Comprehensive training

28 June – 21 July 2022

HOSTED BY GAVI, WHO, UNICEF & US CDC

Digital Health Interventions

Lecturers:

- **Sara Chamberlain**, Digital Director, BBC Media Action, India
- **Dr. Amnesty LeFevre**, University of Cape Town School of Public Health and Family Medicine, South Africa
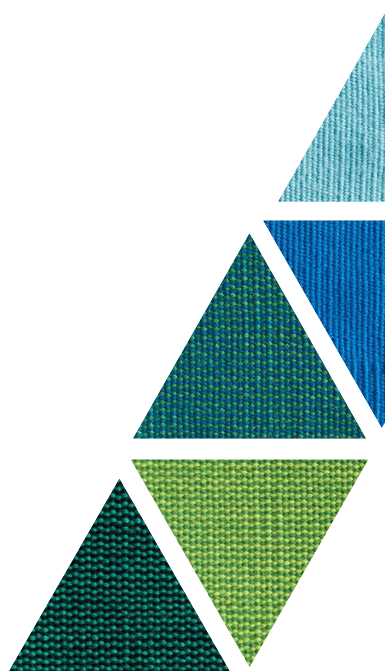
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Outline

- Learning objectives

- Definitions

- What is gender intentional design?

- Why does it matter?

- Examples from the field

- How do you do it?

Learning objectives

Participants will...

- Have greater knowledge of gender intentional design and the risks of gender-blind design

- Understand why gender intentional design is more likely to result in inclusive digital solutions for vaccine programs

- Feel more confident in their ability to design inclusive digital solutions for vaccine programs
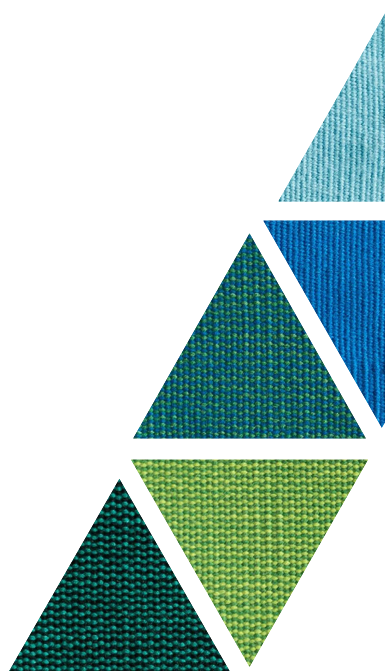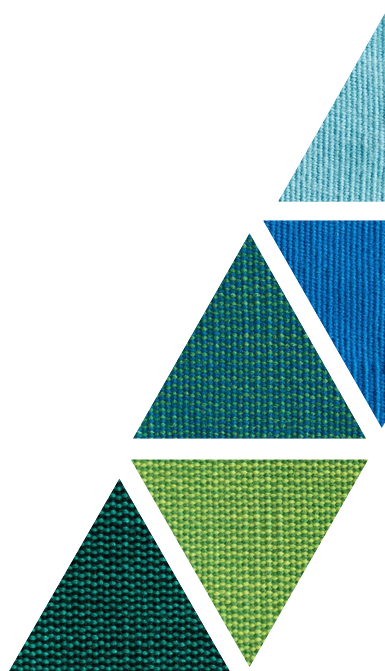
Definitions

- ## Gender digital divide

  The Gender Digital Divide refers to women and girls' lack of access to, use and development of information communication technologies – *US State Department*
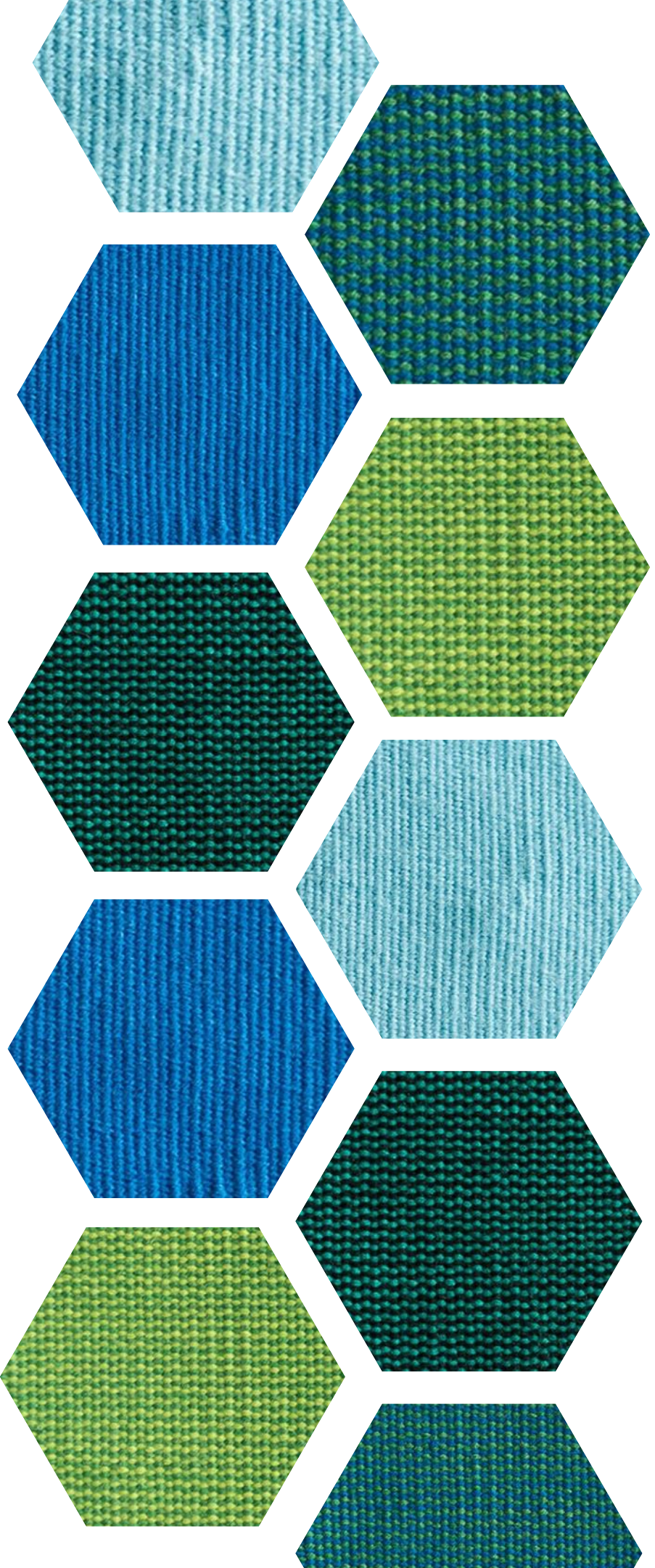
- ## Digital literacy

  "Digital literacy is the ability of individuals and communities to understand and use digital technologies for meaningful actions within life situations" – *Digital Literacy Mission, Government of India*
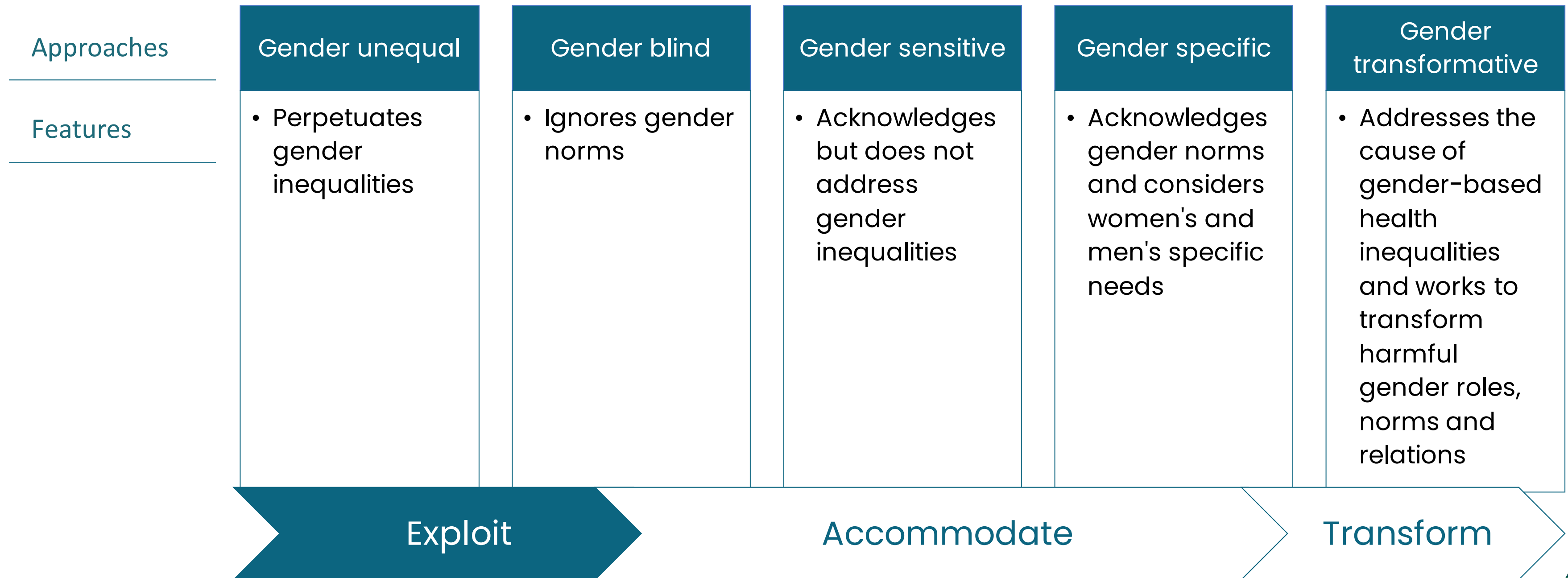
- ## Gender intentionality

  "Gender intentionality means identifying and understanding gender inequalities, gender-based constraints, and inequitable norms and dynamics and taking steps to address them." – *Melinda Gates*

What is gender intentional design ?

A continuum of approaches to action on gender and health

Approaches

Features

Gender unequal	Gender blind	Gender sensitive	Gender specific	Gender transformative
• Perpetuates gender inequalities	• Ignores gender norms	• Acknowledges but does not address gender inequalities	• Acknowledges gender norms and considers women's and men's specific needs	• Addresses the cause of gender-based health inequalities and works to transform harmful gender roles, norms and relations

Exploit → **Accommodate** → **Transform**

Why does it matter ?

"By ignoring gender inequities, many development projects fail to achieve their objective"

–Melinda Gates

"Digital development programs should never assume that the users or beneficiaries have the necessary digital literacy skills to take full advantage of the program or to understand and manage the potential risks involved. A program that incorrectly makes this assumption may set itself up to fail or deepen the divide between the digital haves and have-nots."
– USAID

Failure to address the known and emerging gender-related inequities during the largest global vaccine deployment in history will delay vaccination coverage, add to COVID-19 morbidity and mortality and to its burden on health systems. This will further delay national economic recovery efforts and countries' ability to build back better
– UNU Gender & Health Hub
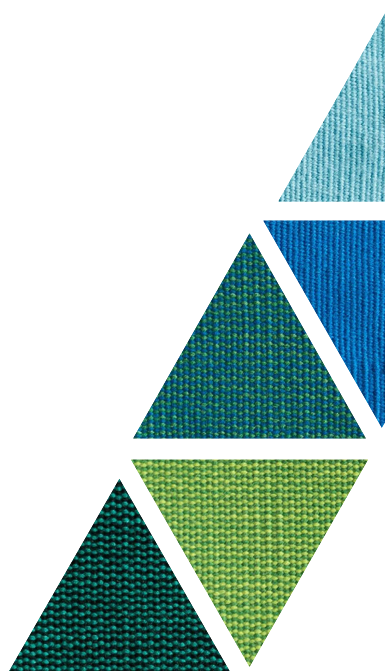
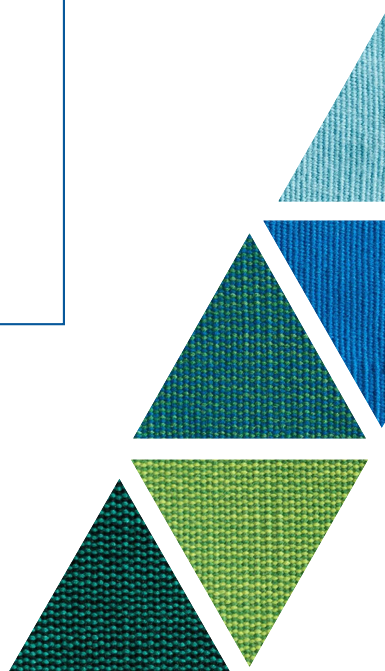# Case study: The gender digital divide in India

Smartphones/internet

- *49% of men but only 26% of women owned smartphones in 2021*

- *51% of men but only 30% of women used the mobile internet in 2021*

- *Ownership and use is lowest among the most disadvantaged*

The Mobile Gender Gap Report 2022
https://www.gsma.com/mobilefordevelopment/blog/the-mobile-gender-gap-report-2022/
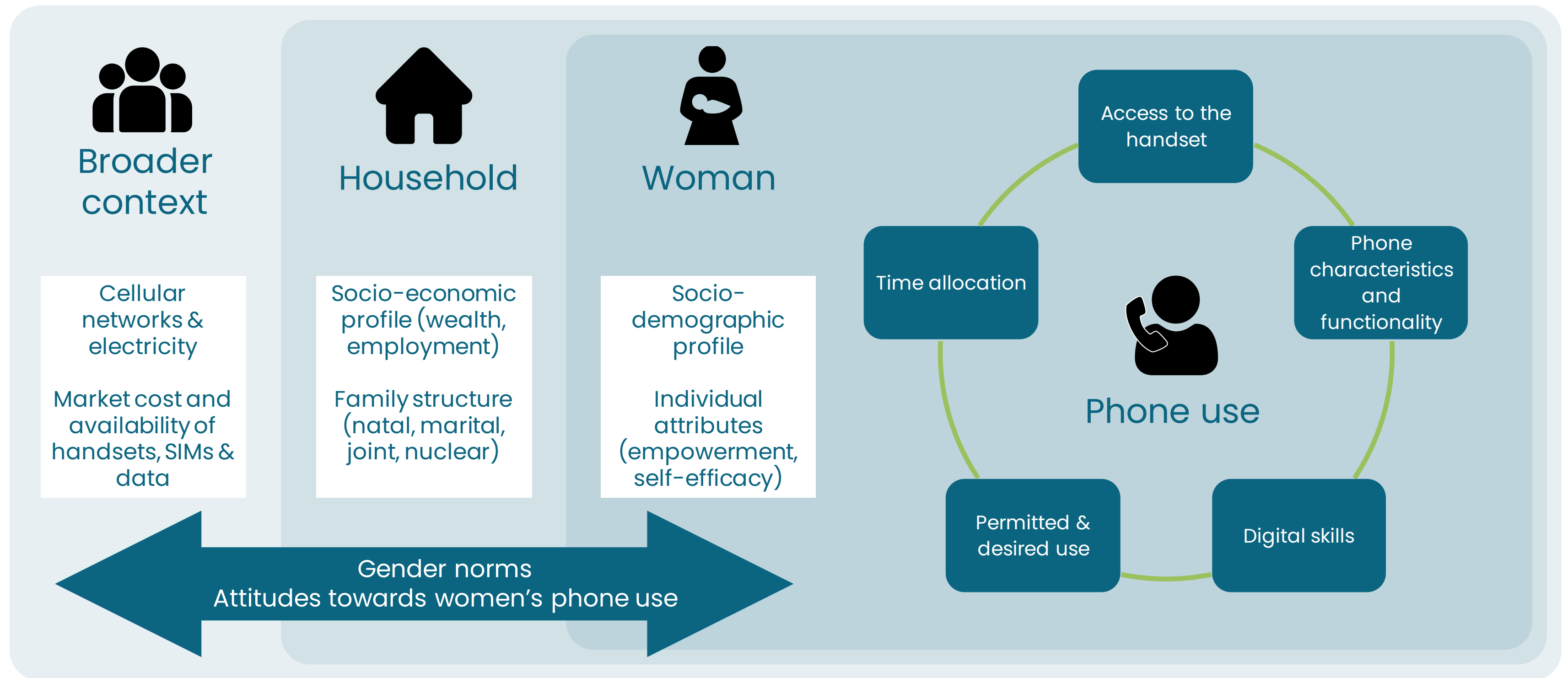
Social media

- *India has one of the largest social media markets in the world but only 30% of users were women in 2021*

- *Social media users are younger, better educated, wealthier and urban*

BBC Media Action, 2022, Why aren't women part of the conversation?
https://downloads.bbc.co.uk/mediaaction/pdf/india-research-social-media-gender-gap-2022.pdf

Determinants of women's mobile phone access and use

Broader context

Cellular networks & electricity

Market cost and availability of handsets, SIMs & data

Household

Socio-economic profile (wealth, employment)

Family structure (natal, marital, joint, nuclear)

Woman

Socio-demographic profile

Individual attributes (empowerment, self-efficacy)

Gender norms
Attitudes towards women's phone use

Phone use

Access to the handset

Phone characteristics and functionality

Digital skills

Permitted & desired use

Time allocation

Scott K et al. (2021). Freedom within a cage, BMJ Glob Health, https://pubmed.ncbi.nlm.nih.gov/34551901/

Gender norms are a critical barrier to women's digital literacy

Wealth and education are the strongest determinants of access to mobile phones, but gender norms are also a critical barrier
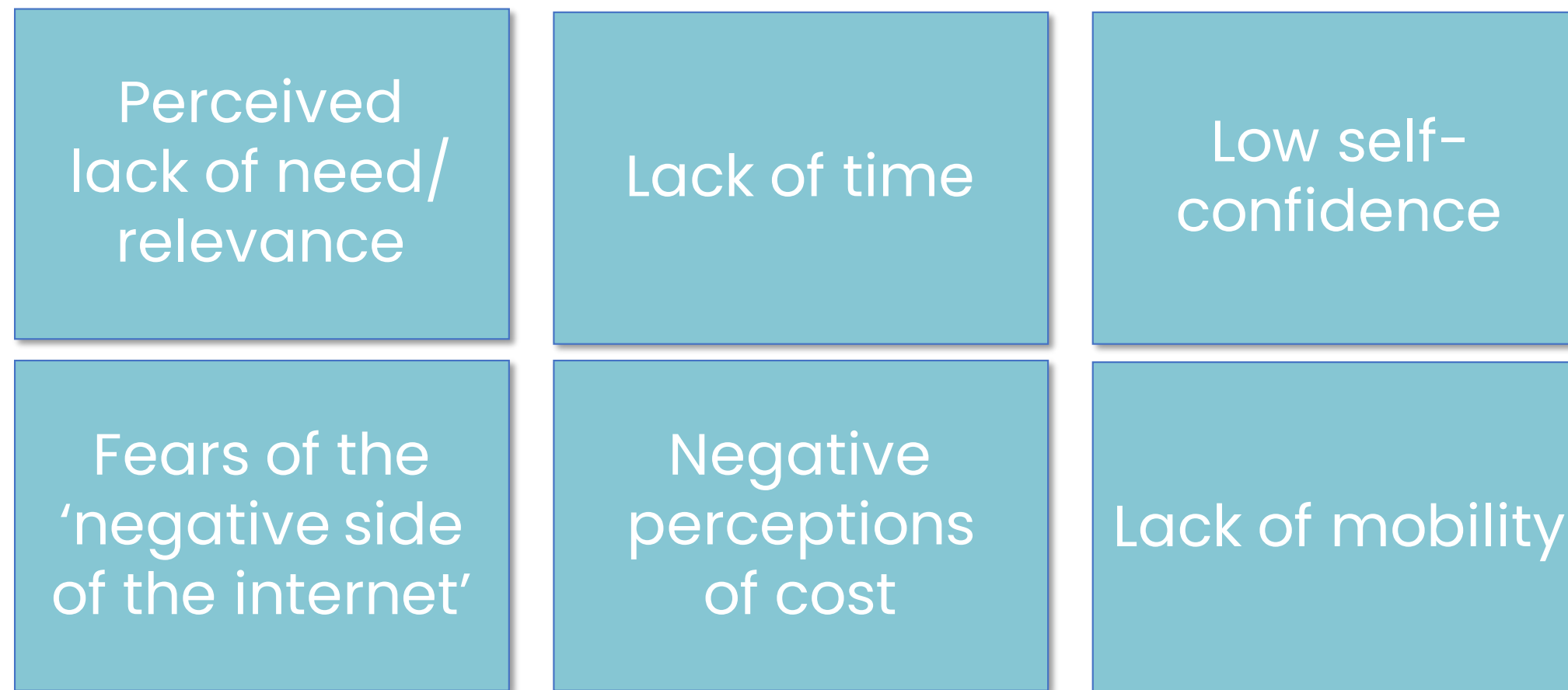
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Perceived lack of need/ relevance	Lack of time	Low self-confidence
Fears of the 'negative side of the internet'	Negative perceptions of cost	Lack of mobility

BBC Media Action (2021). Increasing women's digital literacy in India: what works:
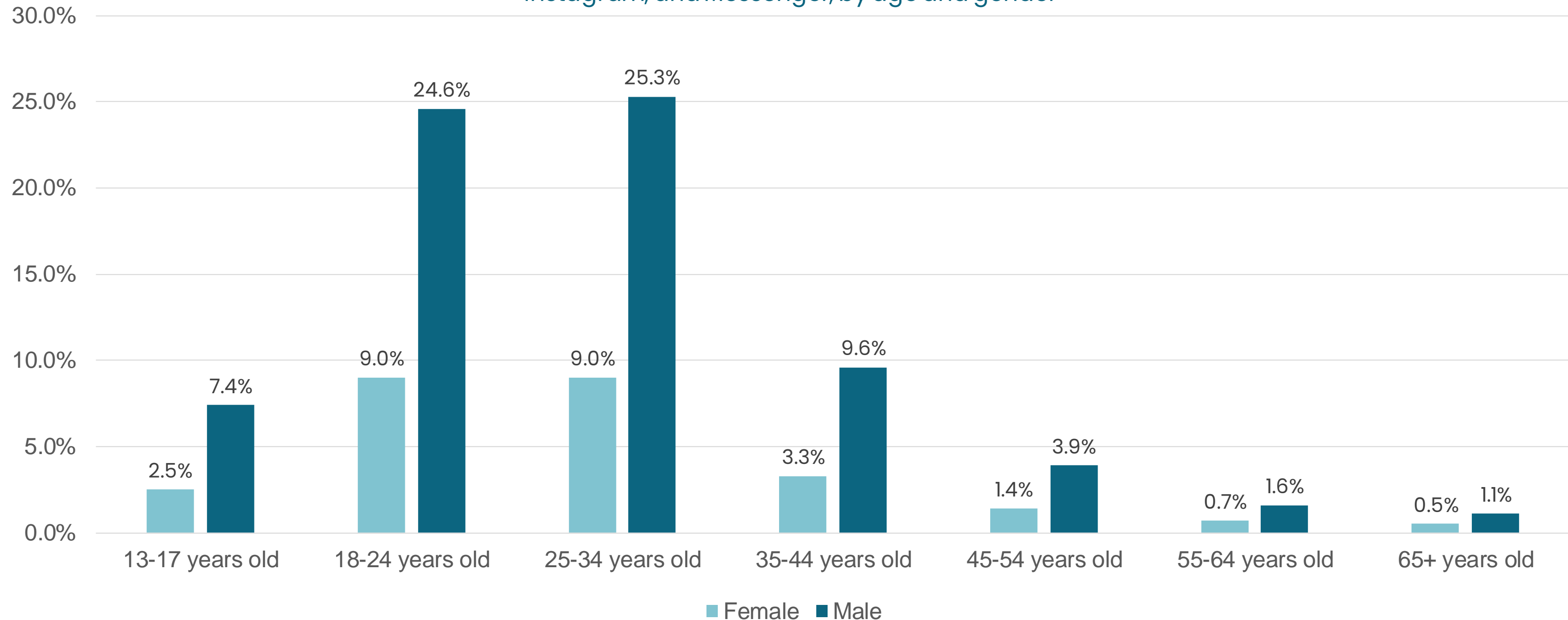https://downloads.bbc.co.uk/mediaaction/pdf/india-research-study-women%E2%80%99s-digital-literacy-2021.pdf
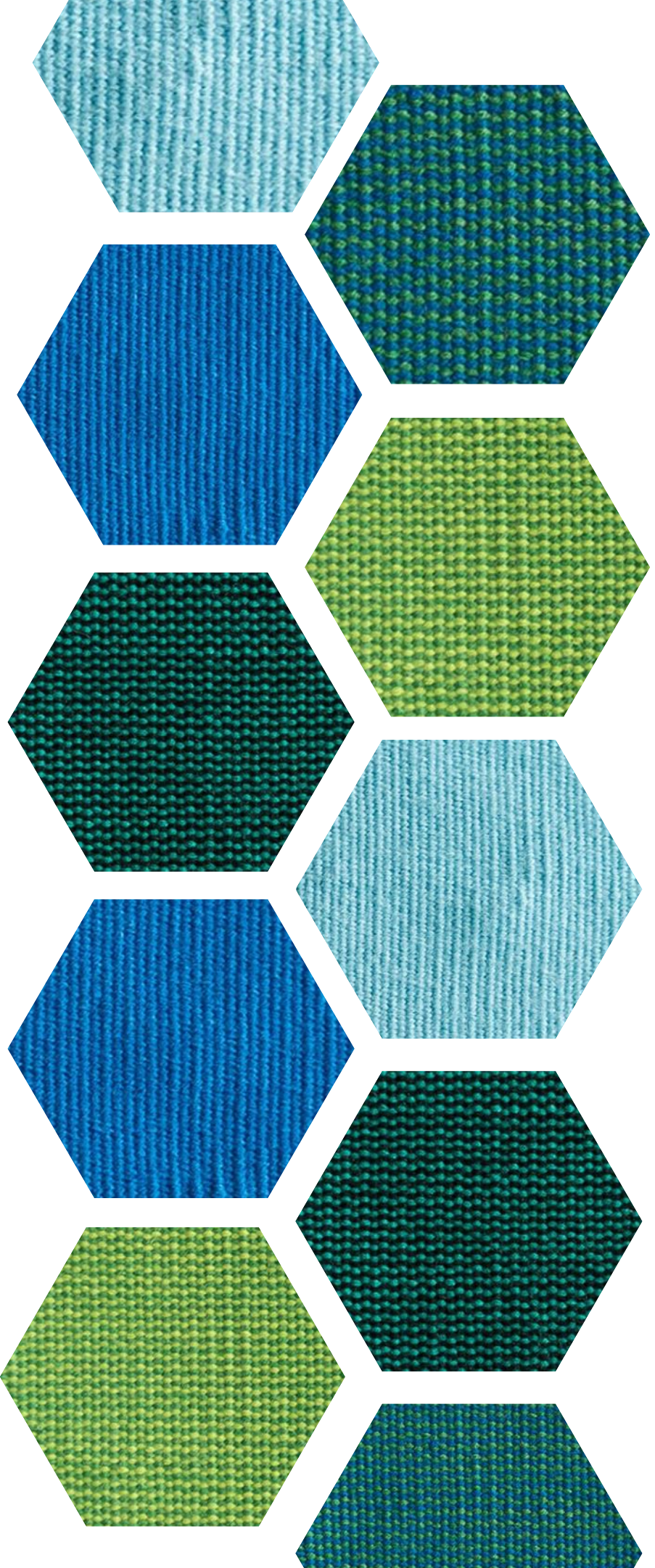
Age also matters

Demographic profile of Meta's ad audience

Share of combined, deduplicated potential advertising reach across Facebook,
Instagram, and Messenger, by age and gender

■ Female ■ Male

Ian Kemp, DataReportal, We Are Social & Hootsuite (2022). Digital Report: India https://www.slideshare.net/DataReportal/digital-2022-india-february-2022-v01

Examples from the field

Kilkari: an example of gender intentional, equitable design

- ***Challenge:***

    Promote healthy RMNCH practices and generate demand for public health services among millions of low literate pregnant women and new mothers and their families in India

- ***Approach:***

    BBC Media Action used a gender intentional, human centered design process to create *Kilkari*:

    - o   stage-based, time-sensitive, pre-recorded audio information
    - o   delivered to families' phones every week for 72 weeks
    - o   addresses both wives and husbands
    - o   integrated with national government database that register and track pregnancies and births in India
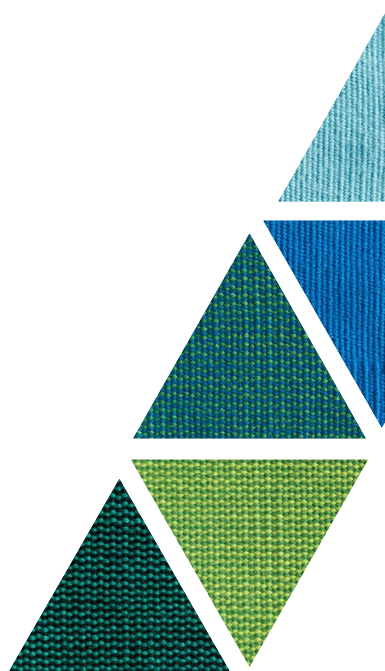
Kilkari: an example of gender intentional, equitable design from India

Results:

- 10 million families reached in 13 states, 200 million minutes of content played by April 2019, when the program was transitioned to the Indian government

- A RCT conducted by Johns Hopkins found that exposure to *Kilkari* content:

  - On **immunization** was significantly associated with an **increase in the timeliness of child vaccination at birth**

  - On **family planning** was significantly associated with **adoption of modern contraceptive methods**

  - The RCT concluded that **Kilkari is a cost-effective approach to saving lives**

Digital Innovations for Community and Primary Health in India: https://gh.bmj.com/pages/digital-innovations-for-community-and-primary-health-in-india

10 lessons for scale and sustainability

1 Private sector business models are challenging in low resource settings

2 You may pilot "apples" but scale "oranges"

3 Trade-offs are required between ideal solution design and affordability

4 Reassess key components of the program before you scale

5 Operational viability at scale is a prerequisite for sustainability

6 Consider the true cost of open-source software

7 Taking informed consent in low resource settings is challenging

8 Big data offers promise, but social norms and SIM change constrains use

9 Successful government engagements require significant time and capacity

10 Define roles and responsibilities, governance structures and roadmaps up front
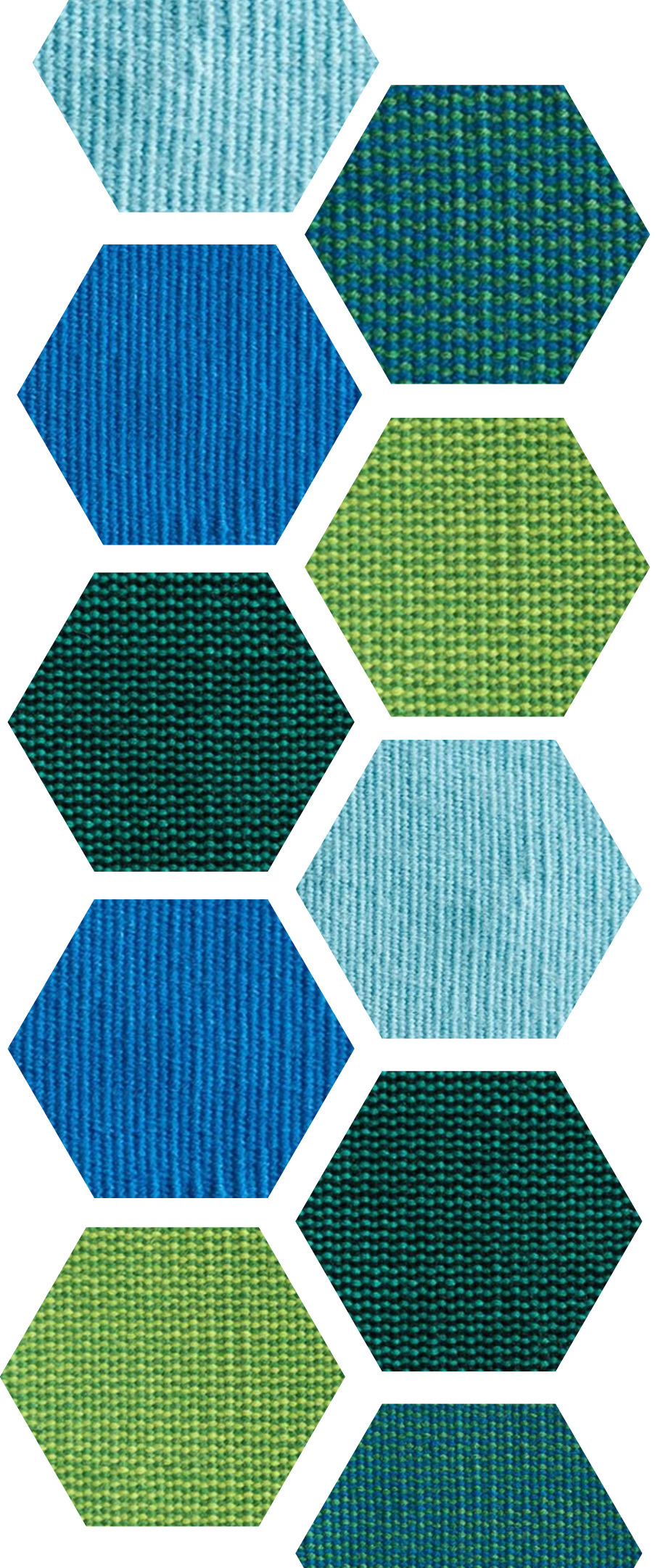
How do you do it?

Gender intentional design is...
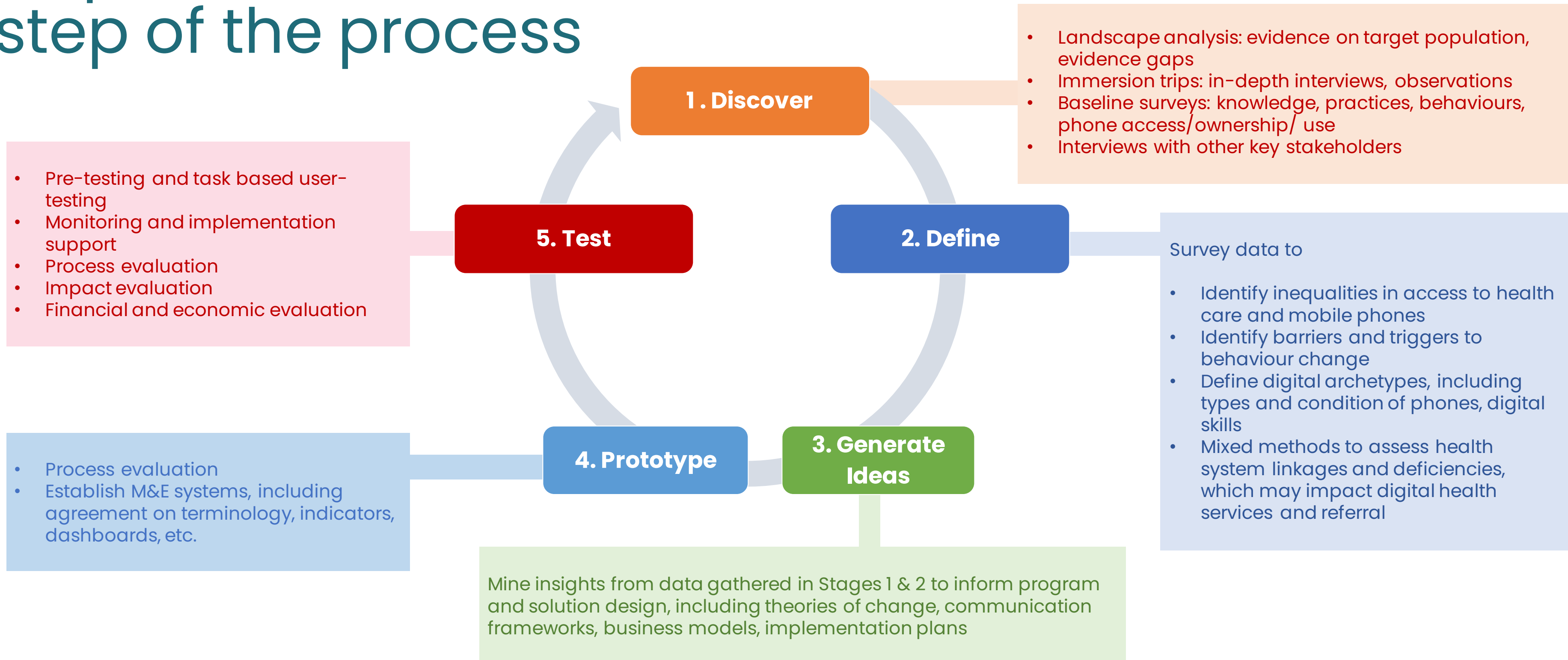
- **Human centered design with a gender lens**
- And the guiding principle remains: **'Design with the user'**
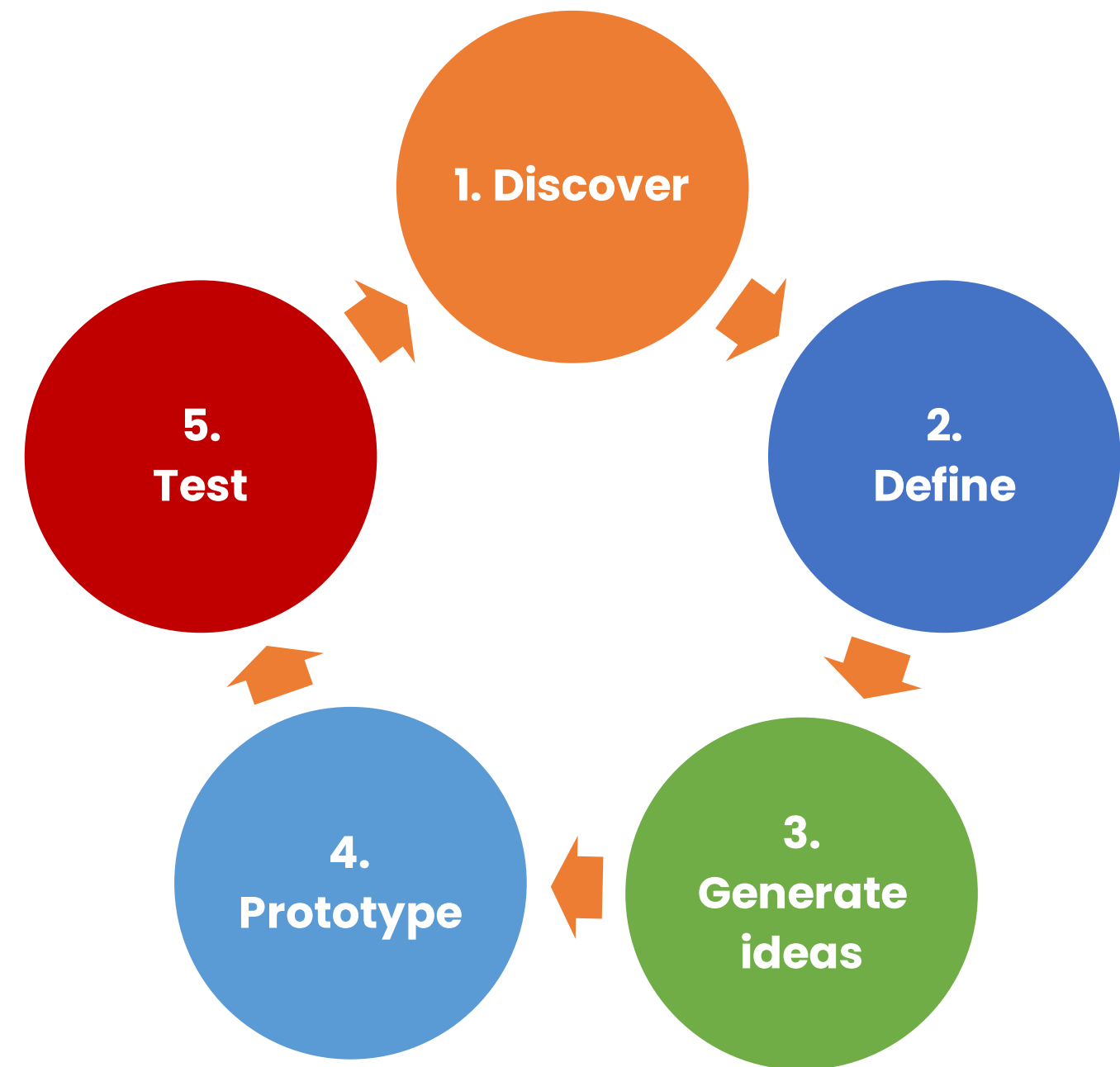
Source: Chamberlain et. al (2022). Lessons learnt from applying a human-centred design process to develop one of the largest mobile health communication programmes in the world, BMJ Innovations: https://innovations.bmj.com/content/early/2022/05/26/bmjinnov-2021-000841.full

Gender intentional design and evaluations requires robust evidence at each step of the process

1. Discover

- Landscape analysis: evidence on target population, evidence gaps
- Immersion trips: in-depth interviews, observations
- Baseline surveys: knowledge, practices, behaviours, phone access/ownership/ use
- Interviews with other key stakeholders

5. Test

- Pre-testing and task based user-testing
- Monitoring and implementation support
- Process evaluation
- Impact evaluation
- Financial and economic evaluation

2. Define

Survey data to

- Identify inequalities in access to health care and mobile phones
- Identify barriers and triggers to behaviour change
- Define digital archetypes, including types and condition of phones, digital skills
- Mixed methods to assess health system linkages and deficiencies, which may impact digital health services and referral

4. Prototype

- Process evaluation
- Establish M&E systems, including agreement on terminology, indicators, dashboards, etc.

3. Generate Ideas

Mine insights from data gathered in Stages 1 & 2 to inform program and solution design, including theories of change, communication frameworks, business models, implementation plans

# Gender Intentional Design requires robust evidence at each step of the process

Achieving this requires.....

1. Agreement on metrics
2. Adequate resources to support programs *and* external evaluators

3 Truths for designing equitable, gender specific digital strategies

1. **We must proceed with caution**

2. **There's no one size fits all digital solution**

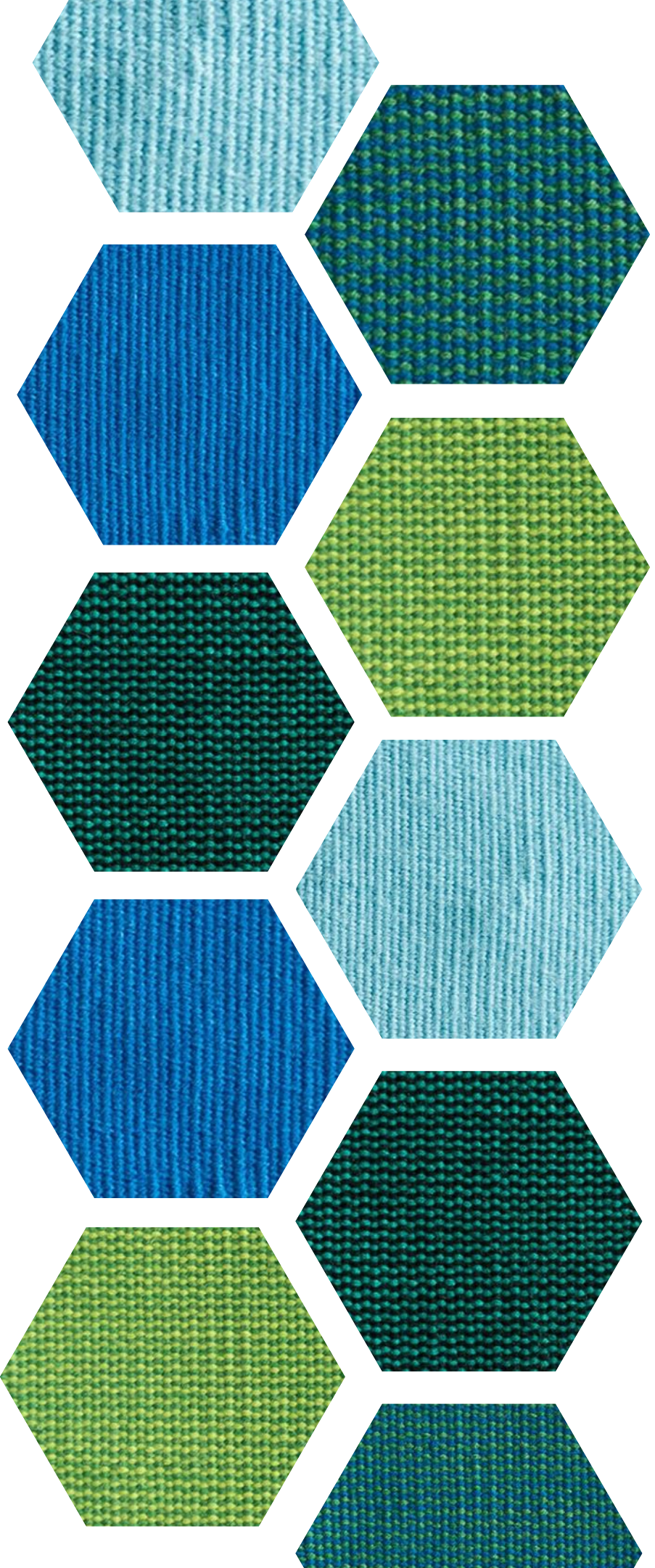3. **Face-to-face communication still matters**
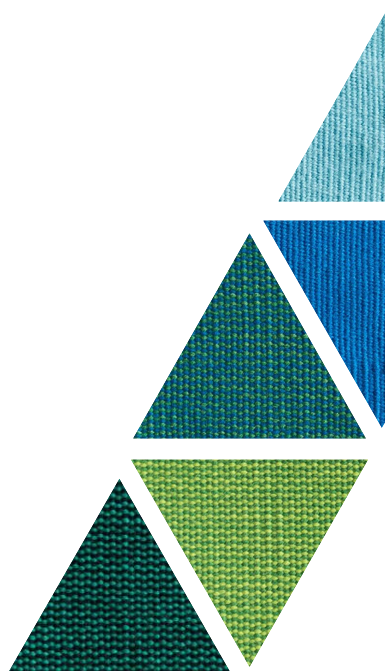
3 Best Practices for designing equitable, gender specific digital strategies

1. **Start with a gender analysis of who has access to digital technologies and why, and who is excluded and why**

2. **Design with the user**

3. **Identify and engage power brokers in the family and community, because they can control access and monitor use**

Source: Chamberlain et. al (2022). Lessons learnt from applying a human-centred design process to develop one of the largest mobile health communication programmes in the world, BMJ Innovations: https://innovations.bmj.com/content/early/2022/05/26/bmjinnov-2021-000841.full

Actions you can take

To Design Equitable, Gender Specific Digital Strategies in Different Operating Environments

Actions You Can Take

If you have limited time and resources...

- ***Identify available country specific data*** *that can help you to guestimate women's level of digital access and skill based on wealth and education*

- ***Identify existing communications channels*** *(government, commercial, not for profit) –* ***digital and face to face*** *– that you could piggyback on.*

- *Undertake rapid, qualitative* ***gender intentional design*** *to create digital content with respondents from your target groups*

- *Assess reach and engagement using* ***phone surveys*** *and* ***qualitative (phone) interviews***
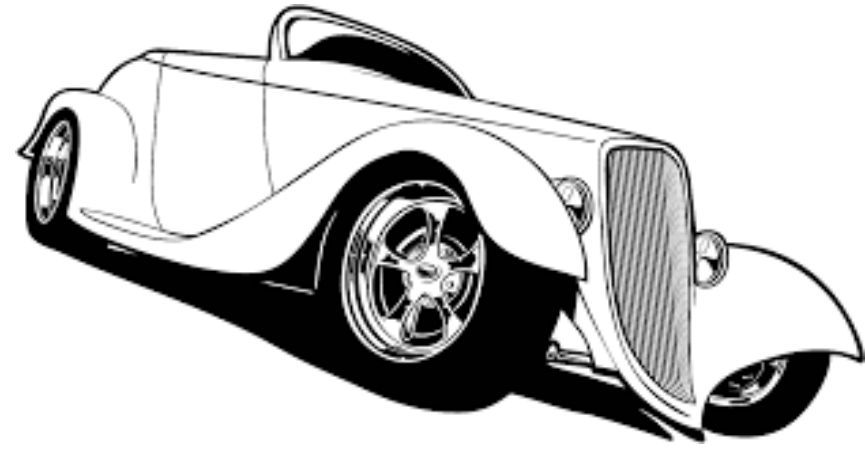
Actions You Can Take

If you have mid-level time and resources

- ***Conduct a small primary research survey*** *measure digital access and use, disaggregated by gender, socio economic status and education*

- *Procure a digital vendor on a* ***software as a service*** *basis to quickly and easily launch solutions*

- *Undertake iterative, qualitative* ***gender intentional design*** *to create* ***digital solutions*** *with respondents from your target groups*

- *Use system generated data to monitor take up and usage*

- ***Conduct an independent evaluation****, which includes primary research and analyses of system generated data*

Actions You Can Take

If you have a higher level of resources and more time

- **Conduct a large-scale primary research survey** on digital access and use and use machine learning to segment the target population and design for specific segments

- **Procure a 'direct to consumer' digital communications platform** to send the right message, in the right format, using the right channel to the right person at the right time

- **Integrate it with the government database** that tracks the continuum of care including vaccine delivery

- **Undertake iterative, qualitative and quantitative gender intentional design** to create digital solutions with respondents from your target groups

- **Use system generated data and face-to-face research** to monitor take up and usage

- **Conduct a process evaluation**, including to assess scalability and sustainability

- **Conduct a randomized controlled trial** to evaluate impact and cost effectiveness
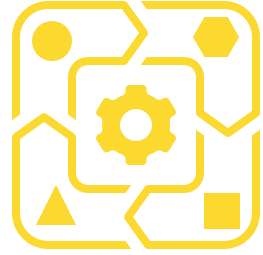
Key References and Resources

Guidance:

- *Digital Impact Alliance, [Principals of Digital Development](#)*
- *USAID (2022), [DIGITAL LITERACY PRIMER, How to Build Digital Literacy into USAID Programming](#)*
- UN University, Gender & Health Hub (2021). [Guidance note and checklist for tackling gender-related barriers to equitable COVID-19 vaccine deployment](#)
- *Chamberlain et al. (2021) [Ten lessons learnt: scaling and transitioning one of the largest mobile health communication programmes in the world to a national government](#)*
- Chamberlain et al. (2022) [Lessons learnt from applying a human-centred design process to develop one of the largest mobile health communication programmes in the world](#)

Further Reading

- *Gates MF. (2014). [Putting women and girls at the center of development](#).*
- *GSMA (2021) [The Mobile Gender Gap Report 2021](#)*
- *A.E. LeFevre et al. (2020). [Does women's mobile phone ownership matter for health? Evidence from 15 countries](#),*
- BBC Media Action (2022). [Why aren't women part of the conversation?](#)
- *UNICEF (2021), [What we know about the gender digital divide for girls?](#)*
- *Scott K et al. (2021). [Freedom within a cage](#)*
- BBC Media Action (2021). [Increasing women's digital literacy in India: what works](#)
- *Ward V et al. (2021). [Implementing health communication tools at scale](#)*
- *CGAP (2020). [The Digital Gender Divide Won't Close by Itself – Here's Why](#)*
- *BMJ Global Health (2021). [Digital Innovations for Community and Primary Health in India](#)*