

EMPATHIZING VIRTUALLY – DEVELOPING FUTURE FORECASTING SKILLS

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ABSTRACT

Time-shift Alert: “Put yourself in the shoes of the user” to “Imagine yourself in the shoes of the user.” Empathy is the core of any design activity. It is said to be done by immersing oneself in the context of the user. It is best practiced by putting oneself in the shoes of the user, experience their circumstances, problems, barriers and then identify opportunities by gathering insights. Time has changed. We are experiencing the new normal which is a hybrid of less physical and more virtual. There is a need to swiftly transition to the virtual methods for carrying out design activity in this ever-demanding technology driven world. Before pandemic, empathy study can never be imagined to be done virtually. Although researchers have started doing empathy study virtually, but it lacks the essence. The insights which one can get from being in the context of the user is far more deeply and closely rooted to the problem than the insights gathered virtually which ultimately lacks the core user values.

It is not possible to gather the exact same insights virtually than being physically present in the user’s context, but we need to get as close as possible by devising efficient virtual methods. The main question which is addressed in this study is: How design pedagogy can be changed to adapt to the present virtual era? How will be the new discourse of design activity in educational institutes? What are the different feasible methods in the premise of design teaching and learning? What could be the different methods to do empathy study in different context with different set of user groups?

To answer the above intriguing questions, this study explores possible ways in which one can do empathy study in different context. Two methods were employed for the study. In the first method, early researchers, design students, academic professionals, and industry experts was asked to come up with new post-pandemic ways of doing empathy study in their own design problem which they are working for thesis. In the second method, we have used Futures Thinking technique developed by Jane McGonigal, a research director at the Institute of Futures, Palo Alto, California, USA. Ideas were brainstormed with focus

groups. Ideas from both the methods were analyzed on some defined parameters for its feasibility in the present scenario. Thus, a set of ideas were proposed for carrying out empathy study for different type of design problem for different type of user groups to be studied. It is therefore concluded that, Futures Thinking technique is an effective way to forecast future of design activities and design education in general.

"Future is already here; it's just not deeply imagined of." - Author

Keywords: virtual empathy, design education, future thinking, forecasting skills, design pedagogy

1 INTRODUCTION

We define empathy in its broadest meaning as perspective-taking, which includes both the involuntary act of feeling with another person and the cognitive act of putting oneself in their shoes and adopting their viewpoint (Köppen & Meinel, 2015). Empathy is essential in suggesting solutions that address the many requirements conceivable in these design difficulties - in other words, empathy is a hallmark of good design concepts (Kouprie & Visser, 2009). Empathy in design has been defined as a learnable skill that includes awareness of oneself and others, stepping into and out of stakeholder perspectives, feeling with others while regulating one's own emotions, and showing dignity for stakeholders' diverse values and needs, according to psychology definitions (Kouprie & Visser, 2009) (Walther et al., 2017). Empathy is, in fact, a keyway for designers to address knowledge gaps while designing (Kouprie & Visser, 2009). Empathy grows as a result of a process known as "need finding," which focuses on identifying people's explicit and implicit needs (Rauth et al., 2010). Fast backward to the pre Covid, where doing an activity like empathy study was a normal step. During Covid, every activity came to a halt. Many designers found it extremely difficult to conduct empathy study and thus the transition happened. Many designers tried to use different methods which lead to build empathy study. There was a shift from using empathy study to gather user insights to using recorded videos of the user while they do the activity in enquiry. Thus, this study is an attempt to explore all these transitions of using different methods to gather insights from design students, academic professionals, and industry experts.

"I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel." - Maya Angelou

2 METHOD AND DISCUSSION

Several methods were employed for the study undertaken to explore possible ways to perform empathy study post pandemic. The first method comprises of a qualitative survey taken from masters, research scholars, academic professionals, and industry experts to come up with wild ideas on ways of doing empathy in this hybrid way of living life post pandemic. The second method includes taking one-to-one interview with a group of design students. Ideas were collected and synthesized into themes. The third method which was used to explore was Future Thinking Technique developed by Jane McGonigal, research director at the Institute of Futures. Broader themes were proposed based on the responses collected aiming at providing a generalized ideas and methods to do empathy virtually. The responses are discussed in the following three sections (Qualitative Survey,

Personal Interviews, Future Thinking Technique) in detail and further analyzed into themes for a general understanding.

QUALITATIVE SURVEY

A survey was taken through a google form among early researchers, design students, academic professionals, and industry experts working in the design domain. A small abstract explaining the intention of the study was put forth in the google form as:

“Empathy is at the heart of every design work. It is believed to be accomplished through immersing oneself in the user's environment. It is best done by putting oneself in the shoes of the user, experiencing their problems and barriers, then gathering insights to uncover opportunities. Due to Covid-19 pandemic, designers are finding it difficult to carry out the same activity by being physically present in the user context. Thus, some of them are trying to do it virtually. Do you think that the insights gathered by doing the empathy study virtually will be same if it would have been performed by physically present in the user context? You probably guessed it right. The answer is no. Hence, the next step is to find out: How we can carry out empathy study virtually to gather insights as close as possible to the insights that would have been gathered from being physically present in the user’s context? Tell us: How you as a designer is doing it?”

The questions asked were about profession, domain of design followed by a closing question asking to propose as many ways as possible which they were able to think on how empathy study can be done virtually. The responses are as follows:

Profession?
20 responses

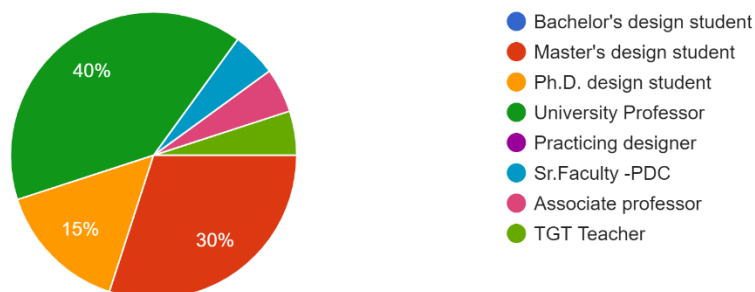


Figure 1: Designers demographics

Design domain you are working for your next project/thesis?

20 responses

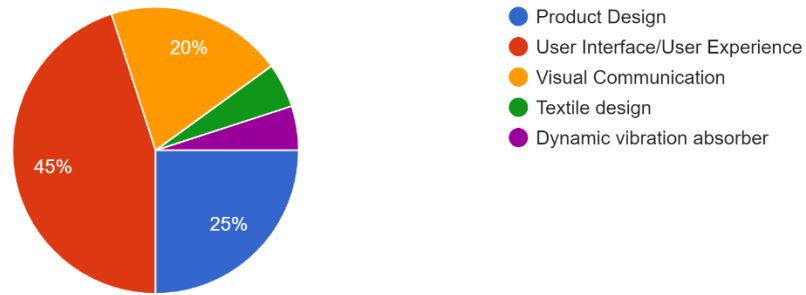


Figure 2: Design domain demographics

RESPONSES OF THE QUALITATIVE SURVEY

Profession	Domain of Design	Response
University Professor (8)	<ol style="list-style-type: none"> 1. UI/UX (5) 2. Product Design (1) 3. Visual Communication (2) 	<ol style="list-style-type: none"> 1. Online 2. Design Thinking 3. By understanding others feeling 4. Virtually 5. Listening from others 6. Literature Survey
Masters Design Student (6)	<ol style="list-style-type: none"> 1. UI/UX (4) 2. Product Design (1) 3. Visual Communication (1) 	<ol style="list-style-type: none"> 1. Through empathy experiments to feel what users feel 2. Phone call interviews 3. Google forms 4. Online search via reading online material that are relevant 5. Video interview 6. Collect data from online sources and libraries 7. Watching videos of the user while they interact with the subject and study the use cases in similar area 8. Audio call 9. A Day in a life of

		10. Auto-ethnography 11. Shadowing
Ph.D. Design Student (3)	1. Product Design (2) 2. Textile Design (1)	1. Showing video 2. Using augmented reality 3. We can tell the users to record their problems in a diary for some period 4. Telling the users to do video recording of themselves while they are performing that activity with the surrounding/objects
Senior Faculty - PDC	Product Design (1)	Do not know
Associate Professor	Industrial Design (1)	Physical Meeting
TGT teacher	Visual Communication (1)	Do not know

Table 1: Responses of the qualitative survey

Key Takeaways:

The above table provides a spectrum in which early researchers, design students, academic professionals, and industry experts are carrying out the empathy study.

Following are the different ways used and suggested by the designers:

1. Data collection technique such as google form survey, searching online, searching in libraries, and doing literature study which are different methods than empathy study.
2. Interview methods such as audio call, video call, video conferencing, were used.
3. Supporting methods to empathy such as shadowing, auto-ethnography, a day in the life of, telling users to record their problems in a video or a diary while they perform the activity in enquiry, watching relevant videos were used.
4. Some designers have proposed the idea of conducting empathy experiments.
5. Some are interested in exploring the possibilities of doing empathy study through augmented reality and metaverse.
6. Lastly, few designers were stringent on doing empathy study only in its original practiced way and that is being physically immerse oneself in the context of user to gather real insights.

PERSONAL INTERVIEWS

Personal Interviews were taken with design students in a mixed offline and online mode. A total of 5 design students were interviewed. The author gives a brief introduction of empathy study to the interviewee to set the tone of the interview. The respondents were asked to propose ideas based on the project presently they are involved for their thesis. The responses were recorded as notes by the author and the same has been reported below:

Interview 1

Interviewee is a PhD student whose research area is information design in healthcare setting. He described his approach to do empathy study is by collecting the phone numbers of the target patients. Then he will be conducting interviews on audio call and online meeting based on the user preference and literacy rate.

Interview 2

Interviewee is a PhD student whose research area is rehabilitation devices for Intensive Care Unit (ICU). He described his approach to do empathy study is by watching videos online related to rehabilitation devices in ICU. He will try to visit some patients in their context for empathy study.

Interview 3

Interviewee is a PhD student whose research area is in medical devices. He described his approach to do empathy study by visiting patients in their physical context. His device must be used in the real setting to test the feasibility so that he can iterate and optimize the design based on the feedback. He cannot imagine a virtual empathy study for his research work.

Interview 4

Interviewee is a PhD student whose research area is in medical infrastructure design. He described his approach to do empathy study by testing his prototype in real context. His designed infrastructure must be used in the real setting to test the feasibility so that he can iterate and optimize the design based on the feedback. He says that doing empathy is the essence of his study.

Interview 5

Interviewee is a PhD student whose research area is in pollution control devices. He described his problem statement where empathy study is not needed. His study is related to an industrial product which needs a more technical simulation and prototyping activity.

Key Takeaways:

Responses indicate that need of empathy study depends upon the nature of project in consideration. Not every designer who is involved in a design activity necessarily require doing an empathy study.

FUTURES THINKING TECHNIQUE

The Institute of Futures' Futures Thinking technique was employed. In any period of major crisis or disturbance, four kinds of change are likely to emerge. We consider growth patterns, constraint patterns, collapse patterns, and transformation patterns in this method. A future theme, such as the future of restaurants, the future of education, the future of health, the future of your community, or the future of your organization, must be chosen. Individuals will find something significant and interesting. Then, in their selected topic, the individual must provide four examples of change. One example of expansion, another of restraint, another of collapse, and yet another of transformation. These patterns of change may now quickly spring to mind. Each of us may already have some ideas or examples for all four. There is no problem if participants do not have any idea at this stage. The suggestion is to simply search the web, news, or social media for ideas using a topic of your choice, as well as search terms like growth, success, collapse, failure, discipline, and constraint.

New laws, new regulations, long-term consequences, reinvent, or metamorphosis, depending on which change pattern is being examined and decided. Now, everyone will ask themselves some intriguing questions as: Which of these four specific examples of change would you like to be a part of the most? Whether you want to help speed up the change, give it some momentum, and make it more likely, or you want to slow it down and make it less likely. You want to slow it down, reduce it, and avoid it altogether. To put it another way, which example of change currently gives you the greatest sense of urgency optimism? There are no right or wrong replies. It's simply a matter of determining where you believe there is the greatest potential or urgency, as well as where you can have the greatest impact. (McGonigal, 2010)

Growth Pattern:

The growth trend tells a picture of more recent transient conditions, both good and terrible, continuing to increase at a quicker rate than in the past. It's like if someone poured flammable liquid on a fire. To find a growth pattern we ask ourselves the question, what existing trends have been accelerated because of the pandemic? We've witnessed a boom of virtual stay-at-home everything in addition to remote jobs. It's difficult to overstate the significance of this transition, which includes telemedicine appointments for ordinary health issues. Thus, to do empathy study in these scenarios are becoming difficult as the pandemic uncovers itself.

Let's look at a few more examples of this growth pattern. For the ease and flexibility, they provide, most forecasters predict that many of these behaviors will persist. This trend suggests that, in the future, we should all consider about enhancing and developing virtual versions of everything. According to new statistics published in the New York Times, exercise is one of the top two activities individuals are spending more time doing since the pandemic began, along with childcare. To improve their diet, many individuals began consuming more plant-based alternatives to meat. This pattern isn't only about better bodies; it's also about healthier environments. To summarize what all these trends tell us about our future lives following COVID-19. In the next three to five years, it will become increasingly crucial for all of us to channel our creativity and invention into new experiences, goods, and services that increase human connection while also improving our health and well-being. (McGonigal, 2010)

Constraint pattern:

The constraint pattern is a story of accepting new limits and restrictions. Often, it's the story of desperate times that call for desperate measures. Accepting new limits and restrictions is the tale of the constraint pattern. Often, the story of dire times necessitates extreme actions. We make individual sacrifices for the larger good in this pattern of transformation. So far, we've discussed global lockdowns, oxygen cylinder shortages, and hospital bed shortages as examples of healthcare service constraints during the pandemic. The next stage is to begin looking for more constraint patterns, and then to see what all those patterns sum up to. What is the colossal pattern? What's the overall picture, as far as we can tell? Let's take a closer look at some more COVID 19 restriction patterns. To find a constraint pattern, we must first ask oneself, "What new sorts of limits are there?" Restrictions? And because of the pandemic, people are willing to make sacrifices for the greater good? Empathy study has been halted in the design activity and people are

preferring other methods to get the same insights. Some of the methods being used is watching similar videos on internet, data collection from libraries, etc.

Let's look at a few more examples of this critical constraint pattern. The influence of lockdowns on air pollution and our climatic health is one of the most obvious constraint patterns we notice throughout the pandemic. Air quality has altered considerably around the world because of less commuting and air travel as Delhi being the example, before and after the lockdown. As everyone stayed at home and planes were grounded, noise pollution decreased dramatically. In the year 2020, there was a 50% reduction in urban noise. Because of its harmful influence on mental health and wellbeing, the World Health Organization has classified noise pollution as the second most dangerous environmental risk factor for people after air pollution. World Health Organization researchers have found that one in every five persons on the planet is today subjected to long-term noise pollution that is hazardous to their health. (McGonigal, 2010)

Collapse pattern:

The collapse pattern is a dismal failure story. It's when human systems fail to overcome inherent flaws or divides, or when they fail to prevent anarchy. Social structures are stressed to breaking point in this pattern of development, resulting in system collapse and social disorder. The collapse pattern of change is the most difficult to analyze. It frequently triggers sentiments of rage and frustration. However, acknowledging these new forms of suffering and the unparalleled failures is the first step toward healing and integrating something better. We ask ourselves, "What sorts of widespread suffering and institutional failures are on the rise as a result of the pandemic?" to uncover patterns of collapse. This was observed in case of empathy study too where researchers have switched to other methods like online interviews, audio calls, etc.

Let's look at a few more examples of this collapse pattern. Our supply chains, from masks and hand sanitizer to personal protective equipment and lifesaving pharmaceuticals, were without a doubt the most vulnerable during the pandemic. It became considerably more difficult for us to get what we needed when we needed it, especially if the supplies were critical. Mental health, trauma, and fatigue from the pandemic are the following patterns of breakdown that require immediate attention, particularly among health care personnel and teachers. Our frontline staff are under a great deal of physical, emotional, and mental strain. According to a national survey for US, 76% of health workers have experienced burnout because of the epidemic, and 48% have pondered retiring, abandoned their employment, or changed careers entirely. Chronic sadness and anxiety are at all-time

highs in the general population, owing to the pandemic's economic uncertainty, social isolation, and a loss of purpose. More than half of those who have survived severe COVID-19 episodes have symptoms of post-traumatic stress disorder. COVID-19 has claimed the lives of many millions of people. The question we should really be asking ourselves, as product and service designers, is what can we do to provide some new feature, some new experience that can contribute to positive mental health and truly boost someone's well-being? In the next 3-5 years, we all have the potential to help others heal from this area. We're also dealing with a new type of physical health threat: extended COVID. Approximately 10% of persons who recover from COVID-19 will experience symptoms like chronic fatigue, mental fog, or shortness of breath that last for six months or more. (McGonigal, 2010)

Transformation pattern:

The transformation pattern tells the story of a life-changing realization, an aha moment. It's a story that tests our ideas about how things function and pushes our imagination. It often provides us hope for the future by resolving major challenges in surprising ways. We ask ourselves the question to discover patterns of transformation. Because of the pandemic, what previously unfathomable, incomprehensible thoughts are on the cusp of becoming reality? People have tried to transform from normal empathy study towards using other methods like shadowing and auto-ethnography to build empathy study.

Let's look at a few more examples of this transformation pattern. People who can afford it are becoming more reliant on telemedicine in the healthcare sector, but those who cannot afford it are still travelling vast distances to hospitals in their nearby cities for treatment. However, there is a shortage of personnel, services, and facilities at these Primary Healthcare Centers (PHCs) to handle patients from far-flung areas. Only those who can afford telemedicine consultation and therapy are affected by the transformation. Thus, we need to find solutions to provide key healthcare to the underserved communities. (McGonigal, 2010)

Key Takeaways:

All four patterns showed a transition from resistance to adaptation in doing empathy study. Designers are using all kinds of methods whether it is leading to empathy or not. They used other methods to gather insights which never leads to empathy study but slowly and lately, they started using methods which help to build the empathy study.

3 CONCLUSION

We conclude from the above study that there are different approaches taken by the designers during and post pandemic to carry the most important step in their design activity. The responses received provides a variety of insights. The first insight which is imperative to mention that some of the respondents being in the profession of design are not aware of empathy in design. There is a lack of awareness of empathy study being a core step in design activities. Secondly, many responses show that people are referring to the interview part of the study rather than the empathy study itself like the audio call, video call, and online meet. Some referred to data collection techniques as collection data from online sources and libraries. Interestingly, some have referred to other methods which are often used to do empathy study like shadowing, auto-ethnography, and a day in the life methods. All these approaches also point to the quality of designers finding possibilities in a constrained situation. Although, some of the approaches may not lead to the same exact insights, the study has shown mindsets, approaches and jugaad to carry out empathy study.

Future is already here; it's just not deeply imagined of. The conclusion is that we need to inculcate Futures Thinking to forecast our tomorrow by learning the patterns from the past, then taking actions of transformation to innovate for the future.

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