INVENTIVE
TECHNO



Transforming Ideas into Reality

Domain expertise combined with AI-powered solutions for Power, Gas and Water Utilities.

www.inventivetechno.in

Transforming the future of energy with AI

Artificial intelligence (AI) is rapidly transforming many industries, and the energy sector is no exception. AI has the potential to revolutionize the way we generate, distribute, and consume energy, making it more efficient, sustainable, and affordable.

Here are some of the ways AI is transforming the future of energy:

Increased efficiency: AI can be used to optimize energy production and distribution systems, making them more efficient and reducing waste. For example, AI can be used to predict demand for energy and adjust production accordingly, or to identify and fix inefficiencies in the power grid.

Improved safety: AI can be used to improve the safety of energy systems. For example, AI can be used to monitor equipment for potential problems and predict failures, or to develop new safety systems that can prevent accidents.

Enhanced sustainability: AI can be used to make energy production and consumption more sustainable. For example, AI can be used to develop new renewable energy technologies, or to help people reduce their energy consumption.

> Our AI-powered solutions are helping public utilities to unlock a cleaner, brighter energy future with improved efficiency, sustainability, and affordability.



SMART METERING SOLUTIONS

ENERGY EFFICIENT, CONNECTED & SECURE

Advanced Metering Infrastructure (AMI) is an interconnected system of smart meters, communication networks and data management system that enables two-way communications between utilities and its customers.

Our Smart Metering Solutions are designed to be adaptable, reliable, and intelligent, providing utilities with the data they need to make informed decisions and deliver the best possible service to their customers.



UGO | SMS
Smart Metering Solutions



Head End System

UGO HES operates on a secure cloud-based server. It is developed to offer secure and quality-based solution in a cost-effective way.

UGO HES is capable to communicate via numerous channels such as 2G, 3G, 4G, NB-IoT, RF, etc. It combines all the functionalities into a unified view for quick searching and data visualization as well as making informed decisions. UGO HES is a fully configurable system and a forward-thinking solution built upon open standards and protocols. It boasts a scalable and flexible architecture.

Features :-

- Supports GPRS, 4G Fallback 2G, NB-IoT
- Multiple MDMs & Utility Systems Support
- Smart Meter Configuration
- Remote Re-connection & Disconnection
- Audit trail, Event & Alarm Logging
- Alert for Load Violation

Meter Data Management

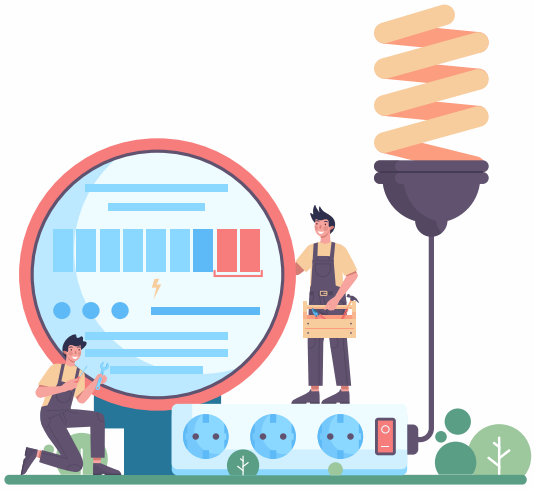
UGO MDM is a powerful meter data management platform that helps utilities optimize their meters, reduce costs, and recover implementation costs faster. It validates, receives, and stores meter data, making it easily accessible to internal and external systems. UGO MDM also includes VEE capabilities to ensure the accuracy and adaptability of the data.

UGO MDM can manage enormous volumes of meter data and be rapidly configured to work with leading meter HES systems. It can also acquire data manually through CMRI.



Features :-

- Acquire data from multiple HES
- Robust VEE Engine for Meter Data
- Manage Meter Life-cycle
- Alarm and Event Notification
- Support TOD and Net Metering
- Theft & Revenue Loss Identification



Consumer Survey and Meter Installation

UGO Consumer Survey is a cloud-based platform that allows users to upload customer data to a server, allocate it to field executives, who then conduct fieldwork and report their verified findings through survey app. It ensures correct consumer survey as it plays an important role in utility operations.

This information is directly sent our servers and available for analysis and decisions. This allows for the collection of KYC information from the customer together with GPS coordinates at the time of the visit, as well as the monitoring of network performance and signal strength.

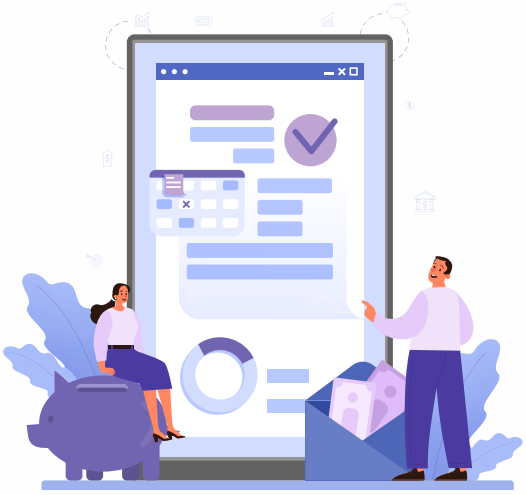
Features :-

- Workforce Management
- Interactive Field Mobile App
- Ensure Signal Strength & Connectivity
- Warehouse Management
- OCR Functionality
- Configurable Workflow Engine

Smart Prepaid System

UGO Smart prepaid system (SPS) Real-Time, Online Utility billing software is an efficient smart-meter billing solution for service providers of Power, Water, Gas and multi-service utilities. It supports simple to very complex multiple utility tariff schemes along with a robust calculation engine, consumer invoicing and tariff configuration.

UGO SPS delivers accuracy, consistency and efficiency for the calculation of consumption and notify consumers upon reaching a critical threshold. It enables user specific threshold configuration for critical alerts and remote disconnection.



Features :-

- Reconciliation with Billing System
- Tariff Synchronization
- Alert & Notifications
- Bill Generation
- Real Time Monitoring and Analytics
- Online Recharge

UGO | UBS
Unified Billing System

Unified Billing System is the essential component in utility services, measuring consumption, generating bills, and collecting payments for **Power, Water** and **Gas Utilities.**

Metering, Billing and Collection

- Efficient, Transparent & Cost-effective Solution for Managing Power Distribution
- Faster New Connection & Onboarding Management with 24*7 Customer Care
- Improved Cash Flow via ePayment Channels & Cash Collection Counters
- Comprehensive Billing Solution to Aid Utilities in Lowering Billing Errors & Disputes, without Manual Intervention.

CRM

- Secure & Powerful Solution Manages & Keeps Track of Consumers, Meters, Bills & Payments
- Automated Alerts to Customers about Outages, Service Requests or Billing etc.
- Real - Time Requests & Grievance System
- Enables Customers to View & Pay their Bills & Manage Payment Preferences.

Consumer Portal & App

- Self-Service Platform having access to Bills, Usage Graphs & Payments
- Facility to Raise the Complaint & Monitor Resolution Status
- Enabling Consumer Self - Generation of Bills using Trust Reading
- Reduce Workload of Customer Support Office & Increase Revenue

Energy Analytics

- Analyzing & Interpreting Energy Data to Identify Trends, Patterns & Insights
- Incorporation of Advanced AI/ML Tools eg. Regression, Time Series etc.
- Compiling of all Data into Common Data Format for Data Preprocessing
- Detection & Mitigation of Potential Losses using AI- Based Reasoning.

Our Products

UGO | UBS
Unified Billing System



Workforce Management

- In/Out Timings Correlated with the App
- Real - Time Tracking of Workforce via Dashboards & Geo- Location
- Easy & Intuitive UI to Assign, Un- Assign, Reassign, Transfer Assignment Division, Book, Binder, Group & Consumer Wise
- Biometric Authentication with Face Recognition & other Validation Checks (eg. Selfie Based Authentication).

Spot Billing App

- Improved Cash Flow & Increased Revenue
- Timely Accurate Meter Readings & Billing
- Integration of Various Activities at Centralized Window
- Increased Transparency and Customer Satisfaction
- Online Monitoring of Billing Information.

Network Indexing Management

- Maintain Network Hierarchy of Distribution System
- Ability to Acquire Information from Existing GIS Systems
- Able to Integrate with Other Systems eg. EA, Fault Detection, OMS etc.
- Data Warehousing & Archiving on Cloud Service for Enhanced Security.

OCR Based Billing

- Works on all Meters Across Utilities/Protocols
- Recording of Photo & Video of Screen Display for further Audits & Verification
- AI/ML- Based Intelligence for Audit of Captured Data.
- Automation of the Billing Process & Reduction of Manual Intervention.

UGO | ERP
Enterprise Resource Planning

Mastering Business Problems with ERP Solutions

UGO ERP offers a robust solution for businesses seeking heightened productivity and control. Tailored to specific industries, this ERP system provides a strategic framework to seamlessly integrate all aspects of your enterprise into a single platform. By doing so, it empowers your organization to excel in the modern global marketplace.

UGO ERP optimizes operations, enhances efficiency, and offers valuable insights, facilitating informed decisions. It serves as the ideal foundation for advancing your business, unlocking growth potential, and staying competitive in today's dynamic business landscape.

Modules :-

- Procurement
- Finance & Accounting
- HRMS
- Sales
- Supply Chain Management
- CRM
- Inventory Management
- Warehouse Management



Our Key Services



Growth
is not a dream, it's a reality with Inventia

- Digital Transformation
- Smart City Solution
- IoT Services
- Data Analytics
- BPO Services
- IT Consulting Services
- IT Staffing
- App Development
- Ecommerce
- Cloud Services

Technology Stacks



Inventive Techno's diverse technology stack allows them to develop products quickly and efficiently, and to scale them to meet the needs of users, regardless of their size or complexity.

The technology stacks are as follows:

Front End

HTML5, CSS3, JS, ANGULAR

Back End

.NET, Java, python, php, node

Mobile

iOS, android, React Native

Databases

Microsoft SQL Server, MySQL, ORACLE, cassandra, PostgreSQL

Big Data

hadoop, Spark, mongoDB.

Cloud

aws, Azure, Paperspace

Platforms

Microsoft Dynamics 365, salesforce, SharePoint

Success Story

Smart Metering for Utility with widely spread consumers

Business Challenge

Our client utility operating in one of the remote regions was facing problems with meter reading, billing, bill distribution and revenue collection. Manual reading and distribution was time taking and prone to errors.

Solution

A complete UGO UBS (Unified Billing System) was implemented, with support for smart metering. Mobile app for offline spot billing and revenue collection was launched for employees to perform collections from remote areas.

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.

Enhanced Meter Data Management for Power Utility

Business Challenge

Meter readings were collected using manual work force. This process was slow and prone to errors/ malpractices. Due to this, the Department was facing problems of revenue leakage and consumer dissatisfaction.

Solution

Meter Data Management (MDM) system was implemented which was supporting online meter readings from smart meter and capable to store data collected using traditional methods with proper validations.

Gains

MDM solution enabled collection, processing with in-built VEE, archival, retrieval & analysis of Meter data from smart meter and legacy meter both. Analysis of meter data enabled fraud detection and plug revenue leakage. MDM calculates billing determinants data and provide to downstream billing system for billing.

MRI and Revenue Tracker for HT consumers of Utility

Business Challenge

The number of HT consumers are usually very low for any utility, but these are source of major chunk of revenue. Utilities need to be able to collect all due revenue from them, as well as providing them high level of service.

Solution

UGO MDM was implemented for HT consumers. This provided support for smooth integration of MRI data, analytics and automated bill distribution with digital acknowledgment gave the opportunity to consumers to see their bill in real time.

Gains

Real time dashboards and analytics provided better visibility on revenue leakage, data collection status for all consumers. Revenue tracker showed which consumers or divisions were lagging in revenue collection. Thus, real-time follow-ups from the central command office were made possible.



Let's work together towards growth.

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