

Implementing Digital Finance for Sustainable Water Supply

Daniel Waldron August 2018



What is digital finance?

Digital financial services are payments, credit, savings, and insurance that are delivered using digital channels and technologies

Digital Channels:

- Mobile phone
- Credit/debit cards
- Internet
- Smartphone applications
- Blockchain



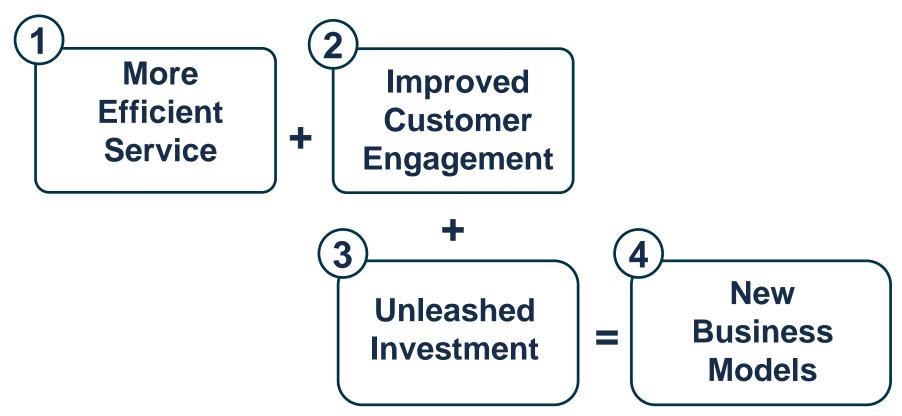
- Mobile money
- Mobile banking
- Internet banking
- Electronic money
- Cryptocurrencies





Why does digital finance matter?

Digital finance can help millions more people to access essential services such as water, health, education, and energy





Impact of Digital Finance

What can digital finance do for water & sanitation?

CGAP has identified four potential areas of impact:



Landscaping of Digital Payments for Water 2018 Evaluation of Digital Finance in Water





Partnered to explore the current state of digital payments in WASH





Landscaping of Digital Payments for Water

We spoke to 22 water-oriented organizations















NWSC

























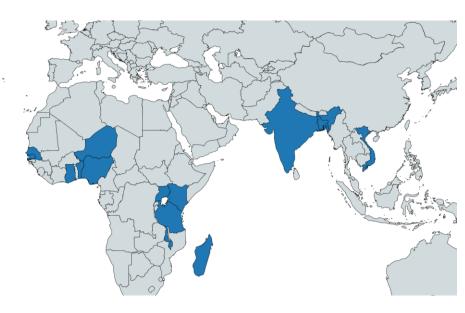




Who we spoke to: Types and Geographies

- > 5 Urban Utilities
- ➤ 6 Small Water Enterprises
- ➤ 3 Hardware Manufacturers
- ➤ 6 B2B Service Companies



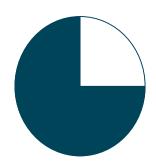


- ➤ 2 Sanitation Providers
- ➤ 1 WSS Donor



Landscaping of Digital Payments for Water

Results: This is where our interviewees are



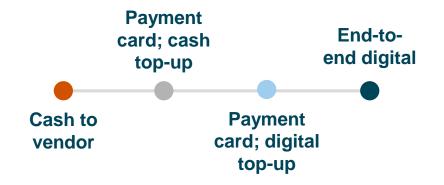
9 out of 12 providers that collect customer revenue are accepting digital payments

Mobile payments ranged from 0 to 38% of revenue collected. The leader took five years to reach that level



7 out of 10 companies offering hardware or B2B services work closely with digital payments

Most communal points are semi-digitized







Key Findings

Cost savings are the major driver

"[providers] are not going to increase the prices, so only way to increase revenue is to sell more <u>or reduce costs</u>"

- ➤ HH Toilets: \$1.10 per cash collection, \$0.05 per mobile
- Utility: Cash collection costs3.3% of monthly revenue
- Container sanitation: collections are 15% of pricing
- Small water enterprise: 20% of revenue to vendors

Key Findings

Data

"No one was sure what the revenue status was" Halima Murunga, Wonderkid

Many respondents did not know baseline measurements

Impossible to quantify return on investment

And <u>no one</u> was using payments data to influence business decisions



"So things are good, stuff is OK, and I reiterate my request for more specific data."





- > Can take over a year to integrate
- Do not underestimate how much help people will need
- Usage is constrained by a lack of other usage
- Beware fee structures that keep customers on cash

"When there is coverage, the payment for water is very small, a micro-payment even, and the transaction fee makes it prohibitive."

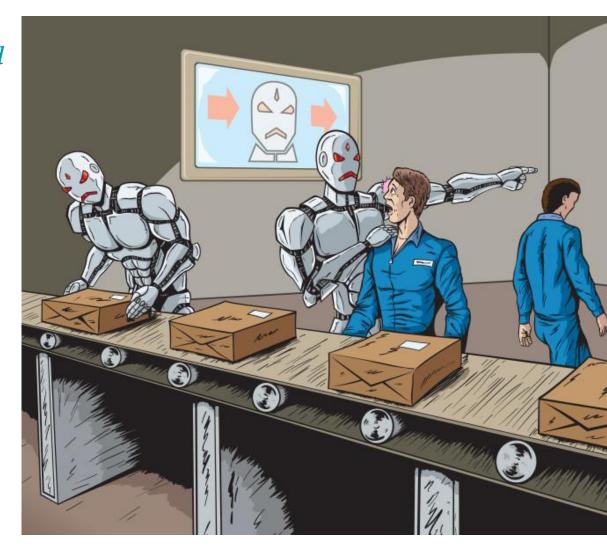


Key Findings

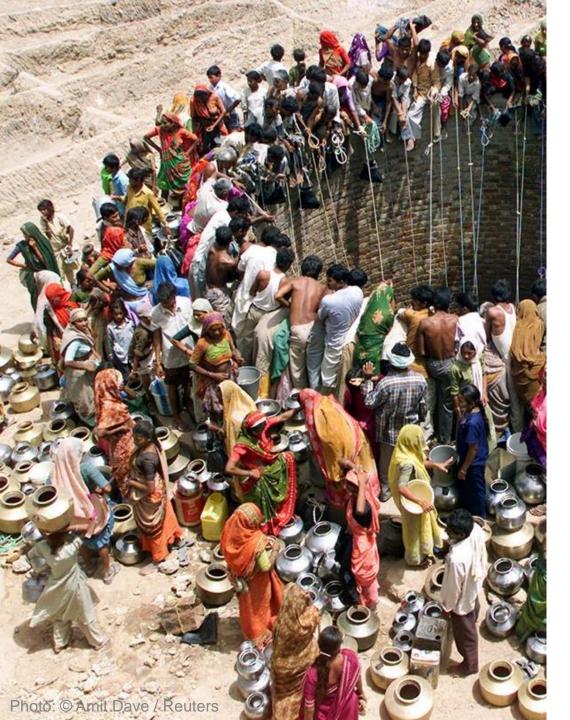
Workforce automation is a real concern

"If we could move all payments to digital, we would be happy. Staff could work on other tasks, it would reduce transport and security costs, and customers would have added convenience"

- Multiple providers could not or would not reduce their staff
- Digitization requires
 finding more productive
 work for people whose
 jobs were cash-based







Great expectations, tempered by reality

Digital finance can help:

- Establish fully-automated service points
- Scale prepaid water
 ("there is no prepaid meter
 without mobile money")
- Combine financing with usage

But <u>no technology</u> can solve for a lack of management, robust processes, or customer centricity

Links to CGAP Reports

CGAP Brief: Digital
Finance & Sustainable
Water for All



Digital Finance for the Real Economy: Water



















Global Affairs Canada



































































