



# **Meter management, the key to effective revenue protection.**

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# Introduction



- Revenue Protection (RP) is often reduced to meter audits and tamper detection. Although this process is important it is essential that the total retail chain be included in an effective RP operation. The importance of quality monitoring, integrated systems and processes to track customers, meters and payment processes will be highlighted in this paper.

# Sources of RP losses



- Incorrect installation data
- Incorrect tariff implementation
- Incorrect meter reading and billing
- Insufficient record keeping
- Fraudulent employees
- Shortage of staff
- Useless RP contractors
- Non –payment / revenue collection process
- Clever customers

# Essentials of RP



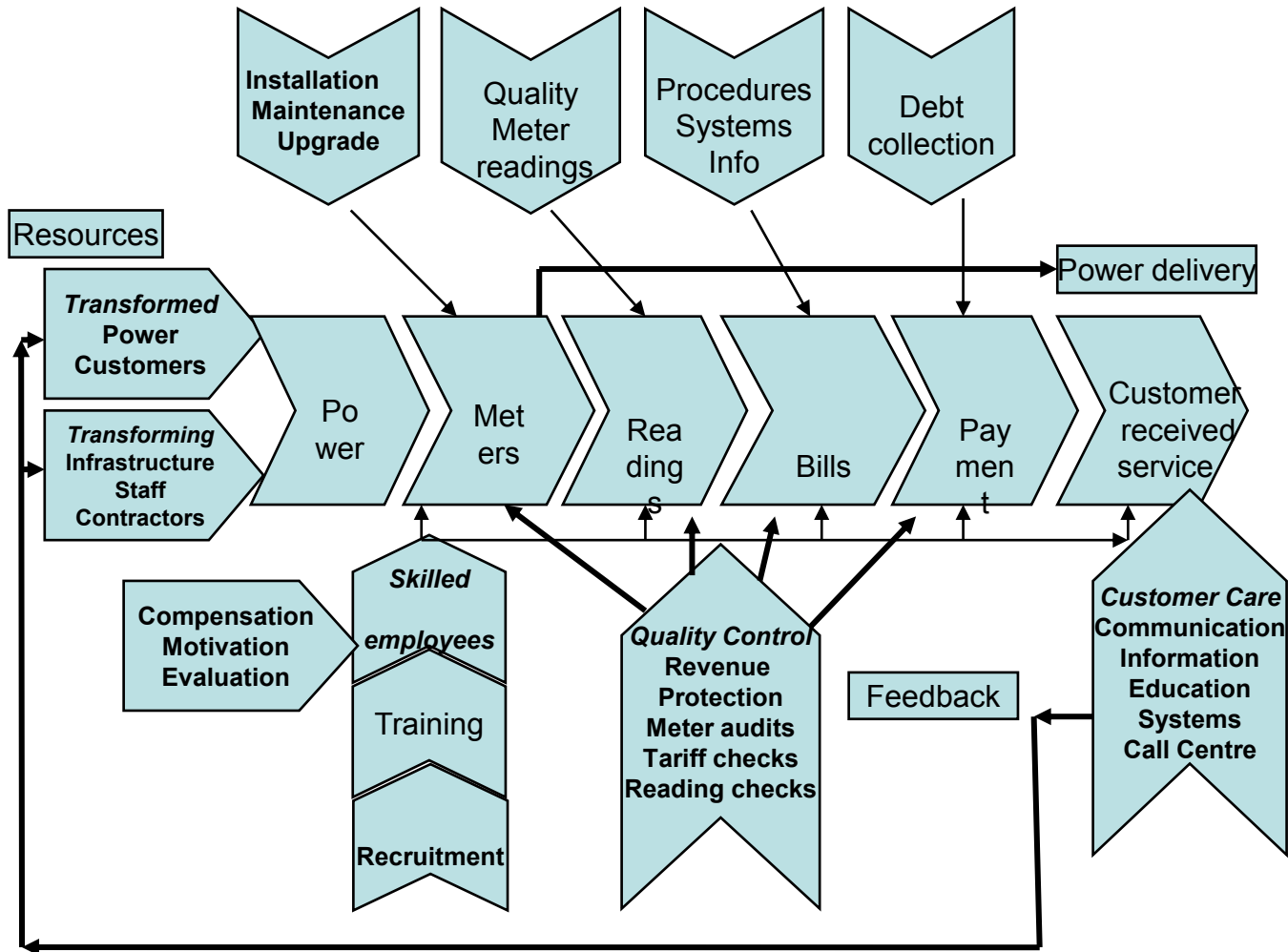
- Provide a good, dependable service
- Keep track of customers, installations and equipment
- Verify meter reading, billing and payments
- Ensure timeous and correct payments
- Use effective arrears collection process

# Holistic approach

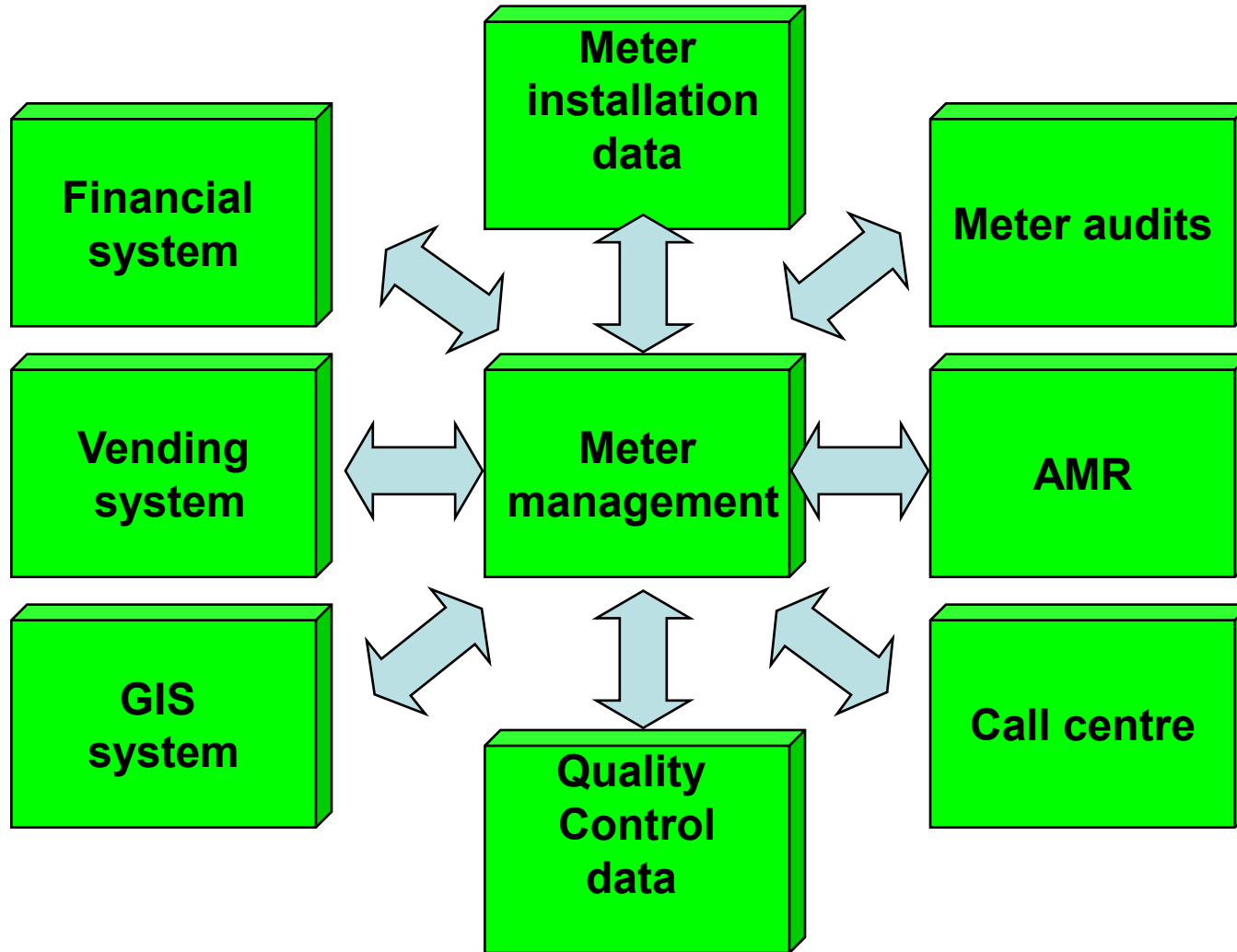


- The total retail value chain should be included in the RP approach including the following items:
  - Connection application
  - Supply Contract
  - Installation record
  - Recording of information
  - Meter reading
  - Billing (or prepayment purchases)
  - Payment history
  - Arrears collection

# Retail process chart



# Systems





# Role of meter management systems



- One view on customer to ensure that all relevant data can be accessed easily
- Installation data from connections section
- Inspection data from meter audit teams
- Sales and payment data from prepayment and billing systems
- Meter life tracking, calibration, maintenance history.
- Mapping and geographic network data to allow graphic presentation of meter data.
- Consumption calculation and forecasting facility to assist with the quality control of consumption patterns and RP recovery processes.
- Connection/ cut-off history to identify possible repetitive defaulters.

# Quality control systems



- Quality is consistent conformance to customer's expectations.
- Quality performance measurements required to evaluate progress:
    - Quality advantage by doing things *right*
    - Speed advantage by doing things *fast*
    - Dependability by doing things *on time*
    - Flexibility by accommodating customer's *unique requirements*
    - Cost advantage by doing things *cost effectively*

# Areas of Quality control



- Areas of application of customer communication and service provision to be included in the quality control process:
  - Database integrity
  - Meter accuracy
  - Meter audits
  - Meter reading audits
  - Billing and Payment audits
  - Tariff audits

# Retail quality control



- Meter audits ( in-house or contractors)
- Tamper detection
- Cut offs/ re-connections
- Checking applied tariffs
- Checking meter readings and bills
- Standard charges for transgressions
- Check customer data bases
- Compare performance measures in retail process with required values
- Keep loss and sale statistics

# Implementation



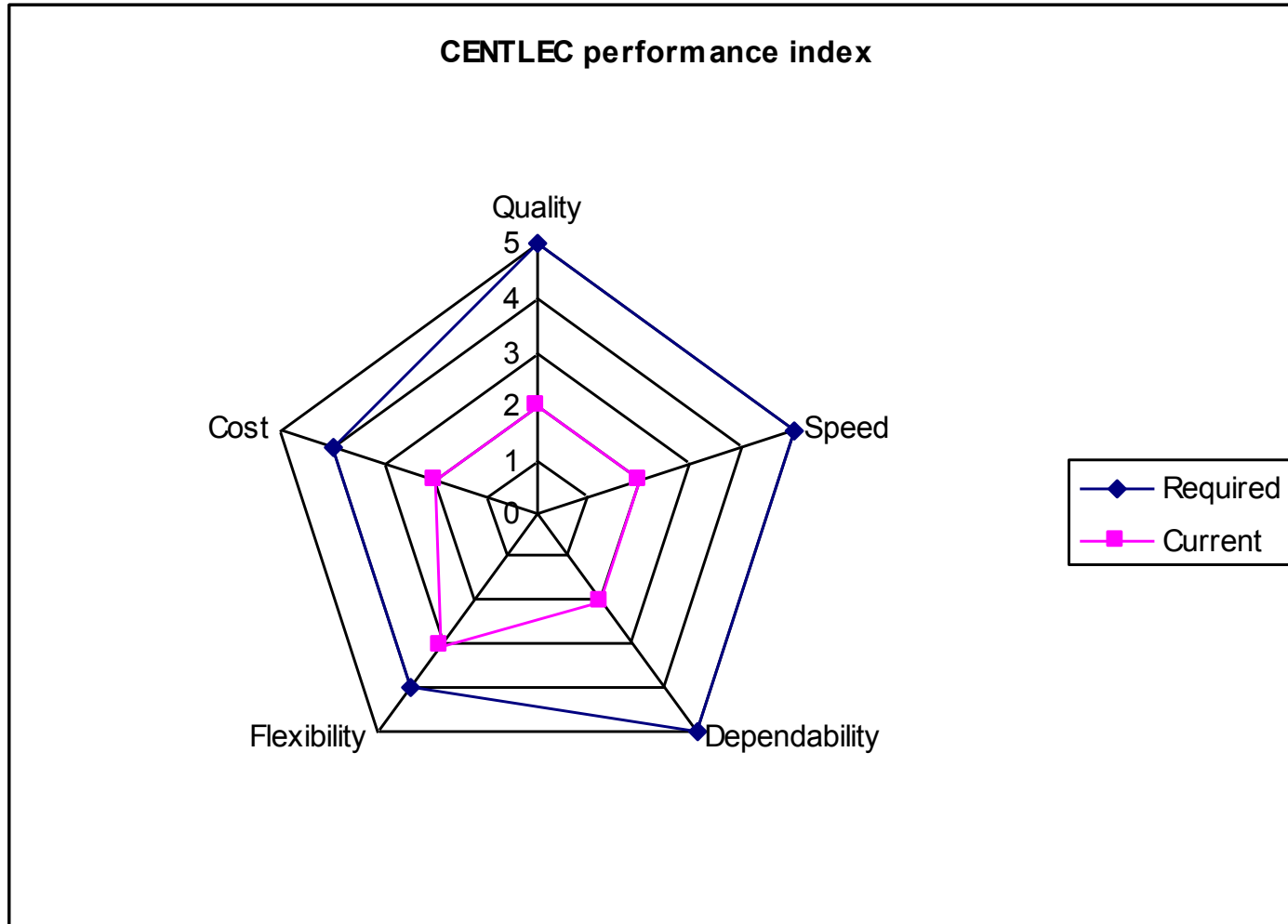
- Evaluate each item in terms of above measurements
- Compile a strategic plan to accomplish the required results
- Allocate resources to the actions
- Measure and improve where required

# Rating performance



Item	1 poor	2 lacking	3 acceptable	4 good	5- excellent
Quality		x			
Speed		x			
Dependability		x			
Flexibility			x		
Cost		x			

# Performance index



# Quality means



- In retail case **quality** would imply:
  - Meters calibrated to SABS standards
  - Meter readings taken correctly on a monthly basis
  - Generating correct bills to all customers
  - Customer data correct on database
  - Sales information correct and available to customers
  - Adhering to the national standard for quality of service in the electricity distribution industry namely, NRS 047
- **Speed** means
  - Responding to a customer's trouble call within 4 hours
  - Installing a new meter within agreed period
  - Responding to enquiries immediately
  - Providing a quotation for new service within 4 days.



# Quality means



- **Dependability:**
- Provide services when agreed
- Meeting customer expectation every time
- **Flexibility**
- Providing a service that a customer needs
- Adapt procedures to improve customers services
- Adapt policies to customer needs
- Provide customer data in most applicable ways
- **Cost**
- Save cost by optimizing processes
- Use only the minimum staff to complete a job
- Adapt methods to save unnecessary cost impact
- Use cost effective equipment and methods rather than the cheapest method.

# Design quality system



- Define characteristics of services
- How to be measured
- Set quality standards for each group
- Control quality against these standards
- Find and correct causes of poor quality
- Continue to make improvements

# Processes



- Quality monitoring will include processes and systems to verify the following processes.
- Audit all meter installations once every 5 years or when fraud and tampering is suspected in a particular area
- Check all tariff application for consistency and correctness
- Verify that all meter installations have been visited and meter read by the meter reader
- Check payment levels of customers
- Check billing process for correctness and speed of delivery
- Check arrears on monthly basis.
- Ensure that customer expectations are met, via customer forums or customer campaigns

# Summary



- Many utilities segment RP actions with no effective co-ordination between operations
- A holistic approach required
- A meter management database system with interfaces to vending, billing, GIS, job scheduling and call centre systems can provide the one view on the total RP operation.
- Quality control systems throughout the retail process required to ensure effective RP operations.
- Get the **basics** right

