

# Connected refugees: Opportunities and barriers for refugees using mobile devices and the internet in East Africa

## KAKUMA REFUGEE CAMP



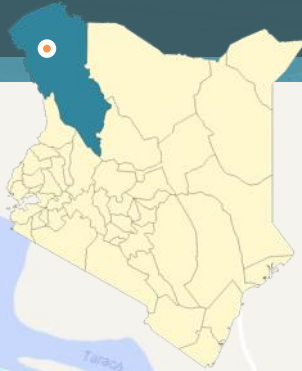
## NAKIVALE REFUGEE SETTLEMENT



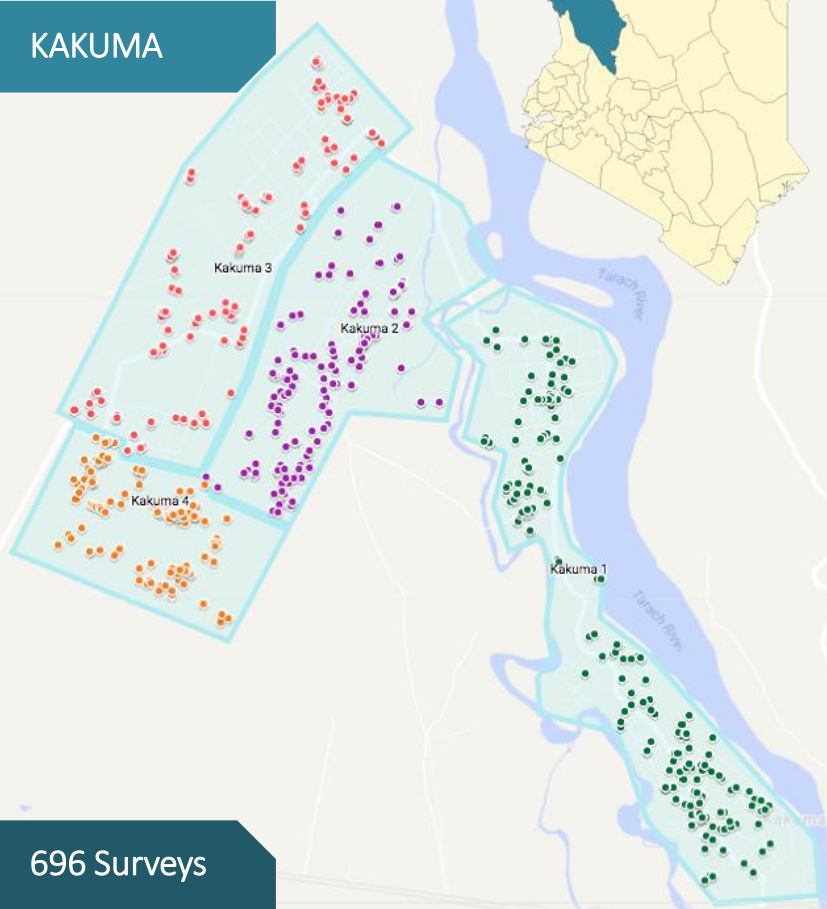
# Key questions

- What are the mobile phone penetration rates in Kakuma and Nakivale?
- What are the main barriers to using mobile technology for refugees in transit and those that are settled?
- What are some of the solutions used by refugees to overcome these barriers?

# Sampling approach



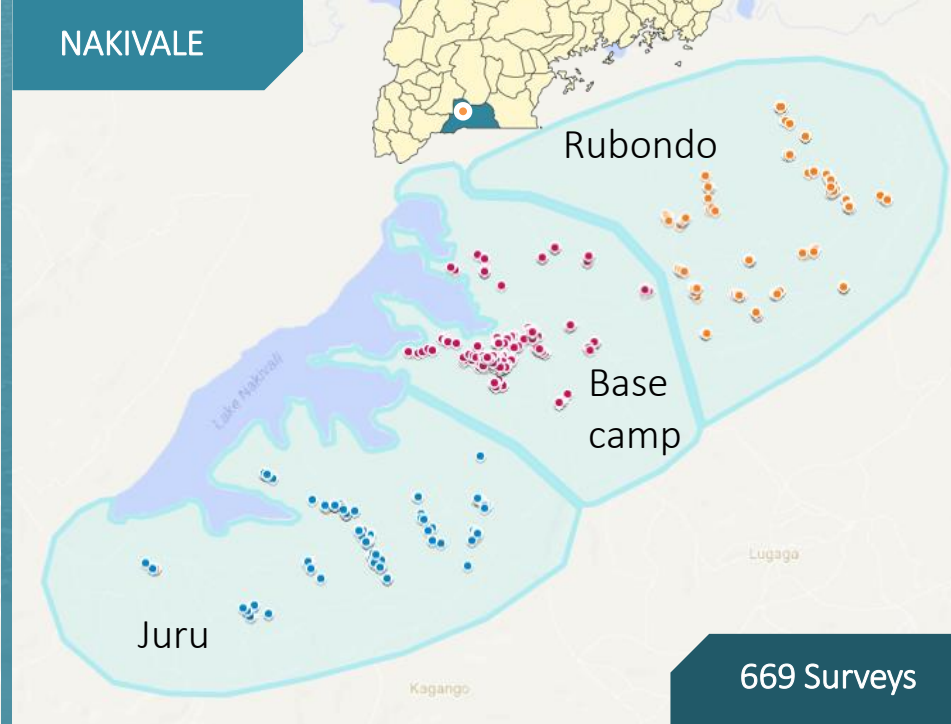
KAKUMA



696 Surveys



NAKIVALE

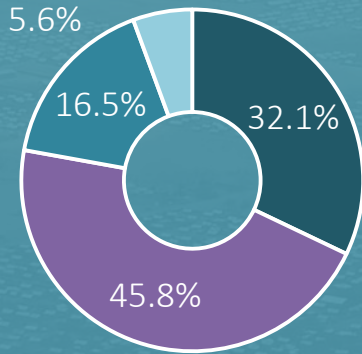


669 Surveys

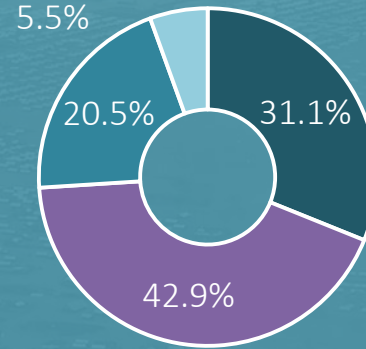
- Mixed methods data collection
- GPS locations recorded

# Survey sample

## Survey population in Kakuma



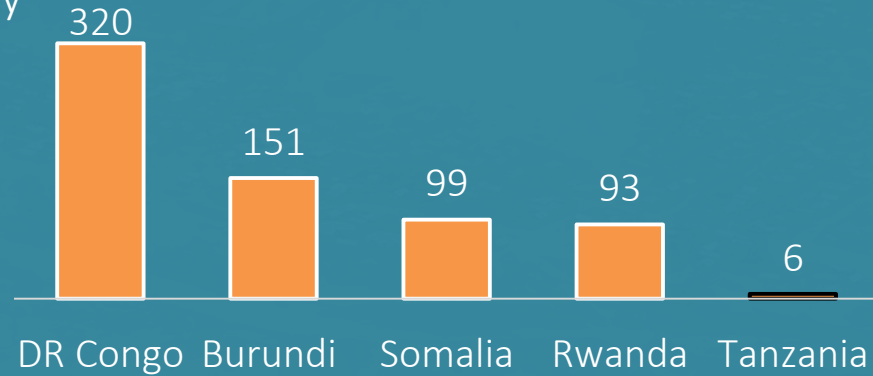
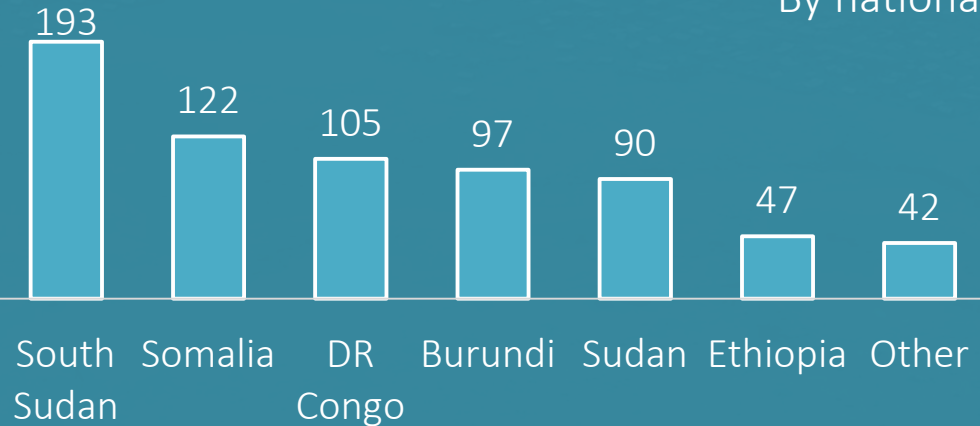
## Survey population in Nakivale



By age

- 18 to 24
- 25 to 44
- 45 to 64
- 65 +

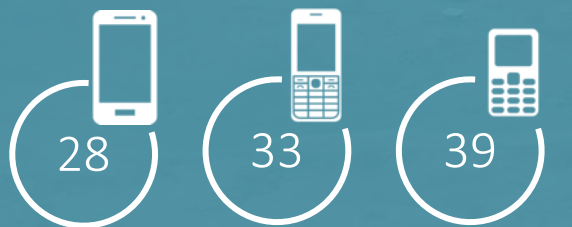
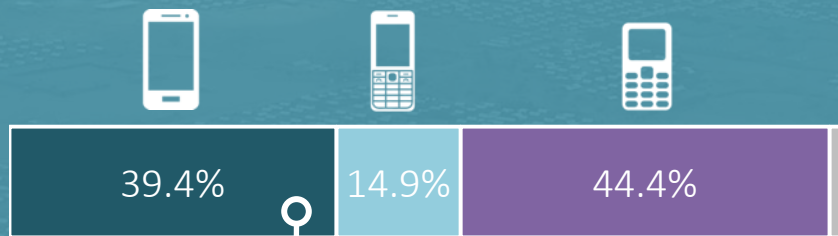
By nationality



# Refugee access to mobile technology

## Kakuma

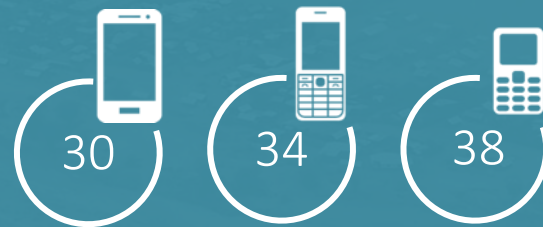
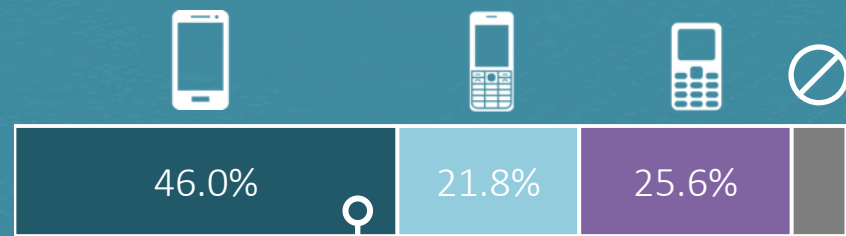
Refugee mobile device ownership



Average age of ownership



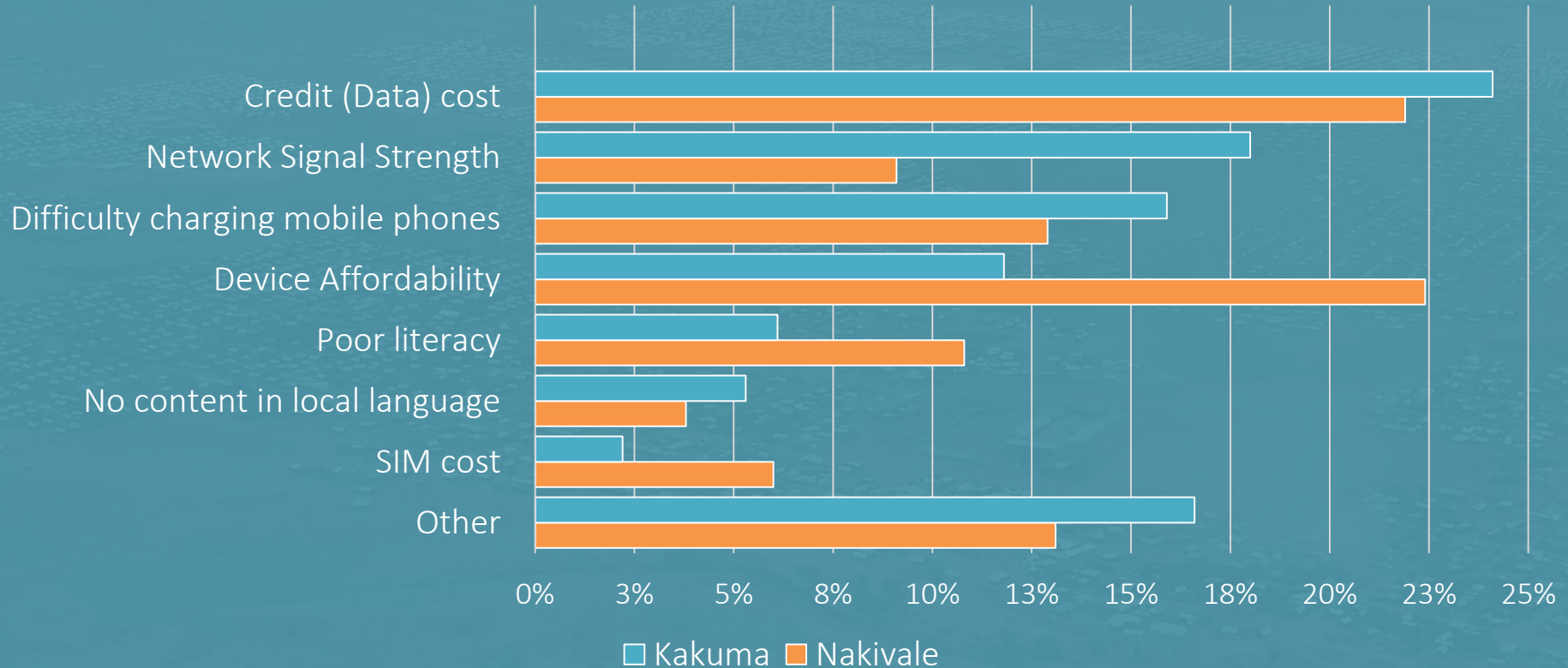
## Nakivale



Average age of ownership



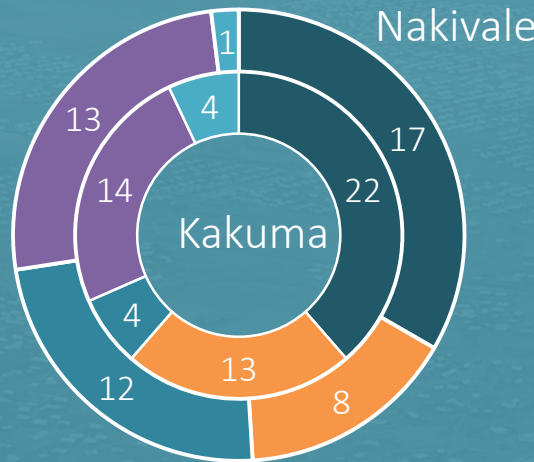
# Barriers to using mobile technology



- Poor network signal strength is a significant factor

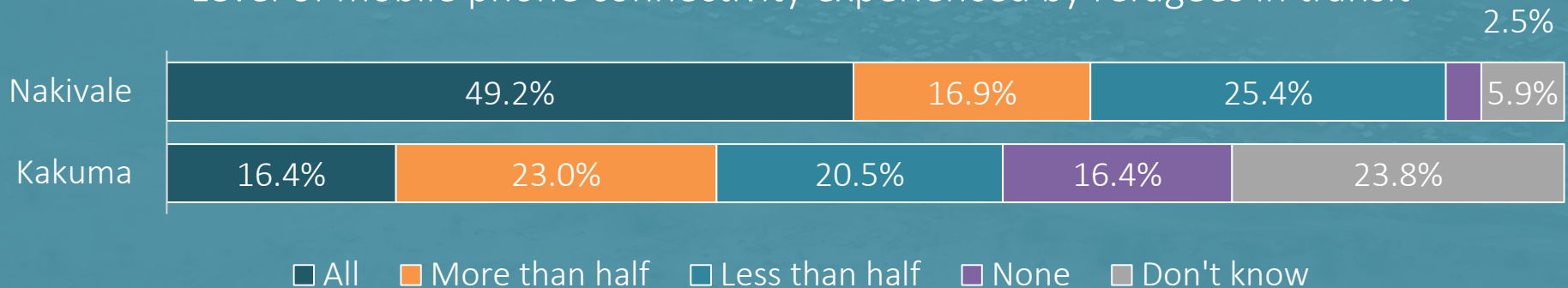
# Mobile phone connectivity and use in transit

Decisions made by refugees during transit based on information obtained through mobile



- Safety information
- Cell phone connectivity
- Weather information
- Border control/policing information
- Other

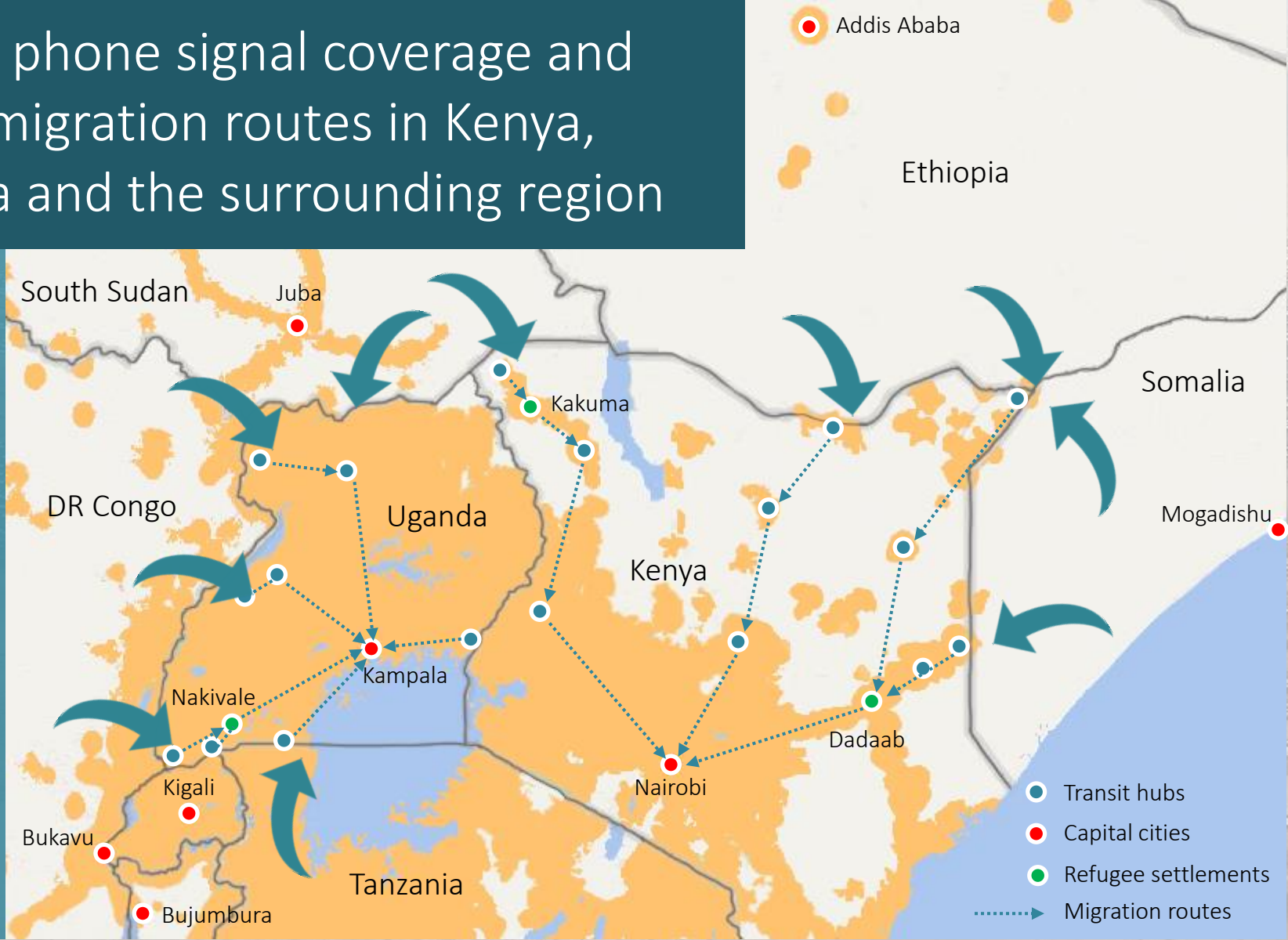
Level of mobile phone connectivity experienced by refugees in transit



- All
- More than half
- Less than half
- None
- Don't know

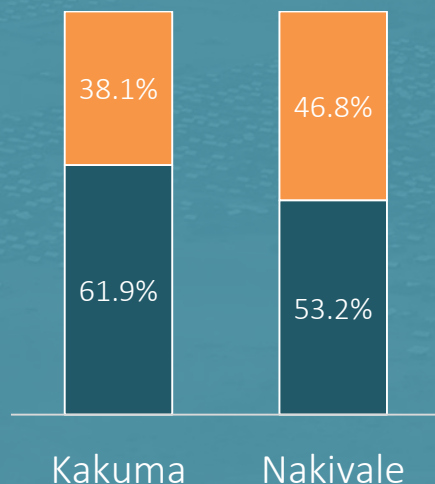


# Mobile phone signal coverage and major migration routes in Kenya, Uganda and the surrounding region

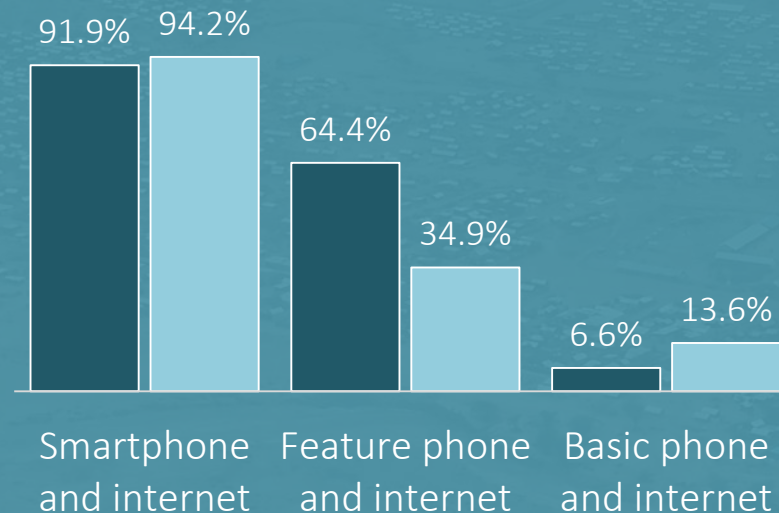


# Characteristics of mobile data access in settlements

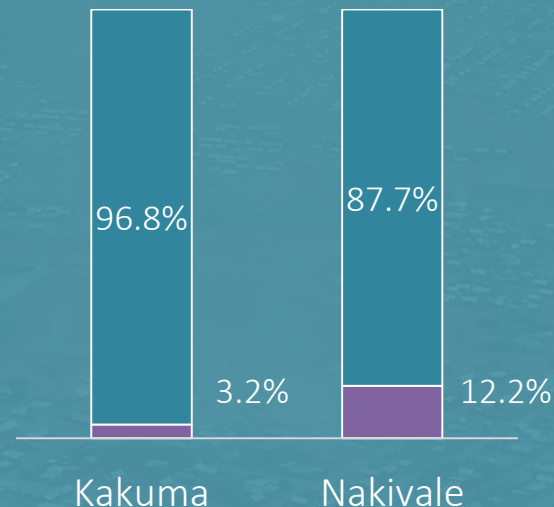
## Refugee access to the internet



## Internet access amongst mobile device owners surveyed



## Method of accessing the internet

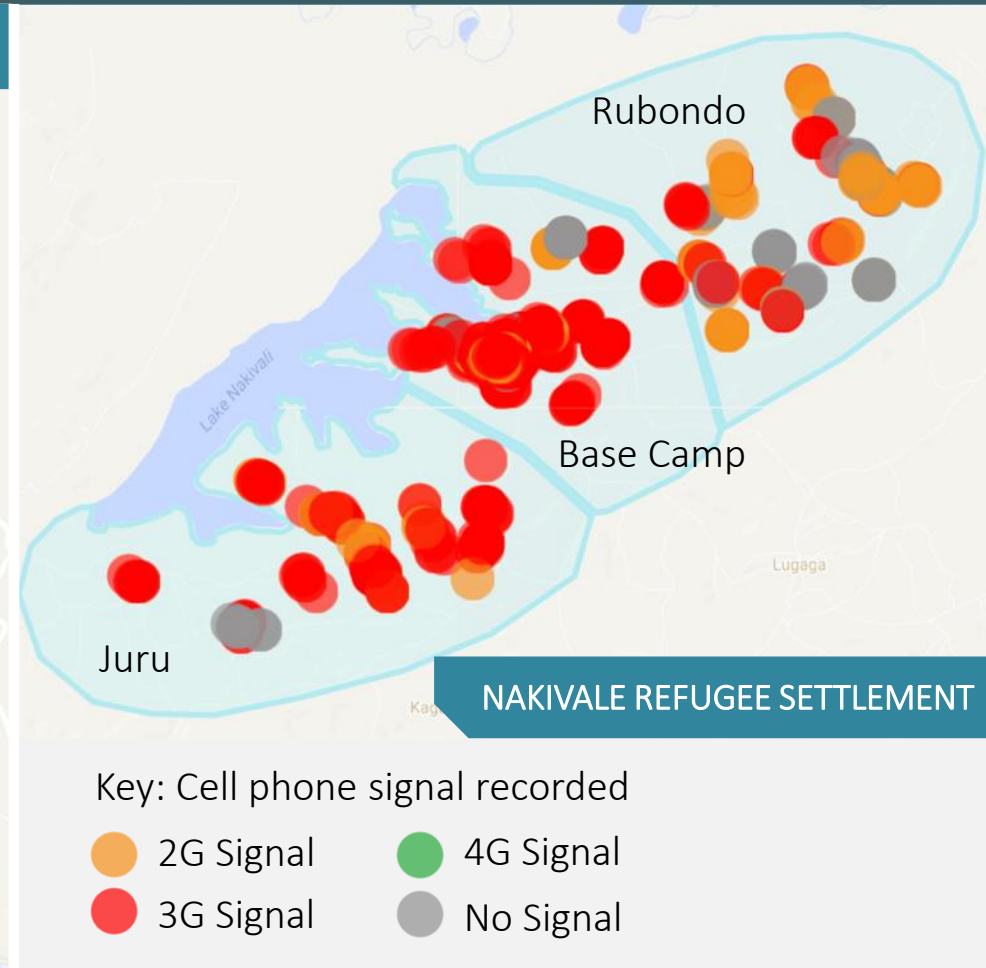
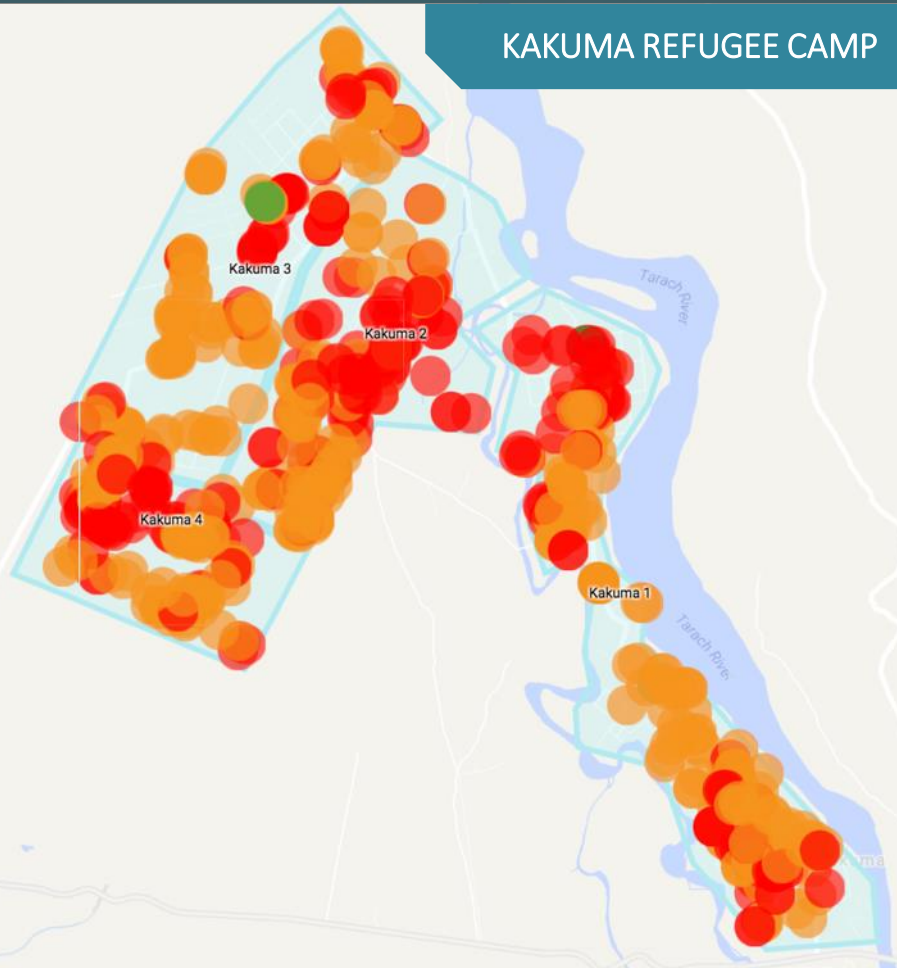


■ No internet access  
■ Internet access

■ Kakuma   ■ Nakivale

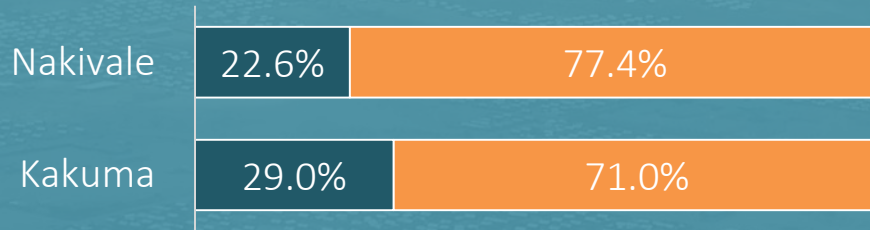
■ WIFI   ■ 3G or 4G

# Connectivity barriers in refugee settlements



# Overcoming barriers to accessing mobile data

## Email address ownership



□ Has an email address    ■ No email address

- Users without email can download apps without accessing app stores
- Airtime costs are zero as Bluetooth does not use 3G/4G.
- Apps, photos and other files can be shared even in areas with poor mobile connectivity, or no 3G access

## FILE SHARE APP

## Transfer APP & GAME

⬇ without any downloads



# Conclusion

- Internet access for most refugees in Kakuma, Nakivale and across the region means using a smartphone
- However, smartphone ownership is notably above national averages
- Mobile connectivity influences how many refugees migrate in the region:
  - Often to get information about the route ahead
  - ‘Islands of connectivity’ follow major migration routes
- Once settled, there are many similarities in the barriers faced by refugees in Kakuma and Nakivale to access mobile services
  - Poor, or intermittent connectivity including unreliable 3G access
  - Innovative solutions, such as peer-to-peer file sharing, overcome issues in accessing apps and sharing data