CASE STUDY

Empowering Data and Dashboard Migration for an Energy Management Leader

Client Profile

The client is a global leader in energy management technology, offering solar and storage solutions for both residential and commercial applications.



The client achieved **greater productivity**, enhanced call handling, nearly perfect data migration accuracy, and **faster decision-making.**

CHALLENGES

The client struggled with:

- Lack of alignment between technology demands and existing initiatives
- Bandwidth limitations delayed the EBS implementation process
- Poor visual adoption and concerns over data safety
- Diverse project demands led to reduced productivity and inefficient resource allocation

SOLUTIONS

ITHENA's Rapid Deployment Solution (iRDS) empowered the client with:

1. **Training Programs**
   Provided extensive training programs to enhance visual adoption and data safety
2. **Persona-based Solution**
   Empowered the team with personalized tools and system setup support
3. **Data Integration**
   Seamlessly integrated EBS and migrated data to create actionable dashboards
4. **Project Management**
   Employed certified project managers to ensure timely delivery and comprehensive oversight

BENEFITS

78%	30%	99%	30%
Increase in productivity in one week	**Boost** in calls per hour	**Accuracy rate** in migrated data	**Faster** decision making

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CASE STUDY

Fast-track Reporting & Analytics for A Leading Steel Pails Manufacturer

Client Profile

The client is a prominent US manufacturer of steel pails, serving Fortune 500 companies, mid-sized industries, and family-owned businesses across North America.



iRDS significantly **improved** the company's overall **productivity**, **profitability**, and **competitive edge**

CHALLENGES

Legacy time-consuming and expensive data engineering system led to:

- Data -silos and fragmented sources made it hard to obtain actionable insights
- Inadequate and slow-to-refresh dashboards delayed decision-making
- Data fidelity raised reliability issues disrupting cross - functional collaboration

SOLUTIONS

ITHENA's Rapid Deployment Solution (iRDS)- a Smart Lakehouse Technology empowered the client with:

1. **Rapid Deployment & Go-to-Market**
   Enabled quick access to ERP connectors (Oracle EBS, SAP) and inbuilt dashboards for finance, operations, & sales, reducing time-to-market
2. **Enhanced Performance Analytics**
   Accelerated agile reporting and data-driven insights with a robust 'Direct Data Mapping' engine to minimize downtime and unplanned costs
3. **Improved Data Integrity**
   Streamlined operations with a unified platform for 100% cloud migration, eliminating the need for a costly data warehouse
4. **Interactive Dashboards**
   Enabled access to customizable, user-friendly dashboards with real-time data widgets and infographics for actionable insights

BENEFITS

23% **Savings** on inventory costs

99% **Accuracy** in business insights

96% **Faster** agile reporting & analytics

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CASE STUDY

Data Transparency Meets Sustainable Development Goals

Client Profile

The client is a global welfare organization that works to cease poverty, reduce inequalities, and build resilience to achieve - Sustainable Development Goals.



iRDS substantially **improved** the client's **operational efficiency** by creating a knowledge dashboard for **agile reporting** and **informed decision-making**

CHALLENGES

The client struggled to:

- Lack of a unified platform to integrate data from multiple sources
- Difficulty to rapidly ingest, process and automate the growing data-volumes
- Inconsistent communication and collaboration across teams, hindering innovation

SOLUTIONS

ITHENA's Rapid Deployment Solution (iRDS)- a Smart Lakehouse Technology empowered the client with:

1. **Seamless Integration**
   Established faster connectivity to existing architecture for seamless data integration
2. **Scalability**
   Expanded data processing capabilities to manage growing volumes, analyzing 450 million rows of data in under two minutes
3. **Real-Time Analytics**
   Created a dynamic dashboard that visualizes actionable insights through widgets, infographics, and animations
4. **Unified Communication**
   Enabled sharing of research and discoveries across teams using a robust Direct Data Mapping engine

BENEFITS

100%	80x	92%	11K
Source data availability	**Faster** delivering dashboard	**Drop** in data quality issues	**Employee** hours saved yearly

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CASE STUDY

Unlock Efficiency with Real-Time Operational Insights Using iRDS

Client Profile

The client is an American memorabilia manufacturer of yearbooks and class rings.



iRDS helped the client to achieve **streamlined analytics**, **faster decision-making**, **cost savings**, and **significant improvements**.

CHALLENGES

The client encountered:

- Disparate systems and frequent data restructuring, limiting business agility
- Non-customizable dashboards lacking feature parity, leading to data delays
- Difficulty maintaining data transparency amidst rapid growth

SOLUTIONS

ITHENA's advanced lakehouse technology, the **Rapid Deployment Solution (iRDS)**, delivered:

1. **Operational Analytics**
   Real-time insights with no ETL load, boosting agility and flexibility in reporting and analytics
2. **Performance Dashboard**
   An intuitive dashboard with widgets and infographics for detailed visual insights
3. **Data Fidelity**
   AI-driven self-service reporting, surpassing capabilities of tools like Tableau or PowerBI
4. **Rapid Data Ingestion**
   Automated data processing for quicker, turnkey solutions

BENEFITS

90%	90	35B+	91%
Reduction in ETL with no IT intervention	**ERPs** accessible in one platform	**Transactions** viewable for insights	**Reduction** in stockout

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CASE STUDY

OPTIMIZING SUPPLY CHAIN WITH FASTER INSIGHTS

Client Profile

A leading manufacturer and digital retailer of high-quality, personalized products and services in the online images market. Combining a technology-based platform and manufacturing processes, the customer helps its end consumers share, print, and preserve their memories in , innovative ways.



ITHENA in partnership with **Incorta** helped the customer **streamline workflows, reduce inventory costs,** and **analyze Oracle EBS data**, enabling **proactive decision-making**

CHALLENGES

Significant challenges included:

- Manual processes to gather and compile data
- Lack of real-time access to inventory data, resulting in delayed identification of stock-related problems
- Inaccessibility to accurate inventory data led to higher E&O costs, rigid legacy reports and wasted resources
- Inventory data delays hindered leadership's ability to assess business performance

OUR SOLUTION

Implementing our solution, we enabled the customer with:

1. **Real-Time, Decision-ready Data in Seconds**
   Real-time access to complex data gathered from diverse sources, delivering decision-ready insights
2. **Modern Self-Service Reporting**
   User-friendly dashboards displaying Oracle EBS data with drilldown to detailed operational data at scale
3. **Improved Inventory Management**
   Ad-hoc reporting and automated workflows developed the "Days on Hand" metric, reducing stockouts and E&O costs
4. **Fast Implementation Driving Business Growth**
   Implementation within 6 weeks maintaining high performance standards, accelerated business opportunities

BENEFITS

50%
Reduction in Stockouts

10+
Hours Saved Per Week

< 1
Seconds To **Gain** Real-time Insights

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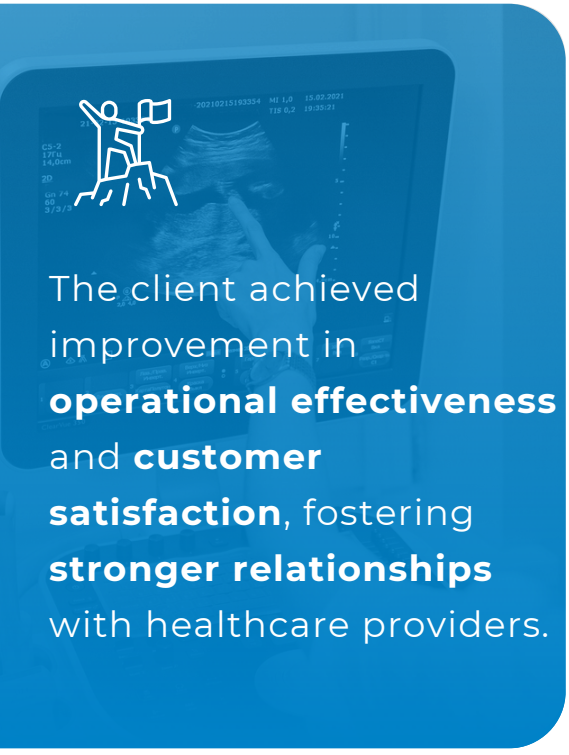
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CASE STUDY

Enhancing Performance Monitoring for Global Manufacturer of IVUS Equipment

Client Profile

A leading U.S. manufacturer of Intravascular Ultrasound (IVUS) equipment, focused on advancing medical technology through innovation.



The client achieved improvement in **operational effectiveness** and **customer satisfaction**, fostering **stronger relationships** with healthcare providers.

CHALLENGES

The client faced problems related to: -

- Lack of visibility into the procedures done on the IVUS equipment
- Absence of real-time alerts and notifications for equipment maintenance
- Inability to scale across platforms
- High maintenance costs, leading to inefficiencies

SOLUTIONS

ITHENA implemented **Business Transformation solution** that provided full visibility into the performance of IVUS equipment.

1. **Performance Monitoring**

   Created an architecture for data transfer from the Evident Vascular system to a centralized platform, ensuring efficient and reliable performance monitoring

2. **Data Pipeline & Cloud Infrastructure**

   Developed a secure data pipeline and cloud infrastructure to facilitate the seamless transfer of performance data from IVUS devices

3. **Software Updates**

   Designed and implemented software updates to enhance equipment functionality and maintain optimal performance

4. **User-friendly Monitoring Application**

   Delivered an intuitive application for real-time equipment monitoring and proactive maintenance

BENEFITS

40% **Reduction** in total maintenance costs

21% **Improvement** in operational efficiency

27% **Enhanced** customer experience

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CASE STUDY

Boosting Efficiency with B2B eCommerce and Asset Performance Management

Client Profile

The largest U.S. bakery equipment manufacturer aimed for lean manufacturing to streamline processes, eliminate waste, and boost efficiency.



B2B eCommerce & iSERV increased the client's **profitability** and elevated its customer **satisfaction score.**

CHALLENGES

The client faced challenges related to:

- Lack of real-time asset visibility caused unexpected downtime and failures
- Inaccessibility to critical maintenance parts lists, causing delayed response times
- Inefficient spare parts planning and ordering processes resulted in increased equipment downtime and revenue loss
- Limited access to order details, hindered the ability to predict deliveries
- Inadequate service assistance, reduced end-customer satisfaction, and diminished brand loyalty

SOLUTIONS

ITHENA implemented **B2B eCommerce and iSERV** solution featuring:

1. **End-to-end E-commerce**
   A seamless ordering process for machinery and spare parts, featuring 3D/2D equipment model views and a tracking system accessible through a web application
2. **Performance Monitoring**
   Enabled real-time monitoring of equipment parameters, aiding performance monitoring and predictive maintenance
3. **System Integration**
   Connectivity with Microsoft Dynamics 365 and all leading finance ERP modules to manage inventory, orders, and bills of materials (BOM)
4. **BOM Visualization**
   Enabled viewing and selecting both orderable and non-orderable spare parts, along with detailed prices, specifications, availability, locations, and images

BENEFITS

- **27%** — **Increase** in revenue from parts sales
- **17%** — **Boost** in machines uptime
- **21%** — **Faster** order dispatch
- **23%** — **Increase** in customer satisfaction

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CASE STUDY

Maximizing Profits with Performance Analytics for the Packaging Industry

Client Profile

A global provider of ready-to-eat food packaging solutions, and recipe formulation for renowned food brands and defense organizations.



iSERV optimized operations through **predictive maintenance, performance monitoring,** and **SPC controls.**

CHALLENGES

The client faced challenges related to:

- Lack of real-time visibility & unreliable OEE calculations hindered performance assessments
- Inability to track common downtime causes & conducting SPC analysis on package weights
- Unable to compare operational performance against internal goals and industry standards

SOLUTIONS

ITHENA implemented **iSERV** - our leading smart service solution enabling the customer to be proactive in visualization and eventually tracking the performance of their assets:

1. **Performance Monitoring**
   Conducting trend analysis and comparing various operational & process parameters to identify patterns, anomalies, and areas for improvement
2. **Predictive Maintenance**
   Remote monitoring, dashboards, and AI-ML based alerts and alarms to enable quick downtime turnarounds
3. **Enhanced Overall Equipment Efficiency**
   Real-time machine analytics and seamless ERP integration for precise OEE tracking and production planning
4. **Quality & Compliance Monitoring**
   Statistical process control (SPC) to monitor production consistency and quality metrics against the benchmarks
5. **Best Practice Implementation**
   Root-cause analysis helped to establish best -practices for improved shop floor processes

BENEFITS

17% **Increase** in equipment uptime

25% **Decrease** in quality concern

21% **Faster** order dispatch

27% **Increase** in revenue per additional sales

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CASE STUDY

Maximizing Profits with Performance Analytics for the Packaging Industry

Client Profile

A global provider of ready-to-eat food packaging solutions, and recipe formulation for renowned food brands and defense organizations.



iMEX optimized operations through **predictive maintenance, performance monitoring,** and **SPC controls.**

CHALLENGES

The client faced challenges related to:

- Lack of real-time visibility & unreliable OEE calculations hindered performance assessments
- Inability to track common downtime causes & conducting SPC analysis on package weights
- Unable to compare operational performance against internal goals and industry standards

SOLUTIONS

ITHENA implemented **iMEX** - our leading smart manufacturing solution, enabling the customer to be proactive in visualization and eventually tracking the performance of their assets:

1. **Performance Monitoring**
   Conducting trend analysis and comparing various operational & process parameters to identify patterns, anomalies, and areas for improvement
2. **Predictive Maintenance**
   Remote monitoring, dashboards, and AI-ML based alerts and alarms to enable quick downtime turnarounds
3. **Enhanced Overall Equipment Efficiency**
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CASE STUDY

Cutting Production Time from 10 to 8 Hours for a Leading Food Processing and Packaging Company

Client Profile

A global provider of ready-to-eat food packaging solutions, and recipe formulation for renowned food brands and defense organizations.



iSERV transformed operations by enabling **real-time visibility, predictive insights, and seamless data integration.**

CHALLENGES

The client faced challenges related to:

- Lack of real-time data validation, limited to end-of-shift or day checks
- Delayed access to historical data, only available at the end of the month
- Absence of standardized KPIs, leading to inconsistent performance tracking
- Reliance on manual processes, leading to inefficiencies and increased risk of errors
- Inability to resolve issues in real time or leverage predictive insights
- Manual data consolidation requiring several hours each week

SOLUTIONS

ITHENA implemented **iSERV**, Smart Service solution enabling the customer to be proactive in visualization and eventually tracking the performance of their assets:

1. **Real-Time Data Validation**
   Implemented data validation in real-time to ensure accurate, timely information for quicker decision-making
2. **Quick Access to Historic Data**
   Enabled access to historic data within an hour for quicker insights
3. **Performance Monitoring**
   Standardized KPIs and made them available across all teams for consistent tracking and visibility
4. **Proactive alerts**
   Deployed alarm-based exception management routines to detect and resolve anomalies in real time
5. **Predictive Maintenance**
   Delivered AI-driven platform providing real-time and predictive insights for proactive decision-making
6. **System Integration**
   Integrated seamlessly within iSERV to streamline processes and eliminate manual data consolidation

BENEFITS

25 Screens	2 hrs Saved	USD 370,000
plant-wide for real-time view	**per operator** per shift	**annual savings** per plant

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CASE STUDY

Driving Operational Excellence For A Leading Packaging Manufacturer

Client Profile

A leading manufacturer of pouching, cartooning, shrink wrapping, and packing materials for food, beverage, personal care, pharmaceutical, chemical, and tobacco industries.



iSERV optimized operations through **predictive maintenance, performance monitoring,** and **service management.**

CHALLENGES

The client faced challenges related to:

- Lack of real-time performance monitoring of assets
- Unavailability of remote access and limited visibility into assets and products hindered improved implementation plans
- Absence of a unified servicing portal for ticketing, prompt query resolution, and tracking

SOLUTIONS

ITHENA implemented **iSERV**- a smart manufacturing business solution with features like:

1. **Performance Monitoring Dashboards**

   Measure asset performance with real-time dashboards and infographics for actionable insights and trends to prevent failures and downtime

2. **Predictive Maintenance**

   Leverage AI-powered tools for remote monitoring and self-servicing, such as custom scheduling forms, alerts, and alarms, to enhance uptime and revenue

3. **Service Management**

   Streamlined process for logging and resolving issues while integrating performance monitoring modules to automate ticket creation

4. **Knowledge Portal**

   Enabled prompt self-servicing with on-the-go knowledge assets like how-to-videos, manuals, and AR/VR guided instant repairs to save service costs

5. **Performance Analytics**

   Trend analysis and comparison of various operational parameters for continuous process improvement

BENEFITS

20% **Growth** in sales revenue

27% **Increase** in service response times

30% **Increase** in operational performance

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CASE STUDY

Boosting Factory Performance with AI-Powered Analytics for T-1 Automotive Supplier

Client Profile

A global leader in mobility technology and automotive supply, known for their innovative approach to design,engineering and manufacturing.

CHALLENGES

The client faced challenges related to:

- Lack of real-time equipment monitoring
- Manual data collection and reporting
- Limited visibility into production performance
- Limited traceability of materials, products, and scrap produced
- Inconsistent quality control
- Sustainability concerns

SOLUTIONS

ITHENA deployed **iMEX**, smart manufacturing solution:

1. **Performance Monitoring**
   Implemented persona-based dashboards to monitor OEE, identify bottlenecks, and analyze machine health and downtime in real time
2. **Preventive Maintenance**
   Utilized an AI/ML-powered solution to automate data collection and schedule maintenance
3. **Digital Quality Assurance**
   Provided digital insights into product quality, ensuring consistent results and minimizing scrap waste
4. **Service Management**
   Introduced a centralized platform for managing help requests and delivering digital checklists, ensuring prompt assistance and adherence to standardized procedures
5. **Traceability System**
   Deployed system to track materials and products, throughout the production cycle, improving transparency and accountability
6. **Optimized Sustainability**
   Enabled real-time tracking and monitoring of energy consumption, improving efficiency and reducing waster generation



ITHENA optimized operations, with improved SQDC leading to **higher FRI**, **reducing downtime, boosting productivity**, and **maximizing profits.**

BENEFITS

- **25%** **Boost** in equipment performance
- **15%** **Rise** in production quality
- **23%** **Increase** in equipment uptime
- **28%** **Reduction** in energy consumption

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CASE STUDY

Seamless Transition to Digital Success with ITHENA's iTHEATRE Platform

Client Profile

A leading media company offering a diverse range of on-demand film, video, and music content.

CHALLENGES

The client faced several challenges in their digital transformation journey:

- Transitioning a large catalog to an independent digital platform while preserving brand integrity
- Implementing robust monetization strategies while integrating cloud storage, content management systems (CMS), and Digital Rights Management (DRM) for over-the-top (OTT) platform
- Ensuring seamless, high-quality streaming with a user-friendly interface to meet consumer demand
- Assuring consistent multi-channel content management across mobile apps, websites, and partner media aggregators

iTHEATRE equipped the client with a custom OTT platform, **boosting engagement, securing content, and driving revenue growth.**

SOLUTIONS

ITHENA's iTHEATRE platform empowered the client with:

1. **Customized OTT Platform**
   Designed and deployed an independent OTT platform for high-quality audio and video streaming, offering 100% content control
2. **Comprehensive Channel Integration**
   Enabled wide content distribution by integrating with leading OTT channels and telecom providers, broadening audience reach
3. **Offline Access & DRM**
   Added offline streaming capabilities and robust DRM for content protection against piracy
4. **Advanced Storage and Analytics**
   Utilized cloud-based storage solutions for efficient content management and AI/ML analytics for optimizing content strategies
5. **Branding Freedom**
   Fully customized the OTT platform's interface to align with the client's brand identity and supported multiple languages to cater to a diverse audience
6. **Dynamic Monetization Models**
   Implemented a combination TVOD and SVOD models with multiple payment gateway integrations to maximize revenue

BENEFITS

15%	5+	30-day	50%
YOY Increase in revenue growth	**Million** user base expansion	**Rapid** deployment	**Boost** in audience engagement

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CASE STUDY

Elevating KPI Tracking and Operational Efficiency in Defense Manufacturing with iGEMBA

Client Profile

The client specializes in designing, developing, and manufacturing weapon systems, missile parts, and ammunition.

CHALLENGES

The client struggled with:

- Delayed decision-making and action due to time-consuming paper-based KPI monitoring during Gemba walks
- Inability to identify trends and patterns for proactive management of shop floor incidents
- Limited visibility into key performance indicators across SDQC
- Unavailability of historical data to conduct thorough root cause analysis (RCA) and developing targeted corrective actions



iGEMBA revolutionized the client's operations by **digitizing and streamlining KPI tracking** and performance management, enhancing **efficiency and faster decision-making.**

SOLUTIONS

ITHENA's Digital Shopfloor (iGEMBA) solution provided the client with:

1. **Digital KPI Dashboard**
   Digitized dashboards enabled users to define organizational hierarchy and KPIs for a unified view of shop floor performance
2. **Smart Visualization**
   Persona-based visualization of KPI formulas and color thresholds for clear performance insights
3. **Historical KPI Access**
   Provided access to historical data of KPIs for easy comparison of current observations with past trends, enabling effective pattern analysis
4. **Proactive Issue Resolution**
   Streamlined efficient task tracking and issue resolution related to KPI breaches

BENEFITS

32% **Boost** in overall productivity

25% **Reduction** in decision-making time

29% **Increase** in operational efficiency

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CASE STUDY

Optimizing Efficiency for World's Largest Composite Cans Manufacturer

Client Profile

SONOCO is the world's largest manufacturer of composite cans, tubes, and cores, serving the food and beverage industry.



iSERV, smart service solution ensured **continuous improvement** and helped the customer maintain their **industry leadership.**

CHALLENGES

The client faced problems related to: -

- Absence of remote monitoring hindered effective system performance tracking and continuous improvement
- Lack of a unified platform for real-time insights and alerts, limiting proactive maintenance and decision-making
- Inability to predict critical equipment KPIs, resulting in higher unplanned downtime
- Disorganized case logging and task management slowed internal team response times
- No centralized digital knowledge repository for troubleshooting, extending resolution times
- Decrease in overall plant productivity and efficiency

SOLUTIONS

ITHENA implemented **iSERV** solution that enabled the client with: -

1. **Performance Monitoring**
   Real-time visibility into asset performance contributed towards continuous monitoring. Delivered persona-based dashboards for reporting, proactive alerts, and alarms to support maintenance operations

2. **Predictive Maintenance**
   Digital logbooks and checklists streamlined records. Automated inspections ensured consistent evaluations. Condition & Schedule-Based Maintenance reduced unplanned downtime optimizing the production efficiency

3. **Service Management**
   Integrated ticketing & case management made it easier to log, and prioritize service requests. Service operations including customer onboarding, technician scheduling & routing were streamlined

4. **Knowledge Portal**
   From a content hub offering training materials, How-To videos, and mechanics schematics, to the ability to raise service requests through tickets, iSERV offered self-servicing in the customer's hand

BENEFITS

5 week
Rapid deployment

35%
Improvement in efficiency of maintenance operations

45%
Reduction in equipment downtime

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CASE STUDY

Transforming Service Operations for a Leading Packaging Manufacturer with iSERV

Client Profile

The client is a pioneer in manufacturing shrink sleeve labels, self-adhesive labels, spouted pouches, and packaging machinery.

CHALLENGES

The client struggled with:

- Lack of a unified platform for end-customers to efficiently raise service tickets
- Inability to provide timely service, resulting in dissatisfied customers
- Difficutly to remotely monitor critical equipment parameters
- Decline in overall service efficiency, leading to reduced customer satisfaction



iSERV streamlined **ticket management, enabled remote equipment monitoring, and enhanced overall service efficiency.**

SOLUTIONS

iSERV, **Smart Service** solution was deployed to meet the client's needs featuring:

1. **IoT-Based Service Management**
   Implemented a platform enabling end-customers to raise service tickets, automatically assigning them to the appropriate service executive

2. **Performance Monitoring**
   Enabled continuous monitoring of equipment performance with an alert management system for proactive issue detection

3. **Knowledge Portal**
   Provided access to maintenance manuals and self-help videos, enhanced with AR/VR technology for better support

4. **Remote Collaboration**
   Facilitated remote collaboration between OEM service teams and end-users, ensuring faster issue resolution and improved efficiency

BENEFITS

27%
Increase in OEM service efficiency

20%
Reduction in service costs

35%
Increase in customer satisfaction

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CASE STUDY

Enhancing Service Efficiency and Customer Satisfaction for a Global Leader in Factory Automation

Client Profile

The client is a global leader in custom turnkey factory automation systems, crafting solutions for manufacturers worldwide.

CHALLENGES

The client struggled with:

- Difficulty in remotely monitoring equipment and performing preventive maintenance
- High service costs from machines located at remote customer sites
- Prolonged issue resolution time
- Absence of a unified platform for end-customers to raise service tickets
- Reduced end-customer satisfaction



The iSERV solution **improved remote equipment monitoring, reduced service costs, and enhanced issue** resolution with a centralized ticketing system and predictive maintenance.

SOLUTIONS

The client partnered with **ITHENA** and implemented **iSERV** on their machines:

1. **Predictive Maintenance**
   Empowered service teams to carry out predictive maintenance by monitoring critical equipment parameters
2. **Centralized Ticket Management**
   Implemented a centralized ticket management portal for raising service tickets and queries
3. **Knowledge Portal with AR/VR Integration**
   Provided access to knowledge artifacts: self-help videos, maintenance manuals, and AR/VR integration
4. **Remote collaboration**
   Facilitated real-time remote collaboration between the OEM and end customers

BENEFITS

- **20%** — **Reduction** in service costs
- **29%** — **Increase** in end-customer satisfaction
- **17%** — **Improvement** in issue resolution time
- **24%** — **Decrease** in unplanned equipment downtime

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CASE STUDY

Enhanced Data Accessibility and Decision-Making for a Leading Marine Transport Corporation

Client Profile

A US-based marine transport corporation specializing in bulk goods transportation on inland waterways, offering ship anchorage, fuel deliveries, and supplies to the towing sector.



With iSERV, the client achieved substantial improvements in **operational efficiency** and **enhanced issue resolution** capabilities.

CHALLENGES

The client struggled with:

- Lack of access to detailed data for specific barges and equipment
- Insufficient granular data hindered the identification of the root causes of issues
- Shore-side engineers lacked real-time information on location, speed, and engine parameters

SOLUTIONS

ITHENA's Smart Service solution, iSERV was deployed with features including:

1. **Multi-Data Source Integration**
   Integrated live weather, NOAA river stages, and Kepware data into a single source
2. **Unified Application Insights**
   A single POS integrated application providing insights into all boats
3. **Performance Monitoring**
   Enabled real-time equipment monitoring to analyze specific barges and equipment for faster issue identification
4. **Geo-Fence Configuration and Automated Alerts**
   Configured geo-fences for each user and automated alerts to notify users when barges enter or exit designated areas
5. **Holistic Data Visualization**
   Displayed boat alerts holistically in BI dashboards for data-driven decisions

BENEFITS

37% — **Increase** in overall operational efficiency

25% — **Reduction** in issue resolution time

30% — **Faster** decision-making

24/7 — **Remote** access and real-time alerts

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CASE STUDY

Integrating and Enhancing Development and Support for a Telematics Service Provider

Client Profile

A prominent U.S.-based provider of trailer telematics solutions dedicated to empowering fleet operators with advanced tools to monitor, manage, and optimize their assets.



With iSAT, the client achieved substantial improvements in **asset lifetime,** reduced **maintenance expenses** and streamlined **audits and daily operations**.

CHALLENGES

The client struggled with:

- Limitations in scalability due to legacy application modules, struggling to handle over 50K trailers and process 7M+ messages daily
- Lack of support and integration capabilities with third-party sensor providers
- Aggressive timelines for delivering changes

SOLUTIONS

ITHENA's Smart Asset Tracking solution, iSAT was deployed with features including:

1. **System Integration and Timely Delivery to Changes**
   Delivered device microcontroller unit (MCU) integrations with new features and enhancements, ensuring timely and high-quality implementation
2. **Scalable Software Provisioning**
   Provided scalable software supporting 3rd party sensor providers, increasing performance and platform uptime
3. **Data-driven Service and Analytics**
   Enabled efficient management of high data volumes (50K+ trailers, 7M+ messages daily) with workflow-driven analytics to manage the infrastructure for inclusive value
4. **Geo-Fence Configuration and Automated Alerts**
   Identified exact location of an asset and configured automated alerts to notify change in location, loss or theft
5. **Cloud-Based Security**
   Hosted on cloud (AWS) secured data storage and management capabilities

BENEFITS

- **100%** — **Accuracy** in asset tracking
- **30%** — **Increase** in maintenance productivity
- **45%** — **Rise** in asset utilization
- **24/7** — **Remote access** and real-time alerts

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CASE STUDY

Digitizing Field Services for Wastewater Equipment Manufacturer

Client Profile

A globally leading manufacturer of dewatering centrifuges and sludge thickeners. It also provides centrifuge, repair, and parts services.

CHALLENGES

The client needed to prevent machine breakdowns and reduce downtime due to:

- High maintenance costs from remote customer locations
- Frequent downtime and failures caused by limited asset visibility
- Delayed responses and reduced customer satisfaction due to the absence of a ticketing system

iSERV enhanced the **longevity** of clients' **utility machines** and improved service management through a centralized ticketing portal.

SOLUTIONS

ITHENA deployed a **Smart Service solution– iSERV** with functionality such as:

1. **Predictive Maintenance**
   Monitored real-time KPIs to generate insights, alerts, and forecasts for proactive maintenance and reduced downtime
2. **Knowledge Portal**
   Offered centralized access to on-the-go resources such as how-to videos, manuals, and machine schematics for self-service troubleshooting
3. **AR/VR Integration**
   Implemented AR & VR for real-time guided repairs, reducing service costs through remote collaboration with customers
4. **Centralized Ticket Management Portal**
   Digitized workflows, scheduled orders, resolved and tracked queries through a unified web and desktop platform with 24/7 access

BENEFITS

- **40%** **Increase** in customer satisfaction
- **30%** **Reduction** in on-field services costs
- **3x** **Faster** time-to-query resolution
- **15%** **Decrease** in equipment downtime

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CASE STUDY

Transforming Support Efficiency for a Major Financial Holding Company

Client Profile

A leader in digital banking and credit card services, recognized for innovative technology and user-friendly mobile experiences.

ITHENA helped the digital banking leader **improve customer support, boosting productivity** and response times for a **better service experience.**

CHALLENGES

The client struggled with:

- Inefficient support workflow leading to decreased operational efficiency
- Lack of contextual communication hindering effective team collaboration
- Prolonged support response times leading to slower customer issue resolution

SOLUTIONS

ITHENA's Smart Service (iSERV) solution provided the client with:

1. **Ticket Integration with Slack**
   Eliminated the need to switch between applications for support requests

2. **Query Response Time Monitoring**
   Improved communication efficiency within the support team

BENEFITS

31%
Enhancement in support efficiency

19%
Increase in employee productivity

27%
Improvement in communication

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CASE STUDY

Enhancing Service Compliance and Traceability for a Food Manufacturer

Client Profile

One of the world's largest companies in confectionery, food, beverages, and snacks.

CHALLENGES

The client struggled with:

- Frequent machine breakdowns leading to high downtime
- Compliance and traceability issues impacting operational standards
- High rate of human error due to manual checklist management

ITHENA's iSERV platform **boosted efficiency, reduced downtime, minimized human error, and improved compliance and product quality**

SOLUTIONS

ITHENA deployed a **Smart Service solution– iSERV,** that efficiently delivered end-to-end service platform for customers through:

1. **Predictive Maintenance**
   Enabled real-time monitoring of equipment through digital checklists for inspection and maintenance
2. **Knowledge Portal**
   Provided access to a knowledge portal for self-service troubleshooting of common errors
3. **Service Portal**
   Introduced a service ticketing portal to define, schedule, complete, and report on services, reducing response time
4. **Service Management**
   Deployed a back office service portal for technician, routing, and scheduling management

BENEFITS

31% **Increase** in service compliance & traceability

32% **Reduction** in equipment downtime

25% **Increase** in service efficiencies

100% **Digitization** of checklists

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CASE STUDY

Transforming Operational Efficiency with iGEMBA for a Leading Golf Equipment Manufacturer

Client Profile

A leading manufacturer of premium golf equipment, renowned for its innovative technology that enhances performance for golfers of all levels.



iGEMBA transformed the client's operations by significantly enhancing **operational efficiency** and accelerating **data-driven decision-making** through **advanced digital transformation**.

CHALLENGES

The client struggled with:

- Delay in decision-making and poor operational efficiency due to reliance on paper-based KPIs
- Lack of automated data feeds hindered real-time insights and limited proactive management
- Absence of historical data prevented trend analysis and effective root cause identification
- Inability to remap personnel assignments or track action items reduced visibility and impacted productivity

SOLUTIONS

ITHENA's Digital Shopfloor (iGEMBA) solution provided the client with:

1. **Digital KPI Management**
   Customized persona-based dashboards for real-time KPI data views and enhanced performance monitoring
2. **Personnel and Action Item Tracking**
   Streamlined tracking of workforce efficiency and task progress, improving operational efficiency
3. **Color-Coded Dashboards**
   Intuitive color-coded (yellow/green) visual indicators providing instant insights into day and night performance metrics
4. **Targeted Training and Implementation**
   Comprehensive training and testing with area representatives ensured the effective use of dashboards for optimal results

BENEFITS

29% **Reduction** in decision-making time

32% **Faster** issue resolution

25% **Increase** in operational efficiency

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CASE STUDY

Driving Growth and Performance in the EV Charging Market with iSEC

Client Profile

The client is a leading provider of turn-key solutions for designing, installing, and managing EV charging systems in the US.



iSEC enabled **faster issue detection, real-time performance analytics, and seamless remote management, enhancing the overall user experience.**

CHALLENGES

The client faced operational challenges in monitoring remote charging stations.

- Lack of real-time monitoring led to delays in detecting and diagnosing errors at remote EV charging stations
- Limited charger capacity and inability to monitor station performance hindered operational efficiency
- Inadequate billing systems and tracking mechanisms resulted in financial discrepancies and operational risks

SOLUTIONS

ITHENA implemented iSEC, a smart EV charging platform, to enhance the service experience for its end customers.

1. **One-stop Solution**
   Launched iSEC, a Charging Station Management System (CSMS) in both web and app formats, within 4 weeks, with end-to-end customer support
2. **Remote Monitoring**
   Installed specific 7.4 kW chargers on vans and UTVs (utility terrain vehicles) enabling modern mobile charging
3. **Diverse Charging Options**
   Offered a wide range of EV chargers like 7.4 kW, 60 kW, 120 kW, & 400 kW, able to charge up to ten vehicles at once with a single Level 2 AC charger
4. **Performance Monitoring**
   Provided real-time monitoring with actionable insights and remote management to reduce downtime, address performance issues, and ensure a consistent user experience
5. **AI-Based Features**
   Supplied EV chargers with modern features like fast charging, and secure digital payment gateways for real-time revenue optimization

BENEFITS

1K+
Rapid deployment of EV chargers

90%
Faster Charging Insights

500k
EV **Users Expanded**

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CASE STUDY

Accelerating Diagnostic Software Delivery and Enhancing Customer Experience for Auto Engineering Services Provider

Client Profile

A global leader in innovative, efficient automotive diagnostic tools, advancing next-generation vehicle technologies.

CHALLENGES

The client faced problems related to their diagnostic software.

- Difficulty in meeting high expectations of end-customers (OEMs and distributors) for new-age diagnostic software to keep pace with the evolving industry standards
- Inability to meet aggressive project timelines that caused recurring project delays
- Failed to deliver a modern user experience with poor integration of third-party diagnostic routines which hampered both usability and performance



The client achieved **higher profits** and **exceptional customer service experience** with end-to-end diagnostic software modernization.

SOLUTIONS

ITHENA deployed advanced Modernization solutions including test service cockpit and dashboard designer console for vehicles.

1. **App Modernization**
   Supported both web and mobile (MEAN, iOS, Android) platforms for building dashboards and running diagnostic tests across devices
2. **Design Thinking Approach**
   Utilized modern UI/UX and cutting-edge design thinking practices
3. **Dynamic Framework**
   Featured a robust development framework with complex dynamic components like a dashboard designer console and device management
4. **Modern Practices**
   Utilized Agile Scrum, CI/CD, and DevOps best practices to ensure high-quality software development

BENEFITS

20%
Boost in revenue

5x
Faster delivery of diagnostic software

32%
Increase in efficiency

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CASE STUDY

Enhancing Training Efficiency and Productivity for a Leading Shot Blasting Manufacturer

Client Profile

A leading U.S. manufacturer of shot and wheel blasting machines, committed to advancing industrial operations through innovative solutions.

CHALLENGES

The client faced issues related to training and productivity.

- Delayed issue resolution times, impacting customer satisfaction
- Inefficient processes that hindered employee productivity
- Insufficient training support, restricting skill development and performance improvement
- Reliance on paper-based training materials, causing inefficiencies
- High maintenance expenses, reducing overall operational effectiveness



ITHENA's AI-powered solution **streamlined training processes, improved operational efficiency, and enhanced customer satisfaction**.

SOLUTIONS

ITHENA deployed a Business Transformation solution to develop AR-guided training modules.

1. **AR-Guided Training**
   Delivered AR-guided training modules with step-by-step instructions for equipment operation and maintenance
2. **AI-powered Solution**
   Implemented an AI module that auto-generates seamless voiceovers for each training module
3. **Knowledge Portal**
   Created a centralized documentation system for easy access
4. **Training Evaluation**
   Enabled easy progress tracking for each training module

BENEFITS

40%
Decrease in issue resolution time

1K
Man-hours saved in resolving customer issues

50%
Increase in customer satisfaction

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CASE STUDY

Enhancing Operational Efficiency with Real-Time Performance Monitoring for a Metal Forging Leader

Client Profile

A leader in the metal forging industry, pioneering the transition of traditional metal-forming methods into advanced, high-tech solutions.

CHALLENGES

The client struggled with:

- Inadequate visibility into KPIs, which delayed decision-making and impacted operational control
- Time-consuming manual processes for data collection and analysis
- Lack of synchronization in maintenance activities across plants



iMEX **boosted operational efficiency, increased productivity, and maximized profits** by enhancing data-driven decision-making and asset management.

SOLUTIONS

ITHENA addressed the client's challenges with iMEX solution.

1 **Performance Monitoring**
Enabled real-time data visibility into departmental KPIs, providing detailed insights into monitoring metrics

2 **Persona-based Dashboard**
Delivered a comprehensive dashboard solution for efficient maintenance monitoring, tailored to specific user roles

3 **Coordinated Maintenance**
Streamlined maintenance management activities for 200 machines across 3 plants

BENEFITS

31% **Increase** in maintenance efficiency

54% **Improvement** in productivity

23% **Enhancement** in visibility and control

25% **Reduction** in downtime

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CASE STUDY

Boosting Revenue Growth with iMEX + FTDM for a Metal Forging Leader

Client Profile

A leader in the metal forging industry, pioneering the transition of traditional metal-forming methods into advanced, high-tech solutions.



iMEX + FTDM **boosted operational efficiency, increased productivity, and maximized profits** by enhancing data-driven decision-making and asset management.

CHALLENGES

The client struggled with:

- Inadequate visibility into KPIs, which delayed decision-making and impacted operational control
- Time-consuming manual processes for data collection and analysis
- Lack of synchronization in maintenance activities across plants

SOLUTIONS

ITHENA addressed the client's challenges with iMEX solution powered by FactoryTalk DataMosaix (FTDM).

1. **Performance Monitoring**
   Enabled real-time data visibility into departmental KPIs, providing detailed insights into monitoring metrics
2. **Persona-based Dashboard**
   Delivered a comprehensive dashboard solution for efficient maintenance monitoring, tailored to specific user roles
3. **Coordinated Maintenance**
   Streamlined maintenance management activities for 200 machines across plants

BENEFITS

- **31%** — **Increase** in maintenance efficiency
- **54%** — **Improvement** in productivity
- **23%** — **Enhancement** in visibility and control
- **25%** — **Reduction** in downtime

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CASE STUDY

Enhancing Efficiency in Smart Infrastructure Management for National Highway Development

Client Profile

An Asian central authority overseeing national highway development and management aimed to implement smart infrastructure governance solutions.

CHALLENGES

The client sought to implement sustainable, intelligent urban street lighting solutions to overcome the limitations of traditional systems, including:

- Excessive energy consumption and a significant carbon footprint
- Lack of control and flexibility, requiring constant manual intervention
- High maintenance expenses and prolonged downtime



iSSL addressed these with IoT-enabled connectivity and predictive maintenance, achieving **energy savings, increased uptime,** and **enhanced citizen safety.**

SOLUTIONS

ITHENA implemented the **Smart Street Light Solution (iSSL)** to foster a smart community.

1. **Design Mapping**
   Optimized street light layout considering road configurations, traffic patterns, and visibility needs
2. **Expert Consultancy**
   Delivered insights on energy-efficient technologies, including dimming controls, smart mesh connectivity, remote scheduling, and management tools
3. **Smart Connectivity**
   Integrated IoT for remote monitoring, diagnostics with alerts, predictive maintenance, and AR-enabled service excellence
4. **Smart Application**
   A total of 210 poles have been installed to ensure comprehensive coverage.

BENEFITS

37% **Decrease** in energy consumption

35% **Increase** in lamp uptime

23% **Decrease** in Carbon Footprint

70% **Enhancement** in citizen safety & experience

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CASE STUDY

Revolutionizing Operational Efficiency for a Leading Boiler Room Product Manufacturer with iGEMBA

Client Profile

A leading North American manufacturer and supplier of boiler room products, specializing in boilers, burners, accessories, and controls.

CHALLENGES

The client struggled with:

- Manual and paper-based KPI monitoring processes
- The absence of historical data delayed actionable insights
- Inadequate drill-down functionality for leadership
- Lack of interactive data access capabilities and detailed insights



iGEMBA digitized Gemba walks and delivered real-time insights, **improving data-driven decision-making** and **productivity.**

SOLUTIONS

The client partnered with **ITHENA** and implemented the **Digital Shopfloor (iGEMBA)** solution:

1. **Digitized Gemba Walks**
   Provided persona-based dashboard with user-configurable organizational structure
2. **Interactive Dashboard**
   Delivered customizable KPI formulas and color limits for visual indicators
3. **Data Visualization**
   Enabled drill-down capabilities for detailed data insights
4. **Task Management**
   Empowered with Kanban board with task assignment and tracking capabilities

BENEFITS

25%
Faster decision making

32%
Rise in team productivity

28%
Decrease in production delays

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CASE STUDY

Enhancing Service Management for a Leading Electronic Products Manufacturer

Client Profile

A leading manufacturer of innovative electronic products and systems for the Army, Navy, and Air Force.

CHALLENGES

The client faced several critical issues, including:

- Frequent equipment downtime caused by obsolete parts
- Dependence on manual workflows and Bills of Materials (BOMs)
- Costly and delayed equipment servicing
- Lack of predictive insights into spare part consumption, resulting in high inventory costs



By leveraging iSERV, the client achieved transformative **operational efficiency, a decrease in downtime, and reduced costs.**

SOLUTIONS

ITHENA's iSERV solution helped the client to address their challenges:

1. **Performance Monitoring**
   Digitized workflows and BOMs, enabling real-time visibility into asset performance
2. **Predictive Maintenance**
   Optimized spare parts inventory with digital logbooks, streamlined checklists, and predictive analytics
3. **Service Management**
   Integrated ticketing and remote collaboration, enhanced by AR/VR capabilities, for seamless service support
4. **Knowledge Portal**
   Delivered a robust content hub with training materials, how-to videos, and mechanics schematic

BENEFITS

- **33%** **Reduction** in service cost
- **32%** **Decrease** in equipment downtime
- **27%** **Reduction** in process time
- **25%** **Decline** in inventory costs

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CASE STUDY

Driving Revenue Growth Through ITHENA's Innovative OTT Platform Integration

Client Profile

A leading non-profit foundation working towards supporting and promoting Carnatic music worldwide through music concerts, vocals lessons, and maintaining the legacy of the art form.



iTHEATRE enabled the client to **expand global reach and increase revenue** through an innovative OTT platform for content monetization and audience engagement.

CHALLENGES

The client struggled with:

- Inability to monetize previously created art content
- Limited reach of art content to a global audience, as it was restricted to offline events
- Insufficient consumption of art content due to the lack of an online presence across multiple platforms

SOLUTIONS

The client partnered with **ITHENA** and implemented the iTHEATRE **platform:**

1. **Customized OTT Platforms**
   Created an OTT platform for live streaming of content with high-quality audio and video
2. **Digital Workshop Management**
   Enabled administrators to create, edit, and manage digital workshops
3. **Advanced Storage and Analytics**
   Provided cloud video hosting for content storage and analytics capabilities with audience insights
4. **Seamless Payment Integration**
   Offered content monetization and integrated the OTT platform with multiple payment gateways

BENEFITS

32%
Rise in audience reach

28%
Increase in revenue

5x
Faster decision making

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CASE STUDY

Driving Business Growth Through Advanced Data Analytics

Client Profile

A leading general insurance and reinsurance company in Saudi Arabia, dedicated to offering its clients high-quality services and competitive insurance.

CHALLENGES

The client faced several critical issues, including:

- Difficulty managing large volumes of complex data from multiple sources
- Inability to stay competitive in a rapidly evolving insurance market
- Difficulty mitigating high levels of risk exposure
- Lack of actionable business intelligence to drive decisions



iRDS empowered the client to **outpace competition, mitigate risks, and achieve substantial business growth** by integrating data analytics and predictive technologies.

SOLUTIONS

The client partnered with **ITHENA** and implemented the **Rapid Deployment Solution (iRDS)**:

1. **Data Migration & Validation**
   Transferred complex data from local sources, then validated and tested it using SQL
2. **Performance Dashboard**
   Created dashboards to generate actionable insights on portfolio performance and risk analysis
3. **Predictive Analytics**
   Built AI/ML-driven models to identify and prevent fraudulent activities
4. **Cloud Backup Implementation**
   Implemented secure cloud backup using the EBS module to ensure data integrity and accessibility

BENEFITS

20%
Increase in revenue

10%
Reduction in risks

30%
Decrease in revenue loss

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CASE STUDY

Driving Business Growth with iSERV for a Leading AI & Machine Learning Company

Client Profile

A leading AI and machine learning company that offers predictive analytics solutions to help businesses optimize operations, improve decision-making, and drive growth.

CHALLENGES

The client struggled with:

- Difficulty collecting large volumes of data from large vehicular machines
- Inability to provide asset data to end users in the form of dashboards
- Lack of AI/ML models for persona-centric dashboards

SOLUTIONS

ITHENA addressed the client's challenges with **iSERV** solution:

1. **Persona-based Dashboard**
   Enabled the integration of predictive models to create user-friendly, persona-based dashboards
2. **Performance Monitoring**
   Empowered accurate data collection, analytical model execution, and customized visualization of asset performance
3. **Predictive Maintenance**
   Optimized inventory with digital logbooks, streamlined checklists, and predictive analytics
4. **AI-powered Solution**
   Implemented AI/ML models with a black-boxing feature to predict total accumulated wear and fuel consumption



With iSERV, the client realized **enhanced operational efficiency, improved decision-making, and substantial business growth**.

BENEFITS

27%
Rise in asset efficiency

32%
Boost in revenue growth

35%
Reduction in operational costs

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CASE STUDY

Improving Training and Efficiency for a Leading Packaging Manufacturer with iSERV

Client Profile

A leading manufacturer of automated packaging equipment, offering innovative solutions for industries such as food, beverage, and pharmaceuticals.

CHALLENGES

The client struggled with:

- High number of hours spent resolving customer issues
- Excessive time and effort in assigning dedicated trainers for each training module
- Over-reliance on paper documentation for training materials
- Lack of AR-guided training modules for executing multiple machine procedures



iSERV solution helped the client to **streamline training, improve issue resolution, and enhance productivity.**

SOLUTIONS

ITHENA's iSERV solution provided the client with:

1. **Service Support**
   Delivered AR-guided training modules with step-by-step instructions
2. **Knowledge Portal**
   Developed a centralized documentation system for easy access
3. **Progress Tracking**
   Enabled simple progress tracking for each training module
4. **Training Flexibility**
   Provided multiple iterations for each training module

BENEFITS

40%
Decrease in time to resolution

30%
Decline in total cost of ownership

27%
Increase in employee productivity

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CASE STUDY

Driving Innovation and Efficiency for a Leading Refrigeration Manufacturer with iSERV

Client Profile

A leading commercial refrigeration equipment manufacturer, delivering innovative and sustainable refrigeration solutions that meet the diverse needs of its clients.

CHALLENGES

The client struggled with:

- Inability to track inventory in real-time
- Lack of effective cooler and freezer temperature monitoring
- Inefficient cooler network management
- Lack of integrated advanced analytics and machine learning
- Absence of cloud-based reporting and visualization capabilities



ITHENA's iSERV solution **optimized performance, reduced costs, and enhanced service delivery**, resulting in **improved operational efficiency and product quality.**

SOLUTIONS

ITHENA's iSERV solution empowered the client with:

1. **Performance Monitoring**
   Connected coolers and freezers with sensors to track inventory, monitor energy efficiency, and prevent ice cream meltdowns
2. **Global Cooler Network Management**
   Managed 1 million branded beverage coolers worldwide to balance supply and demand
3. **Advanced Analytics & Machine Learning**
   Integrated advanced analytics/ML to view customer insights and device performance data
4. **Persona-based Dashboards**
   Provided cloud application software to display dashboards, generate reports, and send alerts and notifications

BENEFITS

37% **Boost** in service excellence

20% **Improvement** in product lifecycle

27% **Enhancement** in energy management

19% **Increase** in product quality

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CASE STUDY

Optimizing Performance and Service Efficiency for a Global Automation Provider

Client Profile

A global provider of automation and technology solutions for the food processing, meat, and packaging industries.

CHALLENGES

The client struggled with:

- Lack of effective performance monitoring
- Insufficient remote support capabilities
- Limited workforce empowerment and efficiency
- Inefficient and disorganized ticketing system

SOLUTIONS

ITHENA's iSERV solution empowered the client with:

1. **Performance Monitoring**
   Delivered persona-based dashboards with real-time visibility into KPIs like OEE, MTTR, and MTBF to optimize operational performance
2. **Preventive Maintenance**
   Enabled AI/ML-powered solution to automate data collection and schedule maintenance
3. **Service Management**
   Integrated PLC and HMI connectivity for remote troubleshooting, support management, and simplified ticket creation, enhancing routing and overall ticket management efficiency
4. **Knowledge Portal**
   Provided access to a knowledge portal for self-service troubleshooting of common errors
5. **E-commerce Integration**
   Simplified spare parts ordering process featuring 3D/2D equipment models



iSERV streamlined maintenance processes, improved equipment reliability, and **boosted customer satisfaction**, leading to **significant improvements in operational efficiency and service delivery.**

BENEFITS

34%
Rise in customer satisfaction

25%
Reduction in maintenance cost

21%
Improvement in equipment performance

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CASE STUDY

Boosting Revenue Growth through Enhanced Service Operations for a Leading Manufacturer

Client Profile

A leading North American manufacturer specializing in industrial and commercial equipment, offering sampling and analysis techniques to customers around the globe.



iSERV solution **improved service efficiency, drove revenue growth** through better customer support, and **boosted equipment uptime** with timely maintenance and **faster issue resolution**.

CHALLENGES

The client struggled with:

- Absence of a dedicated service team caused engineers to spend time on service tickets, delaying issue resolution
- Manpower shortages and scheduling difficulties hindered engineers' availability for customer support
- Maintenance delays and improper execution led to equipment issues and unplanned downtime
- Lack of a platform for customers to order spares resulted in missed revenue opportunities

SOLUTIONS

ITHENA's iSERV solution empowered the client with:

1. **Remote Collaboration**
   Centralized support experts were equipped to collaborate effectively with customer technicians remotely
2. **Service Management**
   Provided customers with a dedicated channel to submit service tickets
3. **Knowledge Portal**
   Delivered a centralized repository for easy access to manuals and technical documents
4. **Integrated Ticketing Management**
   Empowered technicians with quick access to relevant knowledge and historical ticket data, improving FTR and enhancing ticket resolution efficiency
5. **E-commerce Integration**
   Provided a seamless ordering process for machinery and spare parts, featuring 3D/2D equipment model views

BENEFITS

58%
Savings in cost of service

34%
Boost in revenue

27%
Rise in equipment uptime

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CASE STUDY

Transforming Service Operations for a Leading Industrial Filtration Manufacturer

Client Profile

A leading US-based manufacturer of industrial filtration solutions, offering customized products such as automatic strainers, cartridge filters, and backwashing systems.



iSERV solution significantly enhanced service efficiency, leading to a **substantial boost in revenue, improved service excellence**, and a noticeable **increase in overall customer satisfaction**.

CHALLENGES

The client struggled with:

- Lack of a centralized knowledge repository
- Inability to provide effective training due to reliance on paper-based documentation
- Inefficient customer issue resolution system, leading to prolonged resolution times
- Lack of efficient service subscriptions
- Inability to cross-sell during service activities, limiting revenue growth

SOLUTIONS

ITHENA's iSERV solution empowered the client with:

1. **Remote collaboration with AR/VR**
   Centralized support experts used AR/VR technology to collaborate efficiently with customer technicians remotely.
2. **Service Management**
   Offered customers a dedicated platform for submitting service tickets
3. **Knowledge Portal**
   Delivered a centralized repository of a content hub offering training materials, How-To videos, and mechanics schematics
4. **Integrated Ticketing Management**
   Enabled technicians to quickly access relevant knowledge and historical ticket data, boosting FTR and improving resolution efficiency.
5. **E-commerce Integration**
   Streamlined the ordering process for machinery and spare parts with 3D/2D equipment model views

BENEFITS

32%
Rise in service excellence

37%
Boost in revenue

28%
Enhanced customer experience

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CASE STUDY

Optimizing Operations and Reliability for a Leading Craft Brewery

Client Profile

A prominent craft brewery specializing in advanced brewing processes and sustainable manufacturing practices. It employs advanced production techniques across multiple facilities to produce high-quality beers.



ITHENA helped a leading craft brewery **streamline operations, enhance equipment reliability, and improve decision-making efficiency.**

CHALLENGES

The client struggled with:

- Absence of remote monitoring hindered effective system performance tracking and continuous improvement
- Lack of a unified platform for real-time insights and alerts limited proactive maintenance and decision-making
- Disorganized case logging and task management slowed internal team response times

SOLUTIONS

ITHENA's Smart Service (iSERV) solution empowered the client by:

1. **Performance Monitoring**
   Enabled seamless asset connectivity, real-time KPI tracking, and proactive alerts through persona-based dashboards for informed decision-making
2. **Predictive Maintenance**
   Digitized logbooks, automated inspections, and streamlined work order management with scheduled maintenance to maximize uptime and reliability
3. **Service Management**
   Integrated a unified ticketing system, optimizing technician allocation, and utilizing AR/VR for remote collaboration, accelerating issue resolution
4. **Knowledge Portal**
   Provided a centralized hub with how-to videos, training manuals, and self-service resources to improve efficiency and empower teams

BENEFITS

30% **Reduction** in unplanned downtime

20% **Faster** decision-making

25% **Improvement** in asset visibility

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CASE STUDY

Empowering Real-Time Insights and Decision-Making for a Leading Automotive Manufacturer

Client Profile

A leading automotive OEM, known for producing compact, fuel-efficient vehicles. The company emphasizes innovation, design, and sustainability, with a strong commitment to advancing automotive technologies.



The iRDS solution revolutionized the client's operations by greatly improving operational efficiency, **accelerating decision-making, enhancing quality data management, and optimizing production processes**.

CHALLENGES

The client struggled with:

- Lack of automation and digitization in quality data capture and integrated reporting
- Inability to provide real-time KPI-MIS access for leadership teams through mobile devices
- Lack of quick defect alerts and actionable insights on the production line to optimize short-looping
- Absence of a centralized database for MIS with data analytics support
- Inability to provide different levels of leadership with access to a compiled quality KPI dashboard

SOLUTIONS

ITHENA's iRDS solution provided the client with:

1. **Real-Time KPI Access**
   Equipped leadership with integrated, real-time KPI data, accessible anytime and anywhere, enabling timely decision-making
2. **Defect Tracking**
   Enabled quick data entry and real-time status tracking for defects on the shop floor
3. **Data Extraction**
   Automated data extraction from existing systems, reducing manual updates
4. **Reliability Logging**
   Provided consistent tracking of growth data
5. **Auto-Detection**
   Implemented auto-detection of car parts using camera recognition
6. **User Feedback**
   Integrated a feedback system for precise user identification

BENEFITS

3x
Faster data entry

5x
Quicker decision-making

89%
Drop in data quality issues

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CASE STUDY

Optimizing Operational Efficiency and Reducing Costs for a Global Snack Food Leader

Client Profile

A leading global snack food company, focused on producing a wide variety of savory products. It uses advanced manufacturing processes to ensure high-quality, consistent output.



ITHENA helped a global snack food leader **improve operational efficiency, enhance uptime, and reduce service costs**.

CHALLENGES

The client struggled with:

- Lack of real-time asset performance tracking
- Limited remote access and visibility into assets and products
- Absence of a centralized service portal for ticketing, fast issue resolution, and tracking

SOLUTIONS

ITHENA's Smart Service (iSERV) solution enabled the client with:

1. **Performance Monitoring**
   Enabled real-time asset performance monitoring using persona-based dashboards and visual reports to identify trends and prevent downtime
2. **Predictive Maintenance**
   Leveraged AI-driven tools for remote monitoring, customizable scheduling, and automated alerts to improve uptime and profitability
3. **Service Management**
   Streamlined the logging and resolution of issues while integrating performance monitoring modules to automate ticket creation
4. **Knowledge Portal**
   Enabled self-service through how-to videos, manuals, and AR/VR guides for instant repairs, reducing service costs
5. **Performance Analytics:**
   Facilitated the analysis of operational trends and parameters to drive continuous process improvement

BENEFITS

27%
Rise in service response times

20%
Boost in sales revenue

30%
Increase in operational performance

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CASE STUDY

Enhancing Customer Satisfaction for a Leading Flavor and Fragrance Company

Client Profile

A leading company in the creation and production of high-quality flavors and fragrances. It offers innovative, customizable solutions using natural and synthetic ingredients to create unique sensory experiences.



iSERV **enhanced system uptime, accelerated issue resolution, and improved customer satisfaction**, driving greater efficiency and reliability across the organization.

CHALLENGES

The client struggled with:

- Absence of remote tracking limited the ability to monitor system performance
- Lack of KPI prediction for critical equipment led to higher levels of unplanned downtime
- Disorganized case tracking and task management processes
- Absence of a centralized digital knowledge base for troubleshooting

SOLUTIONS

ITHENA's Smart Service (iSERV) solution enabled the client with:

1. **Performance Monitoring**
   Connected assets, tracked real-time KPIs, and provided remote tracking through persona-based dashboards
2. **Predictive Maintenance**
   Streamlined logbook digitization, automated inspections, and introduced scheduled maintenance to ensure system reliability and uptime
3. **Service Management**
   Integrated ticketing, optimized technician allocation, and leveraged AR/VR tools for remote collaboration to resolve issues faster
4. **Knowledge Portal**
   Created a centralized hub with training materials, how-to guides, and self-service resources

BENEFITS

34% **Increase** in uptime

30% **Quicker** resolutions

25% **Boost** in customer satisfaction

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CASE STUDY

Boosting Productivity and Efficiency for a Global Manufacturer of Eco-Friendly Vehicles

Client Profile

A global leader in tractors, utility vehicles, and electric SUVs. The company is dedicated to sustainability, innovation, and advancing eco-friendly technologies.



ITHENA's Smart Service (iSERV) solution significantly **boosted workforce productivity, accelerated decision-making, and improved troubleshooting efficiency.**

CHALLENGES

The client struggled with:

- Lack of remote monitoring made it difficult to track system performance
- Limited real-time asset monitoring and alerts
- Lack of a central digital knowledge repository

SOLUTIONS

ITHENA's Smart Service (iSERV) solution enabled the client with:

1. **Performance Monitoring**
   Enabled real-time KPI tracking, asset connectivity, and actionable insights through persona-based dashboards
2. **Predictive Maintenance**
   Automated logbook digitization, inspections, and work orders while introducing scheduled maintenance
3. **Knowledge Portal**
   Provided a comprehensive hub for training guides, troubleshooting resources, and self-service tools

BENEFITS

25%
Boost in workforce productivity

20%
Faster troubleshooting

4x
Quicker decision-making

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CASE STUDY

Boosting Revenue and Reducing Downtime for a Leading Industrial Boiler Provider

Client Profile

A leading provider of industrial boiler solutions, specializing in boiler rentals, sales, and services. The company offers temporary and permanent boiler systems, including energy-efficient and low-emission models.



ITHENA's Smart Service (iSERV) solution empowered the client by **enhancing real-time monitoring, automating maintenance, and streamlining service management.**

CHALLENGES

The client struggled with:

- Lack of a centralized platform for real-time data and alerts
- Inefficient case management and task organization
- Inability to forecast critical equipment KPIs

SOLUTIONS

ITHENA's Smart Service (iSERV) solution enabled the client with:

1. **Performance Monitoring**
   Facilitated seamless asset connectivity, real-time KPI tracking, and proactive alerts
2. **Predictive Maintenance**
   Digitized logbooks, automated inspections, and provided scheduled maintenance to minimize downtime
3. **Service Management**
   Unified ticketing systems, optimized technician workflows, and incorporated AR/VR to support faster resolutions
4. **Knowledge Portal**
   Delivered a centralized hub with training videos, regulatory tools, and self-service resources

BENEFITS

32% **Growth** in revenue

35% **Reduction** in unplanned downtime

25% **Faster** decision-making

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CASE STUDY

Enhancing Operational Efficiency and Asset Visibility for a Leading Biotechnology Company

Client Profile

A prominent biotechnology company focused on mRNA technology. It develops vaccines and treatments for diseases using advanced manufacturing to improve global health.



ITHENA's Smart Service (iSERV) solution significantly **boosted operational efficiency, enhanced asset visibility, and reduced equipment downtime.**

CHALLENGES

The client struggled with:

- Limited KPI visibility, delaying decision-making and hindering operational control
- Absence of real-time equipment monitoring
- Manual data collection and reporting

SOLUTIONS

ITHENA's Smart Service (iSERV) solution enabled the client with:

1. **Performance Monitoring**
   Provided real-time KPI tracking, asset connectivity, and actionable insights through persona-based dashboards
2. **Predictive Maintenance**
   Reduced downtime with digitized logbooks, automated inspections, and scheduled maintenance
3. **Knowledge Portal**
   Offered a centralized content hub with training manuals, how-to videos, and compliance tools

BENEFITS

32%
Boost in operational efficiency

29%
Improvement in asset visibility

34%
Reduction in equipment downtime

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CASE STUDY

Improving Asset Monitoring and Uptime for a Leading Telecommunications Provider

Client Profile

A leading telecommunications provider in the UAE, offering mobile, broadband, fixed-line, and digital TV services.

CHALLENGES

The client struggled with:

- Lack of real-time equipment monitoring
- Time-consuming manual processes for data collection and analysis
- Limited visibility into production performance



ITHENA's Smart Service (iSERV) solution improved real-time asset monitoring, automated maintenance, and enhanced asset visibility, resulting in **lower maintenance costs and increased equipment uptime.**

SOLUTIONS

ITHENA's Smart Service (iSERV) solution enabled the client with:

1. **Performance Monitoring**
   Providing real-time asset connectivity and KPI tracking through persona-based dashboards
2. **Predictive Maintenance**
   Deployed logbook digitization automated inspections, and streamlined work order management
3. **Knowledge Portal**
   Delivered a centralized hub with how-to videos, training manuals, and self-service resources

BENEFITS

27%
Lower maintenance costs

30%
More equipment uptime

25%
Improvement in asset visibility

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CASE STUDY

Enhancing Data Management and System Upgrades for a Leading Engineering Firm

Client Profile

A leading engineering firm delivering design solutions for mechanical, electrical, plumbing, structural, and fire protection systems for manufacturing facilities.

CHALLENGES

The client struggled with:

- Lack of capability to reduce data ingestion of 300 GB per month across 600 equipment
- Inability to implement upgrades or advanced automation due to legacy SCPA (Smart Connected Product Accelerator)
- Unable to migrate 3 TB of existing data efficiently



ITHENA enabled the client to realize **significant cost savings, improved cloud management, and faster updates.**

SOLUTIONS

ITHENA addressed key challenges with effective solutions:

1. **Optimized Data Ingestion**
   Reduced data ingestion from 300 GB to 25 GB per month, significantly enhancing operational efficiency

2. **Seamless Upgrades**
   Modernized SCPA and ThingWorx, enabling faster and smoother upgrades to the latest versions

3. **Efficient Data Migration**
   Migrated 3 TB of data with minimal disruption, ensuring maximum efficiency and smooth transition

BENEFITS

40%	2.4K	32%	86%
Reduction in cloud cost	USD **Savings** achieved	**Faster** updation rate	**Reduction** in writes per day

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CASE STUDY

Driving Immediate ROI for a Leading Metal Stamping Company with Plex

Client Profile

A leading metal stamping company specializing in metal stamping, wire forming, slide forming, welding, assembly, and tooling services.



By implementing Plex the company improved data visibility and accessibility, automated key processes like tooling maintenance and reporting, and achieved an immediate return on investment.

CHALLENGES

The client struggled with:

- Lack of integration among six legacy systems led to inefficiencies
- Unable to upgrade systems due to high costs
- Reliance on paper-based tracking slowed tooling maintenance
- Manual data entry and reconciliation increased errors

SOLUTIONS

Implementing our solution, we enabled the customer with:

1. **Integrated Cloud ERP**
   Replaced six disconnected systems with an integrated cloud ERP, combining MES, QMS, CRM, and shop floor management
2. **Automated Preventive Maintenance**
   Tracked tooling usage in real time, optimizing maintenance schedules and reducing unplanned downtime
3. **Real-Time Visibility & Control**
   Enabled live dashboards, eliminated duplicate data entry, and provided instant access to reports
4. **Seamless Compliance & Audits**
   Simplified financial reporting and audits with centralized, easily accessible data
5. **Optimized Workforce Efficiency**
   Intuitive system reduced training time, while quick data access improved decision-making
6. **Lower Costs & Immediate ROI**
   Eliminated expensive upgrades and IT maintenance, delivering cost savings from day one

BENEFITS



Reduction in TCO



Improved operational efficiency



Reduction in manual work



Decrease in downtime

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CASE STUDY

Driving Efficiency, Quality, and Predictable Output for a Ceramics Manufacturer with MOM

Client Profile

A leading ceramics manufacturer developing advanced ceramic materials to meet the world's most perplexing engineering and manufacturing challenges

CHALLENGES

The client struggled with:

- Lack of predictable output due to variations in the ceramic-making process
- Inability to consistently meet production targets and delivery timelines
- Difficulty maintaining high quality standards with complex product manufacturing
- Limited visibility into shop-floor operations and equipment performance

SOLUTIONS

Implementing role-based MOM platform, we enabled the customer with:

1. **Inline Inspection Processes**
   Ensured products passed quality checks at every stage, reducing defects and scrap
2. **Real-Time Visibility**
   Enhanced tracking of equipment performance and operations
3. **Simplified Operations**
   Streamlined task management and reporting for shop-floor workers
4. **Predictive Maintenance**
   Proactive monitoring to minimize unplanned downtime
5. **Data-Driven Insights**
   Intuitive system reduced training time, while quick data access improved decision-making

By implementing the MOM platform, the client transformed its manufacturing capabilities — **enabling more efficient, effective, and predictable operations.**

BENEFITS

- **Enhanced** productivity
- **Reduced** unplanned downtime
- **Informed** Decision-Making
- **Minimized** quality issues

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CASE STUDY

Enhancing Planning and Scheduling for a Defense Manufacturing Client in the US

Client Profile

A leading US-based defense manufacturer specializing in the design, development, and production of advanced weapon systems, missile parts, and ammunition.



Advance Planning Solution revolutionized the client's production operations by **digitizing and streamlining planning and scheduling, enhancing efficiency, optimizing resource utilization, and enabling faster delivery**.

CHALLENGES

The client struggled with:

- Limited visibility in production scheduling causing frequent delays
- Inefficient planning and resource allocation resulting in high lead times
- Production bottlenecks leading to machine underutilization

SOLUTIONS

ITHENA implemented iPLAN Solution, powered by Ortems to address the client's issues:

1. **Real-Time Production Visibility**
   Integrated Ortems with existing systems for seamless data flow and schedule tracking
2. **Optimized Resource Utilization**
   Configured advanced scheduling algorithms to minimize idle time and maximize machine efficiency
3. **Predictive Maintenance Scheduling**
   Enabled proactive maintenance to prevent unexpected failures and respond quickly to order changes
4. **Improved Supply Chain Coordination**
   Provided just-in-time inventory management and improved material flow
5. **Enhanced Compliance & Quality**
   Automated tracking for audits, quality control, and regulatory adherence

BENEFITS

27% **Reduction** in lead time

29% **Decrease** in downtime

4x **Faster** Delivery

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CASE STUDY

Accelerating Production with Rapid Onboarding for a Leading Vodka Manufacturer

Client Profile

A global leader in vodka manufacturing, specializing in producing premium, handcrafted vodka using traditional methods.

CHALLENGES

The client struggled with:

- Absence of critical data, visualizations, and analytics for the production lines
- Limited visibility into real-time equipment performance
- Difficulty to scale the Thingworx RTPPM application for new production lines



ITHENA's solution enabled rapid onboarding, real-time performance insights, and scalable operations—delivering **reduced downtime, improved efficiency, and enhanced reliability.**

SOLUTIONS

ITHENA's advanced solution empowered the client with:

1. **Performance Monitoring**
   Developed persona-based dashboards to monitor OEE, identify bottlenecks, and analyze machine health and downtime
2. **Expert Consulting Support**
   Provided skilled consultants and experts for seamless production line onboarding on the Thingworx RTTPM application
3. **Thingworx Implementation services**
   Onboarded production lines on Thingworx RTPPM application within 2 weeks
4. **Operational Scalability**
   Empowered teams to maintain and scale current capabilities for monitoring operations and manufacturing processes

BENEFITS

2 weeks	27%	15%	25%	20%
Fast onboarding	Reduction in downtime	Improvement in overall APQ	Reduction in MTTR	Increase in MTBF

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CASE STUDY

Driving Impact by Creating an Accessible, User-First Website for a State Child Support Agency

Client Profile

A state child support agency aimed to improve its public website, which provides key information and resources to families, local programs, and government partners in support of youth services.



ITHENA's solution modernized the government child support website, enhancing navigation, accessibility, and user experience, leading to increased traffic and a higher accessibility score.

CHALLENGES

The client struggled with:

- Outdated Design & Navigation – The site lacked an intuitive structure, making it difficult for users to find critical information.
- Non-Compliance with Accessibility Standards – The platform did not meet WCAG accessibility standards, limiting user access.
- Limited Mobile Compatibility – The absence of responsive design restricted usability across mobile devices.
- Inefficient Content Management – Outdated infrastructure made updates cumbersome, leading to inconsistent information.

SOLUTIONS

ITHENA's advanced solution empowered the client with:

1. **Modernized Website**
   Redesigned the website with intuitive menus, clear categories, and improved navigation for easier content access
2. **Responsive Web Design**
   Optimized for all devices, ensuring a consistent & user-friendly experience
3. **Accessibility Compliance**
   Updated the design and code to meet WCAG standards, enhancing accessibility for all users
4. **Advanced CMS Integration**
   Seamless content management with unified updates and integration across systems and departmental sites
5. **Consolidated Documents**
   Centralized official documents on the website for improved accessibility and easier updates
6. **Seamless Portal Redirection**
   Enabled smooth redirection between government portals based on department for an efficient user experience

BENEFITS

100%
Increase in AAA accessibility score

29%
Rise in overall website traffic

27%
Enhanced user experience

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CASE STUDY

Optimizing Spare Parts Management with ITHENA's B2B eCommerce Solution

Client Profile

A global leader in packaging automation, specializing in designing and manufacturing end-of-line solutions. They provide innovative packaging solutions for flexible and complex-to-handle consumer goods, ensuring efficiency and reliability in production lines.



B2B eCommerce streamlined ordering, enhanced tracking, and integrated ERP, reducing downtime, improving efficiency, and accelerating fulfillment for smoother operations and an improved customer experience.

CHALLENGES

The client struggled with:

- Inefficient spare parts planning & ordering led to equipment downtime.
- Limited access to order details delayed delivery predictions.
- Lack of real-time tracking caused operational inefficiencies and fulfillment delays.

SOLUTIONS

To address the client's challenges, ITHENA deployed their B2B eCommerce solution:

1. **Optimized Order Management**
   Integrated Epicor Kinetic ERP for seamless order processing and inventory control.
2. **Enhanced Spare Parts Selection**
   Enabled interactive 3D model views for accurate part identification.
3. **Real-Time Tracking & Insights**
   Provided live updates with specifications, availability, and pricing.
4. **Smart BOM Management**
   Automated recommendations for precise part selection and procurement.

BENEFITS

35%
less equipment downtime

50%
improvement in order tracking efficiency

40%
faster spare parts fulfillment

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CASE STUDY

Transforming Spare Parts Management for a Leader in Packaging Automation

Client Profile

BluePrint Automation is a global leader in turnkey packaging automation systems, helping companies worldwide streamline their packaging processes.

CHALLENGES

The client struggled with:

- Inefficient spare parts planning & ordering led to equipment downtime.
- Limited access to order details delayed delivery predictions.
- Lack of real-time tracking caused operational inefficiencies and fulfillment delays.

SOLUTIONS

To address the client's challenges, ITHENA deployed their B2B eCommerce solution:

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   Automated recommendations for precise part selection and procurement.

B2B eCommerce streamlined ordering, enhanced tracking, and integrated ERP, reducing downtime, improving efficiency, and accelerating fulfillment for smoother operations and an improved customer experience.

BENEFITS

35% less equipment downtime

50% improvement in order tracking efficiency

40% faster spare parts fulfillment

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CASE STUDY

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CHALLENGES

The client struggled with:

- Inefficient spare parts planning & ordering led to equipment downtime.
- Limited access to order details delayed delivery predictions.
- Lack of real-time tracking caused operational inefficiencies and fulfillment delays.

SOLUTIONS

To address the client's challenges, ITHENA deployed their iSERV Digital Commerce solution:

1. **Optimized Order Management**
   Integrated Epicor Kinetic ERP for seamless order processing and inventory control.
2. **Enhanced Spare Parts Selection**
   Enabled interactive 3D model views for accurate part identification.
3. **Real-Time Tracking & Insights**
   Provided live updates with specifications, availability, and pricing.
4. **Smart BOM Management**
   Automated recommendations for precise part selection and procurement.

iSERV Digital Commerce streamlined ordering, enhanced tracking, and integrated ERP, reducing downtime, improving efficiency, and accelerating fulfillment for smoother operations and an improved customer experience.

BENEFITS

35% less equipment downtime

50% improvement in order tracking efficiency

40% faster spare parts fulfillment

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CASE STUDY

40% Faster Spare Parts Fulfillment for a Global Packaging Automation Leader with iSERV

Client Profile

A global leader in packaging automation, specializing in designing and manufacturing end-of-line solutions. They provide innovative packaging solutions for flexible and complex-to-handle consumer goods, ensuring efficiency and reliability in production lines.



iSERV streamlined ordering, enhanced tracking, and integrated ERP, reducing downtime, improving efficiency, and accelerating fulfillment for smoother operations and an improved customer experience.

CHALLENGES

The client struggled with:

- Inefficient spare parts planning & ordering led to equipment downtime.
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- Lack of real-time tracking caused operational inefficiencies and fulfillment delays.

SOLUTIONS

To address the client's challenges, ITHENA deployed their iSERV solution:

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50% improvement in order tracking efficiency

40% faster spare parts fulfillment

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CASE STUDY

Enhancing Automotive System Mapping with ITHENA's Digital Solution

Client Profile

A global leader in automotive software specializing in AI-driven solutions for software-defined vehicles. With 11,000+ experts, the company accelerates next-gen mobility through embedded software and digital innovations for a cleaner, smarter, and safer future.



ITHENA's System Mapping solution revolutionized the client's approach to automotive design and simulation. Digital visualization, simplified error detection, and improved system connectivity enhanced efficiency, reducing error detection and simulation time while streamlining automotive development.

CHALLENGES

The client struggled with:

- Lack of a unified view of all automobile components.
- Difficulty in detecting system errors efficiently.
- Limited connectivity between multiple ECUs and systems.
- Physical data simulation led to significant time wastage.

SOLUTIONS

To address these challenges, ITHENA deployed its System Mapping solution:

1. **Comprehensive System Mapping**
   Provided a complete digital visualization of all automobile parts.
2. **Custom Layout Design**
   Enabled flexible designing based on client input.
3. **Error Detection Simplification**
   Integrated color-coded connections for quick and easy issue identification.
4. **Map Designer Feature**
   Allowed drag-and-drop functionality for ECU placements.
5. **Digital Simulation**
   Replaced physical simulation with a digital model, enhancing efficiency and accuracy.

BENEFITS

30% **faster** error detection

40% **reduction** in simulation time

25% **boost** in system connectivity

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CASE STUDY

Modernizing ERP Infrastructure and Streamlining Operations with Cloud-Based Solution for a Global Urethane Manufacturer

Client Profile

A global leader in cast urethane manufacturing, known for its precision-engineered elastomer products serving diverse industrial applications.



The implementation of a modern cloud-based ERP system enabled the client to optimize operations, enhance agility, and unlock significant cost savings, laying a strong digital foundation for long-term growth and competitiveness.

CHALLENGES

The client faced several operational hurdles due to a legacy enterprise resource planning (ERP) system:

- Limited real-time data access and poor cross-departmental collaboration
- Manual processes and inefficient production planning
- No agility to respond to pricing fluctuations
- High costs and risks from outdated infrastructure

SOLUTIONS

The client partnered with ITHENA to implement Infor CloudSuite™ Industrial, deployed through Infor Velocity Suite:

1. **Cloud Transformation**
   Migrated from on-prem infrastructure to a secure, scalable cloud environment within weeks
2. **Collaboration & Agility**
   Improved cross-functional collaboration and agility through connected workflows
3. **Real-Time Visibility**
   Delivered real-time visibility into production and operations across departments
4. **Streamlined Production**
   Leveraged Factory Track and Advanced Planning & Scheduling (APS) to automate workflows and enable concurrent scheduling
5. **Dynamic Pricing Flexibility**
   Enabled dynamic pricing with real-time BOM insights to save time and reduce errors
6. **Cost savings and Scalability**
   Reduced infrastructure costs, enhanced security, and supported remote work

BENEFITS

Substantial boost in productivity

Improved pricing agility

Reduced infrastructure costs

Enhanced data security

Scalable operations

Streamlined production

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CASE STUDY

Modernizing ERP Infrastructure and Streamlining Operations with Cloud-Based ERP for a Global Urethane Manufacturer

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   Leveraged Factory Track and Advanced Planning & Scheduling (APS) to automate workflows and enable concurrent scheduling
5. **Dynamic Pricing Flexibility**
   Enabled dynamic pricing with real-time BOM insights to save time and reduce errors
6. **Cost savings and Scalability**
   Reduced infrastructure costs, enhanced security, and supported remote work

BENEFITS

30%
Increase in **productivity**

97%
Lesser risk of **data loss**

20%
Reduction in **TCO**

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CASE STUDY

Modernizing Manufacturing Operations with Real-Time OEE and Utility Monitoring For a Global Industrial Enterprise

Client Profile

A leading diversified conglomerate with a strong presence in manufacturing, consumer goods, and industrial engineering.



ITHENA's iMEX solution helped a global industrial enterprise modernize production monitoring, optimize utility consumption, and gain real-time visibility into performance. This led to higher productivity, improved uptime, and better quality outcomes.

CHALLENGES

The client struggled with:

- Limited transparency in tracking energy, air, and water usage across lines and utilities
- Heavy reliance on manual efforts for analyzing trends and consumption comparisons
- Difficulty linking utility usage to production output for intensity measurement
- Absence of a stable, scalable, and secure system for production monitoring and OEE tracking
- Lack of effective insights into production losses, especially from minor stoppages
- Inadequate visibility of real-time performance monitoring for critical utility equipments

SOLUTIONS

ITHENA's Smart Manufacturing Solution, iMEX, empowered the client with:

1. **Quick Deployment**
   Delivered OEE dashboards with prebuilt widgets and rule chain components for rapid implementation
2. **Production Monitoring & OEE**
   Integration with PLCs and drives on Lines to capture machine state, downtime reasons, and production metrics
3. **Downtime Capture Tablets**
   Operator-friendly interface to input downtime reason codes at the source
4. **Preventive Maintenance**
   Utilized AI/ML-powered solution to automate data collection, detect trends, and prevent downtime
5. **Golden Batch Analysis**
   Establishment of baseline benchmarks to drive consistency across shifts and batches
6. **Digital Quality Assurance**
   Provided clear, digital views into product quality to minimize scrap and ensure consistency
7. **Secure Edge-to-Cloud Architecture**
   Enabled seamless scalability and centralized access while ensuring data integrity

BENEFITS

100+
assets connected, including machines, utilities, and PLCs

55%
improvement in overall OEE

100%
THENA's Smart Manufacturing

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CASE STUDY

Driving Manufacturing Efficiency Through ITHENA's Ignition-Powered MES Solution

Client Profile

A leading global packaged food manufacturer supplying high-demand consumer products across international markets.

CHALLENGES

The client struggled with:

- Limited visibility into machine-level performance across production lines
- Compliance and traceability issues impacting operational standards
- Inefficient production scheduling resulting in suboptimal throughput
- High levels of material waste and longer cycle times impacting overall productivity



Implementing Ignition has been a game-changer. We've gained real-time visibility into our operations and significantly improved our OEE, manufacturing efficiency and responsiveness. It's helped us move from reactive to proactive manufacturing.

- VP, Global Operations

SOLUTIONS

The client partnered with ITHENA and implemented Ignition-powered MES solution:

1. **Real-Time OEE Tracking**
   Enabled seamless integration with the client's ERP system and provided a unified view of equipment performance metrics to monitor and improve line efficiency
2. **Traceability & Genealogy**
   Enabled full product traceability across batches and production lines, critical for food safety compliance and root cause analysis
3. **Process Execution Management**
   Standardized and digitized shop floor operations to ensure consistent process adherence and reduce manual intervention
4. **Quality Control**
   Improved quality control through real-time production monitoring to minimize defects

OPPORTUNITY FOR IMPACT

- **15%** Increase in OEE
- **25%** Increase in service compliance & traceability
- **12%** Improvement in throughput

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CASE STUDY

Enhancing Water Treatment Efficiency Through Ignition-Based SCADA Modernization

Client Profile

A regional water treatment facility dedicated to delivering safe water through efficient and compliant system.

CHALLENGES

The client struggled with:

- High licensing and maintenance costs tied to their legacy SCADA/HMI systems
- Limited scalability and rigid architecture restricting future upgrades
- Absence of remote monitoring hindered effective system performance tracking
- Increased cybersecurity risks due to outdated software
- Lack of integration across key operational systems



Ignition has completely modernized our operations. We now have a scalable, cost-effective, and secure system that gives us the visibility and flexibility we've long needed.

-Director of Operations

SOLUTIONS

The client partnered with ITHENA and implemented an Ignition-based SCADA modernization:

1. **Cost-Effective Migration**
   Replaced legacy SCADA with a modular, scalable Ignition platform reducing licensing and maintenance overhead
2. **Future-Ready Foundation**
   Established a scalable, open architecture - ready for future system expansion and AI/ML based analytics
3. **Performance Monitoring**
   Enabled real-time visibility into asset performance contributed towards continuous monitoring
4. **Secure Architecture**
   Implemented modern security standards to mitigate vulnerabilities and ensure regulatory compliance

OPPORTUNITY FOR IMPACT

32% Improvement in system uptime

22% Reduction in annual maintenance costs

24% Boost in operational efficiency

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CASE STUDY

Accelerating Decision-Making Through Real-Time Data Integration with Ignition

Client Profile

A Fortune 500 chemical manufacturer delivering specialized products through a global network of production facilities.



With ITHENA and the Ignition platform, we've broken down long-standing silos between our plant floor systems and enterprise applications. For the first time, our teams, from operations to corporate, have access to real-time, reliable data in one place. It's transformed our ability to collaborate, respond quickly, and make informed decisions at every level of the organization.

- Chief Digital Officer

CHALLENGES

The client struggled with:

- Fragmented data sources across PLCs, historians, MES, ERP, and other systems
- Manual data entry processes prone to delays and errors
- Disconnected OT and IT systems preventing unified performance tracking

SOLUTIONS

The client partnered with ITHENA and integrated the IT & OT systems using the Ignition platform:

1. **Unified Data Integration**
   Connected PLCs, MES, ERP, and databases through a centralized platform to eliminate silos
2. **Seamless Data Flow**
   Removed manual touchpoints to improve data accuracy and reporting speed
3. **IT/OT Convergence**
   Established secure, bidirectional data exchange between enterprise systems and the plant floor for a unified view across the enterprise
4. **Holistic Operational Visibility**
   Delivered persona-based dashboards for real-time visibility into the operation

OPPORTUNITY FOR IMPACT

34%	4x	64%
Faster decision-making	Faster data entry	Drop in data quality issues

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CASE STUDY

Driving Remote Asset Visibility and Reducing Field Costs with Ignition Edge & MQTT

Client Profile

A prominent oil and gas producer managing operations across remote and often challenging geographies.

CHALLENGES

The client struggled with:

- Difficulty in monitoring geographically dispersed assets
- High travel costs and time-consuming manual site inspections
- Delayed response to equipment failures and production anomalies



Partnering with ITHENA and deploying Ignition Edge with MQTT has been a game-changer for our remote operations. We've drastically reduced our dependency on manual site visits, improved safety, and now have real-time visibility into our field assets like never before. It's helping us operate smarter, faster, and more proactively.

-Director of Field Operations

SOLUTIONS

The client partnered with ITHENA and implemented an IIoT solution using Ignition Edge and MQTT:

1. **Edge Data Acquisition**
   Installed Ignition Edge gateways at remote sites to collect and buffer critical asset data

2. **Scalable Communication**
   Deployed MQTT to securely transmit data in real time from field assets to central control systems

3. **Real-Time Alerts & Notifications**
   Delivered immediate alerts of any failures to field operators and maintenance teams

4. **Predictive Maintenance**
   Enabled real-time monitoring of equipment, including all remote assets, for proactive maintenance

OPPORTUNITY FOR IMPACT

35%	26%	30%
Reduction in travel costs	Boost in asset uptime	Faster issue resolution

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CASE STUDY

Optimizing Campus Energy & HVAC Efficiency with ITHENA's Ignition-Based Smart Infrastructure

Client Profile

A leading university operating a large and diverse campus committed to delivering high-performance facilities and sustainable outcomes.

CHALLENGES

The client struggled with:

- Limited visibility across disparate building systems (HVAC, lighting, security, energy metering)
- Inability to monitor and optimize operations from a centralized platform
- Increased energy costs due to inefficient system management
- Inconsistent environmental control impacting operational efficiency and occupant comfort



ITHENA's Ignition platform has transformed how we manage our campus infrastructure. From energy savings to improved occupant comfort, it's enabled our facilities team to operate smarter and more sustainably, while creating a better environment for everyone on campus.

- Director of Campus Operations

SOLUTIONS

The client partnered with ITHENA and implemented the Ignition platform:

1. **Integrated Smart Infrastructure**
   Unified HVAC, lighting, energy meters, and other building systems into a single control platform
2. **Centralized Monitoring & Alarming**
   Provided real-time visibility and automated alerts across all facilities
3. **Energy Optimization Tools**
   Enabled dynamic load balancing and real-time tracking of consumption patterns
4. **Predictive Maintenance**
   Leveraged real-time system data to monitor performance trends, enabling proactive maintenance

OPPORTUNITY FOR IMPACT

18%
Reduction in energy costs

82%
Decrease in manual adjustments

100%
Centralized control and alarming

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CASE STUDY

Boosting Productivity & Safety Through ITHENA's Custom-Built Ignition App for Mining Operations

Client Profile

A leading mining operation managing high-volume extraction activities across geographically dispersed sites.

CHALLENGES

The client struggled with:

- Inability to solve unique operational pain points by off-the-shelf software
- Manual, paper-based workflows for critical operational processes
- Disconnected spreadsheets and siloed data across departments



Our operations are too complex for generic software. ITHENA delivered exactly what we needed, a custom-built Ignition app that fits our workflows, keeps our team safer, and gives us total control over our field data.

-Manager of Operations

SOLUTIONS

The client partnered with ITHENA and implemented a multi-feature custom application built on the Ignition platform:

1. **Tailored Workflow Automation**
   Digitized complex, site-specific manual processes across maintenance, safety, and operations
2. **Centralized Data Capture**
   Replaced paper logs and spreadsheets with a unified, real-time data entry interface
3. **Integrated Safety Oversight**
   Enabled proactive safety management through digital checklists, real-time alerts, and incident tracking
4. **Configurable Dashboards & Reporting**
   Provided persona-based visualizations and automated reports to enhance visibility and enable faster decisions

OPPORTUNITY FOR IMPACT

37% Faster decision-making

30% Decrease in reporting errors

47% Enhanced data accuracy

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CASE STUDY

Boosting Productivity & Safety Through ITHENA's Custom-Built Ignition App for Mining Operations

Client Profile

A U.S.-based state and local government body operating in law enforcement and supported by dedicated public-sector IT teams to manage and modernize critical digital operations.



ITHENA helped us modernize our legacy environment with a secure, scalable, and cost-efficient AWS foundation. Their approach delivered measurable improvements in resilience, performance, and data protection—transforming how our teams deliver services to the community.

-Manager of Operations

CHALLENGES

The client struggled with:

- Limitations in modernization due to legacy workloads
- Difficulty handling growing data volumes with legacy storage and processing capabilities
- Constraints in reducing capital budgets due to reliance on costly on-premise infrastructure
- Insufficient data protection mechanisms within legacy environments
- Limited support for remote workforce operations due to outdated systems and insufficient secure access mechanisms
- Inefficient and non-automated backup processes, creating operational risk and impacting continuity

SOLUTIONS

ITHENA's proven AWS modernization expertise helped the client with:

1. **Application Modernization**
   Implemented AWS best practices tailored to the client's environment, enabling optimized workloads
2. **Technical Debt Reduction**
   Deployed modernization patterns designed to cut technical debt and improve cost efficiency across core systems
3. **Scalable Storage & Analytics**
   Implemented optimized storage and data analytics architectures to handle expanding datasets with predictable cost models
4. **Operational Reliability and Automation**
   Enhanced system reliability through automation frameworks and measurable performance improvements
5. **Tailored Backup and Customized Data Protection**
   Implemented targeted backup automation and cross-region recovery strategies, tailored to the client's operational priorities and team requirements
6. **Secure Landing Zones & Governance**
   Designed landing zones that balance security, resilience, and cost efficiency, enabling rapid IT execution without added risk.

OPPORTUNITY FOR IMPACT

99%	35%	24/7
Faster decision-making	Reduction in IT operational costs	Secure access and resilient backup

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CASE STUDY

Accelerating Secure Cloud Transformation for Public Safety Systems

Client Profile

A U.S.-based state and local government body managing mission-critical law enforcement systems, supported by centralized IT teams focused on system availability, data protection, and operational continuity.



ITHENA helped us modernize our public safety systems with a focused and secure AWS approach. Their expertise enabled us to improve reliability, control costs, and confidently support our mission-critical operations.

-Chief Technology Officer

CHALLENGES

The client struggled with:

- Limitations in modernization driven by legacy public safety applications that restrict cloud adoption and system agility
- Difficulty managing the rapid growth of sensitive law enforcement data due to non-scalable storage and analytics platforms.
- Constraints in reducing capital and operating costs caused by dependence on expensive, on-premise infrastructure.
- Insufficient backup and recovery capabilities, elevating risk to mission-critical public safety operations.

SOLUTIONS

ITHENA's proven AWS modernization expertise helped the client with:

1. **Cloud-Ready Application Modernization:** Modernized legacy public safety systems using AWS best practices to improve performance and scalability
2. **Scalable Data and Analytics Platforms:** Designed cost-predictable storage and analytics architectures to support expanding law enforcement data volumes
3. **Cost-Efficient Infrastructure Modernization:** Transitioned workloads from capital-intensive infrastructure to optimized AWS operating models
4. **Resilient Backup and Recovery:** Implemented automated backup and cross-region recovery strategies to ensure continuity of critical systems

OPPORTUNITY FOR IMPACT

40% Reduction in operational costs

60% Faster recovery through automated backups

32% Reduction in unplanned downtime

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CASE STUDY

Digitizing Global Service Operations for a Leading Packaging Machinery Manufacturer

Client Profile

A leading manufacturer of advanced robotic packaging machinery for the food and beverage industries, known for continuous innovation in equipment and package design.



ITHENA's iSERV solution streamlined after-sales service operations, improving response times, increasing productivity, and enhancing customer satisfaction.

CHALLENGES

The client struggled with:

- Fragmented service request handling reduced visibility into ongoing service activities
- Lack of a centralized platform for ticket tracking and service coordination delayed response times
- Manual service scheduling and work order management impacted technician productivity
- Limited access to service history and documentation slowed issue resolution
- Service support inefficiencies affected customer satisfaction and overall service experience

SOLUTIONS

ITHENA's Smart Service (iSERV) solution empowered the client by:

1. **Ticket and Case Management**
   Unified ticketing enabled complete tracking, prioritization, and faster resolution of service requests
2. **Asset and Service Lifecycle Management**
   Digitized asset onboarding and maintained complete service history for improved service efficiency
3. **Service Scheduling and Work Order Management**
   Streamlined service planning, task assignment, and execution to improve technician productivity
4. **Knowledge Portal:**
   Centralized access to how-to videos, training documentation, and self-service tools to boost efficiency and enhance service delivery
5. **Service Reporting and Visibility**
   Enabled digital service reports and operational visibility for better coordination and decision-making

OPPORTUNITY FOR IMPACT

33% **Faster** service response time

36% **Increase** in customer satisfaction

25% **Improvement** in service team productivity

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CASE STUDY

Enhancing After-Sales Service and Customer Satisfaction for a Global Packaging Equipment Manufacturer

Client Profile

A leading manufacturer of automated packaging equipment and integrated packaging solutions serving industries such as food, pharmaceuticals, and consumer goods.

CHALLENGES

The client struggled with:

- Difficulty in remotely tracking equipment and conducting preventive maintenance.
- Lack of a centralized platform for end-customers to submit service requests.
- Ineffective spare parts planning and procurement led to revenue loss.
- Restricted access to order information hindered delivery forecasting.



ITHENA's iSERV solution gave us complete visibility into our equipment and after-sales operations. With predictive maintenance and end-to-end e-commerce capability, we've increased uptime, cut costs, and delivered better experiences for our customers.

– Vice President of Service Excellence

SOLUTIONS

ITHENA's Smart Service (iSERV) solution empowered the client by:

1. **Performance Monitoring:** Enabled real-time monitoring of equipment parameters to support performance evaluation and predictive maintenance.
2. **Knowledge Portal with AR/VR Integration:** Delivered access to knowledge resources, including self-help videos, maintenance manuals, and AR/VR-enabled guidance.
3. **Centralized Ticket Management:** Deployed a unified ticket management portal for submitting service requests and queries.
4. **End-to-End E-commerce:** Streamlined ordering of machinery and spare parts with 3D/2D equipment views and a web-based tracking system.
5. **BOM Visualization:** Provided a 360° exploded view for selecting both orderable and non-orderable spare parts, including detailed pricing, specifications, availability, locations, and images.

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OPPORTUNITY FOR IMPACT

35% **Reduction** in service cost

27% **Improvement** in issue resolution time

21% **Boost** in machine uptime

CASE STUDY

Streamlining Service Management for a Global Labeling Solutions Manufacturer

Client Profile

A global manufacturer of self-adhesive label application systems and customized high-tech labeling solutions.

CHALLENGES

The client struggled with:

- Fragmented service request handling limited visibility and coordination across teams
- Lack of a centralized system to manage installed assets, customers, and service records
- Manual service scheduling and reporting created delays and reduced operational efficiency
- Difficulty in maintaining accurate service documentation affected traceability and compliance



ITHENA's iSERV solution unified and digitized service operations, improving service efficiency, strengthening traceability, and enhancing overall service performance.

SOLUTIONS

ITHENA's Smart Service (iSERV) solution empowered the client by:

1. **Ticket Management**
   Enabled centralized logging, tracking, and prioritization of service requests with complete transparency and control
2. **Digitized Asset and Customer Onboarding**
   Created a structured digital repository of equipment, customer, and site information for improved service traceability
3. **Service Scheduling**
   Streamlined service planning and technician assignment, ensuring timely service execution and improved team utilization
4. **Service Reports and Documentation**
   Digitized service report generation and maintained complete service history for better recordkeeping and decision-making
5. **Knowledge Portal**
   Provided easy access to service manuals and troubleshooting resources to support faster and more consistent issue resolution

OPPORTUNITY FOR IMPACT

29%
Higher service response efficiency

33%
Increase in service team productivity

25%
Improvement in service process traceability

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CASE STUDY

Digitizing Service Operations for a Leading Packaging Machinery Manufacturer

Client Profile

A packaging industry leader producing premium shrink wrap and end-of-line machinery.

CHALLENGES

The client struggled with:

- Lack of a centralized platform to manage service requests and track resolution progress
- Limited visibility into service activities, asset records, and service history
- Manual service coordination and scheduling led to slower response and inefficiencies
- Absence of structured documentation and reporting impacted service consistency



ITHENA's iSERV solution digitized service operations and ticketing, improving service visibility, accelerating resolution, and enhancing overall operational efficiency.

SOLUTIONS

ITHENA's Smart Service (iSERV) solution empowered the client by:

1. **Ticket and Case Management**
   Enabled centralized service request logging, tracking, and prioritization for faster and more efficient resolution
2. **Knowledge Portal**
   Provided a centralized repository of service manuals, troubleshooting guides, and training content to support service teams
3. **Asset and Service History Management**
   Digitized asset onboarding and maintained complete service records to improve traceability and service effectiveness
4. **Service Scheduling and Work Order Management**
   Streamlined service planning, technician assignment, and execution to enhance service coordination and productivity
5. **Service Reporting and Visibility**
   Enabled digital service report generation and improved visibility into service operations and performance

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OPPORTUNITY FOR IMPACT

30% **Faster** service resolution

35% **Improvement** in service team productivity

26% **Higher** service operational efficiency

CASE STUDY

Enhancing Spare Parts Management and Order Fulfillment for a Global Packaging Solutions Provider

Client Profile

A global provider of packaging solutions for diverse applications, recognized as an industry leader offering a broad product portfolio, innovative designs, and a strong focus on customer satisfaction.



ITHENA's iSERV solution has transformed the way we manage spare parts and orders. With real-time inventory visibility and smarter BOM management, we're fulfilling orders faster, reducing errors, and improving customer satisfaction.

– Head of Supply Chain

CHALLENGES

The client struggled with:

- Manual inventory tracking caused frequent stockouts and delayed maintenance schedules.
- Fragmented order information made it difficult to predict delivery timelines.
- Lack of automated alerts led to missed shipments and customer dissatisfaction.

SOLUTIONS

ITHENA's Smart Service (iSERV) solution empowered the client by:

1. **Optimized Order Management:** Enable real-time stock updates and faster order fulfillment through.
2. **Enhanced Spare Parts Selection:** Provided interactive 3D visualization tools to help technicians and procurement teams select the correct components easily.
3. **Real-Time Tracking & Insights:** Delivered real-time updates on order status, availability, pricing, and expected delivery times.
4. **Smart BOM Management:** Delivered AI-driven suggestions to optimize spare parts stocking and reduce excess inventory.

OPPORTUNITY FOR IMPACT

32% **Boost** in Customer Satisfaction

47% **Improvement** in order tracking efficiency

38% **Faster** spare parts fulfillment

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CASE STUDY

Optimizing Performance Monitoring and Equipment Efficiency for a Leading Compressed Air Solutions Provider

Client Profile

A leading provider of compressed air solutions, specializing in the development, design, operation, and maintenance of systems for industrial and high-technology applications.

CHALLENGES

The client struggled with:

- Lack of clear KPI transparency, resulting in slower decisions and reduced operational oversight
- No capability for live monitoring of critical equipment
- Dependence on manual processes for data gathering and report preparation



ITHENA's iSERV solution digitized performance monitoring and predictive maintenance, enhancing **KPI transparency, improving asset visibility, and significantly reducing equipment downtime.**

SOLUTIONS

ITHENA's Smart Service (iSERV) solution empowered the client by:

1. **Performance Monitoring**
   Enabled continuous visibility into KPIs, connected assets, and actionable insights via persona-specific dashboards.

2. **Predictive Maintenance**
   Minimized unplanned outages using digital logbooks, automated inspection workflows, and proactive maintenance scheduling.

3. **Knowledge Portal**
   Delivered a centralized content hub with access to training manuals, how-to videos, and compliance tools.

OPPORTUNITY FOR IMPACT

28%
Increase in operational efficiency

31%
Enhancement in asset visibility

37%
Decrease in equipment downtime

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CASE STUDY

Enhancing Service Efficiency and Operational Uptime for a Leading Industrial Cooling Innovator

Client Profile

A leading innovator in industrial cooling, delivering high-efficiency, eco-friendly process chillers with low-GWP refrigerants and unmatched cooling capacity in a compact footprint.

CHALLENGES

The client struggled with:

- Difficulty in accessing real-time performance metrics of machinery and assets.
- Restricted remote monitoring capabilities for distributed equipment.
- Lack of a centralized system for service requests, ticketing, and resolution tracking.



ITHENA's iSERV gave us complete visibility into our equipment performance and transformed how we manage service. With real-time monitoring, predictive maintenance, and automated ticketing in one platform, we've significantly reduced response times, improved uptime, and unlocked new revenue opportunities.

– Director of Service & Aftermarket Operations

SOLUTIONS

ITHENA's Smart Service (iSERV) solution empowered the client by:

1. **Performance Monitoring:** Delivered live monitoring of equipment performance with persona-based dashboards and visual analytics for trend detection and downtime prevention
2. **Predictive Maintenance:** Enabled AI-driven maintenance planning, remote diagnostics, and automated alerts to maximize operational uptime and efficiency.
3. **Service Management:** Simplified case logging and resolution workflows while linking performance data to trigger automated ticket creation.
4. **Knowledge Portal:** Provided a central hub with how-to guides, instructional videos, and AR/VR-assisted troubleshooting to support faster repairs and reduce service expenditure.

OPPORTUNITY FOR IMPACT

27% **Reduction** in service response time

32% **Rise** in revenue generation

25% **Improvement** in operational productivity

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CASE STUDY

Transforming Service Operations with iSERV for a Global Advanced Technology Systems Provider

Client Profile

A global provider of advanced technology systems, specializing in automated, high-sensitivity, and cryogenic measurement instruments for the scientific community.



ITHENA's iSERV solution digitized the complete service lifecycle, improving service visibility, accelerating response times, and enhancing operational efficiency.

CHALLENGES

The client struggled with:

- Lack of a unified platform to manage service requests and track resolution across global teams
- Limited visibility into installed assets, service history, and customer service activities
- Manual service scheduling and coordination reduced technician efficiency and response speed
- Difficulty in maintaining accurate service documentation and reports for effective service management

SOLUTIONS

ITHENA's Smart Service (iSERV) solution empowered the client by:

1. **Ticket and Case Management**
   Enabled centralized logging, prioritization, and tracking of service requests with complete visibility and improved response coordination
2. **Asset and Customer Onboarding**
   Digitized onboarding of equipment, customers, and sites, creating a structured system for managing service lifecycle and history
3. **Service Scheduling and Execution**
   Streamlined service scheduling, technician assignment, and task management to improve service efficiency and utilization
4. **Service Reports and Lifecycle Visibility**
   Automated digital service report generation and maintained complete service records for better decision-making and traceability
5. **Knowledge Portal**
   Provided centralized access to service manuals, troubleshooting guides, and self-help resources to enable faster issue resolution

OPPORTUNITY FOR IMPACT

32% **Faster** Service Response Times

37% **Boost** in service team productivity

31% **Rise** in service operational efficiency

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CASE STUDY

Improving Real-Time Visibility and Operational Response for a Metal Filtration Technology Leader

Client Profile

SELEE, A global leader in metal filtration technology, pioneering the use of ceramic foam and driving innovation in filtration, melt treatment, and transfer processes for all types of molten metals.



Consistency across our legacy and next-generation kiln assets was essential to scaling efficiently. ITHENA delivered exactly that. Their expertise helped us seamlessly unify our SCADA experience within Ignition, transforming a patchwork of old and new systems into a single, intuitive interface. By standardizing visualization and alarm workflows, our operators now work faster and with greater confidence—driving measurable gains in output without disrupting production. It's been a true accelerator for our digital transformation

–Shawn Hawkins,
Automation Controls Systems Specialist, SELEE

CHALLENGES

The client struggled with:

- Lack of real-time visibility for the newly commissioned Kiln within the existing system.
- Inconsistent visualization, alarms, and workflows across old and new Kilns.
- Risk of data inconsistency from PLC tag mapping and database integration gaps.
- Lack of intuitive operator interfaces, slowing issue detection and resolution.

SOLUTIONS

ITHENA, in partnership with Ignition, empowered the client with:

1. **Seamless Kiln Onboarding:**
   Integrated new Kiln into the existing Ignition V8.1.12 environment with minimal disruption to live plant operations.
2. **Operator-Centric Visualization:**
   Designed and deployed intuitive operator screens using the Ignition Vision Module, including Kiln Overview, Zone Analysis, Trending, and Alarm dashboards for real-time and zone-level visibility.
3. **Reliable Data Integration:**
   Established direct PLC tag connectivity and MS-SQL database integration to enable accurate real-time and historical data capture across Kiln operations.
4. **Alarm Management & Drill-Down Workflows:**
   Configured intelligent alarms and structured drill-down navigation to accelerate identification of abnormal conditions and support faster operational response.
5. **Deployment & Stabilization Support:**
   Supported UAT, production deployment, and post-go-live stabilization to ensure solution reliability, operator adoption, and standardized workflows across Kilns.

OPPORTUNITY FOR IMPACT

13% **Improvement** in output efficiency

32% **Faster** operational response time

28% **Reduction** in operator error

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CASE STUDY

Optimizing Production Performance and Data Reliability for a Leading Craft Brewery

Client Profile

A prominent craft brewery specializing in producing high-quality beers through advanced brewing techniques and sustainable manufacturing practices.

CHALLENGES

The client struggled with:

- Difficulty in maintaining consistent system performance as data volumes increased.
- Limited scalability of existing infrastructure to support future growth.
- Rapid and uncontrolled database growth affecting system stability and costs.
- Lack of complete and reliable OEE data for accurate performance measurement.



ITHENA's solution optimized system performance, controlled database growth, and ensured **reliable OEE data, enabling faster production insights, scalable operations, and data-driven decision-making.**

SOLUTIONS

ITHENA, in partnership with Ignition, empowered the client with:

1. **Scalability & Performance Optimization:**
   Optimized server capacity, database growth, and logging for a high-performance, scalable architecture for the Ignition SCADA application
2. **Optimized Data Logging & Retention:**
   Implemented logging-on-change, dead-bands, and retention controls to limit database growth on Ignition Tag Historian Module
3. **OEE Data Readiness & Alignment:**
   Closed data gaps, manual data entry automation, and aligned OEE calculations with industry standards
4. **Reliable Production & Historical Insights:**
   Validated OPC data and enabled fast access to aggregated historical insights without querying archived databases
5. **Solution Design & Roadmap:**
   Delivered a solution design document with recommended approaches, timelines, and cost estimates

OPPORTUNITY FOR IMPACT

58%
Reduction in database growth rate

24%
Higher OEE data accuracy and reliability

29%
Improvement in system performance

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CASE STUDY

Modernizing Manufacturing Data and Analytics for a Leading Agribusiness Company

Client Profile

A prominent agribusiness company, delivering sugarcane, fresh vegetables, and citrus products through vertically integrated operations and regional rail transportation.



ITHENA's expertise in modernizing our data architecture has transformed how we access and trust our production data. With faster insights, reliable OEE metrics, and a scalable reporting foundation, our teams can make confident, data-driven decisions across operations

– Director of Operations

CHALLENGES

The client struggled with:

- Legacy Wonderware infrastructure limiting scalability and long-term performance.
- Difficulty bridging high-speed historian data with business reporting requirements.
- Risk of data discontinuity while migrating to a modern technology stack.
- Complex, compressed time-series data that was difficult to consume for management insights.
- Limited access to long-term historical trends and advanced analytics for operations and leadership teams.

SOLUTIONS

ITHENA empowered the client with

1. **Legacy Infrastructure Modernization:** Migrated the Savannah Plant from a legacy Wonderware setup to a scalable Rockwell Automation environment.
2. **Data Continuity & System Re-Wiring:** Re-engineered existing applications, including SugmanOEE, to integrate with Microsoft SQL Server 2025 without loss of historical logic.
3. **Historian-to-SQL Processing Pipeline:** Built a processing pipeline to convert high-speed historian data into structured SQL tables for reporting.
4. **Advanced Analytics & KPI Enablement:** Developed SQL logic to generate KPIs such as Daily Yield, OEE, and cost-per-ton metrics.
5. **Visualization & Reporting Enablement:** Enabled PI Vision with persona based dashboards for high-speed trending, centralized reporting via PBIRS/SSRS, and live Excel analysis using DataLink.
6. **Visualization & Reporting Enablement:** Enabled PI Vision with persona based dashboards for high-speed trending, centralized reporting via PBIRS/SSRS, and live Excel analysis using DataLink.

OPPORTUNITY FOR IMPACT

- **30%** **Faster** access to production insights
- **36%** **Reduction** in manual reporting effort
- **42%** **Higher** reliability of OEE
- **32%** **Faster** onboarding of new data sources

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CASE STUDY

Streamlining Multisite Manufacturing Operations with Infor SyteLine & Factory Track for a Metal Forging Leader

Client Profile

A leader in the metal forging industry, pioneering the transition of traditional metal-forming methods into advanced, high-tech solutions.



With ITHENA's expertise and Infor's SyteLine and Factory Track platform, we were able to unify our multisite operations, eliminate manual processes, and gain real-time visibility across procurement, production, and inventory.

— Vice President, Operations

CHALLENGES

The client struggled with:

- Limited visibility and control across multisite vendors, inventory, and job orders.
- Heavy reliance on manual, Excel-based processes for Shear Tickets, PPAP, and reporting.
- Difficulty tracking purchase requisitions and orders end-to-end across systems.
- Inconsistent and manual reporting, slowing decision-making and information sharing.
- Inability to adapt standard ERP processes to support its unique business workflows.

SOLUTIONS

ITHENA, in partnership with Infor, supported Infor SyteLine (CSI) and Infor Factory Track to enable:

1. **ERP & Multisite Enablement:**
   Enabled Infor Syteline with multisite configuration to centrally manage vendors, inventory, job orders, pricing, and contracts while supporting scalable plant operations.
2. **Procurement & Vendor Management:**
   Streamlined requisition, purchasing, and vendor workflows with end-to-end traceability, vendor contract replication across sites, and item-level PO enablement controls.
3. **Production Planning & Scheduling:**
   Enabled Factory Track and APS through ongoing technical and functional support, optimizing material-based scheduling, real-time production visibility, and execution accuracy.
4. **Process Digitization & Customization:**
   Eliminated Excel-based processes by moving Shear Ticket management and PPAP workflows directly into Syteline through form customizations, Mongoose framework development, and event handling.
5. **Optimization, Reporting & Automation**
   Optimized EDI and external business processes, automated weekly purchase order reports, enabled customized reporting, email notifications, and governed user session management for better visibility and control.

OPPORTUNITY FOR IMPACT

28%

Faster purchase requisition-to-order cycles

26%

Reduction in reporting turnaround time

22%

Increase in data consistency across operations

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CASE STUDY

Advancing Manufacturing Performance with AI for a Leading U.S. Bakery Equipment Manufacturer

Client Profile

The largest U.S. bakery equipment manufacturer focused on enhancing its manufacturing processes through innovation and technology.



Aether has transformed how we access and interpret our manufacturing data. With real-time dashboards, AI-driven insights, and conversational analytics, our teams can quickly identify performance gaps and act on opportunities to improve efficiency across operations.

— Director of Manufacturing Operations

CHALLENGES

The client struggled with:

- Limited visibility into production performance across fabrication, assembly, and testing of equipment, impacting throughput and efficiency.
- Inconsistent cycle times and output quality due to variability in processes like welding, assembly, and system integration.
- Difficulty identifying inefficiencies in critical equipment builds, such as thermal systems, conveyor mechanisms, and control units.
- Heavy reliance on manual data analysis to understand machine performance, production trends, and operational inefficiencies.
- Delayed response to production issues, leading to rework, extended build cycles, and missed delivery timelines.

SOLUTIONS

ITHENA's **Analytics AI Platform, Aether,** empowered the client with:

1. **Contextualized Manufacturing Data Layer**
   Shifted focus from fragmented data to a unified view of production processes, enabling teams to monitor and optimize fabrication, assembly, and testing workflows in real time.
2. **Continuous Throughput & Flow Intelligence**
   Applied AI to analyze production patterns, identify sources of variability, and stabilize cycle times across different equipment builds.
3. **AI-Powered Performance Visibility**
   Delivered granular visibility into how key subsystems like heating elements, conveyors, and control panels perform during manufacturing, enabling targeted process improvements.
4. **Automated Insight Generation**
   Eliminated manual analysis by continuously scanning production data to surface inefficiencies, performance gaps, and improvement opportunities.
5. **Proactive Issue Detection & Resolution**
   Detected early signs of production slowdowns, quality deviations, and workflow disruptions, enabling faster corrective actions and smoother operations.

OPPORTUNITY FOR IMPACT

28%
Improvement in production efficiency

32%
Reduction in operational bottlenecks

37%
Faster decision-making

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CASE STUDY

Transforming Spare Parts Management with AI-Powered B2B eCommerce for a Leading Packaging Machinery Manufacturer

Client Profile

A leading manufacturer of pouching, cartoning, shrink wrapping, and packing systems for food, beverage, personal care, pharmaceutical, chemical, and tobacco industries.

CHALLENGES

The client struggled with:

- Manual spare parts ordering processes causing delays, order inaccuracies, and fulfillment errors.
- Limited real-time visibility into spare parts availability, pricing, and inventory status across locations.
- Revenue leakage due to incorrect part identification and missed cross-sell or upsell opportunities.
- High service team workload driven by repetitive spare parts inquiries and manual coordination.



ITHENA's platform has digitized our spare parts operations. By enabling real-time visibility, intelligent part recommendations, and seamless ERP integration, we've increased revenue while significantly reducing service workload and order processing time.

— Vice President, Aftermarket Service Operations

SOLUTIONS

ITHENA's **B2B eCommerce platform** empowered the client with:

1. **Digital Spare Parts Ordering Enablement:**
   Equipped the OEM with a secure, eCommerce portal that allows its customers to independently search, identify, and purchase spare parts with real-time availability.
2. **Comprehensive 360° Parts Visibility:**
   Enabled BOM visualization, AI-driven Recommended Spare Parts Lists, and dynamic equipment views so users can accurately identify critical spare parts.
3. **Seamless ERP Integration:**
   Connected enterprise systems for real-time inventory, ATP, CTP, cost visibility, and customer-specific pricing to ensure accurate transactions and transparency.
4. **24/7 Global Support Framework:**
   Enabled AI-powered chatbot assistance, automated notifications, structured case logging, and escalation workflows to ensure closed-loop issue management.

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OPPORTUNITY FOR IMPACT

39%
Increase in spare parts revenue

34%
Reduction in service inquiry workload

35%
Decrease in order processing time

CASE STUDY

Accelerating Financial Intelligence with Aether for a U.S.-Based Insurance & Financial Services Provider

Client Profile

A U.S.-based financial services and insurance provider specializing in long-term care insurance, life insurance, annuities, and mortgage insurance solutions.

CHALLENGES

The client struggled with:

- Siloed data across insurance products and business units, including long-term care, life, annuity, and mortgage insurance.
- Time-intensive manual data extraction, transformation, and reporting across actuarial, underwriting, risk, and compliance teams.
- Limited real-time insights into emerging risk patterns, fraud signals, and customer behavior.



Aether transformed how we access and act on our enterprise data. With conversational analytics, real-time dashboards, and AI-driven risk insights, we've accelerated decision-making, strengthened compliance, and enhanced fraud detection across our organization.

— Chief Data & Risk Officer

SOLUTIONS

ITHENA's **Analytics AI Platform, Aether,** empowered the client with:

1. **Seamless Data Integration:** Connected siloed insurance systems into a centralized AI-powered platform, enabling cross-product visibility and enterprise-wide reporting.
2. **Automated Data Processing & Reporting:** Automated data extraction, transformation, and regulatory reporting using GenAI, reducing manual effort and accelerating analytics delivery.
3. **Real-Time Risk & Fraud Intelligence:** Delivered AI-driven anomaly detection, predictive risk scoring, and proactive fraud alerts using real-time transaction analytics.
4. **Conversational Analytics & Decision Support:** Enabled natural language data queries, generating instant dashboards, forecasts, actionable insights, and agentic task recommendations.

OPPORTUNITY FOR IMPACT

34% **Faster** decision-making

38% **Increase** in timely delivery

27% **Boost** in fraud detection rate

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CASE STUDY

Transforming Defense Manufacturing with AI-Driven Visibility and Risk Insights

Client Profile

A leading US-based defense manufacturer specializing in the design, development, and production of advanced weapon systems, missile parts, and ammunition.

CHALLENGES

The client struggled with:

- Limited real-time visibility into production throughput, yield rates, and defect trends across manufacturing plants.
- Delayed detection of material shortages impacting production schedules.
- Difficulty analyzing historical test data and tolerance variations to predict manufacturing deviations.
- Inability to convert operational insights into immediate, structured action.



Aether has fundamentally changed how we interpret and act on manufacturing data. With real-time dashboards, conversational access to complex datasets, and proactive AI-driven task automation, we have enhanced operational precision and accelerated mission-critical decision-making.

— Vice President, Manufacturing Operations

SOLUTIONS

ITHENA's **Analytics AI Platform, Aether**, empowered the client with:

1. **Enterprise-Scale Data Processing:**
   Processed large volumes of production, testing, and quality data across secure environments, creating a unified, contextual data layer for mission-critical manufacturing.
2. **Live Dashboards & Visual Intelligence:**
   Delivered real-time dashboards and dynamic visualizations tracking throughput, yield performance, defect patterns, and inventory health across secure facilities.
3. **Agentic AI with Proactive Suggestions:**
   Identified anomalies such as tolerance breaches, process drifts, and supply risks, while triggering proactive, workflow-aligned actions to prevent disruptions.
4. **AI-Driven Quality, Traceability & Compliance**
   Analyzed tolerance data, inspection logs, and historical test results to detect early deviations, ensure full traceability, and support stringent defense compliance requirements.
5. **Proactive Supply Chain Risk Management**
   Anticipated material shortages and component risks in advance, enabling better planning and uninterrupted production for time-sensitive defense programs.

OPPORTUNITY FOR IMPACT

26% — **Reduction** in production lead time

32% — **Improvement** in material shortage detection

4X — **Faster** operational decision-making

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CASE STUDY

Enabling Real-Time Visibility and Predictive Insights with ThingWorx & SCPA

Client Profile

A leading provider of industrial compressed air, vacuum, and cooling water automation and control solutions focused on efficiency and performance optimization.



With ITHENA's expertise and PTC ThingWorx and SCPA platform, we were able to connect our IT and OT systems, eliminate manual reporting, and gain real-time insights into asset performance, helping us reduce downtime and improve operational efficiency.

— Vice President, Operations

CHALLENGES

The client struggled with:

- Disconnected IT and OT systems, limiting unified visibility across operations.
- Heavy reliance on manual data collection and reporting, leading to errors and delays.
- Limited real-time monitoring of asset performance, resulting in unplanned downtime.
- Difficulty performing root cause analysis across machine alarms and downtime events.
- Operator inefficiencies due to fragmented systems and high "search time" for critical data.

SOLUTIONS

ITHENA delivered technical expertise and support across PTC ThingWorx, SCPA, Kepware, and PostgreSQL, enabling the client with:

1. **Unified Digital Thread:** Bridged IT and OT systems by creating a connected data ecosystem, enabling seamless data flow and enterprise-wide visibility.
2. **Industrial Connectivity & Data Automation:** Leveraged Kepware for industrial connectivity and automated data collection to eliminate manual reporting and improve data accuracy.
3. **Real-Time Asset Monitoring & Alerts:** Enabled SCPA Asset and Alert modules to provide real-time monitoring, reduce unplanned downtime, and improve operational responsiveness.
4. **Root Cause Analysis & Predictive Insights:** Enabled drill-down into machine alarms and downtime events while identifying performance trends before failures occur.
5. **Workforce Enablement & Digitalization:** Delivered digital work instructions and intuitive dashboards, reducing operator search time and improving workforce efficiency.

OPPORTUNITY FOR IMPACT

42% **Reduction** in unplanned downtime

36% **Improvement** in operator efficiency

4X **Faster** time to market

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CASE STUDY

Accelerating Operational Excellence through a Unified Low-Code Platform for a Global Pump & Valve Manufacturer

Client Profile

A leading global manufacturer of pumps and valves serving industries such as water, energy, infrastructure, process manufacturing, and industrial operations.

CHALLENGES

The client struggled with:

- Manual, paper-based workflows and disconnected systems across plants
- Time-intensive manual tracking and documentation for valves and components (15–20 minutes per unit)
- Limited real-time visibility into shop-floor KPIs and pump testing parameters constrained proactive, data-driven decision-making
- High reliance on paper records for heat code traceability and inspection checklists increased error risk and reduced auditability
- Disparate legacy applications across plants increased licensing, maintenance costs, and vendor dependency

SOLUTIONS

ITHENA's unified **Low-Code No-Code (LCNC) platform**, featuring an integrated suite of **targeted mini-apps** developed and deployed rapidly, empowered the client with:

1. **Production Order & Time Booking:**
   Automated operator time logging with seamless synchronization to the central SAP ERP system via Robotic Process Automation (RPA) bots
2. **Final Inspection to Dispatch:**
   Enabled end-to-end traceability of the valve lifecycle from warehouse putaway to dispatch, with automated generation of gate passes and loading slips
3. **Digital GEMBA (iGEMBA):**
   Digitized shop-floor management with real-time Safety, Quality, Delivery, and Cost (SQDC) KPI dashboards and a Kaizen (continuous improvement) action-tracking board
4. **Real-time Monitoring & Online Witness:**
   Enabled customers to witness pump testing remotely through live data streams and video feeds through a web-based platform
5. **Unified Namespace (UNS):**
   Connected shop-floor IoT systems, PLCs, and enterprise SAP data into a single source of truth for manufacturing analytics

ITHENA's LCNC platform unified plant operations, automated manufacturing workflows, and delivered real-time operational insights. It **enhanced productivity, improved traceability, reduced ownership costs, and enabled faster, data-driven manufacturing decisions.**

OPPORTUNITY FOR IMPACT

37%	100%	34%	4 wk
Reduction in total cost of ownership (TCO)	**End-to-End** traceability	**Higher** operational efficiency	**Rapid** development and deployment

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CASE STUDY

Enhancing Real-Time Brand Intelligence and Customer Engagement for a Leading Global Consumer Electronics Brand

Client Profile

A global leader and rapidly growing multinational consumer electronics and smart device brand with a strong presence in the United States.



ITHENA's iSIP solution unified social intelligence, NLP-driven sentiment analysis, and agentic AI actions into a single platform, enabling faster engagement, smarter campaigns, and stronger brand visibility.

CHALLENGES

The client struggled with:

- Limited visibility into real-time customer sentiment across multiple social platforms
- Inability to consolidate social interactions, mentions, and feedback into a unified intelligence platform
- Delayed response to negative customer sentiment and reputation risks
- Lack of actionable insights to optimize campaigns and improve engagement
- Difficulty benchmarking brand performance against competitors
- Manual analysis processes slowed marketing responsiveness and decision-making

SOLUTIONS

ITHENA's Social Intelligence Platform (iSIP) solution empowered the client with:

1. **Unified Social Listening:**
   Centralized customer interactions, brand mentions, and feedback from LinkedIn, Google, Facebook, etc. into a real-time dashboard for full brand visibility
2. **NLP-Driven Sentiment Analysis:**
   Used NLP and AI to analyze sentiment, uncover root causes of engagement trends, and track positive, negative, and neutral conversations in real time
3. **Competitive & Market Intelligence:**
   Delivered competitor benchmarking, positioning insights, and AI-generated SWOT analysis for faster, data-driven decisions
4. **Geographic & Demographic Analytics:**
   Provided audience segmentation by location, age group, and sentiment to improve targeting and engagement strategies
5. **Agentic AI Recommendations:**
   Enabled real-time action with AI-driven recommendations for campaign optimization, influencer engagement, responses, and CRM workflows

OPPORTUNITY FOR IMPACT

- **35%** — **Reduction** in manual social analysis efforts
- **38%** — **Faster** response to customer sentiment trends
- **31%** — **Improvement** in campaign engagement rates
- **29%** — **Increase** in customer satisfaction scores

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CASE STUDY

Driving AI-Powered Manufacturing Intelligence with FactoryGPT for a Global Packaging Equipment Manufacturer

Client Profile

A global manufacturer of high-speed rotary filling systems and customized high-tech liquid food packaging solutions.

CHALLENGES

The client struggled with:

- Slow root cause analysis for downtime and OEE losses delayed corrective actions and impacted throughput
- Disconnected machine, historian, and maintenance data created fragmented operational insights
- Reliance on dashboards and manual processes slowed decision-making and maintenance response
- Operators lacked instant access to troubleshooting knowledge and historical maintenance information



ITHENA's FactoryGPT solution enabled real-time conversational factory intelligence, helping the manufacturer **reduce downtime, automate maintenance workflows, and transform production data into actionable insights.**

SOLUTIONS

ITHENA's FactoryGPT solution empowered the client with:

1. **Unified Industrial Data Integration:** Connected machine sensors and data from PLEX, FTDM, FiiX, and other manufacturing systems into a centralized LLM-powered intelligence platform.
2. **Conversational Factory Intelligence:** Enabled operators and plant managers to query production data using natural language and receive instant insights into downtime events, OEE losses, and machine performance issues
3. **AI-Powered Analytics:** Continuously monitored machine data, throughput, filling accuracy, cycle times, and downtime trends to detect anomalies and uncover hidden production losses in real time.
4. **Knowledge Base Integration:** Integrated SOPs, troubleshooting manuals, and maintenance documentation to provide operators with contextual recommendations and guided issue resolution.
5. **Agentic AI Workflows:** Automated operational actions by triggering maintenance work orders, dispatching service teams, and enabling proactive response workflows based on detected production anomalies

OPPORTUNITY FOR IMPACT

<30	3x	24/7	34%
Seconds to identify downtime root causes	**Faster** drill-down into production issues	**AI-powered** factory intelligence assistant	**Increase** in maintenance responsiveness

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CASE STUDY

Transforming Customer Intelligence and Policyholder Engagement for a Leading U.S. Insurance Provider

Client Profile

A leading U.S.-based financial services and insurance provider specializing in long-term care insurance, life insurance, annuities, and mortgage insurance solutions.



ITHENA's iSIP solution unified customer intelligence, AI-powered sentiment analysis, competitive benchmarking, and agentic AI recommendations into a single platform. The solution enabled the organization to proactively manage customer experiences, improve policyholder engagement, **strengthen brand trust, accelerate decision-making, and identify opportunities for product innovation and growth.**

CHALLENGES

The client struggled with:

- Inability to consolidate customer feedback, social conversations, and market discussions into a unified intelligence platform
- Limited visibility into policyholder sentiment and customer experiences across social media, review platforms, and digital channels
- Delayed response to reputation risks and negative customer sentiment impacting brand trust
- Manual analysis of customer feedback and social interactions slowed decision-making and response times
- Limited competitive intelligence regarding customer perceptions of competing insurance providers

SOLUTIONS

ITHENA's iSIP platform improved customer intelligence and engagement by:

1. **Unified Customer Intelligence**
   Aggregated policyholder feedback, brand mentions, reviews, and social conversations across social platforms into a centralized real-time intelligence dashboard
2. **AI-Powered Sentiment and Root Cause Analysis**
   Leveraged AI and NLP to analyze sentiment, identify key drivers behind positive and negative experiences, and monitor policyholder engagement trends in real time
3. **Competitive and Market Intelligence**
   Provided visibility into competitor sentiment and emerging insurance market needs, enabling proactive strategic planning and product differentiation
4. **Customer Experience Monitoring**
   Continuously monitored discussions around claims processing, policy management, and customer service to identify service gaps and improvement opportunities
5. **Agentic AI Recommendations**
   Delivered intelligent recommendations for customer engagement, retention initiatives, marketing campaigns, and CRM workflows, enabling teams to act immediately
6. **Audience and Geographic Analytics**
   Segmented customer sentiment and engagement by region, product line, and demographics to sharpen targeting and service strategies

OPPORTUNITY FOR IMPACT

40%	36%	28%	24%
Reduction in manual feedback & social intelligence analysis	**Faster** response to customer sentiment	**Improvement** in digital channel customer engagement	**Increase** in policyholder satisfaction scores

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CASE STUDY

Redefining Brand Perception and Customer Engagement with iSIP for a Global Solar Energy Leader

Client Profile

A global leader in energy management technology, delivering innovative solar energy, battery storage, and energy optimization solutions for residential and commercial customers worldwide.



ITHENA's iSIP solution unified customer intelligence, AI-powered sentiment analysis, and agentic recommendations into a single platform, **enabling faster issue resolution, improved customer engagement, enhanced product innovation, and stronger brand perception** across global energy markets

CHALLENGES

The client struggled with:

- Limited visibility into customer sentiment across multiple social and digital channels
- Difficulty consolidating feedback related to solar installations, energy storage systems, product performance, and customer support into a unified intelligence platform
- Delayed identification of emerging product, service, and brand perception issues across global markets
- Limited competitive intelligence regarding customer perception of competing solar and energy storage providers
- Manual monitoring and analysis processes slowed decision-making and response times across marketing, customer success, and product teams

SOLUTIONS

ITHENA's Social Intelligence Platform (iSIP) empowered the client with

1. **Unified Social Listening**
   Centralized customer conversations, product reviews, installer feedback, and brand mentions from LinkedIn, Google, Facebook, industry forums, and other digital channels into a single real-time intelligence dashboard
2. **AI-Powered Sentiment Analysis**
   Leveraged advanced NLP and AI to analyze customer sentiment, identify root causes of satisfaction and dissatisfaction, and track sentiment trends related to products, services, installations, and customer support
3. **Product & Market Intelligence**
   Delivered insights into customer expectations, emerging energy trends, competitor perception, and product feedback to support innovation and strategic planning
4. **Geographic & Audience Analytics**
   Enabled segmentation of customer conversations and sentiment by region, market, and audience type, helping teams optimize engagement and market strategies
5. **Agentic AI Recommendations**
   Generated actionable recommendations for customer engagement, issue resolution, product improvements, marketing campaigns, and CRM integration to accelerate business outcomes

OPPORTUNITY FOR IMPACT

- **40%** — **Reduction** in social listening and analysis efforts
- **35%** — **Faster** identification & response to customer sentiment shifts
- **32%** — **Improvement** in customer engagement across digital channels
- **28%** — **Increase** in customer satisfaction & brand advocacy

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CASE STUDY

Empowering a Leading American Memorabilia Manufacturer with Analytics-Driven BI and Engagement

Client Profile

A leading American memorabilia manufacturer specializing in yearbooks, class rings, and graduation keepsakes for schools and educational institutions across the United States.



ITHENA's iSIP solution unified customer intelligence, sentiment analysis, and agentic AI-driven recommendations into a single analytics-driven business intelligence platform, **enabling faster decision-making, improved customer experience, and more effective school engagement** across the U.S. education memorabilia market.

CHALLENGES

The client struggled with:

- Limited visibility into real-time customer sentiment across students, parents, and school stakeholders
- Inability to consolidate feedback from social platforms, reviews, and school-level interactions into a unified intelligence system
- Delayed identification of issues related to yearbook creation tools, class ring customization, and order fulfillment
- Heavy reliance on manual reporting processes that slowed decision-making and reduced operational efficiency
- Limited ability to benchmark performance against competitors in the educational memorabilia market

SOLUTIONS

ITHENA's Social Intelligence Platform (iSIP) empowered the client with

1. **Unified Customer & Market Intelligence**
   Centralized student, parent, and school-related feedback, along with social mentions, reviews, and digital interactions into a real-time BI dashboard for complete visibility across all customer touchpoints

2. **NLP-Driven Sentiment & Experience Analysis**
   Applied AI and NLP to analyze sentiment across yearbook and class ring experiences, identifying key drivers of satisfaction and dissatisfaction such as customization experience, delivery timelines, and product quality

3. **Demand & Seasonal Intelligence**
   Delivered seasonal engagement insights around graduation cycles, allowing for regional and school-level demand forecasting for yearbooks and class rings

4. **Competitive & Market Intelligence:**
   Provided benchmarking against competitors in the memorabilia and school services space, along with AI-generated insights on positioning, pricing perception, and customer preference trends.

5. **Agentic AI Recommendations**
   Enabled real-time, actionable CRM and BI-integrated recommendations for marketing, outreach, support, and operations

OPPORTUNITY FOR IMPACT

37% **Reduction** in manual reporting and analysis efforts

34% **Faster** identification of customer sentiment and operational issues

32% **Improvement** in campaign and school engagement

45% **Boost** in seasonal campaign conversions for target accounts

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CASE STUDY

Driving Integrated Data Intelligence and Advisor Efficiency via Aether for a Major U.S. Financial Services Provider

Client Profile

One of the world's largest privately held financial services organizations, offering brokerage, retirement, wealth management, and institutional investment solutions.



ITHENA's Aether platform unified fragmented financial data into an AI intelligence layer, providing real-time analytics and predictive insights that boosted advisor productivity and decision-making enterprise-wide.

CHALLENGES

The client struggled with:

- Limited ability to unify data across brokerage, investing, and wealth management into one accessible intelligence layer
- Inefficient data access forces advisors to spend more time navigating systems than acting on insights
- Delayed reporting caused by fragmented data across disconnected categories across business units
- Absence of NLP-driven data access, requiring manual extraction and static dashboards for financial and customer decision-making
- Difficulty surfacing predictive and contextual insights across portfolios without excessive manual effort

SOLUTIONS

ITHENA's Aether platform empowered the client with:

1. **Unified Data Lake Integration**

   Consolidated diverse data channels into a governed framework, giving stakeholders synchronized, real-time visibility

2. **NLP-Driven Conversational Analytics**

   Enabled analysts and advisors to query enterprise data conversationally, replacing manual dashboard exploration

3. **GenAI-Powered Insights**

   Automated report generation and ad hoc analysis, cutting data-to-insight time to seconds and freeing advisors to focus on clients

4. **Predictive Intelligence**

   Detected trends and anomalies across retirement and wealth data, enabling proactive risk management

5. **Agentic AI Recommendations**

   Delivered real-time recommendations directly into investment and operational workflows, accelerating decision-making

OPPORTUNITY FOR IMPACT

- **40%** — **Reduction** in manual reporting
- **35%** — **Improvement** in report delivery speed
- **32%** — **Faster** anomaly identification
- **28%** — **Boost** in advisor productivity

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CASE STUDY

Transforming Clinical Data Intelligence and Operational Decision-Making with Aether for a Leading Academic Medical Center

Client Profile

A nonprofit academic medical center delivering clinical care, research, and education across a network of hospitals and outpatient facilities.



ITHENA's Aether platform unified clinical, operational, and research data across a multi-facility academic medical center into a single AI-powered intelligence layer, enabling real-time conversational analytics, predictive anomaly detection, and faster clinical trial matching that strengthened both patient care and operational decision-making.

CHALLENGES

The client struggled with:

- Limited ability to unify structured and unstructured clinical data into a single accessible intelligence layer
- Difficulty in efficiently connecting patients to relevant clinical trials, where eligibility has traditionally been limited
- Delayed identification of operational and clinical anomalies across a multi-facility system
- Lack of real-time, conversational access to clinical and operational data resulting in dependence on legacy dashboards and static reporting
- Limited capacity to convert vast volumes of data into timely, actionable insights

SOLUTIONS

ITHENA's Aether platform empowered the client through:

1. **Unified Data Integration**

   Consolidated structured and unstructured clinical data into a real-time, governed intelligence layer for system-wide visibility

2. **NLP-Driven Insights**

   Enabled conversational queries to instantly match patients to eligible clinical trials, replacing manual chart reviews

3. **Predictive Analytics and Anomaly Detection**

   Identified critical trends and anomalies to reduce errors and enhance diagnostic precision

4. **Real-Time Visualization and Reporting**

   Shifted from static cycles to interactive visualizations to accelerate clinical and leadership decision-making

5. **Agentic AI Recommendations**

   Delivered context-aware recommendations within workflows to improve care and operational confidence

OPPORTUNITY FOR IMPACT

- **30%** — **Reduction** in manual chart review effort
- **27%** — **Decrease** in diagnostic errors
- **25%** — **Improvement** in trial matching speed
- **22%** — **Boost** in clinician AI adoption

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CASE STUDY

Enabling Real-Time Process Intelligence and Operational Efficiency with Aether for a Global Chemical Industry Leader

Client Profile

A global chemical industry leader manufacturing polymers, chemicals, and fuels across a multi-plant operating network.



ITHENA's Aether platform unified sensor and operational data across a chemical manufacturing network into an AI layer. This enabled predictive anomaly detection and real-time KPI visualization, accelerating decisions that reduced downtime and boosted productivity.

CHALLENGES

The client struggled with:

- Limited ability to detect equipment anomalies early, with unplanned downtime repeatedly reducing production efficiency and margins
- Lack of real-time visibility into plant-level operational KPIs, leaving managers dependent on delayed, siloed reporting
- Difficulty forecasting the impact of volatile feedstock costs on production planning across multiple facilities
- Reliance on manual analysis to identify process inefficiencies, slowing response to emerging operational issues

SOLUTIONS

ITHENA's Analytics AI Platform, Aether, enabled the client to:

1. **Unified Sensor Data Integration**

   Consolidated equipment and process data from across multiple plants into a single real-time intelligence layer

2. **Conversational Data Access:**

   Enabled engineers and operations leaders to query plant and equipment data in natural language, cutting investigation time

3. **Predictive Anomaly Detection**

   Identified early signs of equipment failure and process deviation, reducing downtime across the manufacturing network

4. **Real-Time Visualization**

   Delivered live operational KPIs directly to plant managers, removing delays caused by static, manually compiled reports

5. **GenAI-Powered Recommendations**

   Generated actionable maintenance and process optimization, accelerating response to emerging inefficiencies

OPPORTUNITY FOR IMPACT

- **22%** — **Reduction** in unplanned downtime
- **18%** — **Improvement** in anomaly detection
- **15%** — **Boost** in plant productivity
- **12%** — **Reduction** in analysis effort

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CASE STUDY

Spare Parts Commerce with AI-Powered Self-Service for a Leading U.S. Bakery Equipment Manufacturer

Client Profile

The largest U.S. bakery equipment manufacturer is focused on enhancing its manufacturing processes through innovation and technology.



ITHENA's iSERV and Aether enabled seamless digital spare parts ordering with AI-powered self-service, conversational support, and real-time ERP integration, **driving revenue growth and customer satisfaction.**

CHALLENGES

The client struggled with:

- Manual and fragmented spare parts ordering processes across phone, email, and distributor channels
- Limited self-service capabilities for customers to identify, select, and purchase the right spare parts
- Revenue leakage due to customers sourcing aftermarket spare parts from third-party suppliers
- High dependency on service teams for troubleshooting, order inquiries, and support requests

SOLUTIONS

ITHENA's **iSERV and Aether,** empowered the client with:

1. **End-to-end E-commerce**

   Enabled self-service ordering through interactive 2D/3D equipment views and 360° exploded BOMs for precise spare part selection with real-time availability and pricing

2. **Seamless ERP Integration**

   Integrated enterprise ERP systems to enable real-time visibility of inventory, pricing, ATP/CTP, and logistics, ensuring accurate and efficient spare parts ordering

3. **24/7 AI Chatbot**

   Enabled always-on conversational AI chatbot for spare parts identification, ordering support, troubleshooting, and real-time order status via natural language

4. **Agentic AI for Proactive Ordering**

   Delivered RSPL-based recommendations, proactive alerts, and automated ordering workflows to identify required and replacement spare parts

OPPORTUNITY FOR IMPACT

32%
Increase in spare parts revenue

27%
Boost in customer satisfaction

37%
Reduction in order cycle time

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CASE STUDY

Achieving Real-Time Project Control and Profitability Visibility with PanelOps for a Leading Industrial Automation Firm

Client Profile

A leading industrial automation, instrumentation, and process control engineering & consulting firm with 100+ years of combined industry experience and hundreds of completed projects.



ITHENA's PanelOps enabled unified project operations with centralized workflows, BOM traceability, and real-time visibility across costing, procurement, inventory, and execution, **improving scalability and project delivery efficiency.**

CHALLENGES

The client struggled with:

- Information scattered across paper-based records, spreadsheets, and disconnected systems, creating operational silos
- Heavy reliance on person-dependent processes, limiting collaboration and business continuity
- Scalability challenges as the number of concurrent automation projects continued to grow
- Limited visibility into project costs, procurement status, inventory, and project execution

SOLUTIONS

ITHENA's **PanelOps** solution enabled the client with:

1. **Unified Platform**

   Centralized project data and workflows across teams, replacing paper-based and spreadsheet-driven operations with a single source of truth

2. **Project Management**

   Supported increasing project volumes with structured workflows for E&I, PLC, SCADA, and DCS project types without adding administrative overhead

3. **BOM & Stock Management**

   Enabled inventory visibility and stock management with multi-level BOMs and material tracking, providing end-to-end component traceability from procurement through project delivery

4. **Operational & Financial Visibility**

   Provided real-time visibility into project actuals against budgets and project profitability, enabling faster, data-driven decision-making

OPPORTUNITY FOR IMPACT

40%	30%	25%	35%
Boost in operational visibility	**Faster** BOM and parts management	**Increase** in project scalability	**Improvement** in parts traceability

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CASE STUDY

AI-Powered Aftermarket Service Transformation for a Leading Woodworking Machinery Provider

Client Profile

A leading provider of advanced manufacturing solutions, machinery, software, and services for woodworking and industrial manufacturing.



ITHENA's iSERV and FactoryGPT provided a woodworking machinery solutions provider with unified service management, work order tracking, and AI anomaly detection, enabling faster coordination, self-service troubleshooting, and proactive maintenance to **reduce downtime** and **enhance aftermarket service delivery**

CHALLENGES

The client struggled with:

- Limited visibility into technician utilization and work order status across a distributed field network
- Inefficient issue management without a centralized ticket tracking system
- Lack of self-service resources for customers to troubleshoot faults before escalating
- Inability to diagnose equipment issues in real time, causing dependence on engineer availability
- Slow detection of machine anomalies and downtime, often noticed only after production is affected

SOLUTIONS

ITHENA's iSERV and FactoryGPT empowered the client with:

1. **Service Management**

   Consolidated all customer requests into a single tracked system, enabling faster prioritization and consistent resolution from open to close

2. **Work Order Management**

   Digitized scheduling and technician allocation across regional service centers, replacing manual coordination with real-time field visibility

3. **Knowledge Portal**

   Deployed self-service guides, machine schematics, and training manuals, enabling customers to accelerate issue resolution

4. **AI-Powered Service Intelligence**

   Enabled customers and technicians to query ticket status, service history, and updates in natural language, eliminating the manual follow-ups from the service desk

5. **Automated Insights and Agentic Workflows**

   Continuously scanned machine data for early anomalies, automatically triggering maintenance work orders before floor failures occurred

OPPORTUNITY FOR IMPACT

- **42%** — **Boost** in self-service resolutions
- **40%** — **Reduction** in unplanned downtime
- **35%** — **Reduction** in ticket resolution time
- **28%** — **Improvement** in customer satisfaction

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CASE STUDY

Enabling 24/7 Service Coverage and Faster Resolution with Agentic AI Agents for a Leading Heavy-Duty Forklift OEM

Client Profile

A global heavy-duty forklift and material handling equipment manufacturer supporting a nationwide network of dealers, parts centers, and factory-trained technicians



ITHENA's Agentic OEM AI Agents gave a heavy-duty forklift manufacturer round-the-clock call coverage, automated triage, and proactive maintenance outreach, cutting live call volume and missed appointments while speeding resolution across its dealer and service network.

CHALLENGES

The client struggled with:

- Limited after-hours coverage, leaving customers without support when equipment failures happen outside business hours
- Difficulty triaging incoming calls quickly, with simple fault and parts questions competing for the same queue as urgent breakdowns
- Delayed appointment confirmations, leading to missed service windows and wasted technician trips
- Limited visibility into parts and warranty status during calls, slowing first-contact resolution
- Inconsistent outreach for preventive maintenance and safety retrofits, leaving gaps in fleet-wide compliance

SOLUTIONS

ITHENA's Agentic OEM AI Agents empowered the client with:

1. **First-Level Call Support**

   Answered incoming customer calls around the clock, resolving common fault and parts questions instantly without waiting on technician availability

2. **Troubleshooting & Diagnostics**

   Guided callers through diagnostic steps using equipment history and fault codes, escalating only complex breakdowns to specialists

3. **Appointment Scheduling and Confirmations**

   Booked service visits against technician availability and location, then automatically confirmed appointments to cut no-shows

4. **Inventory and Warranty Lookups**

   Checked parts availability and warranty coverage in real time during the call, replacing manual lookups across the 35,000-line parts inventory

5. **Preventive Maintenance and Safety Outreach**

   Proactively contacted fleet owners for scheduled maintenance and safety retrofits based on usage data, closing gaps in fleet-wide compliance

OPPORTUNITY FOR IMPACT

- **70%** — **Reduction** in live call volume
- **3x** — **Faster** issue resolution
- **40%** — **Reduction** in missed appointments
- **30%** — **Increase in** first-contact resolution

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CASE STUDY

Reducing Downtime and Enabling Real-Time Intelligence via iMEX and FactoryGPT for a U.S. Cabinet Manufacturer

Client Profile

A leading U.S. cabinet manufacturer, producing over 10 million cabinets annually across multiple facilities for top retailers and homebuilders.



ITHENA's iMEX and FactoryGPT brought proactive plant intelligence to one of the largest U.S. cabinet manufacturers, replacing reactive reporting. The solution's standardized OEE visibility, digital quality inspections, automated anomaly detection, and conversational diagnostics increased machine availability and reduced unplanned downtime across facilities

CHALLENGES

The client struggled with:

- Lacked real-time OEE and downtime visibility across production lines
- Operated without standardized KPIs, blocking consistent cross-facility benchmarking
- Relied on manual logbooks and paper inspections, slowing quality consolidation
- Failed to detect throughput and cycle time anomalies before production was impacted
- Struggled to identify equipment stoppage root causes without manual investigation

SOLUTIONS

ITHENA deployed iMEX and FactoryGPT, moving the client from reactive reporting to proactive:

1. **Real-Time Monitoring**

   Delivered persona-based OEE dashboards, providing operators live visibility into line availability, performance, and quality

2. **Standardized KPIs**

   Unified performance across all facilities, enabling consistent plant comparisons & faster identification of underperforming lines

3. **Digitized Inspections**

   Replaced paper checklists with structured digital workflows, ensuring consistent quality records across all production stages

4. **Anomaly Detection**

   Scanned throughput and cycle time data continuously, surfacing hidden performance losses before they impacted OEE

5. **Automated Flows**

   Enabled natural language queries on metrics and downtime, auto-triggering corrective work orders before losses compound

OPPORTUNITY FOR IMPACT

40%	30%	25%	2hrs
Increase in machine availability	**Reduction** in unplanned downtime	**Improvement** in line performance	**Saved** per operator shift

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