

# MATRIRAKSHA

## A Service Design Consulting Project on Digital Data Collection for Maternal and Perinatal Healthcare in Rural Nepal

**Problem:** Our client, One Heart World-Wide, a Nepal-based NGO, currently faces numerous data quality and timeliness problems impacting their ability to provide effective programs for expectant mothers and newborns.

### Challenges

#### Data Problems

Underreporting  
Misleading Data  
Data Errors  
Data Delays

#### Root Causes

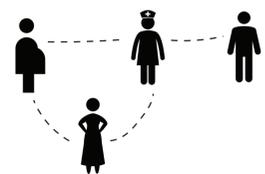
Cultural Values  
• Shame within the community  
• Hindu mourning period  
Manual Data Entry  
(Digital) Illiteracy  
Lack of Incentive  
Understaffing

### Process

#### 1. Qualitative field work in Nepal



#### 2. Sensemaking



#### 3. Collaborative Design



### Outcome

We provided three concepts and support to take them forward in different ways:



Provided documentation for grant funding applications



Shared recommendations for future design iterations



Advised initial steps toward implementation

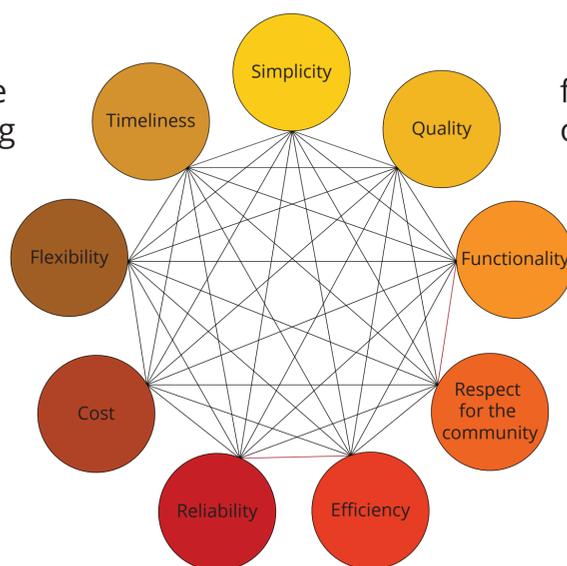
### Design Values

Defining the design values and using them as a guide throughout the process helped us deliver solutions that were in line with the client's needs and respected the socio-technical ecosystem we were designing for.

information needs satisfied at the 'right time' for better decision-making

the solution can evolve with any government restructuring plans

mindful of funding constraints



facilitates a more accurate understanding of the maternal needs within a community

satisfying diverse use cases, including transition to government control

respecting the time, privacy, and role of community members

### Proposed Ideas

Our design process resulted in reimagined information flows, incorporating three proposed concepts that we felt would support an improved health care system in Nepal. These ideas reinforce existing communication channels and introduce innovations appropriate for the given context.

#### Centralized Database for Enhanced Internal Data Sharing



faster access to relevant information



better communication and knowledge sharing



better data quality and insights for more effective decision-making

#### Community-based Death Monitoring via Mobile Service



faster access to relevant information



better data quality and insights for more effective decision-making



spreads the burden of reporting among more members of the community

#### Digital Pregnancy Tracking with Appropriate Reminders



increases effectiveness of existing programs



makes it easier for expectant mothers to keep track of scheduled antenatal care visits



easy data sharing with the government