

DIGITALIZATION

along with Smart Metering Programme –



Vijay Panpalia
AVP, SEW

Naye Bharat ki Nayi Disha



Why did Indian Smart Meter Implementation START?

28 Feb – 04 March 2023 | New Delhi

1 GOAL = ATAMNIRBHAR
BHARAT

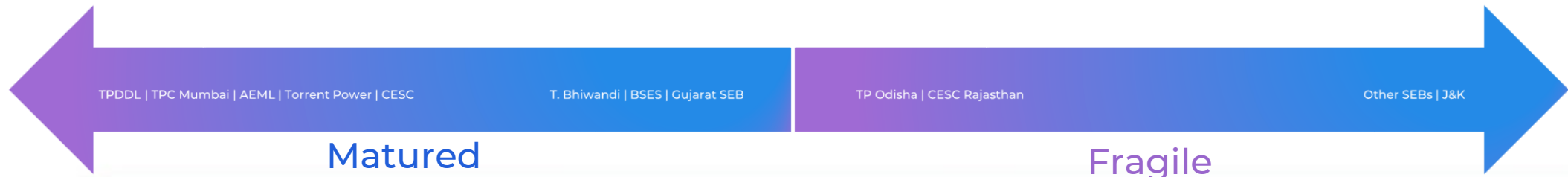
India Has to Take a Pledge to
BE ENERGY
Independent



Multiple Factors At **PLAY**

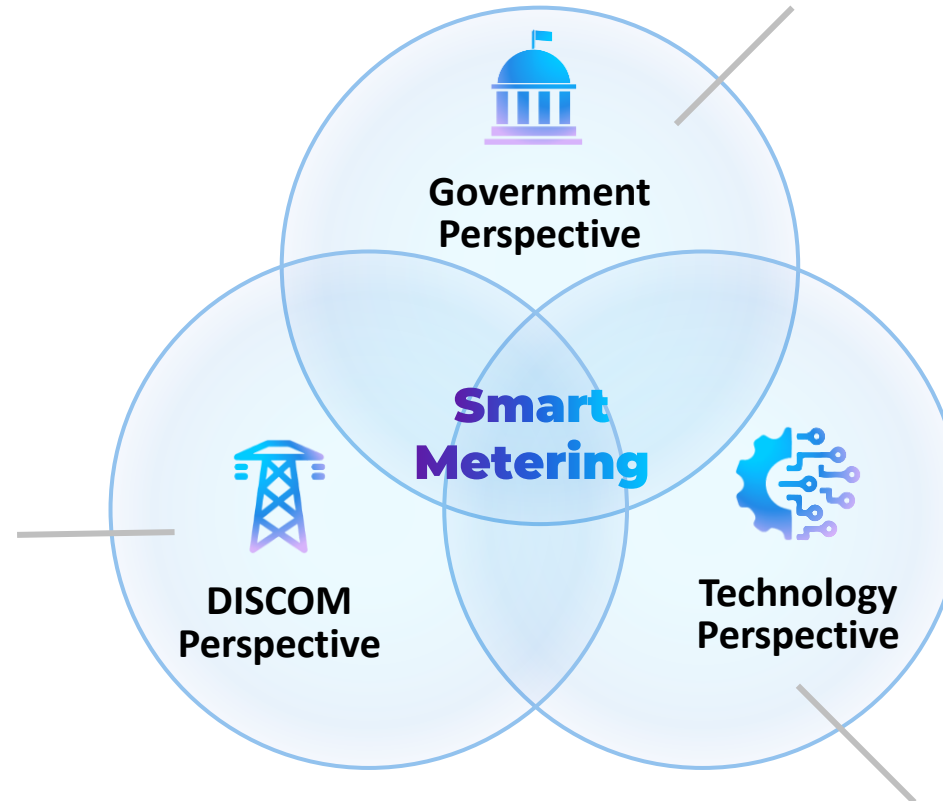
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Factors	Matured	Fragile
AT&C Loss Levels	<10% AT&C Loss	>10% AT&C Loss
Power Reliability	SAIDI <60 Mins Ring + n-1 Network	SAIDI >60 Mins Radial + Overloaded & Dilapidated Network
Technology Absorption	Network - Automation at DT & Smart Metering Process - Workforce Mobility Solutions	Network - Poor Automation Levels Process – Manual, paper driven processes
Annual Revenue Requirement Gap	Dividend Paying Near Zero Regulatory Disallowances Near Zero Regulatory Asset Creation Near Zero Over-dues of Power Gencos	High Regulatory Disallowances Huge Regulatory Asset Creation High Over-dues of Power Gencos
Customer Engagement	EoDB Compliant Transparent Digital Uber Customer Engagement Platform	No or Poor Customer Engagement Platform Non-Transparent

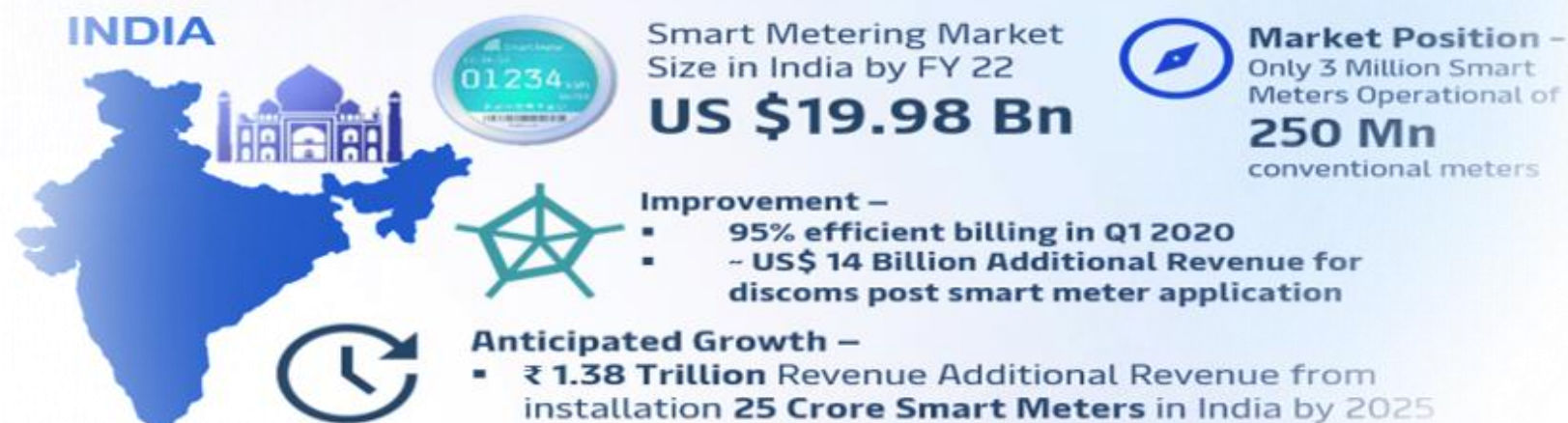
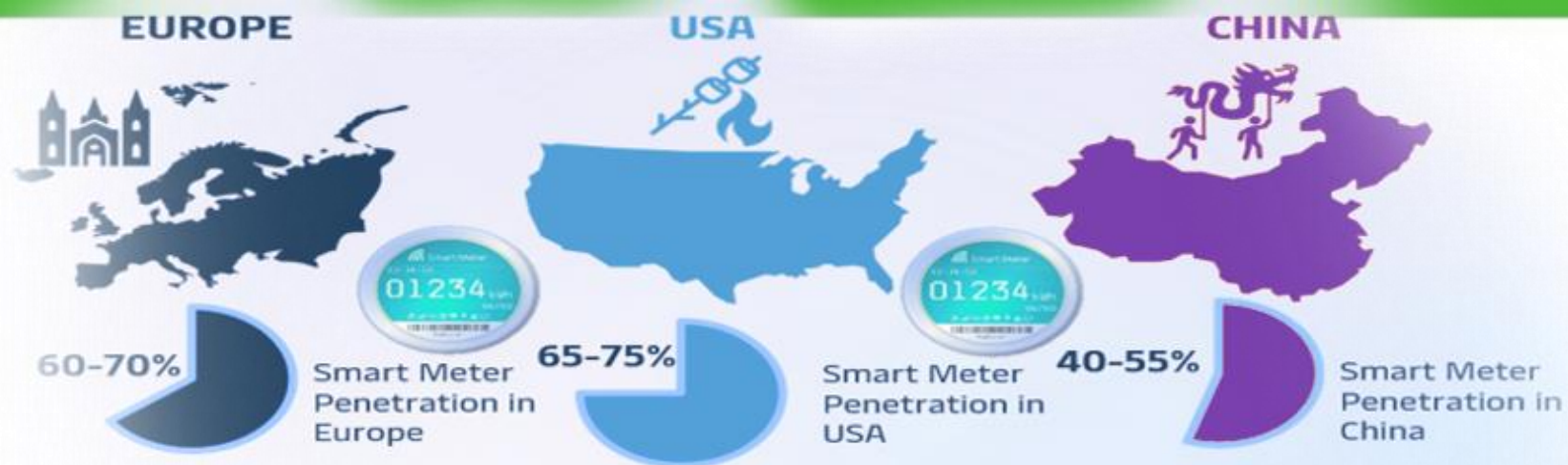


How Did it **START?**

- First step towards incorporating a smart grid
 - Power Reliability Improvement
 - Enhanced Quality of Power
- Energy Auditing & its advantages on the operations side such as --
 - Identification of High Loss Pockets
 - Technical Losses – Load Unbalance, Overloading, Reactive Power Compensation, etc
- Leverage on Power Trading Arbitrage by accurate load scheduling
- Customer Engagement
- Assured of a shorter customer billing cycle and improved accuracy



- Reduction of AT&C losses
 - Increasing billing and collection efficiency
 - Lower tariffs
 - Address issues such as load management, peak shaving and demand side management.
 - Crucial for renewable energy integration
 - Early detection of failing service connections
 - Substantial gains to Customers
 - Help in achieving India's sustainability goal
-
- Use interoperable standards, and undertake staged deployment
 - “Super Computer in the meter”
 - Reports outages to the outage management system.
 - Security from Cyber threats
 - Ensure engaged and satisfied customer
 - Commoditized communication
 - Developing robust ecosystem throughout country
 - Open standard protocol



Source: eninrac research & analysis

Total no. of Smart Meters to be
Implemented = **25 Crore**

Implemented so far = **50 lakh**

Pending = **24.5 Crores**

Days Pending from **today till 2025** =
1035

2.3 Lakh Smart Meter Should be
Installed Every Day to reach
1.4 Billion People



Real Challenge is that **Only 37.33 lakh Smart Electricity Meters** have been Installed so far

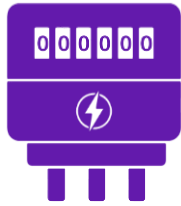


What is the Ground Reality?

- Cost Recovery Mechanism & Finance Management (Capex / Opex & Funding) - Regulators and stakeholders are / need to be concerned about ROIs
 - **Untrained DISCOM Staff**
 - Operational Inefficiency
 - **Unsure about Data Usage**
 - **Lack of Consumer Awareness**

**Isaac Newton - "My Powers are ordinary;
Only my Applications bring me Success"**

What is the **REAL AIM??**



To Deploy
25 crore
Smart Meters ?

OR

To **Reduce AT & C Losses**, Ensure
Healthy Revenue Management,
Provide 24x7 Power to all and
Engage --

1.4 Billion People

to Attain Bharat's **AtmaNirbharta**

Going Beyond Conventional Usage of **METERS**

Current Meter System –
Walk In Reading

Smart Meter Benefits



Establishing the **Pillars of Excellence**

COMPREHENSIVE DIGITAL PLATFORM



People –

Motivated | Change
Oriented | Technology
Trained | Team Spirit |
Performance Driven |
Analytical & Statistical
Mindset (Need for Analytics
Platform)



Process –

Documented | Evolving
based on Customer Needs |
Digitized | Automated
(Need for Workforce
Mobility Platform)



Network –

Robust (n-1 compliant till LT
Level) | Healthy (fault proof)
| Safe (Zero Accidents) | 5S
Compliant | Loss Proof
(Need for DT Energy
Accounting & Revenue
Assurance Platform)



Technology –

Automation – GIS (With
Last Mile Connectivity),
SCADA (100% Automation),
DMS (>50% Automation),
Smart Metering (Data to
Application), Digital
Customer Engagement
Platforms (New for
Customer Engagement
Platform)

DIGITALIZATION & APPLICATIONS

Marrying **PEOPLE, PROCESS & NETWORK** What DISCOM's Should do?

Step One: FOCUS ON CUSTOMER EXPERIENCE

- Digitally Empowering Customers by enhancing **Convenience, Control and Choice**
- Delivering **All-inclusive Human Experiences** with Consistent, Multi-channel Integrations
- Provide **bidirectional communication** across channels with customers on status updates every step of the way
- Develop smooth and fully integrated **smart meter billing services**
- Provides **real-time notifications** to customers on the smart meter repair/maintenance
- Seamless Bill payments via Customer's channel of choice
- Monitor & track Energy & Water Usage in Real Time
- Achieving **Equity for All** through Standard Approach to Empower Billions of Indians to Achieve a Cleaner Future



Step Two: EMPOWERING WORKFORCE

- Manage work orders to **assign, schedule, and complete tasks** from anywhere
- **Facilitates new activations**, meter configuration changes, reconnect/disconnect services, and load-limiting capabilities
- **Automatically routes and prioritizes tasks**, tracks field workers and equipment
- **Manages meter and equipment procurement**, inventory management and warehousing, logistics, warranty and repair
- **Ensures meter maintenance** through installation, repair, and replacement
- Enables **field management, work order management, and resource scheduling and allocation**
- Enables **collaboration and coordination** between different departments



Step 3 - Reduction in AT & C Losses

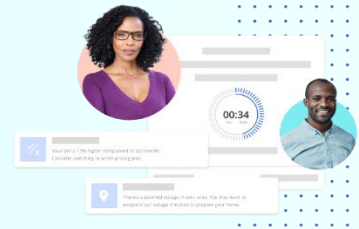
- On the Fly Ensure Energy Accounting & High Loss Area Identification
- Ensure Revenue Assurance & Collection Management Leak Detection
- Manage Meter Fraud & Leakage Detection based on various data patterns
- Key Dashboard across all Actionable Technical Loss Elements
- Extensive reporting and statistics for faster, intelligent decision-making
- Capability to handle real-time consumer data and high data volumes for Smart Grid applications
- Ability to download or export real-time data usage
- Reduces risk, since the platform can easily be scaled up to meet new requirements
- Supports timely and flexible analytics and intuitive reporting through AI/ML



AT&C Opportunity = Improvement across Billing Efficiency (Technical & Non-Technical Loss Reduction) + Collection Efficiency



SMART CUSTOMER MOBILE



- Energy Efficiency and DR Mgmt.
- Drought Management
- Billing and Payments
- Outages and Storm Center
- E Mobility/ EV Management
- Smart Home Management
- Usage and Comparison
- Customer Journey and CSP Analytics using Smart BI
- Content Management pre-integrated with CMS

- Digital Marketplace + Rebate Management
- Community / Rooftop Solar
- Distributed Energy Resource Mgmt. and VPP
- Preference and Notification Centre
- Service Request & tracking + Case Management via CRM
- Integrated Meter Reading capability
- Live Chats and Chatbots

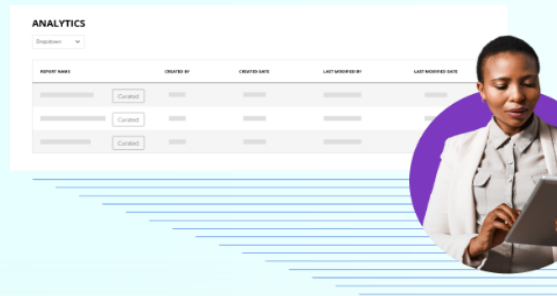
SMART MOBILE WORKFORCE



- Work Order Management
- AI/ML Scheduling and Dispatching
- Assets and Inventory Management
- Training and Learning Mgmt.
- Timesheet & Expense Mgmt.
- Enterprise-wide collaboration
- Online & Offline mode
- AR/ VR Use cases
- Document Management
- Location Intelligence

- Service Request + Case Management integrated with CRM
- Safety and Compliance
- Damage Assessment
- Outage Management
- Vegetation Mgmt.
- Field service and Operational AI and Analytics
- GPS Route Tracking and Optimization
- Inspections and Maintenance
- Meter Read Capability

SMART IQ

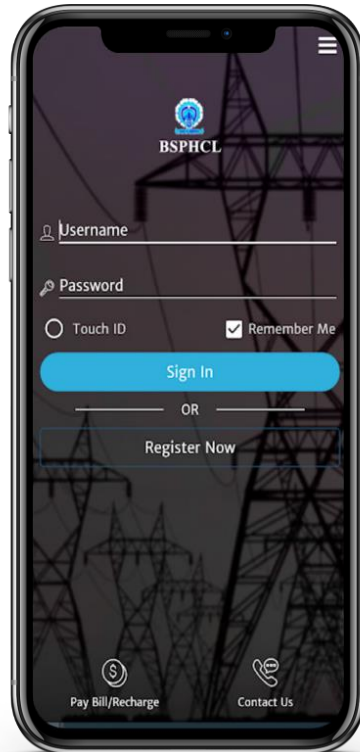


- AI powered Customer and Workforce insights
- Energy and Water Analytics
- AI / IoT driven Use Cases
- Programs and Rebates Management
- Peak Load Management
- Complaints & Violations

- Leakages and Flow Analysis
- Micro Customer Segmentation
- District Metering Analysis
- Non-Technical Losses/ Geo spatial Intelligence
- Customer Behavior and Analytics

Delivering Success with **Native Digital** CX- Self-Service Mobile App Platform

28 Lakh+



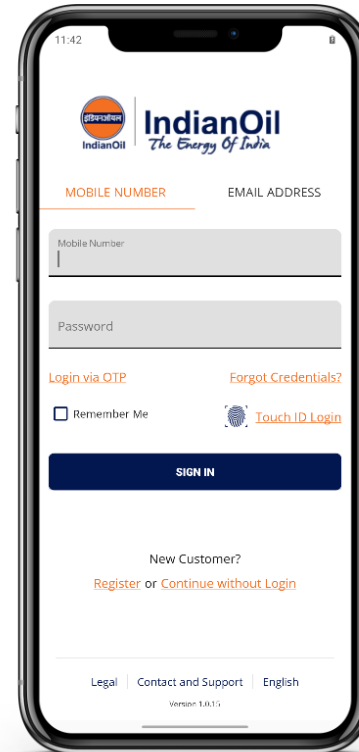
Bihar Bijli

13 Lakh+



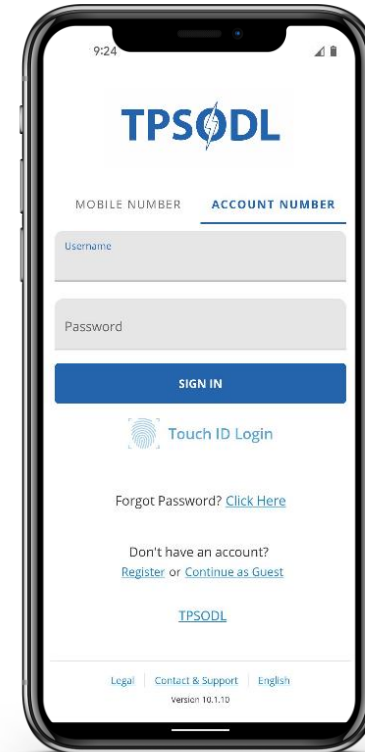
Gujarat Gas

50 Lakh+



IOCL

1 Crore+



Tata Power

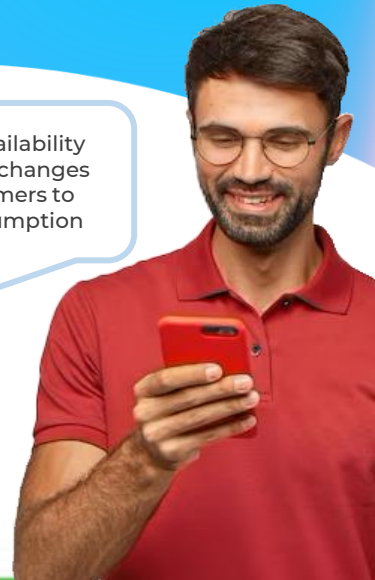
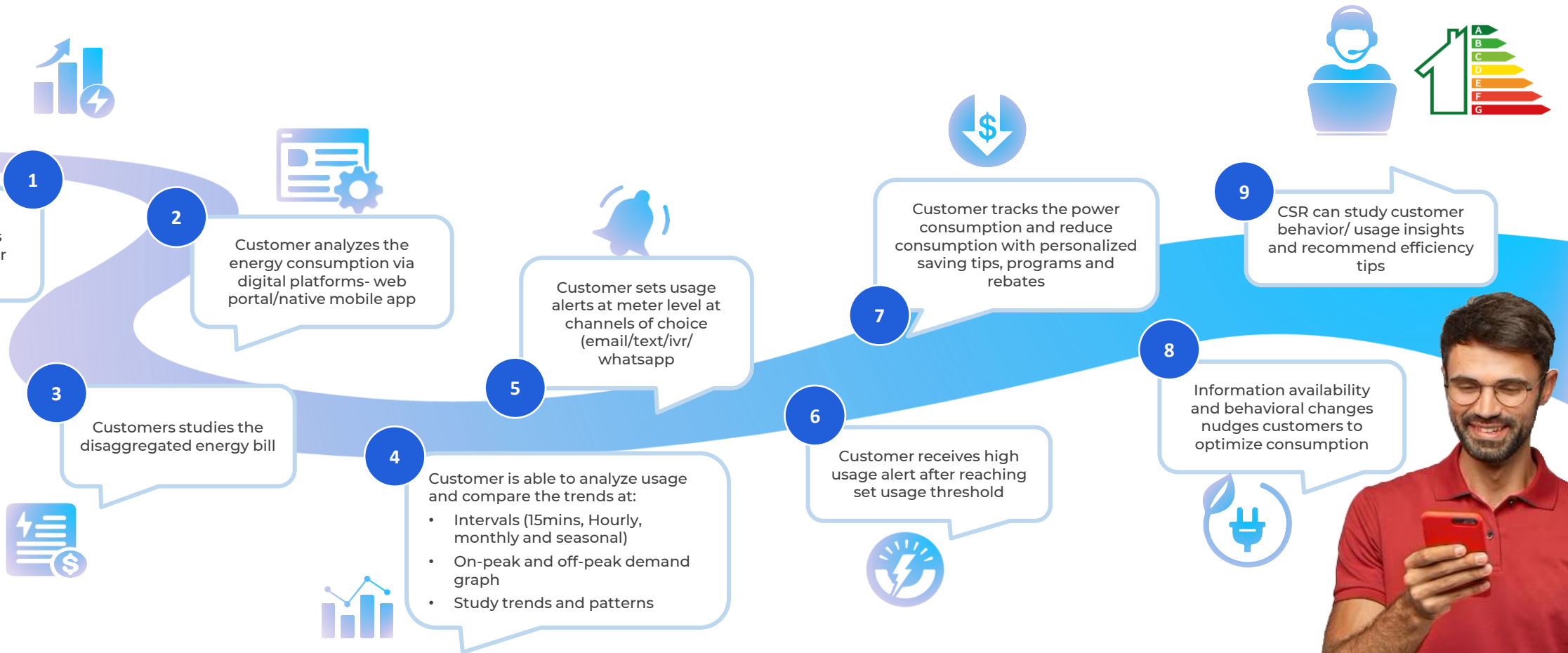
Thank You

"My Powers are ordinary. Only my applications bring me success"

For discussions/suggestions/queries email: info@sew.ai
www.sew.ai

Journey of a “NEW” Digitally Empowered Customer

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Empowering Customers to

Track their energy
consumption in real
time



Receive Notification
for outage alerts



Reduction in bill
abnormalities



Greater control over
their electricity use
when coupled with
a time-based rate



Ease of managing
one's electricity
consumption and bills



Lower electricity
demand during “peak”
periods



Helps customers in
making informed
decisions about their
usage



Contribution to India's
Green Agenda



Solving the Puzzle & Recreating Intelligent & Smart **INDIAN** Provider



- Instant & Reliable Digitization of Utility Meter Reading
- Better Customer Satisfaction
- Lower AT&C losses
- Improve O&M Costs
- Faster realization of revenue
- Lower meter reading & bill distribution costs
- Unmatched data quality & accuracy
- Customer Incentivization & Delight
- Resource Optimization
- Reduce Overhead costs
- Streamline Business Operations
- Time-Saving
- Supported by any meter data type
- Secure & compliant data capture
- Ensure the safety of field workers, customers, and the public
- Realize the benefits of smart grid investments
- Enhance data accuracy and decision-making
- Improve business processes and workforce productivity
- Increase control with real-time information