

Gearing up to meet Africa's
rising power and water demand



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**AFRICAN
UTILITY
WEEK**

**CLEAN POWER
AFRICA** 

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DELEGATED MANAGEMENT MODEL : AN ANSWER TO WATER SERVICE PROVISION CHALLENGES IN INFORMAL SETTLEMENTS

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1: INTRODUCTION

- KIWASCO is a Kenyan utility serving Kisumu – the third largest city in Kenya.



1.1: Facts

- KIWASCO is an operator with the following key facts:

Population in service area	1 million
Service coverage	67%
Number of connections	27,000
Number of staff per 1,000 connections	6
Turn over in USD	6 million
NRW	43%
<i>60% of residents live in informal areas</i>	

2: UTILITY BUSINESS MODEL

2.1: Requirements

Business models are designed to respond and achieve:

- Long term prosperity i.e profitability
- Productivity – increase efficiency of the system
- Public Responsibility – meet public requirements, be a responsible corporate, fair pricing etc

2.2: Customers

- Utilities serve different customer segments i.e Commercial, Industrial, Institutions/Government and Domestic
- In the domestic segment, this can be further sub-divided into:

High income >100litres/capita/day

Middle income >50litres/capita/day

Low income <50litres/capita/day

2.3: Model

- To effectively serve the various customer segments, the market strategy is to “focus” on the special needs of the various segments:
- The business/profit model commonly used is “installed-base”: Refers to both capacity and customers
- The “installed-base” should be adequate to serve all customer segments demand and generate revenues

2.3: Model

- The model expects revenue flow even from the poor segments
- In reality this does not happen

3: CHALLENGES FACED SERVING THE POOR

3.1: The space

- The poor are found in informal settlements that are poorly planned physically
- The space is overcrowded without adequate space for roads or way leaves for water or sewer infrastructure
- Vandalism and theft of infrastructure is common
- The settlements are transient
- The properties are owned by people who do not live in the area and hence do not have a great interest in service improvement.

3.2: The Service Provided

- Access to service was poor as the piping system was informal spaghetti type
- Prices were high, USD 2.3/m³ against normal tariff of USD 0.4/m³
- NRW was high at 70%
- Revenue collection was low at 20%
- Disease was prevalent in the area as quality was poor
- The service was provided through water kiosk

3.3: Customer Expectation

- Good quality water easily accessible
- A price per m³ that is affordable
- Reliability that is acceptable

3.4: Utility Expectation

- Low NRW
- Quality water
- Reduction of price charged by water vendors in the informal settlement
- A sustainable service: revenue generation and collection.

4: THE NEED TO INNOVATE TO SURVIVE

4.1: The challenge

- Water loss (NRW) of 70% was causing a huge loss and threatening sustainability objective
- Vandalism and non-collection of revenue was adding to our costs and loss on efficiency
- Many residents were finding it difficult to access water because of cost thus affecting our public responsibility to supply affordable water to members of the public

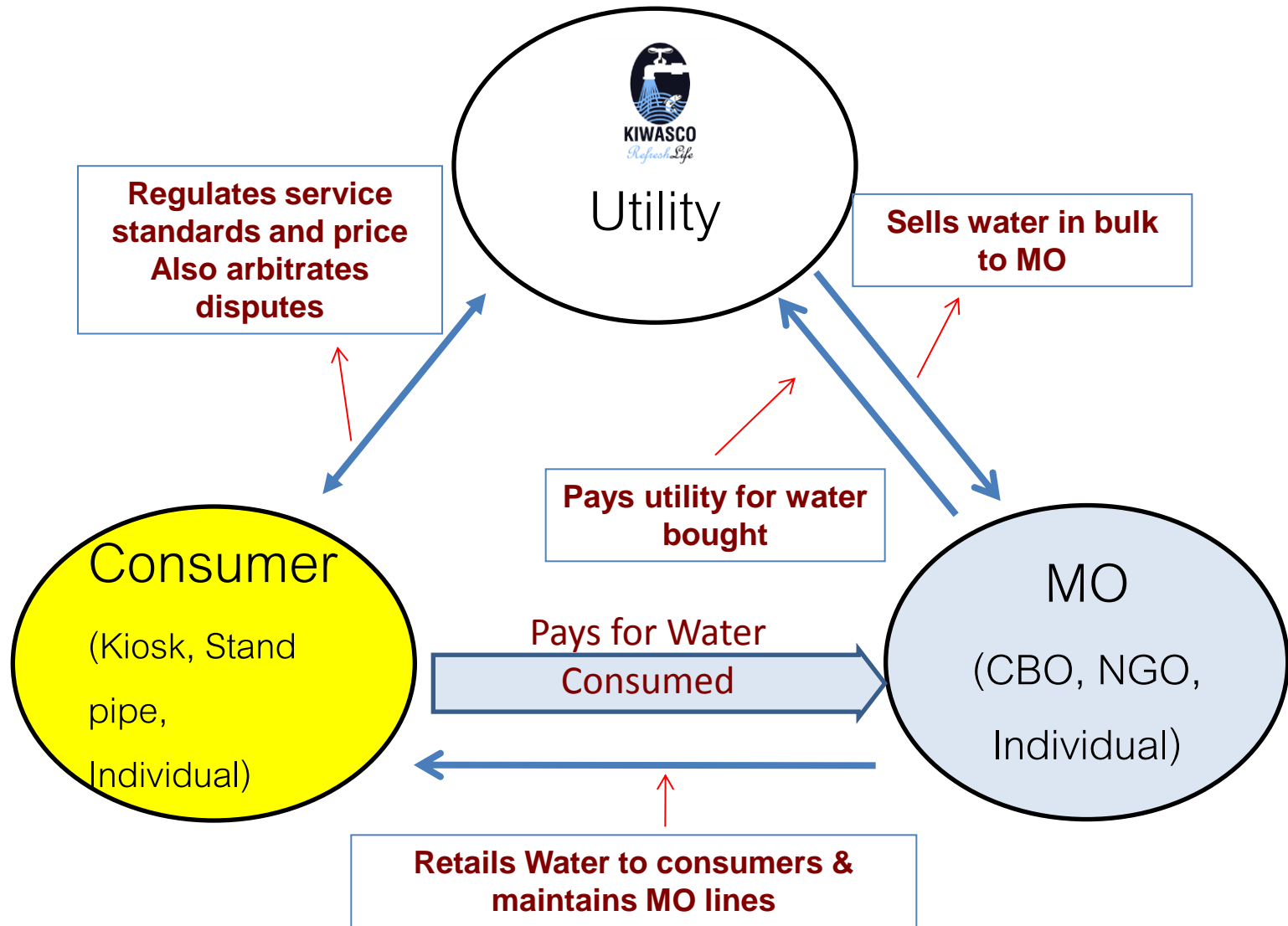
4.2: The goal

- The WSP set out to find a platform for service delivery that would:
 - Reduce NRW from 70% to under 10%
 - Improve collection from 20% to over 90%
 - Increase access by extending the service to un-served areas
 - Reduce cost from Kshs. 5 per 20 litre container to Kshs. 1 per 20 litre container
 - Pilot method capable of replication

4.3: The DMM

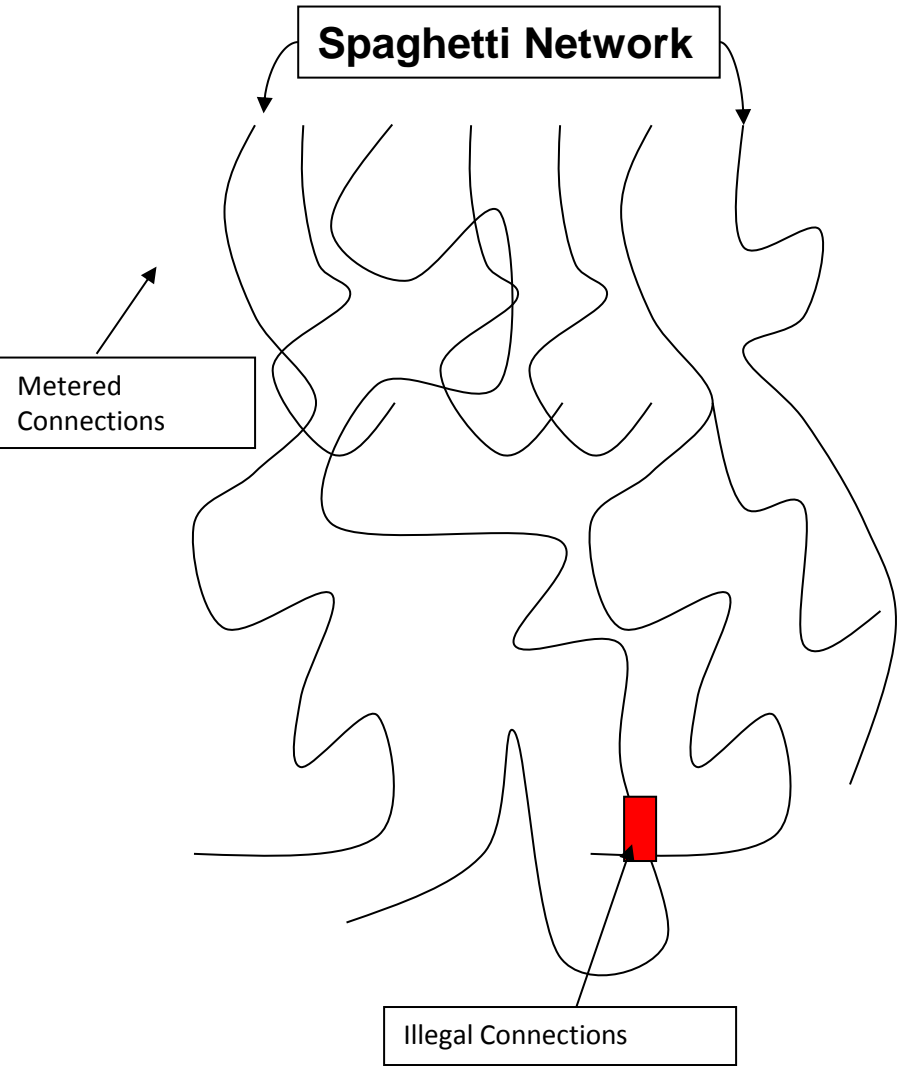
- After exploration and discussion, we settled on partnership between the community and the WSP under a Delegated Management Model (DMM)
- Under the DMM the Company identifies a CBO, NGO or individual in the community to operate the network on delegated authority from the Company. The entity is referred to as Master Operator (MO).

Relationships in DMM

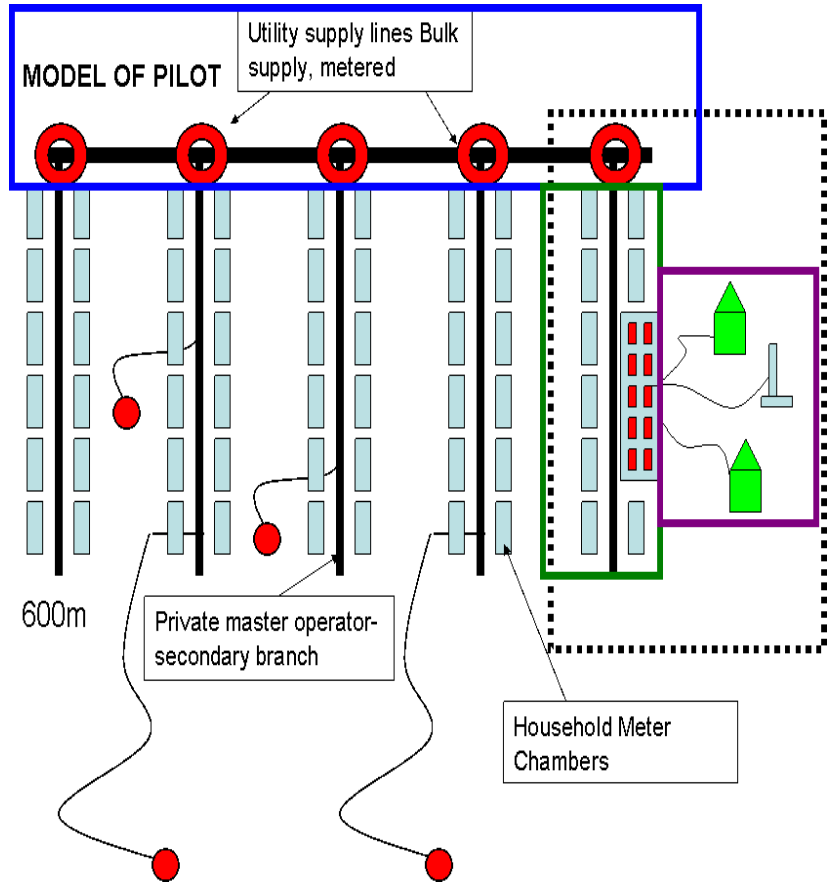


4.4: The model in Picture

Before DMM



After DMM



5: FROM “BOUTIQUE” TO “SUPERMARKET”

Performance of DMM in Nyalenda

INDICATOR	STATUS OF MO 2006	STATUS AS AT MARCH 2015	Change
Billing (Kshs) *	437,780.00	11,726,586.00	x 26
Revenue collection (Kshs) *	396,176.00	11,140,250.70	x 28
Metered Customers(No)	650	1,774	x 3
Population served(No)	4,101	28,424	x 7
Volume sold (m ³)	10,200	37,134	x 4
NRW	70	8.5	x 0.12

* *Kshs. = USD 95:1*

DMM Performance Against Goals

- Reduction in NRW - Yes
- Improve collection - Yes
- Increased access - Yes
- Reduce cost - Yes
- Replication - Yes

5: FROM “BOUTIQUE” TO “SUPERMARKET”.....

- The project was pioneered in Nyalenda, an informal settlement of Kisumu, Kenya.
- Success of DMM has created momentum to take it from the “boutique” to the mass-market or “supermarket”
- It has been rolled out in 3 other informal settlements
- Has attracted both local and international attention
- Has proven resilient in delivery in a tough environment like the informal settlement

6: LEARNINGS AND LOOKING TO THE FUTURE

- Introducing new concepts and technologies in communities require community involvement and robust communication at feasibility pre-launch and post-launch stages
- Use of “early adopters” to experiment with a concept convinces “laggards” to follow suit
- Customers are interested in adopting technologies or concepts that enhance quality of life with minimal disruption to their chosen lifestyles

6: LEARNINGS AND LOOKING TO THE FUTURE

- Deploying technology without considering social dimensions is likely to fail
- With appropriate technology, serving the poor can be as satisfying as serving other segments of the society.

“There is indeed money at the bottom of the pyramid”

6:LEARNINGS AND LOOKING TO THE FUTURE

- Could the success of this concept be taken to the future through use of modern technology i.e smart metering, smart water dispensing, smart collection etc?.
- The answer is in your hands!



Thank you!