

What's New in IBM Cloud Pak for Watson AIOps

MATT RODKEY

Offering Management



IBM

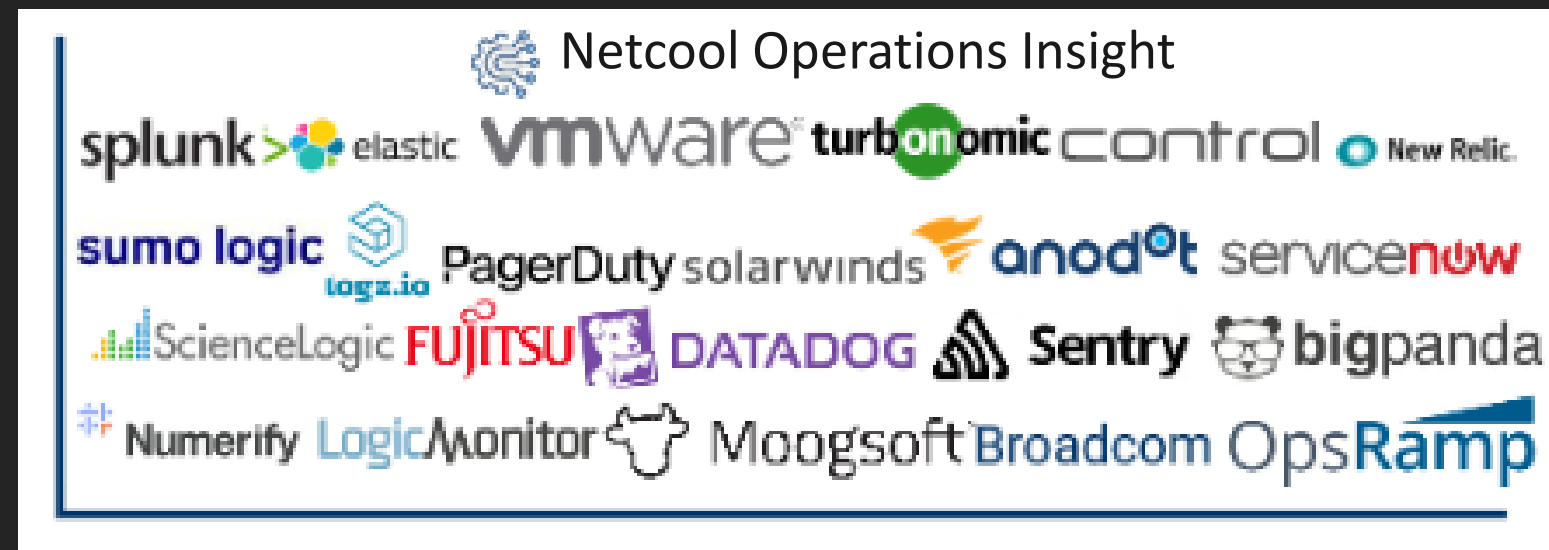
Your current IT tool landscape is likely complex

- Different tools for different resources & platforms
- Tools, Teams, Workflows in siloes
- Local insight or (pseudo) AI

Application & Network Performance Management



Operations Management



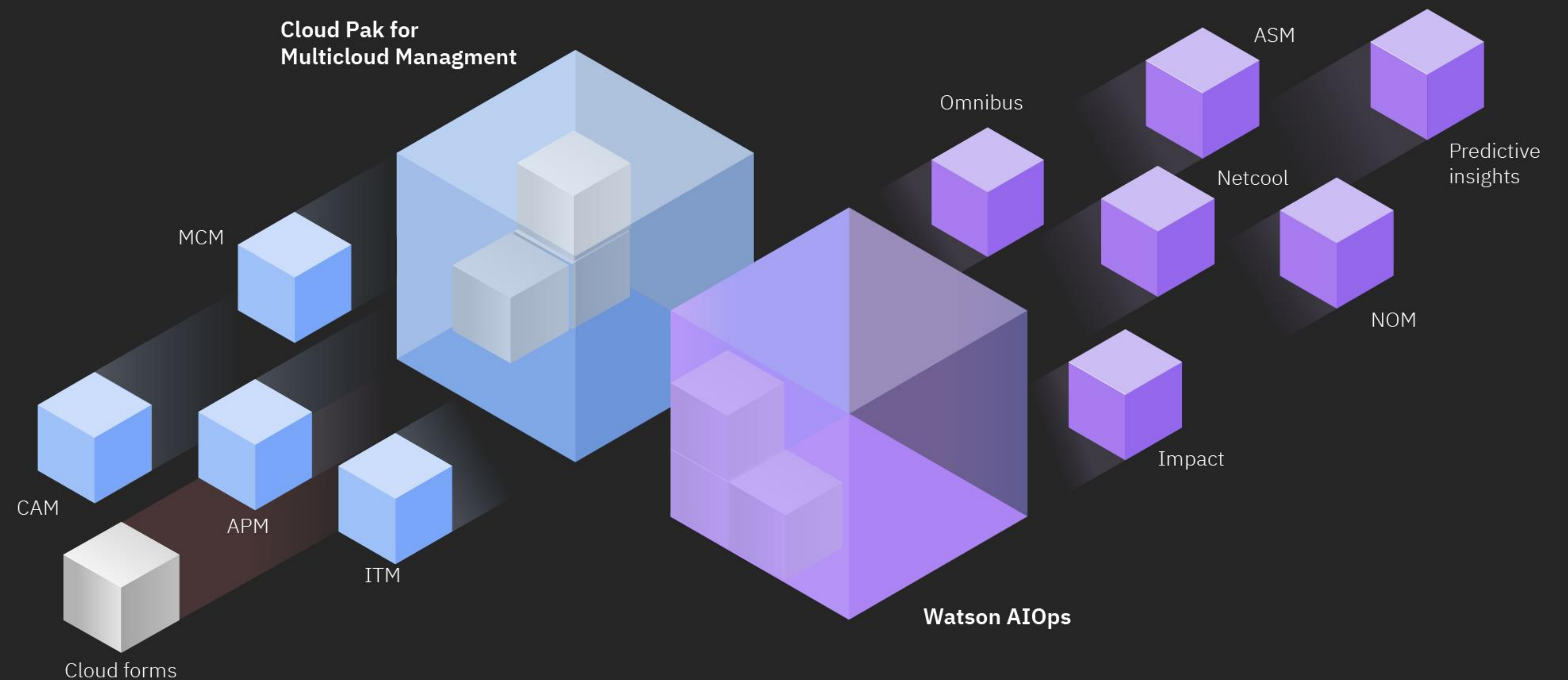
Service Management



IT Management market evolution

MARKET CONSOLIDATION, PRODUCT RATIONALIZATION

- Public clouds commoditizing infrastructure and reducing time to market
- Cloud native architectures introduced new standards and technologies
- Siloed IT monitoring to complete observability and evolution of AIOps
- Transformation of IT support process bringing ticketing , change, event management together



Market Momentum and Validation

MARKET GROWTH AND ANALYSTS

ANALYST COMMENTARY AND EVIDENCE

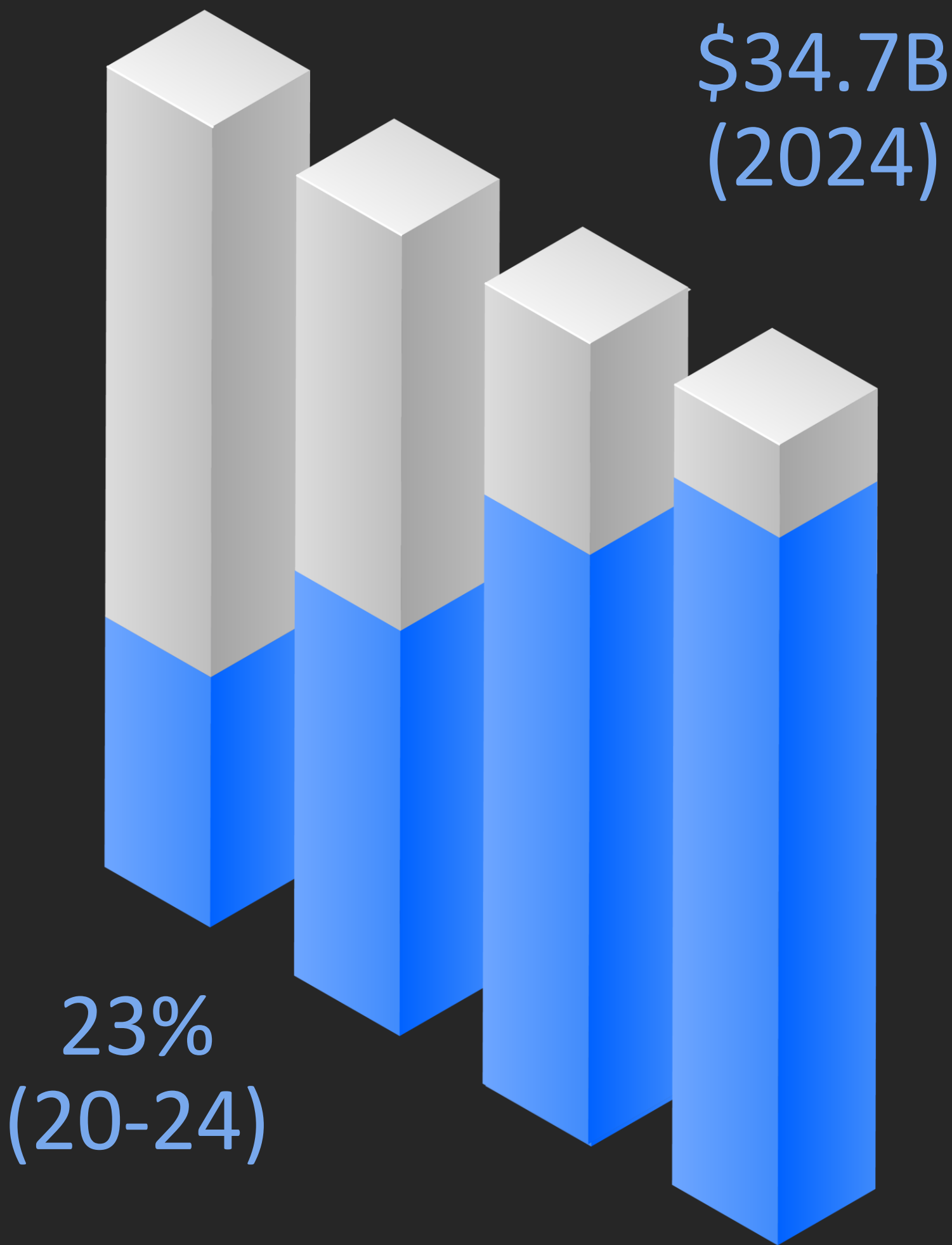
“By 2024, 30% of business leaders will rely on AI Ops platforms for automated insights to drive business-related decisions, as compared to less than 3% today...”
(Gartner)

“ 10x - The Number of business leaders relying on on AIOps platforms for automated insights by 2024.”*

“ 80% of IT Leadership compensation will be based on business outcomes, not IT performance (uptime)” *

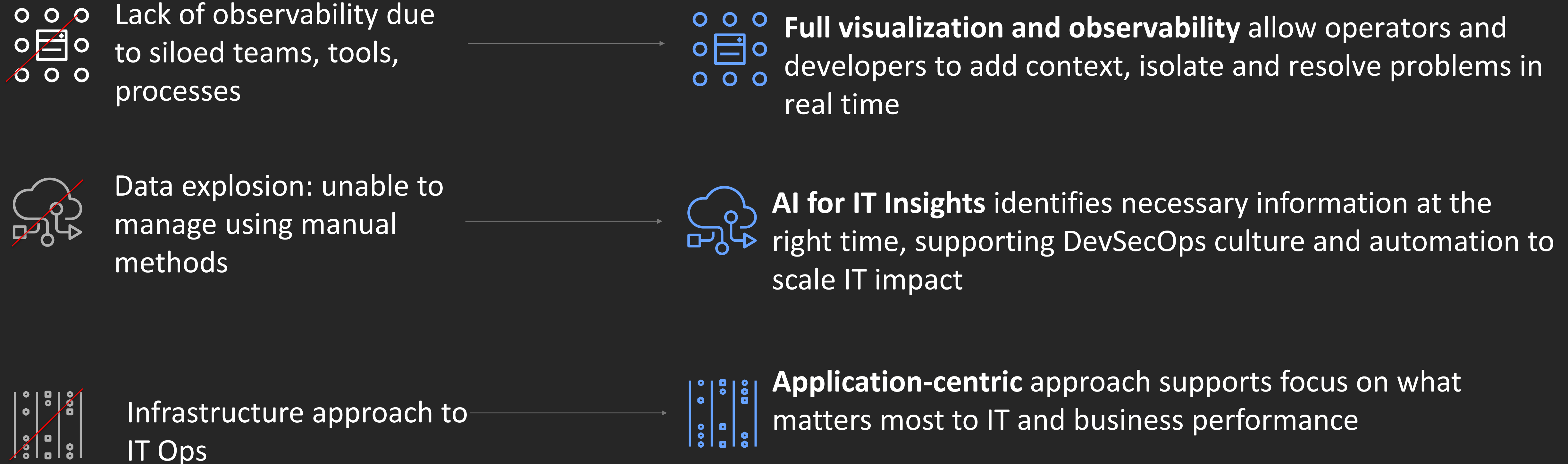
“ By 2023, 40% of DevOps teams will augment application and infrastructure monitoring tools with artificial intelligence for IT operations (AIOps) platform capabilities.” (Gartner)

MARKET SIZE AND GROWTH



AIOps is reimagining IT Operations

POWERED BY AI AND AUTOMATION



Automate IT operations to deliver actionable insights

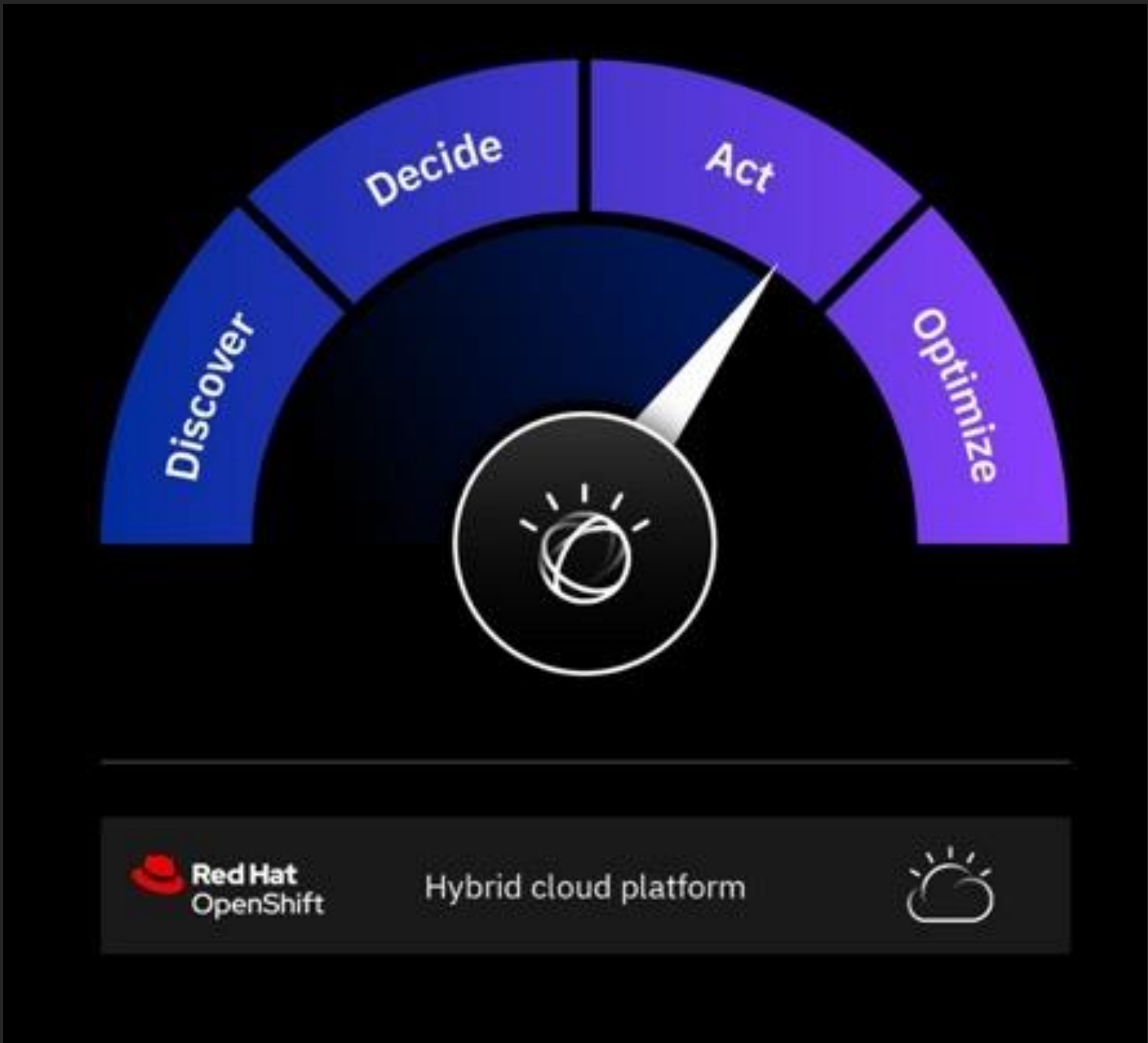
DISCOVER
Ingest and analyze data from structured and unstructured sources including logs, metrics, events and chat with observability

ACT
Correlate, curate and highlight most relevant data across tools without manual investigation

DECIDE
Get recommended remediation actions; specialized Machine Learning (ML) Natural Language Processing surfaces alerts in ChatOps

DISCOVER
Automatically execute runbooks based on past incident action correlation

Automation framework



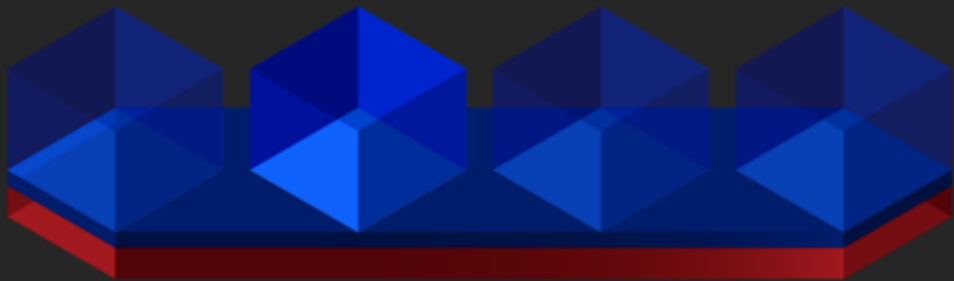
25%

more initiatives completed

50%

less labor cost

IBM Cloud Pak for
Watson AIOps
(incl. CP4MCM)



IBM's AIOps point of view



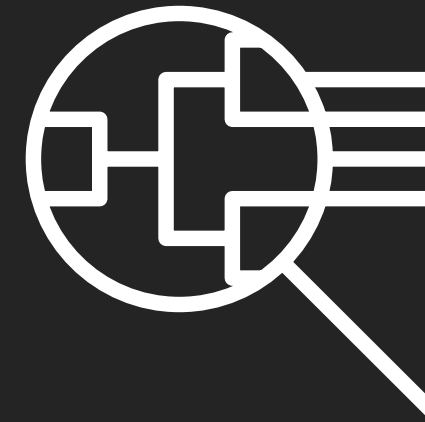
Application Impact Avoidance

Correlate across all relevant data sources. Detect hidden anomalies, anticipate issues and resolve faster. Proactively avoid risks and automate your workflow.



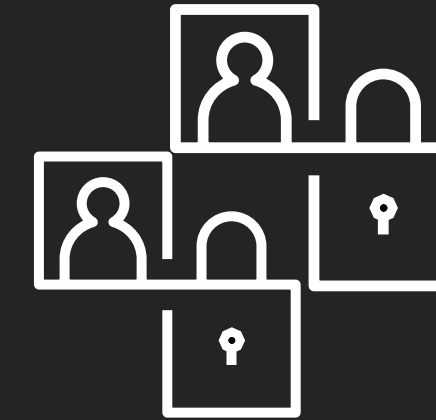
Hybrid Application Management

Obtain an integrated view of your hybrid applications and infrastructure and understand interdependencies



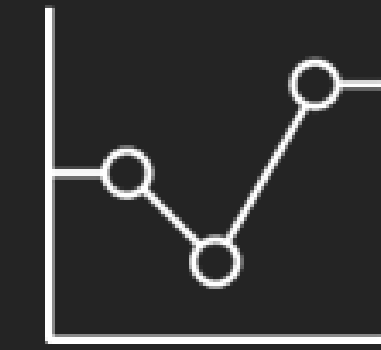
Observability

Understand the health and performance of your applications and collect IT, digital experience and other dimensions of data relevant for risk analysis and automation



Governance and Compliance & Efficiency & Cost Management

Detect policy violations and automate remediation actions with runbooks. Stay compliant.



Establish KPI baselines to understand efficiencies and define cost models to optimize your infra-structure and application deployments

IBM Cloud Pak for Watson AIOps

Technology
Partners

Data feeds



Application Impact Avoidance



Hybrid application management



INSTANA
Observability



Governance and compliance



Efficiency & Cost management

AI and machine learning



IT service mgmt



Log ingestion



Code provenance



App resource mgmt



Container security



Scalable memory



Collaboration

CI/CD, Tickets, logs, metrics, events, topology, Digital experience, Organizational, Cost & Budget, Weather, Energy

Automation foundation

- Robotic Process Automation
- Natural language interactions
- Process and task mining
- Event detection
- Machine learning
- 3rd Party integrations
- Operational models



IBM Cloud



AWS



Microsoft Azure



Google Cloud



VMware



Private



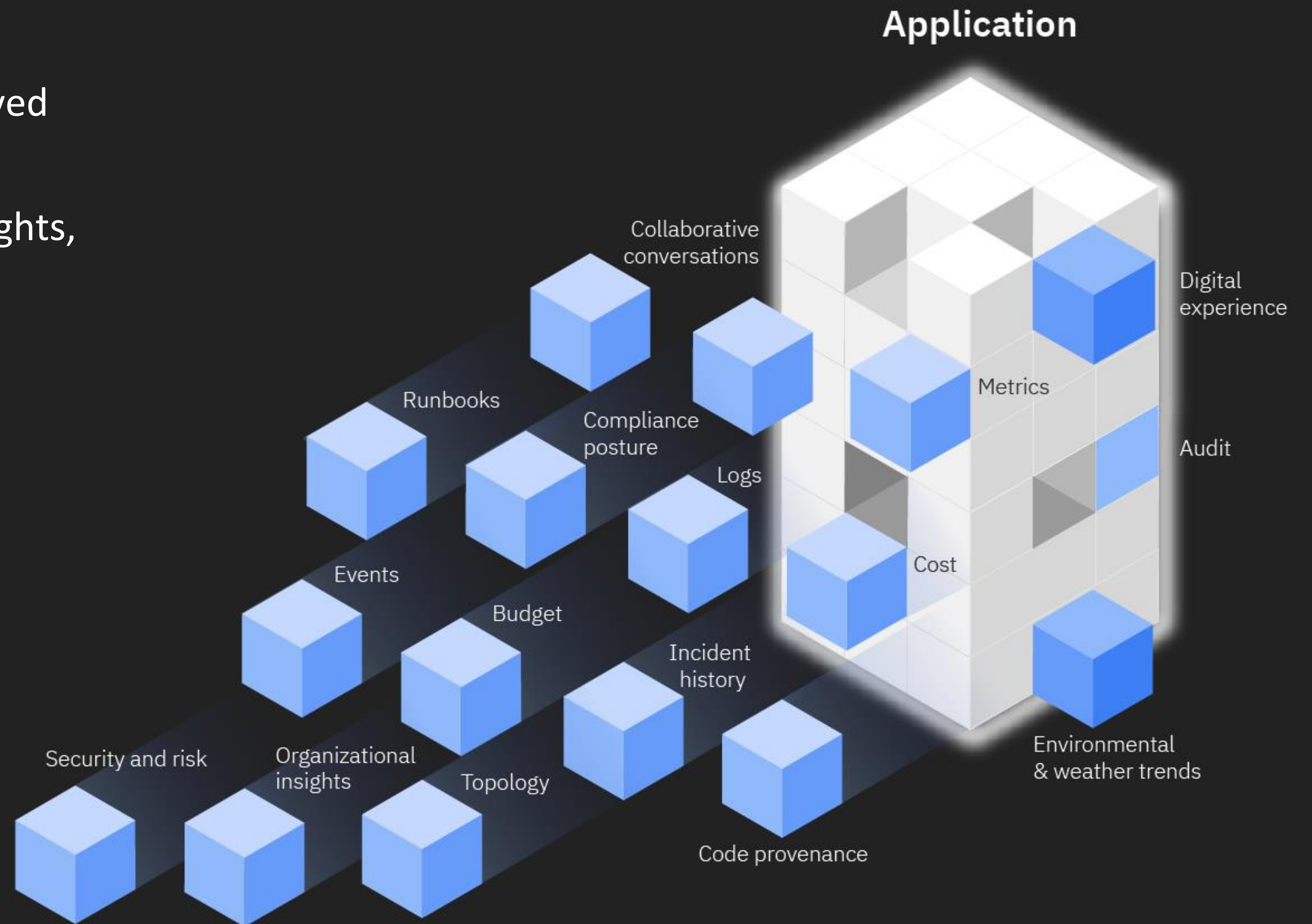
X86
IBM Z
IBM LinuxOne
IBM Power Systems

Dynamically Discover and Acclimate to your Applications

APPLICATION AWARENESS

Comprehensive understanding of business
Applications with insights and intelligence derived
from operational data, logs and events.

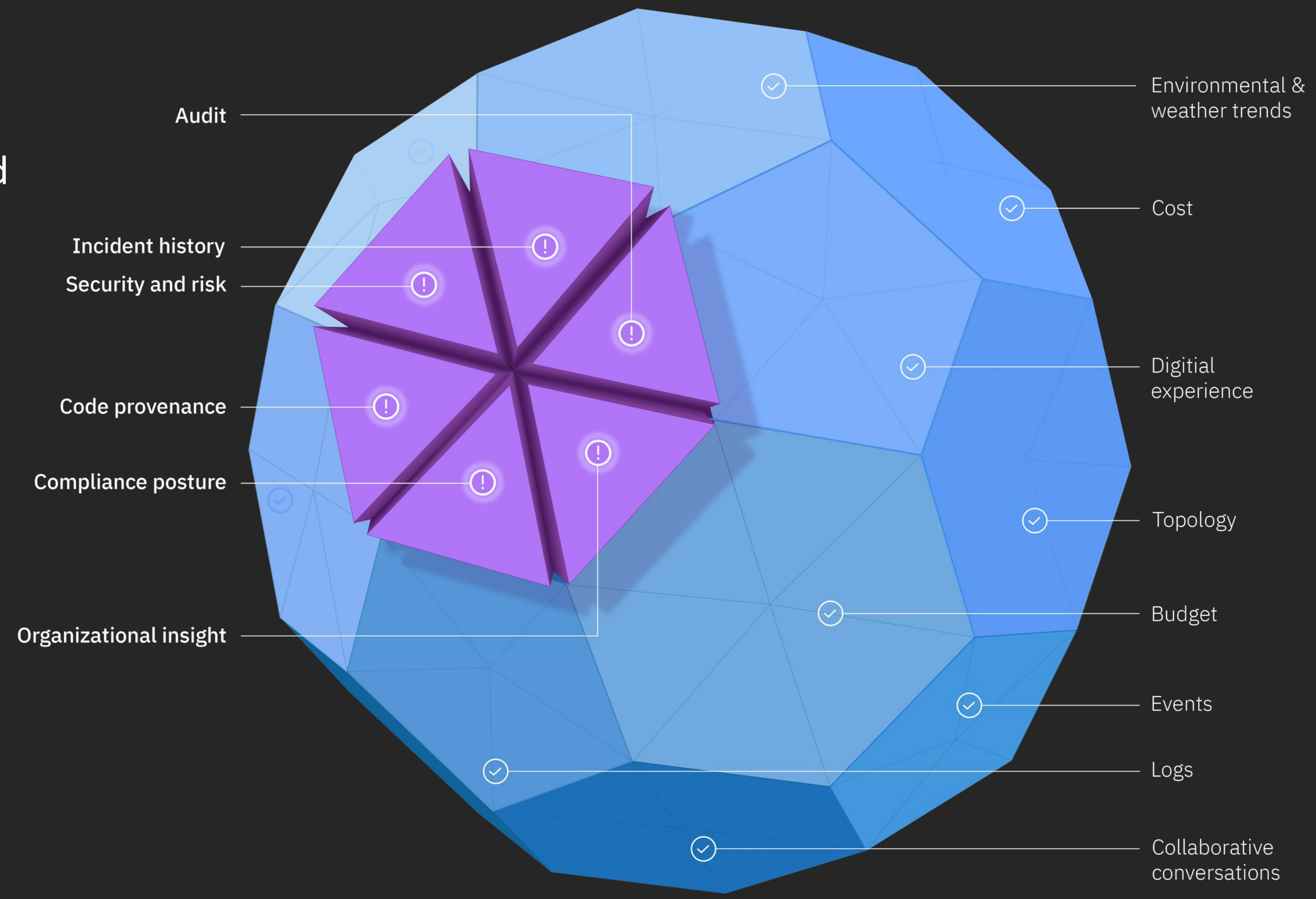
Go beyond to augment with organizational insights,
digital experience, code provenance, budgets,
environmental and weather trends, etc.



Anticipate Issues

PREVENTIVE INTELLIGENCE

Proactive problem avoidance through continuous policy enforcement, anomaly detection, etc. across DevSecOps for increased application availability and reduced risks leading to **increased customer satisfaction**



Automate Resolutions

TRUSTED ACTION

Trusted automation of tasks and remediations resulting in reduced resolution time

Audit with complete insights and explainability enabling teams to focus on innovation

Microsoft Teams

Find or type a command

Activity

Conversation

Teams

Calendar

Calls

Files

...

Teams

Your teams

OP

admin_ops

...

order_ops

...

payment_ops

...

shipping_ops

...

returns_ops

...

HR

mav_hr

...

LE

mav_learning

...

GE

general

...

git-repo-001

Conversation

Files

Notes

Team services

Watson AIOps

9:35 AM

Incident detection

Story 3

Title: ts-ticketinfo-services with 4 events

Ticket: INC0010112

Description: ts-ticketinfo-5XX Internal Server Error + 1 alert, 2 log anomalies

Status: Open

Severity: 3

Created: July 13th at 1:04 PM by @zeno_aiops_demo1

Updated October 31st at 9:35 PM by @zeno_aiops_demo1

Localization and Blast radius

master

ed-mm

mm-runtime

tas

streg-server

tensorrt_ving

nlu

master

ed-mm

nlu

tas

mm-runtime

Competitive Differentiation: IBM's AI Driven Automation

1

Pre-built ML models for brand new insights

Detect anomalies much earlier and correlate data in real-time to focus attention on the right issues.

Apply Natural Language Understanding to offer concise insights and leverage precedents

2

Application centricity

Access and organize relevant information across silos and tools towards specific applications.

Provide an integrated perspective.

Retain context and consistency when switching between UI and ChatOps engagement models.

3

Closed-loop integration

Break Dev / Sec / Ops silos by extracting insights from CI/CD to enrich advice for Operations – and vice versa.

Infuse security and governance as code to prevent violations.

Automate mundane workflows to reduce toil and improve data quality.

What's new with CloudPak for Watson AIOps 3.1?

1. Application Hub
2. AI Hub for ML model management
3. MSFT Teams support as GA
4. Change Risk Advisor – Episode 1
5. Built on top of CloudPak 2.0 and the IBM Automation Foundation

...

Application Hub

1. Complements ChatOps experience
2. Issues as stories
3. Empowers application owner and ITOps engineer with application-centric view

• • •

IBM Automation platform

Applications /

Refresh every 30 seconds

Train Ticket Application

47

320

4

About the application

Learn more

Stories 8

All Priorities

ts-ticketinfo-service with 4 urgent events in a long story title

Updated: 1/11/2021 10:23:12PM

On average, you should expect to be addressing 4 CVEs this week on this applications infrastructure.

View details

P1

#ST235422390001

Updated: 1/11/2021 10:23:12PM

ts-ticketinfo-5XX Internal Server Error + 1 alert, 2 log anomalies

View details

P2

#ST23544021134

Updated: 1/11/2021 10:23:12PM

On average, you should expect to be addressing 4 CVEs this week on this applications infrastructure. Here is some more detail on that prediction.

View details

P3

ticketinfo-service with 4 useful recommendations

Updated: 1/11/2021 10:23:12PM

This application has assets that are seeing little to no activity.

View details

P4

Show all

Topology

Find resources

Delta

Timeline

asm-demo-worker-2.fyre.ibm.com - server

Relationships

State

Property

View last updated: 1/21/2021, 5:27:51 PM. Refresh interval: 30s

4 resources, 3 relationships

Status severity breakdown

Last 24 hours

Topology churn

Last 24 hours

Number of relationships

Property changes

AI Hub

- 1. UI-based ML-model training & lifecycle management
- 2. Model Accuracy assessment
- 3. Quick time to value
- 4. End-user friendly

...

IBM Automation platform

AI type / Change risk /

log_anomaly_detection_11.5-11.6

v1

Deployed

Actions

Last trained: 1 minute ago

Deployment complete

Your training definition is now deployed.

Data set breakdown

Training results

Excellent

Suggestion: Your training results look great! You can further view your results by looking at the models generated and view applications this training definition will cover.

Show me how

Models generated

55

view

Applications found

4

view

Overview

Scheduling

Name

change_risk_1-10-2021

Created on

01/10/2021 8:30 UTC

Version

1

Created by

John Smith

Automatically retrain

Yes

Start and end date

01/01/2021 to 01/01/2022

Frequency

Weekly

Promote AI policy

Manual

At time

12:00 AM CST

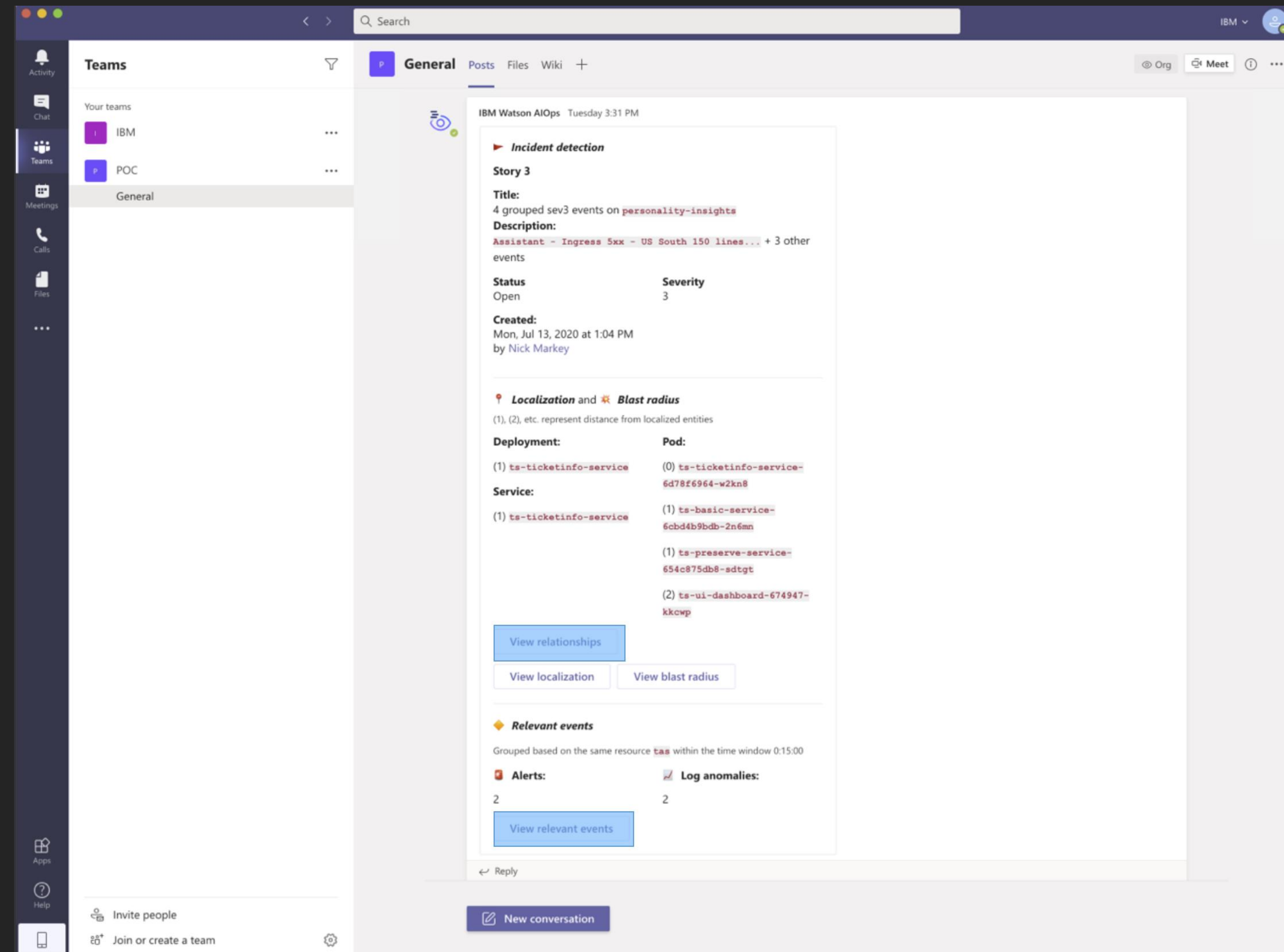
Date sets

Name	Connection(s)	Notes
change_risk_1-10-2021	SNow-1, Snow-2	Change risk AI on my flagship applications

Microsoft Teams ChatOps integration

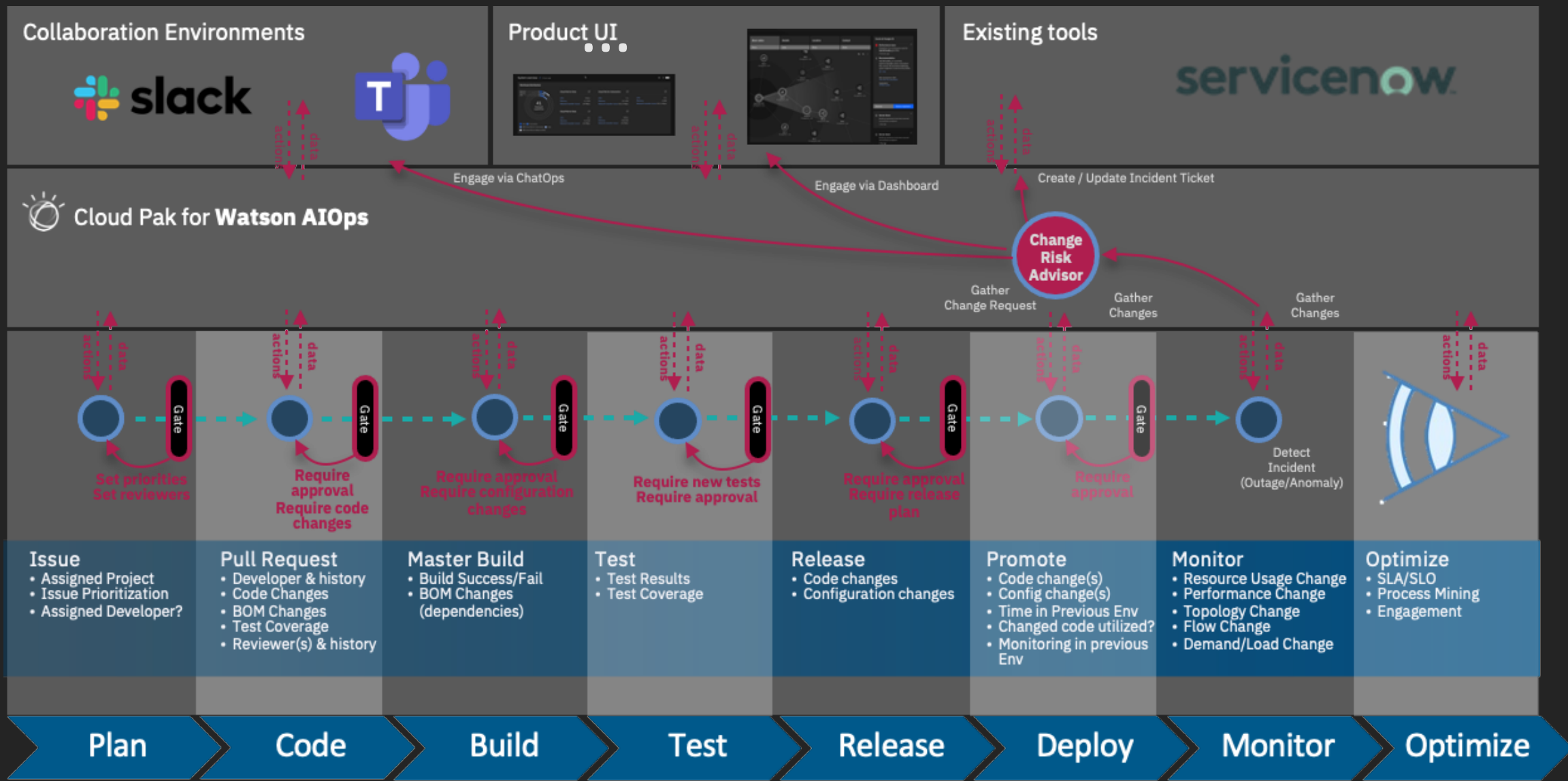
1. Leverage your regular enterprise collaboration platform
2. GA-ready, aligned with Slack UX
3. MSFT Teams marketplace integration coming with future SaaS offering

...



Change Risk advisor – Episode 1

- 1. Don't trade speed for stability
- 2. Avoid risky roll-outs
- 3. Predict risk based on similar change requests and associated incidents
- 4. Integrates with Service Now change request flow



System Administrator

Change Request CHG0030006

Follow Request Approval Update Delete

New Assess Authorize Scheduled Implement Review Closed Canceled

Number: CHG0030006 Type: Normal

Requested by: System Administrator State: New

Category: Other Conflict status: Not Run

Service: Conflict last run:

Service offering: Assignment group:

Configuration item: Assigned to:

Priority: 4 - Low

Risk: Moderate

Impact: 3 - Low

Short description:

Description:

Planning Schedule Conflicts Notes Closure Information

Watch list: Work notes list:

Work notes: Work notes

Additional comments (Customer visible) Post

Activities: 2

Watson AIOps: Change Risk Score: 80%
Description text to be added for guidance.

System Administrator: Field changes • 2020-12-02 07:25:21

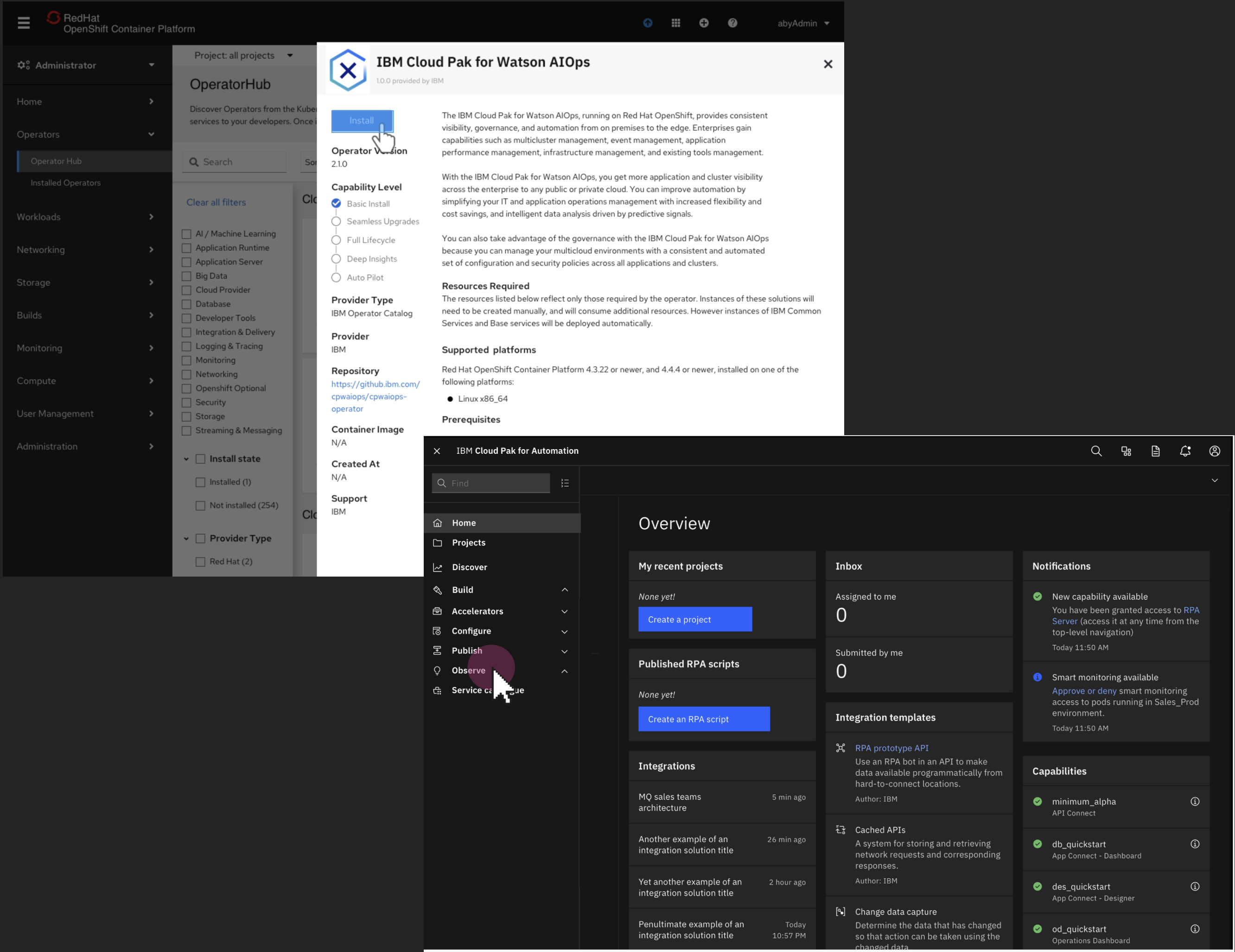
Impact: 3 - Low
Opened by: System Administrator
Priority: 4 - Low
State: New

Request Approval Update Delete

Build with CloudPak 2.0 and IBM Automation Foundation

- 1. Unified deployment and management experience across CloudPaks
- 2. Certified for RedHat Openshift
- 3. Accessible via marketplace
- 4. Deploy with Kubernetes Operator
- 5. Access to Process Mining included
- 6. Access to RPA included

...





<https://www.ibm.com/cloud/cloud-pak-for-watson-aiops>