QUALITY & RELIABILITY
GROUP OF COMPANIES

Strengthen your Asset Lifecycle Management (ALM) Energy Portfolio with AI-Driven Apps

Michael Pierettis
Chief Commercial Officer

Reliability Through Our Commitment

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GROUP

Reliability Through Our Commitment

At **QUALITY & RELIABILITY (QnR),** we are committed to generating value for our clients, their businesses, and the communities we serve.
We consistently deliver on our commitments, ensuring that both our clients and stakeholders experience the excellence we strive for.

Fuelled by the passion for cutting-edge technology, we are dedicated to innovation and remain at the forefront of the industry.

Who we are

Quality and Reliability (QnR) is a Greek Technology company, with more than 30yrs presence in the market, **leading the digital transformation of Greece.**

Listed in Athens Stock Exchange since 2000: **QUAL**

QnR, is now evolving into a forward thinking, **dynamic Group of Companies**,
with extended capabilities, from innovative end-to-end software solutions, to artificial intelligence and cybersecurity solutions, that empowers organizations to optimize their operations, protect and enhance efficiency and transform their business landscape.

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Meet the Group

QNR GROUP
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Driving innovation through intelligent
Public and Private sector services

SysteCom

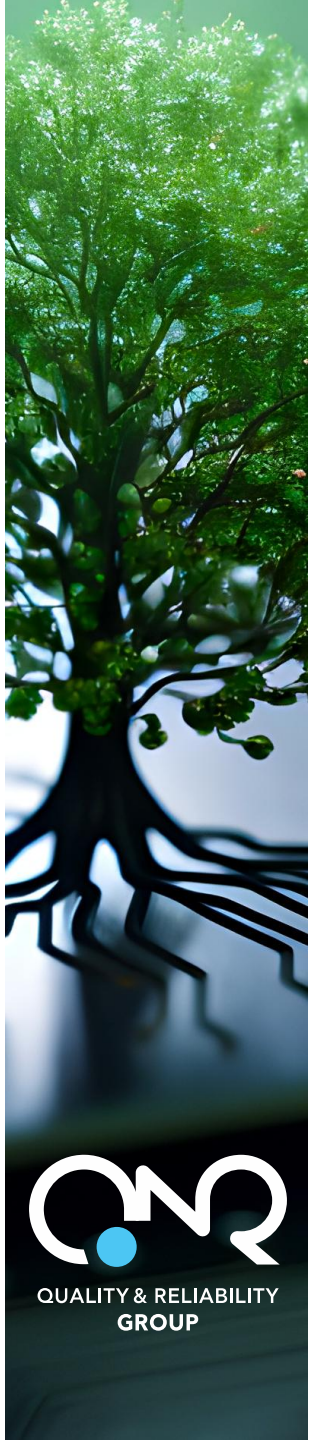
Cybersecurity &
Infrastructure Solutions

FINANCIAL SERVICES

Banking Center of
Excellence

SQUAREDEV

Powering the Future with AI



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Group Capabilities

1. e-Government and digital public services
2. Generative AI & ML- Enterprise AI Solutions
3. Business Automation & Workflow
4. Asset Performance Management & IoT
5. Big Data Analytics
6. FINTECH & Banking Center of Excellence (CoE)
7. Cyber Security & Infrastructure Solutions and Services

IT Business Partners

Banking and Financial Services Business Strategic Partner

Use Cases

gastrade

admie

Rural Connect

in Digital

Gastrade – Business Automation and Enterprise Content Management

Gastrade is the first company received an Independent Natural Gas System License in Greece.

Gastrade scope is the development, operation and management of modern natural gas systems in a safe, reliable manner, respecting the environment and human rights.

As a critical infrastructure, handle sensitive and strongly confidential data and documents.

QnR implement an **AI based solution** to recognize the content, classify the documents, categorize and create metadata and content relations to help ordinary users to ask question in natural language and find easily answers.

The solution eliminate the movement of physical files and copies.

Offers rapid completion of workflows with direct access to the information that accompanies it (documents, emails, etc.).

Handles also special type of documents (e.g. contracts, recruitment, technical manual) based on specific processes and role base security.

Asset Performance Management & IoT Projects

Project MODESTO (IPTO-ADMIE)

Development of an information system, redesigning operational processes for the Software, included the software development for measurement certification, energy calculation, and data exchange on the corporate website and the development of a unified information portal for Electricity Market participants, automated machine communication through web services, alongside procuring and configuring necessary equipment and software.

Project APMS - Asset Performance Management System (IPTO-ADMIE)

We use IBM Maximo Application Suite (health & predict), which allows an organization to analyze asset maintenance information, and other IoT and environmental data to help prioritize maintenance around critical assets and determine optimal replacement strategies.

QnR provide services for the following services:

- Implementation study of logical and physical architecture and realization
- Implementation and configuration services, including data migration, testing and documentation
- Training
- Warranty and maintenance services

Project MODESTO (IPTO-ADMIE)
Participating in Electricity Balancing Market-Settlements

The project implemented an information system to redesign operational processes for the Software Processing and Certification of Measurements and Calculations in the Energy Balancing Market.
It included software development for measurement certification, energy calculation, and data exchange on the corporate website. https://market-extranet.admie.gr/home/main

The project also established a unified information portal for Electricity Market participants, automated machine communication through web services, alongside procuring and configuring necessary equipment and software.

- Recipient: IPTO-INDEPENDENT POWER TRANSMISSION OPERATOR
- Duration: 7 months
- Custom software
- Completed and is under support contract until today
- Budget: €1.500.000

IBM Maximo Application Suite (MAS)

Reimagine Maintenance for
All Your Critical Assets

QNR QUALITY & RELIABILITY

IBM maximo

What the Analysts Say

IDC
ANALYZE THE FUTURE

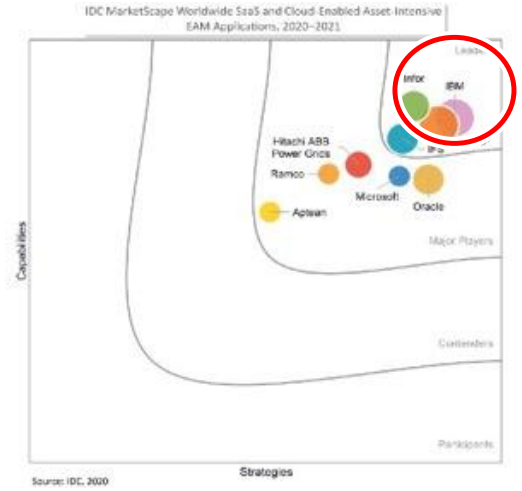
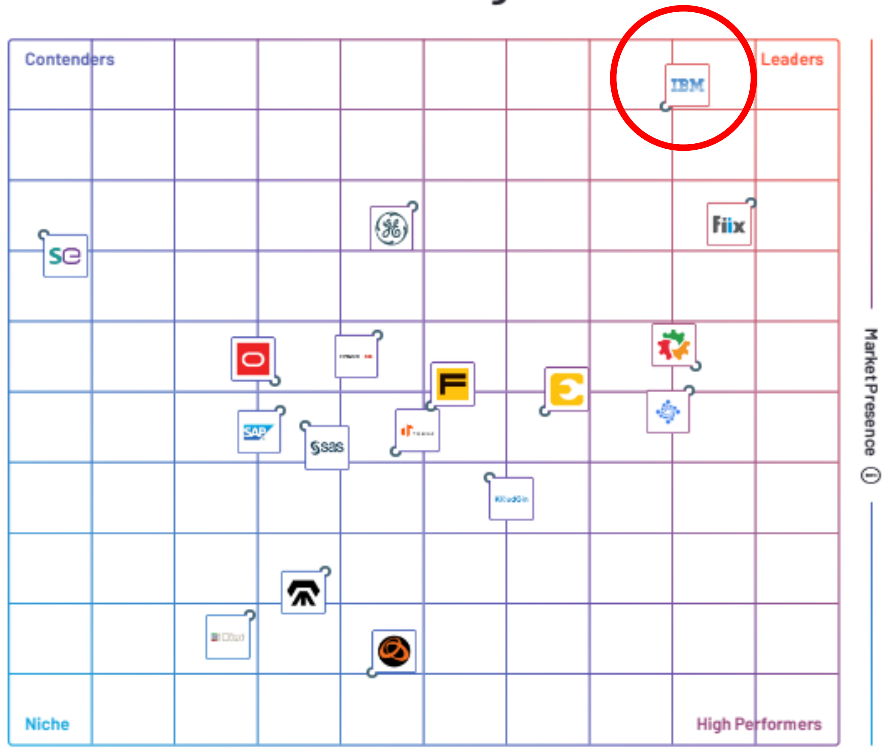


Figure 1. Magic Quadrant for Enterprise Asset Management Software

Gartner

Grid® Report for Asset Performance Management
Summer 2024

Asset Performance Management Software



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Concerns and Challenges

Operational cost. Better manage aging equipment and extend the lifecycle of critical assets.

Optimize performance to minimize interruptions. Reduce revenue loss.

Experienced technicians retiring. Lack of skills and assets becoming more complex.

Reduce unnecessary preventive maintenance. Predict failures and maintain assets before they fail.

Safety concerns increasing. Proactive intervention of Compliance and Safety concerns.

Increase assets overall availability and customer satisfaction by utilizing technology.

Reimagine Maintenance for All Your Critical Assets

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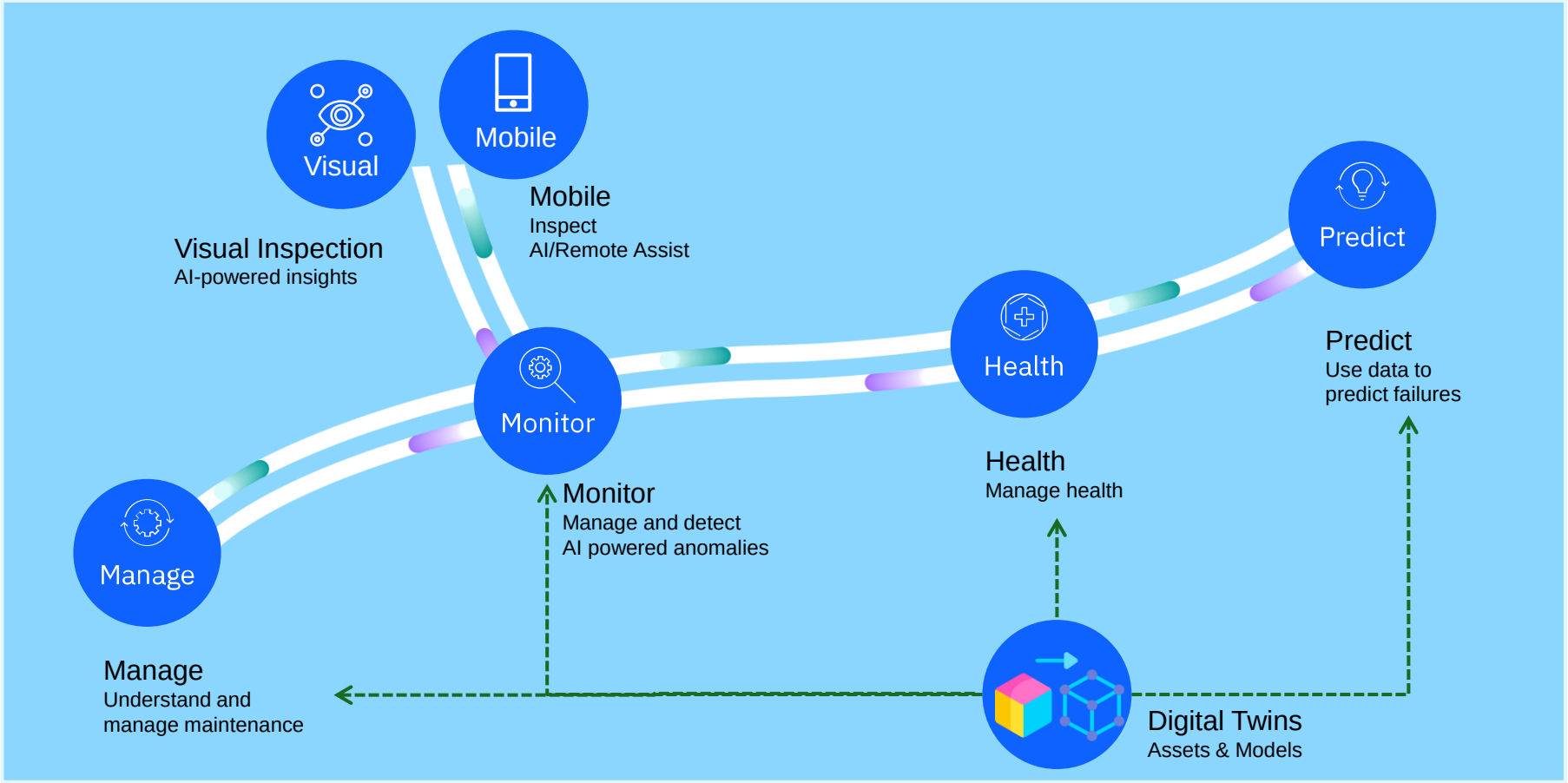
Asset Management Journey
Helping customers extend across the digital journey

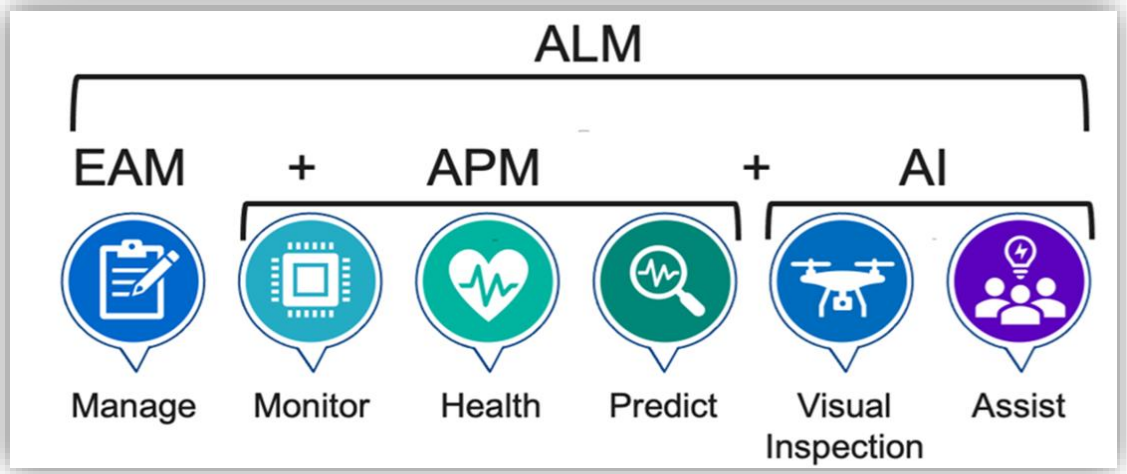


IBM Maximo Application Suite

Asset monitoring, maintenance and reliability applications in a single platform

Maximo Application Suite (MAS) is a set of applications providing Enterprise Asset Management (EAM), Asset Performance Management (APM) and some additional applications which are based on AI.

MAS is recognized as a leading **Asset Life-Cycle Management (ALM)** Application.



Maximo Manage - EAM Key Modules

Work management

- Job plans for recurring tasks
- Preventive maintenance
- Manage labor, skills, qualifications
- Mobile enablement for better point of failure data collection

Asset management

- Location/Function, work, and cost history
- Roll-up costs
- Asset modeling
- Improved asset safety

Supply chain

- Manage inventory across storerooms and sites for better visibility
- Eliminate costly off-contract buying
- Improved monitoring of vendor performance
- Fully manage receipts, inspections and vendor payments

Planning and scheduling

- Ensures assignment of the right person, with the right skills
- Drag-and-drop team assignments accelerates schedule optimization.

Health safety environment

- Standardize HS&E practices
- Operators log risk assessment, incident management, Investigation and correction
- Planning for hazard identification, risk assessment, and risk control

Service management

- Deliver on internal and external contracts
- Track SLA's and performance

Analytics

- Descriptive, predictive and prescriptive analytics
- Built on industry-leading Cognos business intelligence software
- Available & customizable by user type

Mobility

- Connected and Disconnected capabilities
- Ensure data capture at the point of work for better accuracy

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Spatial data

Business Value

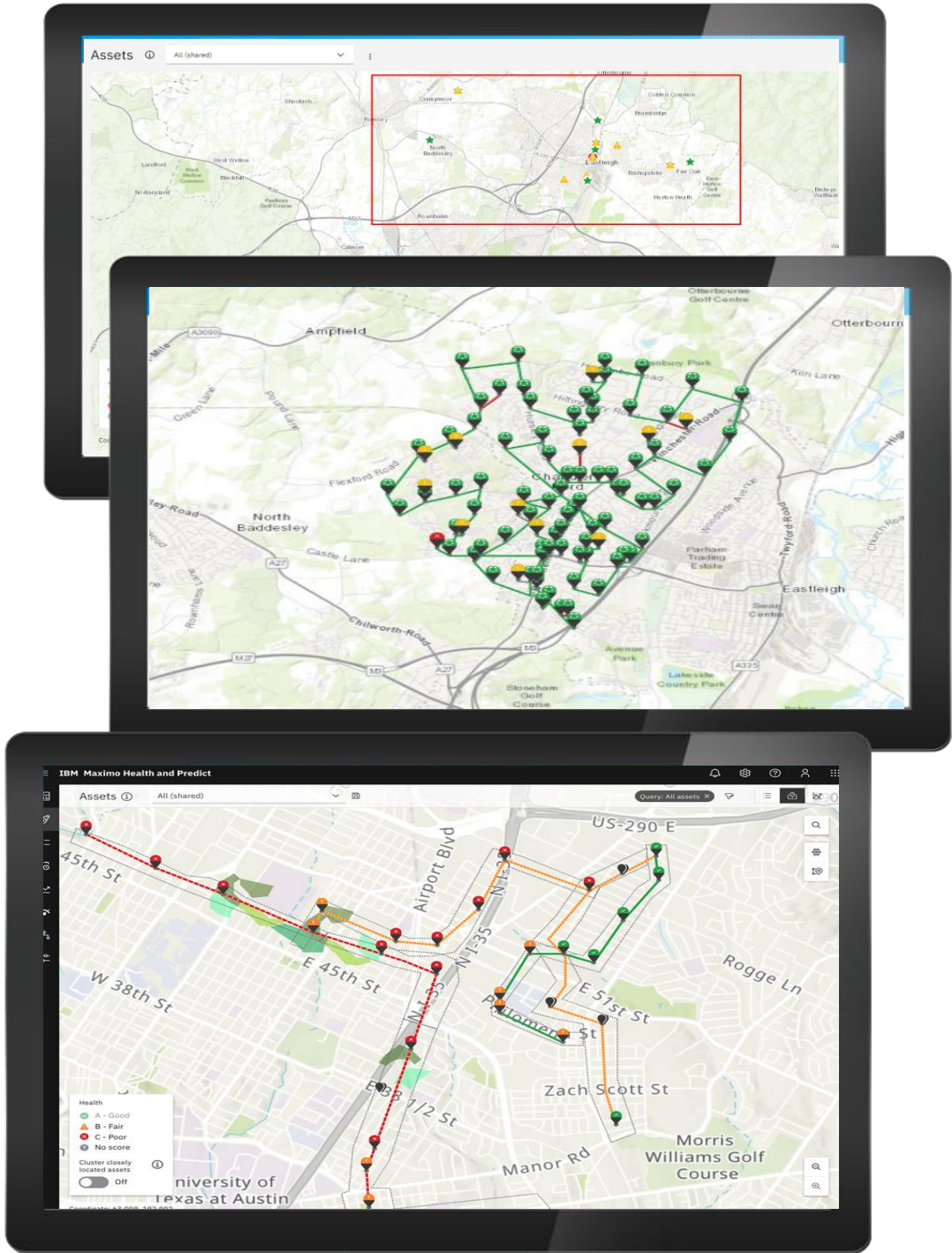
– View critical assets in a geospatial context.
– Visualize the spatial relationships between assets and roads, buildings, pipelines, and other mapped features.
– Enrich their ability to analyse assets.

Application

– Spatial data are available in:
– Assets
– Locations
– Work Order Tracking
– Service Requests

Capabilities

– See the proximity of assets and work to one another to make more cost-effective business decisions, such as when you're sending crews out to do repair work.
– Add work orders, service requests, assets, and locations directly on the map.
– Can integrate with various GIS systems, such as Esri ArcGIS.



Health

Business Value

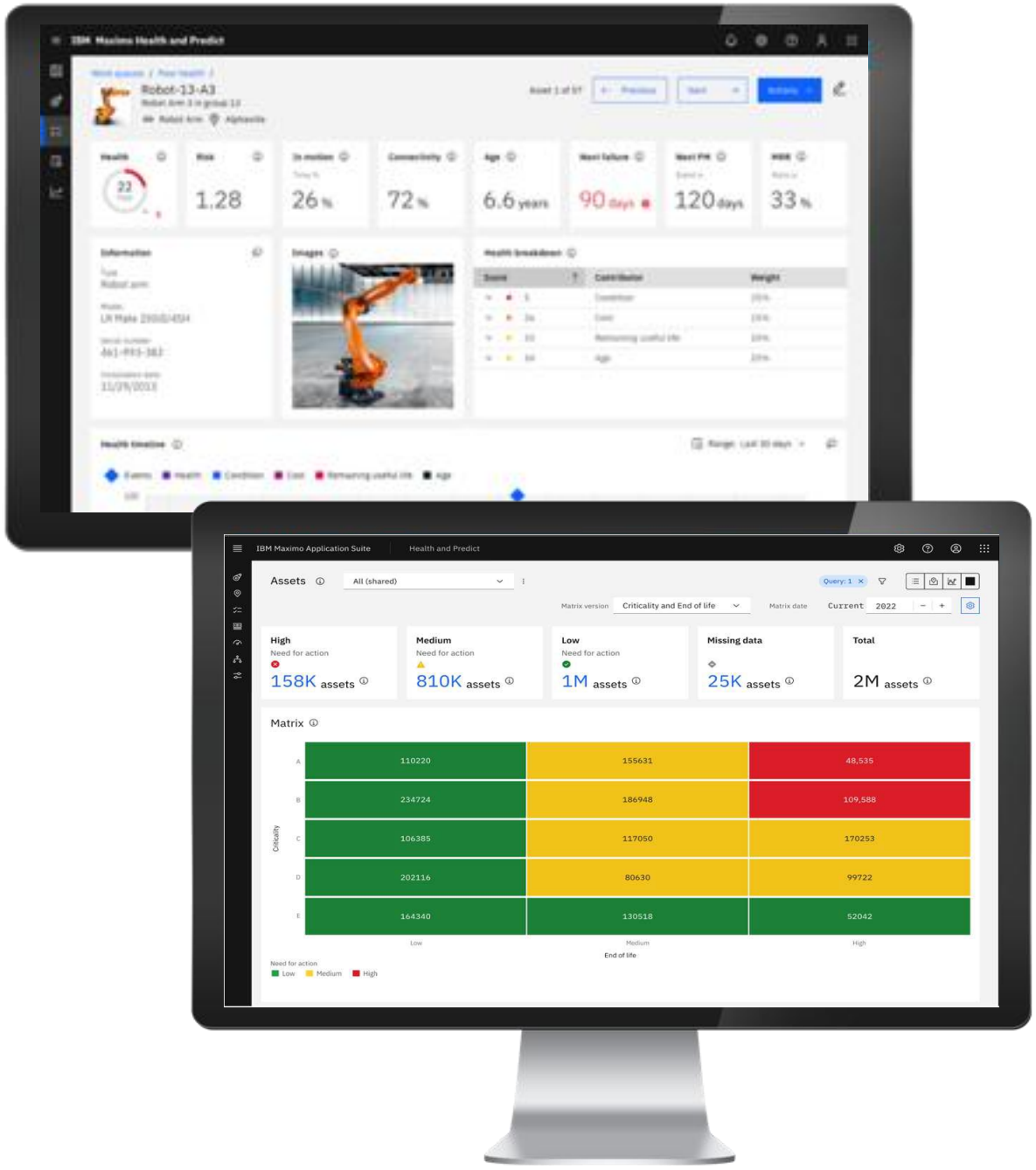
– Reduce fleetwide operational risk by focusing on the right assets
– Increase asset availability
– Reduce unnecessary preventive maintenance
– Reduce time to make capital replacement planning decisions

Application

– Consolidated global view of assets
– Health Visibility and Analysis
– Condition based actions
– Replacement Planning

Capabilities

– Dashboard with cards, map view, spreadsheet view
– Fleet-wide view and health drilldown
– Health based notifications and actions
– Flexible health scoring by asset type or groups
– Sensor data integration
– Refurbish / replace prioritization



Predict

Business Value

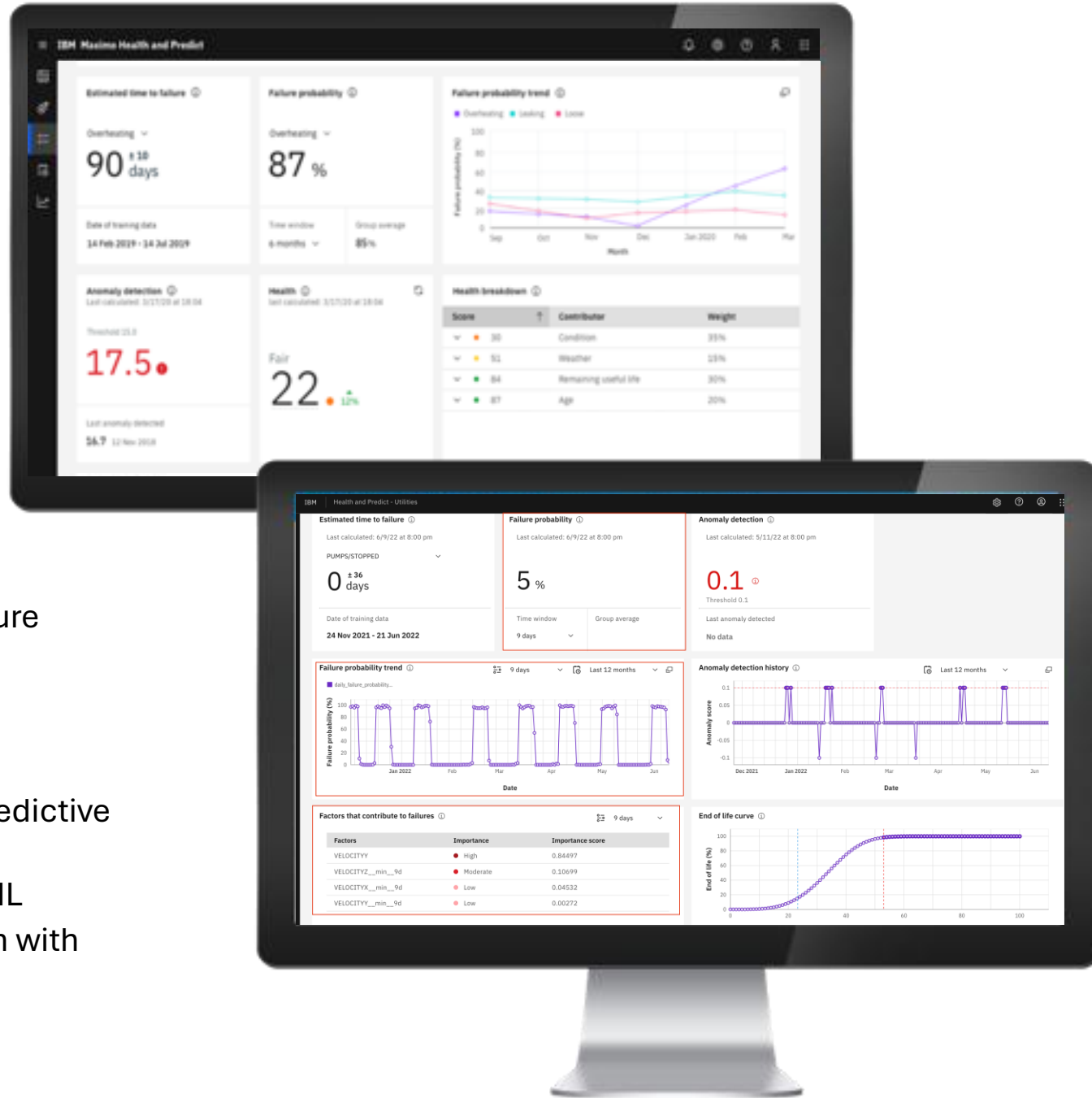
– Reduced failures
– Reduced maintenance costs
– Improved asset utilization
– Extended life of asset
– Increased production output

Application

– Build asset failure models
– Predict failures
– Determine factors that contribute to failure
– Score models with current sensor data

Capabilities

– Templates provided to build common predictive models
– Score predictive models using Watson ML
– Use model scores to assess asset health with Maximo APM - Health



Visual Inspection

- Automated Data Sources
  - Drones
  - Camera and Video Enabled Equipment
  - IoT Sensors
  - Weather Insights

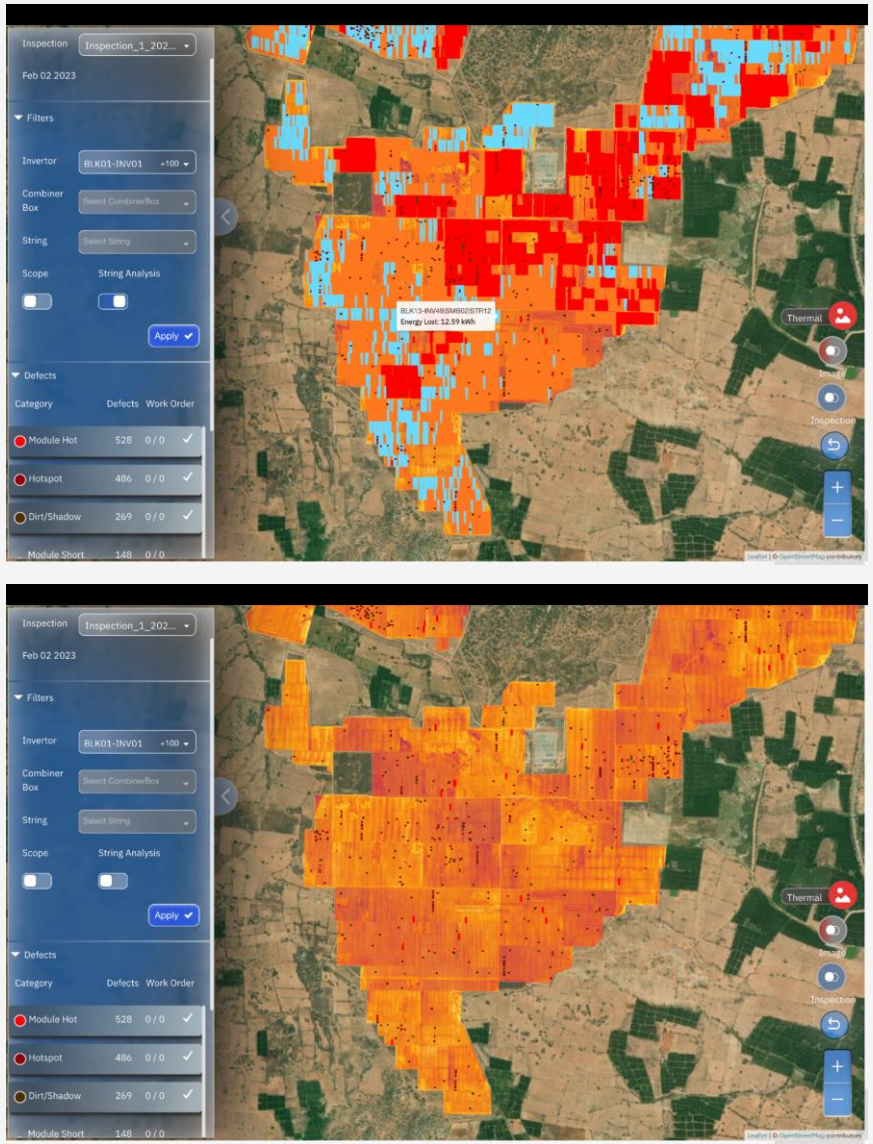
- AI Defect Detection and Risk Models
  - Build custom AI Models for Classes of Materials and Assets
  - Build predictive models for different asset classes and metrics

Defect Management – Drone View

Solar

e.g. Identify systemic losses with drone thermography

- Capture Defect Ranking, Images, Cause
- Defect Catalogs assist in categorization
- Defect Positioning in Linear, Spatial and 3D coordinate systems
- Defect Evolution (roadmap) tracks changes over time
- Integrates with Visual Analytics Improve Defect Management
- Discover defects with Visual Inspection
- Understand the context of defects with BIM and Linear Visualization



Thermographics data and heat map

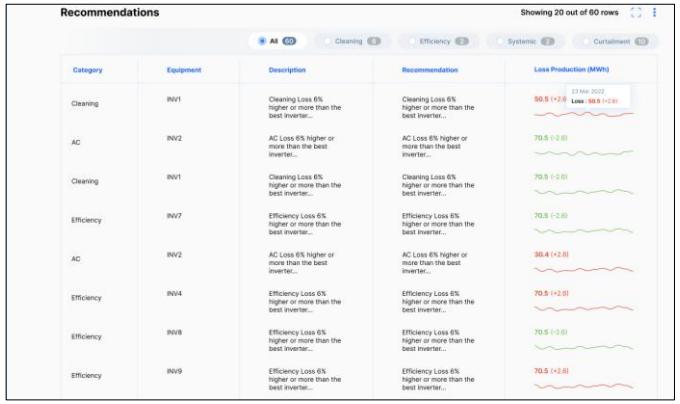
IBM Maximo Renewables
Solving Clean Energy's Biggest Problems

Monitor

Data driven insights from across your portfolio, and every device

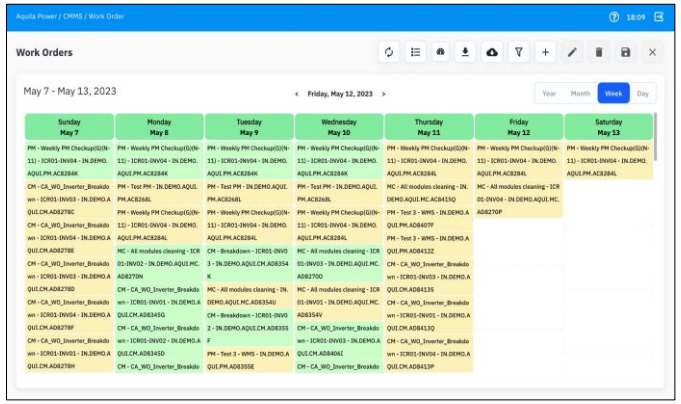
Analyze

Leverage advanced analytical tools for actionable insights



Operate

Automate your O&M effortlessly and optimize performance



Key highlights

- Performance visibility
- Detect Unavailability
- Drive Digitization
- Data Quality and centralization
- Address underperformance
- Efficiency analysis

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WE ARE READY TO DISCUSS YOUR BUSINESS!

Contact us at booth