

Customer Journey & Water Supply Timing

Executive summary – NextDrop's water supply timing service in urban India

Water supply is an issue in Indian cities, especially for lower income populations

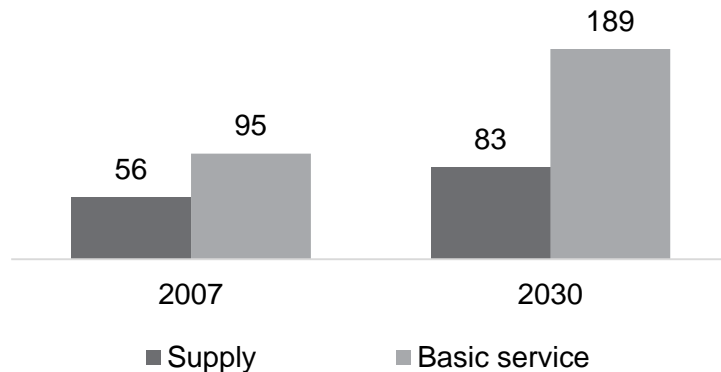
Water demand is outpacing water supply

Water supply is scarce and unreliable in many Indian cities and massive investments are required. Demand is growing faster than supply across many Indian cities.

With lower income populations most vulnerable to the effects

Lower income populations will feel the effects of this water supply problem most acutely. Missing the water supply may come at significant cost.

Water supply in Indian cities
(billion liters per day)



Lower ← **Income** → **Higher**

- Limited storage space – often using buckets, bowls
- Need to fill up storage spaces with water manually
- Having to pay more for tankers is a big expense
- Often have underground and overhead tanks
- Tanks can fill up automatically
- Have another water source such as a private bore well
- If needed, can buy water from tankers

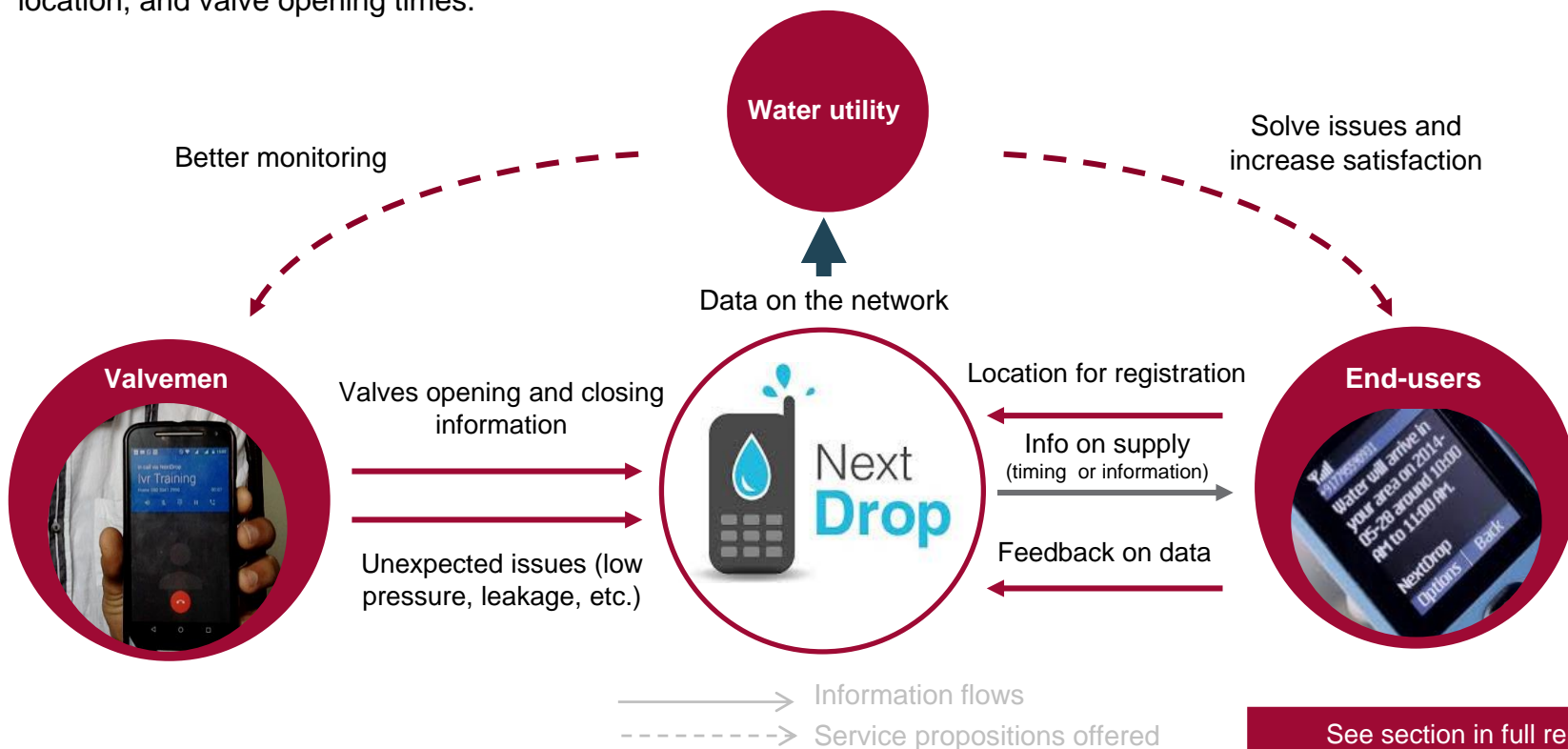
NextDrop addresses a need in the context of this problem by engaging 3 user types

Service delivery based on mobile solutions that captures critical data

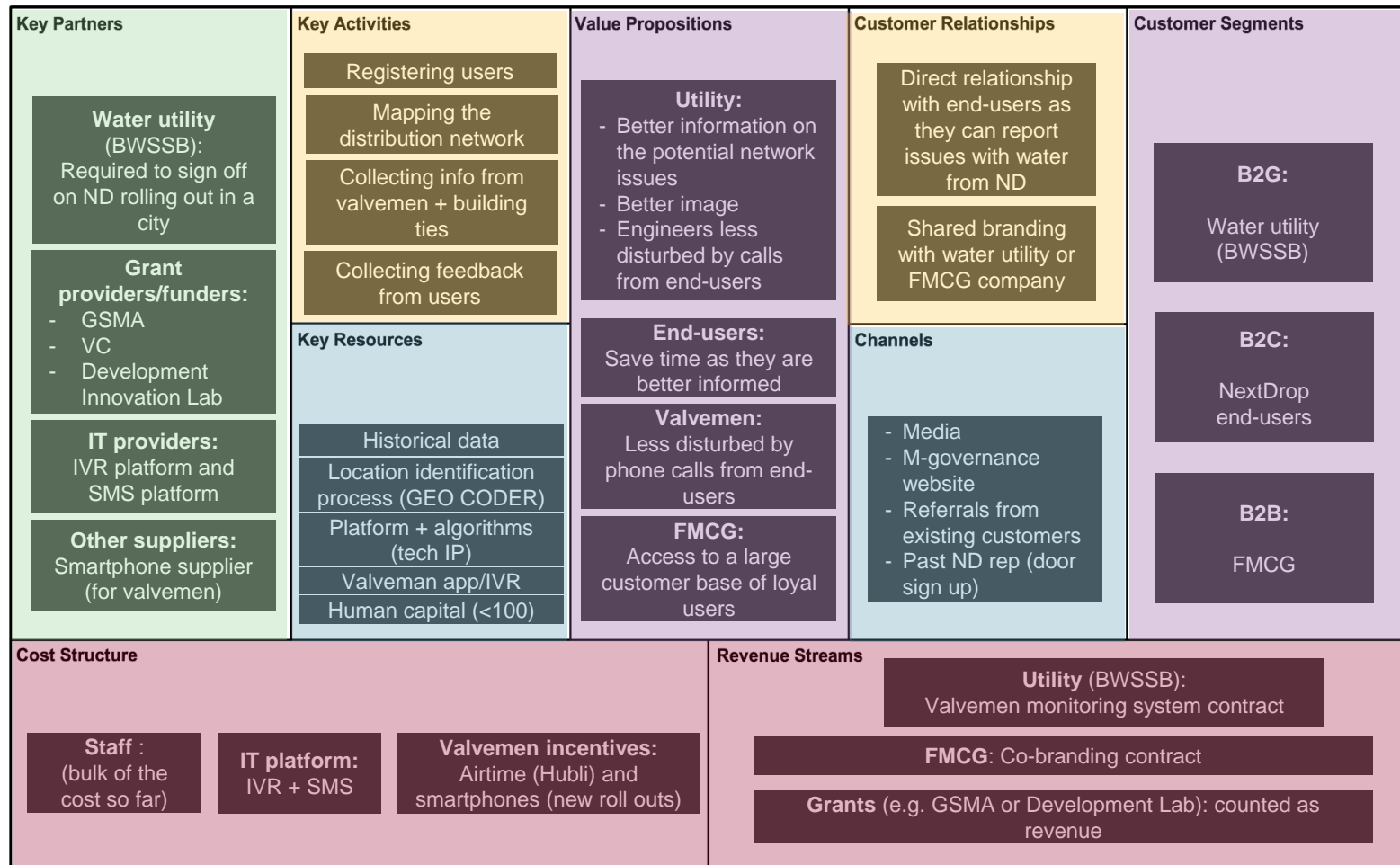
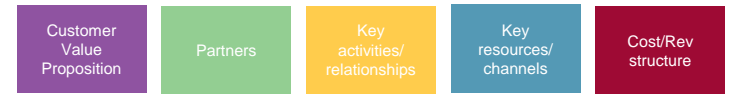
NextDrop has created mobile solutions that engage end users and valvemmen (individuals who manually open/close valves on the water network daily). These applications capture critical information such as location, and valve opening times.

Such data is used as the basis of key services

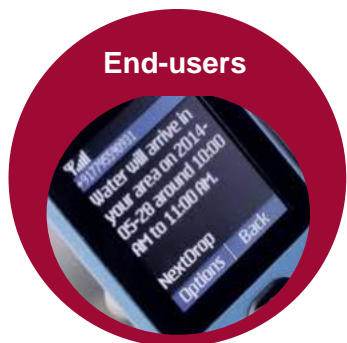
Information derived from the data collected forms the basis of service value propositions, **enabling end-users to get information on supply, and the utility to understand network performance.**



NextDrop's business model has spanned multiple customers

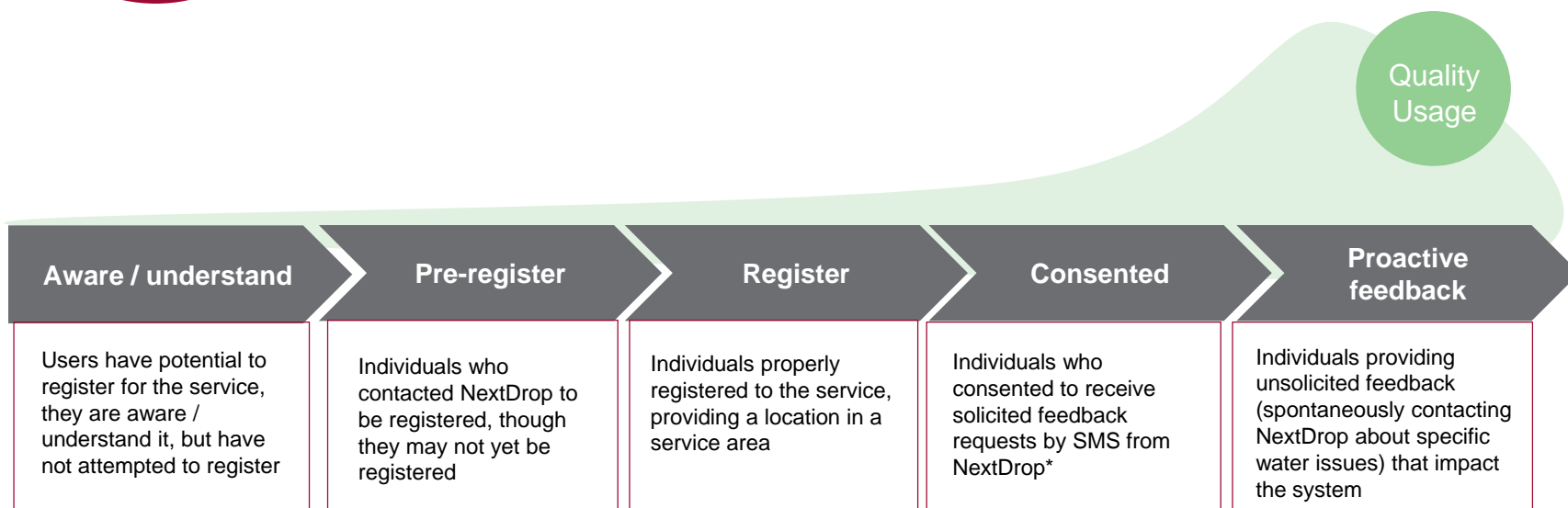


A basic customer journey is mapped for end users

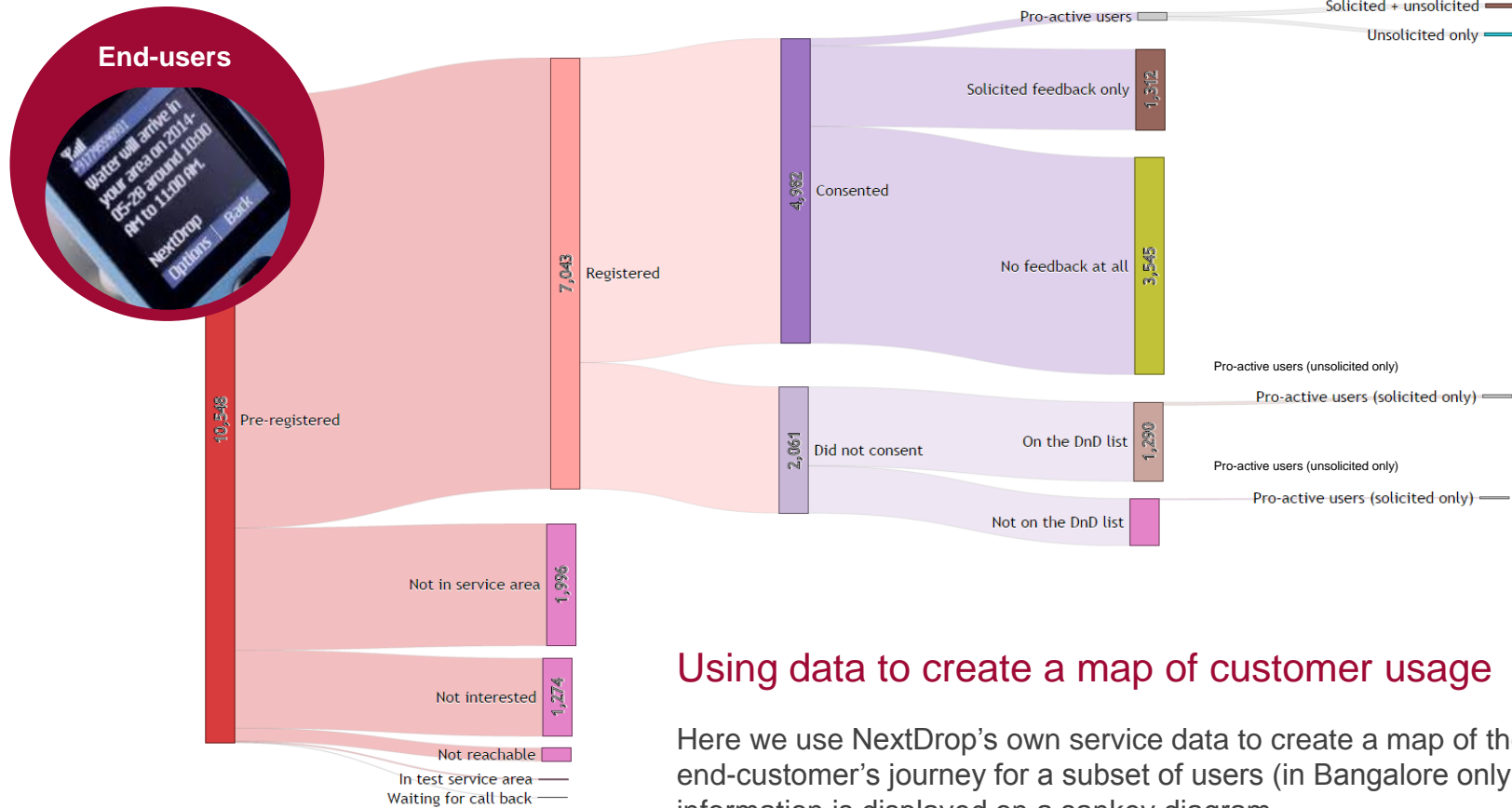


The optimum kind of users for NextDrop are those that provide feedback

By plotting a path of service usage, we are able to define a customer journey for end users where they move toward a greater engagement with NextDrop's service and provide quality feedback that will enhance future service delivery.



Overview of the end-user's journey from pre-registration onwards



Using data to create a map of customer usage

Here we use NextDrop's own service data to create a map of the end-customer's journey for a subset of users (in Bangalore only). The information is displayed on a sankey diagram

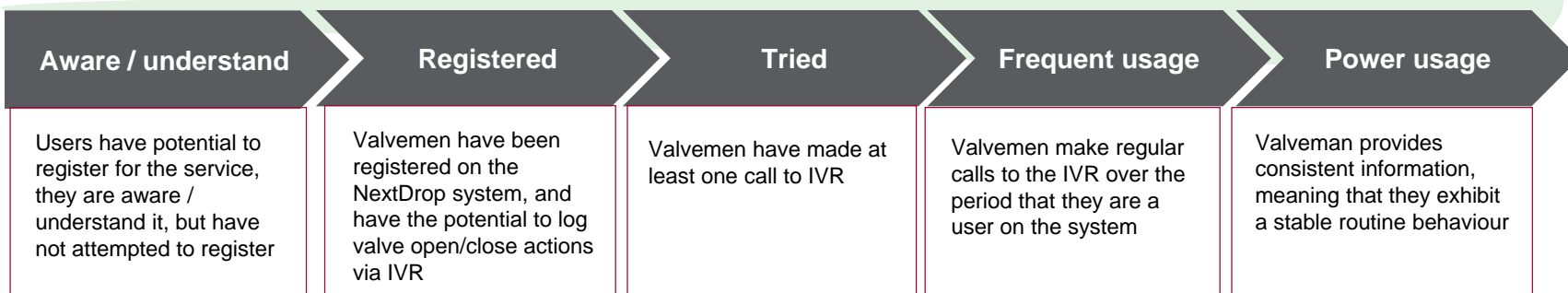
A customer journey is also mapped for valvememen



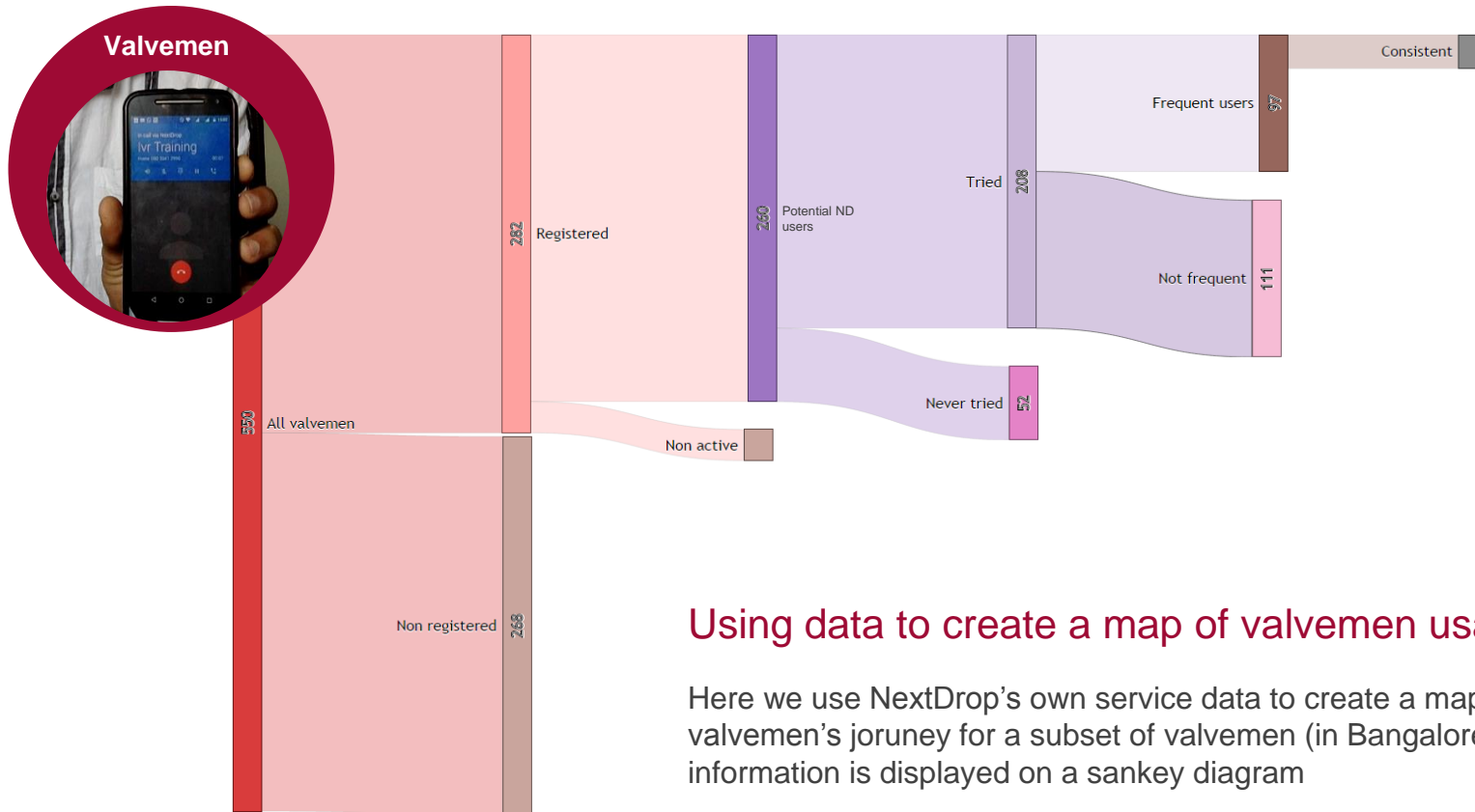
Optimum valvememen usage depends on providing frequent and consistent data

Valvememen provide critical information about the water supply network and their routine is supposed to be fixed each day. The kind of recorded usage that the water utility wants to see is therefore frequent and consistent. We can map a separate journey of usage recorded by a mobile application (in this case an Interactive Voice Response [IVR] app) for valvememen

Quality Usage



Overview of the valvemen journey to consistent usage



Using data to create a map of valvemen usage

Here we use NextDrop's own service data to create a map of the valvemen's journey for a subset of valvemen (in Bangalore only). The information is displayed on a sankey diagram

We developed three potential growth options for NextDrop

Using the results from data analytics and an analysis of the business model, three strategic directions are posited with associated recommendations for future implementation.

Deeper utility engagement & city iteration

Short/medium term

Allow greater depth of engagement and product development in a focus city (e.g. Bangalore) to provide the proof points to replicate iteratively across other cities, partnering with water utilities

Driving rapid breadth & scale across users/partners

Short/medium term

Focus on scaling across new cities and new types of B2B revenue sources (e.g. Utility, FMCG, etc.) as fast as possible

Automation & Infrastructure future focus

Medium/long term

Aim to become turnkey provider with blended automation, infrastructure and software value proposition to the water utility



Mobile for
Development Impact



Mobile for Development
Utilities



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