

Mobile Enabled Community Services

Predicting the Future of Mobile Enabled Community Services

Objective and Agenda

Mobile Enabled Community Services

Share Insights of our work from 2013, and provide a foundation for discussing the future of mobile enabled community services.

- Presentation of findings:
  - The MECS Market Opportunity
  - The MECS Innovation Fund: An Idea Factory
    - Creating a pipeline of opportunities
    - MECS Grantees
    - The role and opportunity for MNOs
  - Pipeline Analysis: A look into the future
    - Regional Spread
    - Prevalence of Mobile Channels
    - Lead Organisation
    - Business models

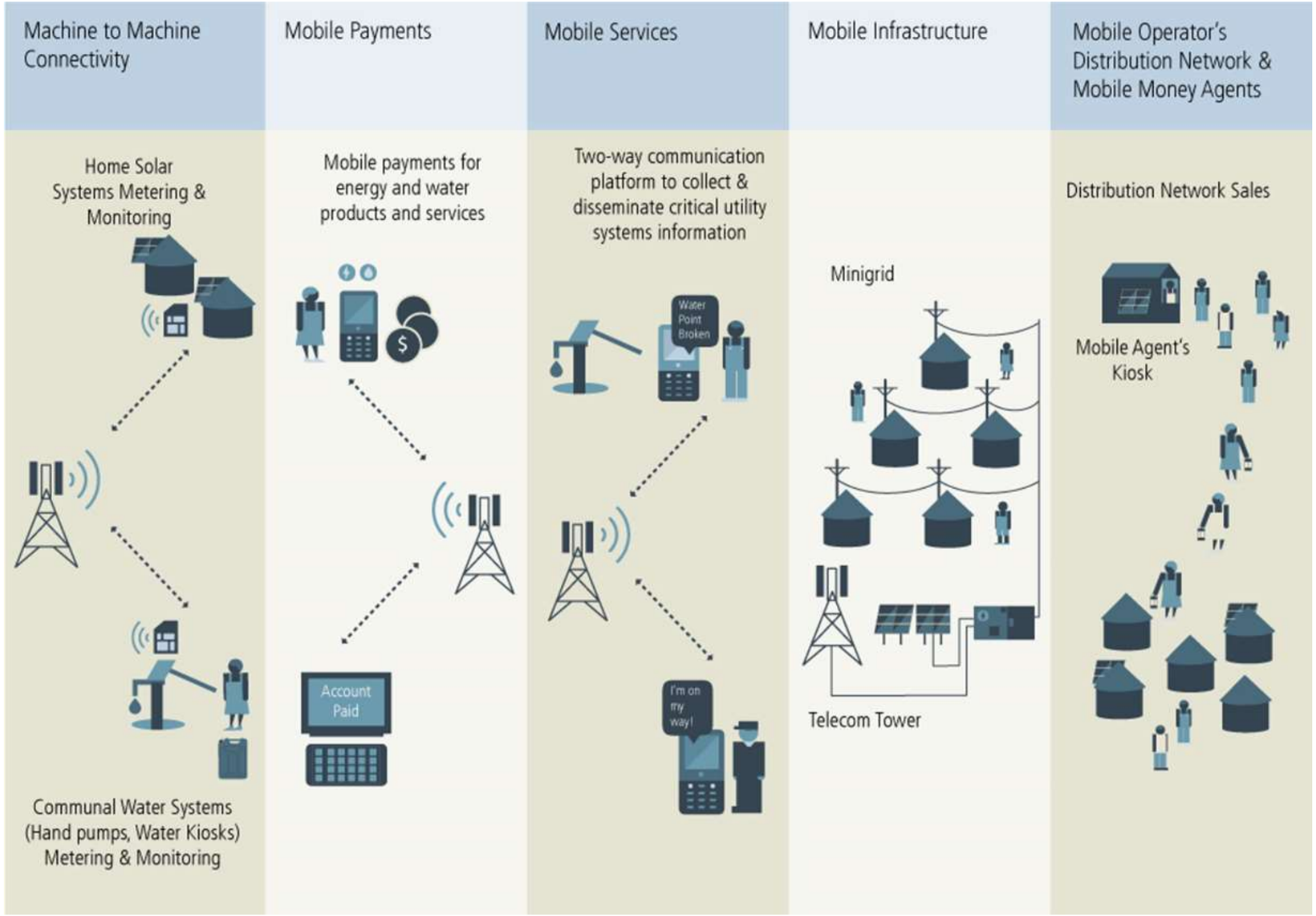


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The MECS Market Opportunity

Accelerating the MECS ecosystem

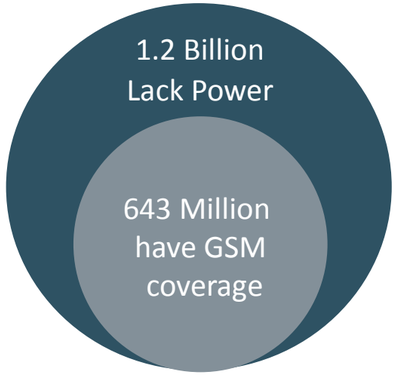
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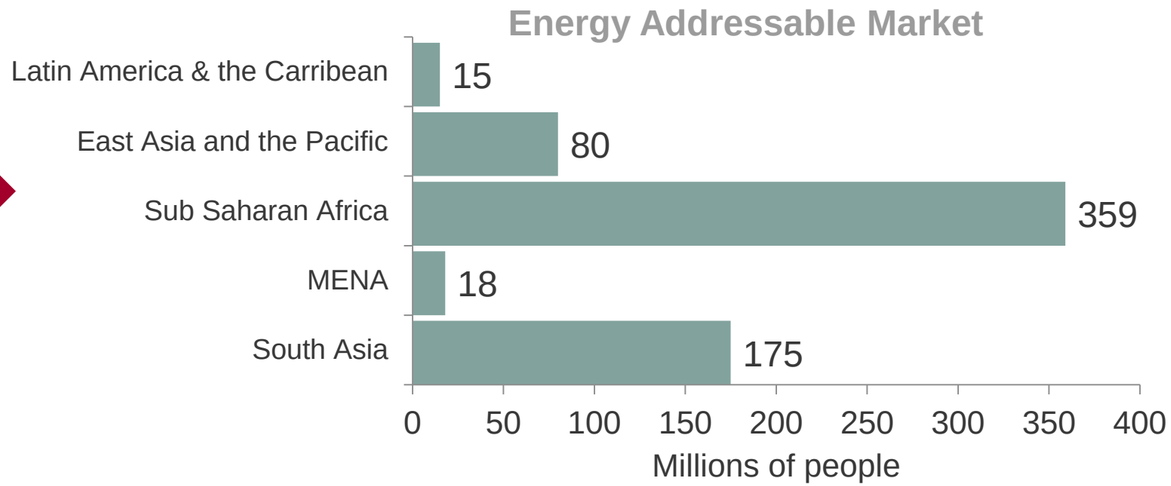


The size of the opportunity

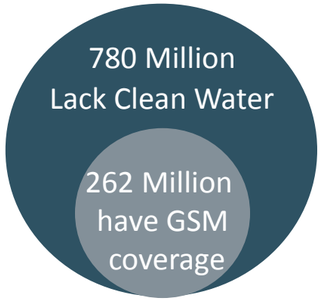
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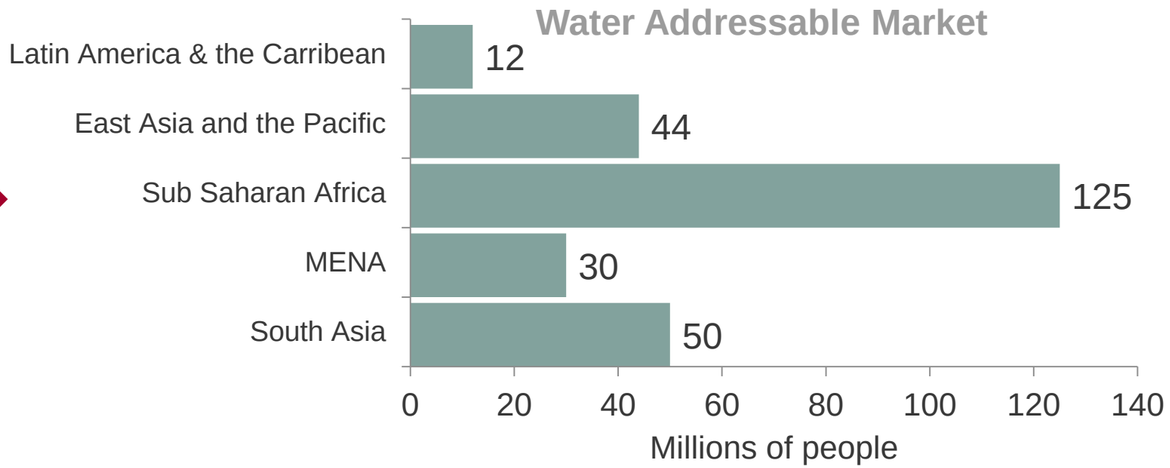
Energy





Water





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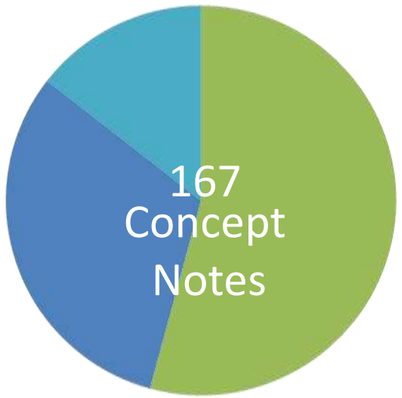


An Idea Factory:
The MECS Innovation Fund

Pipeline of Opportunities

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2- stage, competitive process delivering insights in the future of the sector



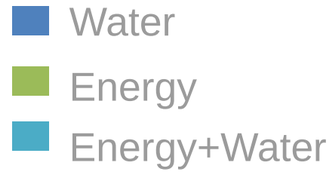
Asia 65, Africa 89, Latin America 7, Other 6



Asia 19, Africa 24, Latin America 3



Asia 5, Africa 8

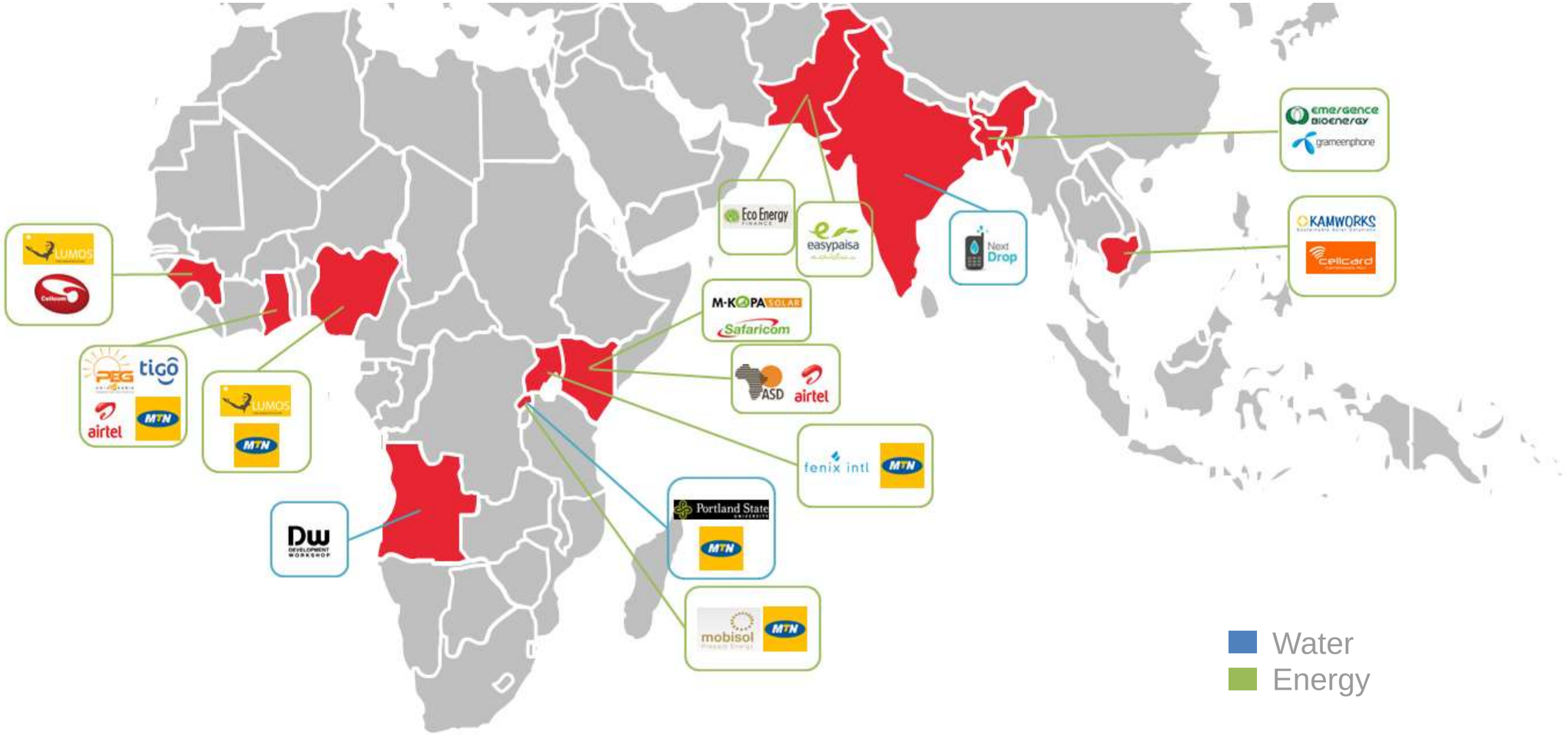


Key Trends:

- Mobile Operator Partnerships:
  - Concept Notes: 36% proposed partnerships with operators
  - Grants: 77% of grantees have partnerships with operators
- 44% of concept notes proposed to use Mobile Payments
- 35% of concept notes proposed to Machine-to-Machine technology
- Differing business models for different context
- Nascent water business models

MECS Grantees

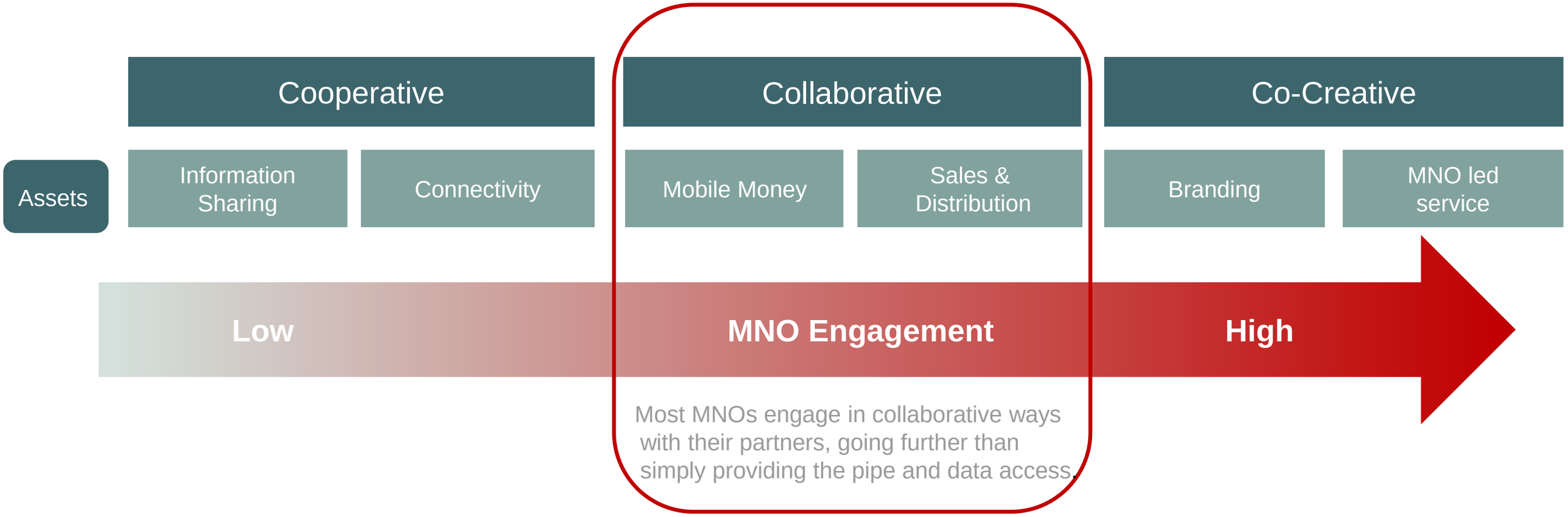
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MNO Engagement Spectrum

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We reviewed the 25 MECS Innovation Fund applications, which included MNOs as partners or lead applicants, as well as their detailed partnership plans. This analysis allowed us to build a spectrum of MNO engagement when partnering with third party providers.





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Pipeline Analysis: A look into the future

Dimensions of Analysis

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Each Concept Note was analysed across the following dimensions to identify key trends

Grant Type and Context

- Type of Grant
- Geography
- Sector: energy, water, etc..
- Setting: rural, urban, peri-urban

Partnerships

- Lead Applicant type
- # of Partners in Consortium
- Telecom Partner
- Implementation Partner

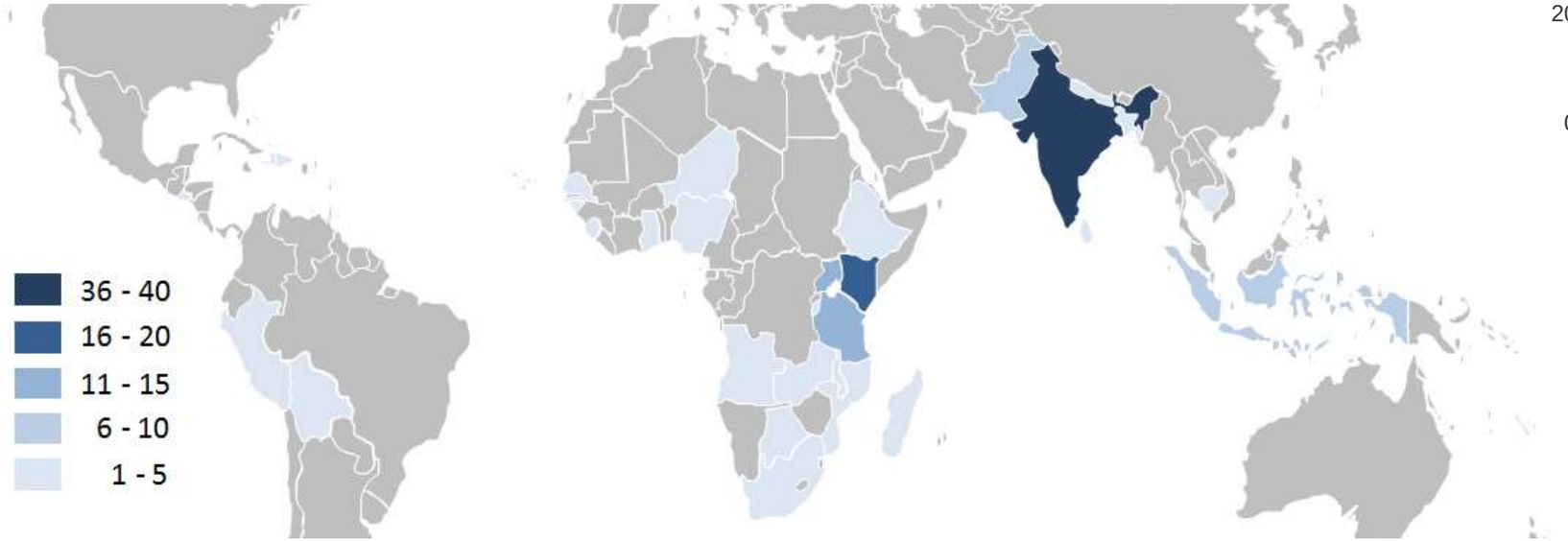
Business Proposal

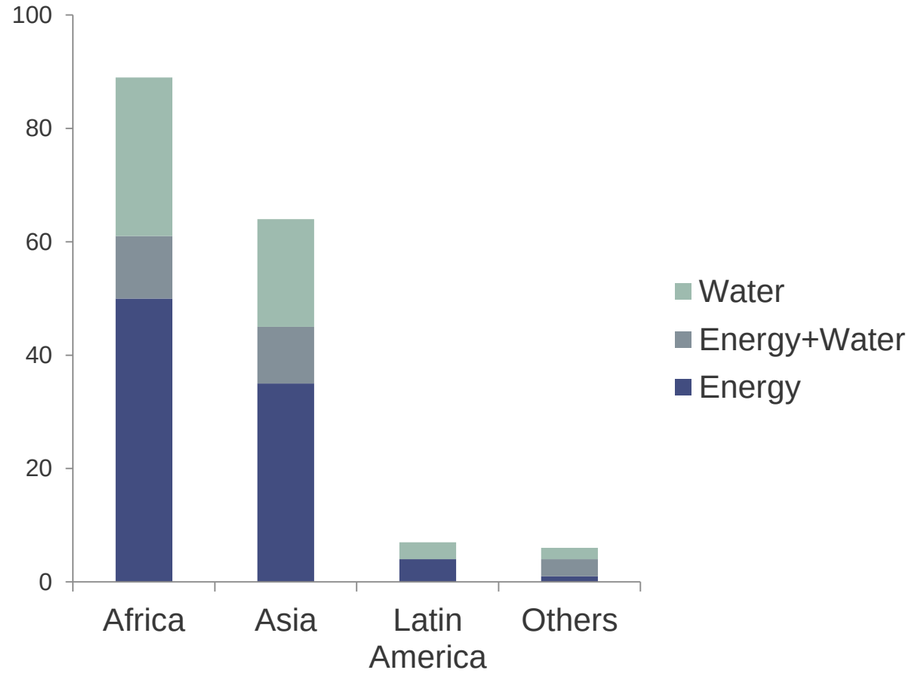
- Offering: Product, Service
- Mobile Channels
- Business Model
- Consumer Value Proposition
- Government as a Customer
- Payment currency: mobile money, physical

Regional Spread

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- 3 continents & 35 countries represented
- Activity is in line with addressable market
  - Africa is the most active continent
  - India is the most active country





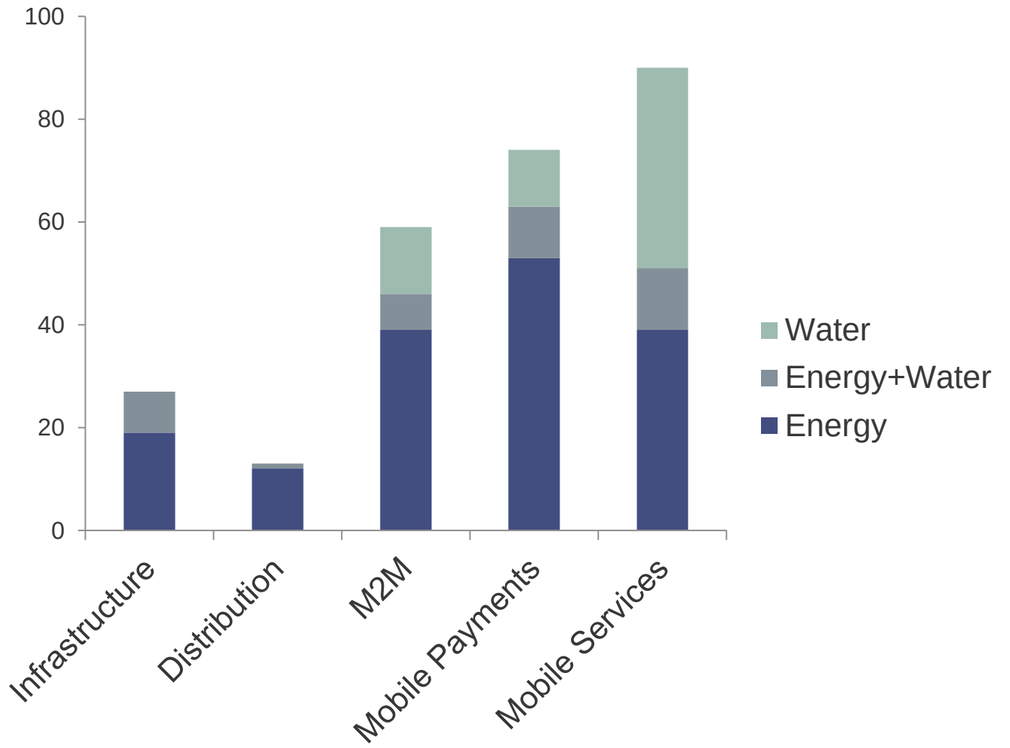
- Interest in Latin America, despite lack of active marketing
- Others: multiple continents and outliers

Mobile Channels

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Mobile Services, M2M and Mobile Payments are most popular

- Most popular channels require light touch MNO partnership
  - 54% Mobile Services
  - 44% Mobile Payments
  - 35% M2M
- Infrastructure and Distribution channels leverage core MNO assets, therefore most difficult to develop
- Use of multiple mobile channels: Average number of mobile channels for Energy (1.80) > Water (1.21)

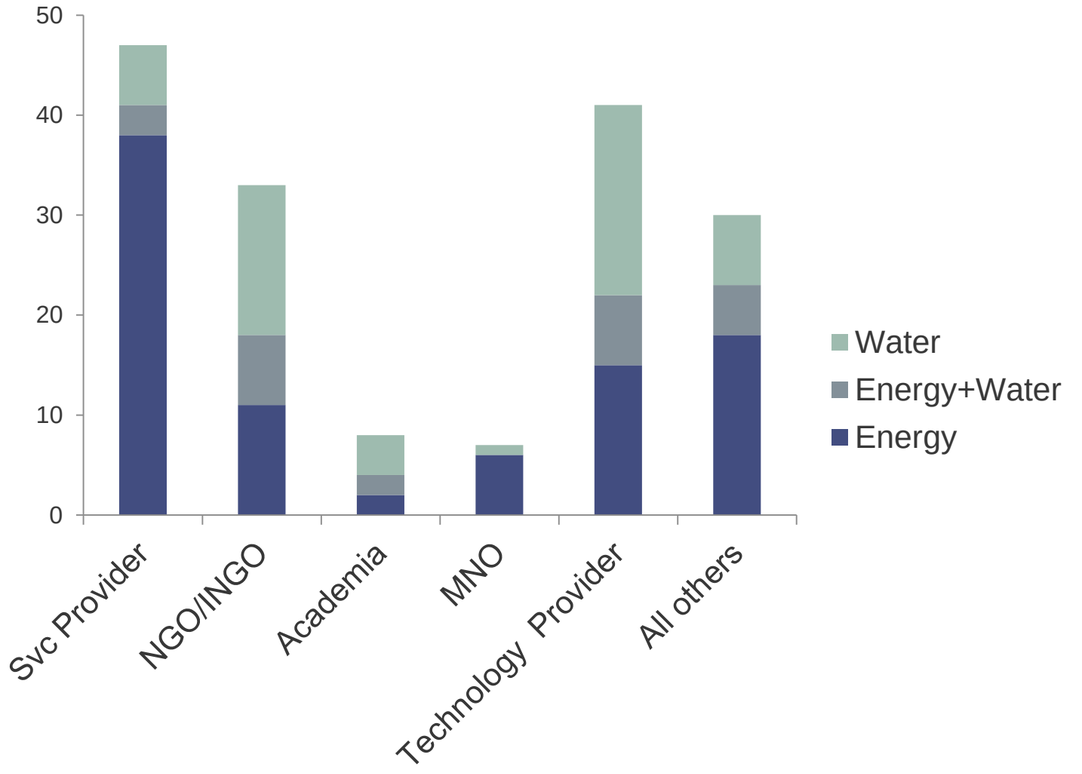


Lead Organisation

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Lead organisation indicates relative maturity of energy business models

- **Energy-only ideas:** service providers led 40%
- **Water-only ideas:** technology providers led 36%; academia and NGOs together led another 36%
- Water just beginning to adopt mobile, most often to improve delivery and gather/spread information
- More needs to be done to educate water service providers about the capabilities of mobile





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Pipeline Analysis: Business Model Trends

Use cases from Rural to Urban

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Rural Underserved Community

- **Energy access:** Poor, inconvenient and very expensive. Sources are unhealthy
- **Water access:** Improved sources are often unreliable, alternative sources are often unsafe and inaccessible

Urban Underserved Community

- **Energy access:** Grid energy is cheap and available even if unreliable.
- **Water access:** Generally intermittent and expensive to buy in small quantities

Business Models

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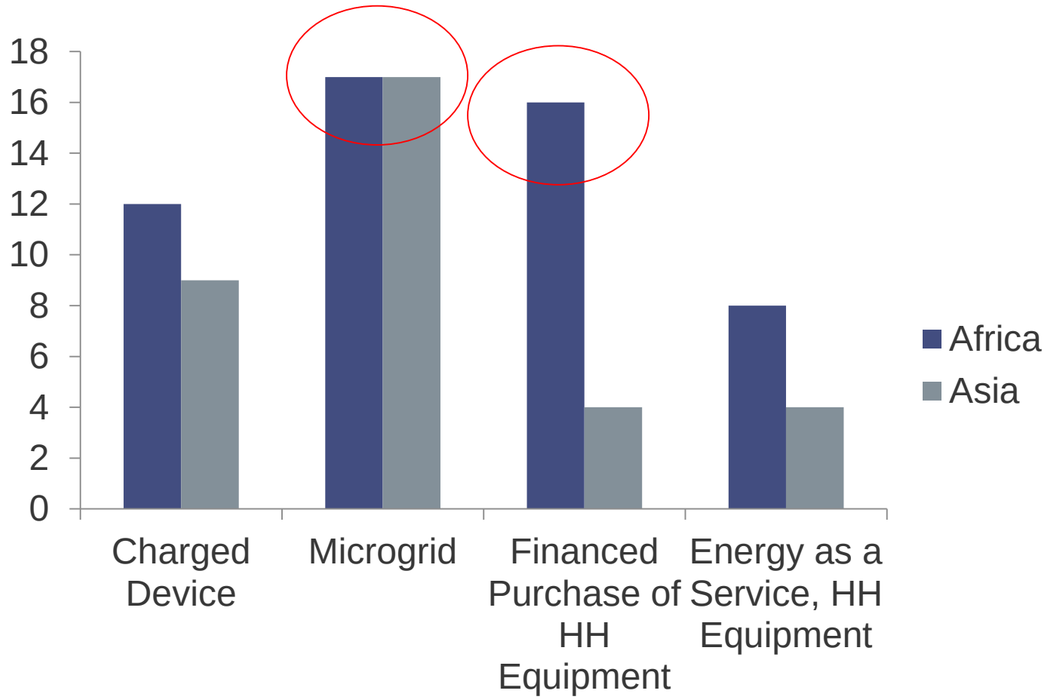
- 55% of all water & energy proposals included Pay-As-You-Go (PAYG) business models
- Energy sector is maturing:
  - PAYG made up ~70% of all proposals, indicating financial flexibility a major driver
  - 4 models:
    - Micro-Grid
    - Charged Device
    - Financed Purchase of household solar system
    - Energy as a service for household equipment
  - Many proposals included multiple PAYG business models

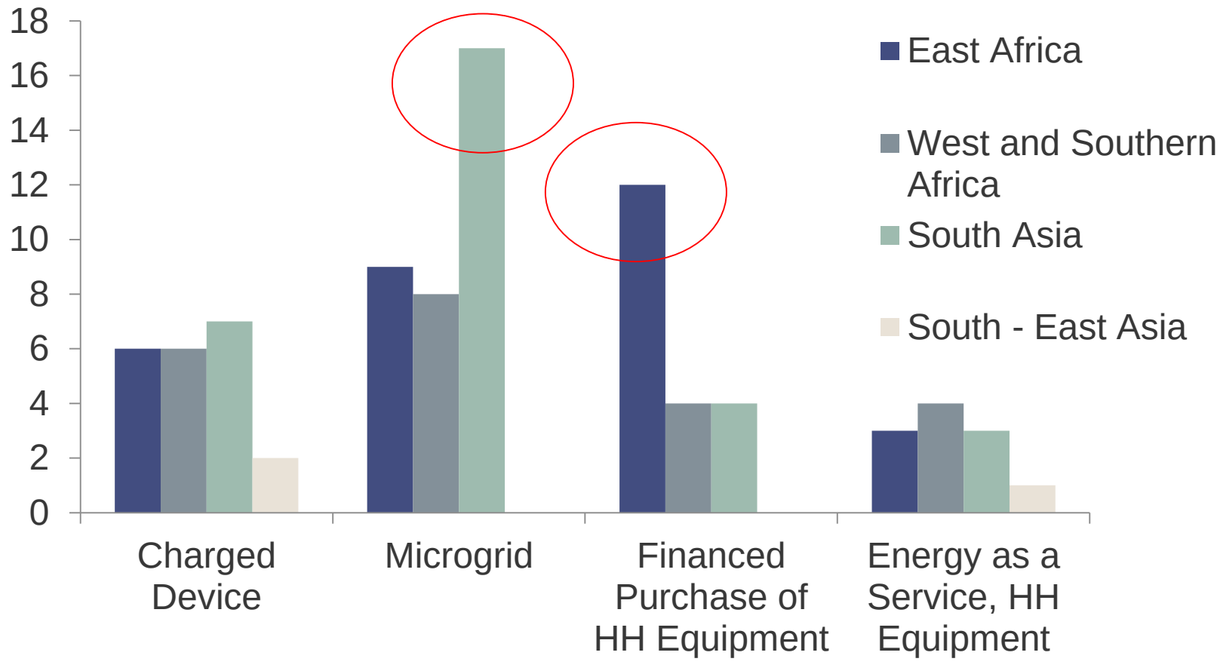
- Water sector is more nascent and complex:
  - PAYG made up ~25%, most proposals (~60%) focussed on information exchange to improve water service delivery
  - More experimentation and proof points are required to reach the sectors potential

PAYG Energy: Regional Variances

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- Microgrids similarly popular across Asian and African continent
  - Yet microgrids dominant in South Asia potentially due to high population density
- Financed purchase of energy equipment more popular in Africa;
  - Potentially driven by popularity of home solar systems and maturity of mobile money in East Africa

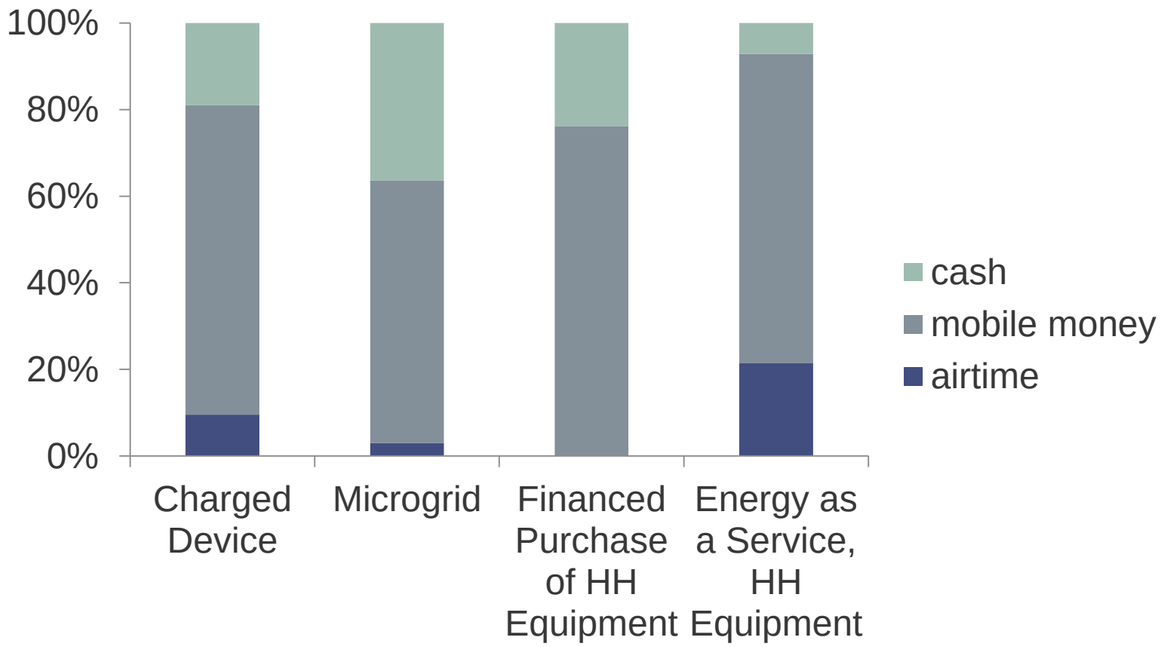


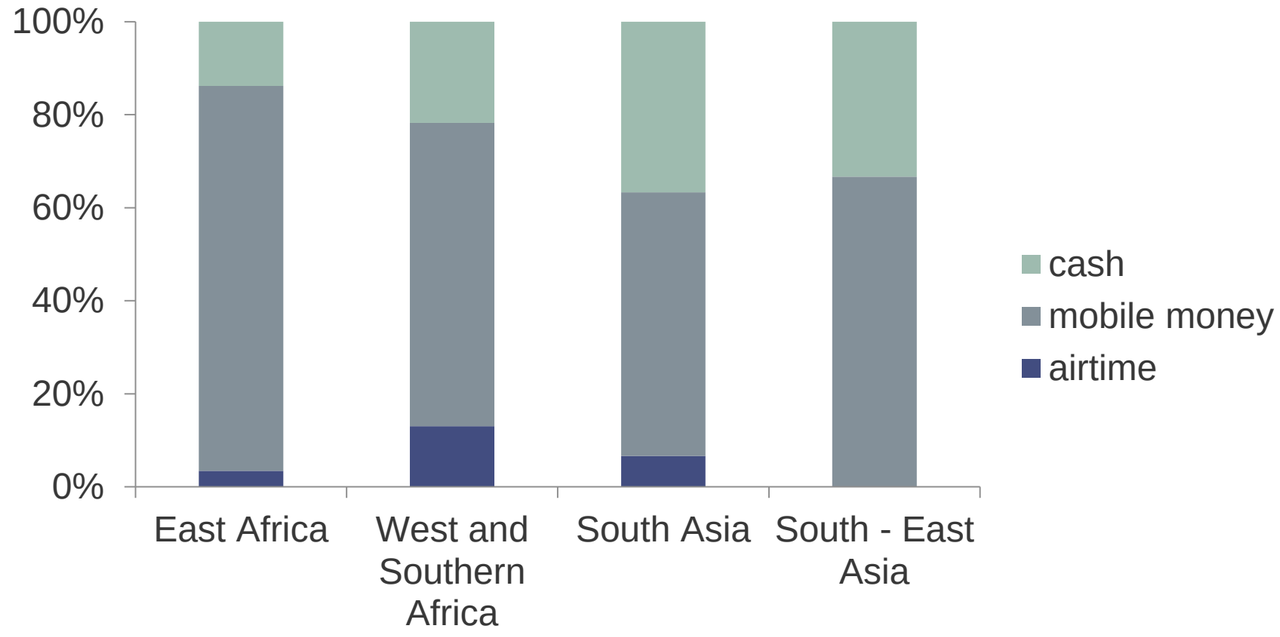


PAYG Energy: Currency choices

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- Mobile money: digital currency of choice; dominant in mature East African markets
- Airtime: 3 of 4 proposals were in less mature mobile money markets[1]
- Cash: Greatest reliance in South Asia where mobile money penetration is lower[2]





1) Countries where airtime proposed: Guinea, Nigeria, Kenya, Botswana, India
2) Countries in South Asia where cash used: 8 India, 2 Nepal, 1 Bangladesh

Water Service Challenges

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- **Multiple dimensions of water services require multidimensional solutions**
  - Water is infrastructure-intensive
  - Quality of water, reliability of service delivery, affordability

  →Information collection and exchange for real time monitoring and accountability

- **Financial non-sustainability requires consideration of cost recovery**
  - Limited achievement of operational cost recovery
  - Subsidised by government and donors

  →Need to carefully consider who pays to sustain service, mobile payment and billing

- **Complex institutional responsibilities require multi-stakeholder engagement**
  - Numerous stakeholders: local & nat'l gov't, NGOs, Consumers, service provider

  →Gov't engagement necessary but difficult: only 13% of proposals suggested gov't client

  →Water service provider may not lead, but most familiar with service challenges



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Coffee Break



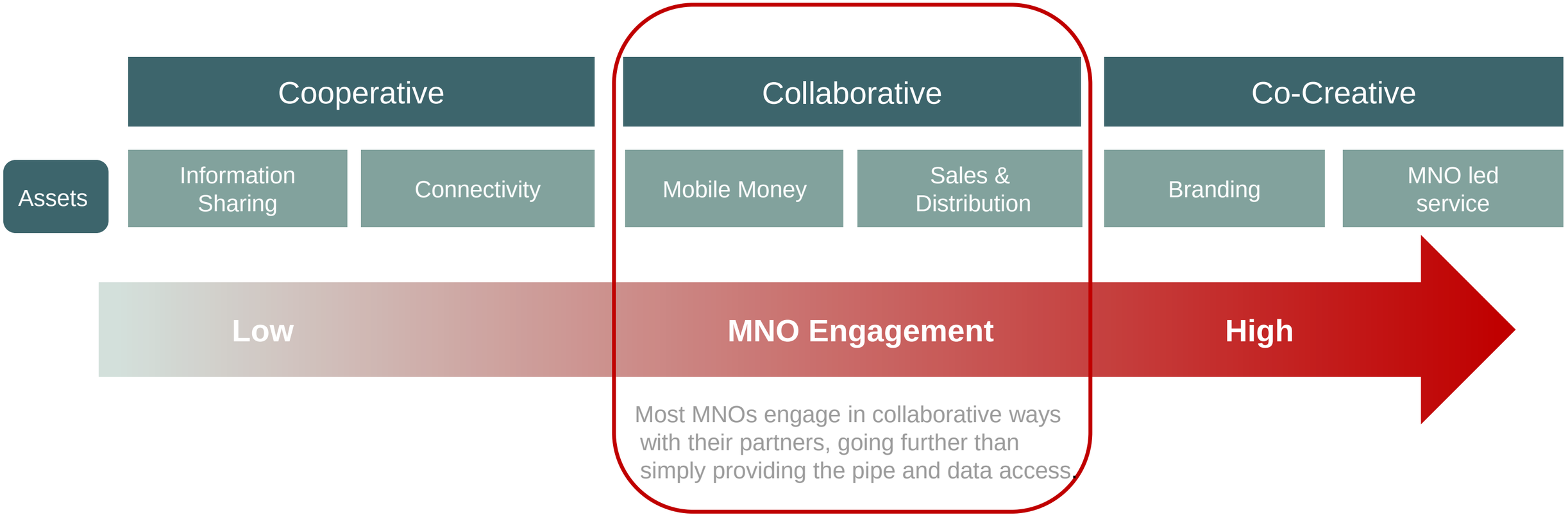
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Developing Partnerships with Mobile Operators

MNO Engagement Spectrum

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Developing Partnerships with Mobile Operators

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Panellists:

- Sam Ndori, Consumer Marketing Manager, MTN Rwanda
- Akbar Hussain, Legal Manager, Airtel Group
- Yasmin Sued, Marketing Manager, Tigo Rwanda

Developing Partnerships with Mobile Operators

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Moderator Questions:

- What is needed to help operators form more partnerships with innovators and start-ups?
- What are some of the challenges of these partnerships?
- How interested do you think operators are to develop these partners and what additional evidence do you think is needed to drive these?



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Lunch



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Mobile Money and Bill Pay

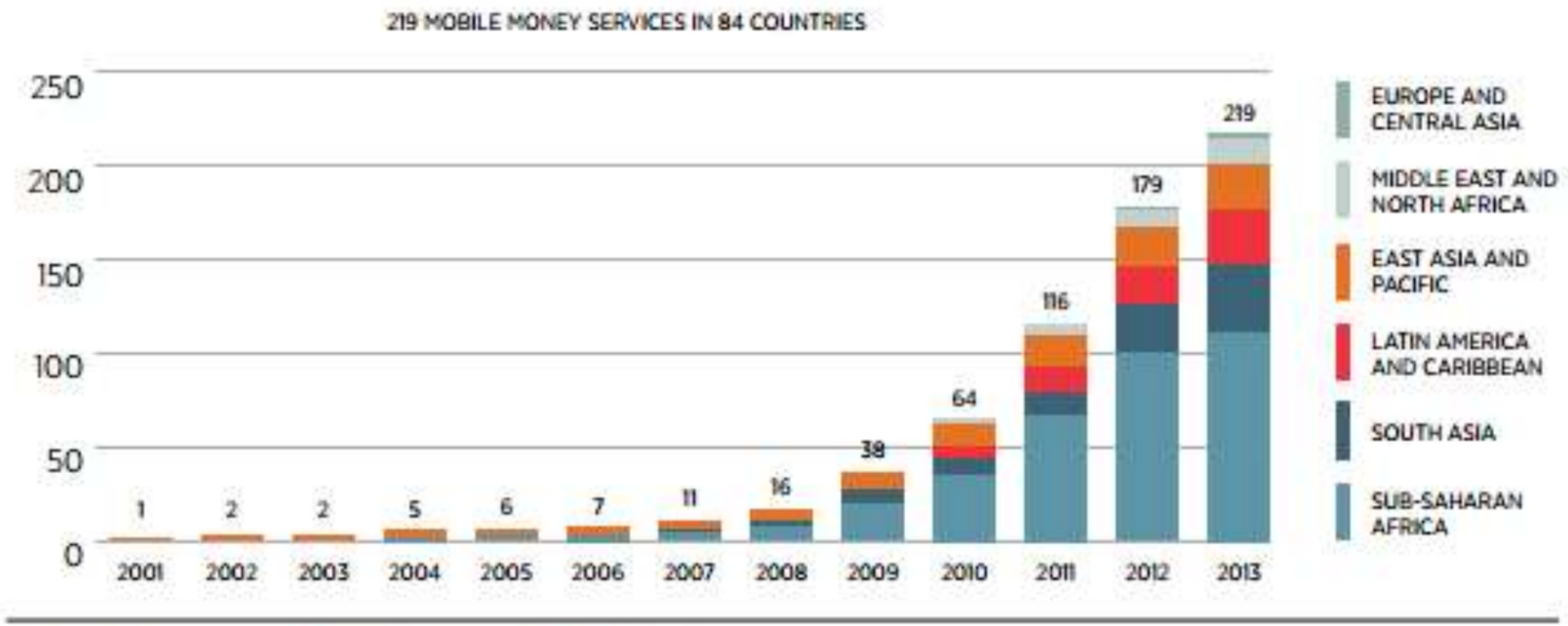
Mobile payment currencies

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Choices of Mobile Currencies:

- Mobile money
- Airtime

Growth of the Mobile Money Services Around the World – 2001 to 2013

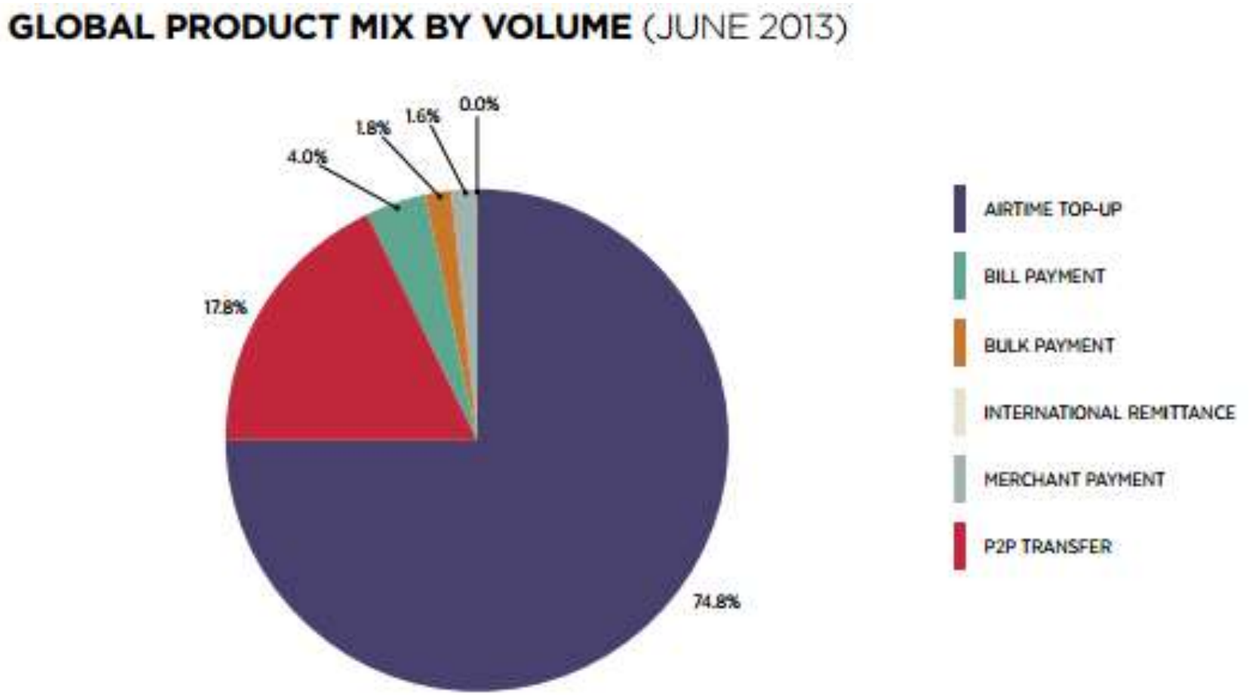


42. http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/02/SOTIR_2013.pdf

Mobile Money Services

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- **Mobile Bill Pay**: Payment of a utility or other bill using your mobile money account
- **Person to person transfer**: Send money
- **Buying Airtime**: Topping up airtime for recharging a GSM account through a mobile money account.
- **Merchant Payment**: Payment for good or services at a store using a mobile money account
- **Bulk payment**: One-to-many transfers such as salary disbursal is a bulk payment



Mobile Money Bill Payment Options

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There are three options for third party providers to integrate bill payment services:

- **Pre-set bill payments** are the most basic mobile payment model whereby the third party service provider receives a bill payment ID from the MNO which he can then communicate back to his customers.

- **Customised billing services** requires a higher level of integration between the MNO and the third party service provider. This option allows for more in-depth customisation and sharing of information between the third party provider and the MNO.

- **Shared APIs** are still in their early days as MNOs are exploring the practicalities of offering this model.

There are benefits and challenges to each of those models, in terms notably of ease of integration and security levels.

Mobile Money and Bill Pay

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Panellists:

- Patrick Apoya, Skyfox Ltd, Director, Africa Sanitation Think Tank at Water and Sanitation for Africa (WSA) and Chairman, Skyfox Ltd. Ghana
- Mathias Püschel, Mobisol Operations Manager, Tanzania



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To M2M or not to M2M

Setting the scene

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Machine to Machine (M2M) refers to technologies that allow both wireless and wired systems to communicate with other devices of the same type

M2M facilitates:

- Remote monitoring and data collection
- Remote control→ sending commands to devices
- Gathering detailed data to support customer insights and analytics

M2M considerations:

- Cost of integrating the embedded SIM & developing a database
- Network coverage is not present in all areas
- Over-engineered solution?

To M2M or not to M2M

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Panellists:

- Bindu Susheel, Next Drop
- Jack Beach, Living Water International
- Mike Szymanski, Off-grid Electric

To M2M or not to M2M

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Moderator Questions:

- What have been the challenges of integrating M2M? Or using another technical solution?
- If you were to launch your service anew, would you use the same technology solution? Why or why not?



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Coffee Break

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Water: Product and Service Innovation Stories

Water Service Challenges

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- Poor Level of Service: quality, hours, accessibility

→Opportunity to monitor

- Low cost recovery: Billing and Payment

→Opportunity for mobile billing, payment and savings

- Many stakeholders: gaps in accountability

→Opportunity to share service information

Yet, Limited evidence and institutionalisation/scaling remain a barrier

Innovation: Process and Learnings

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Context Driven Solutions:

- Understanding the need/demand
- Innovation Development Process
- Refining and Financial Sustainability

Moderator Questions:

- What was your organisation’s biggest lesson learnt from this process?
- What advice would you give to others as they develop their products and services?
- What do you think are the biggest hurdles facing this industry and what should the role of the GSMA and other market facilitators be?

Water: Product and Service Innovation

Mobile Enabled Community Services

Panellists:

- Ann Thomas, UNICEF
- Laura Szczuczak, SeeSaw
- Marcel Schreurs, Water Forever International

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Breakout Session

Challenges in developing MECS businesses

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We have spoken about the opportunities but what about the challenges?

Break-out session format:

- Intro: 5 min
- Group Discussion: 30 minutes
- Report-Back: 15 minutes
- discussion: 10 minutes

Group Discussion: Groups divided by sector and mobile-maturity

- What challenges does your **sector** face in increasing the use of mobile?
- What challenges does your **organisation** face in increasing your use of mobile?
- What new evidence/experiment results would be useful for the sector
- What funding challenges do you face? What evidence is required to raise that funding?



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Closing Remarks
Dinner: 7pm transport to Chez Robert