CA's AIOps Platform for Smarter, Faster IT Ops

Kiran Diwakar

AIOps Product Management

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ES Segment: AIOps
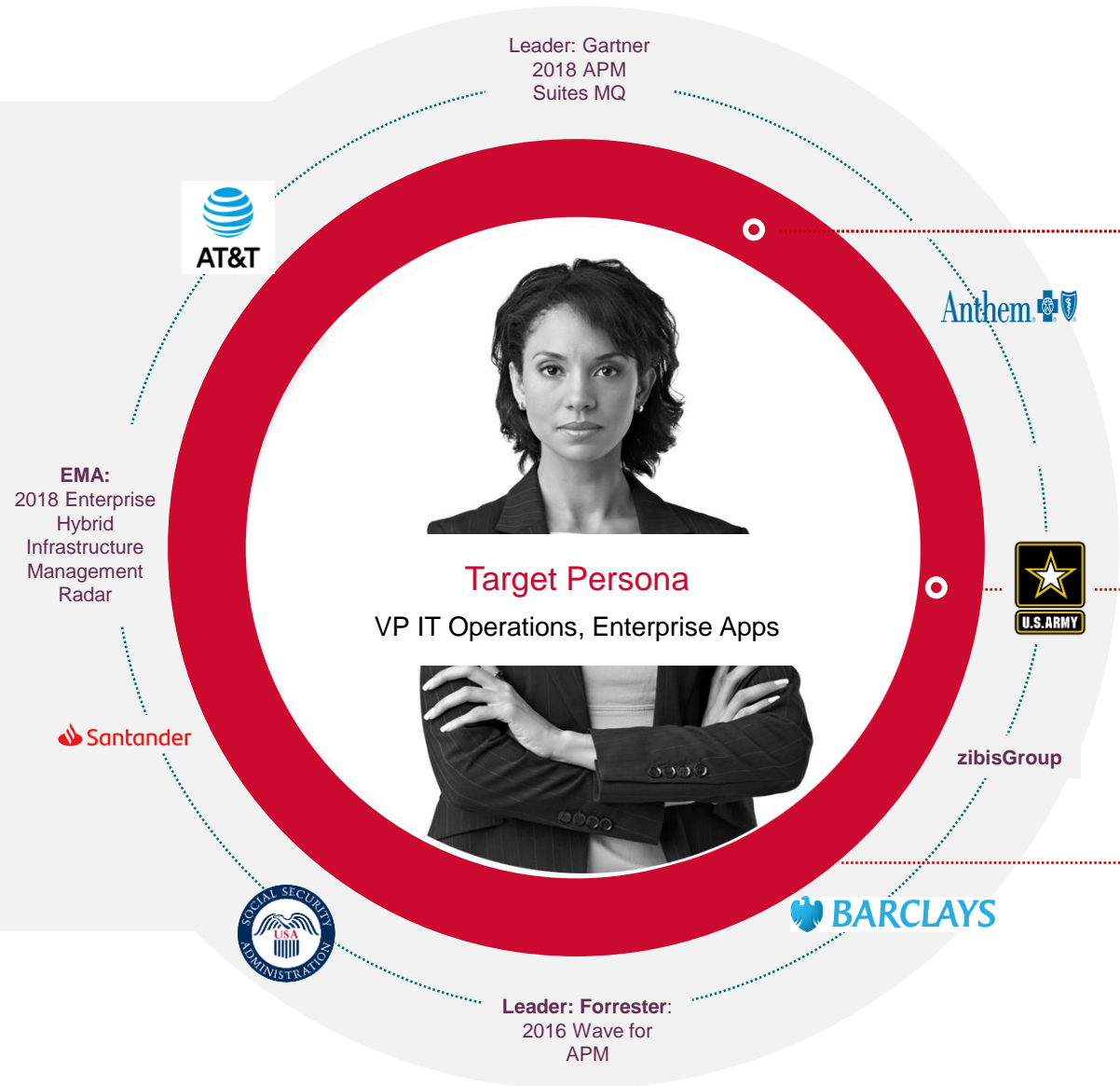
wily technology

nimsoft

Spectrum

TAM

- **$12.1B** in CY19

Target Organization

- Enterprises with mission critical omnichannel applications that run on complex and distributed hybrid and multi-cloud infrastructure.

- Service providers who manage such applications and infrastructure on their customer's behalf

Segment Leader :

Ali Siddiqui

Leader: Gartner
2018 APM
Suites MQ

AT&T

Anthem

EMA:
2018 Enterprise Hybrid Infrastructure Management Radar

Target Persona

VP IT Operations, Enterprise Apps

U.S.ARMY

Santander

zibisGroup

BARCLAYS

Leader: Forrester:
2016 Wave for APM

Pain Points

- Difficult to deliver stellar digital experiences due to end to end visibility, and inability to isolate performance bottlenecks

- Lack of business insights, high MTTR, and inability to know and fix issues before they occur.

Value Proposition

- Deliver business insights with predictive analytics

- Reduce alarm fatigue and MTTR, and increase IT efficiency via self-remediation

- Speed application and infrastructure transformation with AIOps-driven DevOps

Products

- Digital Experience Insights, Operational Intelligence

- UIM, Network Management, NetOps, Application Performance Monitoring, AXA

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AIOps Software: Operational Intelligence

MONITOR

OPERATE

PLAN

Operational Intelligence

DEVELOP

DEPLOY

Objective

Leverage algorithmic operational intelligence to proactively resolve issues, cut through false alerts and optimize key resources

Customer Challenges

- Growing complexity & service level expectations
- Siloed views due to disparate tools and disparate data
- Teams stuck in reactive triage and troubleshooting

How We Help

CA Operational Intelligence is built on an open, powerful engine and is the most comprehensive AIOps solution in the market that provides users with comprehensive insights and end to end monitoring by ingesting and analyzing a diverse data set including metric, topology, text and log data." It integrates with Broadcom and 3rd party APM, Infrastructure monitoring, and network monitoring tools.

How We Do It

- Machine learning-driven analytics
- Service-centric analytics
- Algorithmic noise reduction & correlation
- Predictive capacity analytics
- Open, powerful engine
- Intuitive visualization and correlation

Business Results/ROI

- Improve mean time to repair by up to 60%
- Reduce false alerts by more than 80%

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AIOps Platform

App Owner/LOB   Server Admin   **USER PERSONAS**   Network Engineer   NOC Operator

DIGITAL EXPERIENCE INSIGHTS

Operational Intelligence

Service Analytics	Performance & Alarm Analytics	Log Analytics	Capacity Analytics	Contextual Automation

Unified Visualization & Correlation

Automic™

Unified Data Lake With Open APIs
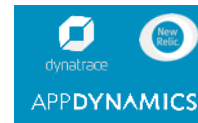(Metrics, Alarms, Topology, Logs, Text & Wire Data)

FULL STACK MONITORING

DXI APM	⇄	DXI IM	⇄	DXI NetOps

30+ INTEGRATIONS

dynatrace   New Relic   Tivoli   SCOM   DATADOG   SevOne   bmc   CHEF

APPDYNAMICS   solarwinds   servicenow   splunk>   puppet   ca technologies   Automic

Deployed Via Hybrid, Private Or Public Cloud

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AIOps Platform

USER PERSONAS

App Owner/LOB

Server Admin

Network Engineer

NOC Operator

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CA AIOps Solutions: Real Value Real Results

IMPROVE OPERATIONAL EFFICIENCY
Up to **80%**[1]

REDUCE MEAN TIME TO REPAIR
Up to **60%**[1]

REDUCE SERVICE DESK TICKETS
Up to **51%**[2]

REDUCE NETWORK COMPLEXITY
Up to **75%**[1]

OPTIMIZE COST & RESOURCES
Up to **60%**[1]

ROI
321%[2]

EMA TOP 3
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AI FOR IT OPERATIONS AND DEVOPS
SERVICE CENTRIC OPERATIONAL INTELLIGENCE

2018 VALUE LEADER
CA TECHNOLOGIES
EMA Radar™ for Enterprise Hybrid Infrastructure Management Q1: 2018

#1 RANKED CLOUD MONITORING SOFTWARE
IT Central Station for January 2018

#1 RANKED NETWORK TROUBLESHOOTING CATEGORY
IT Central Station

#1 RANKED SERVER MONITORING
IT Central Station for January 2018

#1 RANKED INFRASTRUCTURE CAPACITY PLANNING
IT Central Station

Sources:(1). https://www.techvalidate.com/product-research/ca-infrastructure-management
(2) Benefits realized for a composite organization created for The Total Economic Impact™ Of CA Unified Infrastructure Management, a March 2018 commissioned study conducted by Forrester Consulting on behalf of CA;

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Why CA

Diverse Datasets, Expertise	Out Of The Box, Integrated	Robust Platform, Open API's
Comprehensive Insight	Faster Time To Value	Future Proof

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AIOps Priorities and Product Roadmap

Key Trends and Customer Asks in Infrastructure Monitoring

1. Enterprises want converged persona-driven monitoring for apps, infra and network

2. Hybrid cloud is here to stay: most enterprises have multi-cloud solutions

3. Infrastructure is getting more dynamic: SDNs, containers, serverless

4. Machine learning based operational intelligence is the key to having lower MTTR faster RCA

5. The future of operations is autonomous: enterprises want closed-loop contextual remediation

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Plan for APM/AXA
Flexible Deployment Model Principles

Drive Adoption

- Rapidly onboard applications

- Utilize features

Reduce Effort

- Operate and scale environments with ease

Achieve Value

- Unified Data

- Analytics lead to enterprise-wide operational intelligence

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Universal Monitoring Agent

Discover
- Single agent provides full stack monitoring of microservices Applications
- Automatically discovers and monitors Application processes, Cloud & Container Infrastructure

Deploy
- Deploys as a docker/kubernetes/openshift service, same agent monitors performance of containers, host, service dependency and also instruments apps running inside containers
- Deploys as a monitoring service with a single command to all the Docker/Kubernetes/Openshift nodes in the cluster

Manage
- Orchestrates Agent upgrades from a centralized ACC via Bootstrap Agent
- Bootstrap agent shim light weight agent wrapper - loads the real agent.jar

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Business Insights

Digital Experience Monitoring

Adaptive User Monitoring and Funnel Analysis

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Starting point – total session capture & replay

- Follow and replay any mobile session.
  - See exactly where a user clicked, scrolled or interacted with app screens
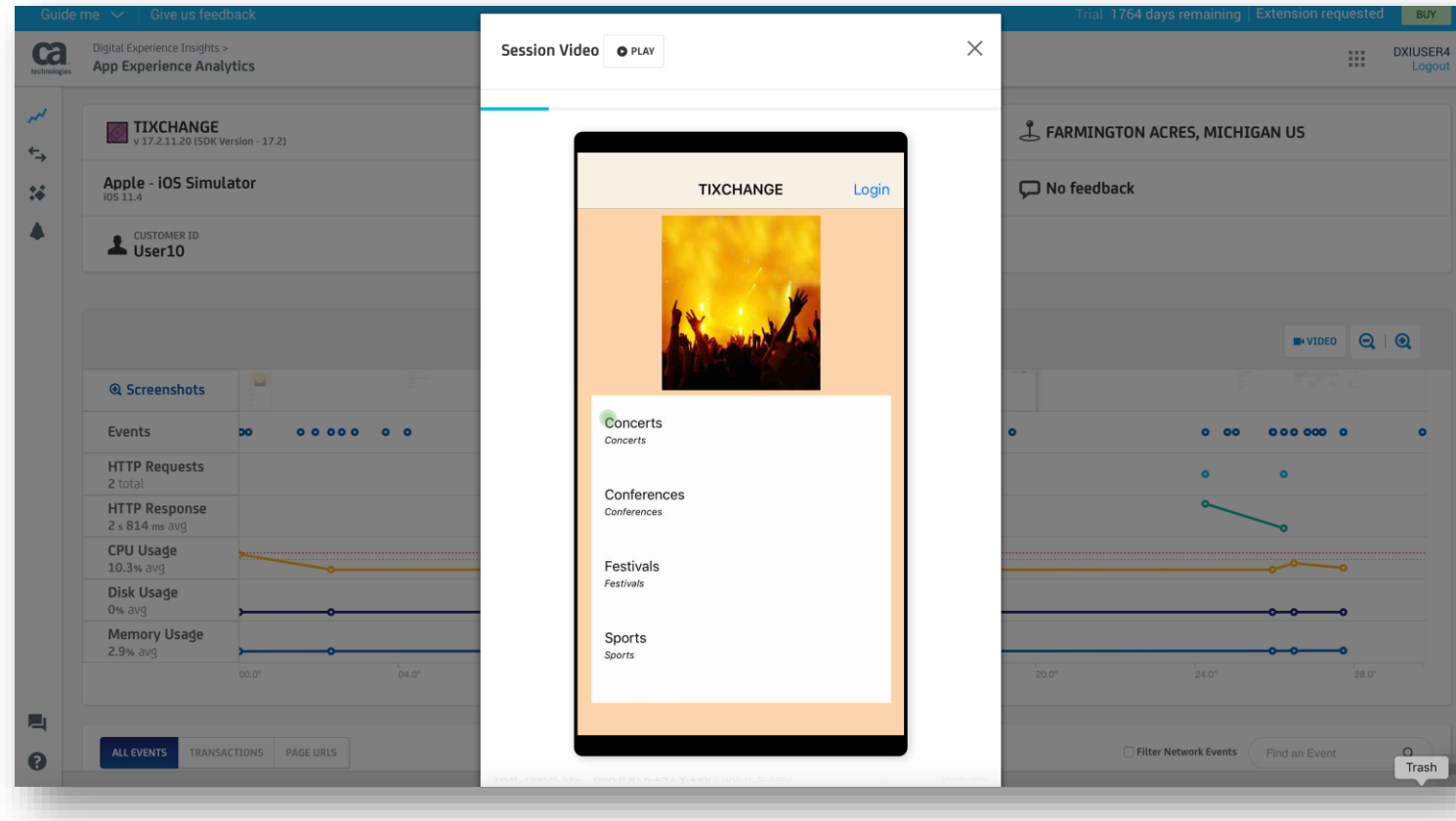
Browser screen capture and replay support under development

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Why a New Approach is Needed to Gain Insights into Business & Customer Experience ?

Network Taps
- Traffic Encryption
- Volume of traffic
- Limited Resources

Cloud Applications
- No ability to tap into network traffic
- Blindspot in real user experience

Development Driven
- Requires tagging to capture detailed user data
- Constraints on time & resources

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Business Insights

- Automates business context and dynamic user segmentation for all transactions all the time

- Automatically captures key Business KPIs values

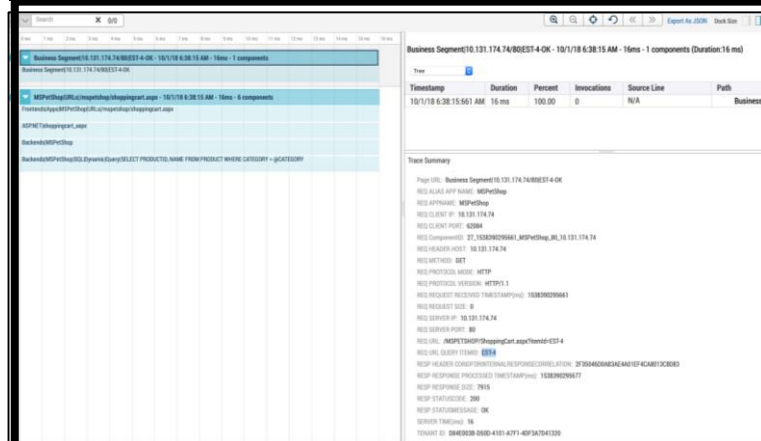- Removes need for developers to tag code by using data science to extract dynamic tags from payload
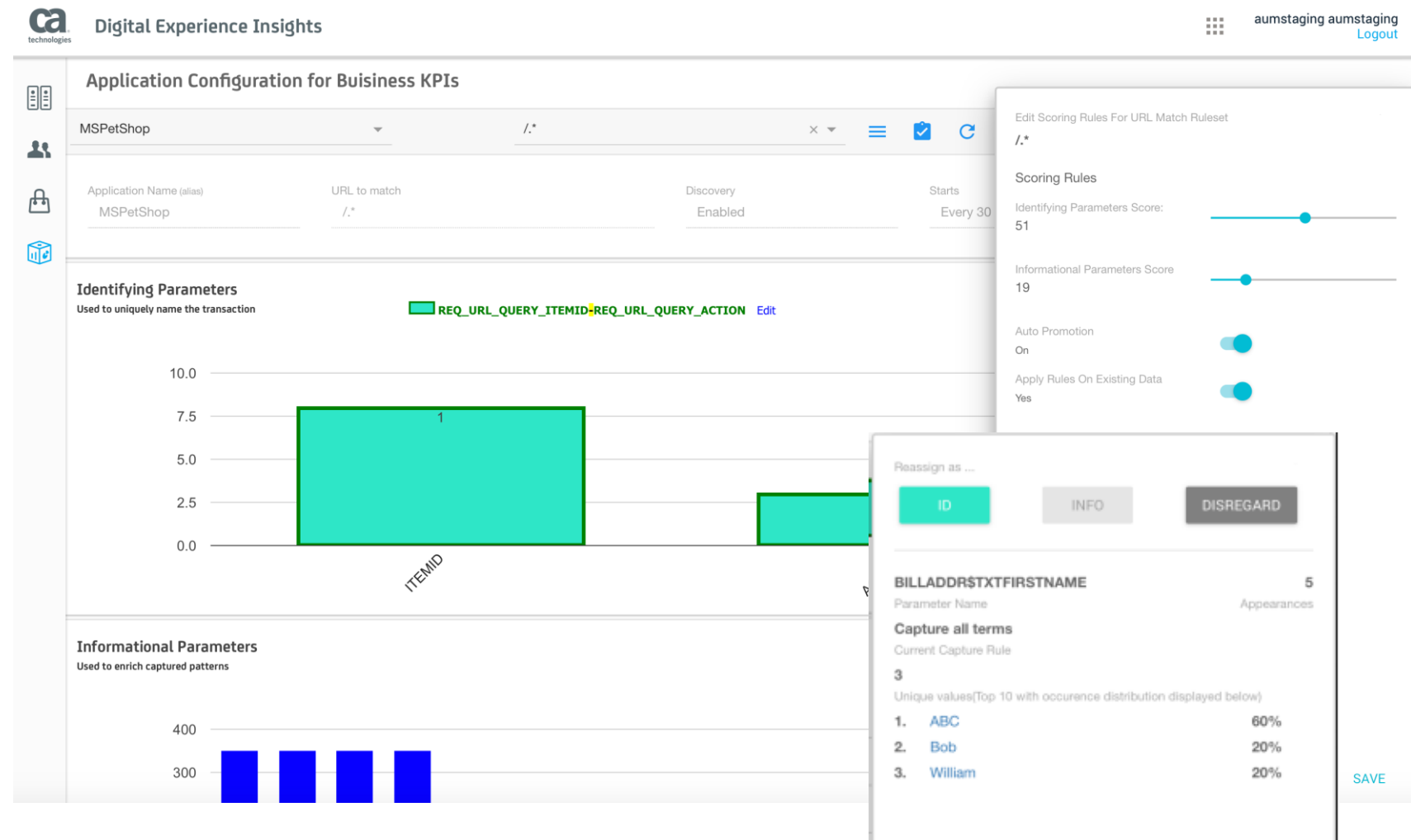
Uses *data science* and *natural language processing* techniques to reduce the maintenance and deployment challenges of the current generation of EUM tools – *Patent Pending*
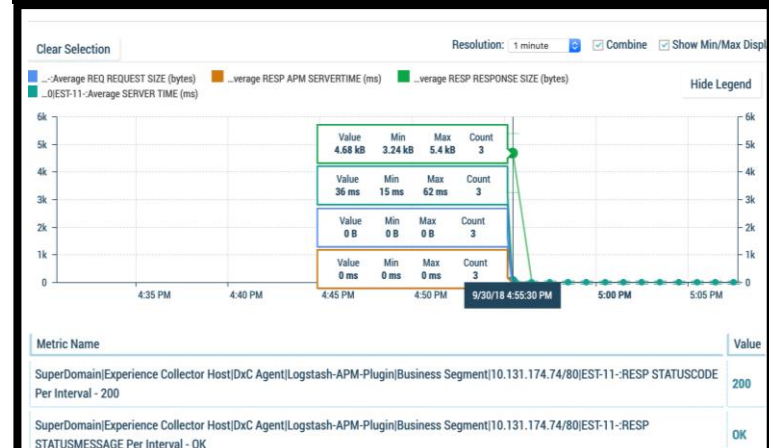
Business Insights

Business Transaction in Topology
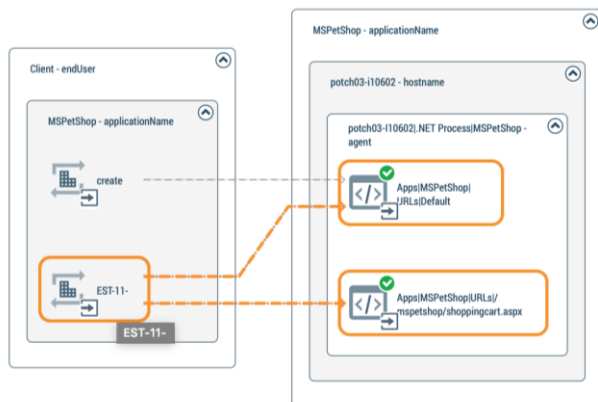
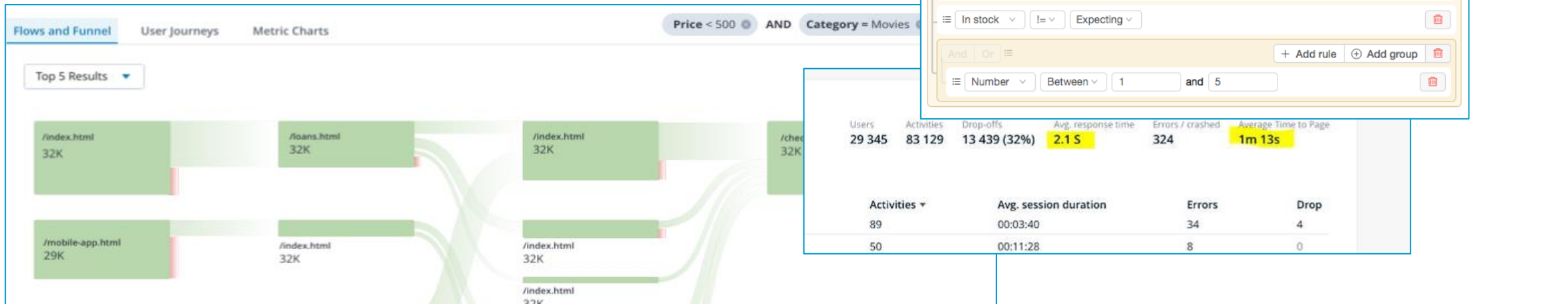Business Transaction in Trace

Business Transaction Metrics

- Summarizes the transaction details into a set of tags, keywords and values (i.e. € value, loan type, …)
- Automatically creates end-to-end business transactions which provide context for application-to-infrastructure topology

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Funnel Analysis

Advanced User Journey Insights

- Track and analyze the *UI steps* taken within a *User Journey* towards a defined goal or end state.

- Know *who* is performing a *business activity* then organize, filter or pivot by **user segment** or dimension.

- Business insights to application infra correlation to understand *why* was user impacted or dropped out

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Questions and Answers