

SAFEGUARDING INFRASTRUCTURE AND ENHANCING REVENUE

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INTRODUCTION

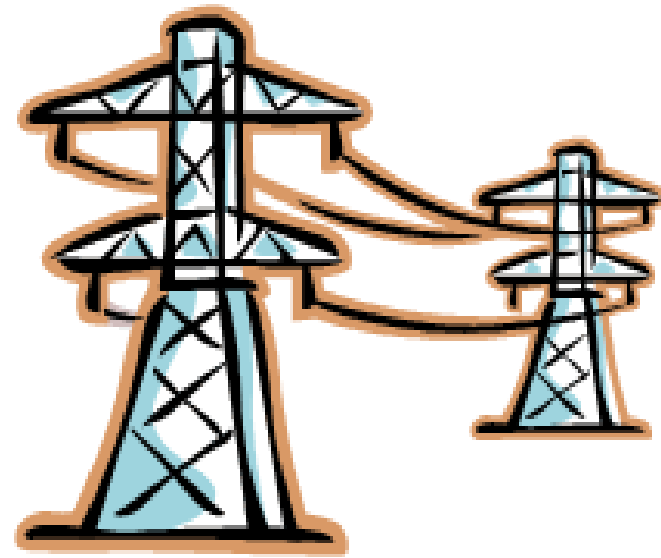
- Revenue losses are a source of concern to the Municipalities and should be curbed as far as possible. The effect of these losses exacerbates the poor financial situation of the Municipality and any improvement/reduction thereof will assist to improve the financial situation.
- Theft and vandalism of infrastructure is also a major problem with a huge impact on people's lives and the overall economy. Theft and Crime is a socio-economic challenge (not a technical problem). Motivating factors behind theft of cables and vandalism of infrastructure vary. There are people who steal opportunistically, there are those who steal out of need (pressured) and those who steal out of greed (illegal enrichment).
- The Municipality's substations are vandalized day by day. With the increase of the copper price, more and more of municipal assets get stolen. This is causing municipalities millions to repair or reinstate infrastructure to its original state which is cost that was supposed to be used to do maintenance.

INTRODUCTION cont'

- To analyze what the causes of high revenue losses were and the challenges faced in revenue loss management.
- To look at the processes and strategies which were developed and implemented in order to successfully address trends and causes of revenue losses.

High power distribution losses

- Technical Losses
- Non-technical losses



TECHNICAL LOSSES

- Overloaded distribution networks and
- The ageing distribution infrastructure



NON TECHNICAL LOSSES

- Copper theft and vandalism
- Illegal connections
- Electricity theft



SOLUTIONS TO CURB INFRASTRUCTURE VANDALISM



BEFORE



AFTER

SOLUTIONS TO CURB INFRASTRUCTURE VANDALISM



BEFORE



AFTER

SOLUTIONS TO CURB INFRASTRUCTURE VANDALISM



BEFORE

AFTER

SOLUTIONS TO CURB INFRASTRUCTURE VANDALISM



BEFORE



AFTER

REVENUE SPLIT AND POSSIBLE LEAKS

Prepaid



Conventional



BULK



Possible Revenue Leaks

Prepaid	Conventional	Bulk meter
1. Customer Data Integrity	1. Aging metering infrastructure	1. Aging metering infrastructure
2. Low Buying Level	2. Low Meter Reading Performance	2. Low Meter Reading Performance
3. Low or Non action of consumption report	3. . Untimely action of meter replacement	3. Untimely action of meter replacement
4. No post installation audit	4. Inconsistent and incomplete billing	4. Inconsistent and incomplete billing
5. No frequent meter audit	5. No post installation audit	5. No post installation audit
6. No or inconsistent application of penalties	6. No or inconsistent application of penalties	6. No or inconsistent application of penalties
7. Inconsistent application of business processes	7. No supporting documents for system activities	7. No supporting documents for system activities
8. No Formal customer tip off channel	8. No Formal customer tip off channel	8. No Formal customer tip off channel

STRATEGIES TO ENHANCE REVENUE

STRATEGY 1	Restructure revenue protection department.
STRATEGY 2	Identify the greatest revenue loss potential areas and prioritize investigations.
STRATEGY 3	Meter all customers especially high loss areas (both residential and businesses). Replace faulty or non functional prepaid and conventional meters
STRATEGY 4	Improve meter reading and billing
STRATEGY 5	Implement AMR system for bulk customers to reduce manual meter reading
STRATEGY 6	Installation of robust substation doors, mini subs, kiosk and high mast doors

STRATEGIES TO ENHANCE REVENUE

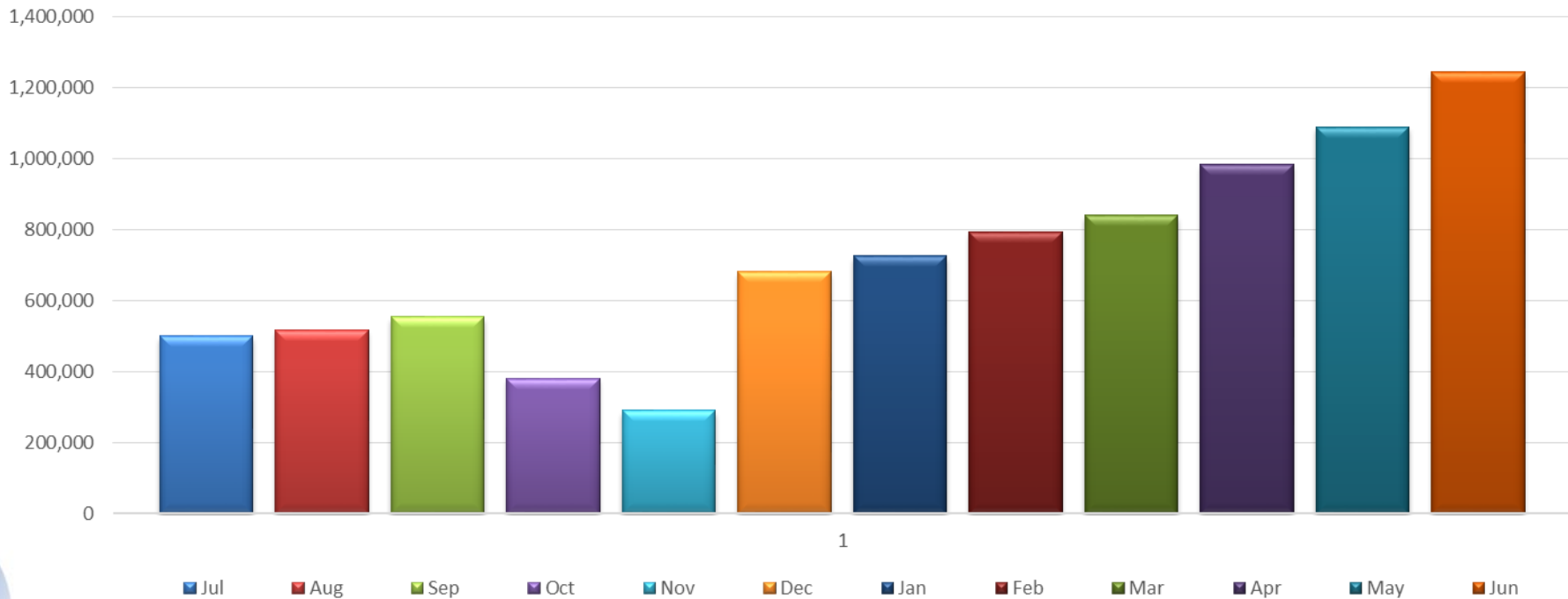
Metering and Meter reading	<ul style="list-style-type: none">• Replaced all electro-mechanical meters with digital meters and split prepaid meters.• Ensure strict and consistently monitor the meter reading cycle is done on time and correctly.
Debt control	Strictly managed all debt control system activities by: <ul style="list-style-type: none">• Constant review of all site disconnected services.• Constant review of all over due reconnections.• Resolve account queries in a short period of time.
Customer Service	<ul style="list-style-type: none">• Improved management of all commercial activities in the business units by training staff.

BENEFITS OF SPLIT METERS AND ROBUST KIOSKS

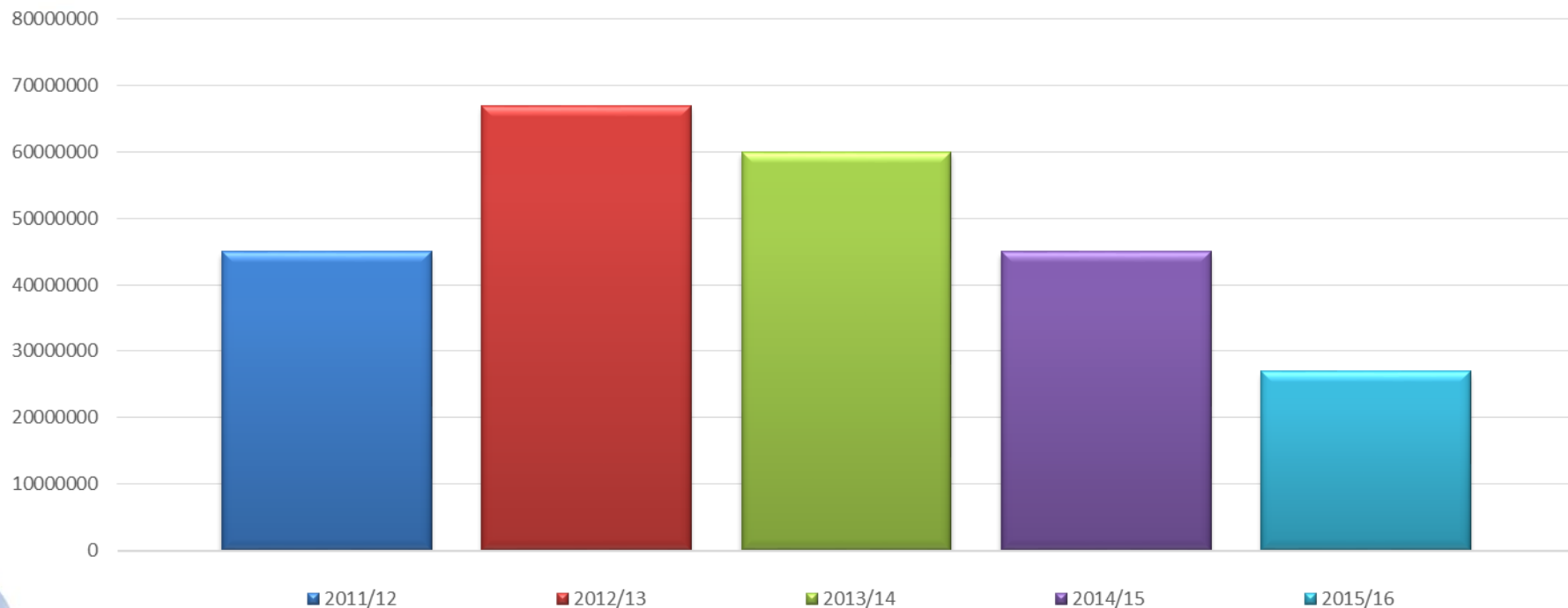
- Improved public safety
- Reduced energy losses
- Reduced energy delivered -Consumption
- Easy credit management –control of the switch
- Reduced outages and overloading
- Limited access to municipal meters
- Reduced maintenance costs

SPLITMETERS PROJECT (810 METERS)

2015/16



SUCCESS ON REDUCING INFRASTRUCTURE VANDALISM



SUCCESS ON REDUCING Theft and vandalism

- Installation of CCTV at the main substations (88kV)
- Installation of Pepper spray in the substations
- Installation of alarms with response unit
- Installation of sensors on sub gates, fences and cellphone cop with response unit
- Establishment of SMS system to report theft and vandalism of electricity
- Establishment of Stakeholder forums

CONCLUSION

- This performance was achieved by understanding the revenue loss problems at hand and choosing the right strategies.
- For municipalities to be competitive, they must use all their resources to effectively bill and collect revenue through a healthy revenue protection program.
- Successful revenue loss management requires strategies and solutions that allows municipalities to institutionalize best practices across the organization

THANK YOU

