

# Powering the Future of Energy with AI



# About Inventive

## Our Highlights



Our story began with the vision of harnessing the power of technology to transform Power, Gas and Water Utilities management capabilities and lives connected with it. For two decades, Inventive has stood out because of its innovative technology, and ambitious projects, starting from CMRI-based billing of consumers to smart metering solutions provider in the technologically connected world. We offer disruptive technology to support Power, Gas and Water Utilities across the World.

Being CMMI ML5 appraised and REC empaneled AMI service provider, Inventive specializes in delivering innovative solutions customized for the evolving needs of Power, Gas and Water Utilities. Our comprehensive suite of offerings includes a diverse range of products like Workforce Management (WFM), Head End System (HES), Meter Data Management (MDM), Smart Prepaid System, Energy Audit, AI Powered- Energy Analytics, Consumer App, Unified Billing System, and OCR-Based Spot Billing. Our products stands out in dynamically changing landscape by providing a pivotal foundation for enhancing efficiency, robust data management, and elevated customer experiences through the integration of cutting-edge technologies.

**INVENTIVE**, true to its name, is always striving to develop new solutions by continuously improving its deliverables and delighting its customers. It has a state-of-the-art IT facility for software development.



Inventive is trusted to encompass utility transformation challenges that are fueled by the fast evolving & innovative ecosystem of cloud data, connectivity, software and people.



# Success Story

## End-to-end Smart Metering Solution for Hilly Areas



Challenge	Client intends to deploy a versatile solution that reduce the operational hassles of meter reading and posting, eliminate the risk of energy bill collection, maximize convenience to residents and help residents in efficient energy usage.
Solution	Implemented AMI solution from supplying, commissioning of smart meters to wireless data acquisition (via cellular and RF technology), data management and validations for ensuring billing accuracy in smart prepaid billing system.
Gains	Leveraging daily meter reading and billing for accuracy and transparency, along with oversight of billing cycles and management of payment reconciliation channels through online applications and portals, has led to increased efficiency in billing and collection, consumer satisfaction, and revenue protection.

## Unified Billing System for utility with dynamic consumer landscape



Challenge	Adoption of various metering methodologies like Conventional Prepaid, Smart meters and HT meters posed a challenge for utility legacy system to cater timely billing, online payments and reporting of revenue leakage cases. This resulted in High AT&C losses.
Solution	Our Unified billing system aid utility to address on-going smart meter prepaid and postpaid billing, energy auditing for loss calculation and omnichannel payment facilities like UPI, Mobile app door to door collection etc for high billing and collection efficiency.
Gains	Combination of Smart Meters and offline spot billing app enabled timely and accurate billing of consumers. Further, a self-service consumer app with the ability to recharge & pay bills online, optimise energy use, and resolve complaints increased consumer satisfaction.

## Loss reduction using Energy Analytics for high value consumers



Challenge	The utility experiences a situation where a small yet impactful group of high-value consumers utilizes over 70% of the energy, while revenue collection remains below 80%. Consequently, this leads to a notable lack of efficiency in revenue collection and poses operational challenges for management.
Solution	The creation of a data lake and deployment of an energy analytics solution layer above the existing utility system accelerated bulk data processing efficiency and facilitated the identification of theft-related cases, power quality control, and revenue leakage protection.
Gains	Rich UI/UX-based dynamic reports resulted in pinpointing revenue leakage areas, reducing losses, and optimizing the network. The system generated personalized alerts/notifications on operational failures, consumer safety and protection, billing updates, smart metering exceptions, etc.





Workforce Management

## Index – Commission – Monitor

Collaborating with UGO, you can effectively address the challenge of balancing cost control with service quality. UGO seamlessly integrates Workforce Management (WFM) systems incorporating consumer indexing, meter installation, network commissioning with HES, inventory control, and quality installation monitoring. This solution ensures that field personnel and AMI monitoring agencies have real-time access to relevant information in the most suitable format, regardless of their location.

### Key Features



OCR/ Probe Read



Inventory Management



Ticket Management



Interoperability



Head End System

## Configure – Capture – Share

UGO-HES functions as a versatile, city-wide platform, operating independently of specific standards and equipped with diverse protocols. Through services such as device management, configuration read/write, on-demand data pull, and relay control operations, it acts as the architect of an intelligent, eco-conscious IoT communication grid. This enables users to deploy a unified application and leverage the same infrastructure to interconnect additional devices or networks, offering a forward-thinking, cost-effective solution.

### Key Features



Data Acquisition



Cellular and RF



SLA Reporting



Alarm Management



**U MDM**

Meter Data Management

## Collect – Analyze – Visualize

Whether it's managing meter rollout or managing data repository, UGO MDMS provides a sturdy platform essential for maximizing the utility of smart meter by encompassing smart device rollout management, remote control, push-pull mechanism and multi-form data import for utility-centric value-added services. Partner with UGO to avail benefits of highly scalable and open technology-based solution that functions as a central hub for downstream data sharing with multiple systems of utility.

## Key Features



Automated VEE



Asset Management



Service Orders



Highly Interoperable

**U Smart Prepaid**

### Instant – Transparent – Convenient

Introducing the UGO Smart Prepaid System, where billing accuracy and savings converge, putting you firmly in control. Easily top up your account from anywhere, at any time, and enjoy peace of mind with our automated notifications and alerts that informs about your balance and usage patterns. Utilize prepaid configuration, schedulers and balance maintenance facility for your ease.

## Key Features



Treatment of Arrears



RC/DC Control

**U Smart Buddy**

### Connect - Collect - Control

The UGO Smart Buddy mobile application empowers utilities by establishing a seamless authenticated Mobile-to-Meter (M2M) connection for non-communicating AMI and AMR meters on-site. This versatile app facilitates meter relay control (RC/DC), configuration and data downloads, offering fingertip access to non-communicating meters in secured manner.

## Key Features

Relay Control,  
Data Downloads

Secure Authentication

# Unified Billing System

## Accurate – Automate – Reliable

Our SaaS based smart utility billing was purpose-built to handle the complexities of an ever-changing utilities landscape and its commitment to operational excellence and customer satisfaction. We impact lives by providing accurate meter data and billing, omni-channelled revenue collection via online/ offline, efficient work management, and simplified billing analytics. Distinguishing itself from traditional billing, unified billing system brings a cohesive view of all financial transactions.

### Key Features



OCR/ Probe/WiFi Reads



ToU and Net Metering



Reconciliation Channel



Exception Management

## OCR

### Detection – Extraction – Precision

With technological advancement, utilities are relying on fast and promising solutions for accurate meter data collection and usage. UGO offers an automatic, reliable and simple AI-based OCR Solution which aid in scanning, reading, and providing inputs for relevant meter data information such as meter reading, unit type, meter serial number, and meter manufacturer by leveraging advanced machine learning algorithms.

### Key Features



Data Validation



Offline Processing

## Spot Billing

### Simple – Fast – Accurate

The revolutionary UGO Spot Billing Solution is crafted to empower distribution utilities in streamlining and implementing an efficient Spot Billing System. Specifically tailored to function continuously in network-prone areas with limited resources. Integrated OCR and probe data download technology, payment collection facility reduce reliance on manual processes and promote multi-services in single application.

### Key Features



Anywhere Collection



Route Control

**U CRM**

Customer Relationship Management

## Request – Resolve – Satisfy

An advanced outage management system with integrated CRM offers multiple communication channels to consumers enabling consumers who chose their preferred mode of communication. System utilizes data gathered from various automation systems to built intelligence to optimize field team allocation and thereby reducing fault rectification time significantly. System optimizes resource based on factors such as availability and severity of the outage, ensuring efficient response times.

## Key Features



Info Management



Breakdown Portal



IVRS, CTI Integration



Grievance Redresel

**U Supervisor**

### Monitor – Inspect – Recover

Determined to help you continually sense inefficiency and respond to energy losses, Presenting UGO Supervisor mobile application for real time field monitoring of billing, exceptions & complaints. That's not all - the theft assessment feature is a game-changer. With a detailed screen for documenting and assessing theft cases, you can input all the necessary information in one place, making it easier to handle.

## Key Features



Field Monitoring



MRI Survey

**U Consumer App**

### Engage – Intelligence – Notify

Deepen engagement with your consumers by unveiling the benefits of UGO Consumer app and web portal which offers your consumers, an ability to self-serve and pay their bill in a way that is best for them. With real-time usage information, alerts and personalized insights, we empowers consumers to take control of bills and safety.

## Key Features



Quick Pay



Trust Reading

# U Energy Analytics

## Scalable – Statistical – Sustainable

UGO Energy Analytics is your trusted product in bridging operational and financial gaps within the power/gas/water distribution sector, ensuring you thrive in today's dynamic energy landscape. Our comprehensive suite of offerings empower you to monitor performance, achieve tangible results, and future-proof your operations. Control exactly what you want to see and interrogate with your data.

### Key Features



Holistic Solution



KPI Target Reporting



Theft Detection



Demand Management

### Key Benefits



AT&amp;C Loss Reduction



Revenue Leakage Protection



Theft Detection and Control



Workforce Optimization



Network Health Monitoring



Demand Management



Power Quality Control



Net Zero Commitment (SDGs)



Consumer Notifications



Revenue Prediction

## U Energy Audit

### Discover – Analyze – Optimize

Beyond traditional verification, analysis, and reporting steps, the UGO Energy Audit system revolutionizes energy management by leveraging advanced tools to enhance processes, identify areas for improvement, conduct cost-benefit analyses, and pinpoint crucial network health parameters for preventive action in distribution networks.

#### Key Features



BEE Reporting



Commercial Analysis



360-degree Awareness



Asset Performance

## U Consumer Notification

### Sense – Analyze – Act

Introducing a new era of energy intelligence through innovative technology, UGO Consumer Notification primarily focuses on providing energy management as a service. It analyzes energy data and offers recommendations to consumers regarding energy savings, safety precautions, energy tips, balance updates, commercial updates, and reducing energy bills. Gain exclusive insight into your home's energy data that you can't find elsewhere.

#### Key Features



Energy Control



Fault Detection



Safety Alerts and Tips



Manage Equipment

# Key Projects



## TATA Power

Successfully deploying Workforce Management System for 28 Lac consumers and Smart Meter installation work for more than 3 Lac consumers for the Smart Metering Project of Chhattisgarh State Power Distribution Company Ltd.



## GMR Group

Successfully executing operational tasks and conducting smart metering indexing and commissioning activities for over 2 million smart meters in several areas of east Uttar Pradesh.



## Military Engineering Services

Supply, Installation, Commissioning and complete setup of AMI system with integrated smart prepaid billing system in all 3 zones of MES under the north eastern region.



## Punjab State Power Corporation Ltd.

Successfully executing our spot billing services and MIS Dashboard for approx. 9 million consumers in Punjab thus improving revenue assessment & billing efficiency.



## Meghalaya Power Distribution Corporation Ltd.

In Meghalaya Power Distribution Corporation Limited (MePDCL), with an objective of Regular Billing + Accurate Reading + Bill Delivery 100%, we have undertaken smart prepaid metering project to facilitate new age digital customer experience for 6 Lac people.



## Uttar Pradesh Power Corporation Ltd.

We are currently executing multi core value project for our oldest & most trusted client UPPCL in 3 out of 4 DISCOMS (MVNL, PUVNL and DVNL) spanning the entire spectrum of Metering, Billing, Data analysis & Revenue management for 5 KW and above high value consumers.



Entire solution under one roof,  
**No subcontracting**

**Certified cloud & infra experts**  
for managing operations

Supported by strong core team  
having cumulative domain experience  
of more than **1000 years**



## Value Additions by Inventive

Assurance of  
**CMMI Level 5**



Strong organization  
serving for **two decades**

Team consisting of  
**Energy Auditors & Managers**

Technology-driven  
processes

Field presence across  
multiple states powered by  
**3000+ employees**

# Let's work together towards growth.

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