

Sustainability of Discoms

Focusing on HR, Service Quality & Customer Engagement

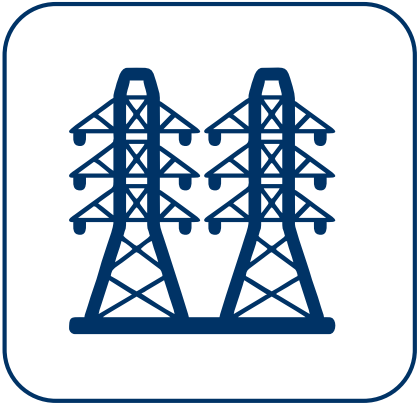
Presented By

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Distribution Utility Meet | 14 - 15 November 2024 | www.dumindia.in

UNRAVELING THE FACTORS BEHIND UPCOMING DISRUPTIONS IN POWER SECTOR

Changing Paradigms in Power System Management



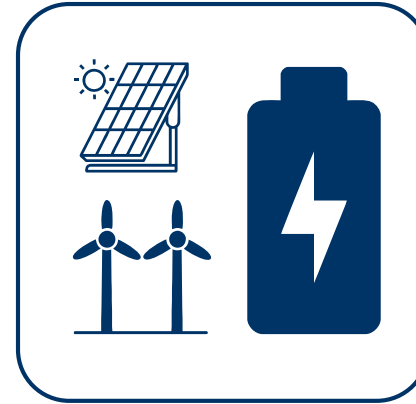
Uni-direction to Bi-direction
24 x 7 Reliable Supply
N-1 Contingent System

Shifting towards Smart Grids & Microgrids



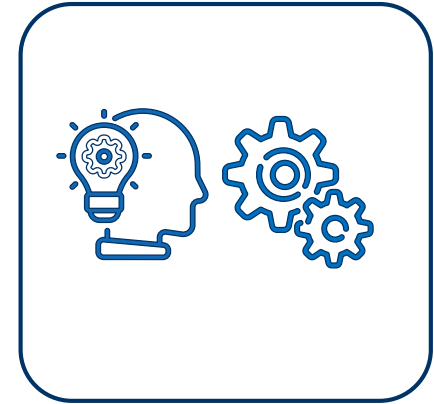
Smart Home, Smart Building, Smart
City with 24x7 Resilient Power
Supply

Integration of Renewable Energy Sources with Decentralized Control



DERs like Solar, Wind EV, BESS..

Digitalization and Data Analytics



Advanced Sensor based IoT,
Smart Meters...

Entire viability of the power sector value chain depends upon the
effectiveness & sustainability of the Discoms

Technology absorption to maintain 24x7 Supply Reliability

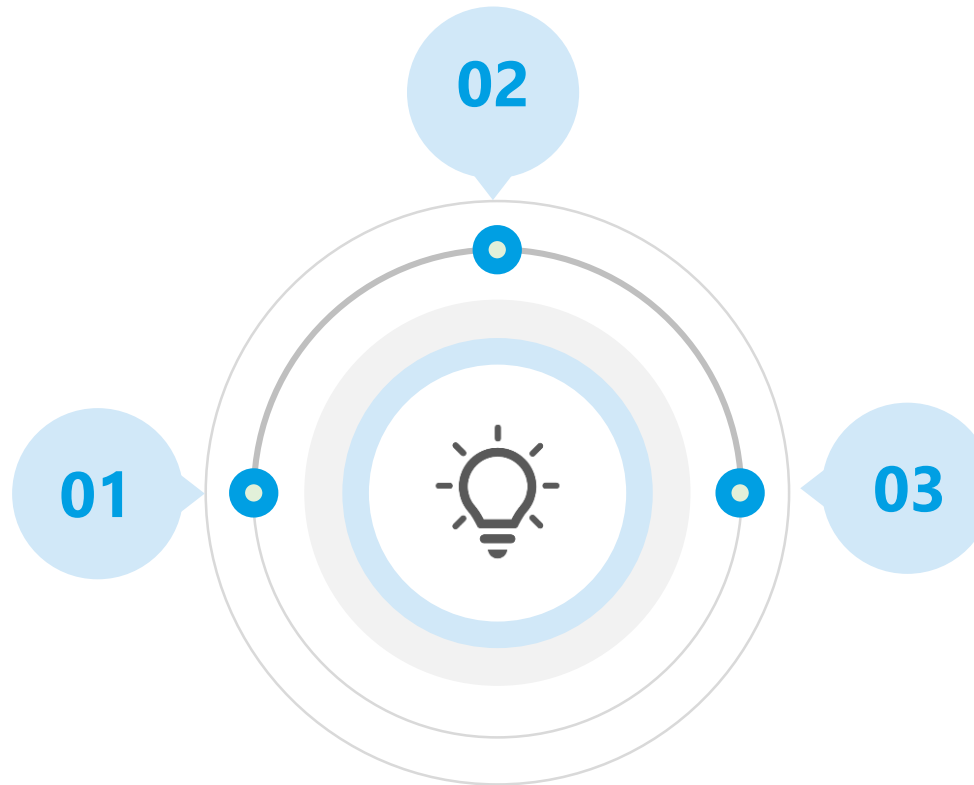
- Economics based mindful adoption of technologies to ensure standards of performance
- Robust Network Design to ensure 24x7 quality & reliable power supply

Workforce Development and HR Best Practices

- Managerial reforms: Stable Leadership & Vision, Compliance, etc.
- Workforce Development: Ensuring agility, Multi skill development & forward-thinking engineering professionals
- Innovations & Motivational Strategy

High-Touch Customer Experience

- Enhancing post-billing services: Focused on customer satisfaction and quick resolution of issues
- 24x7 Customer Support, Customer facing AI to answer queries, Digitalisation of Services



Continuous Value addition to customer with Optimization in cost

Efficiency improvement in operation

24 x 7 Power Supply

Stable Leadership & Vision



Consistent Leadership: Enables pursuit of long-term goals, fostering stability.

Aligned Vision: Leaders unify efforts toward common goals, reducing ambiguity.



Compliance:

Transparency & Accountability:
Builds trust and upholds integrity.

Performance-Based Evaluation:
Rewards employees, driving high performance.

Workforce Development



Capacity Building: Promotes multiskilling and future-proofs talent.

Skills Training: Equips employees for industry trends.

Thinker-Doer Balance: Combines strategic vision and practical execution to drive success.

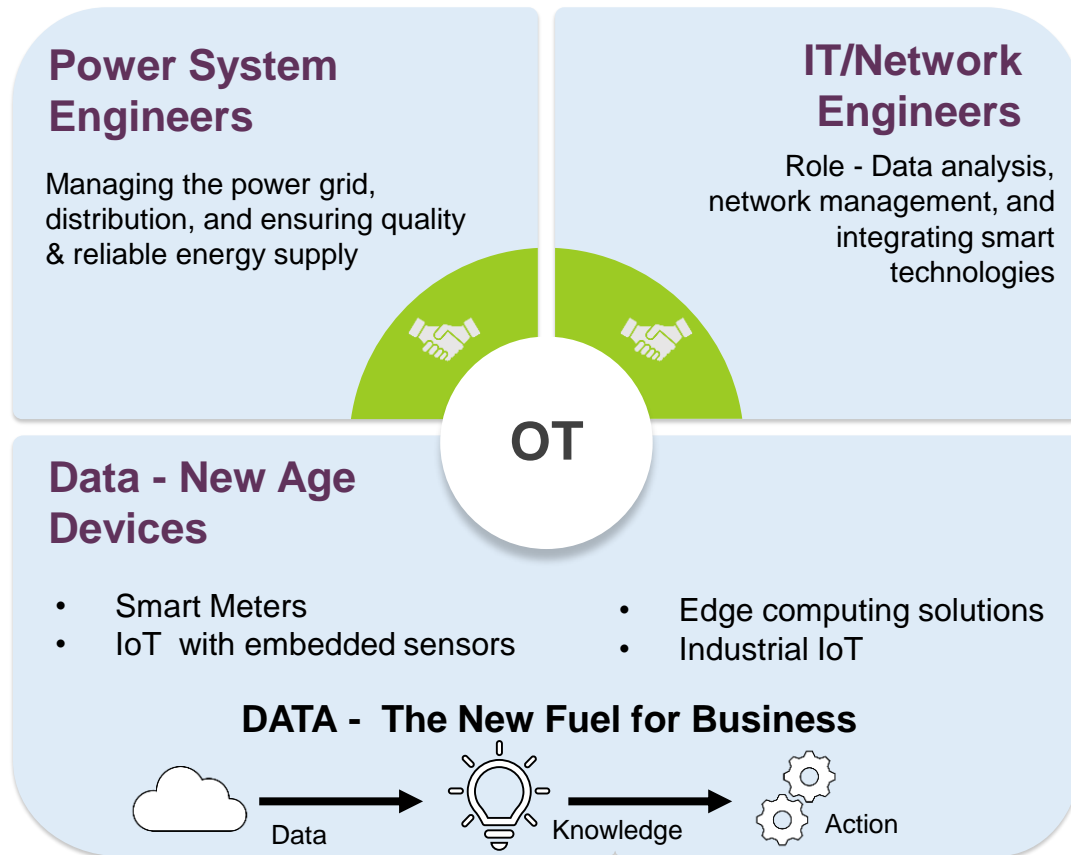
Thinker-Doer Framework

Strategic mindset of thinkers with the operational efficiency of doers, organizations can :

- Drive continuous improvement
- Optimize processes (Value Engineering)
- Ensure long-term success through structured and disciplined execution



Innovation Management



Convergence of Power System Engineers & IT/Network Engineers disciplines

Interdisciplinary collaboration is essential as-

- Analyzing data from new-age devices enables actionable insights
- Leveraging core expertise across fields for innovative solutions

MoP National Electricity Policy

The National Electricity Policy (NEP) emphasizes the importance of “**Training/Capacity building and Human resource development (section : 5.11)**” in India's power sector.

Training Focus: Ensures well-trained personnel across the power sector

Infrastructure Enhancement: To meet the growing & changing demands of the industry

Consumer-Focused Workforce: Promotes cost-conscious, consumer-friendly attitudes to enhance service quality

GOVT. POLICIES ON TRAINING AND HUMAN RESOURCE DEVELOPMENT

IMPROVING RELIABILITY & MANAGING SUPPLY INTERUPPTION...

Reliability Improvement Initiatives

Greater Network Reliability, Faster Isolation & Restoration & Precipitate maximum value to the consumers



Ring network



Gas insulated Substations with Ring Main Connectivity



Self Healing



SCADA riding on own Communication Infrastructure



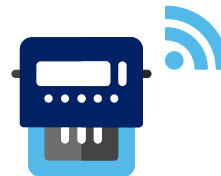
Wide Area Management (WAM) using PMU



Overhead to Underground conversion



RMU & Pillar Box Automation, LT Changeover



Smart meter (AMI)



GIS for Network Monitoring & control



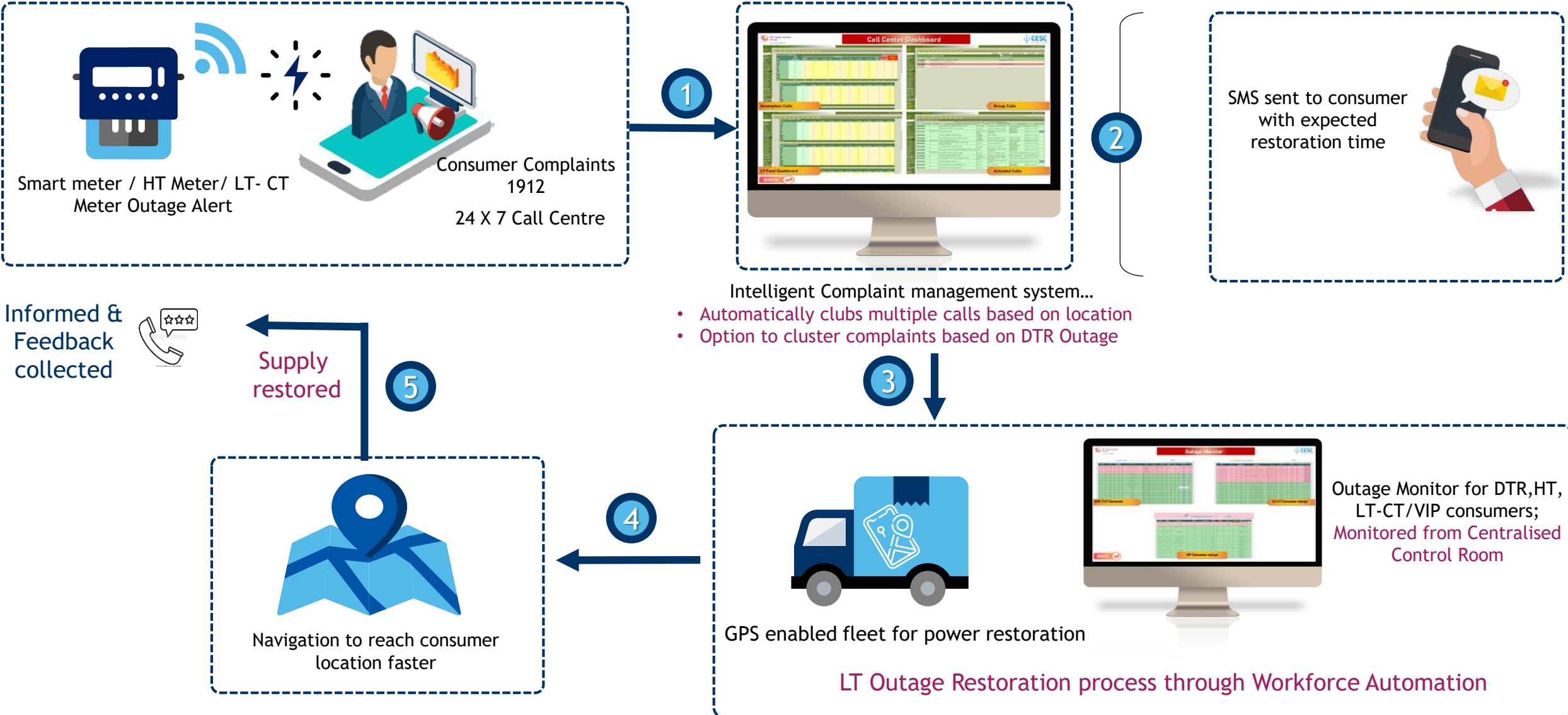
State-of -the-art Asset Health Monitoring

A step towards SAIDI, SAIFI Improvement

IMPROVING RELIABILITY & MANAGING SUPPLY INTERRUPTION...

Outage Management System

Handling Consumer Complaint through Centralised Control Room and Resolution at Ground Level within minimum time



DIGITALIZATION OF CUSTOMER SERVICES

100% Digitalization of Customer Services...

Easily accessible call centres, convenient bill payment facilities, and accurate billing can help reduce customer dissatisfaction and increase revenue.

Digital Office

Plethora of Digital services at consumers' finger-tips, from the comfort & safety of their homes & offices

Mobile App

Digital services on the go

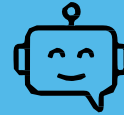
24 X 7 Call Centre

State-of-the-art IVRS, Auto Docketing & Grouping of complaints, supported by GIS & algorithm

AI/ML IN CUSTOMER SERVICES

Using Advanced Analytics to serve Customers

- Customer facing AI
- Interacts & answers queries of consumers; Registers Complaint
- Supports Regional languages like Bengali, Hindi
- Equipped with AI / ML / NLP



Chatbot- eBuddy Leveraging AI/ML techniques to address customer queries



Voice Bot

AI, ML & NLP-powered digital voice assistance integrated with CRM and Outage Management System.



WhatsApp Bot

Superior customer experience and services on a daily use platform of customers' choice



Social media (sentiment analysis)

For better customer service, tracking activity on FB, Twitter, Instagram, LinkedIn, etc.



Metaverse

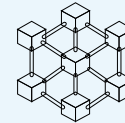
The new age immersive customer experience enabled with new age XR technologies



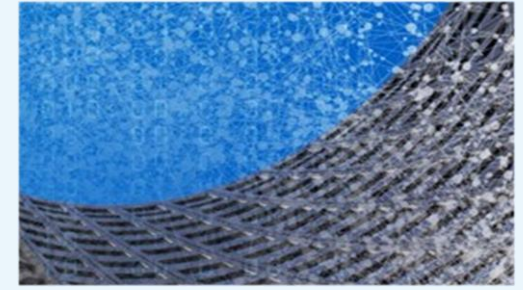
IoT Sensors for Real-time monitoring of Grid



Harnessing the power of AR / VR / MR for faster response time



Blockchain
P2P Energy Trading



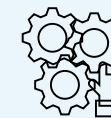
Cloud adoption to accelerate IT modernization with
Cybersecurity Measures



Fueling utility innovation through Big Data Analytics, AI/ML riding on Smart Meter Data



State of the art IT/OT infrastructure

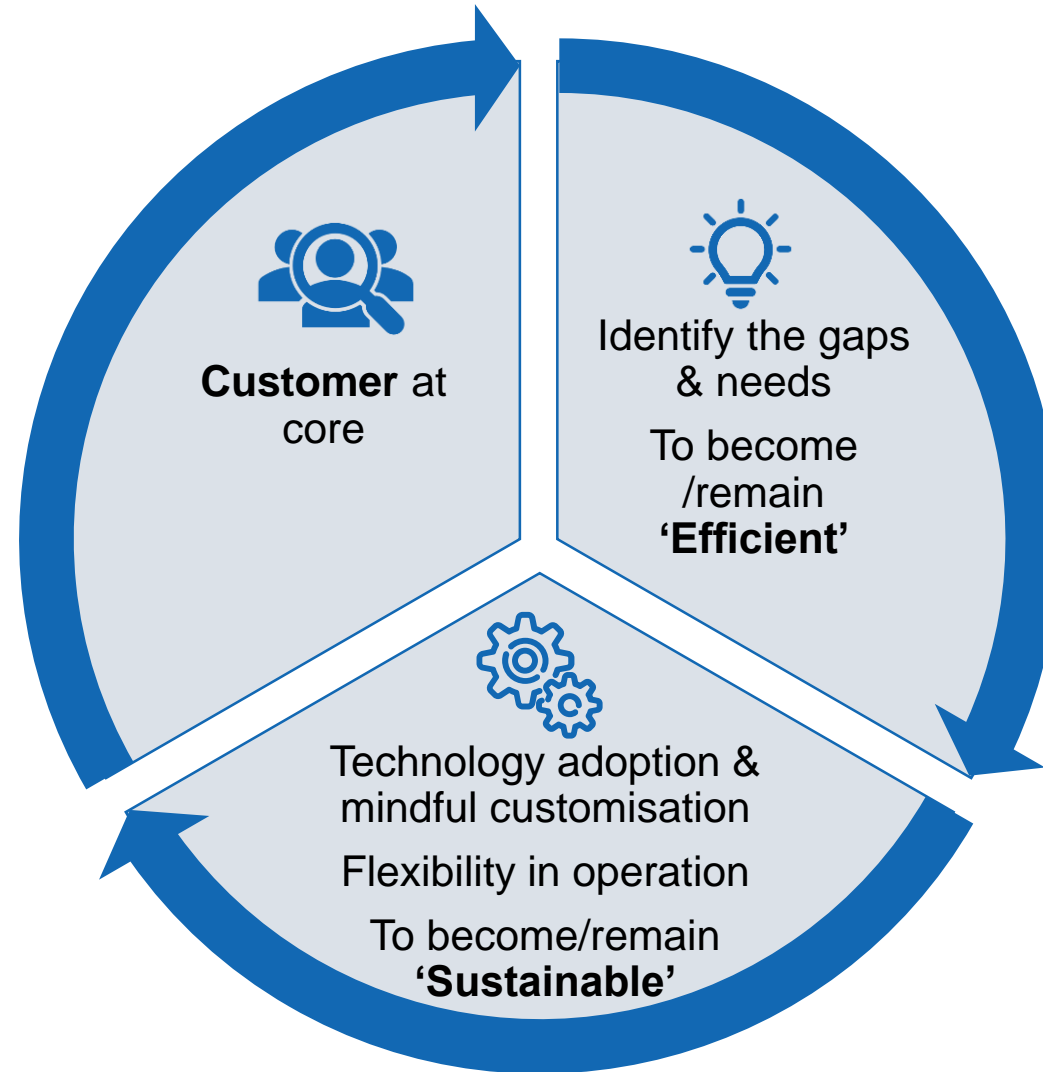


Deriving Efficiency thru. Workforce Automation



Enhancing Customer Experience thru. Digital services

WAY FORWARD



THANK YOU

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