

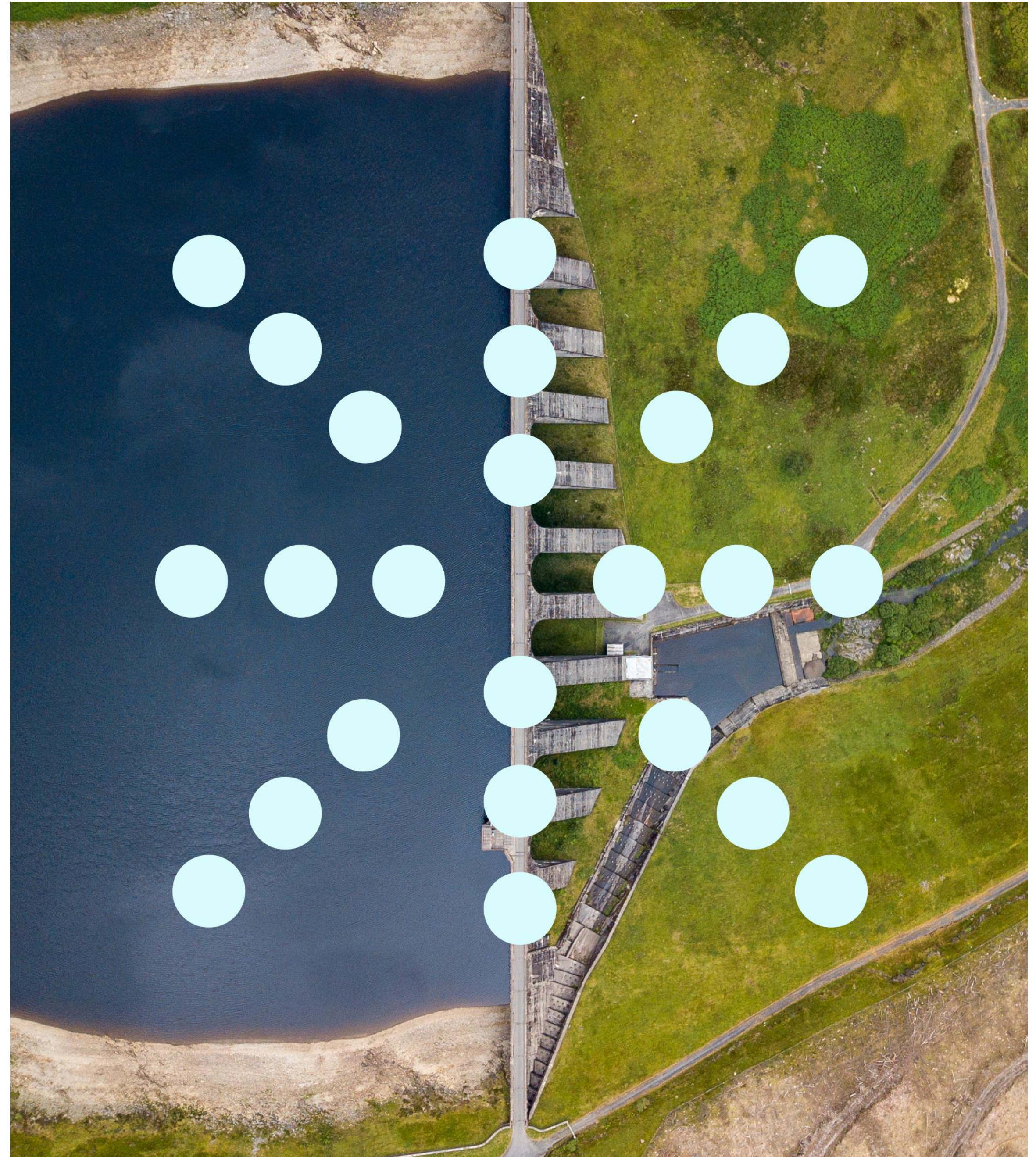
Maximo Mobile & Inspections

May 2026

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Maximo Product Manager – MAS



IBM Asset Lifecycle Management / © 2025 IBM Corporation



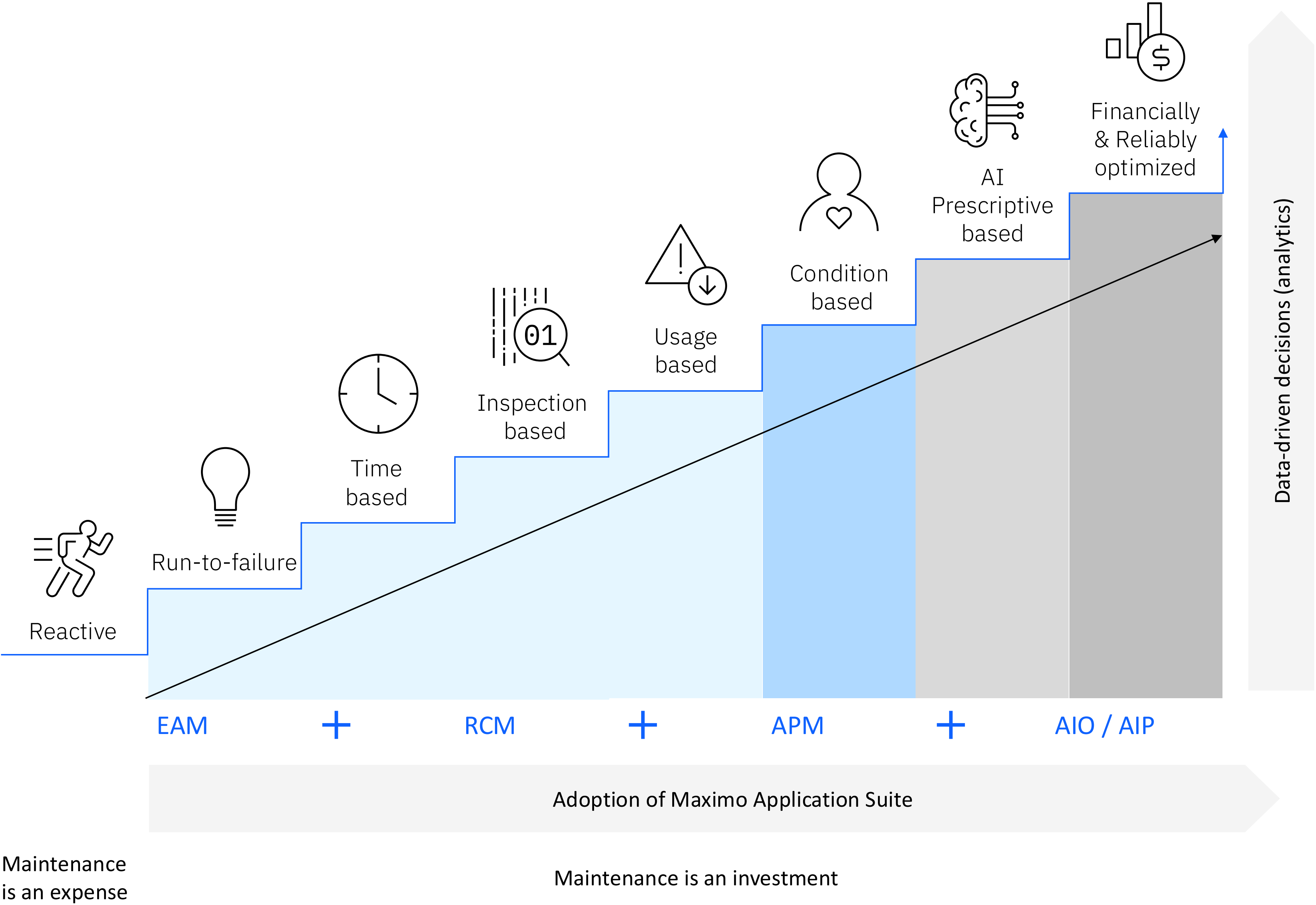
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Asset Maintenance Practices and Adoption of MAS

MAS delivers an integrated solution that enables coverage of all types of maintenance practices.

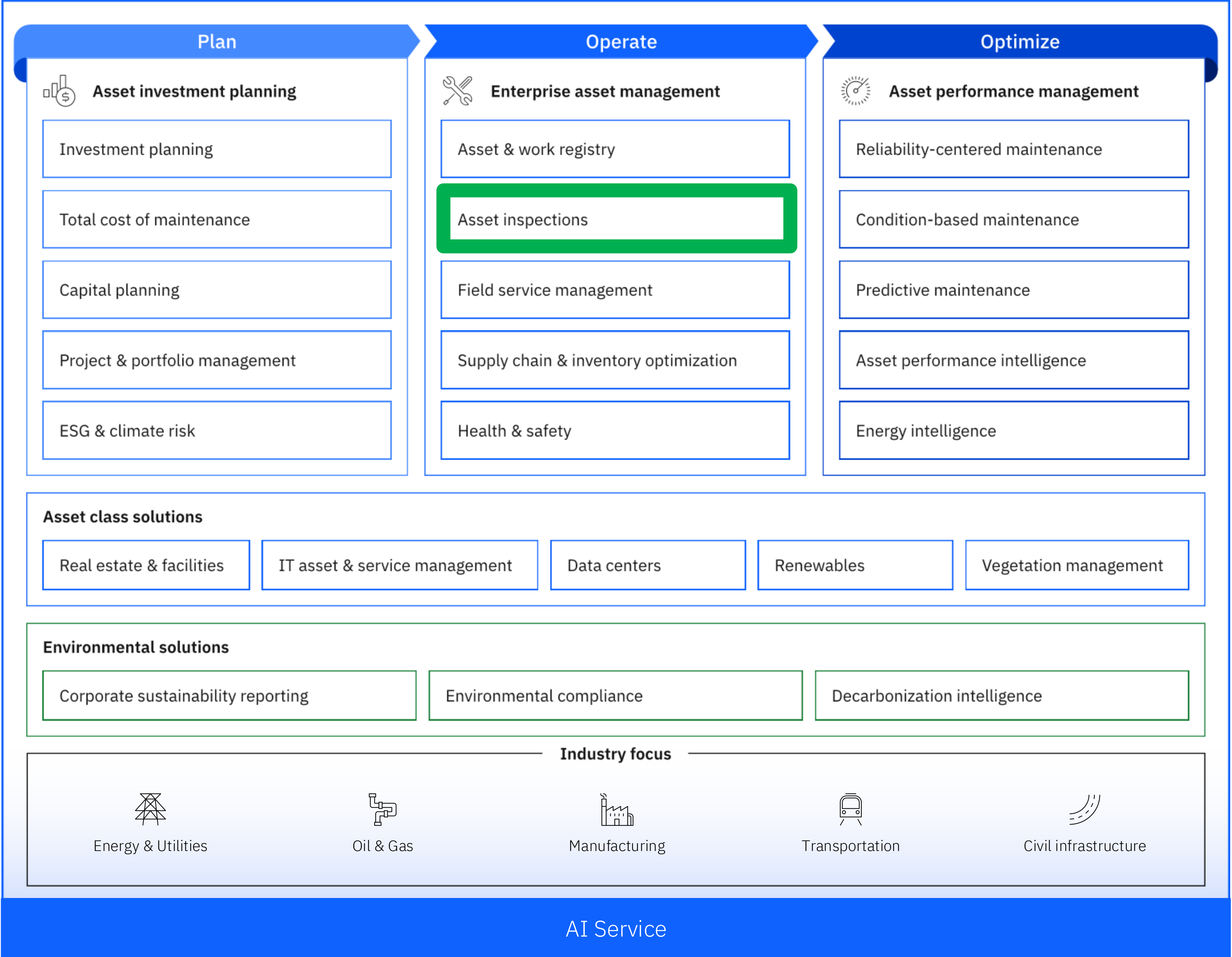
The asset maintenance practices and MAS adoption journey depends on factors including criticality of the asset, operating context, , asset replacement cost and its impact of failure on safety, environment and operations.



Maximo Application Suite

Provides a complete asset view, addressing key organizational roles

- Technicians
- Technician Supervisor
- Asset Maintenance Manager
- Plant Manager
- Fleet Manager
- Operations Manager
- Reliability Engineer
- Quality Manager
- Planners / Schedulers
- Dispatchers
- Storeroom Managers
- Purchasing Managers
- Facility Managers
- Program manager
- Project manager
- Space planner
- Reservation coordinator
- Real estate strategist
- Lease administrator
- Lease accountant



Purpose of Asset Inspections

Vision The continuous assessment of the condition of assets aligns the anticipated condition of an asset to the actual condition of an asset to provide clarity for the management of those assets and the allocation of resources.

Mission The Asset Inspection shall determine the current physical condition and the life-cycle / service life of assets to provide baseline data, benchmarks and metrics by which the organization can efficiently plan and cost-effectively manage the following aspects of the asset: Executive Management (capital funding, strategic planning, risk analysis) Fiscal Planning (program oversight, budget projections, scenarios planning, asset disposal) Strategic Management (program execution, cost accounting, procurement) Asset Management (condition management, project planning, needs prioritization)

Purpose Asset Inspection is the task of surveying or assessing the physical condition of an asset, to create data that can be used in the efficient and effective management (governance) of that asset over its life-cycle. Regularly updating asset condition assessment data will ensure that the decision making process will improve the governance of the life-cycle of assets and increase an asset's return on investment.

When Required Asset Inspection is a continuing task that can be performed in isolation or along with other tasks when visiting an asset in the field. Having accurate condition assessments is critical to accurate TCO evaluations and is performed after the procurement of an asset and the identification of the asset in Managed Asset (3.3.1). Thereafter, continuous Asset Inspections should occur on a regularly scheduled interval appropriate to the organization.

Types of Inspections Supported within MAS

Technician executed Inspections via Mobile

- Form driven
- Standalone or part of a Workorder

Visual Inspections – Production Flows

- Quality inspections as part of a process (manufacturing flow)

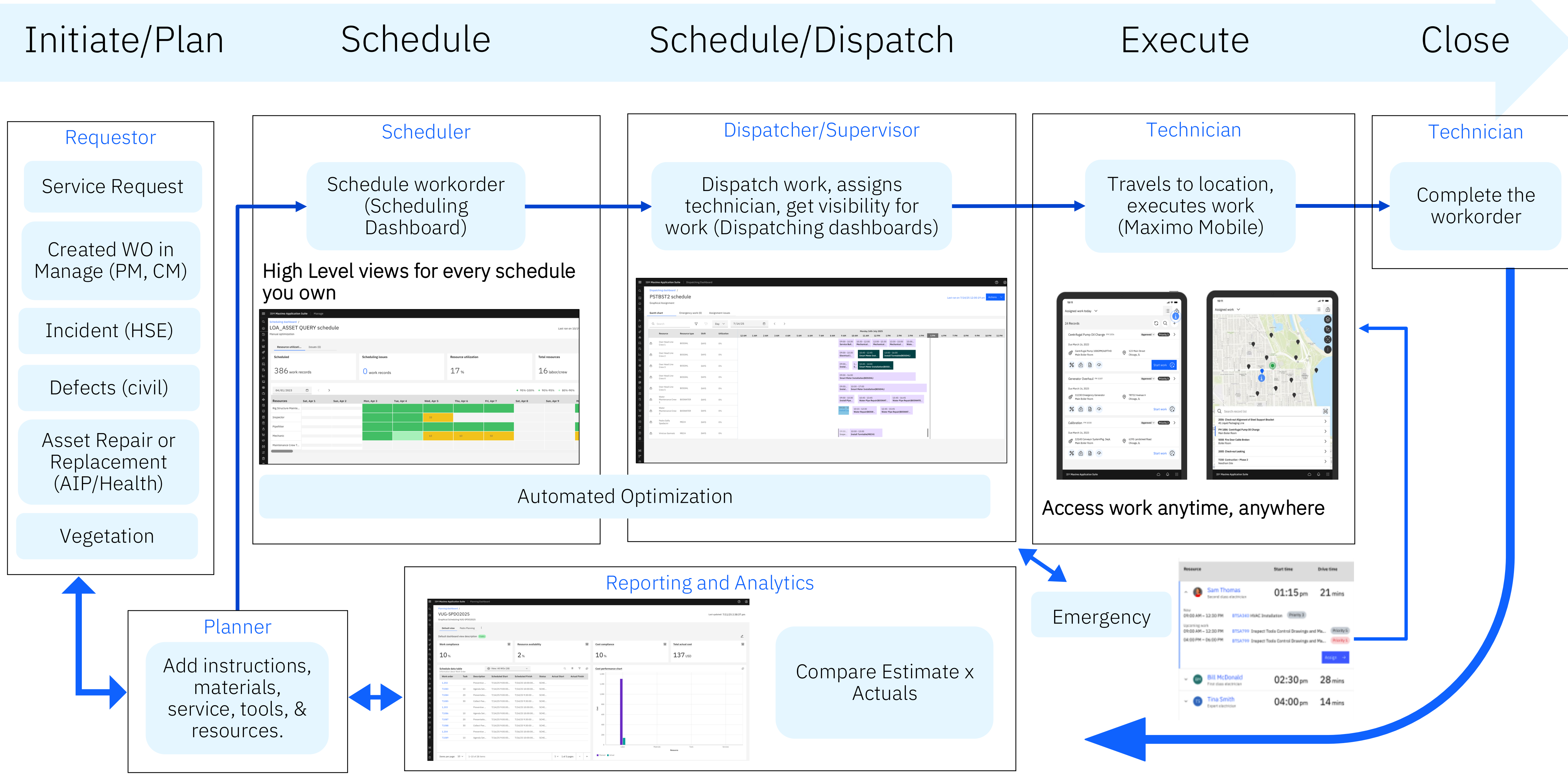
Visual Inspections - Assets

- Focus on specific assets leveraging trained models
- Used for infrastructure and complex assets (pumps, drill bits, dams, bridges, tunnels, rail, etc)
- Multiple means to execute (individuals, drones, rail cars, robots, etc)

Facility Condition Assessments

- Commonly used for facility assets
- Well defined methodology and classification system

Field Service Management ensures the work is done!

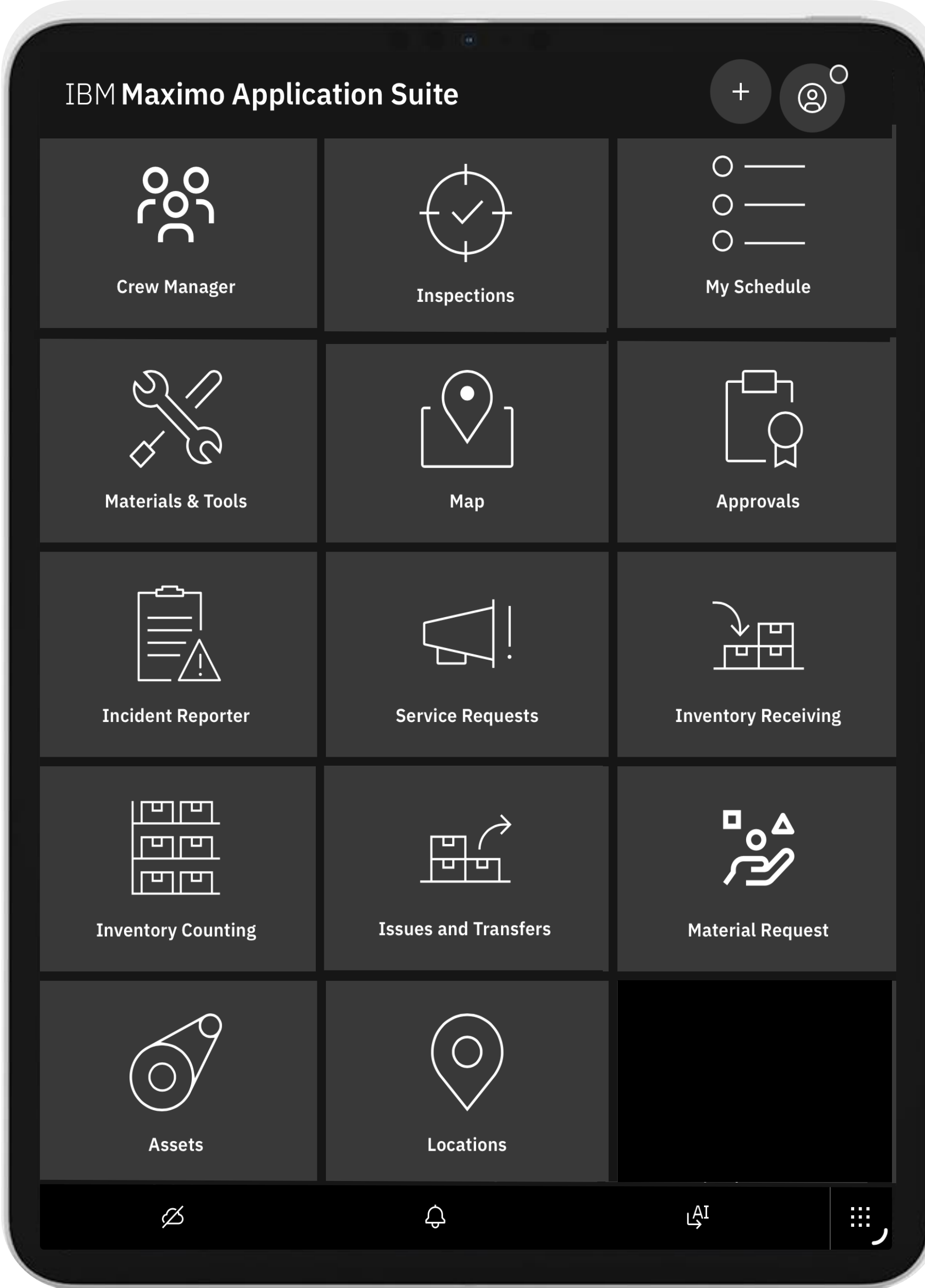
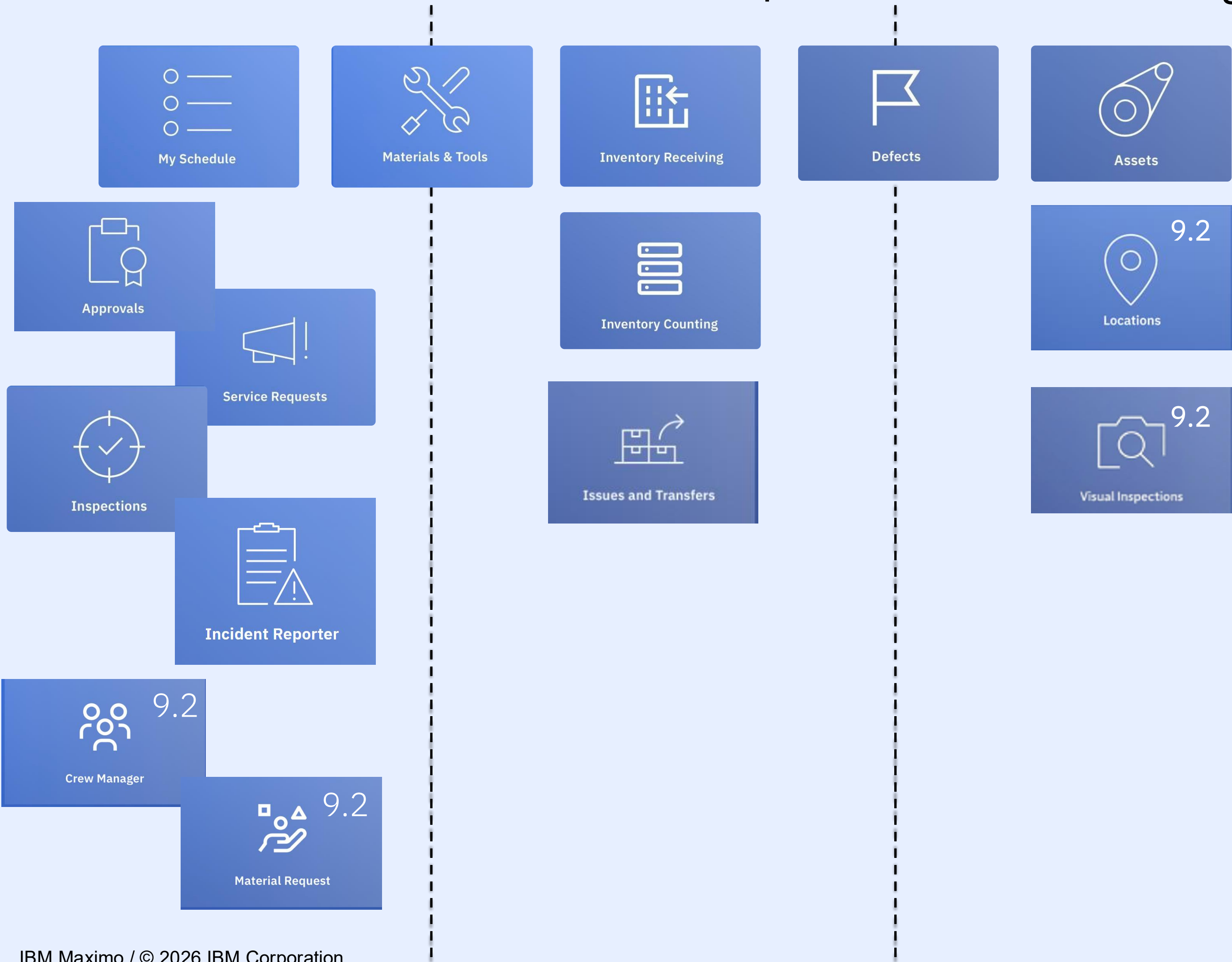


Complete Mobile Solution

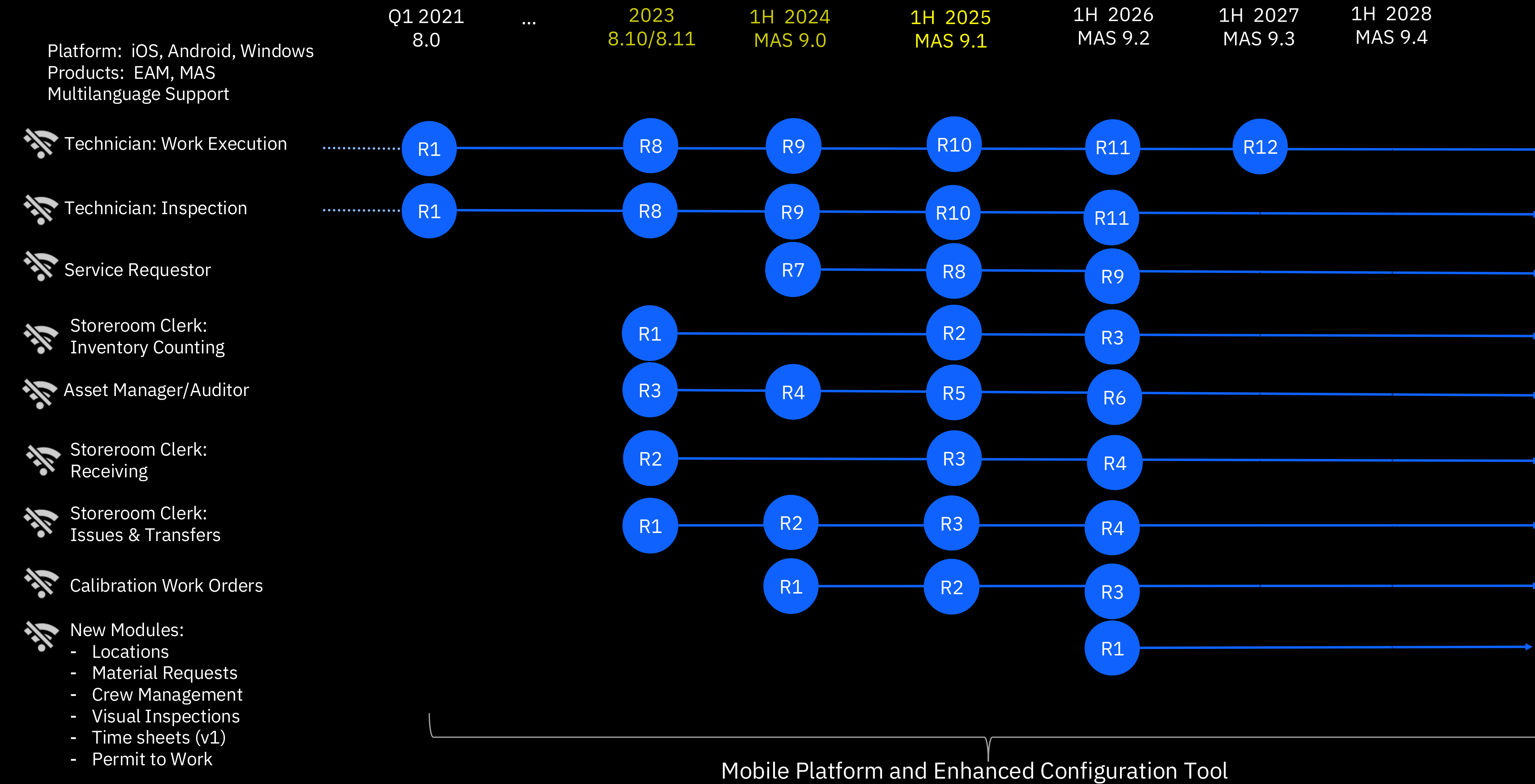
Field Technician

Storeroom Keeper

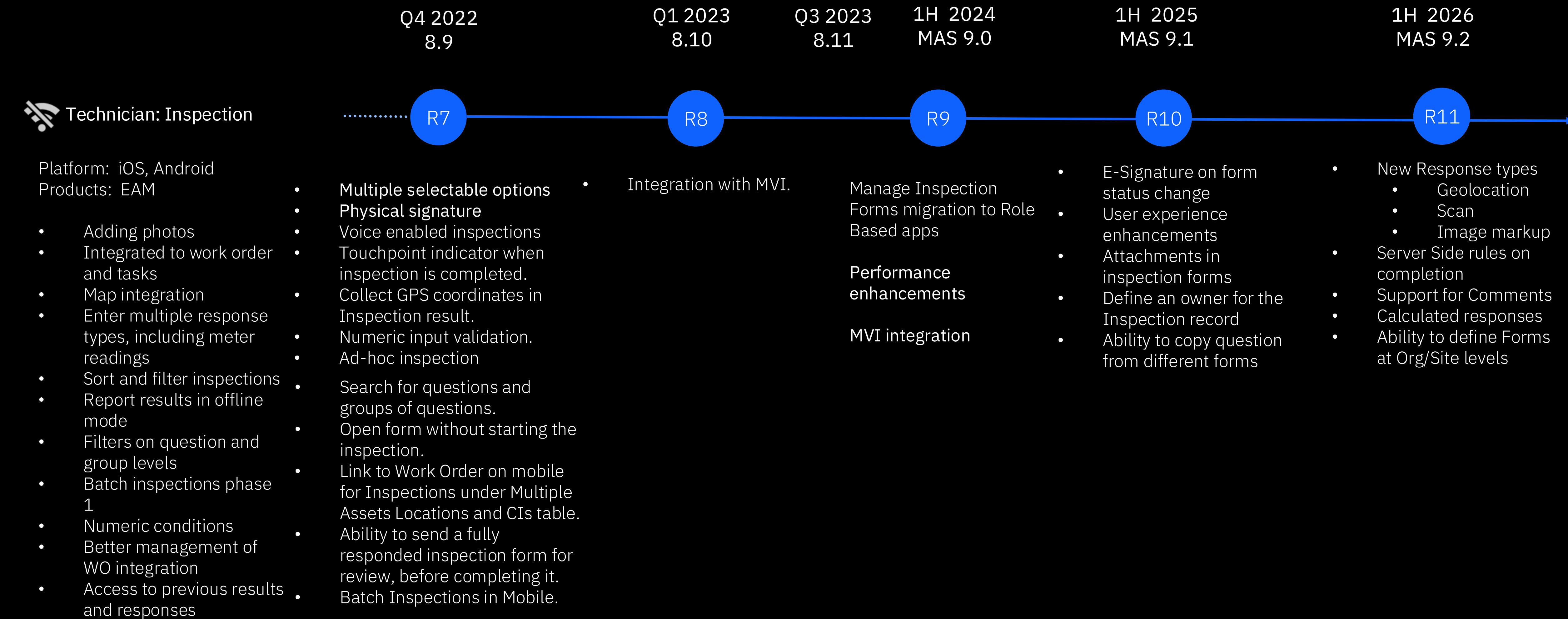
Asset Manager



Roadmap to Expand Maximo Mobile



Roadmap to Expand Technician: Inspections



Maximo Mobile Inspections

Continual improvements across recent releases.

Significant focus on inspection form capabilities and performance.

9.0

- Migration of Manage Inspection Forms from work center to a Role Based Application

9.1

- Automation, stability and performance
- Little UI enhancements on Execution
- eSig support
- Assignment on Inspections
- Copy questions between forms

Planned for 9.2

- Calculated Responses (formulas)
- Security controls at the object level
- Linkage with Assets and Locations
- Support forms at Org/Site levels
- Persist question state with responses (visibility, required)
- New response types
 - Be able to scan responses
 - Geo Location
 - Always visible instructions
 - Comments

Future considerations for Maximo Mobile Inspections

Planning is in progress for MAS 9.3

Classic flows enhancements

- Forms at system level (without ORG) ([MASM-I-369](#))
- Support forms with asset templates ([MASM-I-666](#))
- be able to view and edit linked forms to assets and locations ([MASM-1119](#))
- Formal support for Migration Manager with Inspection Forms (Universal)
- Free form inspections (not tied to assets or locations or WOs) (Alliant)
- Status sync with WO (cancel, in prog)

Meter Enhancements

- Upper/lower warning and action limits for Meters ([MASM-I-1790](#))
- Meter history (not only the last x responses)
- Previous responses in an online mode only
- Individual assets per form/question (Alliant, Universal), mainly for meter readings
- Create WO at the question level for responses that Require Action (Alliant)

Formulas

- Formula for text responses (maybe just a toggle to define if the result should be stored as a number or text would fit for the need)
- Support formula as an input for a condition (competitive gap / DatasplICE)
- Trial Mode to allow someone play with the form before activating it

Usability

- ability to change a form name (<https://bigblue.aha.io/ideas/ideas/MASIT-I-135>)
- Reorder response fields (<https://bigblue.aha.io/features/MASMOBILE-772>)
- Review flow enhancements ([MASMOBILE-I-870](#))
- Reduce clicks when coming from technician app
 - auto start inspections ([MASMOBILE-I-692](#))
 - option to skip completion page ([MOBILE1-I-296](#))

- NERC/CIP - show datetime, technician who reported the results (Alliant)
- Enhanced Batch inspections - Be able to navigate across multiple forms using the hamburger navigation option (Derek)
- Search questions based on ALIAS using scanning (Alliant)
- Recurrent questions (be able to respond the same question multiple times)
- Support multiple inspections per WO/Task (joint work with Techmobile team) ([MOBILE1-I-282](#))
- Pass/Fail status for Inspection Result (needed also by Inventory Receiving)
- MVI Rework
 - Local inferencing
 - Usage of MVI results as responses to the form
- AI Initiative
 - find, start and complete inspections
 - summary of previous inspections
 - nice to have - capture responses using the AI agent
- Instrumentation
 - track volume of inspections that are being reported from Mobile
 - number of AI MVI inferences triggered from Inspections

Maximo Visual Inspections

Continuing to expand usability and interoperability for the desktop and mobile experience.

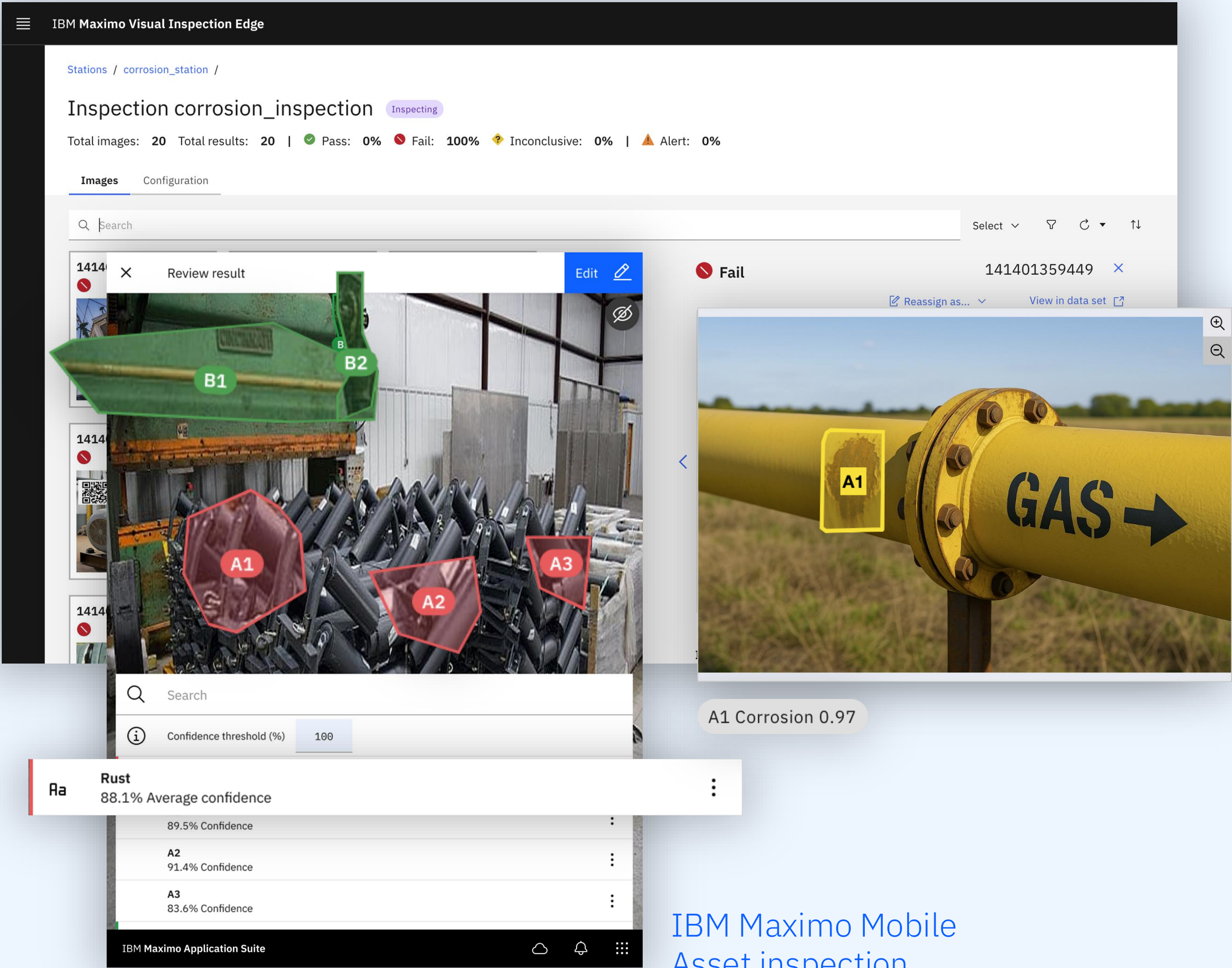
AI-enabled asset inspections

Put computer vision AI capabilities into the hands of your asset inspection teams to identify failures, anomalies, and critical operating conditions.

Run inspections anytime, anywhere

Conduct efficient remote and on-site inspections using not only mobile devices, but also drones, thermal and specialized imaging cameras, as well as fixed cameras installed on critical assets

IBM Maximo
AI vision models



IBM Maximo Mobile
Asset inspection

Maximo Visual Inspections

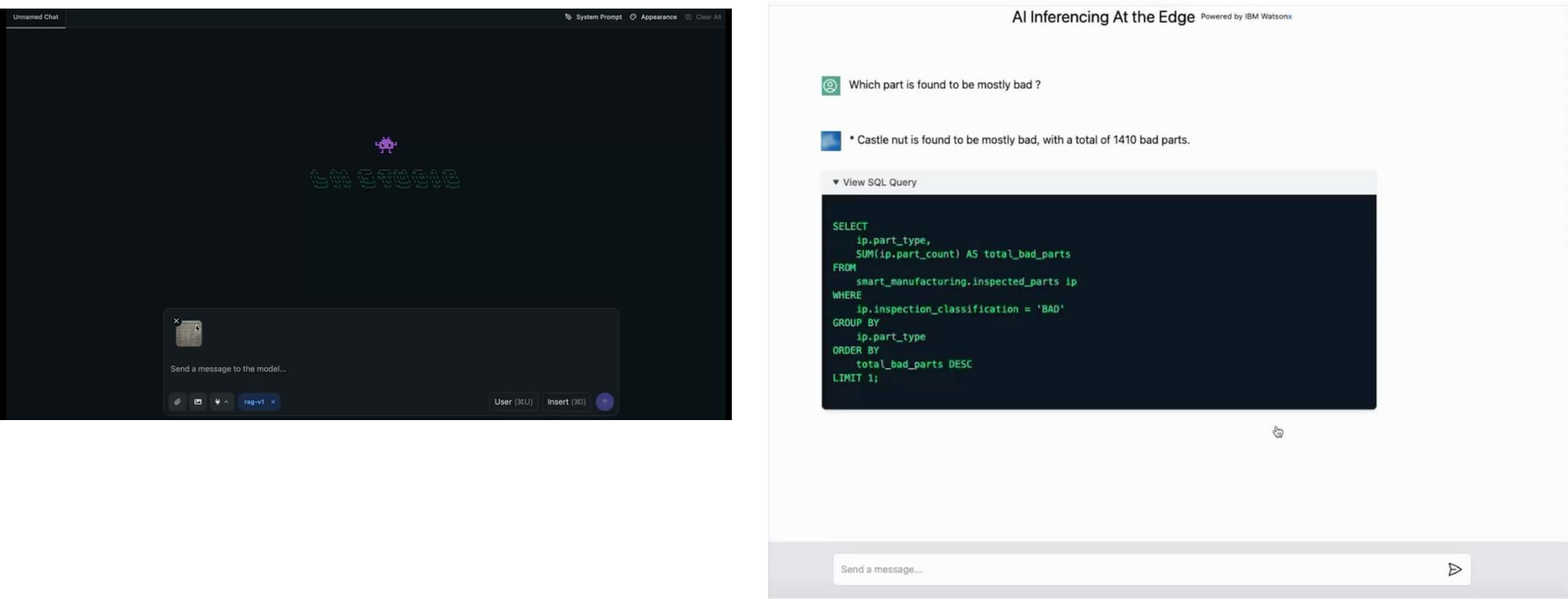
Continuing to expand usability and interoperability for the desktop and mobile experience.

Granite Vision – AI Service

Through integration with Granite, users will be able to consult and receive insights from thousands of inspections.

Users can have dynamic conversations with visual content, asking the system to describe an image, identify specific objects, extract text from elements within the scene, or highlight selected areas.

Questions / requests such as: What went wrong?, Show me the last inspection with defects, Where are problems arising? will be understood, compiled, analyzed, and resolved in real time.



Custom Models

Introducing support for third-party custom models, enabling users to seamlessly, transparently, and safely integrate MVI with external inference services.

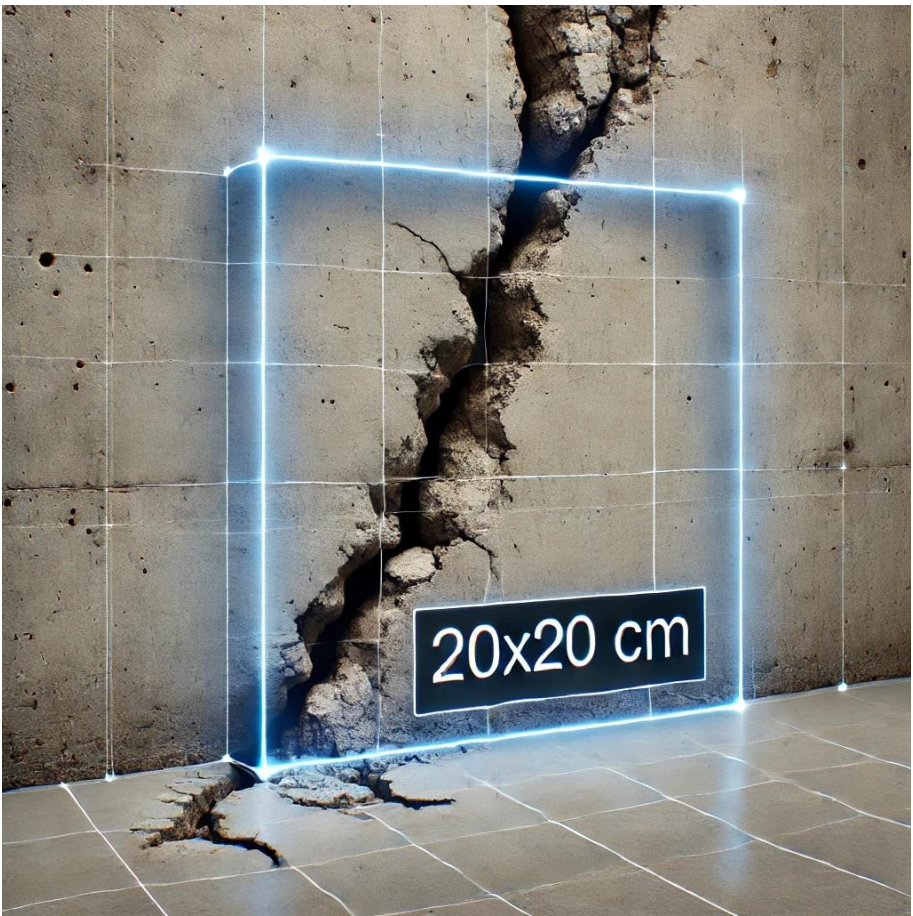
This provides greater flexibility in deploying and scaling custom AI solutions, without compromising data integrity, privacy, or system stability.



Measurement

Automatic measurement technology for anomalies and objects

(Drones and fixed cameras)



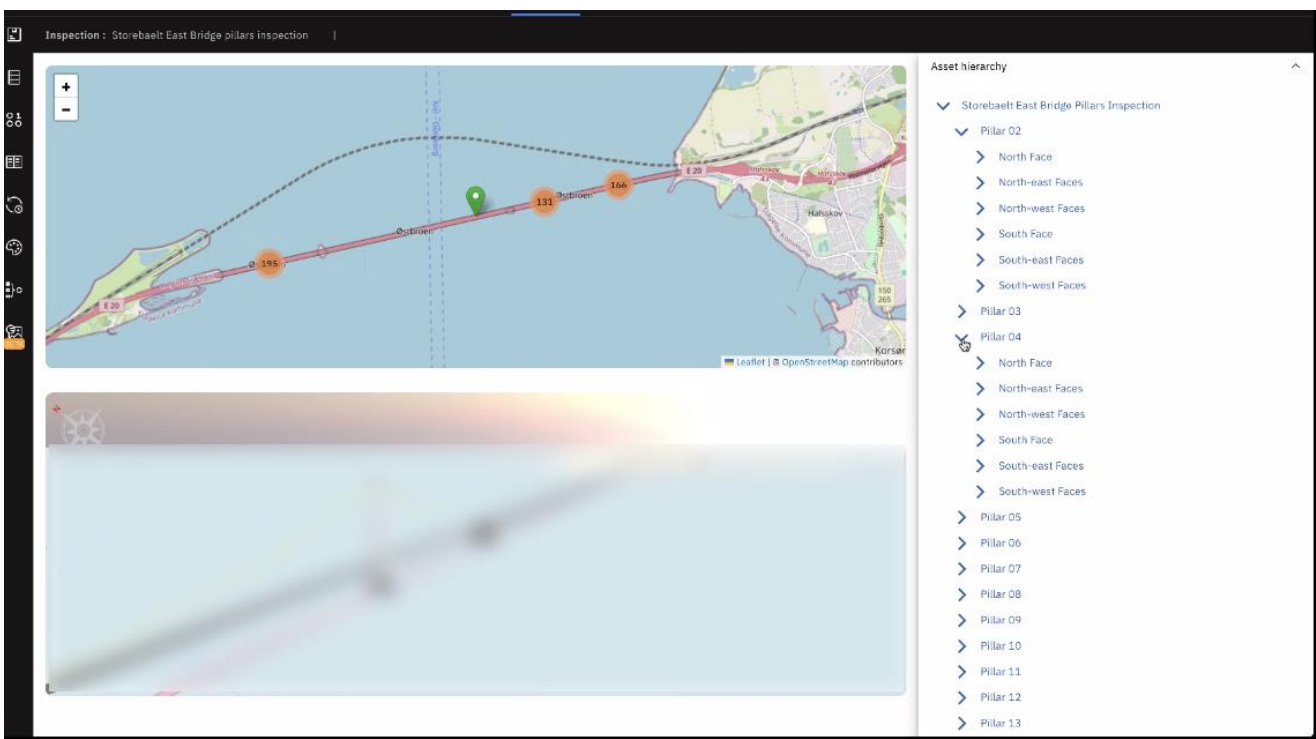
Maximo Visual Inspections

Continuing to extend integration points across the Suite

Asset Inspection Flow

MVI will have access to the Manage hierarchy, allowing projects, datasets and models to be connected directly to the asset location.

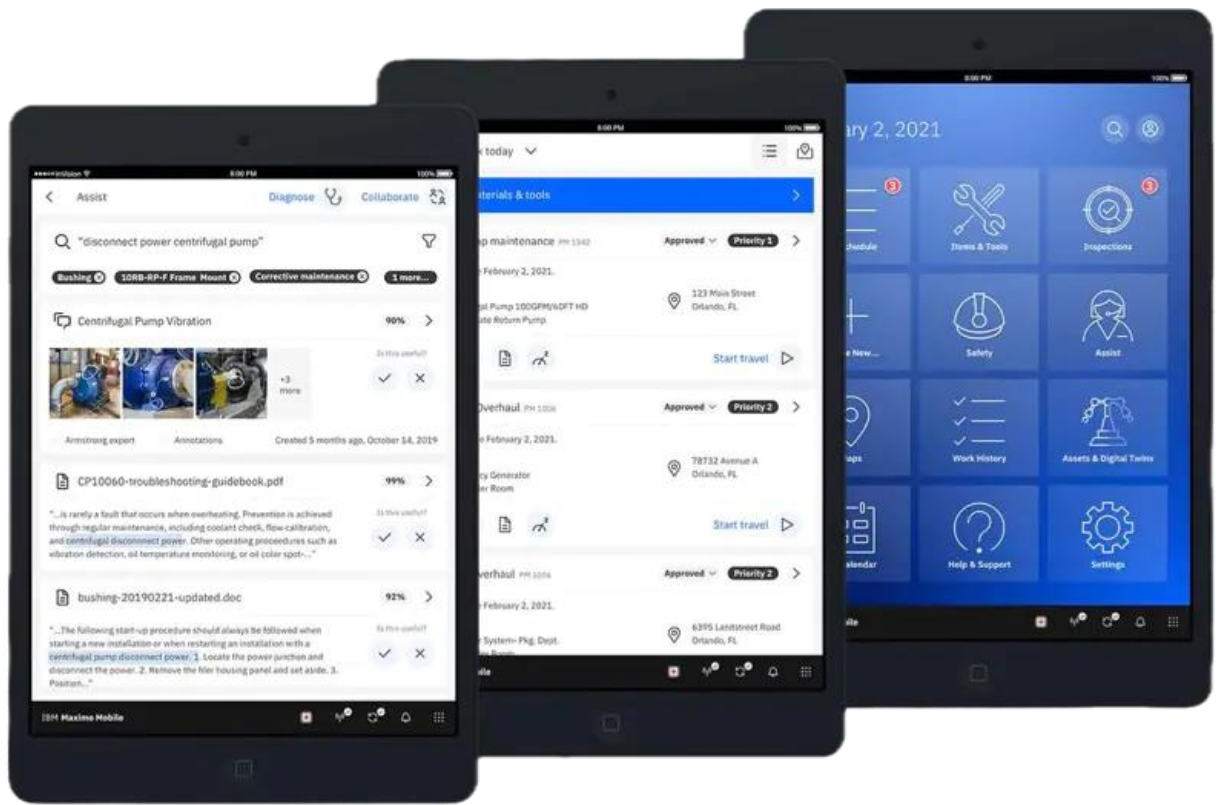
Detections will be aggregated and can be consumed as alarms more easily from any other product in the suite.



Maximo Mobile

Improving the integration between Maximo Mobile and MVI; the new Maximo Mobile application will enable running models offline directly on the phone, making the device simultaneously a camera, a computing unit, and a storage system.

We are also adding the ability to create inspection rules and deliver results via MQTT, allowing a mobile device to function as another smart sensor on the plant floor.



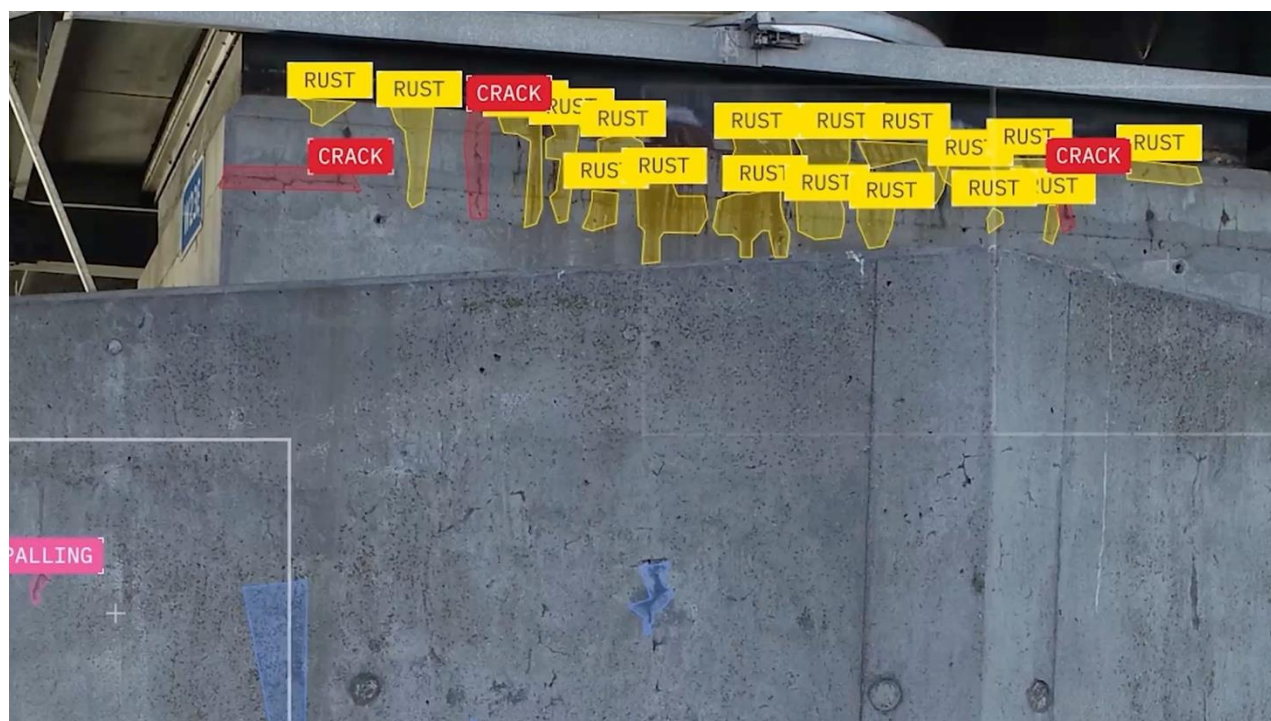
Maximo Visual Inspections

Continuing to extend integration points across the Suite

Model Training Improvements

Empower users to efficiently fine tune domain specific models (LVMs) such as Concrete, Rail, Corrosion, Welding and GeoFM with significantly fewer labeled annotations.

This approach enables faster adaptation to specialized use cases while reducing the cost and effort of data preparation, ultimately accelerating deployment and improving model performance in industry-specific applications.



Edge Improvements

Several improvements to be implemented in MVI Edge, including:

- Running models in CPU mode.
- Support for Microsoft Windows.



FISMA/NIST

Starting in Q3 2025, MVI will be compliant with FISMA and NIST security controls (specifically NIST SP 800-53 Revision 5), enabling its deployment in U.S. government cloud environments.

This opens new opportunities for collaboration with public sector agencies and contractors seeking trusted platforms that align with federal cybersecurity standards.



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Backup

9.2 Details

Alias

Edit question

Response field type

+/-

Calculation

📅

Date only

📅

Date and time

📁

File upload

📊

Meter readings

ⓘ

1/2

Multiple Choice

📋

Multiple choice domain

ⓘ

📱

QR, NFC or barcode scan

123

Single numeric entry

🖋

Signature

✓

Single choice

✳

Single choice domain

ⓘ

🕒

Time only

T

Text

*Get started by entering a form question

Average speed

0 item selected

2. Single numeric entry

Required

No

Visible

Yes

☐

*Description

Time (hours)

Alias

TIMEHRS

You can add an additional response for the question

🗑

📄

Cancel

Save

Formula Editing

Edit question

Response field type

±x

Calculation

📅

Date only

📅

Date and time

📁

File upload

📏

Meter readings ⓘ

1 2

Multiple Choice

📋

Multiple choice domain ⓘ

📱

QR, NFC or barcode scan

123

Single numeric entry

✍

Signature

✓

Single choice

✳

Single choice domain ⓘ

🕒

Time only

*Get started by entering a form question

Average speed

0 item selected

Description

km/h

Alias

☐

Write the response alias here

Formula

Preview

*Formula expression

:DIST / :TIMEHRS

16/255

You can add an additional response for the question

Cancel

Save

Validation of Formula inputs

Learn more about formulas	
^ Referenced Fields	
DIST	Found
Distance (km)	
TIMEHR	Missing

Testing Formulas

☐

Formula

Preview

!

Validation stimulates execution but do not account for real-world conditions.

×

DIST

5000

TIMEHRS

6

Test formula

Calculated result

833 3333333333334

Entering Responses

<

A320 Flight Log

Complete

All

To Do

Done

Required

0 of 1

NORTH Northern District

1. Average speed

Distance (km)

—

+

10,000

Time (hours)

—

+

87 l

km/h

114.94

Documentation

IBM

Documentation

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Maximo formula operators and functions

Last Updated: 2026-01-09

Maximo® formulas support most common mathematical operators and functions. The formulas combine the formula expression syntax with Maximo business objects and Maximo business object (MBO) attributes.

Supported operators

The following table lists supported operators for Maximo formulas.

Table 1. Mathematical operators supported in Maximo formulas

Mathematical operator	Description	Examples of usage
+	Addition	<code>purchaseprice + tax</code>
-	Subtraction	<code>enddate - startdate</code>
*	Multiplication	<code>unitcost * quantity</code>
/	Division	<code>totalcost/quantity</code>
%	Remainder	<code>a%b</code>
^	Power	<code>a ^ 2</code>

Table 2. Logical operators supported in Maximo formulas

Logical operator	Description	Examples of usage
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A large, stylized green thumbs up icon with a thick outline, positioned on the right side of the image.

Table 2. Logical operators supported in Maximo formulas		
Logical operator	Description	Examples of usage
& &	Logical And	<code>if(a>10 & & b<20, x,y)</code>
	Logical Or	<code>if(a>10 b<20, x,y)</code>
>, ≥	Greater than, greater than equals	<code>if(a≥10 b>20, x,y)</code>
<, ≤	Less than, less than equals	<code>if(a<10 b≤20, x,y)</code>
=, ==	Equals comparison	<code>if(a=10 b==c, x,y)</code>
!=, <>	Not equals	<code>if(a<>10 & & b!=c, x,y)</code>



Supported functions

The following tables list supported functions for Maximo formulas.

Table 3. Asset or location functions

Function name	Number of parameters	Description	Examples of usage
<code>meteravgval</code>	2	Calculates the average meter value over a time span. This function is applicable only to gauge meters.	<code>meteravgval("0_pressur", duration(0,0,30,0,0,0))</code> , which gives you the average reading of the 0_pressur meter over a span of the last 30 days.
<code>meterexceedcount</code>	3	Calculates the number of times the meter readings exceeded the target value.	<code>meterexceedcount("0_pressur", duration(1,0,0,0,0,0),0.9)</code> which counts the meter readings that are above 0.9 in the last one year.
<code>meterlowaction</code>	1	Obtains the meter lower action value from the measurement point. It is commonly used in the Condition Monitoring application.	<code>meterlowaction("metername")</code>
<code>meterlowwarning</code>	1	Obtains the meter lower warning value from the measurement point. It is commonly used in the Condition Monitoring application.	<code>meterlowwarning("metername")</code>

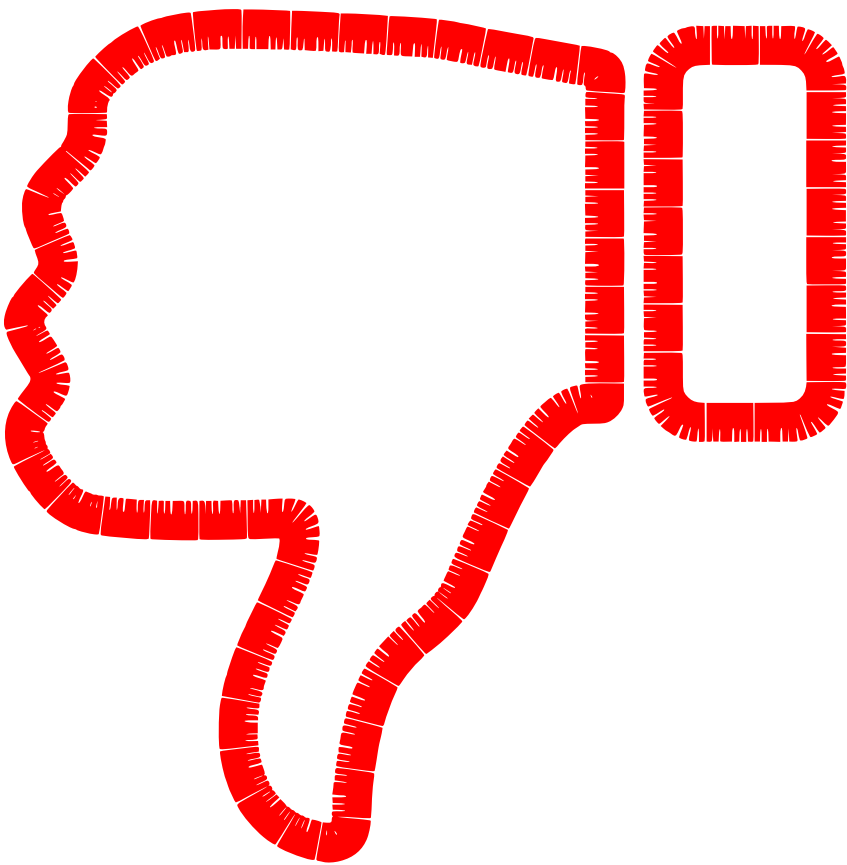
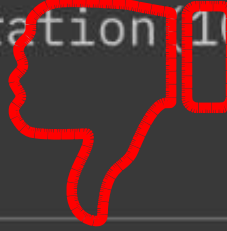


Table 4. Date and time functions

Function name	Number of parameters	Description	Examples of usage
addymd	4	Adds year as the second parameter, month as the third parameter, and day as the fourth parameter to the first parameter, which is a date and time field.	addymd(statusdate,1,5,6). The formula adds 1 year, 5 months, and 6 days to the statusdate field.
date	3	Specifies a date with year, month, and day in a formula	date(2024,11,30) is used to specify 30 November 2024 as the date.
datetime	6	Specifies a date with year, month, and day and a time with hours, minutes, and seconds in a formula. The hour follows the 24-hour format.	datetime(2024,11,30,6,45,0) is used to specify 30th of November, 6:45 AM as the date and time.
duration	6	Specifies a duration with years, months, days, hours, minutes, and seconds in a formula.	duration(0,0,0,2,0,0) is used to specify a duration of two hours.
msince	1	Calculates the number of months from a date and time field that is specified as a parameter in the function.	msince(statusdate) returns a value of 6 if the status date is six months old.
now	0	Obtains the current date and time.	now()
subymd	4	Subtracts year as the second parameter, month as the third parameter, and day as the fourth parameter from the first parameter, which is a date and time field.	subymd(statusdate,1,5,6). The formula subtracts 1 year, 5 month, and 6 days from the statusdate field.
time	3	Specifies the time in hours, minutes, and seconds.	time(6,45,0)

Table 5. Mathematical functions

Function name	Number of parameters	Description	Examples of usage	
abs	1	Obtains the absolute value of a number	<code>abs(a)</code>	
avgf	4	Calculates the average value of a related attribute over a period.	<code>avgf("openwo", "wopriority", "statusdate", duration(10,0,0,0,0,0))</code>	
ceiling	1	Rounds a value up to the nearest integer.	<code>ceiling(3.2)</code> returns 4.	
countf	3	Calculates the count of a related set of attributes over a time period.	<code>countf("openwo", "statusdate", duration(0,0,10,0,0,0))</code>	
floor	1	Rounds a value down to the nearest integer.	<code>FLOOR(3.2)</code> returns 3.	
maxf	4	Calculates the maximum value of a related attribute over a time period.	<code>maxf("relation", "attr_to_sum", "timeline_attr", duration(0,0,10,0,0,0))</code> The timeline_attr is of type Date or Date Time.	
minf	4	Calculates the minimum value of a related attribute over a time period.	<code>minf("relation", "attr_to_sum", "timeline_attr", DURATION(1,0,0,0,0,0))</code> The timeline_attr is of type Date or Date Time.	