Watson AIOps for IBM Z

Take a holistic approach to IT operations

1

IBM
Cloud & Cognitive Software

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2

IT Grappling With New Challenges

IBM surveyed senior IT leaders and teams to understand the need for AI in IT.

CIOs

IT Ops Teams

Innovation v. Stability

70% of of their **resources** are tied up **just keeping what they already have alive**

$1.2M spend per service in highly skilled FTEs to meet SLA and resiliency demands

Negotiating Complexity & Scale

Days to detect and diagnose a complex issue

Less than 1% of your alerts are critical but cost $420K per hour in downtime if not detected

Overwhelmed by disparate tools

Struggling with inconsistent alerts, **interrupted workflow** to swap between incomplete tools

Wasted hours, growing frustrations manually scouring logs, tickets and alerts

Burnout & Skills

Only 10% percent of FTEs **have 90% of critical expertise**

Teams & leadership struggle with talent risk

Why AIOps with the Mainframe

90% agree that on-premises infrastructure is a critical part of their firms' hybrid cloud strategies.

Base: 350 global decision makers for IT infrastructure environments
Source: A commissioned study conducted by Forrester Consulting on behalf of IBM, September 2019

The mainframe must be central to an AIOps adoption effort not because it is somehow more important than the rest of the stack, but simply because it is an essential element of most business-critical workflows.
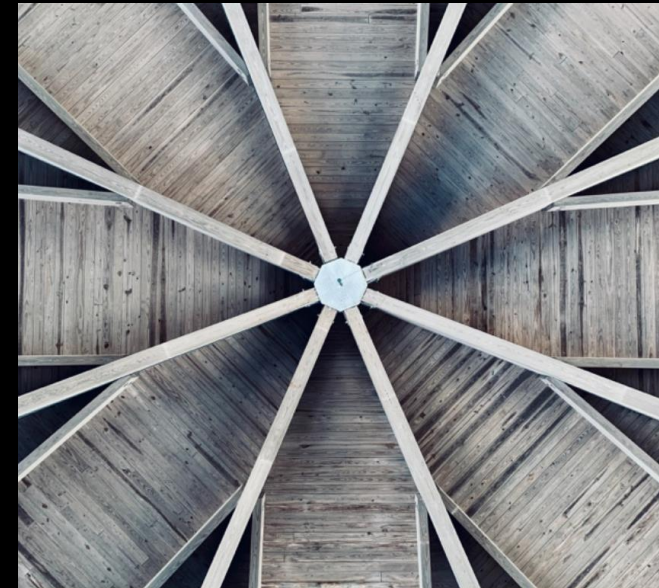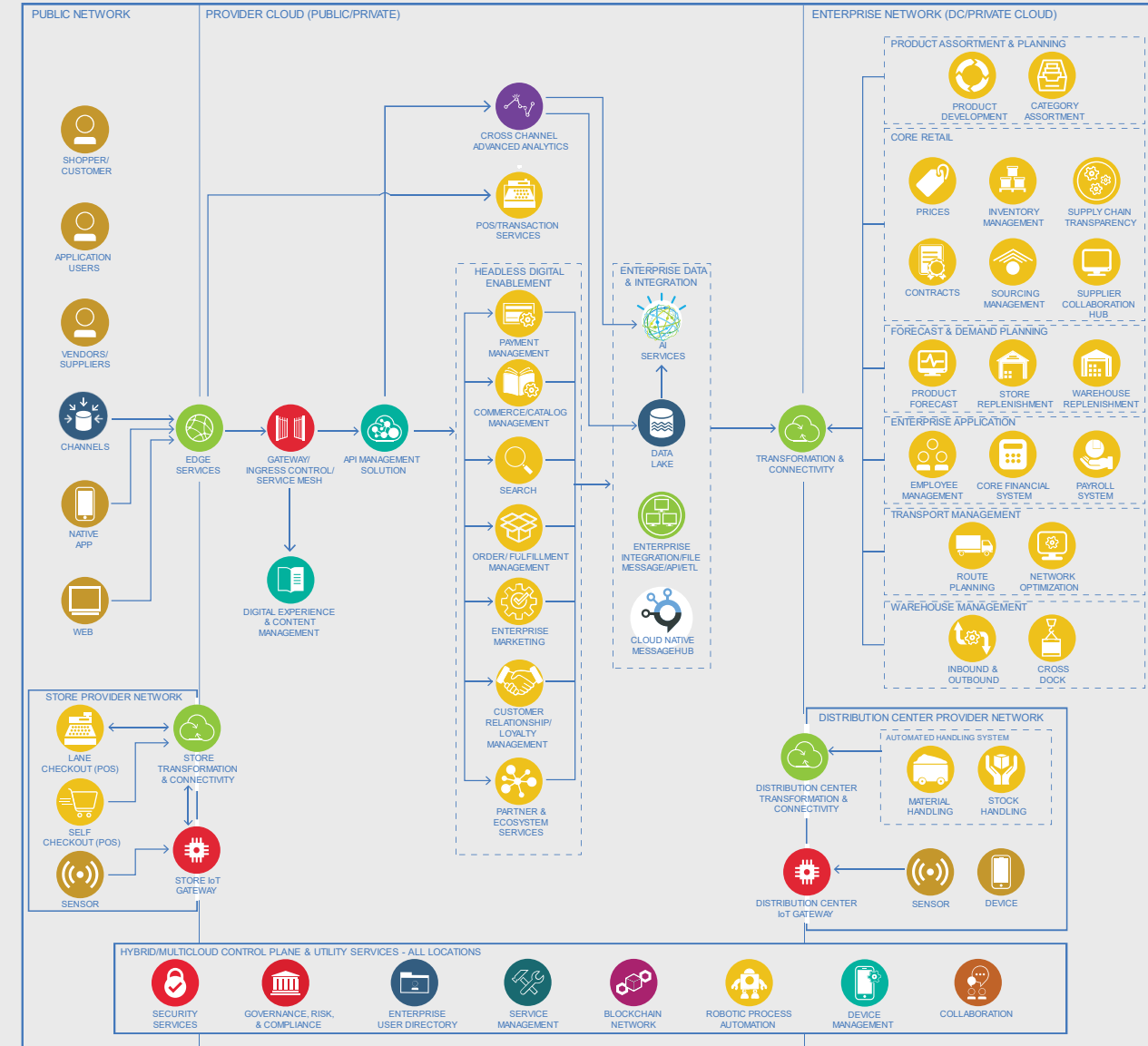

Intellyx™

Available White Paper:

Applications are increasingly Hybrid in scope

- Application domains often include:
  - Edge services
  - Public Cloud
  - Data Center (Distributed / Mainframe)
  - Supplier networks
- How can I achieve full visibility to my application?

Your tools can provide a lot of useful data … …

… Resolution times and costs are still high

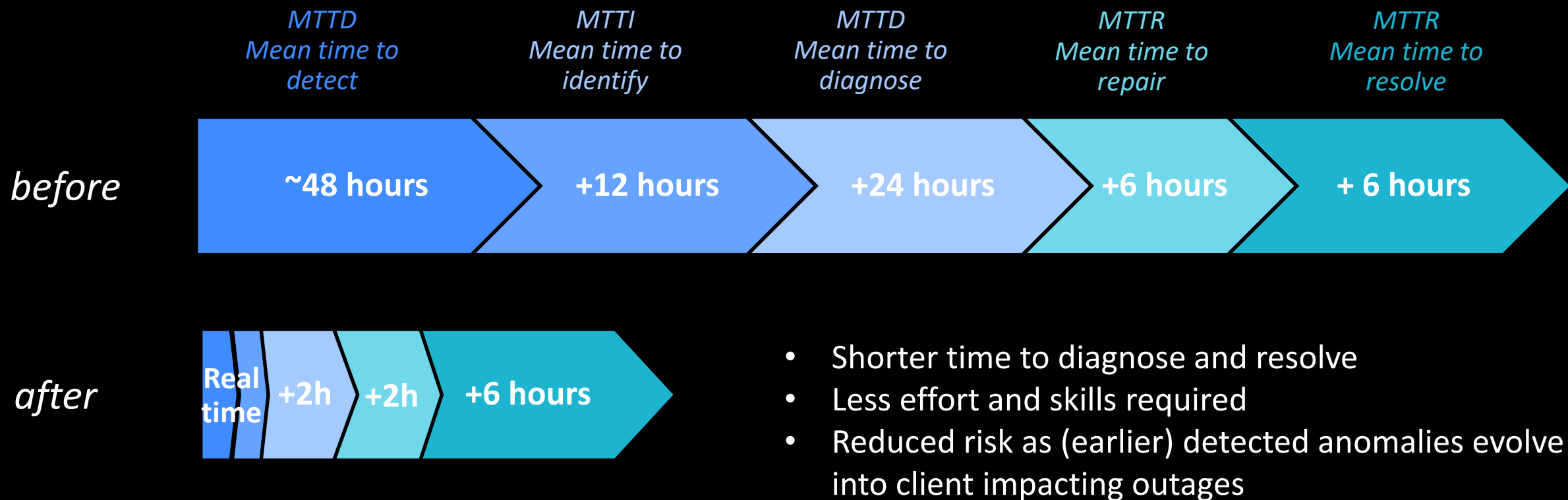| 4hr 53min	17	10	$135K
Time	# of Steps	# of Responders	Cost per incident

Bridge existing silos to make your entire operations better

The world with AIOps:
Reducing time to diagnose incidents and avoid outages

MTTD Mean time to detect	MTTI Mean time to identify	MTTD Mean time to diagnose	MTTR Mean time to repair	MTTR Mean time to resolve

before

~48 hours	+12 hours	+24 hours	+6 hours	+ 6 hours

after

Real time	+2h	+2h	+6 hours

- Shorter time to diagnose and resolve
- Less effort and skills required
- Reduced risk as (earlier) detected anomalies evolve into client impacting outages

*Potential impact

Predictive incident detection and resolution for hybrid applications that include IBM Z
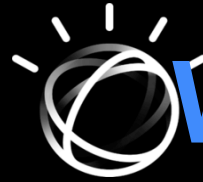
New Watson AIOps + IBM Z

Predictive anomalies across environments

Watson AIOps groups predictive anomalies across hybrid data sources, including IBM Z, to reduce the mean time to detect potential issues

"Story Service" completes the puzzle

Surface relevant data from hybrid monitoring and logging tools, inclusive of IBM Z, through a single pane of glass to reduce the mean time to isolate

Results for Users & Stakeholders

Share insights with explainable AI to support collaboration of stakeholders across all teams supporting your hybrid applications to reduce the mean time to mitigate and resolve incidents

Customer Application

Offering	PID	Product Page
Watson AIOps	D28TELL	Link
IZOA	5698AAV	Link
		*PIDs sold Separately

Watson AIOps

- Patented, deep learning AI
- Cross data source correlation
- ChatOps User Experience

Watson AI Ops evaluates the health of the application

Distributed Platform

Disparate data sources

Structured data

Events / Alerts
Metrics
Topology

Un-structured data

Logs
Tickets

Monitoring and Automation Suites

Structured data

Events / Alerts

IZOA

IBM Z Platform

- Identify unusual workload behaviors (Db2 initially)
- Locate common issues hidden in operational data
- Detect & set System Z baseline normal with ML

IBM Z Structured data

Events / Alerts

IBM Z Un-structured data

Logs (Db2 initially)

IZOA evaluates the health of the IBM Z environment.

DEMO

Today with AIOps

Yesterday	4hr 53min	17	10	$135K
Today	Time	# of Steps	# of Responders	Cost per incident
	14min	4	1	$6K
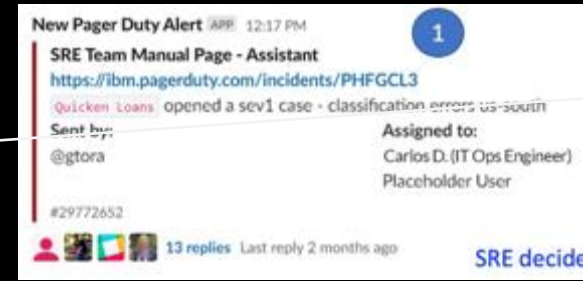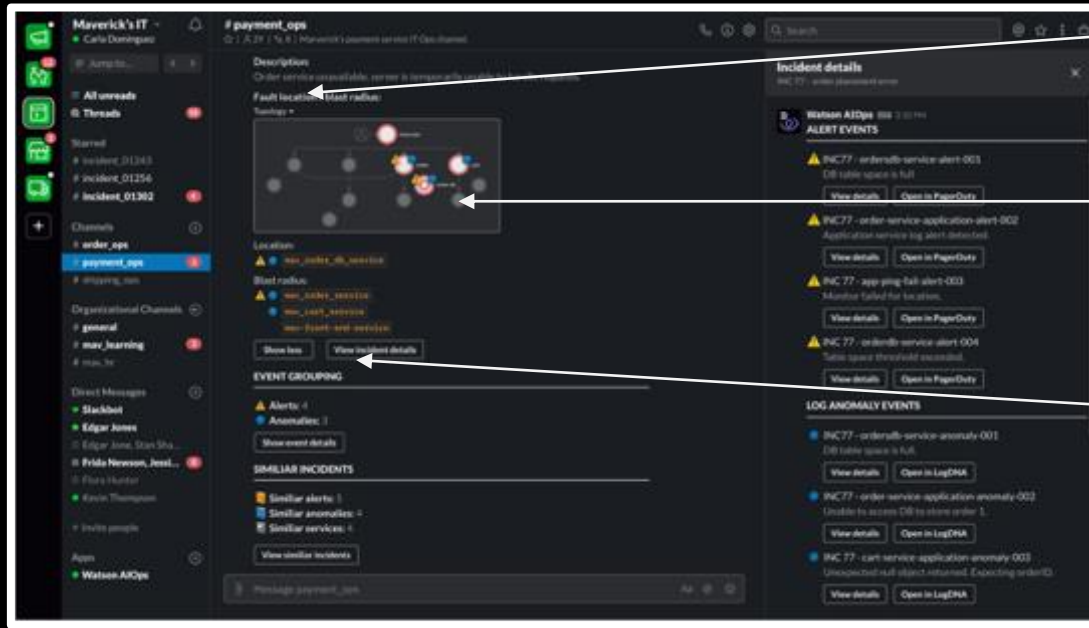
- Bridge existing silos
- Accelerate / skip diagnosis steps
- Assist engineers to become more effective
- Automate response to events & incidents
- Replace subjective decision making with evidence-based machine learning guidance
- Organize and simplify the tools and data presented to an operator

IBM

Impact of AI on IT Operations

Efficiency, cost savings and a foundation built in DevSecOps to gain meaningful business value from IT operations

$420k
saved*
by reducing outage costs by 1 hour

50%
less cost
in labor by up-skilling IT operators with AI-powered insights

25%
more initiatives
Get job done faster and focus on new initiatives.

"...we've gotten much better at understanding some of the issues buried within our data. Being able to draw insight from within our logs and other unstructured data has helped us to progress in addressing anomalies quickly. It also has addressed a challenge our engineers have had with the task of combining and working with data and chatter across different tools. Watson AIOps brings it all together, allowing our engineers to respond faster and much more effectively."

- David Almendros, Artificial Intelligence Director at CaixaBank

*Potential impact

Client outcomes with IBM AIOps

Watson AIOps in use with IBM clients, driving ROI from unstructured data capabilities and faster incident resolution

CaixaBank

using Watson AIOps to accelerate workflows:

"a challenge our engineers have had with the task of combining and working with data and chatter across different tools."

"Watson AIOps brings it all together, allowing our engineers to respond faster and much more effectively."

"Using IBM's Watson AIOps, we've gotten much better at understanding some of the issues buried within our data. (our logs and other unstructured data)... "

David Almendros, AI Director, CaixaBank

dynata™

using Watson AIOps to uncover new insights

"…we found that traditional methods like keyword searches could not surface anything meaningful out of our unstructured data"

"… when using Watson AIOps, we were able to find and localize new anomalies within our data sets which helped our teams address potential long-standing issues and has improved our overall service levels and incident responses."

Paul Hudson, SVP Platform Engineering, Dynata

FREE IBM AIOps assessment

- Determine current stage of AIOps maturity
- Identify strengths and opportunities
- Tailor assessment based on business needs

4. Which practice areas of AIOps would you like to assess?

Select the areas that you want to assess. Based on your decision, you will be redirected to the corresponding questionnaire.

Detect

⚠

The ability to monitor hybrid infrastructure and applications and detect issues and anomalies.

Decide

📈

The ability to quickly analyze issues and anomalies to isolate problems and identify root causes.

Act

⚙

The ability to respond quickly to issues and anomalies and thus reduce impact on customers with improved resiliency.

IBM can help in your AIOps Journey

AIOps

Learn more

Learn more

Qualify for a free AIOps Assessment

Contact your IBM Representative or Diego Bessone: dbessone@us.ibm.com

Visit the IBM Watson AIOps Product Page

https://www.ibm.com/products/watson-aiops

Learn more about IBM Watson AIOps for IBM Z

Contact your IBM Representative or Mike McGee: mmcgee@us.ibm.com

Thank you