

Integration Value Add: <u>Protecting</u> <u>Revenue</u>

JULY 2014

# INTRODUCTION

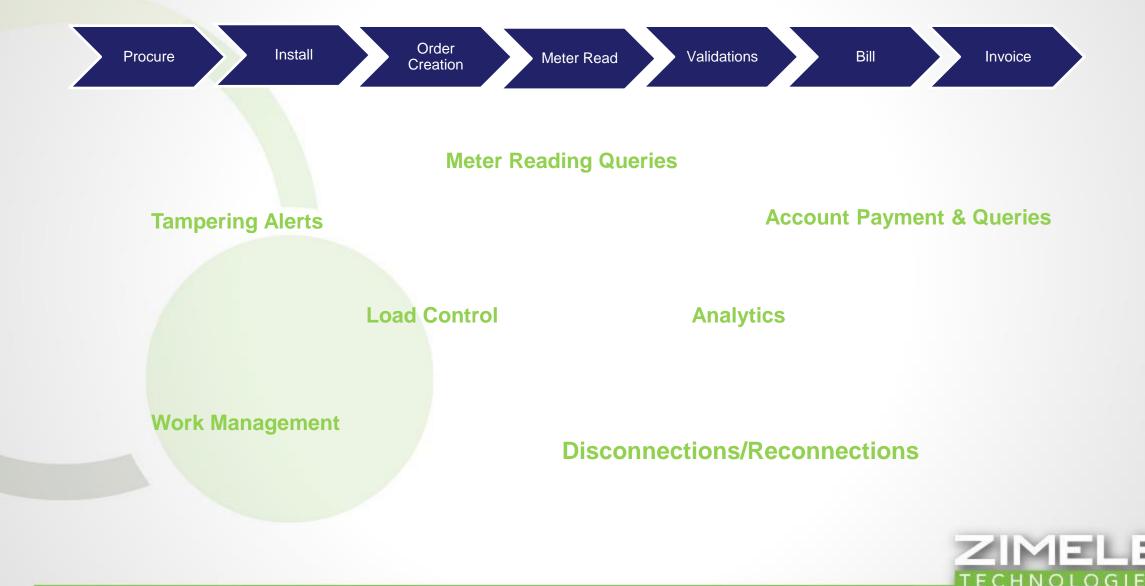


#### Traditional Process & Architecture



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#### **Meter to Cash Value Chain**



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# Risk & Issues in Meter Reading • Issues

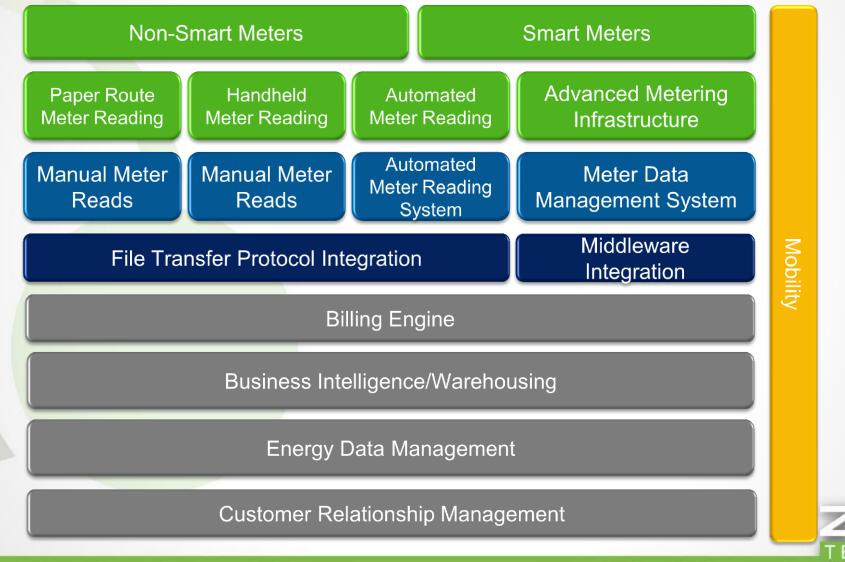
- Semi Automated Metering Process
- Customer Data Inconsistencies
- Meter Data Inconsistencies
- Tariff Data Inconsistencies
- Incorrect capture of Meter Readings
- Misalignment between Billing Systems and MDMS
- Risks
  - Delay in obtaining Meter Readings
  - Manipulation of Meter Readings
  - Delay in issuing of Customer Invoices
  - Poor Revenue Collection (Over or Under Collection)



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# Ideal Meter Reading Process & Architecture

#### Zimele Advanced Metering Infrastructure Mobility Landscape

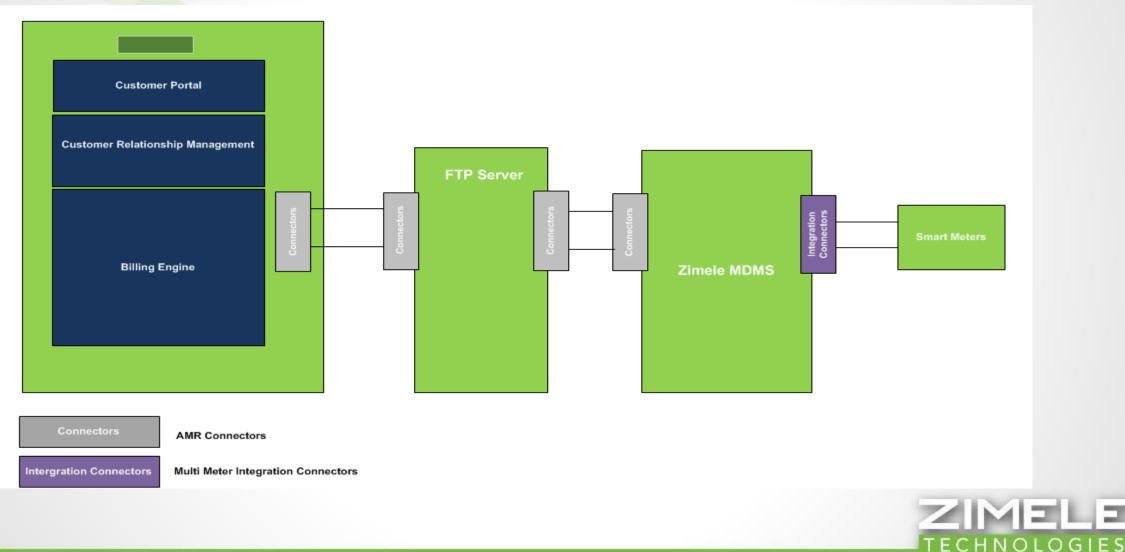


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#### **Integration Solutions**



#### **Proposed Automated Metering Reading**



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# **Integration State Comparison**

- Automated Meter Reading
- Business Processes
  - Download Meter Reading Orders
  - Upload Meter Readings
- Semi Automated Meter Reading Process
- Flat File Integration
- One directional Communication
- No Event Management
- No Outage Management
- No Master Data Transfer between Billing Systems
   and MDMS
- No Real Time Processing

- Advanced Metering Infrastructure
- Business Processes
  - Device Creation
  - Device Activities (Install, Remove)
  - Move in and Move out
  - Download Meter Reading Orders
  - Upload Meter Readings
  - On Demand Meter Reading Process
- Automated Meter Reading Process
- Streamline Integration
- Bi Directional Communication
- Real Time Processing
- Event Management & Outage Management

## **Typical Integration Matrix**

Solution Maturity	Back End Integration	System Automation	Reduce time to Revenue impact	Low Labour Cost	Robust Long- term Solution	Multi- Meter solution
<ol> <li>Manual Meter Reading System</li> </ol>	•	•	0	٠		
<ol> <li>Semi Automated Meter Reading System</li> </ol>	•	•	•		•	•
<ol> <li>Fully Automated Meter Reading System</li> </ol>	•	•		•	•	•
4. Advanced Metering Infrastructure	•	•	•	•	•	•
			Excellent Go	ood Satisfa	actory Poor	Very poor
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## **Ultimate Integration Matrix**

Solution Maturity	Back End Integration	System Automation	Reduce time to Revenue impact	Low Labour Cost	Robust Long- term Solution	Multi- Meter solution
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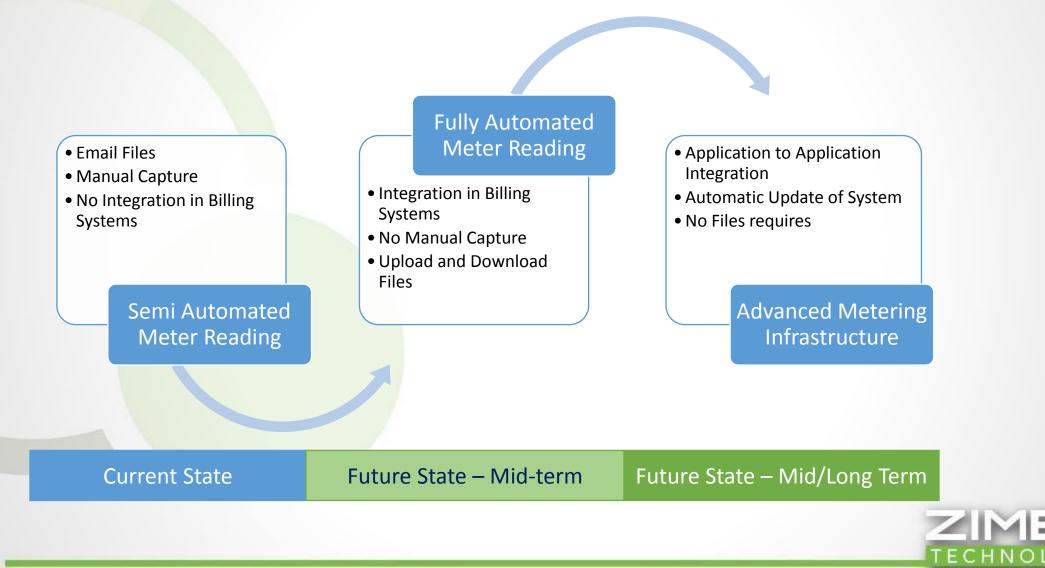
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# Recommendations





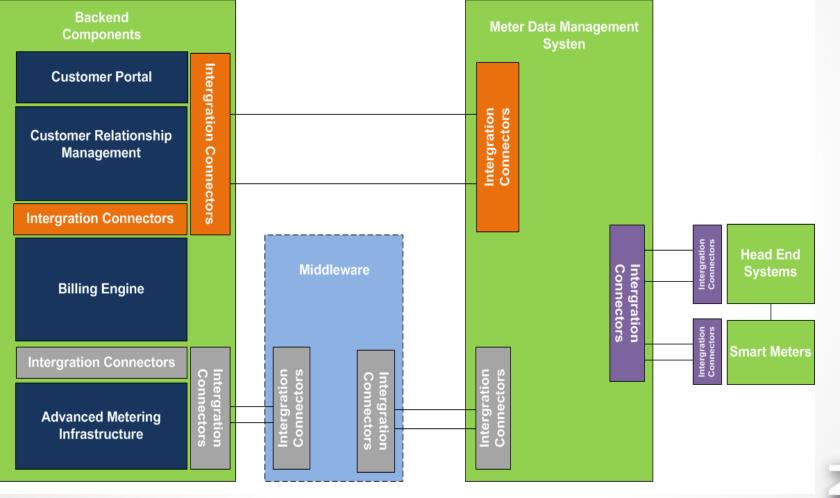
#### **Smart Metering Roadmap**



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#### Mid Term Solution Advanced Metering Infrastructure



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#### **Recommendation Business Benefits**

- Able to measure electricity losses (measure value in doing so)
- Able to reduce electricity losses and consumption for the period
- Effective management of load shedding
- Spatial integration
- Curb electricity theft
- Reduce number of debtors
- Opportunity to generate more money to service municipality need, e.g. electrification of the low cost housing
- Increase revenue collection (know how much revue is electricity specific)
- Improve return on investment





### **Strategy Formulation**



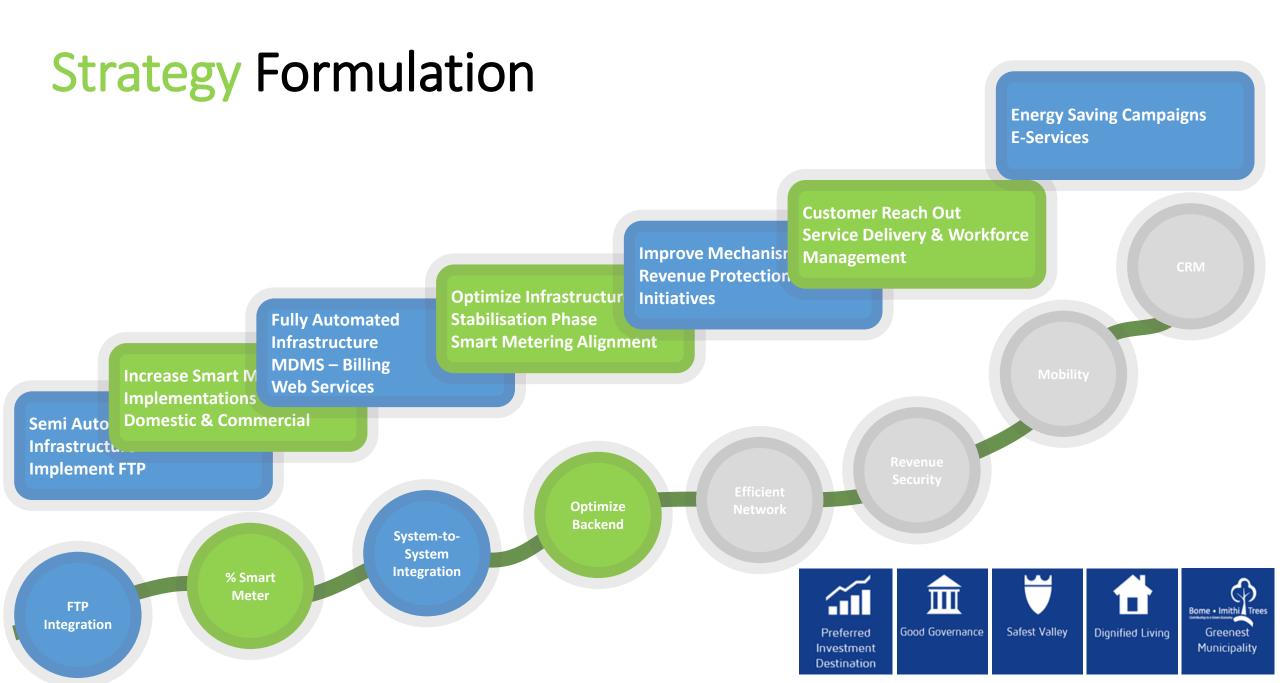
# **Strategy Formulation**

What to consider when formulating a Smart Metering Strategy:

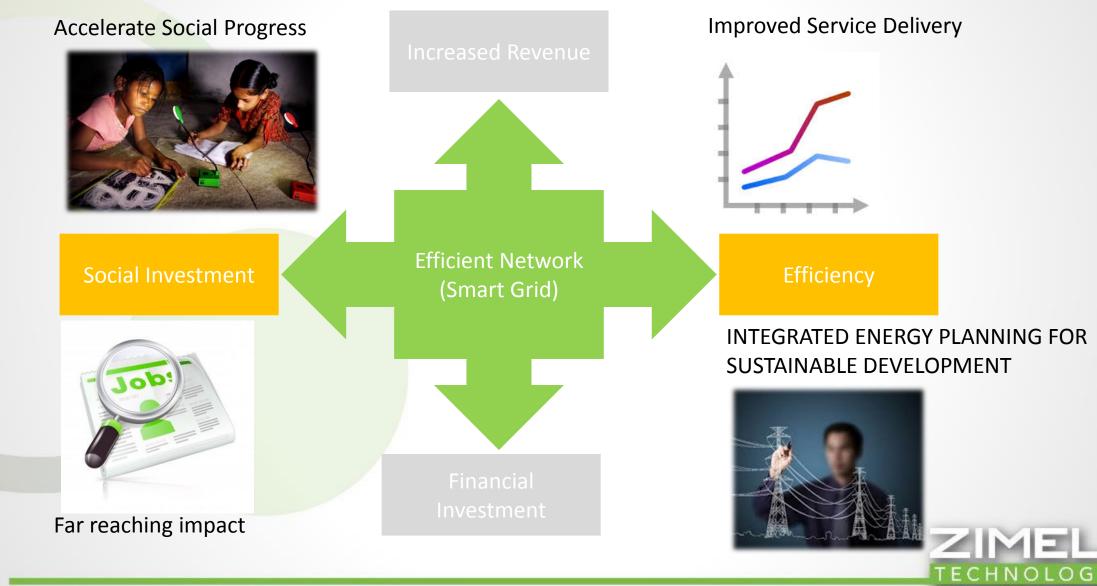
- The Smart Meter Strategy must incorporate the Business Strategies of a Municipalities.
- Develop an effective energy strategy that supports national sustainable and development goals
- The alignment and integration of systems including subsequent processes allows for better insight into; revenue collection, planning mechanisms and energy saving initiatives.
- A strategy that will result in an integrated Smart Metering Network
- Adopt additional channels to which information can be made available to the consumer







## **Ripple Effect of Efficient Network**



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#### **Implementation Plan**

#### Optimized Infrastructure

- Increase Smart Meter Rollout to Domestic Consumers
- Implement System to System Integration
- Optimized Backend to align with Smart Metering Functionality



- Improve Report Mechanisms
- Revenue Initiatives
- Customer Reach Out Programs
- Service Delivery & Workforce Management
- Energy Saving Campaigns
- Introduce E-Services

#### Efficient Network

- Social Investment
- Financial Investment
- Metering Efficiency
- Increase Revenue

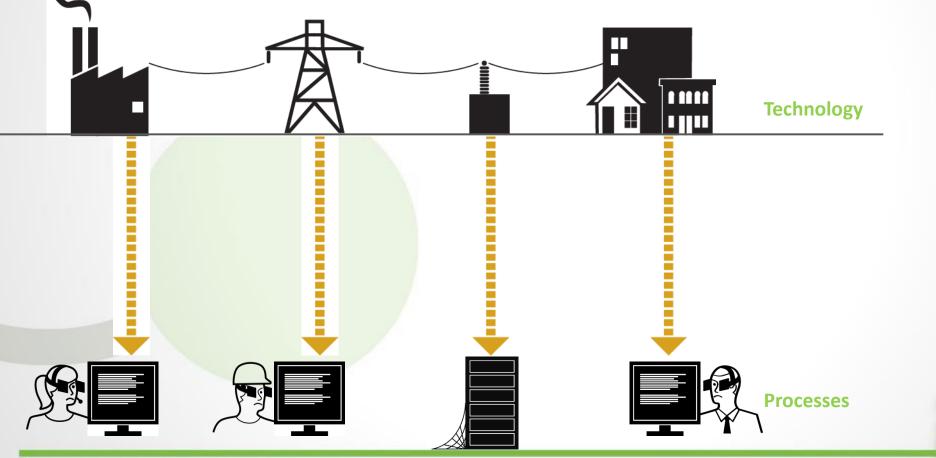


#### **Future Considerations**



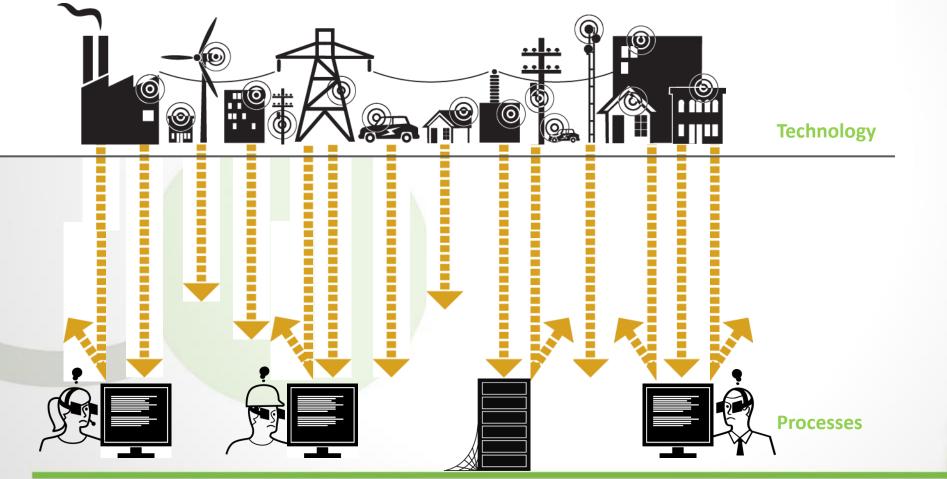


The Electricity Industry has not changed much over the past 20 years..... however



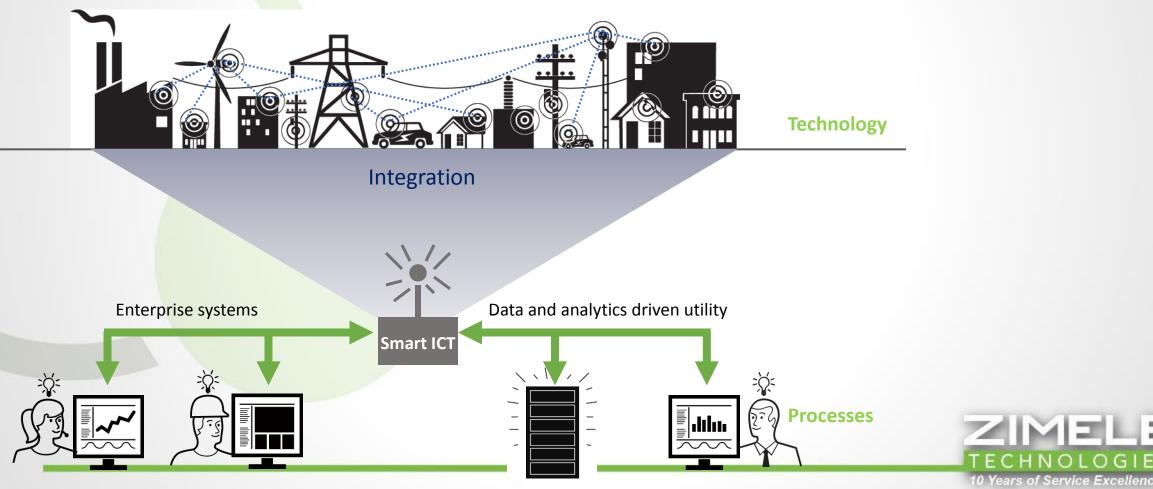


Increasing data loads & new devices coupled with new usage require advanced capabilities to ensure valuable insights are harnessed.....increased data loads means that technology alone is not the answer...





The Smart Utility of the future integrates, manages, analyzes, & visualises data across the supply chain for intelligent decision making.....but coupled with advanced capabilities towards a vision of transforming into tomorrow's Smart Utility.



# **Key Take Home Messages**

Define clear STRATEGY

- Define realisistic implementation roadmap
- ONLY End to End Solution will bring lasting results
- Involve Experts where it matters
- Strategically outsource non-core functions



# **Thank You!**

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