2], to see what they see, feel what they feel, and experience things as they do. Empathy helps us gain a deeper appreciation and understanding of people's emotional and physical needs, and the way they see, understand, and interact with the world around them.

2.2 How does Empathy affect design?

During a design thinking process, it is often documented [5] that a designer should first and foremost “Empathise,” with the user who would want to use the product that is being designed. This process involves observing, engaging, and empathizing with the people you are creating for in order to understand their experiences and motivations.

This is also in league with developing “Mental Modals” for the target user base to understand their possible needs for the product.

2.3 Distinguishing Commonality

Empathy as an idea is often confused with the word Sympathy. Which is more in line with the

idea of one's ability to have or show concern for the wellbeing of another,

This reason this comparison is explored is that, In Design Thinking, we are concerned with understanding the people for whom we are designing solutions—for doing something that can help them. Rather than we are not seeking for opportunities to react to other people, what they are going through or feeling

3.Prerequisites for Skill

For this exploration, we can look at two major areas that can help a person contribute to cultivating human empathy. It is the belief of many [3] that these have a huge contribution towards the cultivation of human compassion therefore, to explore this area further. A brief analysis is conducted.

3.1 Social Personas

According to the ID Foundation [3], Personas are fictional characters, which you create based upon your research to represent the different user types that might use your service, product, site, or brand in a similar way. Creating personas will help you to understand your users' needs, experiences, behaviors, and goals. Creating personas can help you step out of yourself. It can help you to recognize that different people have different needs and expectations, and it can also help you to identify with the user you're designing for. Personas make the design task at hand less complex, they guide your ideation processes, and they can help you to achieve the goal of creating a good user experience for your target user group.

The knowledge of social personas allows UX Designers to Emphasize with people of different social backgrounds, which ultimately as a toolset allows them to curate their design solutions with

more precision to the expectations of the users of the product.

3.2 Understanding Human behavior

The understanding of human behavior is the basis for the creation of human empathy, it allows the designer to fill the shoes of the target audience, and immerse him/herself into their roles more precisely based on their behaviors.

4.Related Software Engineering Area

Human empathy being the broad skill set it is has a variety of uses in a lot of different mediums of work. For the purposes of this project, the area of information architecture was analyzed and discussed to understanding how human empathy guides the arrangement of information in our software products

4.1 Information Architect

Most consumers are accustomed to finding exactly what we need, where we expect it to be. And when we find it easily, it's generally no coincidence. It's usually the result of extensive user research and testing, most people give up within a few seconds and move on.

The purpose of an Information Architect is to help users understand where they are, what they've found, what's around, and what to expect. As a result, Information Architects inform the content strategy by identifying word choice as well as informing user interface design and interaction design by playing a role in the wireframing and prototyping processes.

5.Rationale for Skill

There are a couple of rationales that can be explored for the need for human empathy in UX Designing. Some of these reasons were explored in the introduction of this report however, for the sake of exploration into the

topic, more details will be discussed in this section going forward.

5.1 Understanding Users

Empathy is crucial to a human-centered design process such as Design Thinking, and empathy helps design thinkers to set aside his or her own assumptions about the world in order to gain insight into their users and their needs.

6.Roles for Skill

Human empathy is a skill that has it broad and varied uses, has a lot of applications/roles in the world of software engineering, however for the purposes of this paper we are going to look at two distinct roles in the realm of Human interface design, where Human empathy is the building foundation for where these roles lie.

6.1 UI/UX Designer

The notion of human empathy can/is a huge asset for a software UX/UI designer, It allows them to develop/ understand their use cases more thoroughly when developing their designs for a program's UI.

Creating empathy with clients requires more than tuning in to them and mimicking their lives. By deciphering the world through the perspective of their qualities, history, religion, and culture, we can start to structure them in light of them. This is basic to making a connection.

6.2 UX Researcher

The purpose of the UX researcher (also referred to as "user researcher" or "design researcher") is to unearth human insights in order to guide the application of design. Human Empathy is a useful tool set of UX researchers, allowing them to put their Unbiased opinions in the research process.

7. Work-Related to Skill

7.1 A/B Testing

A/B testing is a Unique technique for making sense of the best online limited time and advertising procedures for your business. It very well may be utilized to test everything from site duplicate to deals messages to look through promotions. What's more, the favorable circumstances A/B testing give are sufficient to balance the extra time it takes.

Very much arranged A/B testing can have an immense effect on the viability of your advertising endeavors. Narrowing down the best components of advancement, and afterward joining them, can clearly put forth your showcasing attempts significantly more beneficial and fruitful.

Human Empathy allows the testers to rationalize some of the test scenarios and relate better feedback to the designers on why certain actions were noticed on test scenarios.

8. Real-World Scenario of Skill

As an example of why human empathy is important in interaction design in general, we can look at the biggest example of a company failing to utilize empathy in the design of their product and hence failing to connect with their target user base.

8.1 Designing Without Empathy: Google Glass

Google [5] launched its first wearable product, Google Glass, with much fanfare in 2013. The head-mounted wearable computer, while being technologically impressive, failed to perform well, and a lot of that comes down to a lack of empathy towards the users.

Although the Glass allows users to take photos, send messages, and view other information such as weather and transport directions, it does not actually fulfill the real needs of users. In other words, although the Glass performs many things, these are not things you need or want to get done.

Also, the Glass is generally a voice-activated device, and in our current social environment, saying commands out loud in the streets such as, "Okay Glass, send a message," just isn't a socially acceptable thing to do. Google's lack of empathic understanding in the user's social environment is evident here; if the user has to perform socially awkward or unacceptable acts to be able to use your product, you can be sure that few people would be willing to use your product.

Lastly, the Glass featured a nondescript camera which resulted in privacy concerns for those people around the Glass user, since there was no way of knowing whether or not they were being filmed. All of these problems can be traced back to Google's lack of empathy when they designed the Glass,

9 Role of Academia or Industry in Cultivating the Skill

There are several fields/majors in the realm of academia which can contribute towards the cultivation of human empathy, as empathy itself is a social construct, however, since the paper has a theme surrounding how empathy can reflect towards the betterment of Software. The later section of the paper is going to explore two areas of software engineering, where human empathy is highly recognized as an asset. HCI and Cognitive Sciences.

9.1 HCI (Human-Computer Interaction)

Human-computer interaction (HCI) is a multidisciplinary field of study focusing on the design of computer technology and, in particular, the interaction between humans (the users) and computers. While initially concerned with computers, HCI has since expanded to cover almost all forms of information technology design.

9.2 Cognitive Sciences

Cognitive Science is the interdisciplinary study of cognition in humans, animals, and machines. The goal of cognitive science is to understand the principles of intelligence with the hope that this will lead to a better comprehension of the mind and of learning and to develop intelligent devices.

With its insights into human activities and their understanding, Cognitive Sciences is a great gateway to the realization of empathy.

10. Tools Supporting the Skill

UX tools focus on the user and how they'll experience the content. These tools can help structure the information architecture, as well as how someone will flow through the experience. Since this is more conceptual, UX tools are about helping a designer paint the broader picture of how content and organization will affect the experience.

Below are some of the UI and UX tools that you may be useful for your design process. Some of these tools have features that work in both UX or UI.

1. Xmind(Mind Mapping and project Architecture)
2. Asuna (Project Management and task management)
3. Sketch (UI Architecture and design)
4. Pen and paper

11.Skill Self-Assessment

Considering the amount of information that can be further explored for this subject area, this paper covers the basic knowledge about it. However, it is the view of the author that given more time and extended scope further research can be done on how empathy can help with the understanding of human behaviors and ultimately the betterment of software products.

Therefore, Considering the points presented a rating of **7 out of 10** would be a reasonable assessment for the paper itself.

12.References

[1] Cognitive psychology in UX design
<https://medium.com/design-signals>

[2] Sympathy vs. Empathy in UX
<https://www.nngroup.com/articles/sympathy-vs-empathy-ux/#:~:text=Definition%3A%20Empathy%20is%20the%20ability.limitations%2C%20reasoning%2C%20and%20goals.>

[3] Personas
<https://www.interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed/personas>

[4] Intro to Human-computer interaction
<https://www.interaction-design.org/literature/topics/human-computer-interaction>

[5] Design Thinking with empathy
<https://www.interaction-design.org/literature/article/design-thinking-getting-started-with-empathy>