

### **Enabling Deep-Tech Digital Transformation for Utilities**

Abjayon aims to help power, gas and water utilities transform their businesses using digital technologies to meet current challenges as well as future opportunities. Abjayon will leverage an ecosystem of partners and industry specialists to deliver sustainable and reliable technology services and experiences (as listed below)

Expert digital transformation services (projects, consulting)

Managed business services and IT operations

Advisory and program management services

Value-added technology solutions on top of core business apps to help augment business process efficiency and intelligence and monetize available data from edge



MDM implementation with

27 Million+

Smart Meters

16

Head-end Integrations



# **Target industry segments**

Focus Areas in which products and services will be curated for a decentralized, decarbonized and digitized utility



**Consumer Experience** 



**Transmission & Distribution** 



AM



**IR4.0 for Utilities** 



# **Consumer Experience**

Caters to customer-centric business processes of the utility including but not limited to Meter to Cash

- Simplified & modern billing models
- Field Work

**Customer Service** 

Self Service

Energy Efficiency

Service

Smart Metering/AMI

# Transmission & Distribution

Caters to business processes relating to grid modernization, edge integrations, outage and distribution management functions and infrastructure for power, gas and water utilities

- Smart Asset Management
- Outage Management
- Advanced Distribution Management
- Energy Management System
- **Solution** DT Load Management

- T&D Load Management
- Utilities Control Center
- IIoT, SCADA and GIS
- Distributed Energy Resources (DERs)
- Field Work



Grid Edge is the center of energy system. Decentralized generation, energy efficiency, IoT, Data Monetization, Insights from data at Edge of the grid matters for a digital utility

Edge analytics

DERs and Grid Resilience

IoT applications and integrations



# Abjayon's industry centric centers of excellence

### **Advanced Metering Infrastructure (AMI)**

Advanced Metering Infrastructure, Smart Metering related business processes:

- Meter Data Management
- Smart Metering
- Integrations
- Smart Metering Operations
- Load Forecasting using meter data
- Energy Audit



### **Consumer Experience (CX)**

Caters to customer-centric business processes of the utility including but not limited to Meter to Cash:

- CX CoE

- Simplified and modern billing models
- Customer Service
- Self Service
- Energy Efficiency
- Fieldwork





### **Transmission and Distribution (T&D)**

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- Smart Asset management
- Outage and distribution management
- Energy Management System
- T&D loss management
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OT CoF

### **IR4.0** for Utilities

Grid Edge is the center of energy system. Decentralized generation, energy efficiency, IoT, Data Monetization, Insights from data at Edge of the grid matters for a digital utility.

- Edge analytics
- DERs and Grid Resilience
- IoT applications and integrations
- IIOT, SCADA, GIS



**Industry 4.0 CoE** 





# Reimagining customer engagement for a smart and sustainable future driven by cutting-edge Al

In a recent survey executives of major utility and distribution companies were asked how the present scenario, including the pandemic, has influenced their investment strategy for the next few years. **55%** responded that their need for CX investment has increased to become a higher priority, second only to grid infrastructure upgradation.

	Impact over next 2 years		
Investment Area	Increase	Decrease	No Impact
Grid modernization	64%	11%	25%
Improvements in customer experience	55%	5%	39%
Digital transformation	54%	24%	22%
Renewable energy generation	48%	6%	46%

**Impresa CX** is a comprehensive digital customer engagement platform that enables Utilities to drive higher customer satisfaction and improve revenue collection by providing enhanced customer support at a lower cost. It leverages **AI/ML-enabled** tools to handle customer interactions and drive their sustainability efforts.

### The Leading CX Platform for Electricity, Gas, Water Industry



### **Higher Customer Engagement**

Impresa CX offers a comprehensive, seamless, and feature-rich web portal, and a native mobile interface to enhance the utility customer experience with online account management, bills and payments, usage tracking, outage management, and service request management.



#### **Increased Revenue Assurance**

With strategies like the gamification of CX, bill-payment reminders and multiple payment options, Impresa promotes and incentivizes on-time bill payment resulting in a smooth flow of revenue collection. By offering an intuitive experience for **prepaid customers**, Impresa provides ease of recharge, view balance, suggesting next best actionand tips.



### **Lowered Customer Support Cost**

Only about a third (37%) of utility customers use the digital channel to report an outage whereas 54% choose to contact the call center. This adds to the operating cost for providers. The data indicates that utilities on average spend ~\$4 per customer call, which includes direct and indirect labor costs and operational expenses. Impresa CX is designed to lower this cost and improve the quality of support.



### **Drive Sustainability Initiatives**

Impresa helps transition your brand into an environment-conscious utility service provider. It promotes best practices for energy consumption through strategic product features like **Demand Side Management**, **Net Metering**, **and CO2 Emission Tracking**, **Energy disaggregation** to reduce each user's carbon footprint. In the process increasing revenue and contributing towards a greener future.

# **AMI Insights for Utility Consumers**

**Impresa CX** mines AMI data to provide consumers of utilities (electric, water and gas) with insights into their usage, billing, and pricing to help them save money and optimize their consumption.



Modern utilities strive to have customer at the center of their business. Utilities are overwhelmingly convinced that AMI provides benefits to both their customer and themselves. Surveys indicate over 60% of homeowners want to learn more about consumption, and more than three-quarters want data- driven suggestions on how to reduce their energy use and save money.

**Impresa CX** is key to smart grid and AMI implementations helping utilities drive customer engagement at lower cost.

Modular design enables utilities to add AMI features at their will with at most ease without significant efforts. It provides AMI Usage/Consumption and Billing Insights to customers so that they can manage it according to their priorities.



Impresa CX comes with a suite of pluggable AMI widgets that helps utilities engage consumers like never before. These Pluggable Widgets are designed using modern UX principles to anticipate follow-up queries and answer them preemptively.

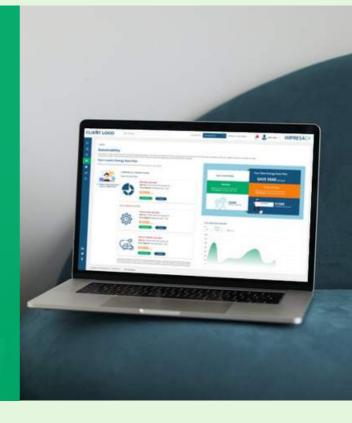
# **Engaging Utility Consumers to meet Sustainability Goals**

The future of this planet depends on environment-conscious energy and utility companies. Become the pioneer to usher in a new era of intelligent energy consumption and lead the world towards a sustainable future...

Affordable, Clean Energy and Climate Action are respectively the **7th and 13th goals** in the SDGs proposed and adopted by the United Nations in collaboration with more than **125 nations**.



Impresa CX offers the technology that is engineered for the purpose of serving utility consumers to create a lasting environmental impact. Everyday, Utilities across the globe are using Impresa CX platform to drive the expansion of renewables, decarbonization by engaging customers and prosumers in this process.





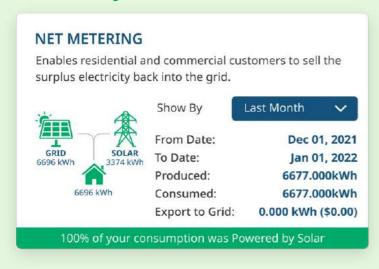
Impresa CX's sustainability-focused features help transition your brand into an environment-conscious utility service provider. It promotes best practices to drive efficiencies in consumption through strategic product features like Demand Side Management, Net Metering for Renewables, Distributed Energy Resource integration and CO2 Emission Tracking to help reduce each user's carbon footprint. Together, these features contribute toward the decarbonization of cities and a greener future.

#### Track carbon emissions at consumer level



To provide visual feedback of how much customers have been able to impact the planet positively, Impresa equips the consumer with a CO2 emission tracker. This enables the consumer to course correct in case of increased footprint and provides motivation to reduce consumption.

#### **Net Metering for Prosumers**



#### **Smart Rate Plan Selector**



### Drive demand side management programs using Impresa CX

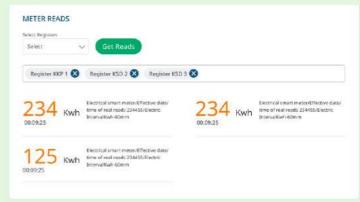
Insufficient consumer engagement is the biggest challenge Utilities face in driving demand-side and conservation programs. **Impresa CX** is the platform to experiment with various energy efficiency and water conservation programs.

Using modern user experience strategies, it draws customer participation by providing them with **data science-enabled insights** about their consumption behavior, effectiveness and measurable results of any demand-side or conservation program participation. Impresa does it by reducing frictions linked with onboarding a consumer onto the portal and providing relevant thoughtful insights at every level once they are onboarded **increasing their stickiness to the platform**.

Impresa allows delivery of tailor-made communications for various demand-side management programs for different consumer segments and allows experimentation in this to nudge the consumers to subscribe to various conservation programs. Once onboard, a customer is kept constantly on the hook with the delivery of deep insights about programs and the impact being created by their small contributions towards sustainable living.

### **Out-of-the-box Pluggable UI widgets**

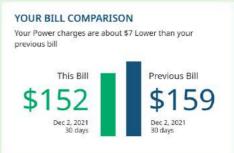




View usage & cost by hour, day or any defined period

Meter reads from different registers





Usage comparison with current vs previous bills

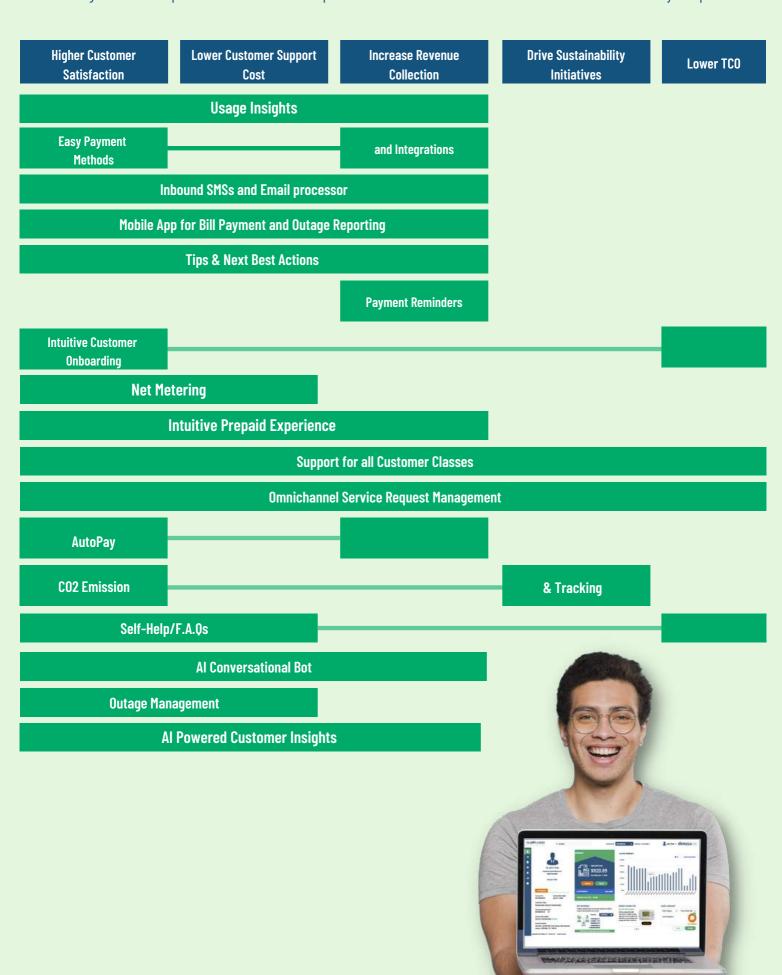


**Highest Usage Days** 

Impresa CX comes with a suite of pluggable AMI widgets that helps utilities engage consumers like never before. These Pluggable Widgets are designed using modern UX principles to anticipate follow-up queries and answer them preemptively. The widgets can easily be plugged into existing customer portals and websites of Utilities. This helps Utilities leverage existing investments and still benefit from the modern technology. This further minimizes the disruptions from the AMI rollout process.

### **Powerful Features, Unmatched Value**

Following is a visual map of the crucial features Impresa CX offers to maximize value for both customers and utility companies



# IMPRESA Insights



# **IMPRESA** Insights

With exponential growth in volume and sources of data, utilities have an ever-expanding opportunity to derive value from that data to support data-driven decisions across the business. Impresa Insights is a big data analytics platform that provides analytical insights into the most critical business areas of a Utility. It unlocks smart grid and AMI data and turns it into actionable insights for business operators. Impresa Insights delivers a smart grid-centric data model to enable quick answers to the most pressing questions regarding Meter to Cash, Revenue Protection, Read Reliability, Distribution Planning, Batch Performance, and other operational insights for a smart grid and AMI system.

Impresa Insights is scalable and extendible with built-in capability for self-service BI, a unique feature that allows operators and executives to analyze data as per their preferences. Impresa Insights will be configured to ensure the right people see only relevant reports and can get the reports to their preferred communication channel and frequency.

### **Background**

The Utility (electric, water, gas, wastewater) industry continuously produces vast volumes of data (usage, events, meter reads etc.), and this volume is ever-expanding, thanks to the advent of AMI/smart meters and other smart devices. Datadriven decision-making using advanced data analytics tools is key for any Utility to optimize cost, process, resource, and operational efficiencies. This can be achieved using an integrated modern platform that enables data to be accurate, readily shared, interpreted, and customized into a dashboard for decision-makers, across different levels. Teams within Utilities constantly face the need to build customized reports and demand an intuitive UI to be able to easily and quickly create required reports.

#### **Key Benefits**

- Actionable insights for Utilities
- Explore data across our enterprise applications
- Gain robust point-in-time historical data exploration capabilities
- Explore deep insights into trends and root causes of business problems

### **Pre-integrated with**

- Oracle Utilities Customer to Meter.
- Oracle Utilities Customer Care and Billing
- Oracle Utilities Meter Data Management



### **Key Features**

- Out-of-the-box insights
- Insights based on Utilities best practice

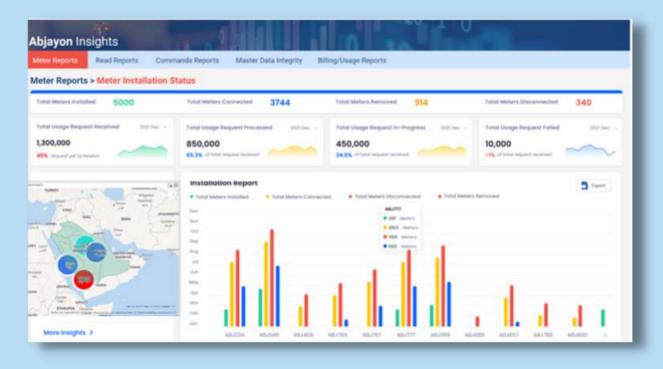
## **Overview**

Impresa Insights for AMI can be divided into three broad categories: Meter Insights, Billing Insights and AMI System Insights.

The various modules of insights are as below:



# **Meter Analytics:**



Meter analytics provides insights for the Utilities regarding number of meters installed/connected/disconnected/removed. Also, it provides the total number of usage requests received /processed/in progress/failed.

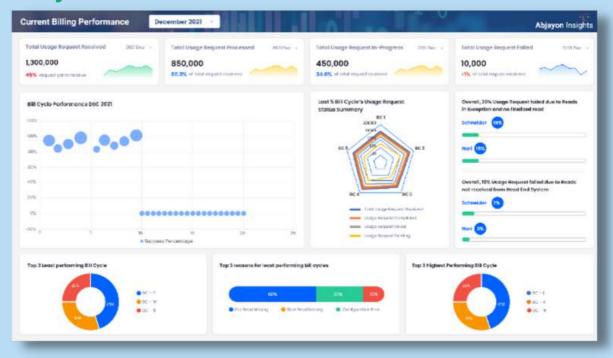
Map shows the number of installations based on the regions (area/ cis division/ office codes).

Utilities can view the number of installations per regions (area/ cis division/ office codes) based on meter status (installed/ connected/ disconnected/removed).





### **Billing Performance:**



Billing performance provides insights about usage performance for instance total usage request received/processed/in progress/failed. Also, it provides bill cycle(s) usage request status summary. The insights also provide the least performing bill cycles and the top reasons that makes bill cycle least performing.

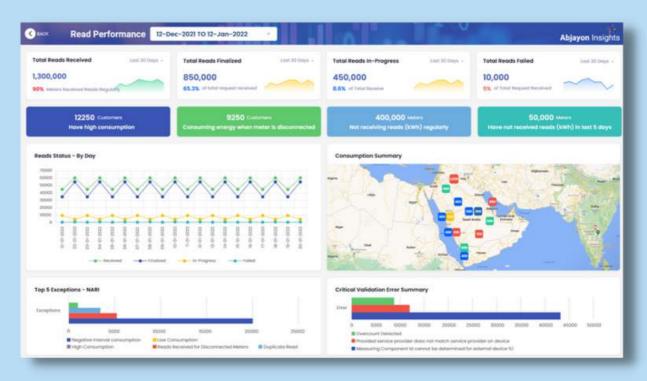
### **Billing Performance for Active Bill Cycle:**



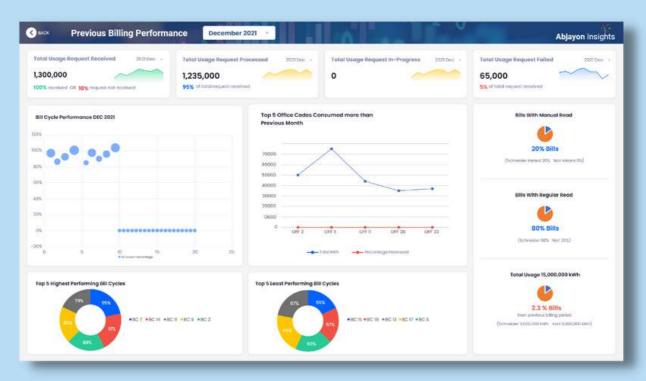
This analytics provides insights about the performance of usage requests for active bill cycles. Also, provides the insights about the processing of usage requests day-wise along with top usage exception.



### The other reports of this Impresa Insight products:

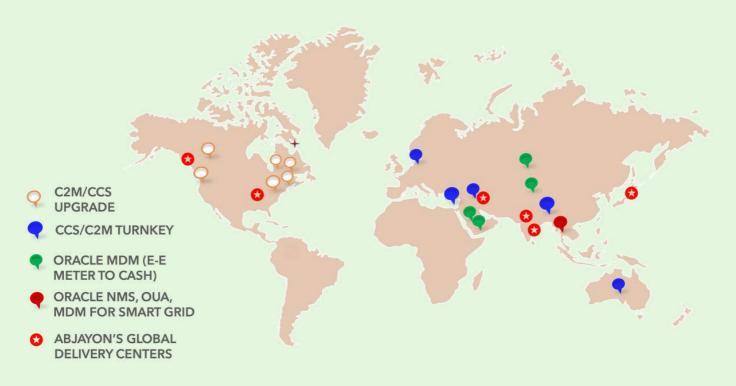


### **Read Performance**



### **Previous Bill Performance**

#### Global EXPERIENCE. GLOBAL PRESENCE. END TO END COVERAGE



# Awarded the Outstanding Customer Service for Middle East & Africa for FY 2022 at Oracle Summit, Dubai



### Some of our Notable Success Stories in the Middle East



We were called in to help streamline the meter-to-cash process of a leading water utility in the Middle East, servicing 2.7 million consumers across the region. We were awarded the project to implement #OracleUtilities Meter Data Management application.

Our team used lean thinking and an agile approach to execute the project in 4 phases. It enabled the client to address the meter data quality issues and get a year's worth of data before go-live, resulting in 99+% billing quality adherence from day 1.

**Click to Read More** 



Abjayon is the proud Oracle Utilities Meter Data Management (MDM) System Implementation partner of a major electricity utility in Saudi Arabia.

Along with one of the fastest smart meter installations, the said utility did the fastest scale-up of Oracle Utilities Meter Data Management from 0 to 10 million within just 3 weeks with expert help from Abjayon. This implementation is a firm next step in the transformation of the Kingdom of Saudi Arabia toward creating a sustainable economy and society.

**Click to Learn More** 

### SUMMARY OF SERVICE LINES

# **Digital Transformation**

Abjayon offers comprehensive transformation for Energy & Utility companies that can be termed as "Digitization-as-a-Service." As part of this offering, we provide custom-built, cutting-edge software solutions that support AMI, smartgrids, grid resiliency, DERMs and allow Utilities to offer rich & engaging customer experience to their consumers.

# **Products & Solutions**

Research and insight-driven products and solutions by Abjayon are uniquely designed to support non-standard business functions. Additionally, we work with Utilities to build tools with emerging technologies to monetize and open up new revenue opportunities using consumer data.

# Advisory and program management

We assist Utilities across the globe in various areas of their business resulting in the discovery of growth, modernization and digitization opportunities. Through our consultation services, Utilities add tangible value to their business (increased cash flow, better reputation and futureready infrastructure).

# Managed services & IT operations

With a highly focused and capable team of domain experts, Abjayon is well-positioned to plug into your business as your reliable IT operations partner to drive digital transformation for your company.

#### Get in touch for a Free Demo



abjayon.com

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