
EQUITABLE DESIGN

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Abstract

We often believe that being fair entails that everyone receives the same treatment, and we were taught this as children. But that only works if we're all on the same page in the first place. Gender and sexuality, colour, physical or mental ability, and religion are all factors that influence social fairness. It is our job as designers to consider the needs of users who have been excluded from everyday products because they are members of historically underrepresented populations or organizations. The design process can be an example of fair practices, but we must accept responsibility for going the extra mile. As a culture, we become more aware of where we have erred and where we have been insensitive. It is conceivable to reduce gender disparity in our lifetimes; one approach to do so is to change the way we do business.

Key Words: *Equitable, Universal design, Inclusive design, Behavioral design*

1. Introduction

Definitions of social equity can vary but all focus on the ideals of justice and fairness. Equity in old societies involves the role of public administrators, who are responsible for ensuring that social services are delivered equitably. This implies taking into account historical and current inequalities among groups. Fairness is dependent on this social and historical context.

2. Equity vs Equality

Terminologically, '**equity**' and '**equality**' sound similar while hearing or reading it for the first time. But actually, they are just homophones (i.e., sounds similar but with different meanings and different spelling).

Conceptually, 'equity' and 'equality' are completely different from one another. Moreover, the difference between equity and equality helps us to understand the notion of social justice, social equity, social inclusion, racial justice and social security. Even if you take the time to search the words equity and equality in the dictionary, you might walk away thinking they mean the same thing. Merriam-Webster defines equitable as "dealing fairly and equally with all concerned," and equal as "of the same measure, quantity, amount, or number as another." However, much like systemic and systematic, the two words (and their derivatives) can't be used interchangeably. Equality has to do with giving everyone the same resources, whereas equity involves distributing resources based on the needs of the recipients.

When we are talking about equality, we are talking about two things that are the same or have a similar value. When we treat two people or two groups of people equally, we make sure they have or get the same things. To give an example, if Rahul is given some number of apples, then it should be made sure that Raj also gets the same number of apples, so that they are treated equally. But this is different from equity. It can unconventionally also be said that equity is giving everyone what they need to be successful. Which also translates into not giving everyone the exact same thing.

It is imperative to remember that if we give everyone the exact same thing expecting that it will make people equal it considers that everyone started at the same point.

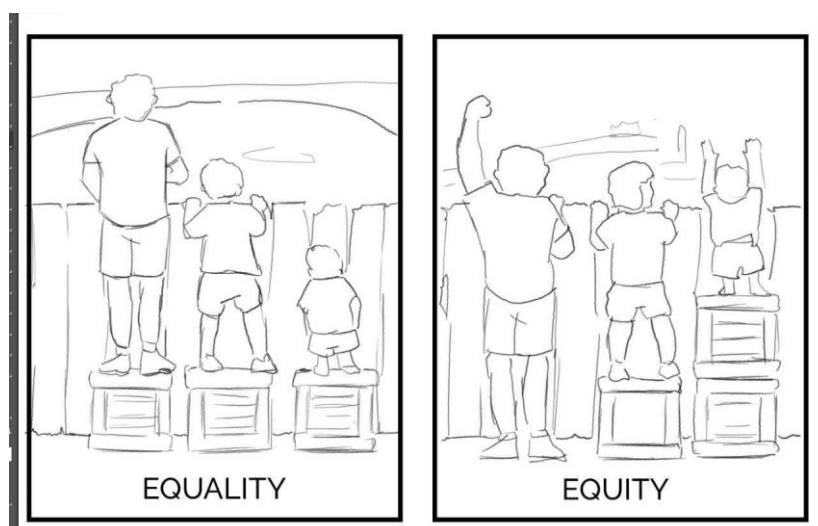


Fig. 1. Equality Fig. 2. Equity

In the first picture (Fig 1), everyone is given the exact same box so that they are treated equally in order for them to see over the fence. That is great for the person on the left because he is already tall, but it is not so great for the person on the right, who can't see over the fence. If we look through the perspective of equity, we wouldn't want everyone to have the same box because each person has a different height to start out with. In the mindset of equity, we would give everyone what they need. So that everyone reaches the same level (Fig 2).

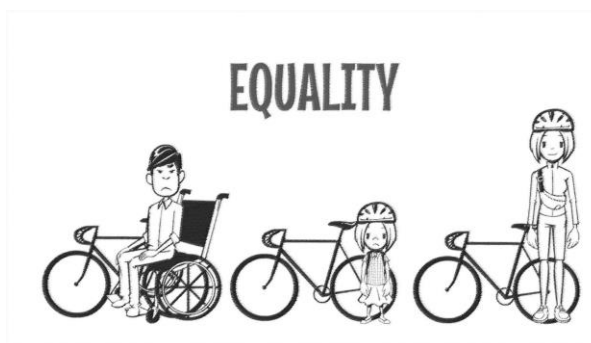


Fig. 3. Equality



Fig. 4. Equity

In another example with equality in mind, if we treat everyone the same and give everyone the same cycle (Fig 3) and that wouldn't help the person on the left who can't write that kind of cycle or the person in the middle who is too short for that kind of cycle. In the same situation through the lenses of equity, we should give everyone a different kind of cycle (Fig 4) so they can all enjoy a ride. This is where the concept of fairness becomes a little confusing. We often think that being fair means that everyone gets the same thing and we were pretty much taught that when we were growing up. But that only works when we are all the same, to begin with. There is a quote, by Doctor Naheed Dosani, which says "Equality is giving everyone a shoe, Equity is giving everyone a shoe that fits".

3. Types of Equity

3.1 Equity in finance, accounting and ownership

Finance- Ownership of assets that have liabilities attached to them

Stock- equity based on original distribution of cash or other value to a business

Home equity- The difference between market value and unpaid mortgage balance on a home

Private equity- Stock in a privately held company

3.2 Business, Justice and Law

Law- Equity is a particular body of law that was developed in the English Court of Chancery. It is not a synonym for 'general fairness' or 'natural justice'. It exists in domestic law, both in civil law and in common law systems and international law. The tradition of equity begins in antiquity with the writings of Aristotle and with Roman law. Later, in civil law systems, equity was integrated into the legal rules, while in common law systems it became an independent body of law.

Economics- Equity, or economic equality, is the concept or idea of fairness in economics, particularly with taxation or welfare economics. More specifically, it may refer to equal life chances regardless of identity, to provide all citizens with a basic and equal minimum of income, goods, and services or to increase funds and commitment for redistribution.

Educational equity- It is the study and achievement of population proportionate group inclusion and credentialing in education.

Intergenerational equity- Equality and fairness in relationships between people in different generations.

Equity theory- on the relations and perceptions of fairness in distributions of resources within social and professional situations.

Employment equity- a policy requiring or encouraging the hiring of disenfranchised minorities

- Health equity- Fairness and justice in health and healthcare.

3.3 Education and social sciences

- Social Equity.
- Factors influencing social equity can be gender and sexuality, race, physical or mental ability and religion.

4. Equity and design

As designers, it is imperative that we think of designs that are equitable. The most common and probably apt definition for design is usually stated: Design is to solve a problem.

Making fancy products is just not enough. As designers, our duty is much larger. As shapers of the future designers should always look forward to building new and improved experiences for

people. This involves in-depth research and taking into consideration all types of users that might use a specific product or service. As designers, it is our responsibility to include the needs of users who have experienced exclusion while using day-to-day products due to being a part of historically underrepresented communities or groups.

The aim of an equitable design is to create designs that cater to groups that have been historically underrepresented and address diverse identities. An equitable design takes into consideration gender, sexuality, race, ethnicity, nationality and abilities (Raghvani, 2021).

5. Designing with equity as a core value

Equity in design starts with finding systems that unfairly privilege some over others and asking questions on what can be done to balance it out and level the playing field. Through this, design based on equity disrupts power structures that otherwise might be invisible to most.

Almost all design projects which are human-centered start with user questionnaires and trying to figure out what they require. The details of a situation or context, which can provide a starting point to shed light on where current systems are not serving people, especially in marginalized groups. The design process can be a specimen of equitable practices- but we need to take responsibility for taking that extra step.

In order for the outcome to be equitable, the process also needs to be equitable. Just like the journey is as important or maybe even more important than the destination, it is in the small interactions and conversations along the way that equity begins to happen.

Achievement of equity becomes possible when we question ourselves and our perspective and challenge the system that made us think in a particular way. Accepting the fact that we know so little makes things easier. Admitting that you have been partial while approaching something and letting others critique you thereby doing it differently and better can turn out to be the first step towards a new relationship with the identities we bring to the table and emphasizing equitable design practices.

6. Examples

Examples of equitable design and in-equitable design can be found around us if we look closely. It is very likely that most of the examples of inequitable designs that currently exist were established a long time ago. One reason for this can be that we as a society were not as inclusive as we are now. We were not as sensitive to the needs of the less privileged as we are now. Hence while these products or services were made, there was less effort to take into consideration the

less privileged, the physically disabled etc. in the design process.



Fig. 5. Example of inequitable design

Let us take the example of the picture (Fig 5) given above. Railway stations in most parts of the world were made decades ago. Due to which some design flaws in terms of equity are still visible, like the egress and ingress into and from the trains for people who are physically disabled. Another example of inequitable design is more common to us. The stairs lately. There has been a good amount of effort being made to make the stairs more inclusive by building ramps to accommodate the physically disabled. Most of the public places have made it mandatory to have ramps so that people who cannot access stairs can also reach their place of destination. As a society, as we progress, we realize where we have made mistakes and where we have been insensitive. Another good example of inequitable products is fairness creams. Fairness creams were being sold like hotcakes in our country where the media made us feel that it is not okay to be dark-skinned in a country where most of the population are brown-skinned or dark-skinned. We were made to feel insecure about our skin colour to push their sales. It was much later we realized that beauty standards are not something that the corporations should be allowed to set. And finally, advertisements for any kind of duty products were made illegal, more efforts are being made to teach people how to feel comfortable in their own skin. Whatever new products we come up with, there should always be an effort to make it equitable by making the design process more inclusive.

7. Behavioral design

We as human beings are biased; we are built to be biased. This is a natural tendency we have adopted to make sense of our world but unfortunately this natural tendency. When applied to people can result in Bias. So, we need to avoid this unconscious bias to build a better society through behavioral design. It is possible to bring down gender inequality in our lifetime, one way

to do this is by changing our organization. To state one example in the 1970s, major US or case stress came up with an idea to select musicians by judging them based on their musical skills and not their looks by adding a simple dark curtain at the time of the audition. This resulted in, not only the selection of better talent but also the fraction of female musicians grew by a fraction of 35%. Simply removing the name and photos from the resume can avoid bias to a certain extent. This results in access to a full talent pool of candidates. Behavioral designs like these have doubled the fraction of women in some of the largest companies. Seeing women in such a position of higher power be it in business or politics changes how people think and opens new possibilities for the younger generation and motivates them. This also results in getting new insights and encourages women to speak up. The greater number of women in this area, the more girls in the community are motivated to stay in school, marry later and delay having their first child. We have the tools to quickly redesign how we work, learn and live (Harvard University, 2016).

8. Equitable use as a principle of universal design

When we talk about equitable use it means that the design must be useful and marketable to people with all abilities. This principle brings attention to what we hope to achieve with universal design.

Along the same lines of the definition of the equitable use principle, there are four guidelines to ensure proper implementation.

8.1 Provide the same means of use for all users

This allows all the users to use the same features at the same time. For example, automatic doors for people who are walking, using a wheelchair or using rolling luggage.

8.2 Avoid segregation or stigmatizing any users

If we look into history, the concept of “separate but equal” has not been equitable for all people. It isolates the person and more attention is drawn towards the fact that the person has a disability.

8.3 Ensure provisions of privacy, security and safety, equally to all users

Designs like restrooms for families give privacy and security for people who would require assistance. Safety is also to be taken into consideration so users are not injured when using a design.

8.4 Make the design appealing to all users

Designs that are appealing to the eyes can bring together those who want to use them. However, it is imperative that the designs should be just as appealing in their function. To put it in other words, designs should be marketable to anyone.

9. Conclusion

In conclusion, equitable design in today's world is something that should not be overlooked. Equitable design should not be just a fancy word for the corporation to market their products. It is something that should be in the roots of the product right from the beginning of the design process. Equitable design aids in the removal of barriers that generate division and differentiation. It gives everyone equal access, regardless of their identification. By investigating and studying a varied spectrum of users, the equitable design aims to provide a framework for people that empathize with human differences. Designers and researchers use this paradigm to make design decisions that consider human characteristics such as gender, age, sexual orientation, language, race, and talents.

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