



***VOIce-based Community-cEntric mobile Services  
for social development***

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# Mobile services at the BoP

- Rapid growth of ICT services in developing countries
  - >> Opportunities and challenges
- Two main challenges
  - Locally relevant content
  - Access barriers
- **How to tackle these challenges?**

# Goal of VOICES project

- Social development through:
  - Open and wider voice-based access
  - Integration of local community radios with ICT
  - Better support of local languages
  
  - Long term sustainability
  - Faster uptake

# VOICES Factsheet

- FP7 ICT 2009.9.1 Specific International Cooperation Action
- Start 1st of Jan 2011
  - 30 months
  - 12 partners from 5 EU countries and 3 African countries
  - 30% of effort by African parties
  - 2.9 M€



# Project Partners

World Wide Web Foundation



France Telecom



TNO (NL)



VU University Amsterdam



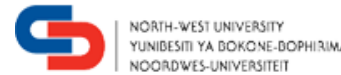
CRS4 (Italy)



CSIR (South Africa)



North West University (RSA)



ESMT (Senegal)



Sahel Eco (Mali)



W3C (US/F)



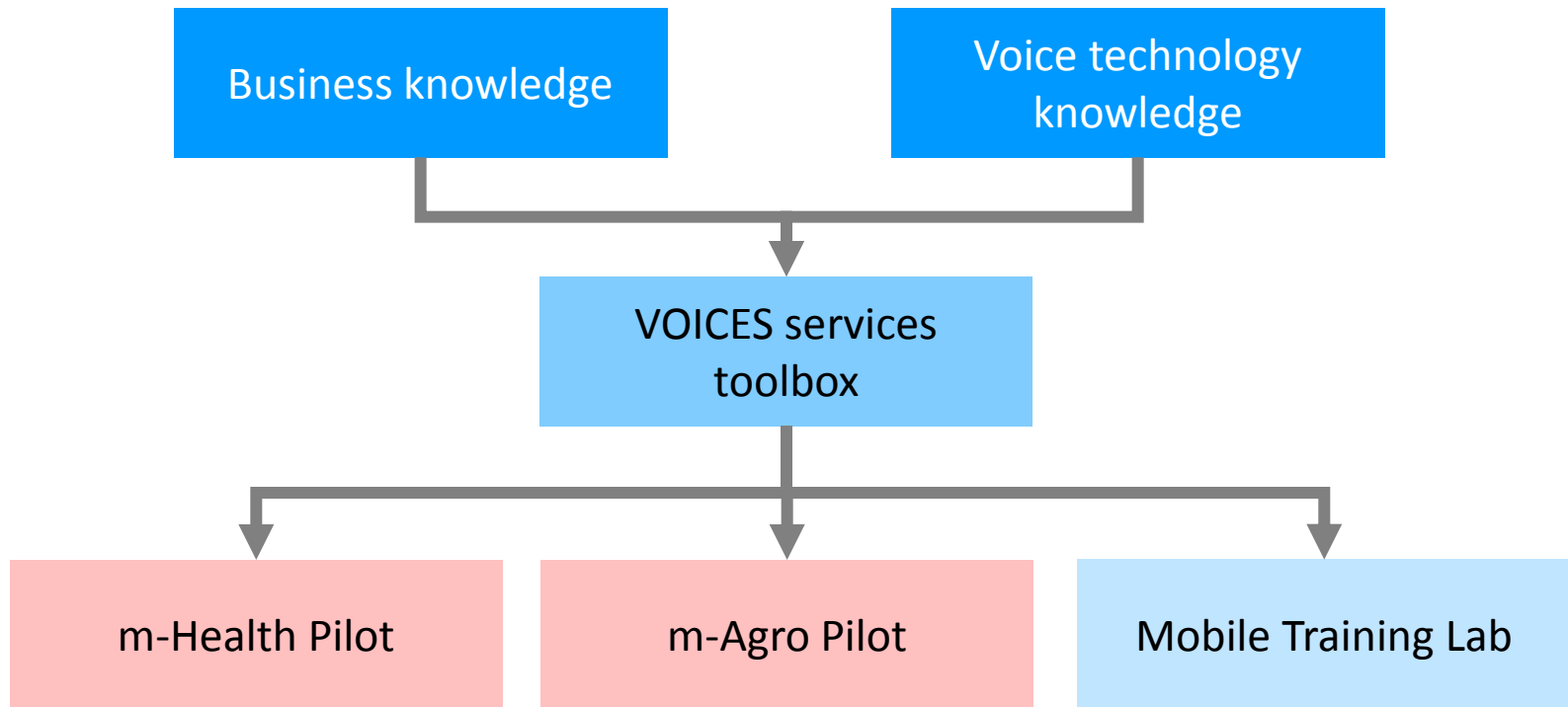
Fondation Mérieux (Senegal)



Portugal Telecom Inovação

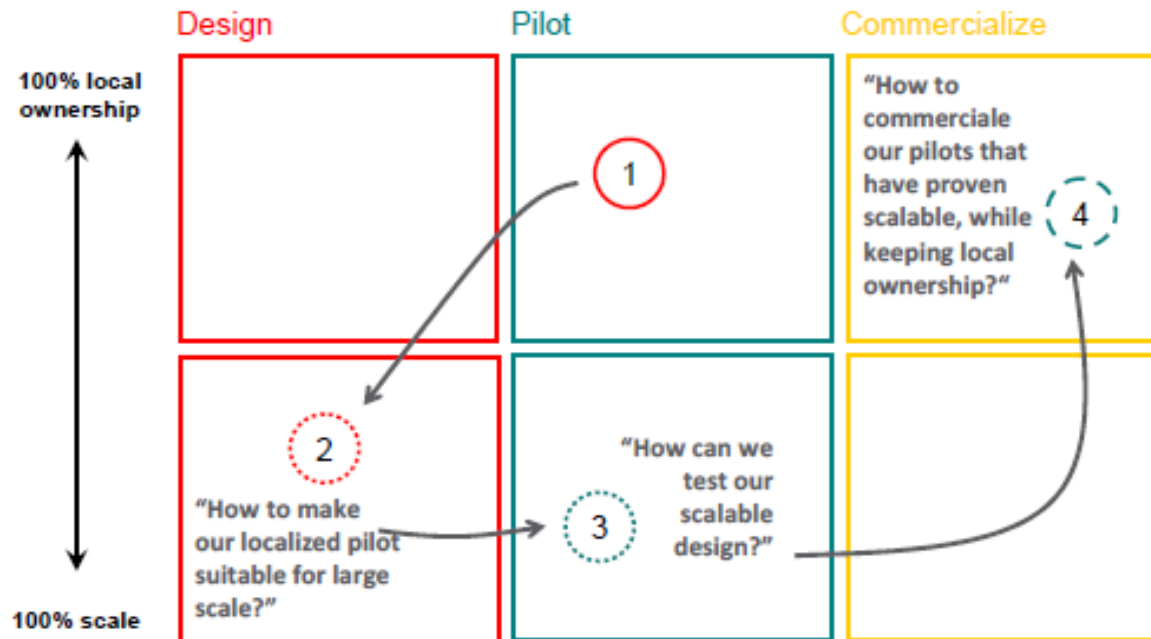


# Project Set-up



# Business knowledge

- Local entrepreneur



# Voice Technology Knowledge

- Background:
  - So far no speech technology available for mobile services @ BoP due to lack of standardized open source platforms and speech technology elements in local languages
- Goal
  - Technical architecture of the platform
  - Text-to-Speech and Automatic Speech Recognition for African languages
- Output
  - Toolbox for direct use in m-Health Pilot and m-Agro Pilot

# mHealth Pilot



# m-Health pilot services

- Background
  - To mitigate the impact of infectious diseases over 100 labs are well connected, however not operational below the district level
- Goal
  - To link peripheral biomedical laboratories to regional and national reference laboratories by mobile systems
- Output
  - Pilot 1: Epidemiological surveillance data exchange
  - Pilot 2: Intranet solution adapted for m-learning
  - Pilot 3: m-Training and m-Information for health specialists

# mAgro Pilot



# m-Agro Pilot

- Background
  - After several periods of drought, the exchange and spread of simple and effective farming techniques led to successful re-greening
- Goal
  - Enhance the exchange of information with voice-based access to content and mobile ICT services
- Output
  - Pilot 1: Radio Marché; Shea butter & honey trading service
  - Pilot 2: m-event organizer for Re-greening events

# Mobile Training Lab



# Requirements training

- Hands-on approach (higher education theoretical)
- Not just a technical training, facilitate creation of working services
- Quality: include user experience and process control
- Mix students and professionals (employed or unemployed)
- Deepen face-to-face with self-learning
- Platform agnostic approach

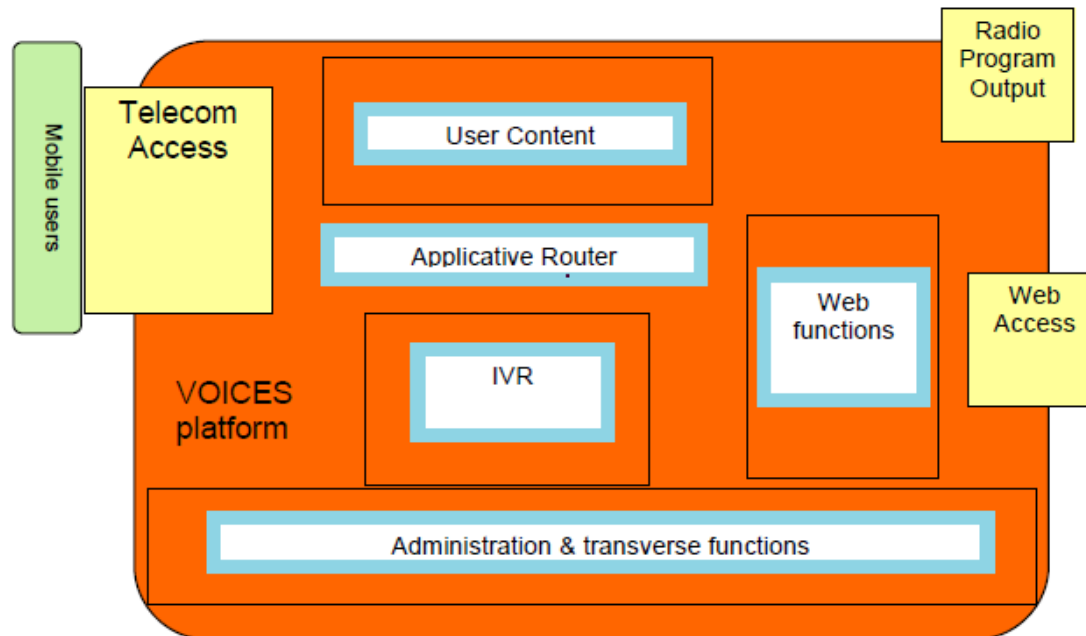
# SUMMARY

- Voice-based services and voice browsing have a huge potential to
  - Cope with connectivity, literacy and language challenges
  - Ensure a better access to ICT and the Web for the BoP
- First experiences show importance of
  - A thorough understanding of the local context
  - Robust, incremental and tailor-made voice technology
  - Skills transfer
- Follow EU FP7 VOICES -on its way to realize its potential- on <http://www.mvoices.eu>

# Back-up slides

# VOICE Technology Knowledge

- Output
  - Toolbox for direct use in m-Health Pilot and m-Agro Pilot



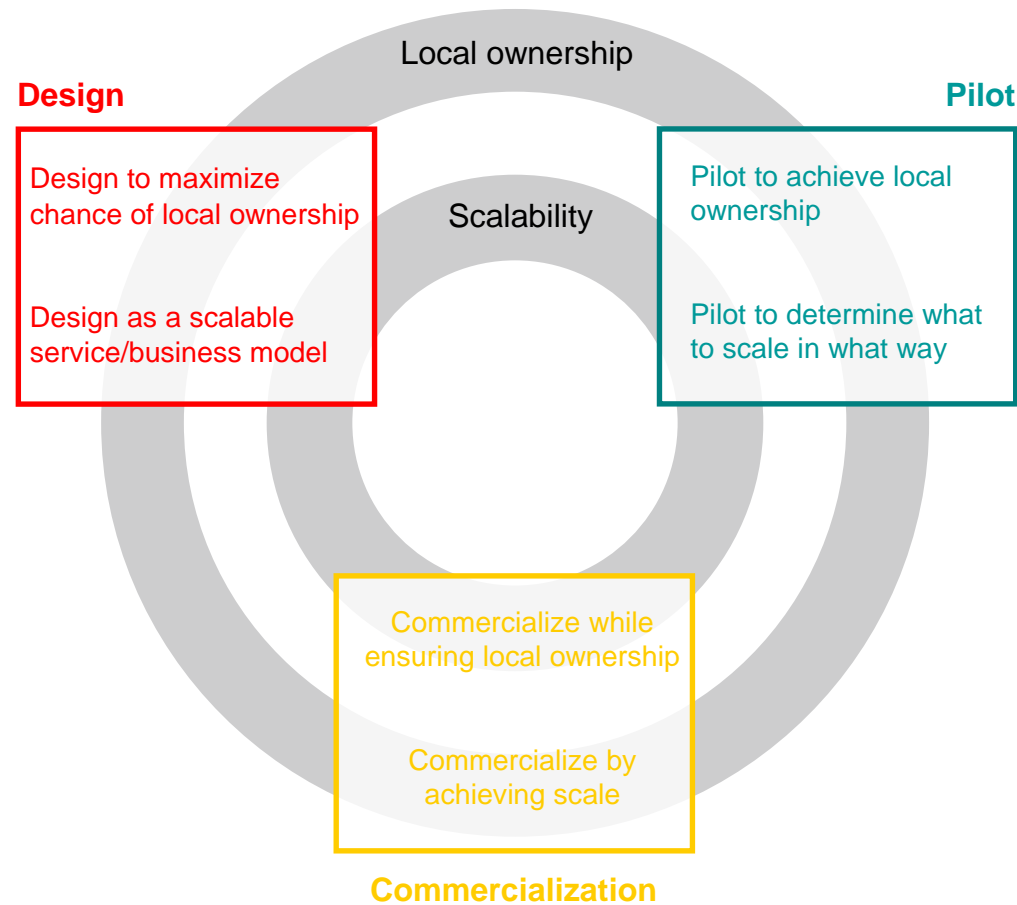
# Critical success factors

- Critical success factors are elements that are vital for a strategy to be successful
- A critical success factor drives the strategy forward, it makes or breaks the success of the strategy, (hence “critical”)
- Strategists should ask themselves 'Why would customers choose us?' The answer is typically a critical success factor

# Approach

- This section is devoted to specifying how each phase by its nature (i.e. level of maturity of the service) requires the focus on a specific subset design choices; how it requires specific input to make these decisions in an informed manner; and how the design decision make steer design and decision making in a previous or next phase.

# Our approach



# Business Model canvas: trade offs for ICT services targeting the BoD as a market

### Key Partnerships

- Content/ service portfolio development
- Organise end-to-end value chain
- Scalability

### Key Activities

- Manufacturing
- Organisation learning
- Governance

### Key Resources

- Inter-operability
- Distribution of functionality
- Human resources

### Value Propositions

- Added value
- Open Value proposition
- Positioning

### Customer Relationships

- Capacity building
- Customer relationship building
- User interaction
- Customer lock-in

### Channels

- Local awareness creation
- Local service delivery
- Service management

### Customer Segments

- Nature of demand
- Market entry strategy
- Nature of customer segment

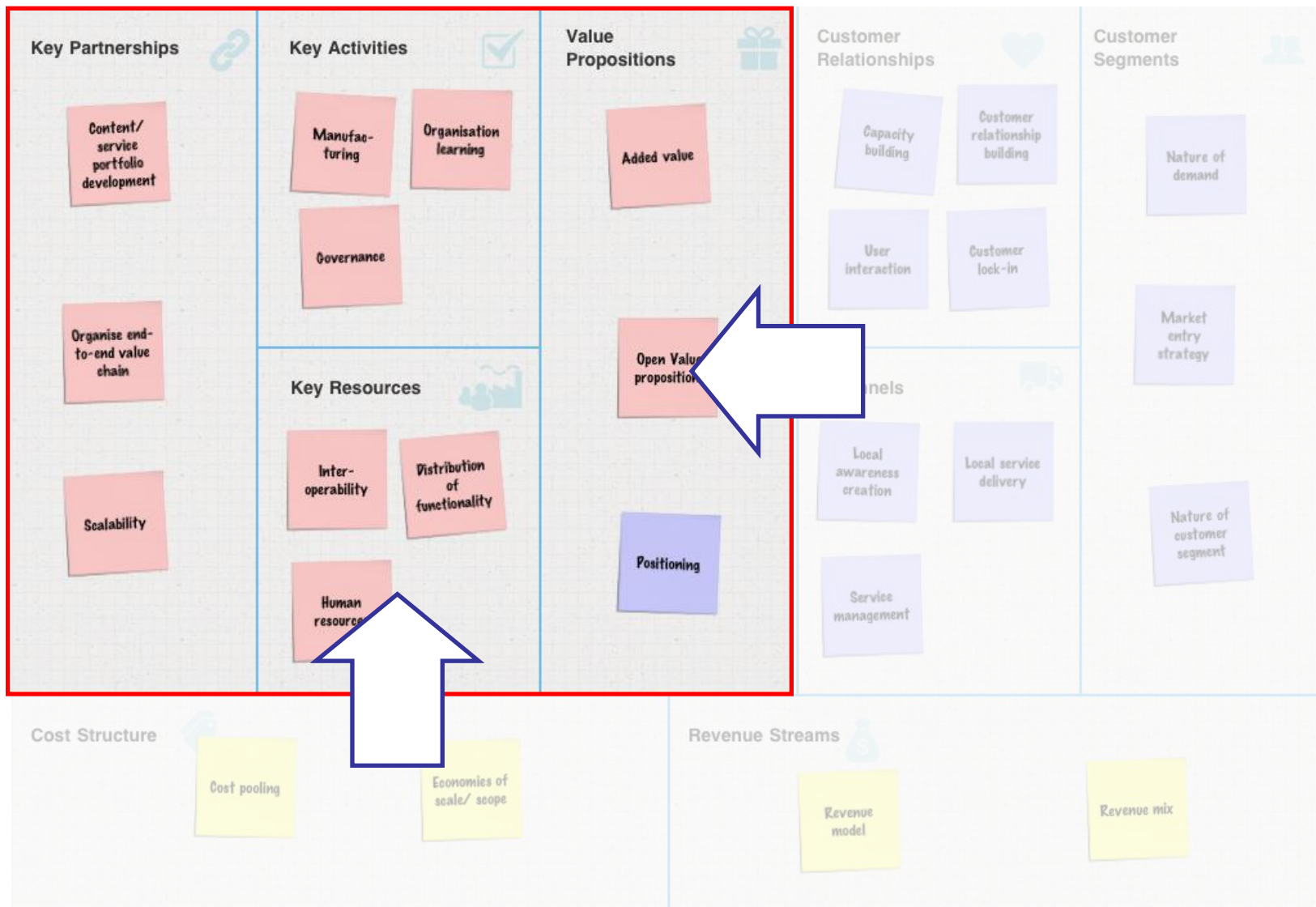
### Cost Structure

- Cost pooling
- Economies of scale/ scope

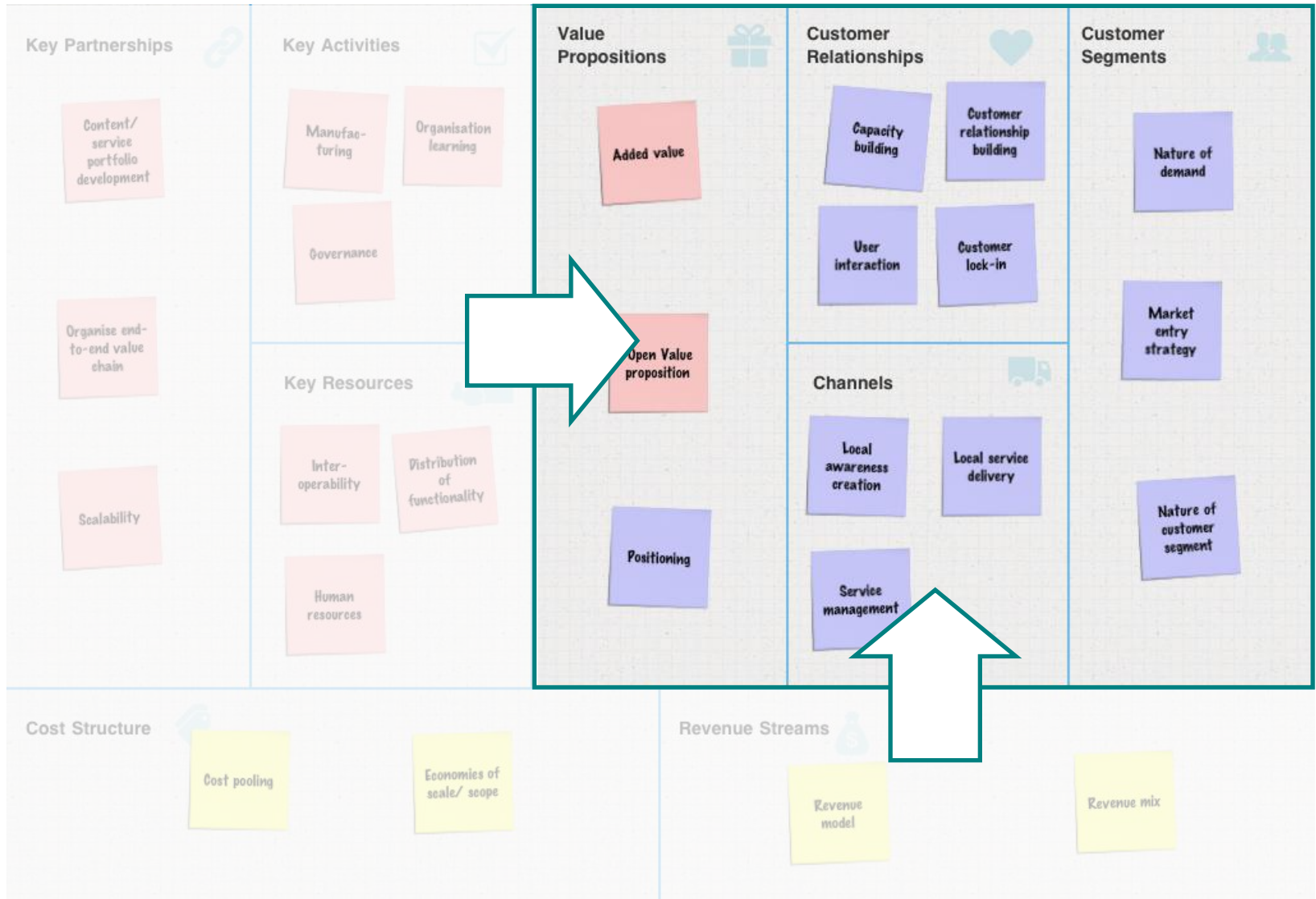
### Revenue Streams

- Revenue model
- Revenue mix

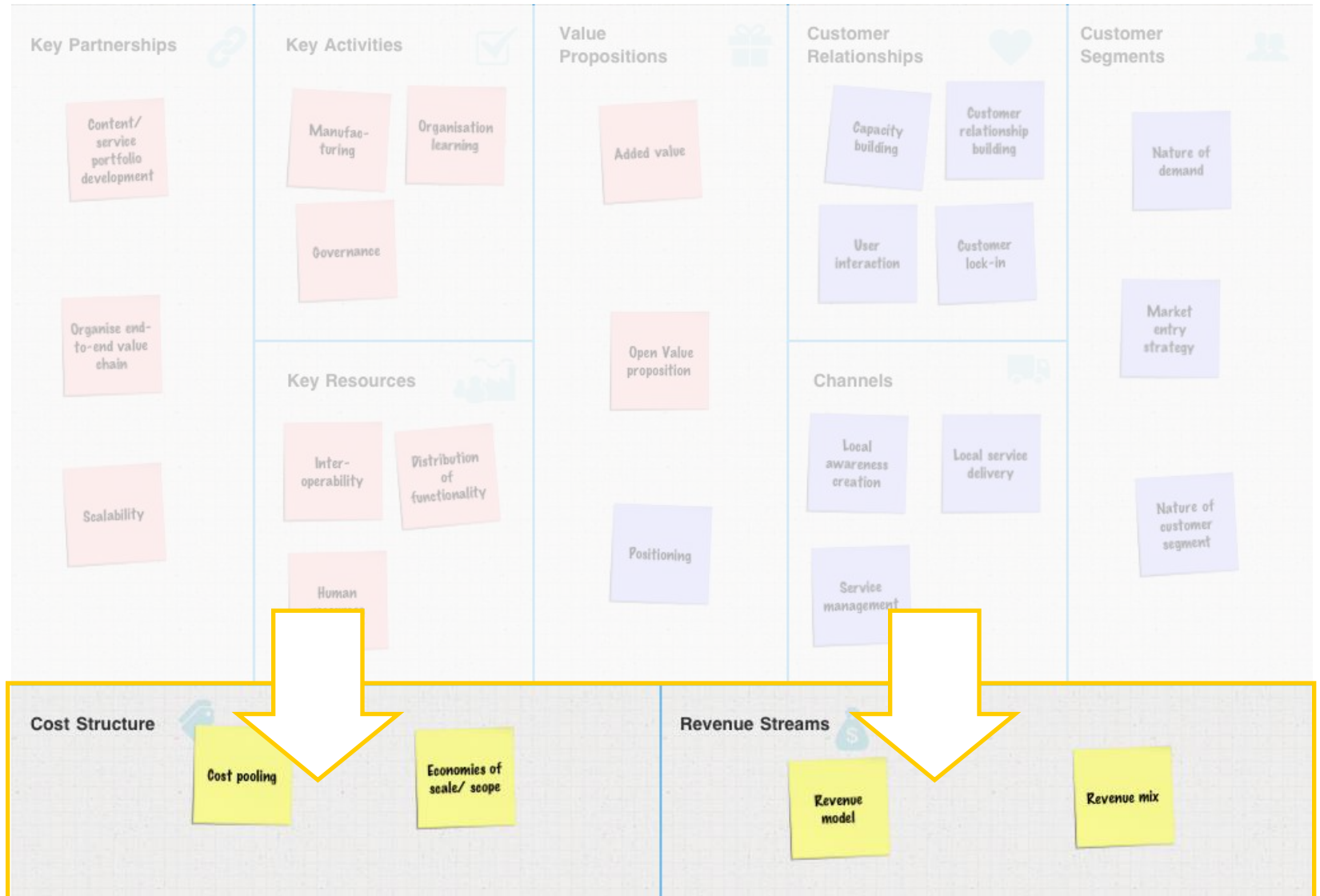
# Mapping Business Model Choices: CFSs in design stage



# Mapping Business Model Choices: CFSs in pilot stage

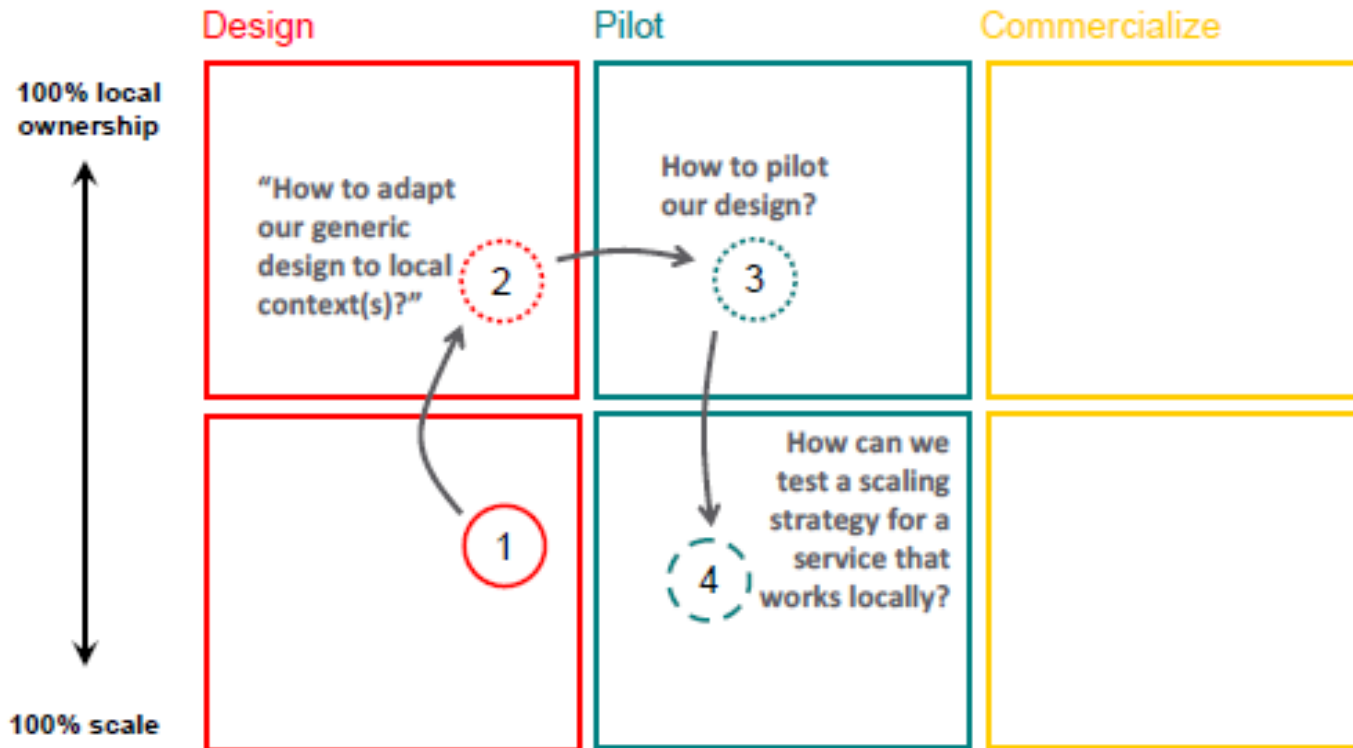


# Mapping Business Model Choices: CFSs in commercialisation stage



# Business knowledge

- Multinational



# Business knowledge

- Goal
  - To ensure coherency and sustainability by creating a business model and adoption methodology for VOICE-based services
  - Use impact assessment to improve the development
- Output
  - Business Models for m-Health Pilot and m-Agro Pilot
  - Training material for Mobile Training Lab
  - Practical toolkit for entrepreneurs
  - Impact assessment framework