

THE  
BACHCHAO  
PROJECT

# Designing Technology for Diversity and Inclusion



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**Designing technology that encompasses the diversity among its intended users and includes them with their active participation.**

**Reference:**

**Building technology for diversity and inclusion 101**

**By Chinmayi S K, Rohini Lakshané and Willow Brough**

**<https://goo.gl/BCqQMZ>**

# Examples

- Kodak's "Shirley Card" from the 1950s:  
<http://www.cjc-online.ca/index.php/journal/article/view/2196>
- The multiracial Shirley Card arrived only in the 1970s.

# Examples

- Office air-conditioning: 2016 study in the journal Nature Climate Change; based on a formula developed in the 1960s that employs the resting metabolic rate of a 70-kg, 40-year-old man.
- Hand-held devices: Mobile phones/ phablets
  - Men/ women; different races; left-handed/ right-handed; differently-abled; senior citizens
  - Average adult man's hand is about 2 cm larger than a woman's
  - Pink colour, apps targeted at women [As essentialisation or fetishisation]
- Apple Watch heart rate monitor
- Mobile device-based apps for women's safety:  
<https://cis-india.org/raw/evaluating-safety-buttons-on-mobile-devices-preview>
- Women's safety products

**The many  
diverse  
diversities**

# Why bake inclusivity into tech design?

- Retrofitting or rebuilding could be impossible, wasteful, expensive or economically unviable. Correction could be a protracted, time and resource-consuming process.
- Dangerous, safety-compromising or counterproductive for excluded or ‘illegitimate’ users.
- Bad design gets linked to “user (in)competence”, clumsiness, or ditziness.
- Users feel excluded, vulnerable, segregated or discriminated against.
  - Over time, these users feel disrespected and disempowered
  - These users may choose to leave; Minorities feel unwelcome
- No “ambient sense of belonging” for some sections of the population
- Affects the wellbeing of individuals, families, organisations, workplaces, the society, the country, the economy.

# Why do we need the active participation of stakeholders?

- “Lived experience”
- “Nothing about us, without us.” Every group knows what’s best for them.
- No appropriation
- One or more sections of the population is not invisibilised.
- Diversity == more innovation; Homogeneity harms innovation
- “Ambient sense of belonging”
- Women are almost half the world’s population. The “Female Economy” was worth US \$22 trillion in 2015 and is growing.
  - Every broad group is a huge market.

# Further Reading

- It's a Man's Phone, Zeynep Tufekci  
<https://medium.com/technology-and-society/its-a-mans-phone-a26c6bee1b69>
- Building tech for diversity and inclusion, Chinmayi S.K.  
<https://medium.com/@chinmayisk/building-technology-for-diversity-and-inclusion-3d9f6304463a>
- Diversity, Equity, and Inclusion in Science and Technology: Action Grid [PDF]  
<https://www.whitehouse.gov/sites/whitehouse.gov/files/images/Documents/Diversity%20Equity%20Inclusion%20Action%20Grid.pdf>
- Diversity & Inclusion in Design: Why Do They Matter?  
<https://www.aiga.org/diversity-and-inclusion-in-design-why-do-they-matter>
- Diversity & Inclusion Resources <https://www.aiga.org/diversity-and-inclusion-resources>
- Fostering Innovation Through a Diverse Workforce [PDF]  
[https://images.forbes.com/forbesinsights/StudyPDFs/Innovation\\_Through\\_Diversity.pdf](https://images.forbes.com/forbesinsights/StudyPDFs/Innovation_Through_Diversity.pdf)



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