
AWS
re:Invent

DOP283-S

SPONSORED BY APPDYNAMICS

Solar Turbine's journey to full-stack observability

Tomas Huszagh
Software Engineering Manager
SolarDigital (Solar Turbine)

Vikram Parmar
Senior Technical Manager
AppDynamics

AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Agenda

Introductions

Digital transformation journey

Migration to AWS

Why AppDynamics?

Key learnings



© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

About the speakers



Tomas Huszagh

Software Engineering Manager,
DevOps & Operations Lead
SolarDigital, part of Solar Turbines



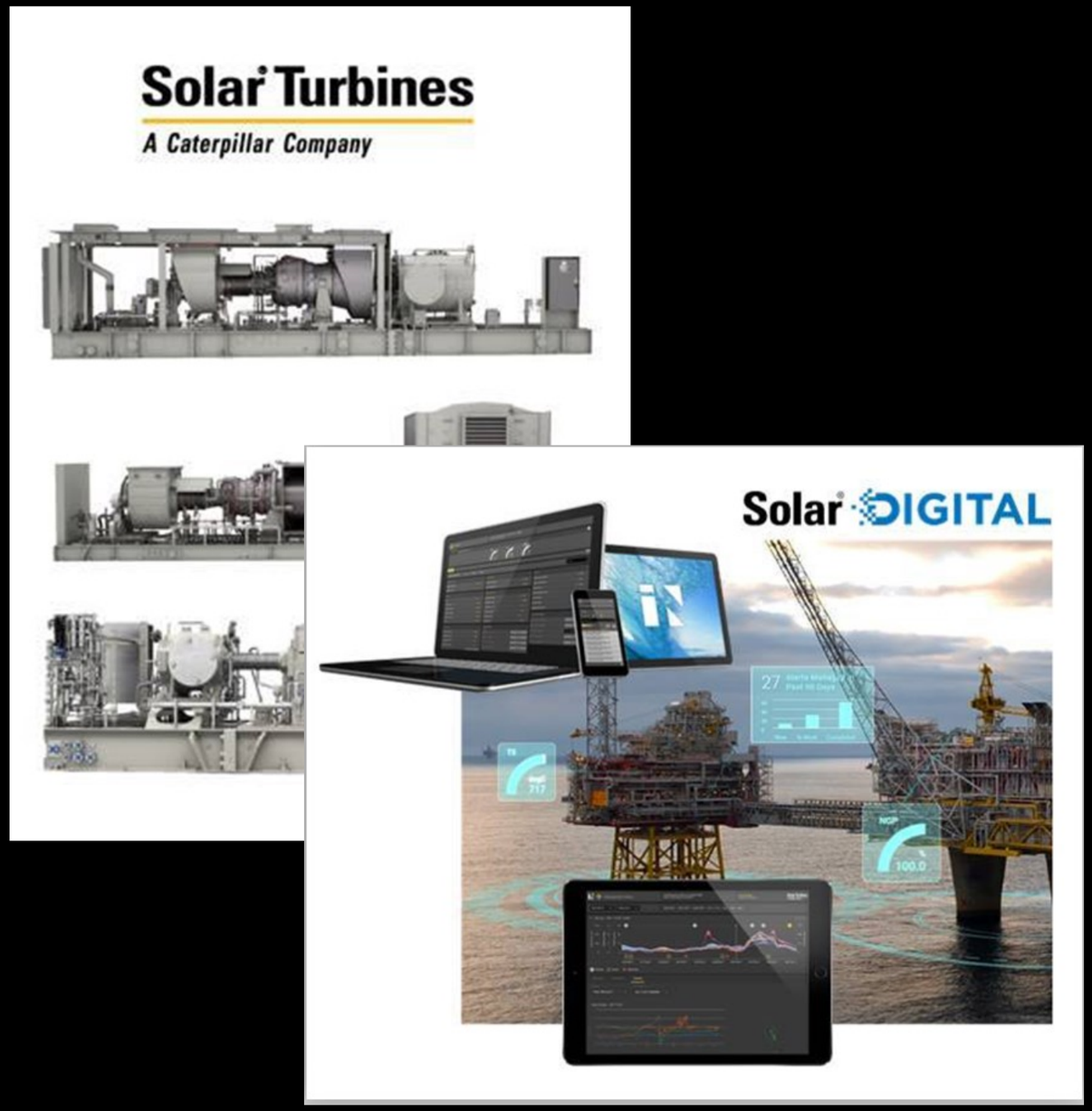
Vikram Parmar

Senior Technical Manager,
Cloud Solutions
AppDynamics, part of Cisco

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

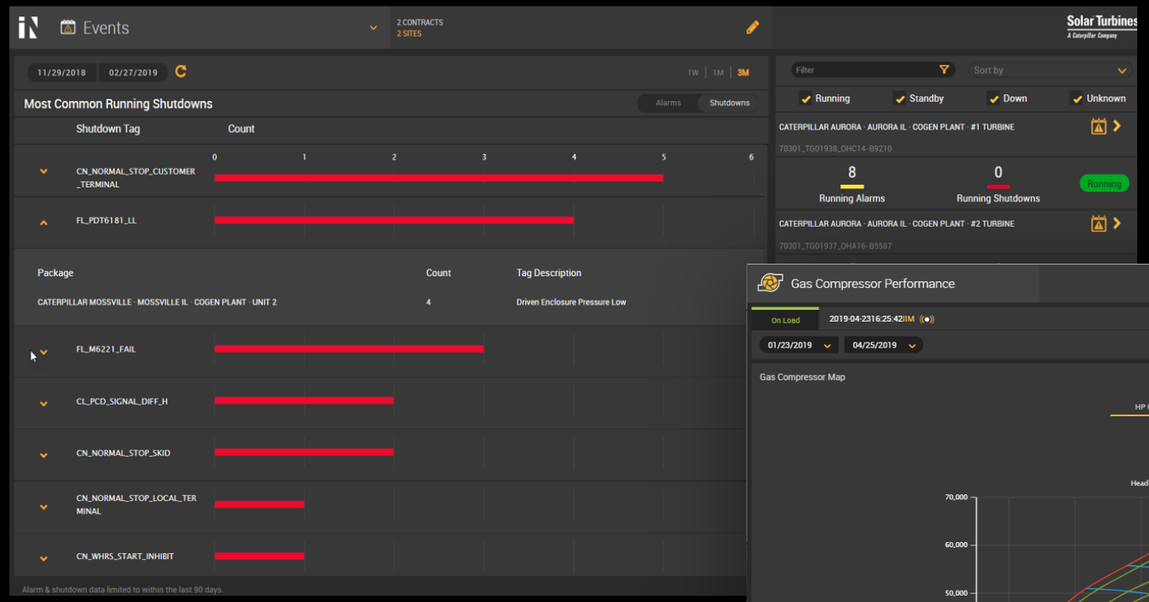
About SolarDigital

- Headquarters: San Diego, CA
- A wholly owned subsidiary of Caterpillar, Inc.
- A customer service group within Solar Turbines
- Responsibilities
  - Condition monitoring, reporting, and alerting solutions
  - Documentation stores
  - Incident tracking systems
  - Predictive analytics
  - Trend detection tools
  - And many others using a variety of underlying platforms and systems

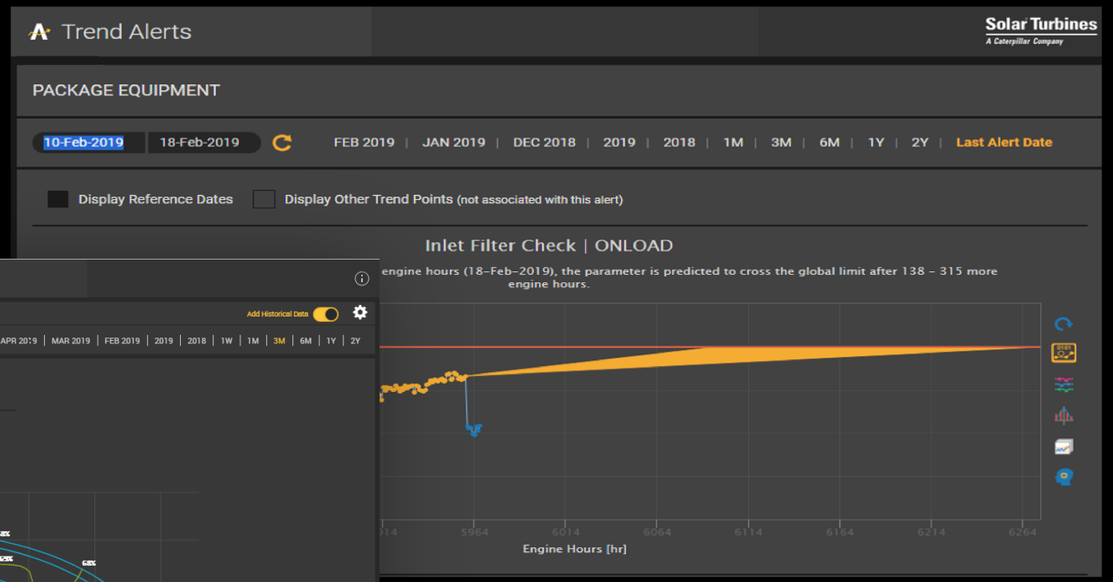


Our SolarDigital transformation

Considered a traditional industrial company . . . going through a massive digital transformation







SolarDigital: Digital transformation journey



AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Our corporate strategy

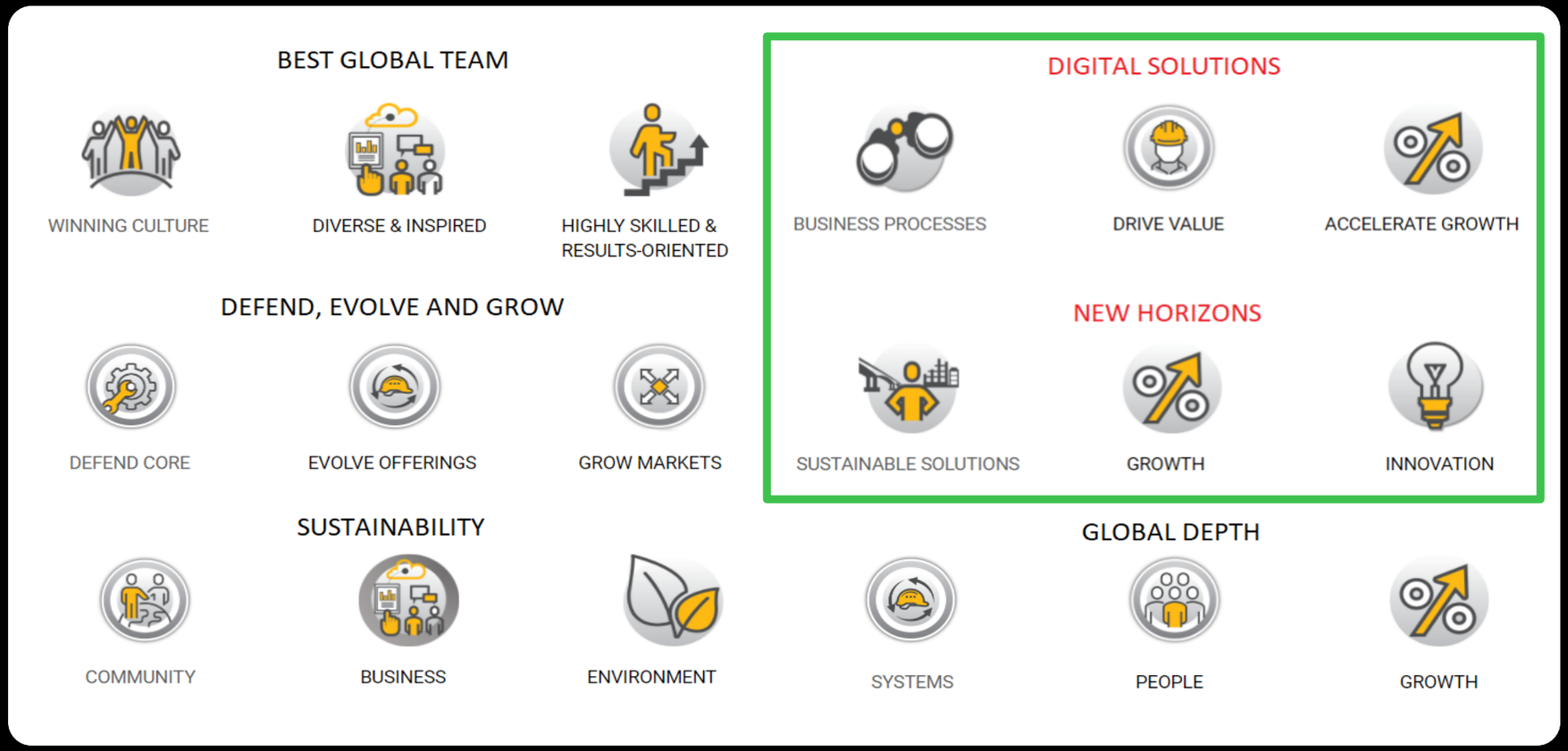
INTEGRITY
The Power of Honesty
Integrity is the foundation of all we do.

EXCELLENCE
The Power of Quality
We set and achieve ambitious goals.

TEAMWORK
The Power of Working Together
We help each other succeed.

COMMITMENT
The Power of Responsibility
We embrace our responsibilities.

SUSTAINABILITY
The Power of Endurance
We are committed to building a better world.



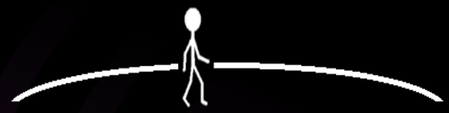
Cultural transformation

In order to **digitally transform** we had to first **culturally transform**

How are we getting this done?

- Adding agility & automation to our processes
- Migrating to the cloud
- Embracing monitoring
- Digitalizing operations
- Focusing on DevSecOps
- And many other actions . . .





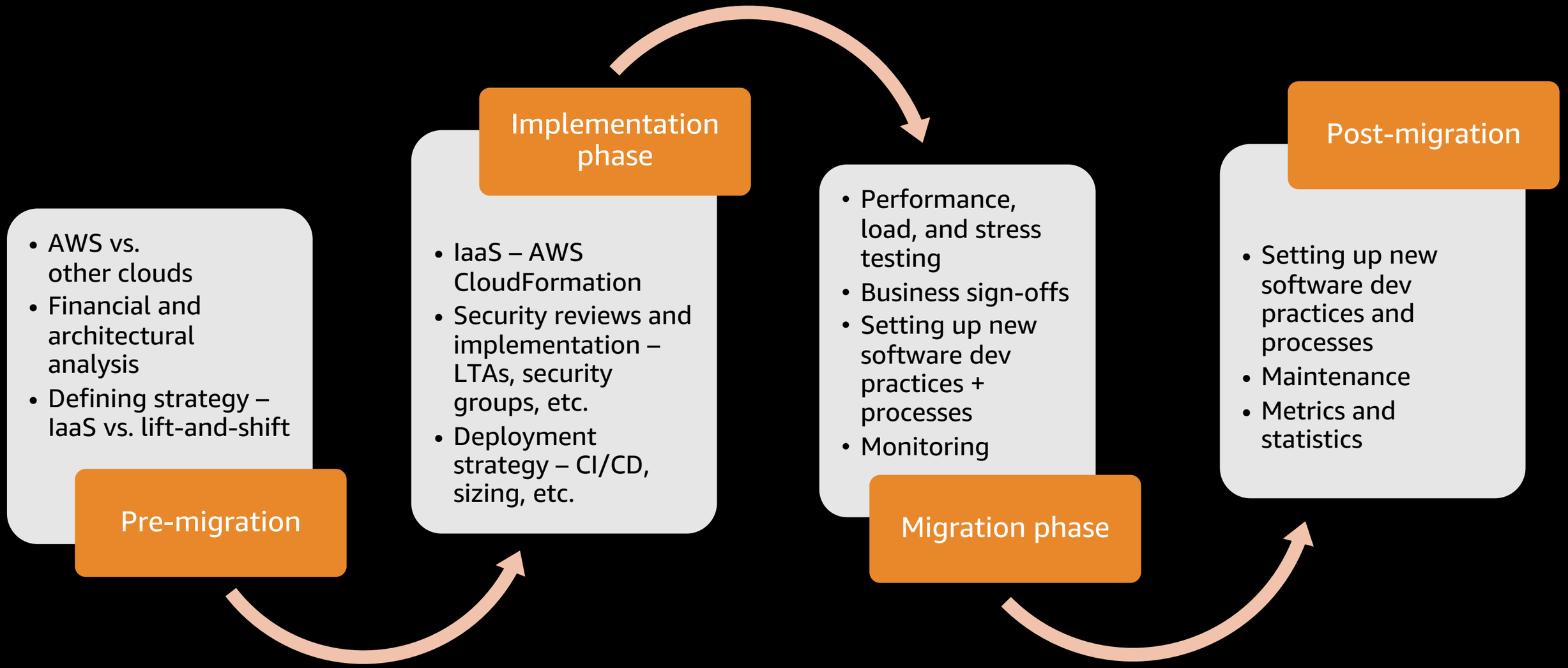
Migration to AWS



AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Our innovation success



We are going live with several “flagship” applications next month –
Our journey to innovation will continue in 2021

Monitoring needs, and why AppDynamics?

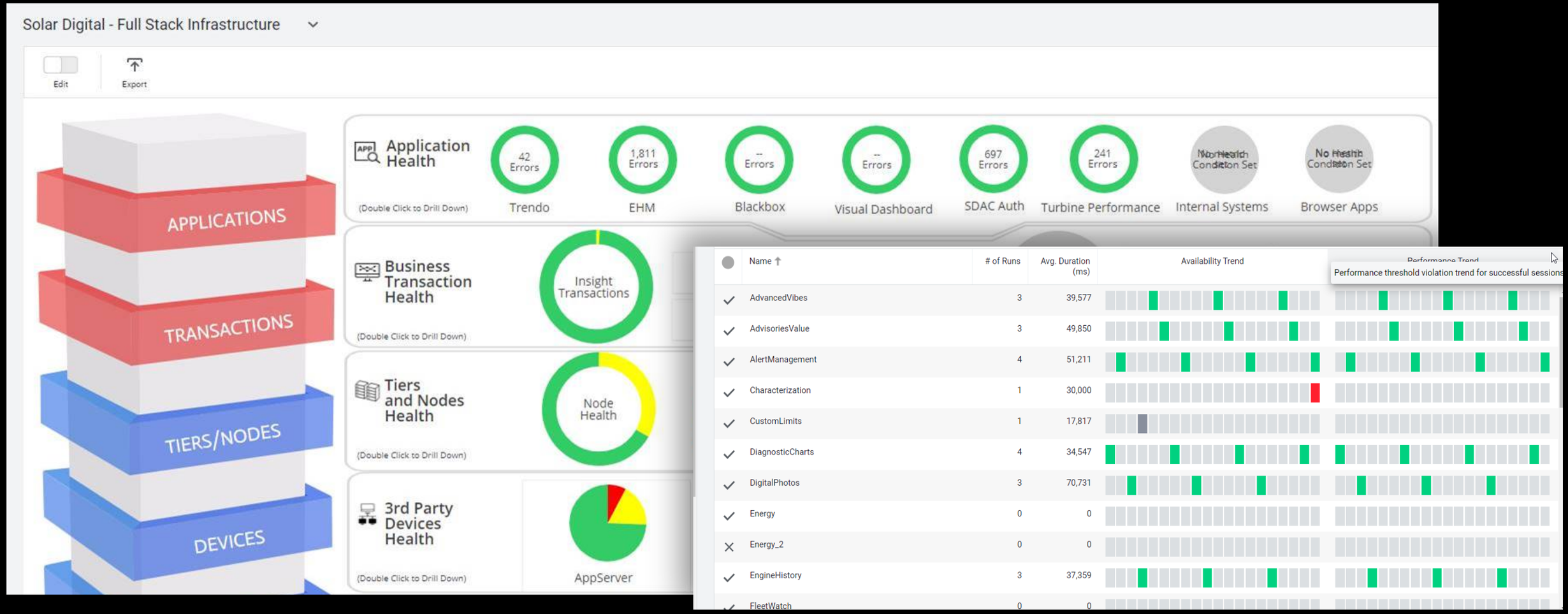


© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Know before your customers!

PROACTIVE MONITORING

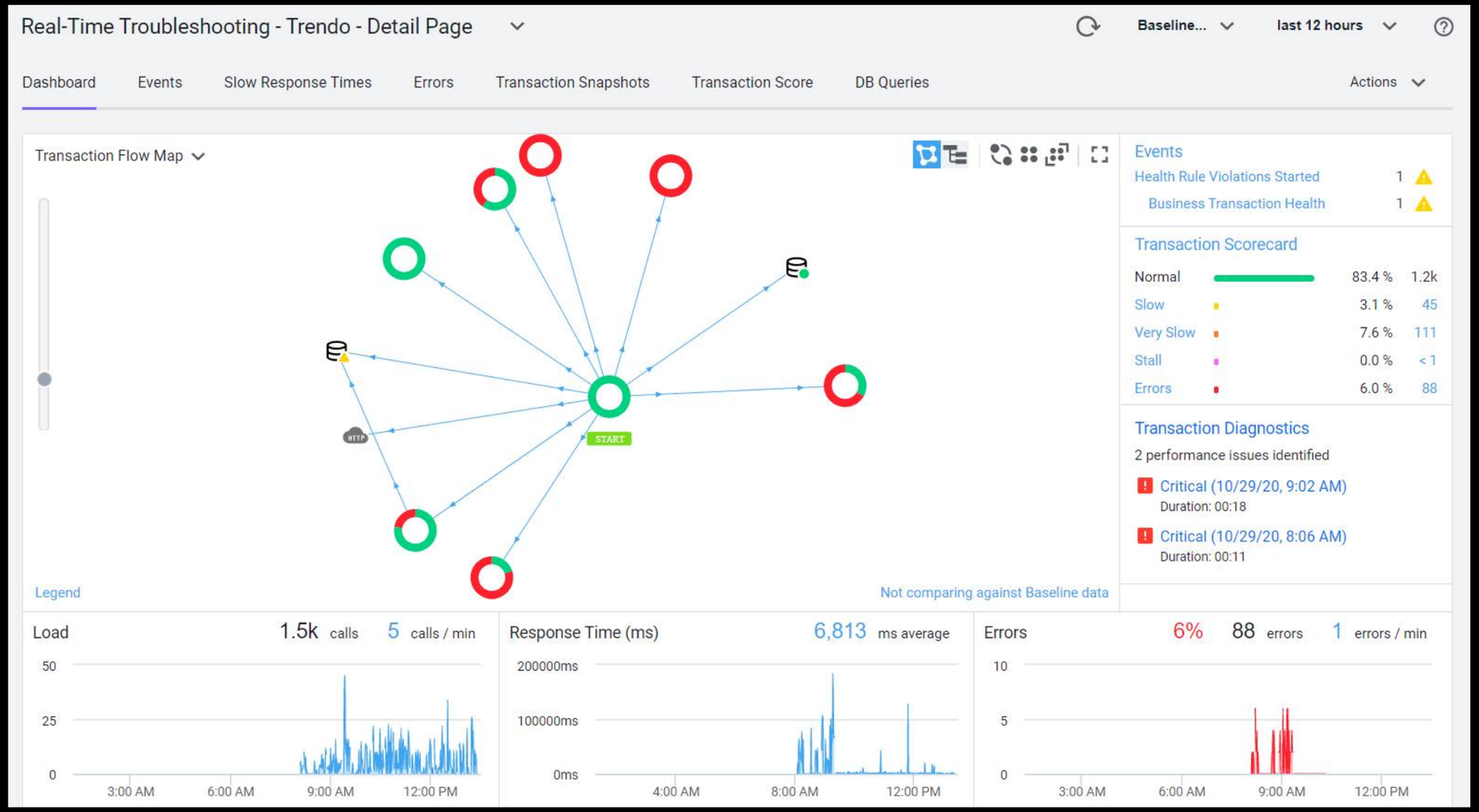
Deep insights to see and remediate issues before your customers tell you



Know before your customers!

TROUBLESHOOTING

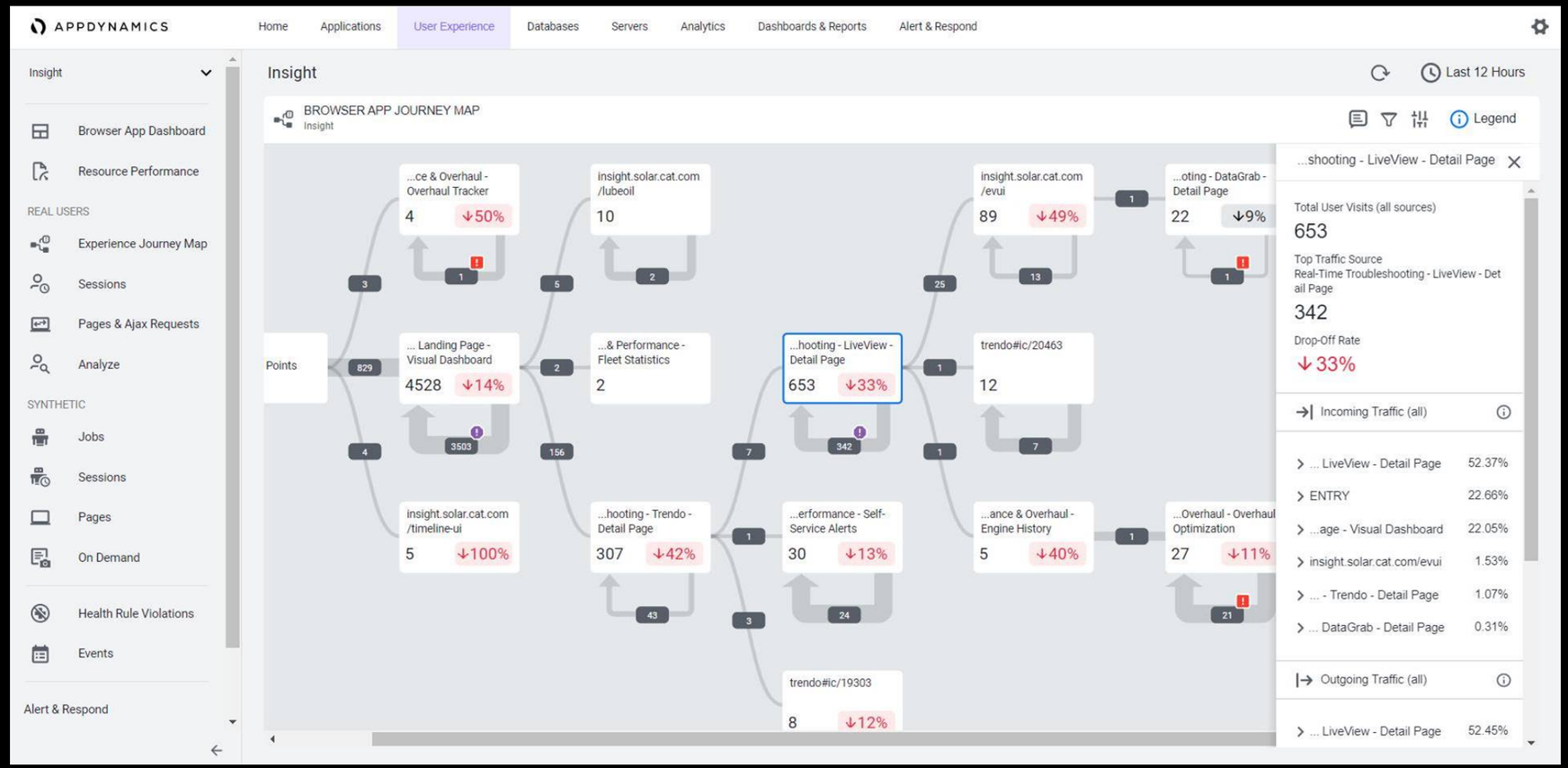
Efficiently identify where issues are happening; leverage experience with traditional tools and build on top for a modern monitoring approach



Know before your customers!

END USER MONITORING

Adopt user journey maps, business analytics, custom metrics, and other features to make better business decisions based on customer's behavior – delivering maximum value while innovating faster



The new world: Innovating with AppDynamics

Solar® DIGITAL



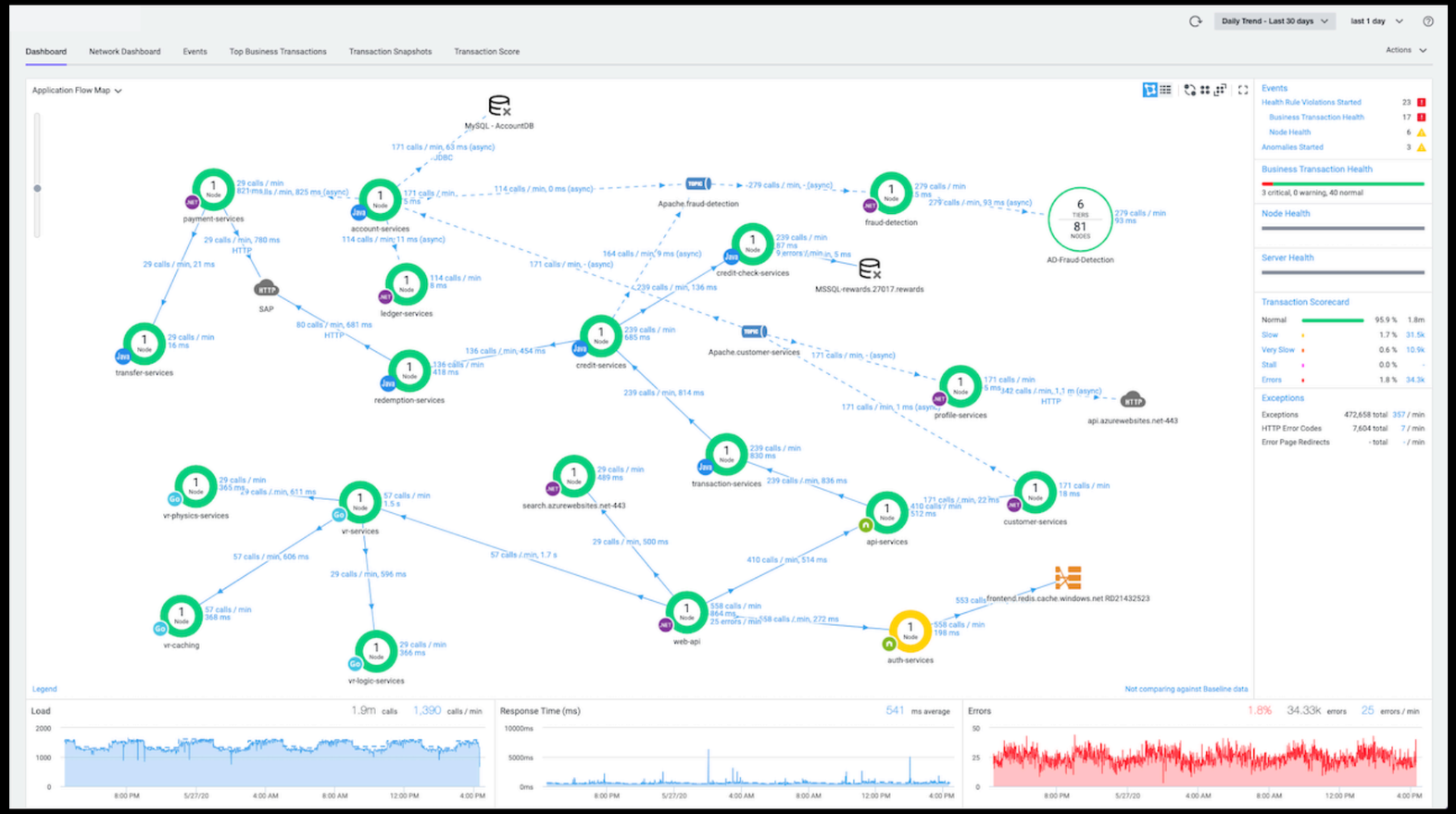
AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Visibility for the hybrid application stack

Automatic discovery, visualization, and mapping of services, including serverless

- Map dependencies in minutes
- Baselines in hours
- Troubleshooting when you need it most

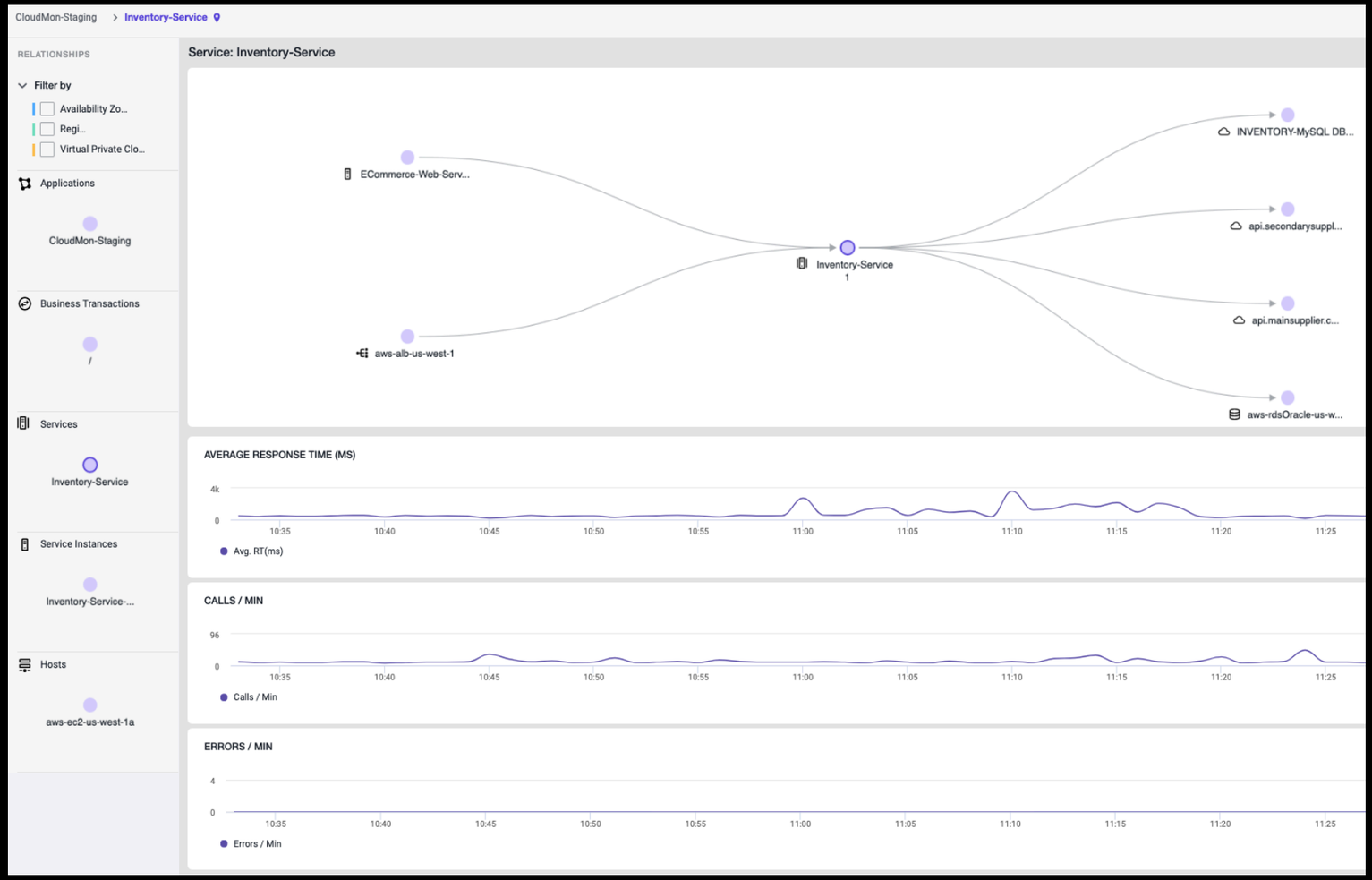


Multi-language support including Java, .Net, Python, Node.js, and Go language, along with SAP ABAP and more

Cloud-native visualization

See your apps and infrastructure through a whole new lens

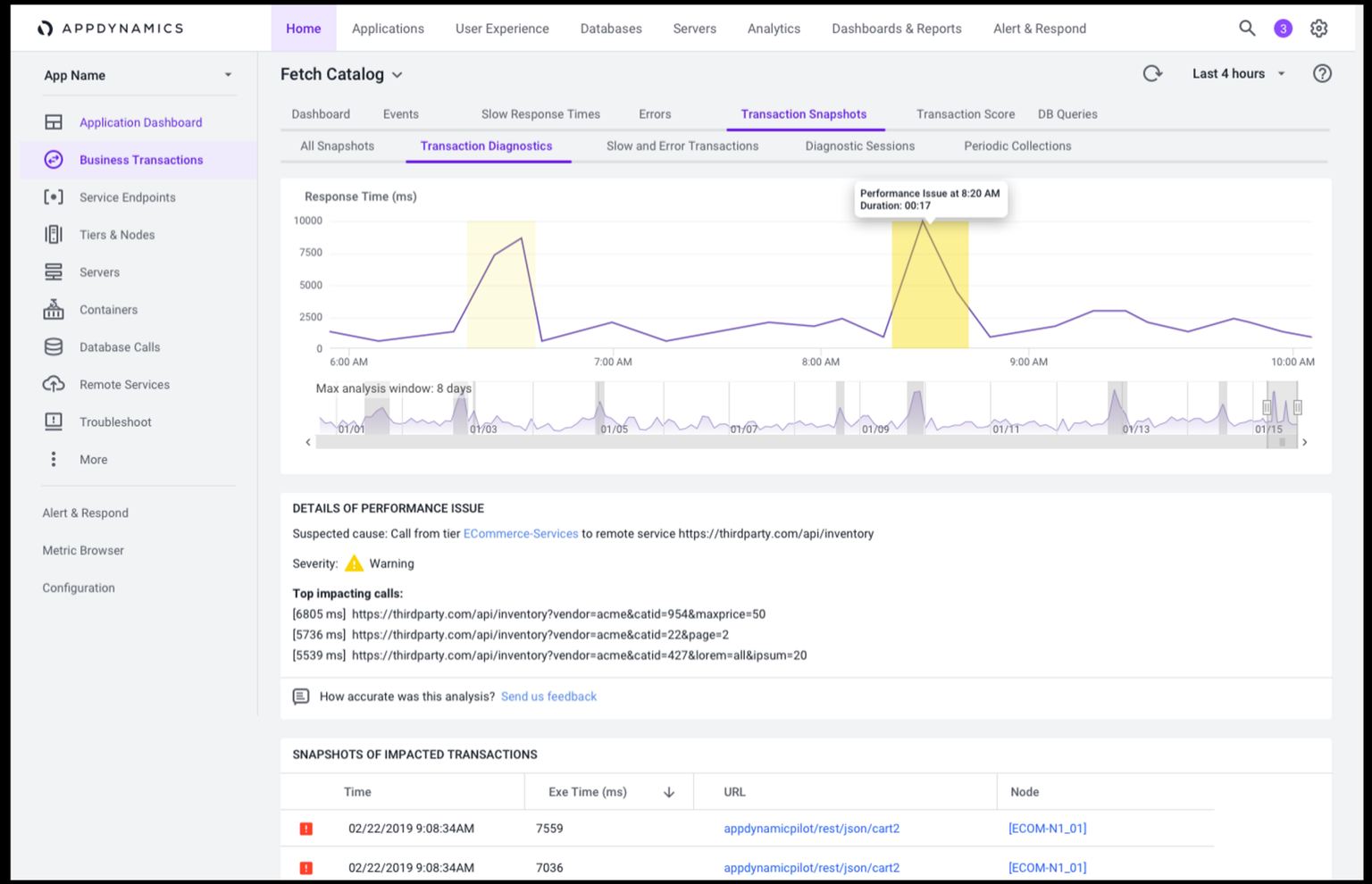
- Explore relationships between various entities
- Correlate between APM and AWS infrastructure across domains
- Search across all data sets utilizing the unified query layer



Automated transaction diagnostics

Isolate problems faster than ever before with machine learning analysis

- Automatically analyze BTs to identify periods of anomalous activity
- Isolate the problem to a specific entity within complex BT flows
- Identify the specific method or exit call mostly likely causing the issue



Key learnings and takeaways

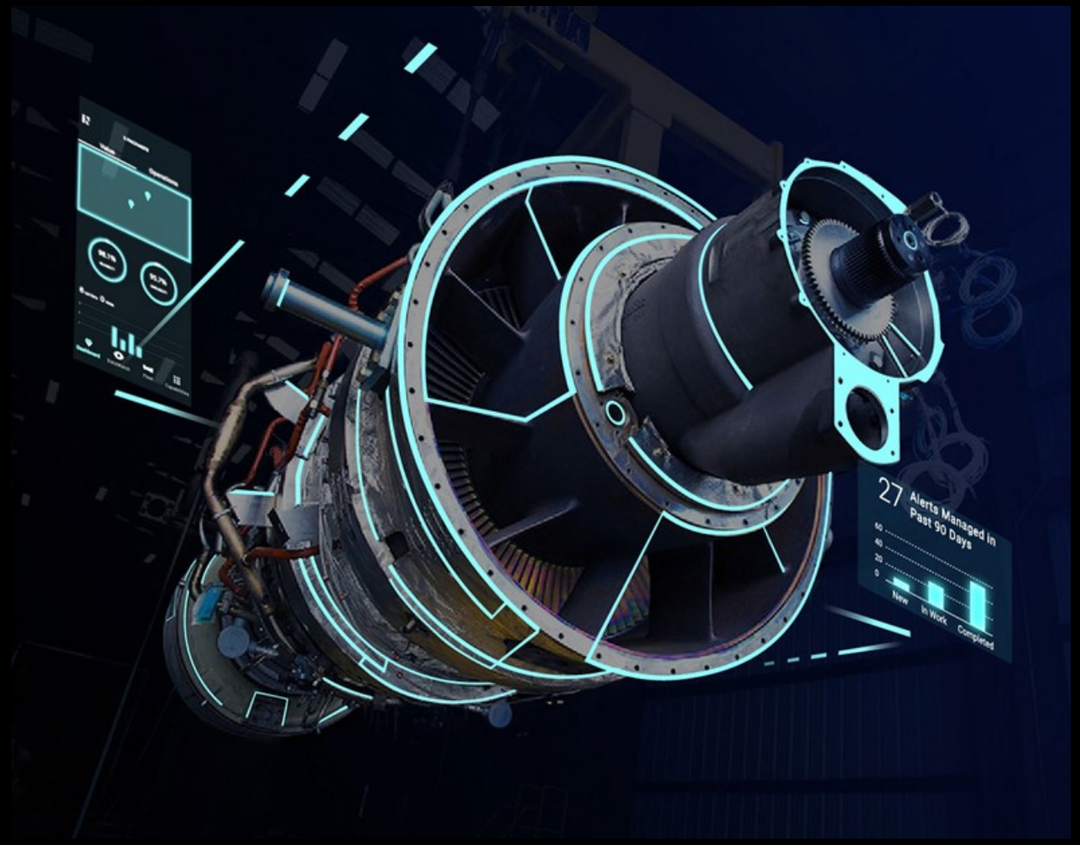


AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Summary

- Migrate to AWS with confidence
- Improve application performance and stability
- Quantify user experience
- Increase operational efficiency
- Deliver continuous observability
- Accelerate digital transformation



Thank you!



AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.



Please complete the session survey

AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.