

# Dynatrace's impact on our customers

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PRESENTER

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Account Executive



PRESENTER

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Principal Solutions  
Engineer

# Agenda

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- Who is Dynatrace?
- What is Observability and why it matters
- Customer examples
- Application Security – Runtime Vulnerability Analysis
- Customer examples



# Dynatrace - The Industry Leader

#1

Intelligent and Automated Observability for Digital Transformation

#1



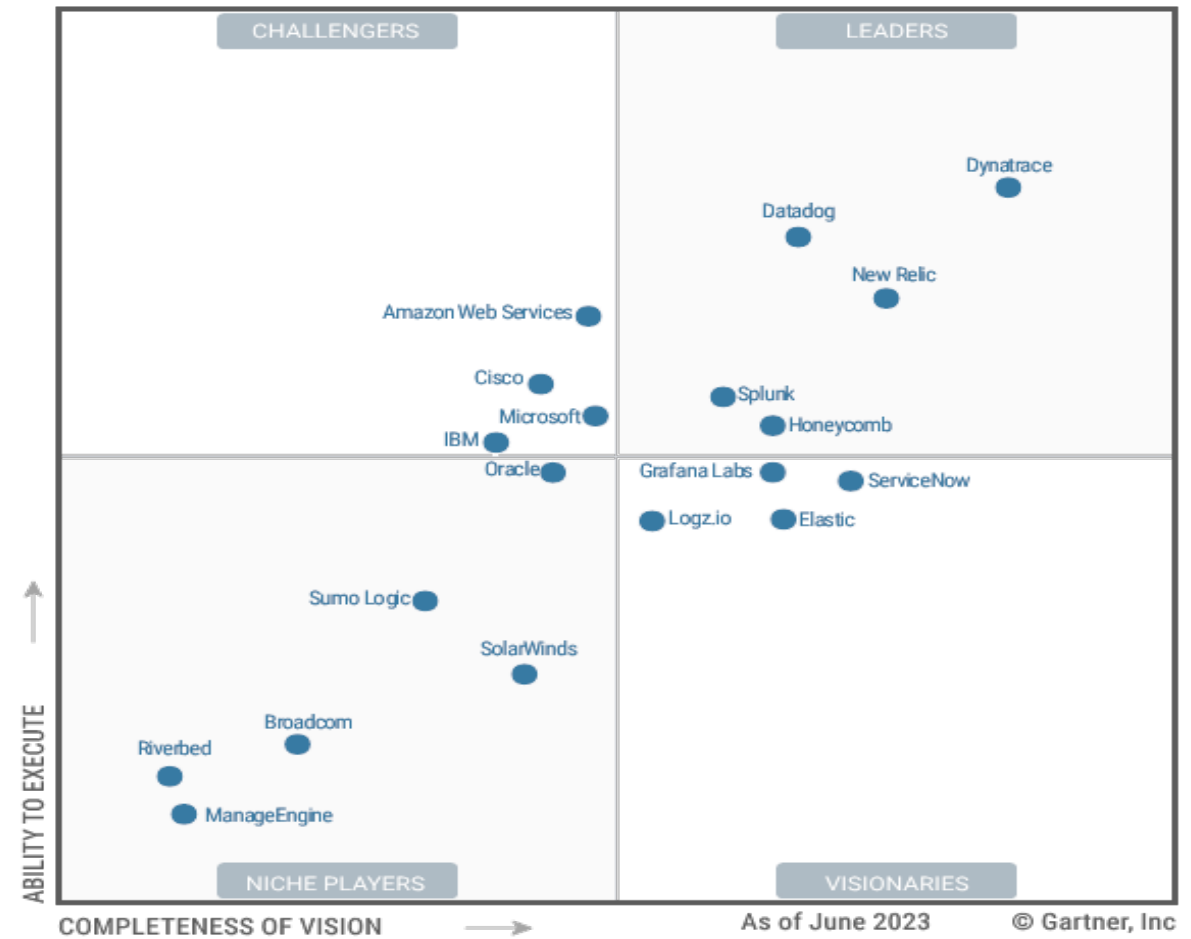
3000+ Customers



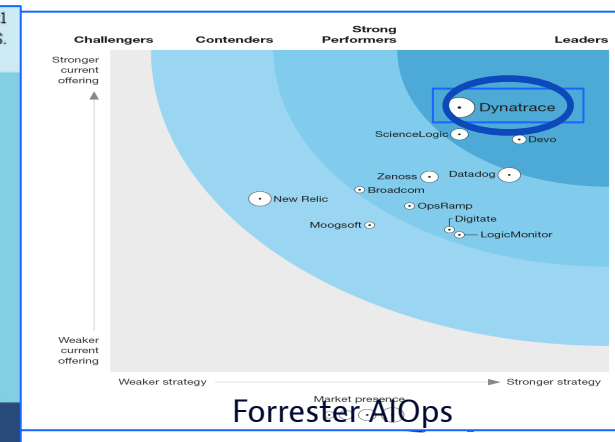
25

Major Releases per Year

Publicly Traded



As of June 2023 © Gartner, Inc Gartner



# What is Observability and Application Performance Management(APM)

## ▪ Observability and Application Performance Management (APM)

- Measure a system's current state based on the data it generates, such as logs, metrics, and traces.
- Track key software application performance metrics to ensure system availability, optimize service performance and response times, and improve user experiences.

## ▪ Why it matters

- Cloud-native environments have gotten more complex, and the potential root causes for a failure or anomaly have become more difficult to pinpoint.
- Optimize application reliability and performance
- Improve digital user experience
- Reduce outages through wholistic monitoring of enterprise applications and infrastructure

## ▪ Key roles in an organization

- Site reliability engineers (SRE)
- Operations, and Security Teams
- Development, DevOps engineers
- Digital channel teams





# WHY OBSERVABILITY MATTERS

BUSINESS  
TRANSFORMATION

## DRIVE INNOVATION

Dev Productivity

Business process  
analytics

Superior customer  
experiences

## OPTIMIZE COST

Tool sprawl reduction

Cloud cost  
optimization

Achieving  
sustainability goals

## MITIGATE RISK

Improved availability

Security compliance

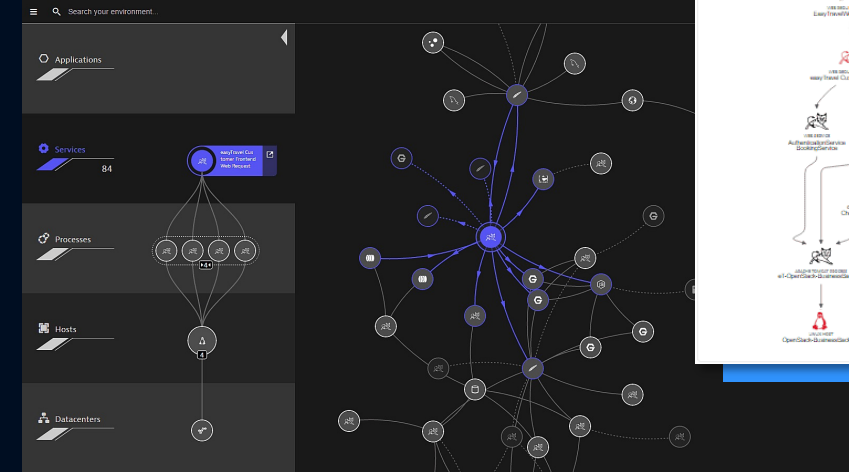
Embrace AI properly



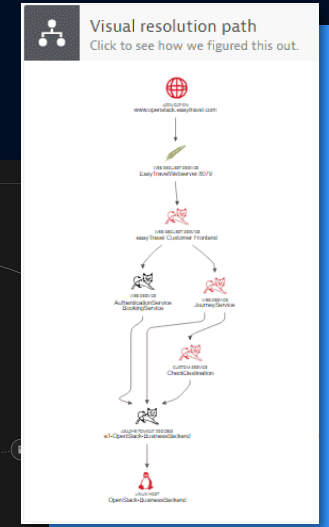
# How Dynatrace is uniquely positioned to help you

- **One platform** for all observability use cases at enterprise scale
  - Ingest logs, metrics, traces, user, and business data
  - Continuous **discovery and visualization** of entire estate with Smartscape topology
- **AI-driven insights automatically** in context
  - **Always-on deterministic-AI** alerting and root cause analysis
  - **Relive each step of each problem** with Pure Path®, every dependency, end-to-end, full-stack
- **Industry-leading AIOps platform**
  - Log Management & Analytics
  - Intelligent Observability and Automation

## Smartscape



## Pure Path®



	timestamp	status	content
<input type="checkbox"/> /var/log/pods/easytravel_easy...	82		
<input type="checkbox"/> /var/log/pods/easytravel_easy...	45		
event.type			
<input type="checkbox"/> log	240		
dt.process.name			
<input type="checkbox"/> linux system	270		
<input checked="" type="checkbox"/> easytravel-backend.easytravel	240		
<input type="checkbox"/> easytravel-loadgen.easytravel	199		
<input type="checkbox"/> easytravel-frontend.easytravel	84		
<input type="checkbox"/> kube-proxy.kube-system	80		
<input type="checkbox"/> easytravel-mongodb.easytravel	62		
<input type="checkbox"/> easytravel-pluginservice.easy...	50		

timestamp	status	content
2022-05-03 10:59:12	INFO	2022-05-03 14:59:12 INFO [CPUHel nio-8080-exec-1] com.dynatrace.e service at easytravel-pluginserv

**Context**

[View trace](#)

dt.source\_entity  
easytravel-backend.easytravel (easytravel-backend-86c4b859b-skpx5)

dt.entity.host  
ip-10-0-0-66.us-west-2.compute.internal

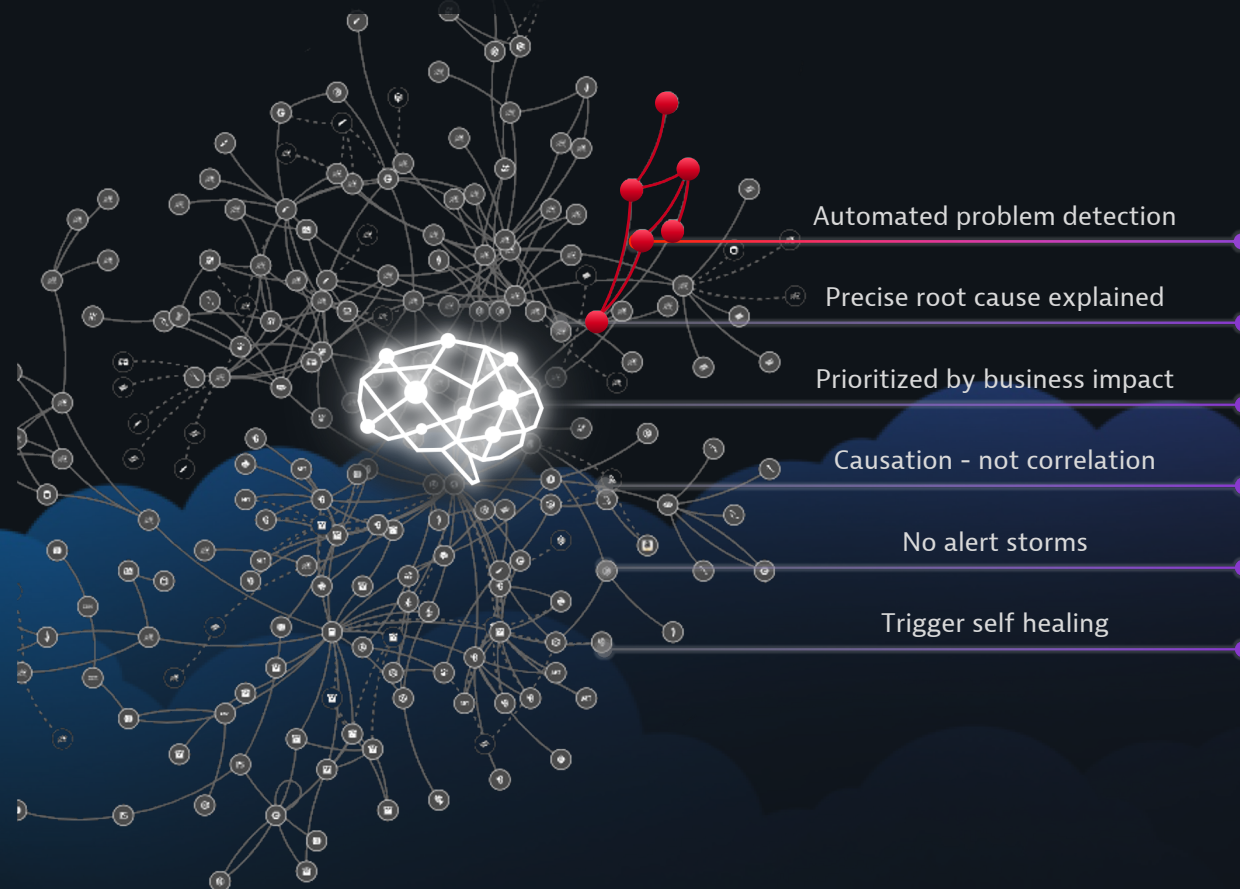
dt.entity.cloud\_application\_namespace  
easytravel

dt.entity.container\_group.instance  
easytravel-backend-86c4b859b-skpx5 easytravel-backend

## Log event viewer and analytics

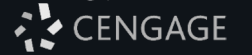
# The benefits of Davis Causal AI: Provides precise answers

Dynatrace continuously observes, learns and auto-adapts to changes in real-time to detect problems automatically (even the ones you never thought of).



“ Dynatrace’s AI-driven answers are helping the business to remediate problems quicker, meaning we’re able to spend more time innovating and less time solving problems.”

Anish Patel, Principal Systems Engineer



Problems Problem 694

www.easytravel.com: User action duration degradation  
Problem 694 detected at 02:03 - 02:29 (was open for 26 minutes). This problem affects real users.

Affected applications 1 Affected services 10 Affected infrastructure 2

DAVIS™ analyzed 2,942,317,092 dependencies

**Business impact analysis**  
An analysis of all affected service calls and impacted real users during the first 36 minutes of the problem shows the following potential impact.

276 Impacted users (show first 100) 4.33mil Affected service calls

1 impacted application  
73.6 User actions per minute impacted

www.easytravel.com  
Web application

User action duration degradation  
The current response time (4.49 s) exceeds the auto-detected baseline (118 s) by 279 %

Affected user actions	User action		
73.6 /min	2 User actions		
Browser	Geolocation	OS	
All	All	All	

**Root cause**  
Based on time correlation and analysis of all transactions that use these components, this issue has the following root cause

CheckDestination  
Custom service

Deployment  
Deployment change Today, 01:57 - 02:03

2 Response time degradations  
Service CheckDestination slow down Today, 01:58 - 02:18

Events on:  
Service CheckDestination

Analyze code level, database calls, and outgoing requests. Analyze response time degradation

Metric anomalies detected  
Review the metrics which show abnormal or outlying behavior.

Visual resolution path  
Click to see how we figured this out.

Comments

Add comment

No comments posted

# **Customer Example of A.I.**

## Bank of Montreal reduces MTTI/MTTR with Davis AI

- Massive reduction in outages and MTTR with AI driven, automatic problem detection and root cause analysis
- Dynamic, hybrid cloud environment (VMs, K8s Openshift, AWS, Serverless)
- 15,000 hosts, 4,000 applications, 25,000 application services in production, 2-3 TB of log data ingested a day
- Dozens of legacy monitoring solutions leading to MTTI of 30+ days

### Dynatrace impact:

80%

MTTI/ MTTR

Mean Time reduced for  
issue analysis and  
resolution

60

Hours saved a  
Month

Per team for log  
analytics toil

40

Hours of extra time

Unlocked for each  
development team

*“ Using Dynatrace’s Grail technology, we have incident response with quicker turnaround times”*

Michael Wintel- VP of Payment and Cloud Operations





# **Customer Example of Digital Experience Monitoring**



## SAP optimizes e-commerce experiences

- Modern cloud environment including Azure, Kubernetes and ServiceNow
- SaaS service powers e-commerce for 3,500+ of the world's leading brands, transacting \$500B+ gross revenue annually

*"Dynatrace helps us to scale, and without its insights, it would not be possible to run our business successfully."*

-Senior Director for Observability

### Dynatrace impact:

#### Dynatrace Modules

Infra, APM, DEM

**1.3M**

ORDERS PROCESSED

during Cyber Monday Weekend alone

**100%**

DELIVERED

uptime

**88%**

DECREASE IN OUTAGES

during the 2020 holiday shopping season vs. 2019, while managing a 6x increase in traffic volume



# **Customer Example of DevOps**

# Leading APAC bank releases new digital services 20x faster by automating DevOps processes

- Company migrated to modern cloud environment based on Azure, Kubernetes and OpenShift
- Limited observability across clouds slowed dev cycles

## Dynatrace Impact:

**Dynatrace  
Solutions**

**APM, Infra,  
DEM**

**10x  
More apps**

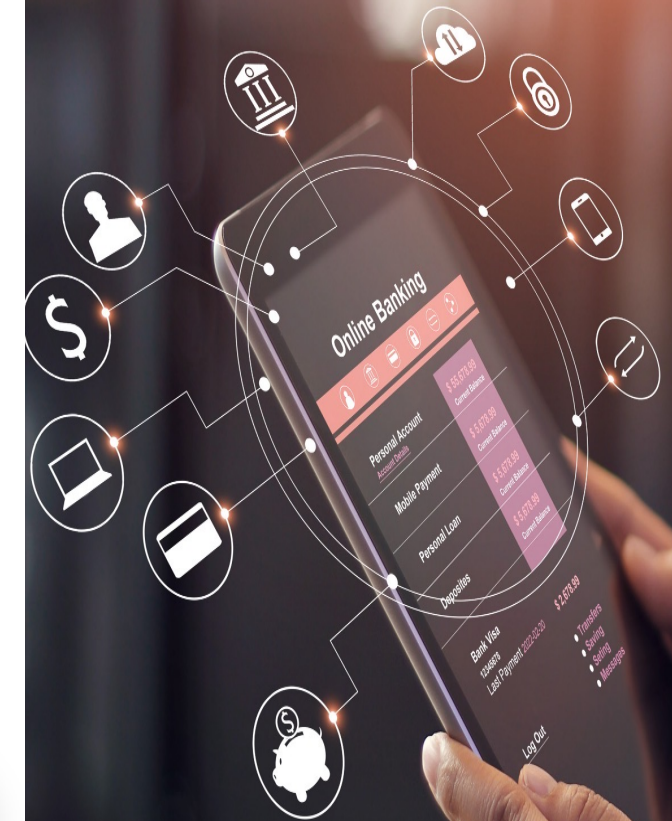
In new cloud environment, end-to-end observability across full-stack

**20x  
Faster**

release of new services

**0  
Major Errors**

In post-production code, and 75% faster resolution for non-major errors



*"Dynatrace has been a key enabler in achieving a faster release cadence."*

-DevOps Lead

# **Application Security**

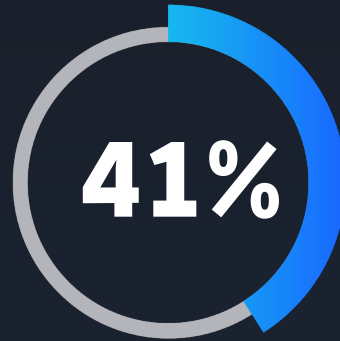
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# COMPLEXITY IS MAKING IT HARDER TO SECURE CLOUD APPLICATIONS

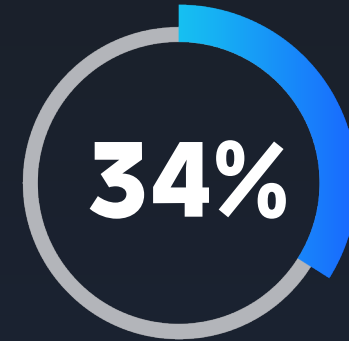


**58  
DAYS**

Avg MTTR for vulnerabilities in internet facing apps\*



Application exploits that took advantage of a vulnerability\*\*



Third party CVEs with Injection vulnerabilities\*\*\*

\* Edgescan 2022 Vulnerability Statistics report

\*\* 2023 Forrester state of Application Security

\*\*\* Analysis of 2014-24 data on CVEdetails.com - includes SQL Injection and XSS

# A NEW APPROACH IS NEEDED TO BREAK DOWN DEV-SEC-OPS SILOS

## High-risk Posture

"68% say software supply chain complexity makes vulnerability management difficult"<sup>1</sup>

"58% of "critical" vulnerability alerts are false positives"<sup>1</sup>

## Unprotected Vulnerabilities

"It takes an average of 96 days to fix a vulnerability"<sup>2</sup>

"We've turned off full-blocking mode on our WAF due to too many false positives"

## Manual Response

"33% of teams have automated handoffs across functions"<sup>1</sup>

"28% of time spent on vulnerability management tasks could be automated"<sup>1</sup>

## Laborious Investigations

"55% say security data spans multiple platforms with no context"<sup>1</sup>

"70% of alerts are never investigated"<sup>1</sup>

# Dynatrace Application Security Runtime Vulnerability Analysis (RVA)

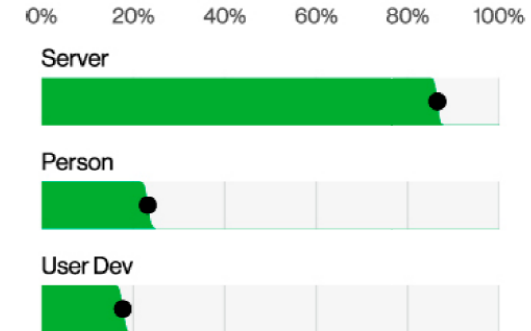
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- The goal is to ensure that software applications are built secure and that they can withstand attacks from malicious actors.
- DevSecOps is a methodology that aims to ensure that security is considered throughout the software development process and that security is treated as a shared responsibility between developers, security teams, and operations teams.

# Application Security Risk – Recent Facts

- 50% of all Data Breaches happen at the Application Level – Source Verizon 2023
- The average cost of a Data Breaches is \$9M – Source IBM 2023
- 74% of all vulnerabilities never get remediated – Source Veracode 2023
- Leads to: LastPass, Codecov, Kaseya, Spring4Shell, SolarWinds, Log4j – Comparitech 23
- **Takeaway**
  - Code Scanners are no longer sufficient to protect the Applications, as the attack Surface & Vectors have grown, exponentially.
  - You need a much broader, contextual, overarching, and continuous view of the risk that works in alignment with your existing AppSec Point Solutions .....to fill in the “gaps”, where the code scanners leave off, are omitted, or miss.
  - In order to drastically reduce false positives, prioritize vulnerabilities using runtime context, analyze applications for which source code is not available (COTS), and to monitor for and protect against exploits in production

## Assets Breach



## Healthcare Industry

<b>Frequency</b>	525 incidents, 436 with confirmed data disclosure	<b>Actor motives</b>	Financial (98%), Espionage (2%), Fun (1%), Ideology (1%) (breaches)
<b>Top patterns</b>	System Intrusion, Basic Web Application Attacks and Miscellaneous Errors represent 68% of breaches	<b>Data compromised</b>	Personal (67%), Medical (54%), Credentials (36%), Other (17%) (breaches)
<b>Threat actors</b>	External (66%), Internal (35%), Multiple (2%) (breaches)		

**Source:** Verizon 2023-data-breach-investigations-report-dbir





# Application Security – Operation Risks

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- Web Application Protection
- Zero-Day Prevention
- Cloud Application Protection
- Software Supply Chain Protection
- Sensitive Data within Code
- Improper Error Handling

# Reliable, secure environment proactively managed at scale

- Continuously detect vulnerabilities in your production environment in real time
- AI-assisted prioritization based on vulnerability impact
- Runtime attack detection against key threats
- Automated handoffs between Security and Development with added intelligence and context
- Open platform to empower DevSecOps at scale with intelligent automation

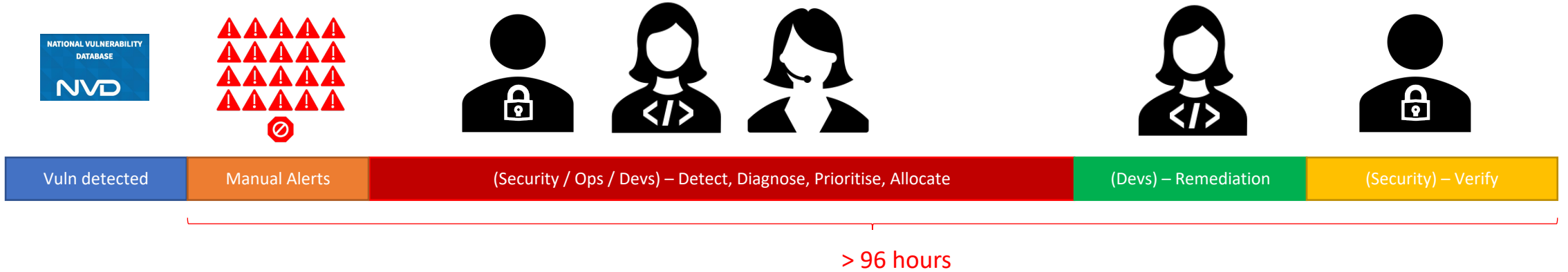
## Benefits

- Reduce time to find vulnerabilities
- Reduce cost to fix vulnerabilities
- Faster time to risk remediation
- Reduce attack surface
- Reduce IT risk and exposure

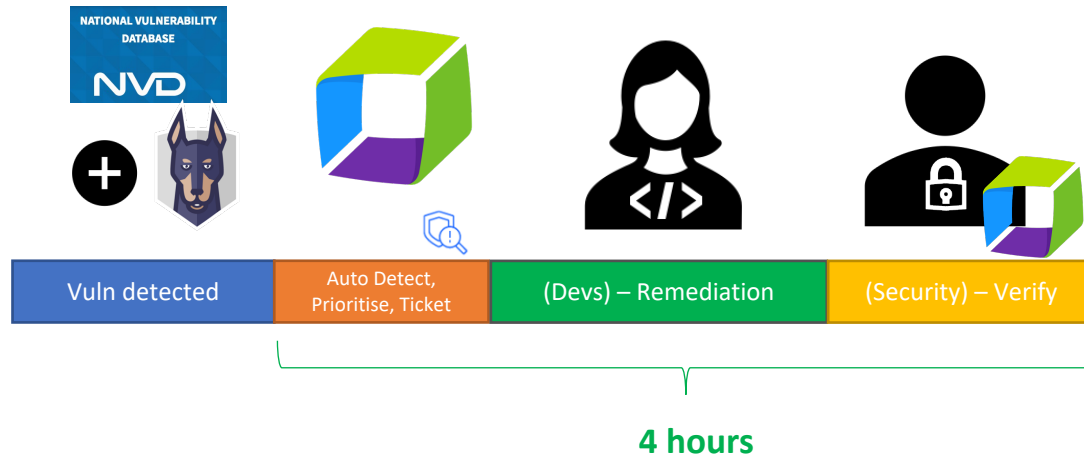


## Application Security Runtime Vulnerability Analysis (RVA)

Before AppSec



After AppSec



95% reduction in vuln risk remediation time

*“With Dynatrace’s AppSec Solution, we’ve improved critical vulnerability remediation from 96hrs to 4hrs”*

# **Customer Example of AppSec - RVA**

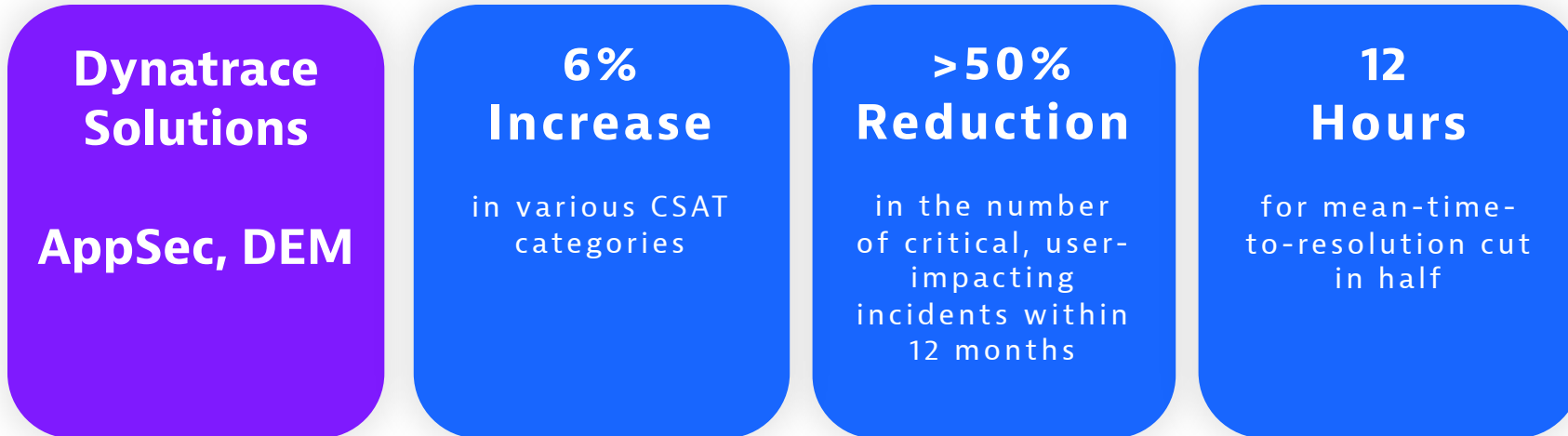


# Pasco County boosts trust with constituents and enhances agency reputation



- Pasco County needed a platform that would serve as a digital backbone, providing end-to-end visibility and a consolidated view across its environment, and automate its manual operations and security processes
- Pasco County needed to adopt measures to ensure the integrity of its systems and protect sensitive citizen data that could be used for fraudulent activity

## Dynatrace Impact:



*"Dynatrace has become the anchor for our INSOC and has improved our focus on service availability and quality."*

- Assistant Chief Information Officer

# Questions