



The Value of Moving to MAS for Transit

IBM MAS for Transit/ SGR

Gretchen G. Gallagher-EVP, Strategic Relationships



Background

- Life Long Northeast Corridor Resident, now in SNJ
- Raised on Central PA Railroad
- “Riding the rails” for over 38 years
- 20 years of EAM (Maximo/ MAS) provider experience
- 18 years of Transit provider experience
- 17 years with Interloc
- EVP, Strategic Relationships
- WIRAM (Woman in Reliability Asset Management) Founding Member
- WIRAM Executive Sponsor – 11 years



MAS & Mobile-Hosted/On-Prem



- **BART** Maximo implementation, rolling stock implementation with Transportation, Asset Configuration Management implementation for rail car configurations, work management, integration to business and financial systems, time reporting in a complex union environment, customization of Maximo business processes based on regulatory and internal practices, analytics and reporting, project and change management. Presently, providing and overseeing guidance and experience for their MAS 9 Upgrade. Long term 18-year provider relationship.



- **DART** Ongoing corporate Maximo implementation, Mobile Informer implementation, rolling stock implementation with Transportation for rail cars and buses, asset and work management, linear asset management, cost and work apportioning, supply chain management, document management integration, GIS integration and visualization, time reporting in a union environment, integration to business and financial systems, managed and hosted services with disaster recovery and active replication and failover, change and project management. Implemented Electronic Parts Catalog (EPC) and Vertical Lift Module (VLM). 9-year provider relationship.

Benefits of MAS Manage

The IDC Business Value of IBM Maximo report, sponsored by IBM, found that ten surveyed companies with an average of 15,840 employees have obtained the results stated below after adopting IBM Maximo. These are annual benefits on average for the interview enterprises.

- Reduce operational costs by 15%-25%
- Improve up time and availability by 5%-10%
- Reduce hours spent on preventive maintenance by up to 50%
- Reduce overall maintenance costs by 25%
- Reduce labor costs up to 60% through remote monitoring

[Get the newly released 2024 IDC Report](#)

47%

less unplanned equipment or site downtime events.¹

17%

increase in average lifespan of assets.

26%

more productive technicians.³

Bay Area Rapid Transit (BART)

The Customer

- Established: 1957
- Service Area: San Francisco Bay Area
- Track Length: 131.4 miles
- Stations: 50
- Daily Ridership: ~169,800
- Employees: roughly 3,500
- Role: Key part of the region's transportation, reducing traffic and promoting sustainability.

The Challenge

- Need: Standardize maintenance work orders in a single CMMS.
- Issues: Different work management approaches, disparate software, lack of standardized categorization and prioritization, insufficient automation.

The Solution

IBM Maximo Application Suite (MAS)

- Led by Interloc, implementing various Maximo modules and integrations, including Asset Configuration Management for rail car configurations, integration with business systems, and time reporting.
- **Asset Configuration Manager (ACM):** Establish parent/child relationships for new rail cars.
- **Maximo Integration Framework (MIF):** Integrate with PeopleSoft Financials and Trapeze applications.

The Benefits

- Standardized data collection for reporting key metrics.
- Accurate routing and identification of work requests.
- Improved planning, scheduling, and management reporting.
- Enhanced operational efficiency and reduced downtime with ACM.

Dallas Area Rapid Transit (DART)

The Customer

- Established in 1983
- Large multi-modal transportation organization
- Over 700 square miles of coverage
- Bus fleet of approx. 500
- Longest light rail system in the country (93 miles)
Serves 220,000 passengers per day
- Employs roughly 3,700 people
- Mobile workforce of 1,000+ technicians

The Challenge

- Significant hurdles in inventory management, asset standardization, and enterprise-wide processes.
- Diversity of assets posed difficulties for conducting State of Good Repair (SGR) inspections efficiently.
- Always growing- Addition of Silver Line and future encompassing 400 capital projects.

The Solution

- IBM MAS on Interloc Hosting through IBM Cloud
- Interloc Mobile Informer
- Interloc implemented DART's original Maximo and Informer and is currently performing their MAS upgrade
- Integrated with advanced systems like Documoto (Parts Catalog) and Vertical Life Machines (VLMs) with MIF to enhance employee business processes around picking parts

The Benefits

- Better maintenance, tracking, and accountability of assets
- More accurate inventory counts and efficient workflows
- Real-time data access for better decision making
- Higher productivity and system adoption due to effective training
- Reduced in-house repair costs by over 40% through warranty management
- Saved an average of 40 minutes per inspection with mobile inspection forms

Vertical Lift Module/ Electronic Parts Catalog



Search / 2.0.2 Front Axle Assembly

Illustration Info Comments Related Where Used

SEAL KING PIN ASSY FRONT AXLE
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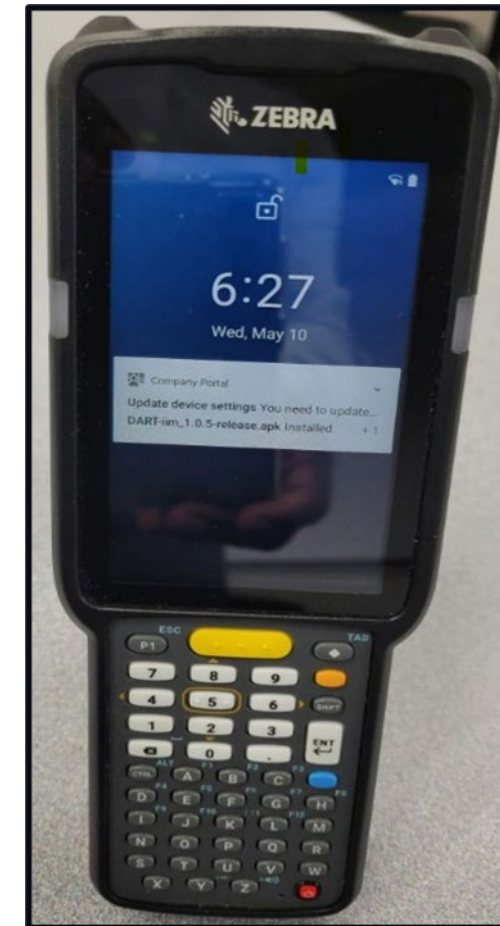
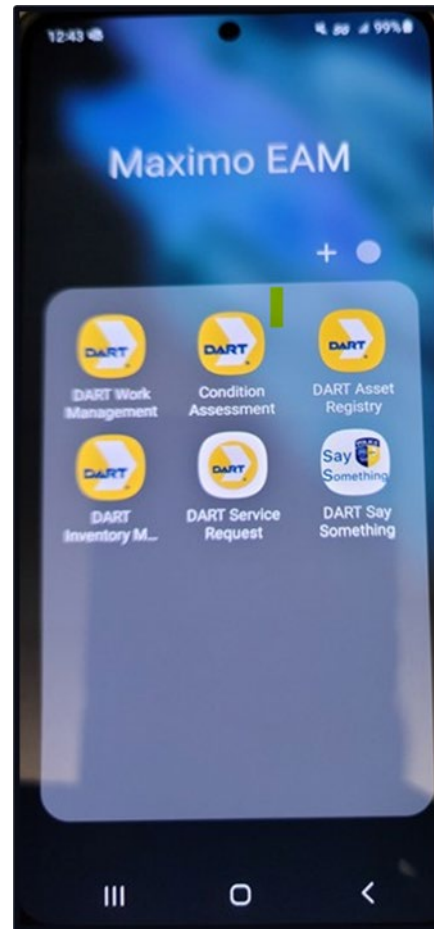
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#	Maximo Asset Number	Maximo Item Number	Name	Quantity	OEM Part Number
1			AXLE CENTER BEAM	AR EA	3100X8032
2			KNUCKLE ASSY-STEER-LH	AR EA	A 3111R3502
3			KNUCKLE ASSY-STEER-RH	AR EA	A 3111S3477
4			KING PIN	AR EA	3101C1069
KIT		02-CG-0015	KING PIN KIT FRONT AXLE WHEEL	1 EA	R201424
5		02-CG-0020	SEAL KING PIN ASSY FRONT AXLE	AR EA	A1205X1428
6			SCREW-STOP	AR EA	26X146
7			NUT	AR EA	N1101
8			CAP-KING PIN	AR EA	2297Y8475
9			FITTING-GREASE-UPPER #2	AR EA	A2206Y1065
10			FITTING-GREASE "STRAIGHT"-LOWER	AR EA	1898R720
11			THRUST BEARING ASSY	AR EA	A1228E1305
12			SHIM-.005-USE AS REQD	AR EA	2203L3002
12			SHIM-.010-USE AS REQD	AR EA	2203K3001
12			SHIM-.015-USE AS REQD	AR EA	2203D2942
13			DRAWKEY	AR EA	7X113

STREETSIDE

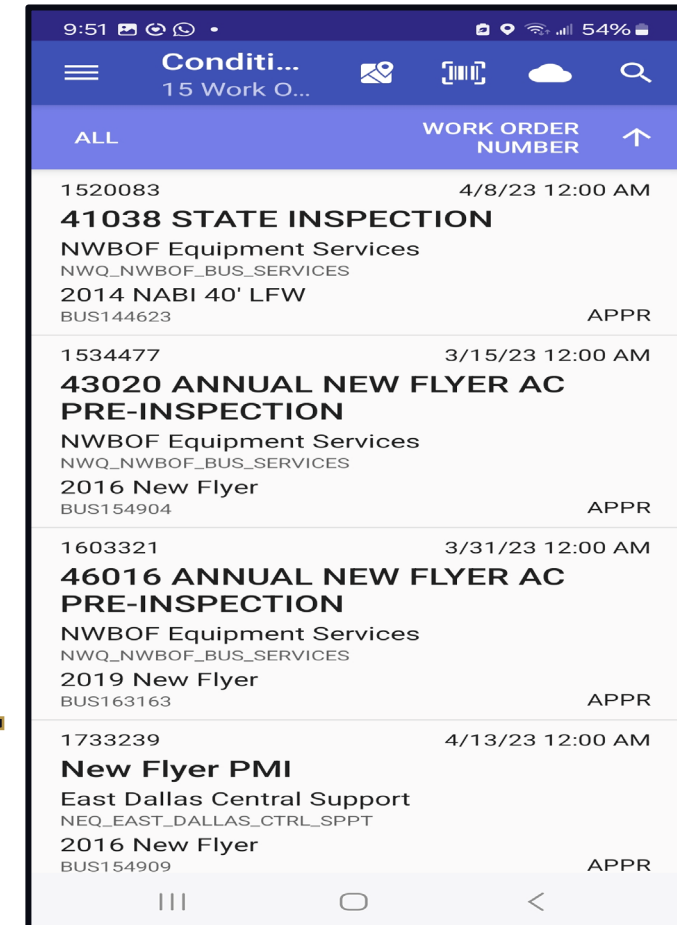
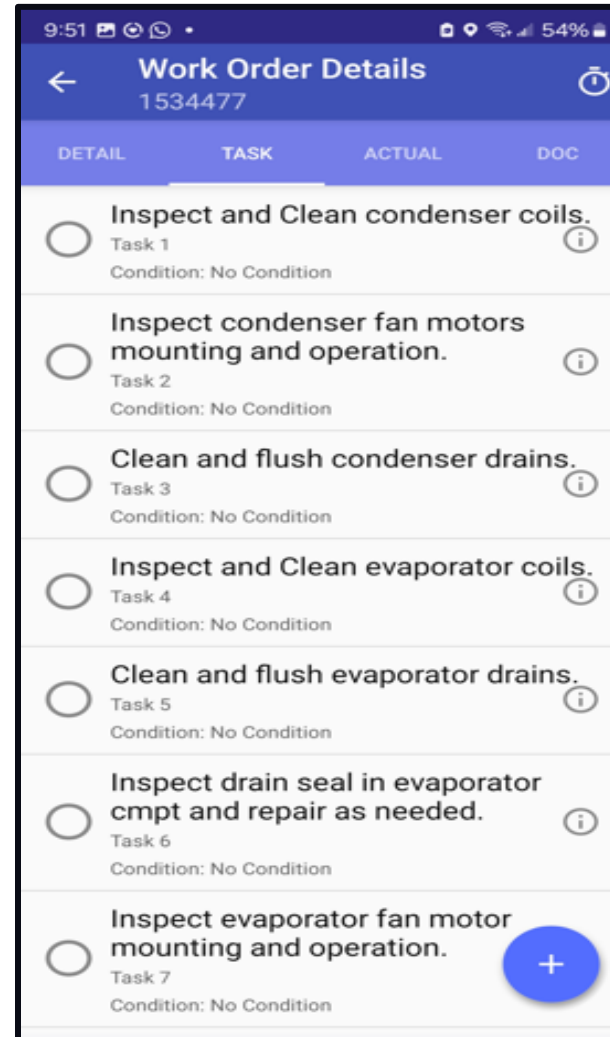
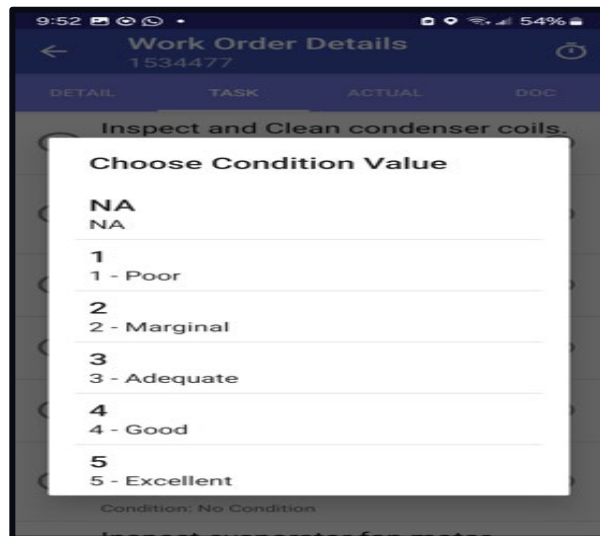
DART Mobility Apps

- Condition Assessment
- Inventory Management
- Work Management
- Asset Registry
- Service Request

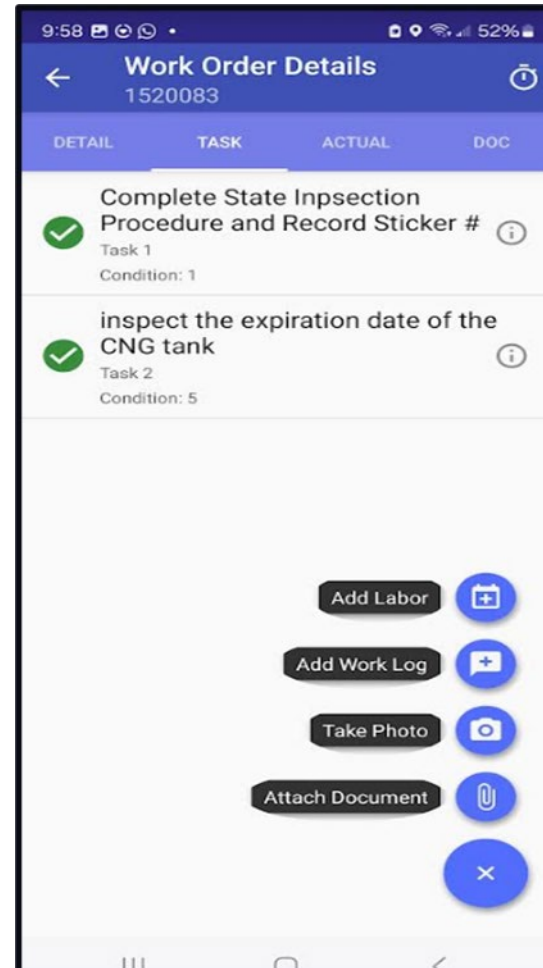
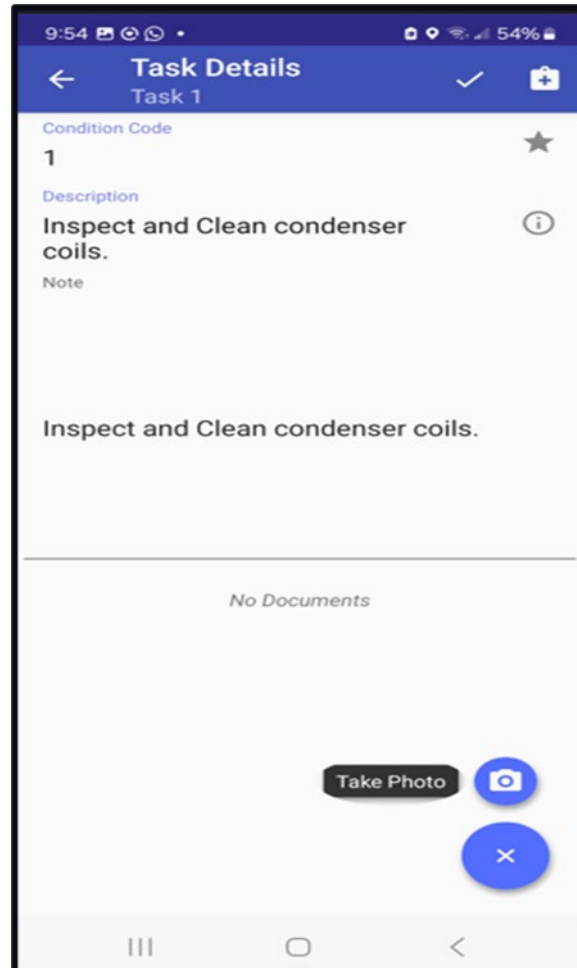


Condition Assessment (SGR)

- Work Orders On Mobile
- Integration with Maps
- Asset Scanning
- Offline Mode
- Start/Stop Watch for Labor Entry



Condition Assessment (SGR)



- Engineering Reports
- Develop Remediation Plan

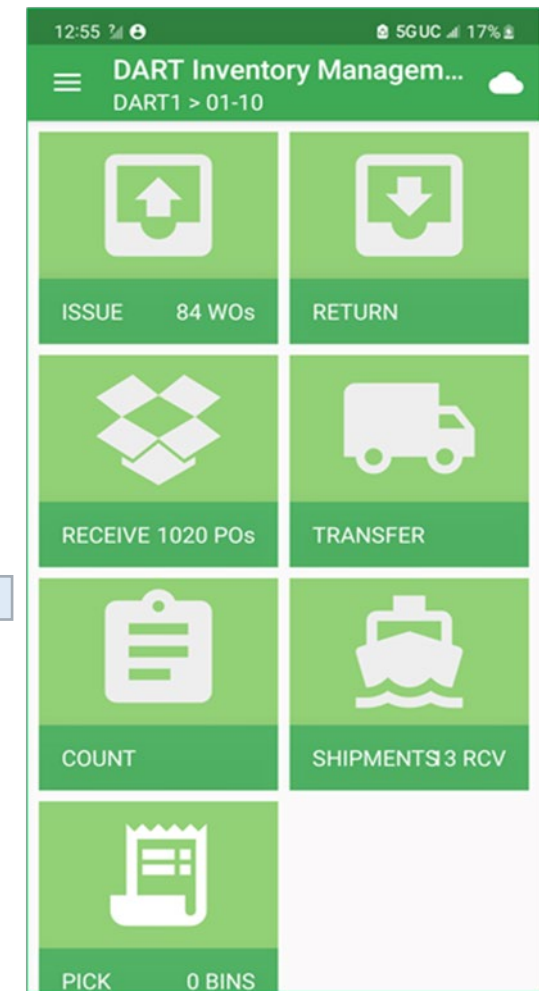
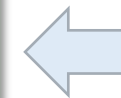
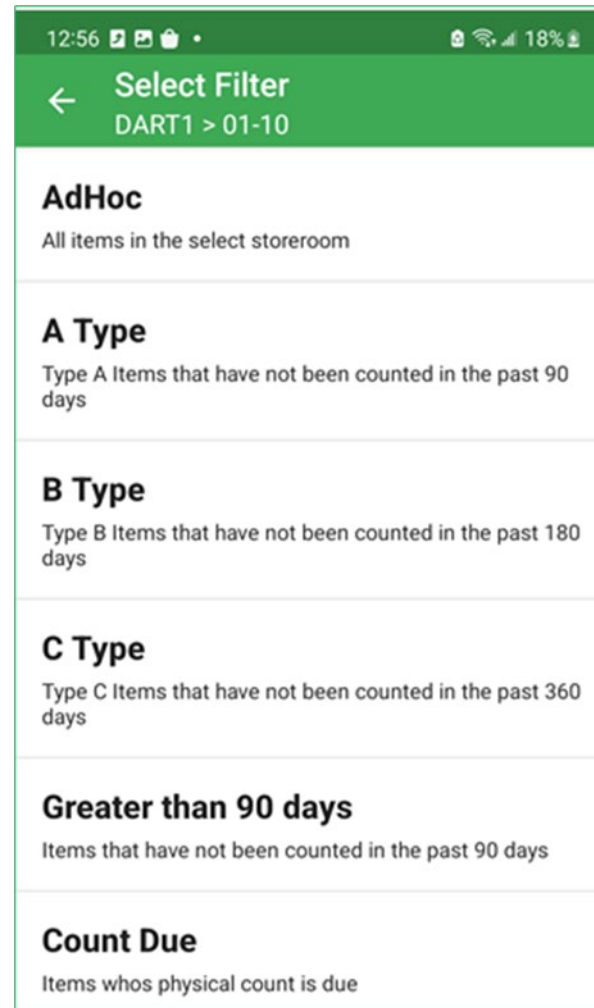
SGR Mobile App Benefits



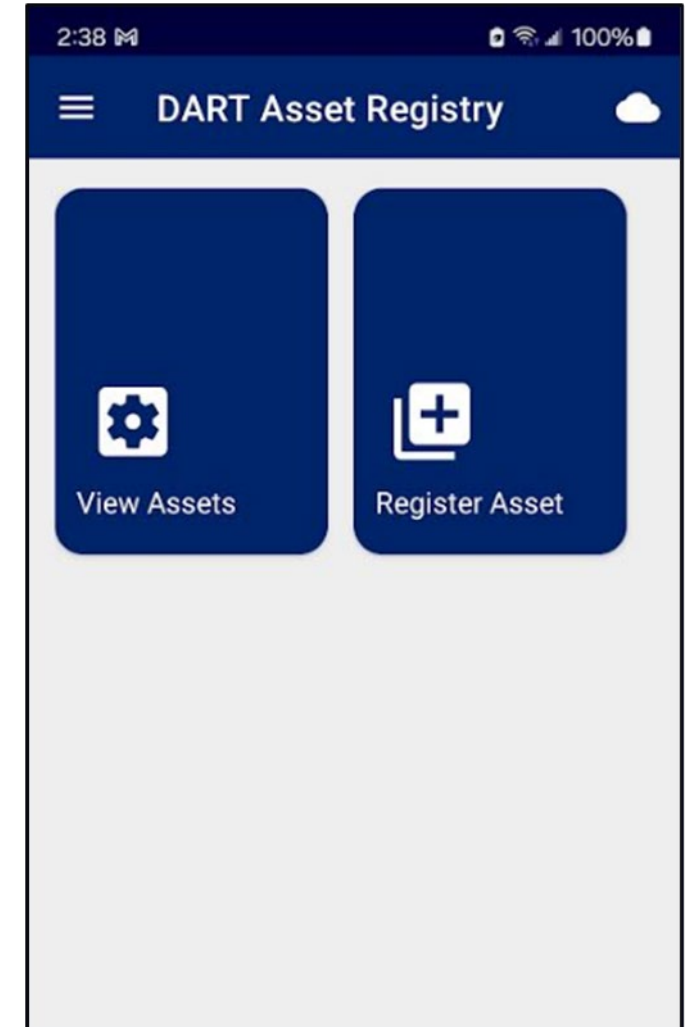
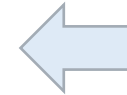
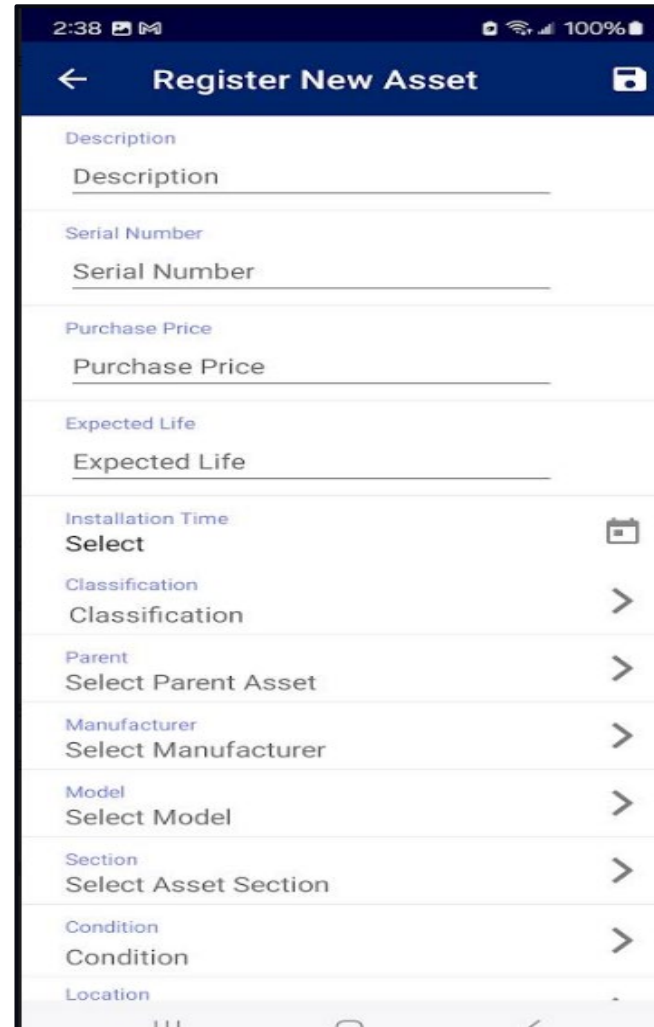
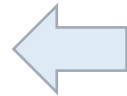
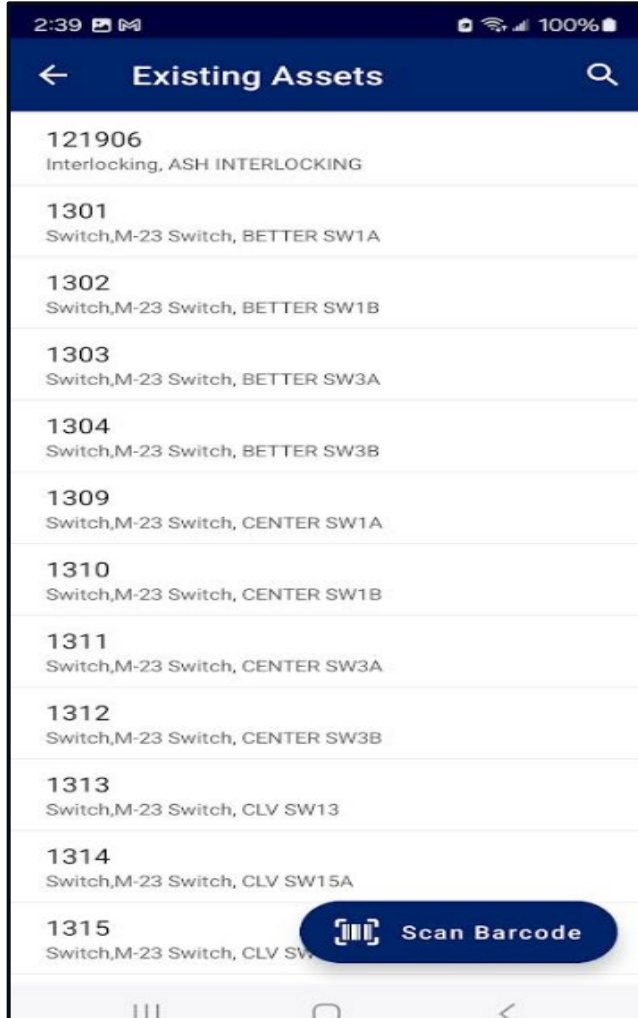
- Improved Accuracy
- Time Saving
- Real Time Data
- Streamlined Workflow
- Reduction in inspection time from 40 minutes to about 15 minutes per asset
- Accurate asset rating

Inventory Count Process Improvements

- More items counted per cycle
- Easy reconciliation process
- Frequent Cycle Counts
- Reduced Wait Time for Material based on Count Accuracies
- Reduced Inventory Losses



Asset Registry



Asset Registration Process Improvements

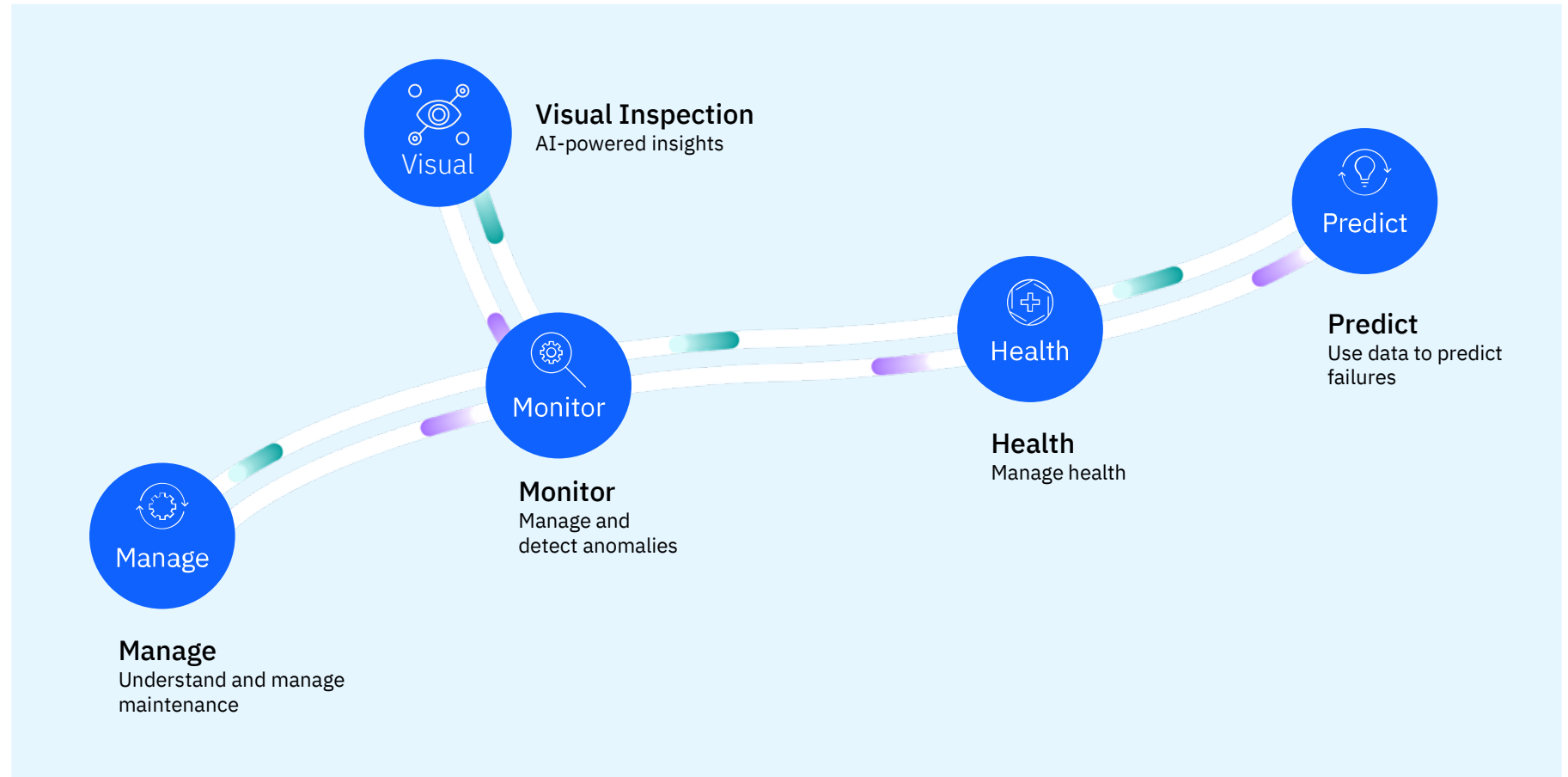
- Ability to search current Asset Registry
- Asset Collection (additions) done in Real Time
- Reductions in Labor Hours Redundancy
- Increase in Asset Managers visibility
- Reduction in Costs
- Increase in asset data accuracy and more asset details

Maximo Application Suite

Maximo marries 30-years of EAM know-how with pragmatic innovations in AI/ML, IoT, mobility, augmented reality as well as health, safety and environmental (HSE) solutions.

It provides the tools to increase operational productivity through automation, increase first time fix rate through AI and mobile capabilities, and helps teams execute with best-in-class insights and workflows.

Journey to the new operating model



IBM Investment & Commitment to Maximo/MAS

40+ years
Leading EAM
Software

Maximo Asset Management was introduced in the early 1990's and has been the leading Enterprise Asset Management software package for over three decades. Today, there are thousands of Maximo customers, including companies across every asset intensive industry, deployed in 99+ countries, with millions of end users.

\$1+ Billion
IBM Investment in
Maximo/MAS devel
opment

IBM prides itself on investing in our best-in-class solutions. Since acquiring Maximo in 2006, IBM has invested over \$1B in on-going development to the Maximo portfolio. Currently, there are 400+ dedicated Maximo development resources, working in IBM Global labs in Lowell, MA, Raleigh, NC, Austin, TX, London, Ontario, Canada, Sao Paulo, Brazil, India, and Europe. This commitment has helped to grow the product capabilities with enhanced functionality, delivering new offerings, expanding into new industries and beyond traditional EAM (e.g., HSE, Reliability, APM). Leveraging IBM's Research organization has also enabled Maximo to deliver new and innovative solutions using advanced technologies for analytics, complex scheduling, optimization, AI and mobile.

IBM
On-going
Commitment
To Maximo

From a roadmap perspective, IBM has always publicized the Maximo plans and has consistently delivered against these plans with regular new product releases and updates.

This commitment continues, as IBM focuses on our next chapter moving into hybrid-cloud, Maximo plays a key role in this strategic direction. As part of this strategy, IBM has increased the investment to expand the Maximo brand, launching the Maximo Application Suite, with a multi-year roadmap that delivers additional capabilities, modernized applications, embedded AI and best in class mobile applications, which we believe will keep Maximo as the leading Asset Management solution for the next 20+ years.

IBM Maximo Application Suite High-level product direction

2023

2024

2025

2026

2027

v8.11

New Functionality

- Reliability Strategy Library (RSL)
- Maximo IT
- Accelerator Catalog

Manage IS/Add-ons Updates

- Indoor Mapping
- FISMA/FIPS/Accessibility
- Operational Dashboard
- Dispatching Dashboard

Civil Infrastructure

- 2D Stitching service
- Manual Defect reporting
- Usability

Visual Inspections

- Self service enhancements

Monitor – OMNIO adapters

Maximo Mobile

- Inventory Count Books
- Receiving/Issues
- Extended Mapping

Health & Predict

- Investment Project Planning

MAS Core

- Improved User Management
- Login Enhancements

v9.0

MAS Core

- Cross MAS application Dashboard
- Operator Maturity
- Federal Readiness

Manage IS/Add-ons

- GenAI assistant for Work Orders

- Inspection Forms

- Field Service Management - dispatching, mobile

- Maximo IT – Service Insights

- RSL expanded library

Visual Inspections (MVI)

- Edge Appliance

Maximo Mobile

- Support for Calibration

- Configuration tool enhancements

- Updates to Inventory apps

Maximo Application Suite

- Monitor – for Real Estate & Facilities

- Carbon Emissions module

MAS Core

- Improve cross MAS user management
- Java 17
- Support for Power/Z
- Asset Dashboard (CBM)
- SaaS FedRamp

Manage

- Watson Assistant (AI)
- Civil Infrastructure – Defect Dashboard
- BIRT update
- Maximo IT – Discovery API's

Maximo Mobility

- Industry Solution applications
- Incident reporting app
- Field Service management improvements

Maximo Application Suite

- MVI – scalability
- Vegetation Management
- Asset Investment Planning
- Real Estate & Facilities
- Renewables functionality
- MRO Inventory Optimization

MAS Core

- Platform Improvements
- Continued Security & Regulatory Compliance updates

- Dataloader dashboard

Manage

- Additional GenAI use-cases
- Industry Solution and Addon updates

- Maximo IT – Service Dashboard

- Manage application enhancements

Maximo Mobility

- Material Request application
- Aviation mobile application
- MAS level scheduling
- Configuration application enhancements

Maximo Application Suite

- Optimized Investment Planning
- Updates to Monitor, Health, Predict, Manage

MAS Core

- Customer and Market driven enhancements
- Improved Reporting and Data management

New Industries or Markets

- Mining
- others

Maximo Managed Service

- Additional applications
- Continued Security & Regulatory Compliance updates Serviceability
- GenAI use-case expansion
- Maximo IT Service Agent portal

Maximo Mobility

- Enhancements to existing applications

Maximo Application Suite

- MVI Edge enhancements
- Updates to Monitor, Health, Predict, Manage

Notice: IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal at IBM's sole discretion. Information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision. The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code or functionality. Information about potential future products may not be incorporated into any contract. The development, release, and timing of any future features or functionality described for our products remains at our sole discretion.

Maximo Application Suite – Solutions Available

MAS Applications

Manage

Monitor

Health

Predict

Visual Inspections

Assist

Industry Solutions

Manage
Transportation

Manage
Nuclear

Manage
Utilities

Manage
Oil & Gas

Manage
Aviation

Manage
Civil Infrastructure

Add-on Solutions

Visual Inspection
Edge

Manage
Health, Safety &
Environment

Manage
Asset Configuration
Manager

Manage
Spatial

New in MAS 9.0

Manage
Location Service for
Esri

Manage
SAP and Oracle
Connector

Manage
Reliability Strategies

Manage
IT

Manage
Optimizer

Manage
Service Provider

Manage
WorkDay Connector

Manage
TRIRIGA and Envizi
Connectors

Accelerator
Catalog

About Us

QUALIFICATIONS

- Founded in 2005
- IBM Platinum Business Partner
- 100% Solely Maximo
- 24 x 7 Support Model
- 100+ Years IBM Experience w/in Exec Mgmt
- CMMC 2.0, NIST 800-1711, SOC 2, ISO 27001, ISO 27017, FISMA, FedRAMP
- Comprehensive single provider for all our clients' and partners' needs.
 - MAS AppPoints/ Trade Ups/ Support/ Upgrades
 - Maximo/MAS Consulting
 - Interloc Cloud Services
 - Mobility Solutions

AWARDS

- Best Maximo Mobility Program Award - Maximo World 2021
 - **Leidos Antarctica**
- Best Data Governance Award- Maximo World 2022
 - **Amentum Commercial**
- Best New Maximo Implementation Award- Maximo World 2022 & Best Sustainability 2023
 - **Chugach Government Solutions (CGS)**
- Best New Maximo Implementation Award- Maximo World 2023
 - **Dallas Area Rapid Transit (DART)**



Interloc Solutions is 100% dedicated to helping organizations realize the greatest potential from their IBM Maximo/MAS investment.



Contacts

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Maximo = MAS Manage

COMPLIANCE

Ensures compliance with industry regulations, such as Department of Transportation (DoT) standards.



REAL-TIME DATA

Provides real-time data and role-based dashboards for managing critical work orders and preventing failures.



INVENTORY MANAGEMENT

Extensive inventory management features, such as cycle counting, fuel tank management, and lifecycle costing.



PREDICTIVE MAINTENANCE

Maximo MAS helps anticipate problems and increase diagnostic accuracy through IoT-driven and AI-powered offerings.



FLEET MANAGEMENT

Offers intelligent fleet management capabilities, including maintenance scheduling, repair tracking, and warranty management.



WORK MANAGEMENT

Enhanced work management capabilities for campaigns, labor qualifications, maintenance alerts, and recording inspections.



ACCESSIBILITY

Includes accessibility features to support users with physical disabilities.

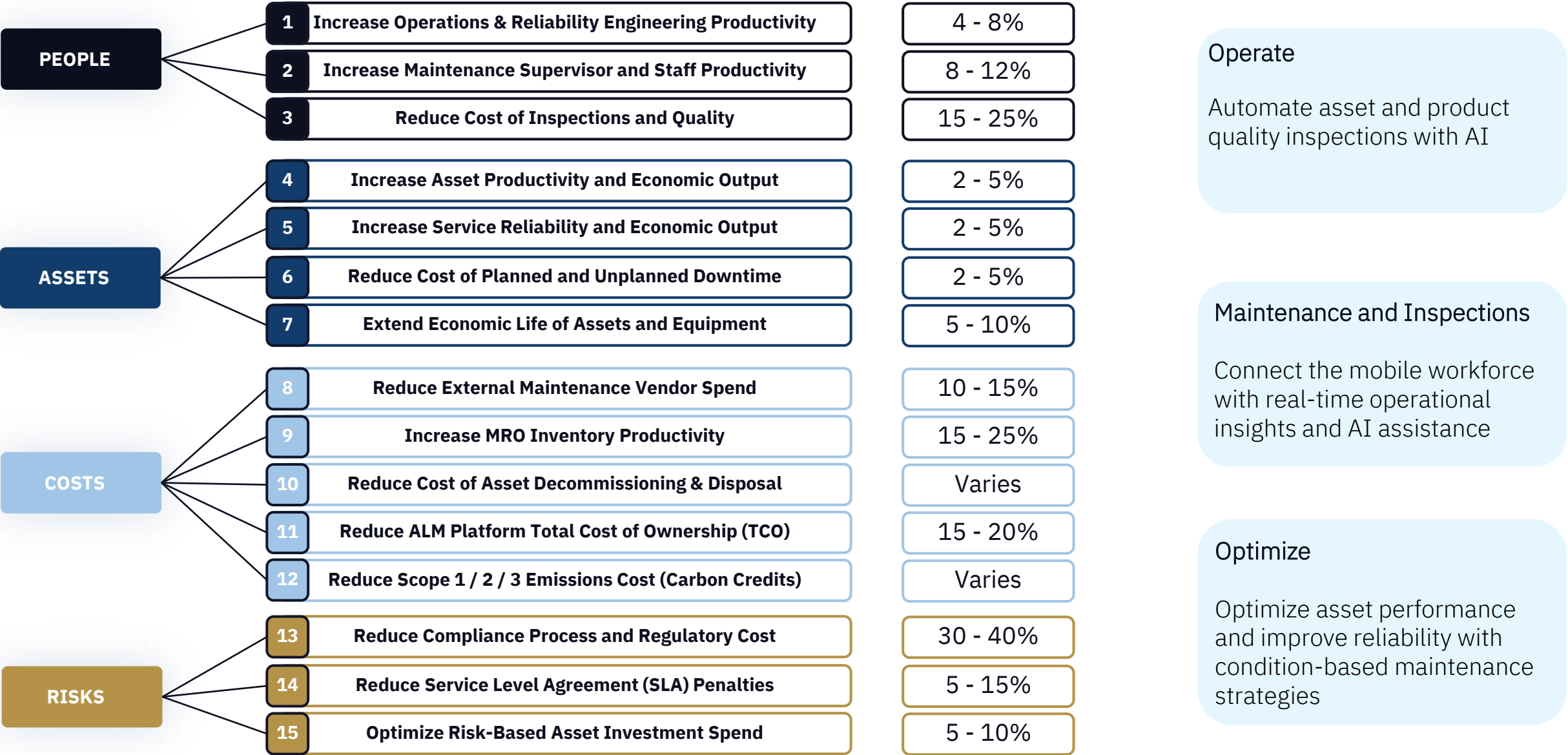


Quantifying the value of the Maximo Application Suite

Benefit Areas

Improvement Ranges⁽¹⁾

Example Entry Points / Use Cases



¹⁾ Representative improvements based on IBM experience with clients. Client-specific improvement potential may differ and depends on factors such as asset management maturity, solution capabilities, and assets in scope.