SAS | inspira®

Empowering the Digital Transformation Journey in Power Utilities, Health Care and Transport

Inspira and SAS

Inspira and SAS, through a strategic partnership, aim to redefine operational excellence in the manufacturing, power utility, health care, agriculture and smart city sectors. This collaboration combines industry-leading analytics from SAS with Inspira's deep domain expertise and integration experience to develop tailored solutions that address complex industry challenges. The result is value delivered to customers through a sharper focus on domain-specific analytics.

The partnership prioritizes the integration of advanced analytics with profound domain knowledge. This ensures our solutions are not only technologically advanced but also deeply relevant to the specific needs of each industry. By focusing on the unique challenges and opportunities within each sector, Inspira and SAS deliver innovations that drive efficiency, sustainability and growth.

Together, Inspira and SAS will deliver value to our customers in the following sectors:

Power and utilities. Inspira and SAS have a proven track record of delivering secured data analytics solutions to leading power utilities worldwide. Together, they help optimize grid management and asset performance and integrate renewable energy sources.

Health care. Inspira's expertise in data integration allows health care providers to use SAS advanced analytics for data collected from electronic health records, IoT devices and other sources to improve patient care and operational efficiency.

Smart city and transport. Inspira's experience in the smart city sector includes collaborating with railway companies to implement AI-powered solutions for predictive maintenance, passenger flow optimization and dynamic scheduling.

- Data modeling and design.
- Data storage and operations.
- Data security.
- Data integration and interoperability.
- Data warehousing and business intelligence.

Power Utility: Advanced Analytical Applications

Inspira and SAS have provided a real-time analytics platform with mission-critical use cases that enhance grid performance by integrating predictive analytics directly with operational systems. This enables more accurate and timely grid management and maintenance decisions, leading to significant cost savings and improved reliability.

Dynamic load forecasting. Use deep learning models from SAS to predict energy demand with high accuracy (+ /- 2%), enabling more efficient grid management and energy distribution. This is crucial for maintaining grid stability and operational efficiency.

Smart grid management. Integrate IoT data from smart meters and grid devices with analytics to enhance operational decisions. This enables functionalities like:

- Dynamic load management to balance supply and demand in real time.
- Theft detection to identify and address energy losses.
- Tariff optimization to create dynamic pricing structures based on demand patterns.

Predictive maintenance for infrastructure health. Predictive models from SAS use sensor data on critical infrastructure (transformers, power lines, etc) to foresee potential failures and proactively schedule maintenance. This reduces downtime, operational costs and the risk of outages.

Renewable energy optimization. Analytics helps manage the variability and integration of renewable sources, such as solar and wind. This includes:

- Predicting renewable energy output based on weather patterns.
- Optimizing energy storage solutions to balance supply and demand during peak and off-peak periods.
- Enhancing grid reliability by integrating renewable energy sources seamlessly.

Health Care: Leveraging Analytics for Better Care

Combining Inspira's integration capabilities with analytics from SAS has created a unified health care analytics system that integrates data across multiple platforms (electronic health records, billing systems, wearables, etc.). This enhances the ability to deliver personalized patient care, optimize hospital operations and improve overall health care efficiency.

Predictive analytics for patient care. Powerful and tailored machine learning algorithms process vast amounts of health care data to predict patient health events (e.g., readmission risk, potential complications). This enables proactive interventions, such as early treatment or preventative measures, improving patient outcomes and reducing hospital readmissions.

IoT-driven resource management. Advanced analytics optimize the management of critical resources, ensuring efficient use and availability. This includes:

- Tracking and optimizing medical supply inventory levels to prevent shortages and waste.
- Monitoring personnel workloads and scheduling to ensure adequate staffing across departments.
- Optimizing medical equipment utilization to improve efficiency and cost savings.

Optimizing patient flow. Data analytics streamlines the patient admission, treatment and discharge processes. This can involve:

- Identifying bottlenecks in patient flow and implementing solutions to reduce wait times.
- Predicting patient volumes and scheduling resources accordingly for improved capacity utilization.
- Optimizing hospital layout and room assignments based on patient needs and resource availability.
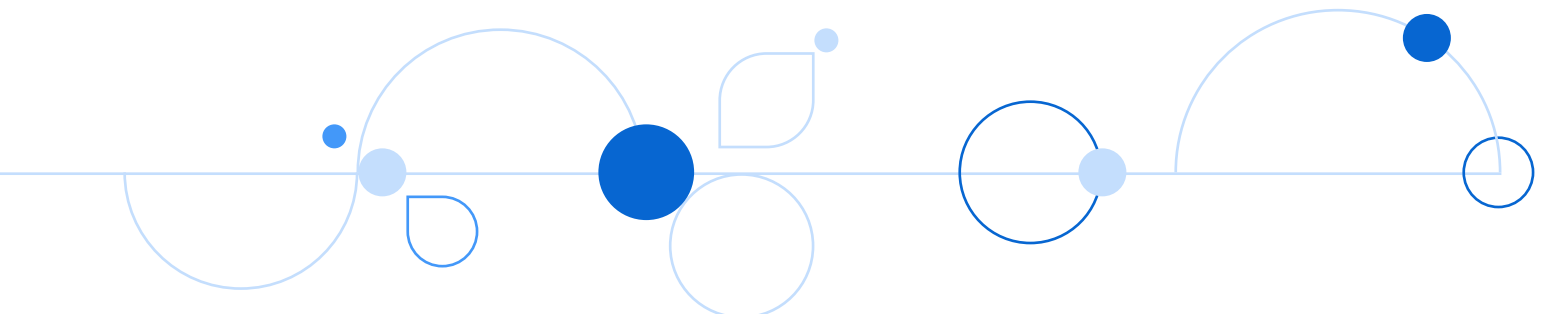
Analytics for Smart City

The Inspira and SAS partnership has implemented an advanced analytics framework that uses machine learning to optimize railway scheduling and asset management. This allows for dynamic routing based on real-time factors, which improves operational efficiency, passenger satisfaction and on-time performance.

Railway performance analytics. This joint solution provides insights into operational efficiency, asset utilization (e.g., rolling stock, track infrastructure) and service reliability. This helps railway companies improve their operations by:

- Identifying areas for performance improvement (delays, route inefficiencies, etc.).
- Optimizing resource allocation for maintenance and repairs.
- Implementing preventative measures to ensure safety and service reliability.

Predictive maintenance for railway infrastructure. Predictive models analyze condition data from railways (sensor data on tracks and trains) to effectively schedule maintenance. This includes:

- Real-time train arrival/departure information to improve passenger wait times and experience.
- Optimizing ticketing systems for faster and more convenient passenger transactions.
- Analyzing passenger flow data to improve station design and layout for efficient movement.

About Inspira

Inspira Enterprise is a global provider of cybersecurity, data analytics and AI services, operating across regions and serving various industries, such as banking, health care, public sector, manufacturing and others. Inspira delivers advanced cybersecurity solutions through global partnerships that enable cutting-edge solutions to detect, predict and manage cyber incidents. Their managed analytics service helps IT and business teams bridge data strategies with business outcomes, fostering a resilient, data-driven culture that accelerates change across people, processes, technology and operations management.

About SAS

Curiosity is our code. SAS analytics solutions transform data into intelligence, inspiring customers around the world to make bold discoveries that drive progress. SAS delivers better fraud and financial crimes compliance with enhanced fraud detection; efficient, effective investigations; consolidated monitoring and reporting; and proactive protection through advanced analytics, AI and machine learning technologies.

For more information, please visit sas.com/inspira