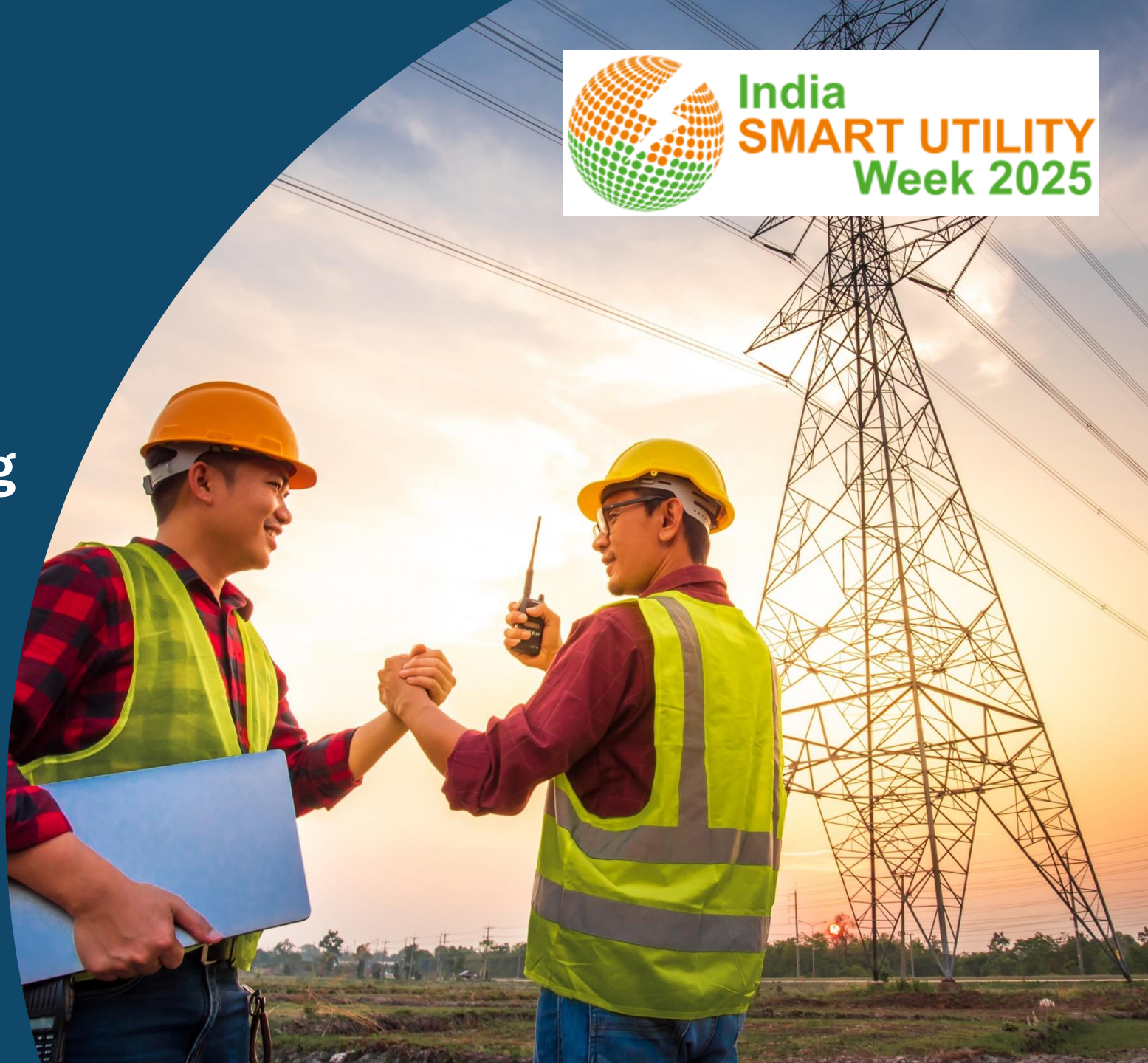


Navigating India's AMI System Challenges Using Futuristic Architecture

A Case for AI Enabled Meter Data Systems

Rohit Pareek

Chief Product Officer, Impresa.ai



India's AMI Challenge

1

Unmet RDSS Goals

Utilities are struggling to meet RDSS AMI targets

2

Persistent Project Delays

On-time go-live, Important for revenue realization of AMISPs

3

The SLA Challenge

It's hard to measure and meet SLAs

4

Deficiency in Future Readiness

Lacks ability to take next steps with "Beyond the Meter" story.

India's AMI Crisis

Top Reasons

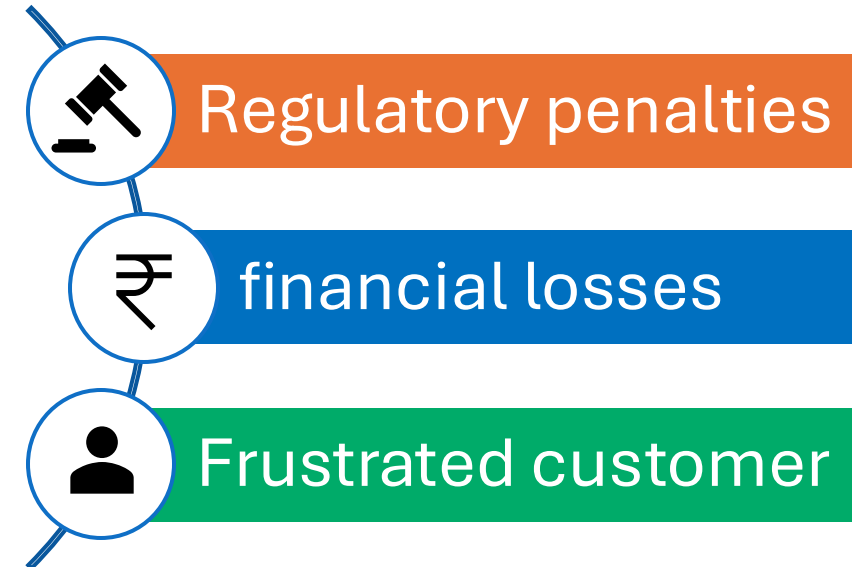
Decades old system architecture

Drowning in data but lack of actionable insights for Smart Metering Operations



Fragile integration between IT-OT systems

The Consequences!



India's AMI Crisis

Example: Why Traditional MDMs are Failing



Monolithic
Architecture and
Lack of Cloud
Nativity



Siloed Approach to
Critical Business
Functions e.g.
SMOC



Missing AI
Advantage.



Traditional Ways
of Integrations
are fragile and
erroneous.

Future-Ready Architecture

Key Elements



AI-First Approach – Intelligence to detects anomalies & fraud in real time.



Cloud Nativity & Edge Computing – Eliminates system overload & improves scalability.



Seamless AMI Integration – Works with AMI, billing, CRM, and IT/OT systems.

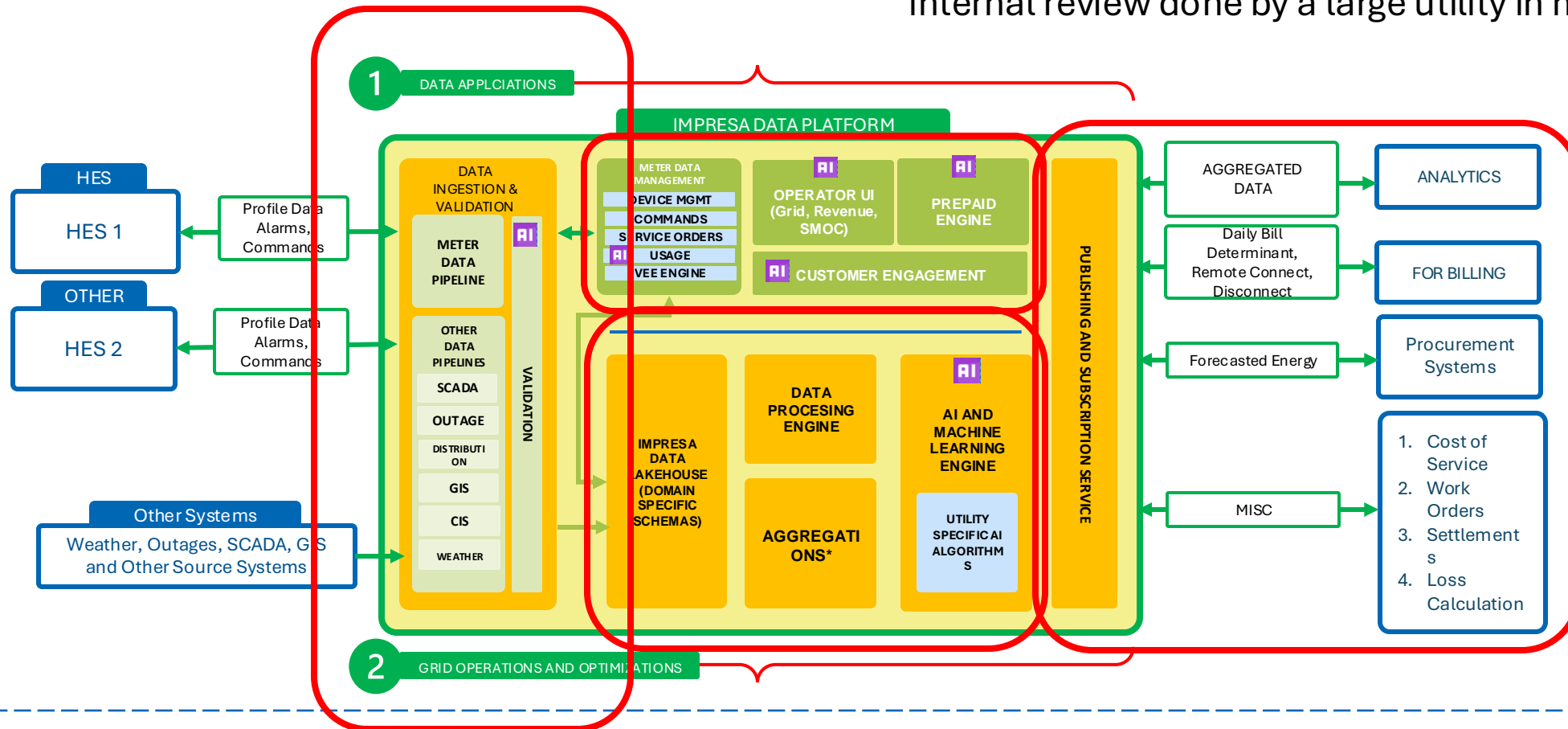


Automated Compliance – Built-in/pre-integrated Prepaid Engine, SMOC, Customer Engagement, alignment with RDSS AMI mandates.

Reference Architecture

An Integrated Meter Data System

Ranked #1 by GARTNER in AI platform landscape in an internal review done by a large utility in mid-east.



PREBUILT DATA PIPELINES
(INTEROPERABLE, CIM COMPLIANT)



AI-FIRST APPROACH
(FASTER AVAILABILITY OF DATA FOR BUSINESS USE)



READY FOR "BEYOND THE METER" STORY
(GEN-AI FABRIC, PREBUILT AI USE CASES)

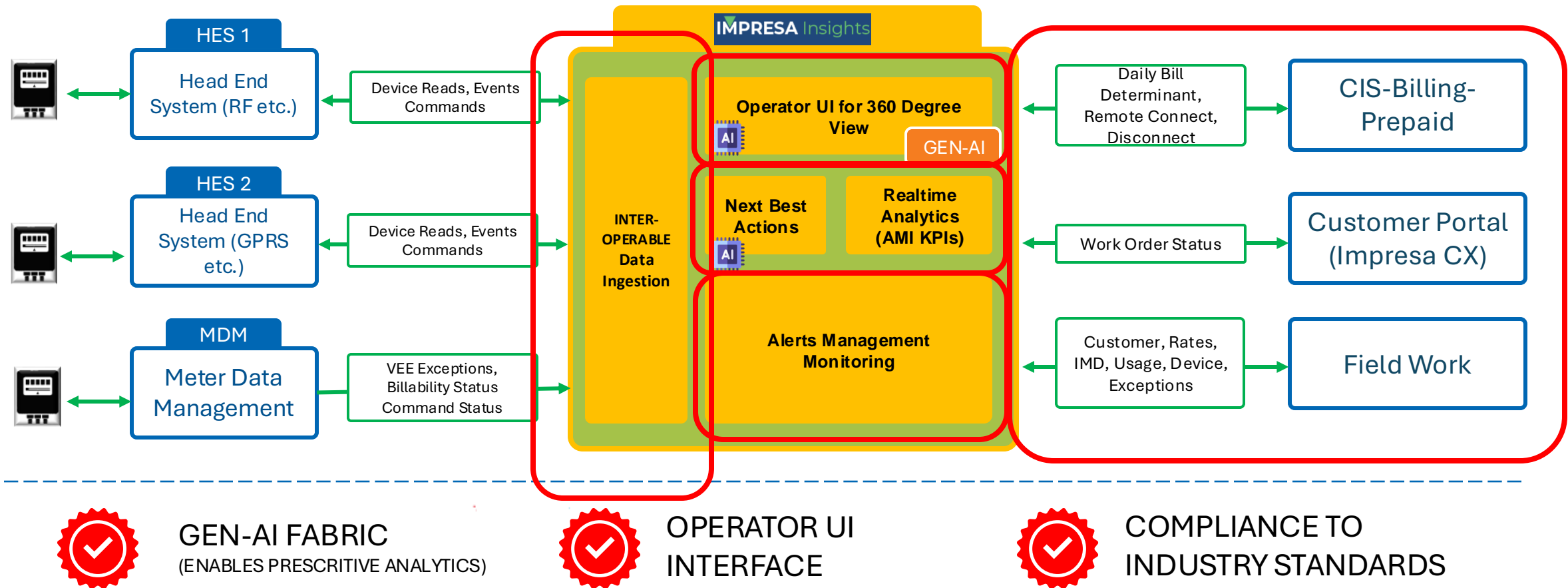
Reference Architecture

An Integrated Meter Data System

A Sample SMOC Architecture using Impresa.ai

GEN-AI

Cognitive Automation Features allows users to identify patterns and prevent AMI system disruptions



Reference Architecture

A Future-Ready, Disruptively Enabling The Path Forward

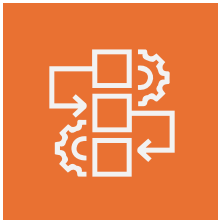
We have experienced



75% Reduction in
Total Cost of
Ownership



Flexible Scaling for
Business-Critical Days in
The Day/Month



99.99% Meter Data
Accuracy using AI
Processing



Interoperability - New
Age Integration
Architecture

How a Major Utility Gained from **Beyond The Meter** Capabilities

A CASE STUDY

Client : Large Utility in Mid-East, **1.5 Crore Smart Meters**

Challenge : **Cost of ownership** of traditional systems, system **reliability**, **system rigidity** for handling large number of registers. **Inability to use data** for “beyond the meter” AI use cases.

Solution : Impresa Meter Data Hub and AI platform.

OUTCOMES

- **4 Year Roadmap** for leveraging AI for business operations and customer service
- **Iterative go-lives** of value-added functionalities every 3 months.
- **Operational costs** are ~15% of traditional MDM.
- **Faster, value-driven country-wide rollouts**

TAKE NEXT STEPS!

To know more
Contact me at **+91- 9701420310.** or
Visit **WWW.IMPRESA.AI**



BOOTH # 1

