# Gain Real-Time Insight into App Performance and User Behavior with CA App Experience Analytics

**Bryan Whitmarsh, Sr. Director Product Manager**
**CA Technologies Idaho**
**September, 2018**

# IN THE SOFTWARE BUSINESS, EXPERIENCE IS EVERYTHING

**Fact:**

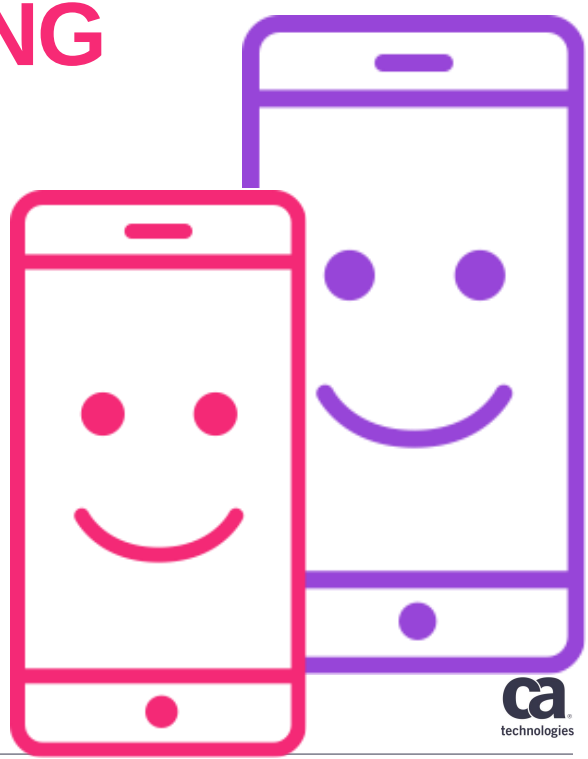
**83%** of U.S. consumers say having a positive customer **experience** with a brand **is more important than the product** itself[1]

**Fact:**

**53%** of large companies want to be customer experience leaders within three years[2]

**Fact:**

**53%** of mobile site visits are abandoned if pages take longer than three seconds to load[3]



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# Success Depends on Organizational Alignment

## Operational Performance

**78%** of organizations report having **separate developer and application teams**[1]

INFRASTRUCTURE

## Digital Performance

APPLICATIONS/CODE

## Buyer Journey

**70%** of siloed digital transformation initiatives will **ultimately fail due to insufficient collaboration**[2]

DESIGN

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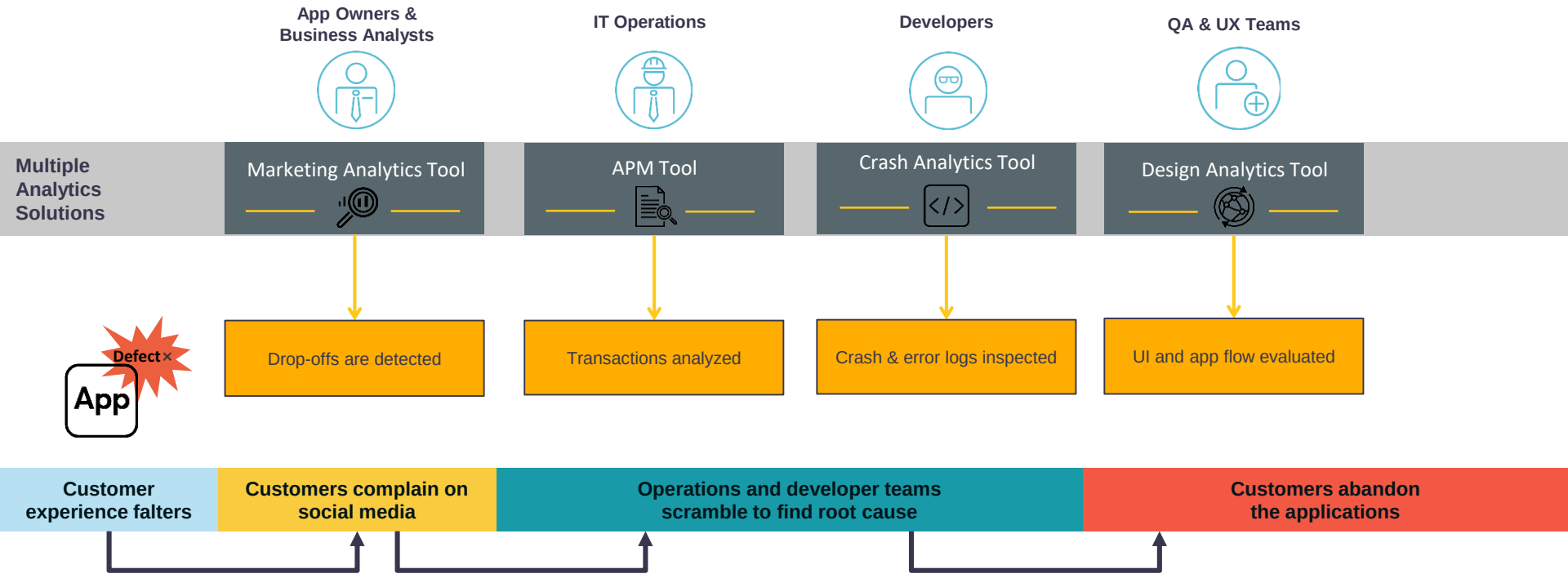
[1] "Customer Experience: The New Frontier" 451 Research, February 2018
[2] "2016 IDC FutureScape CIO Agenda Prediction 4" Bill Keyworth, Jeff Rivkin, November 2015 iDC#US40550115

# Resolving App Experience Issues Today




**App issue are eventually resolved, but time is wasted, customer experience suffers and revenue is lost.**

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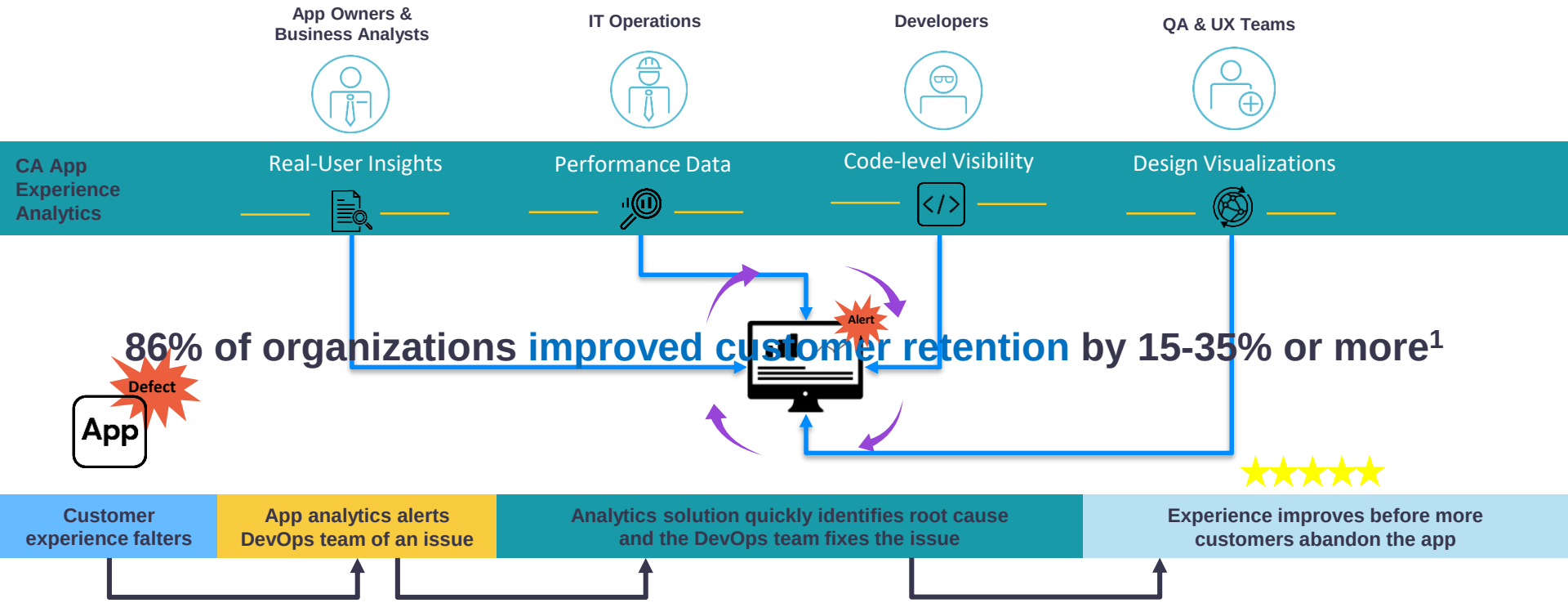
# Resolving App Experience Issues with Analytics




**App issues are resolved as a team with a single point of truth to eliminate finger-pointing and improve mean time to resolution.**

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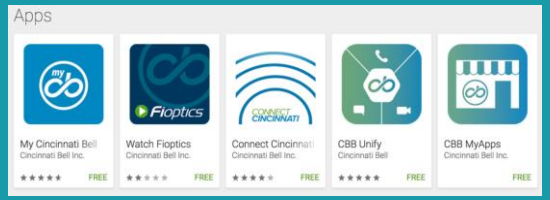
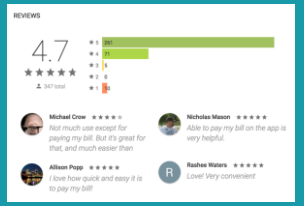
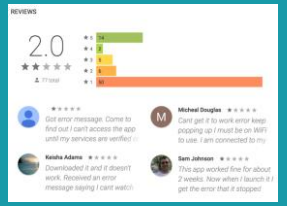
*1: with CA App Experience Analytics, TechValidate. TVID: 0E8-F21-49A*

# Continuously Improving App Experience

## Ratings, Ratings, Ratings

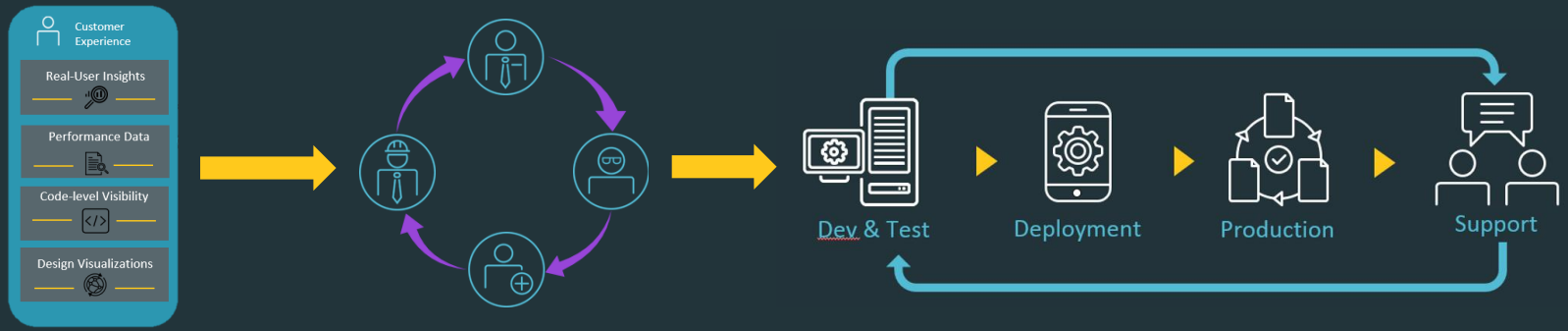



## What's at stake?

- Consumer Loyalty
- Increased Profit by Increased Usability
- Company Reputation
- Brand Loyalty




CA ENABLES EACH STAGE OF **CONTINUOUS DELIVERY**

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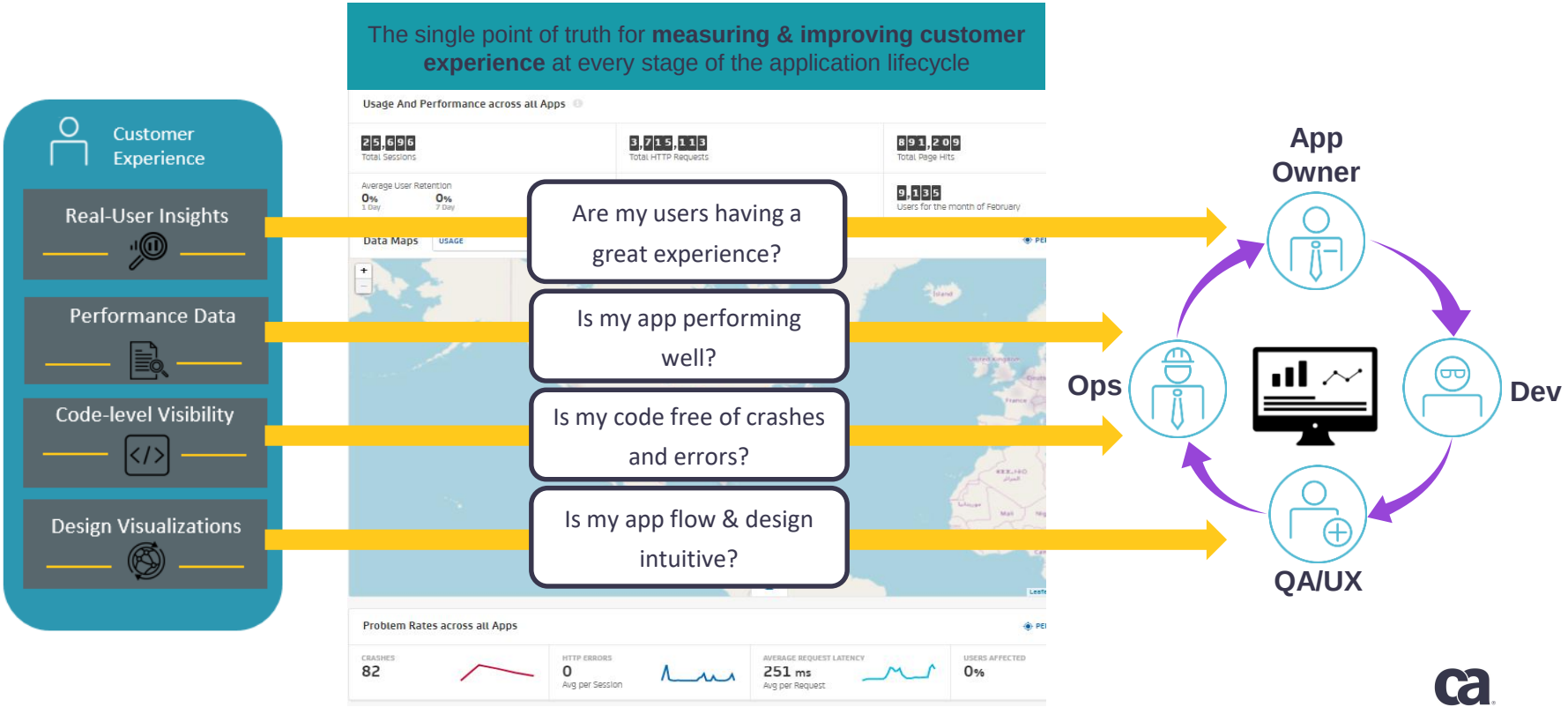
# Creating a Shared View of Customer Experience

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# CA App Experience Analytics

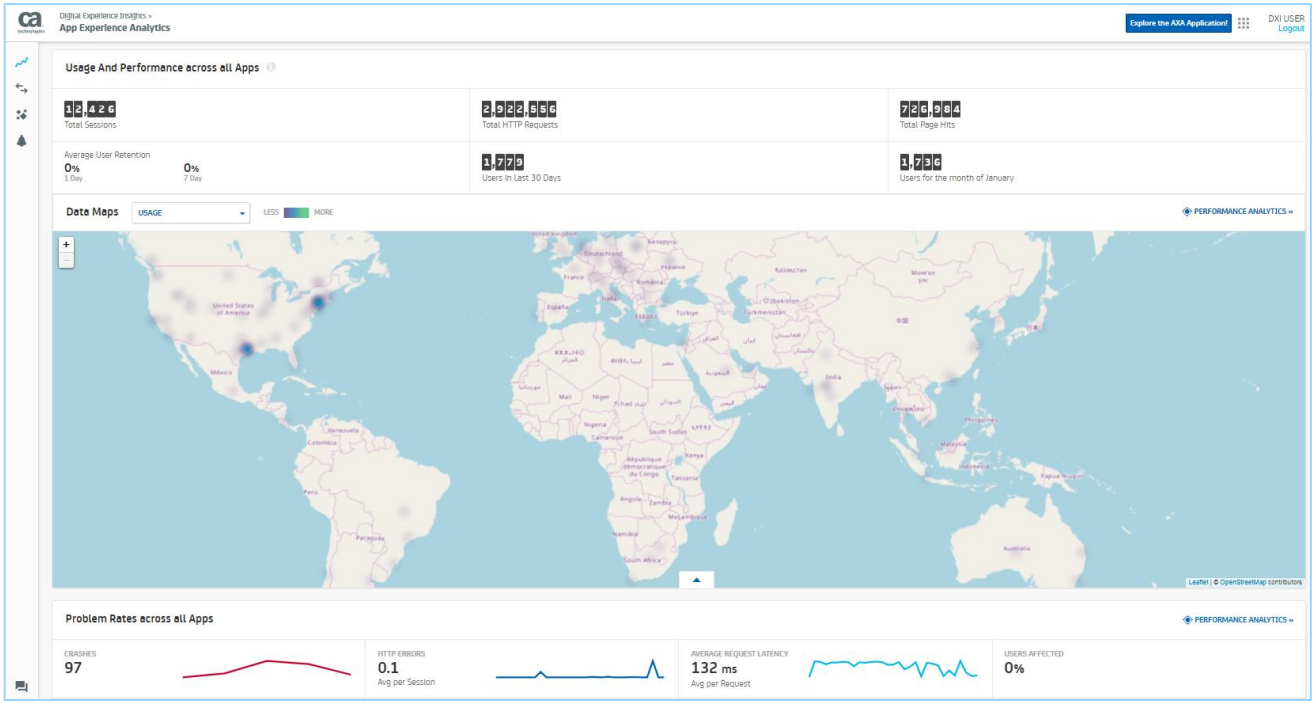
- **Deliver 5 star app experiences** for your customers
- **Gain real-time insights** into the customer experience
- **Optimize the customer journey** and track customer migration between devices
- **Design for the experience** and improve the flow of your applications
- **Improve digital performance** and quickly identify the root cause of application issues
- SaaS and on-premise offerings

**86% of surveyed users improved their star rating with CA App Experience Analytics[1]**

CNN econocom ATTUNED TECHNOLOGY EUROSPORT softvaro soluções em software

*1: TechValidate. TVID: 06E-376-F3D*

# Monitor Experience Across All Apps and Channels




Optimize the Customer Journey

**Achieve a unified view of customer experience & app performance**

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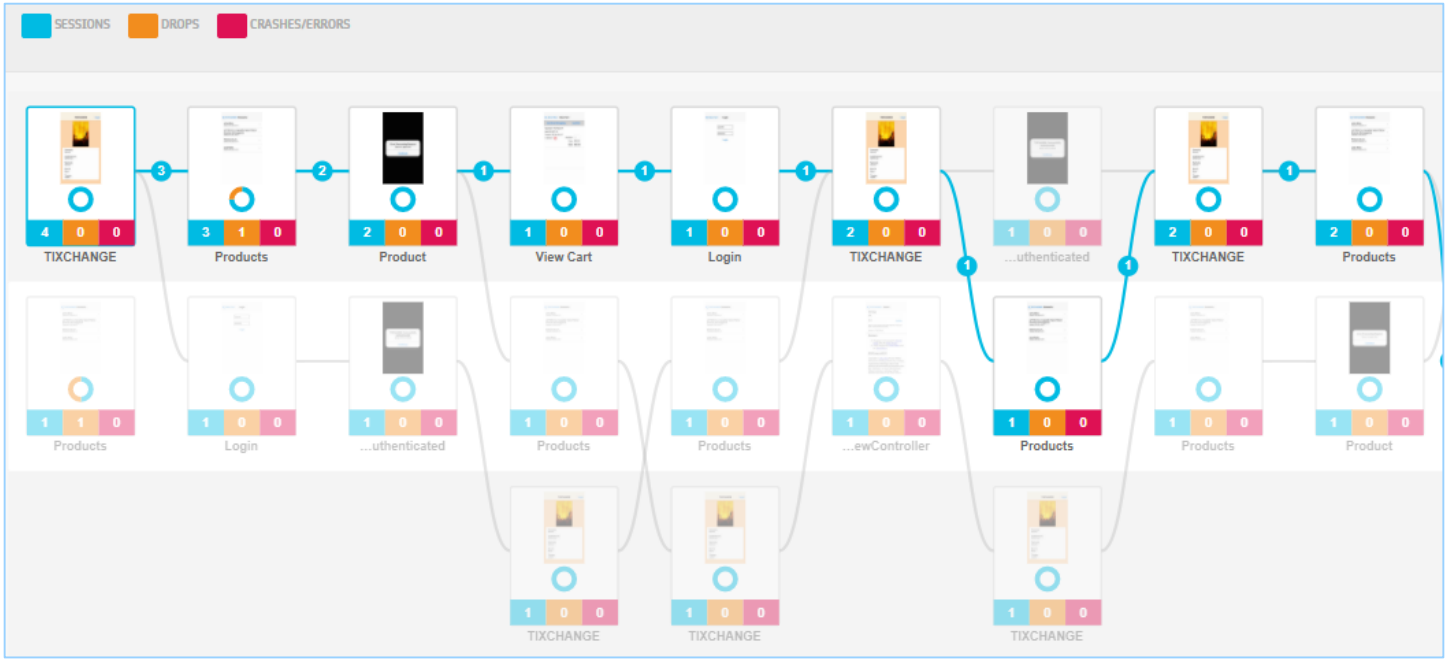
# Design with the Customer In Mind




Design for the Experience

**Gain insights into the buyer's journey and user experience**

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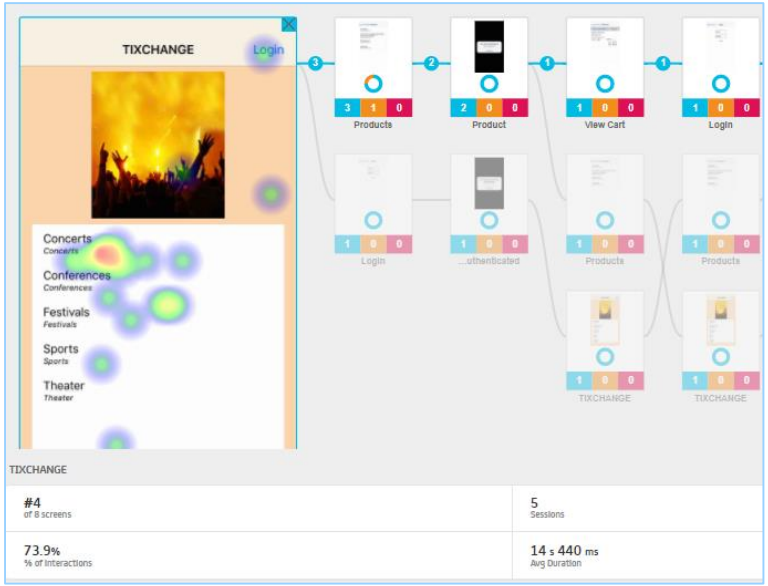
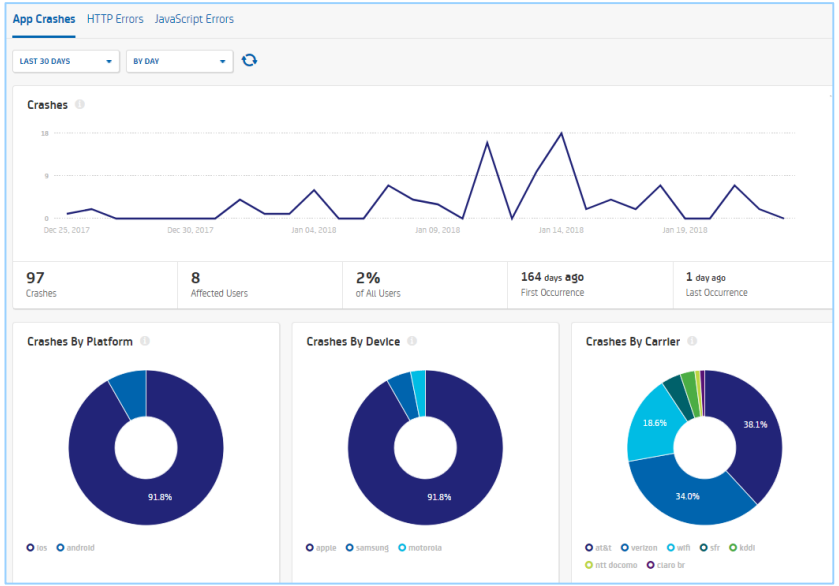
# Design with the Customer In Mind

Design for the Experience




**Application flows, heat maps & insights into app crashes provide the data you need to tailor your app to your customers' needs.**

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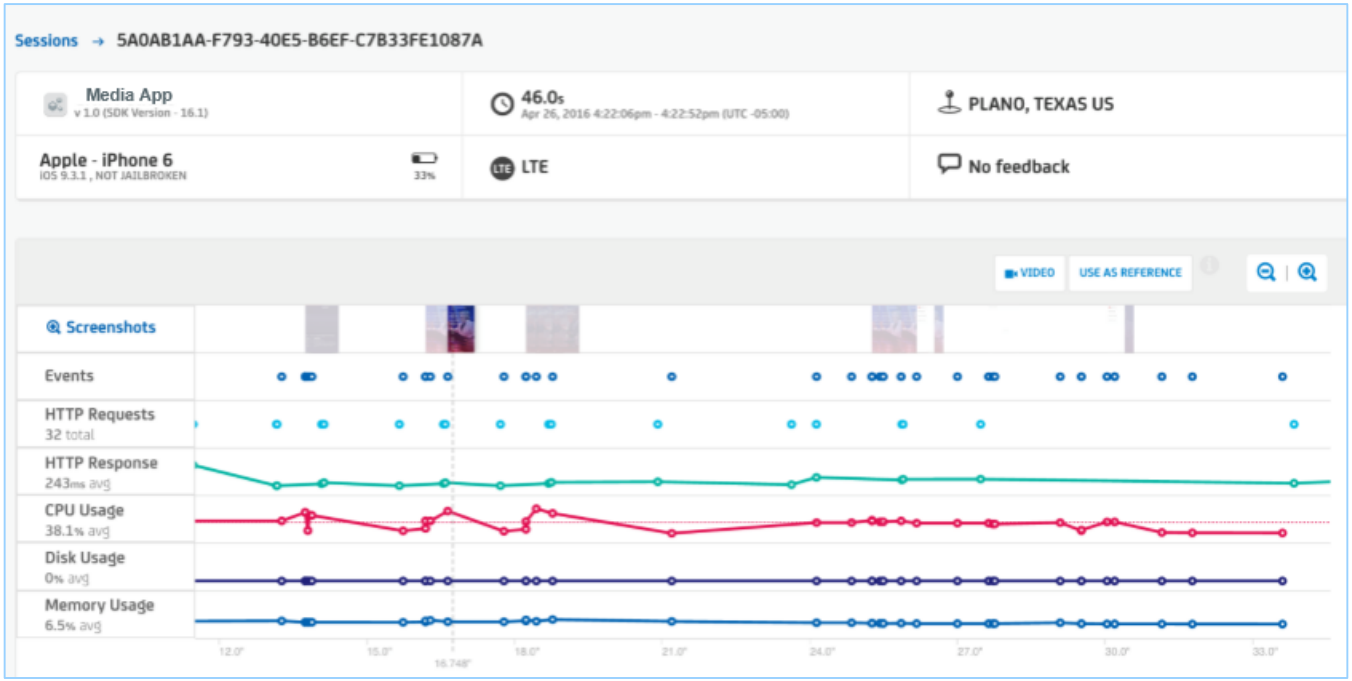
# Improve Digital Performance & Availability




Improve Digital Performance

**Insights into Operations and Performance**

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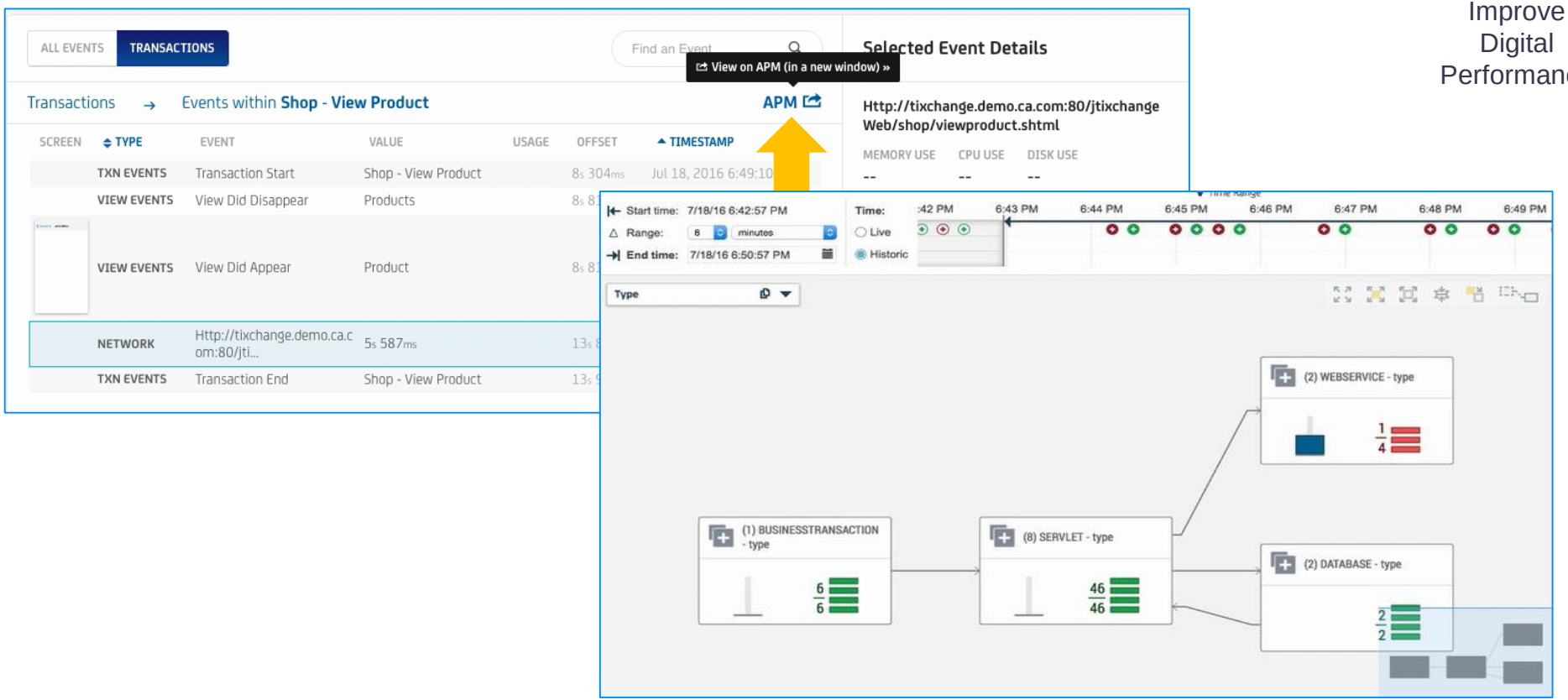
# Comprehensive End-to-End Visibility

Improve Digital Performance

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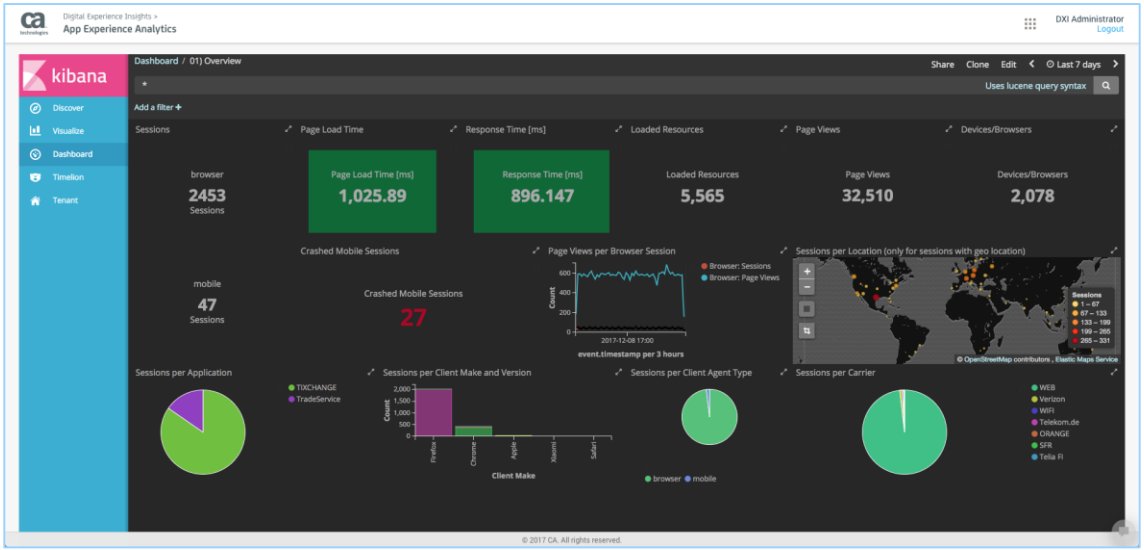
# Greater Insights into Digital Experience

## Data Studio & Blueprints




- Based on Open Source Analytics
- Customizable dashboards
- Quickly get started with Blueprints, or out-of-the-box templates that are easily customizable to fit any business need

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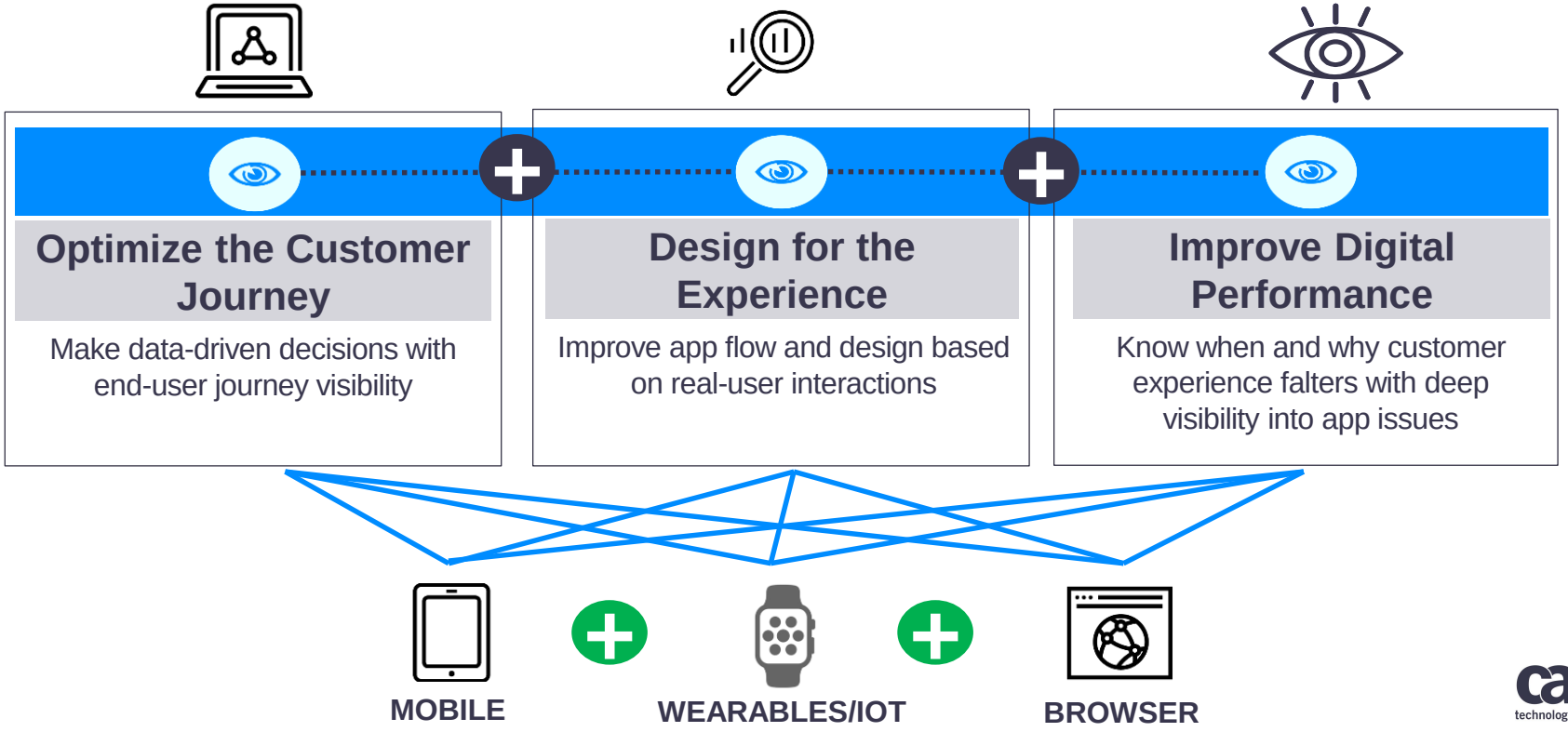
# CA App Experience Analytics

## One Platform for End-User Analytics

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# Why CA App Experience Analytics?

**90%** of surveyed customers feel they **Lack insight into their Digital Experience**

**70%** of surveyed customers believe **Improving the Digital Experience will Attract New Customers**

August 2016 Vanson Bourne Digital Experience Survey Report

With CA App Experience Analytics More likely to…

- **230%** Speed Time to Market for New Apps & Products
- **180%** Provide a Seamless Customer Experience Across Platforms
- **150%** Leverage Continuous Feedback from Real User Experiences
- **190%** Gain Analytic Insight Across Channels

August 2016 Vanson Bourne Digital Experience Survey Report

**LEADER**
The Forrester Wave™: Application Performance Management, Q3 2016
FORRESTER®

"CA App Experience Analytics will provide us with the insights into buyer behaviors, crashes and application performance that will enable us to proactively solve any incidents that occur and improve the overall digital experience our customers receive." - Francisco Guirado, IT monitoring manager, Produban.

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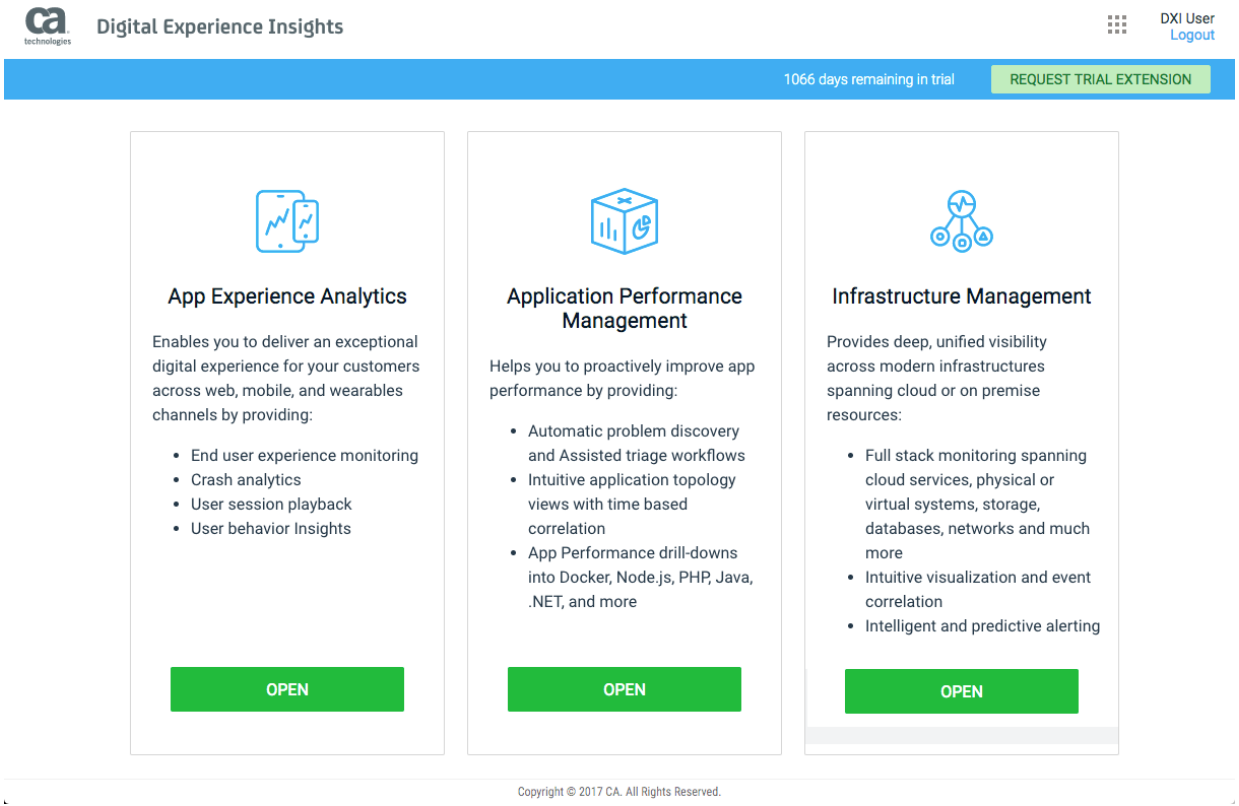
Introducing

# CA Digital Experience Insights

## SaaS-Based Digital Monitoring & Analytics

- Omni-channel User Experience
- Application Performance Management
- Infrastructure Health and QoS
- NetOps (coming soon)

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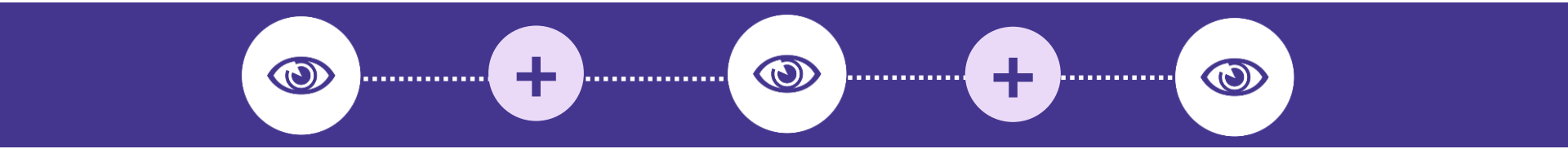
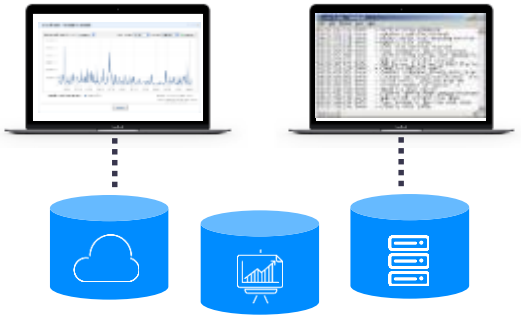
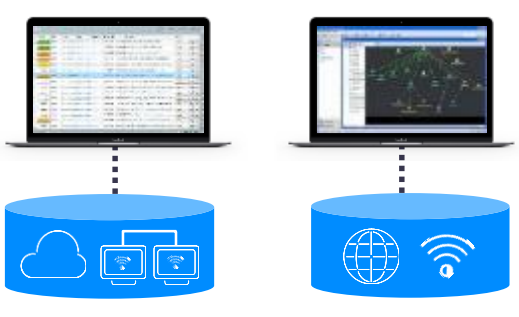
# Unified, App-to-Infra Visibility and Insights



APPLICATIONS



INFRASTRUCTURE



NETWORKS

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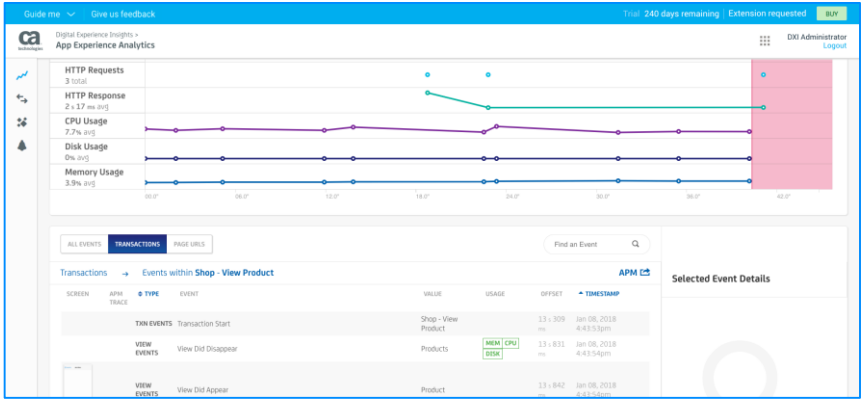
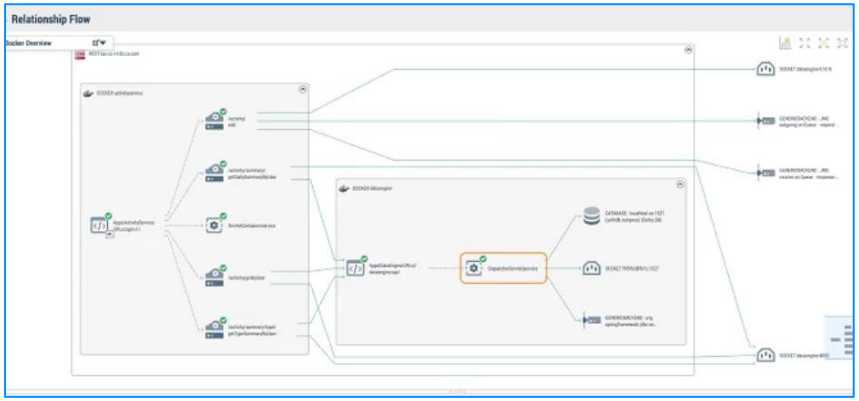
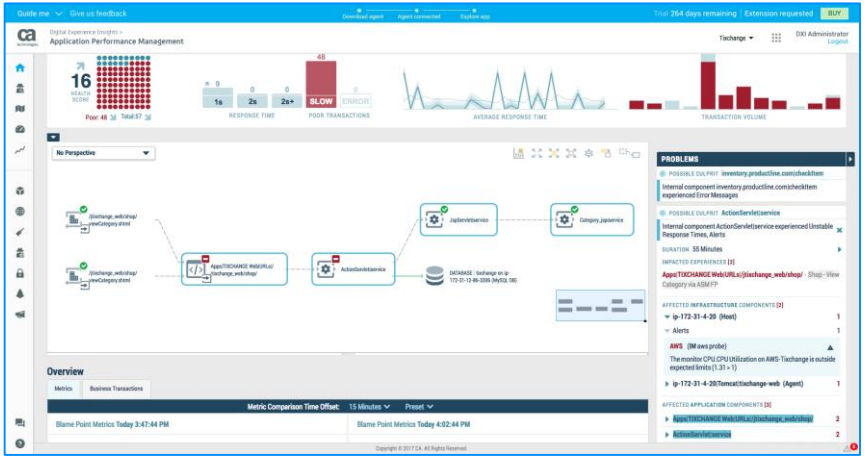
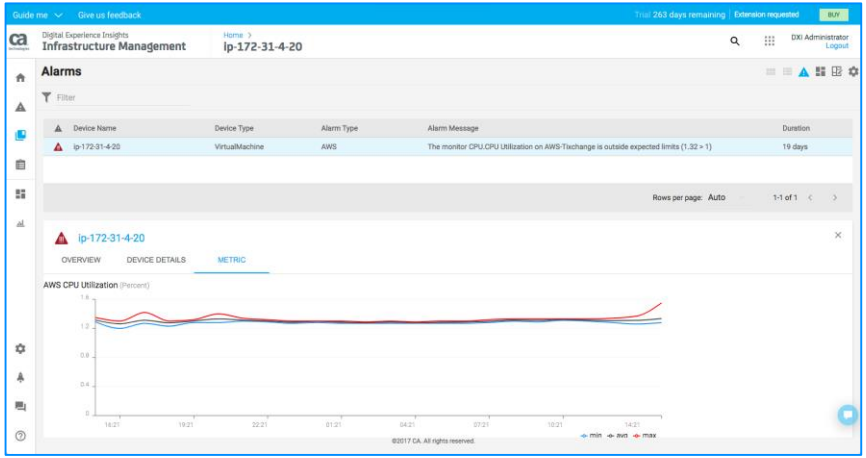
# Full Visibility – App to Infrastructure

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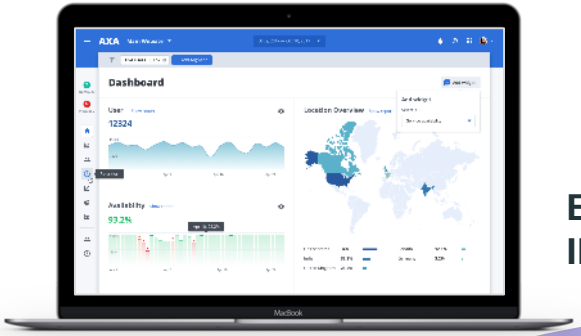
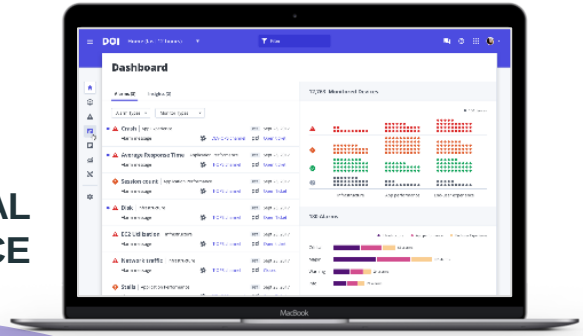
# CA Agile Operations Analytics Platform




**BUSINESS INSIGHTS** ⟷ **OPERATIONAL INTELLIGENCE**

Diagnose

Predict

Prescribe

**PREDICTIVE ANALYTICS**

Store

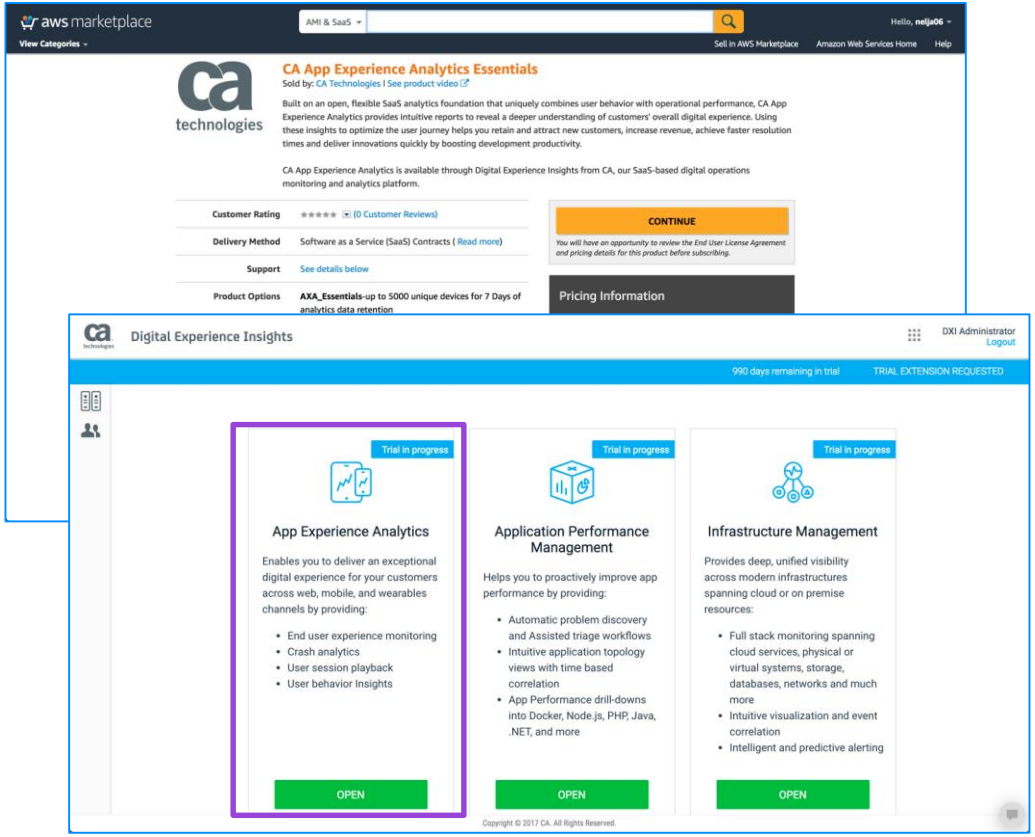
Correlate

Search

**OPEN ELASTIC PLATFORM**

**Application Experience** ⟷ **Machine Logs**

# Try/Buy CA Digital Experience Insights Today!




## SEE WHAT INSIGHTS CA CAN PROVIDE YOUR ORGANIZATION

Free 30 day Hosted Trial
Quickly get started

http://ca.com/trydxi

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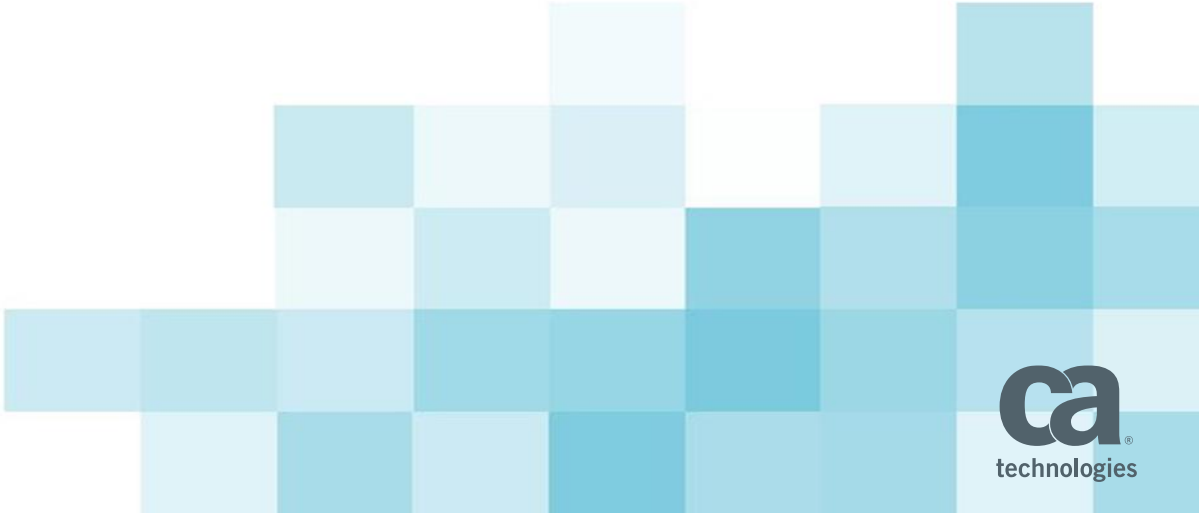
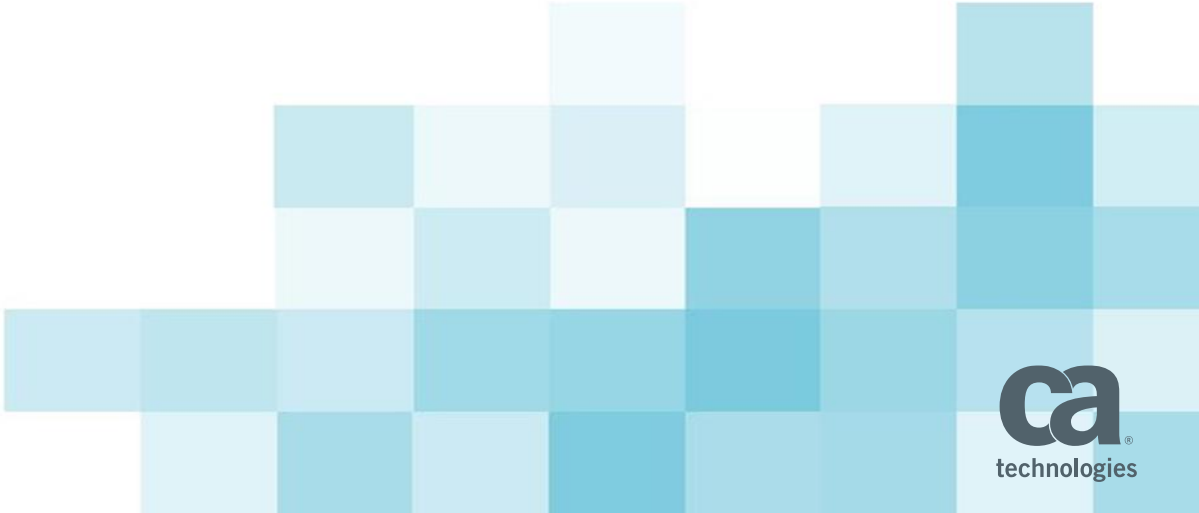
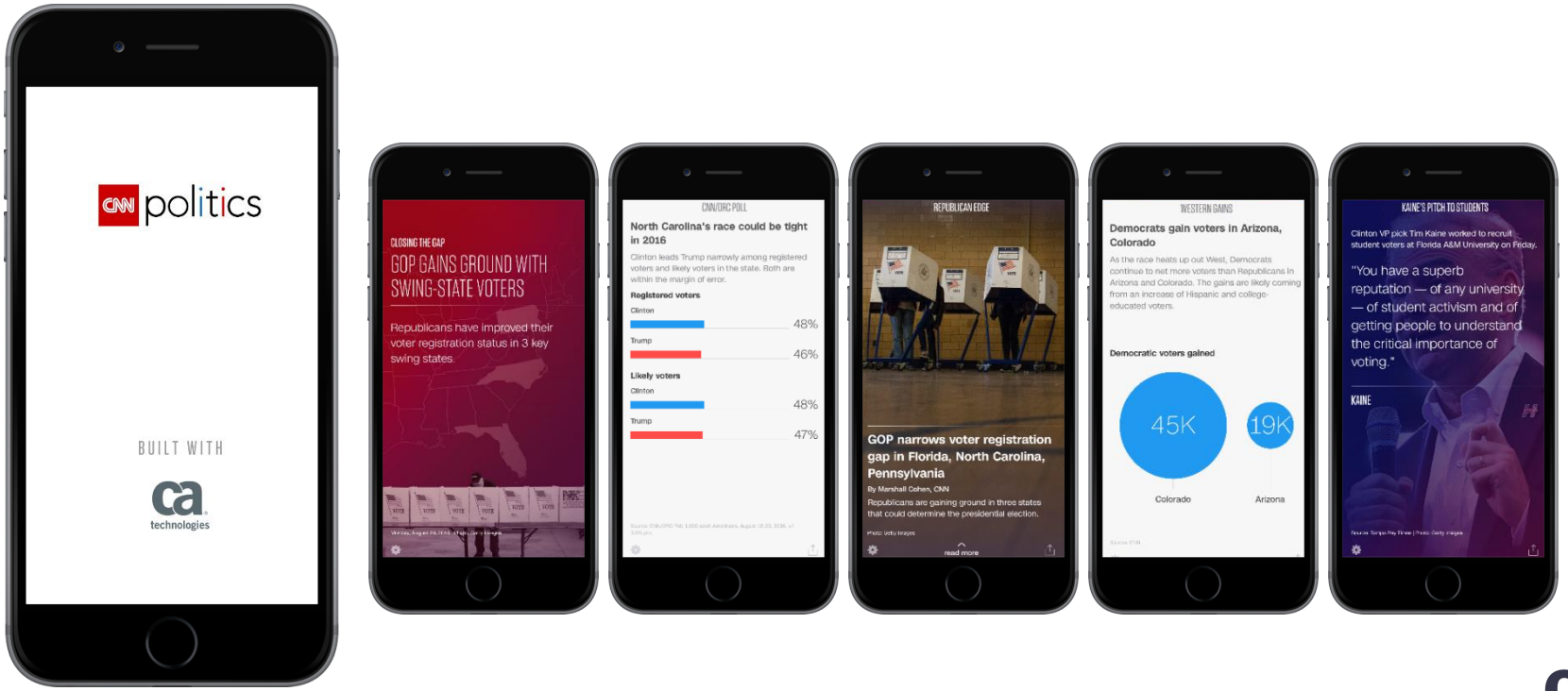
# Backup material



# CNN Case Study



# CNN Politics – Its First Curated Mobile App Experience

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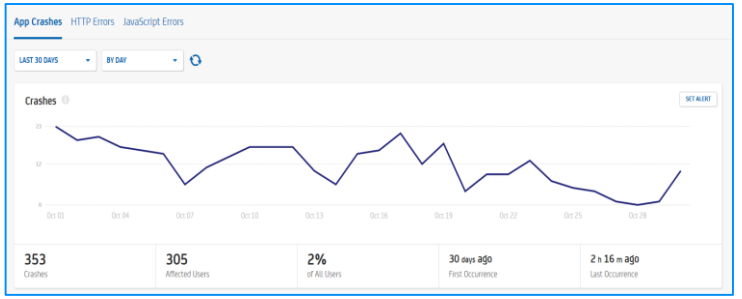
# How Analytics Improve App Experience for CNN

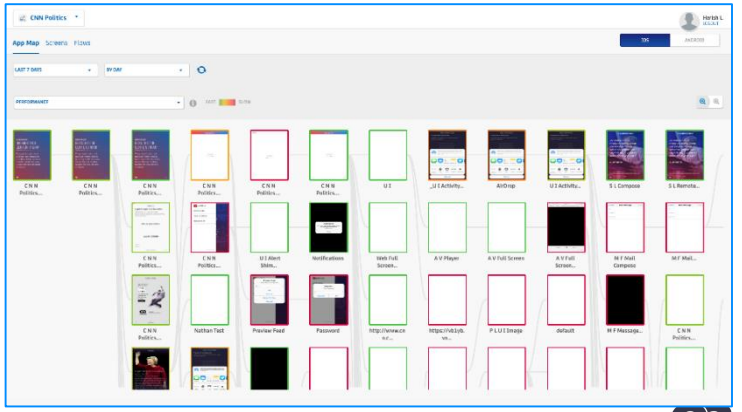
## Development Improvements

- Detailed session reporting
- Code-level crash analytics




## Performance Analytics

- Deep visibility into performance
- Visualizations of app issues
- HTTP Errors

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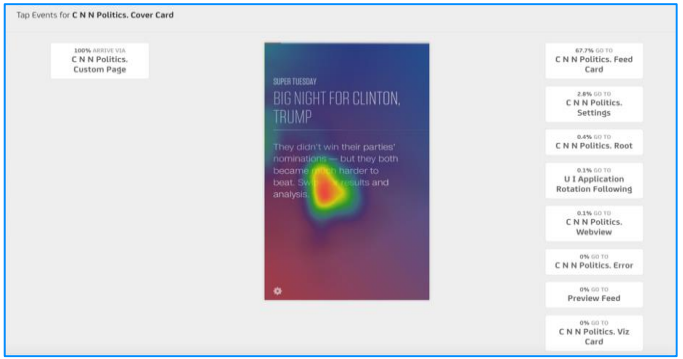
# How Analytics Improve App Experience for CNN

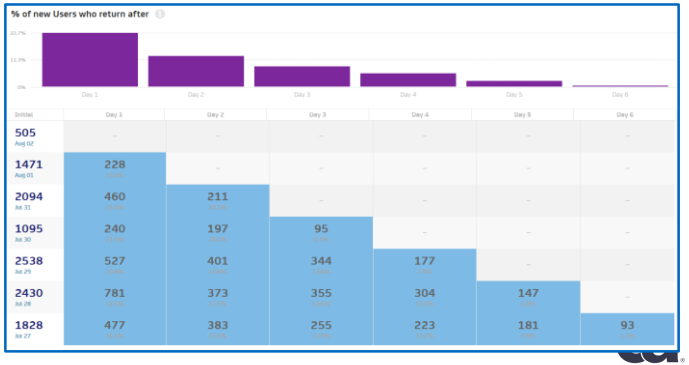
## Product Design Improvements

- Heat maps of app usage
- Top “tap events”
- Optimal user interfaces




## Measuring User Engagement

- User acquisition and retention
- Time spent in app
- Geographic heat maps

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# Three Key Lessons Learned for CNN

1. Upfront testing is ideal – but lacking that, go with your gut and iterate based on **consumer feedback and data insights**.
2. The sources of customer usage are many – store reviews, Omniture®, CA App Experience Analytics, etc.; have a **strategy to convert data insights** into clear product plans.
3. In truth, translating the data into actionable product decisions involves supposition. What to do? Analyze the product's performance – and your assumptions – and be **fearless and fast in making changes.**

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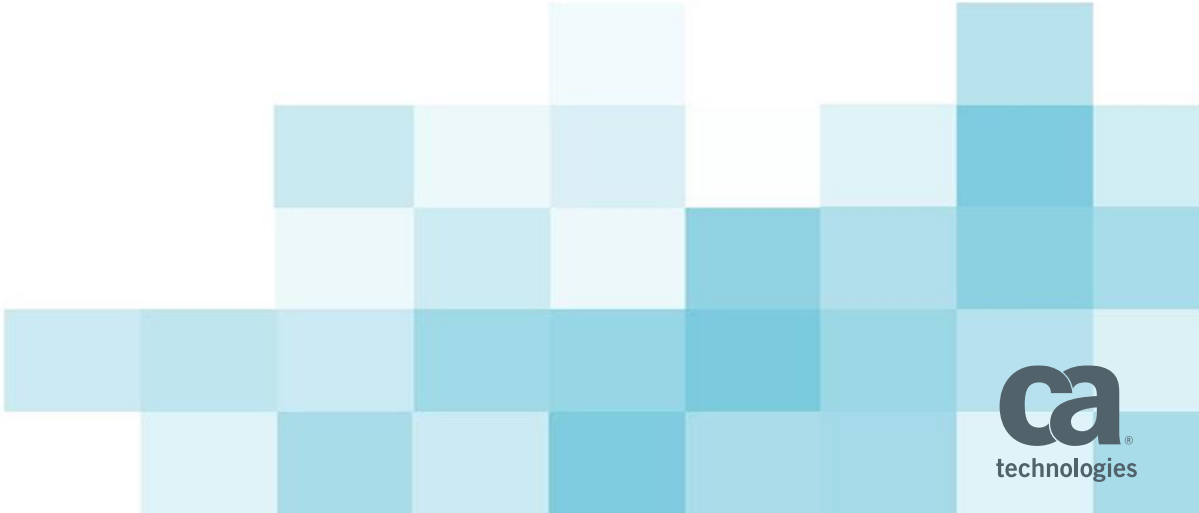
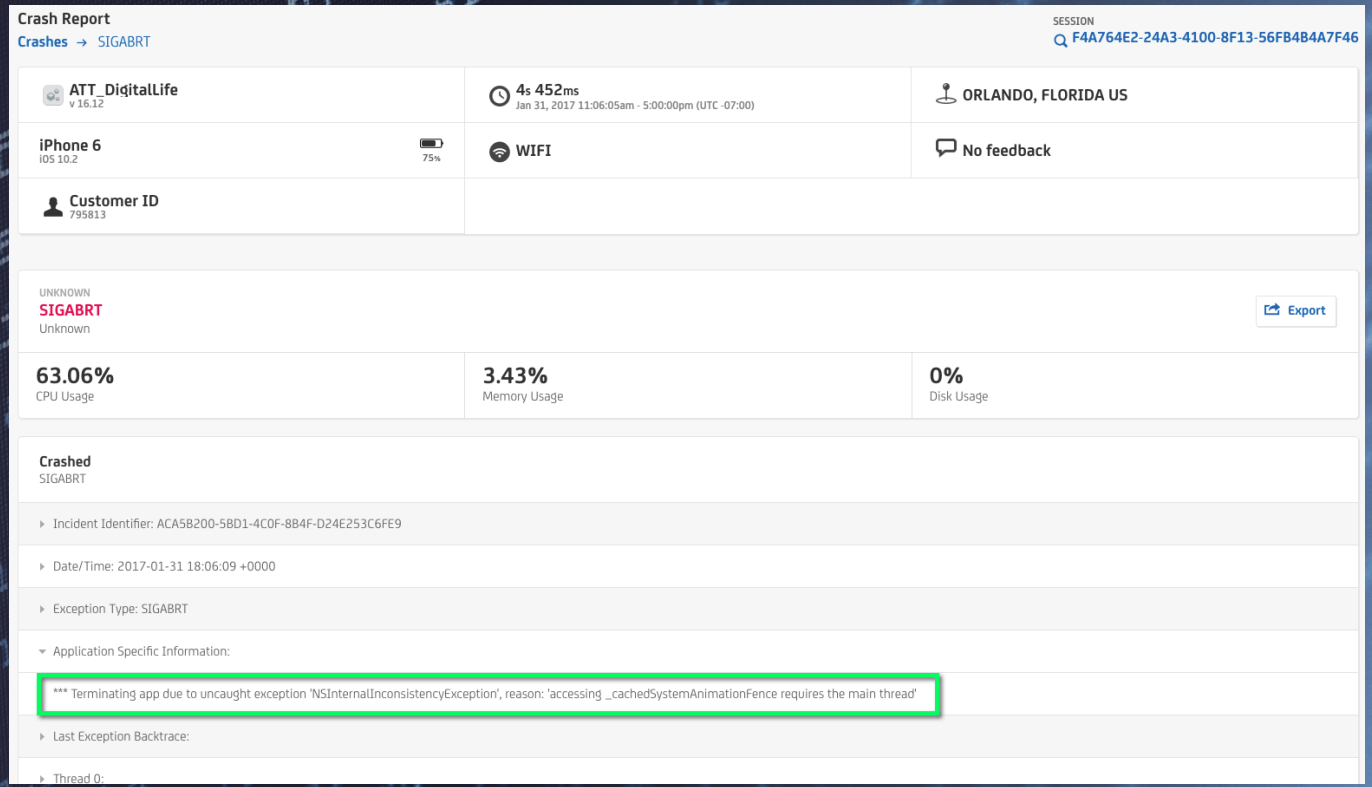
# Persona Deep Dives



# Design the Experience.

CODE





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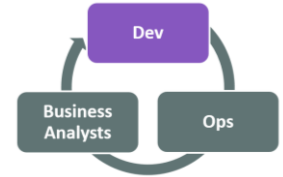
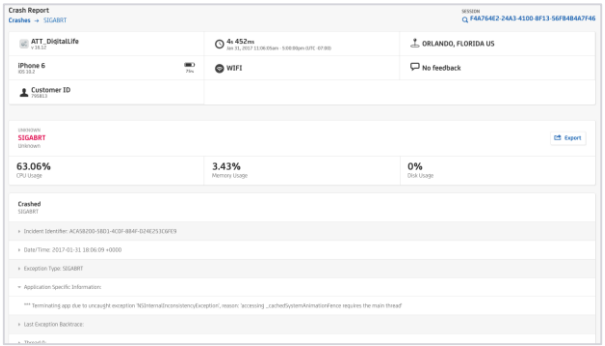
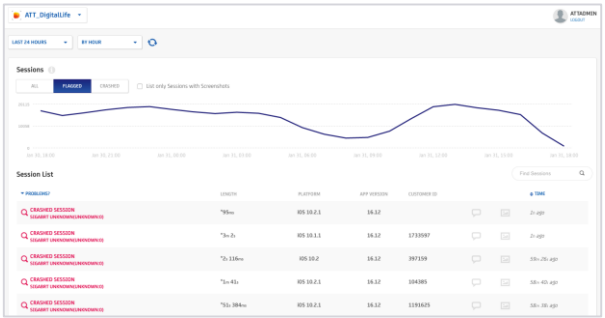
# Developer Analytics




For **Developers**, CA App Experience Analytics **captures app crashes** and **offers code-level visibility** into root causes. This visibility is **critical in providing best end-user experience.**




- Capture mobile app crashes and identify root causes
- Screen capture issues fix them faster, drive better UX
- Gain code-level visibility into issues with symbolic stack traces and detailed activity logs
- View video session playback of user interaction prior to a crash
- Prioritize issues by assessing impact on user experience and revenue
- Analyze errors and network behavior to identify issues in code or back-end servers
- Capture device usage metrics: CPU, memory, frame rate
- Tag a user, then understand how the app performed for that specific user (crash, latency)

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INFRASTRUCTURE

# Link the Outside In with the Inside Out Views

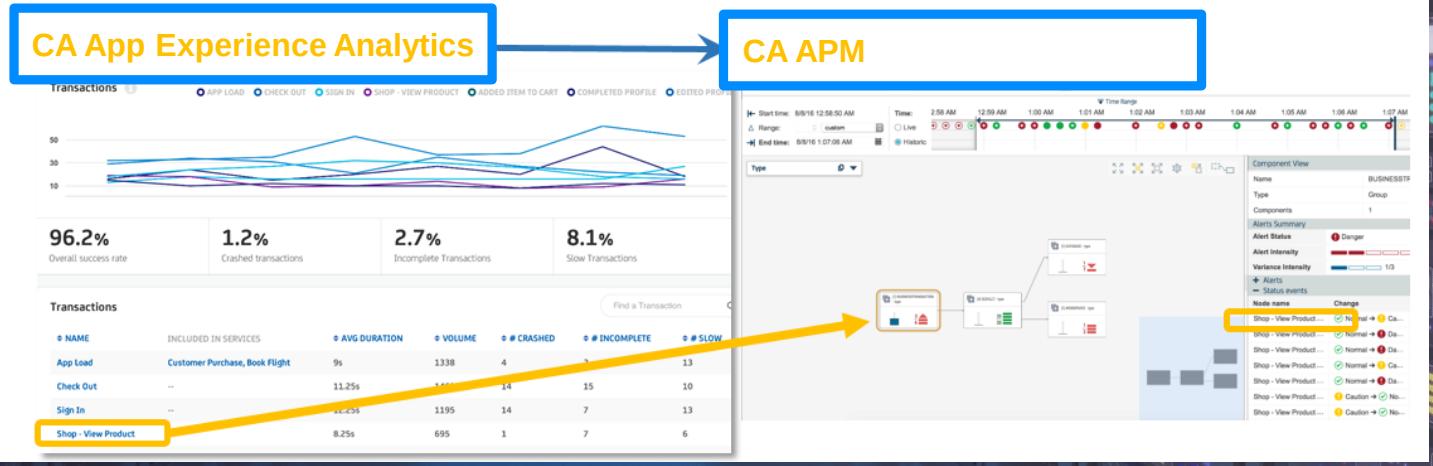
## What is it?

Slow business transactions cause poor user experience. CA App Experience Analytics *Outside In* perspective detects these and connects you to the CA APM monitored *Inside-Out* view.

## Why does it matter?

CA App Experience Analytics integrates the *Outside In* view with the CA APM monitored *Inside-Out* context to show inter-play of components with a perspective view to isolate performance conditions.

Reduced MTTR: CA App Experience Analytics users gain insights in-context to understand backend performance issues impacting end-user experience.





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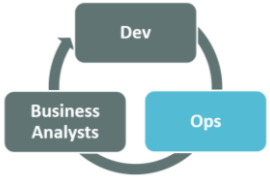
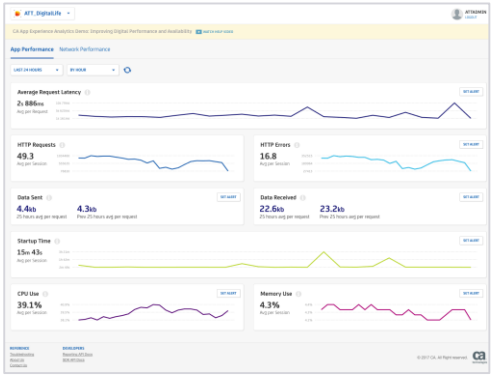
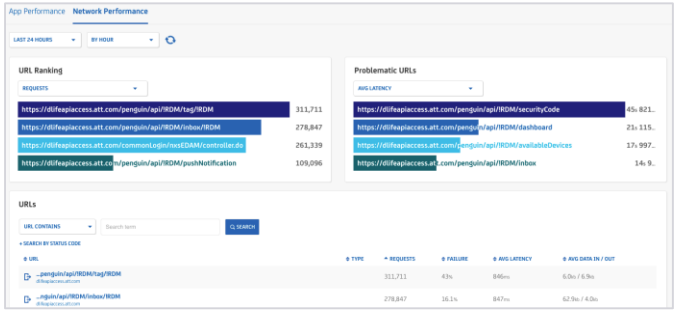
# Operations Analytics




For **Operations** team, CA App Experience Analytics **captures performance metrics** of the mobile app infrastructure. These **metrics help address issues** before they hurt UX.




- Segment app performance by version, carrier, geo, OS, device
- Get real-time alerts on threshold violations impacting SLAs, user experience, or revenue; prioritize alerts
- Gain visibility into backend services affecting the app performance
- Analyze performance of networks and locations to correlate with app performance
- Isolate and rule out domain, network, data center issues
- Identify mobile app hotspots: usage, performance, coverage, issues

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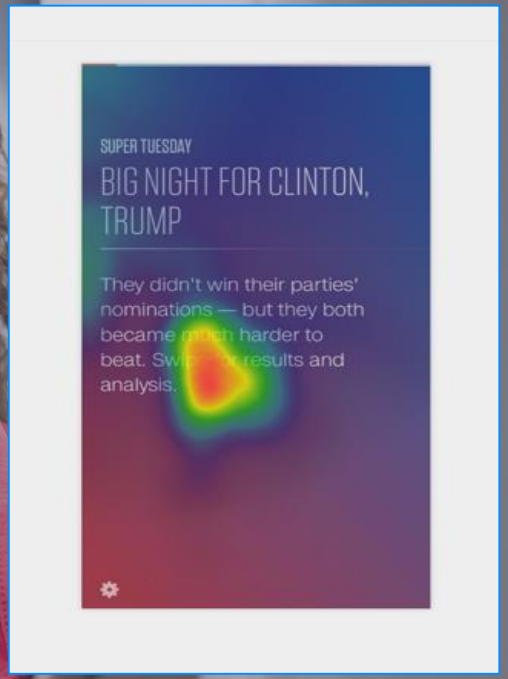
# DESIGN





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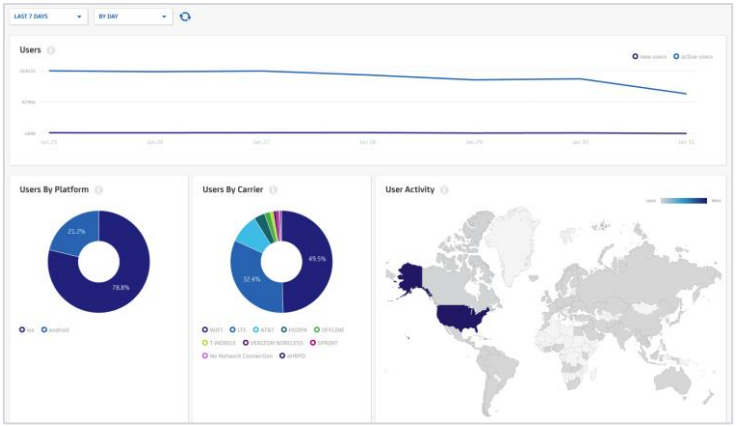
# Business Analytics

For **Business Analysts**, CA App Experience Analytics is an analytics solution that **captures usage and user experience metrics**. These metrics help **increase top-line revenue**.




- Gain visibility into performance of key business services
- Identify popular business flows in the app; capture user flow through your app
- Insight into mobile app user engagement, activity, and retention
- Segment & analyze usage data by app version, carrier/WiFi, location, platform, OS
- Track and report stickiness based on users' revisits
- Get data to help make better OpEx and CapEx decisions
- Tag a business event (e.g. Gold Customer, shopping cart > 100 items) and look at impact on the top line

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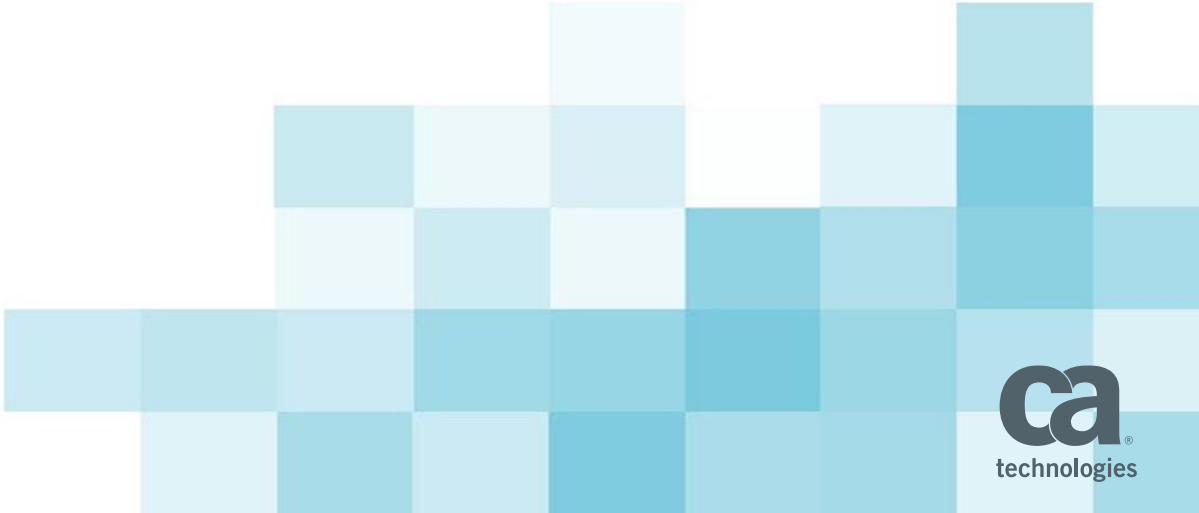
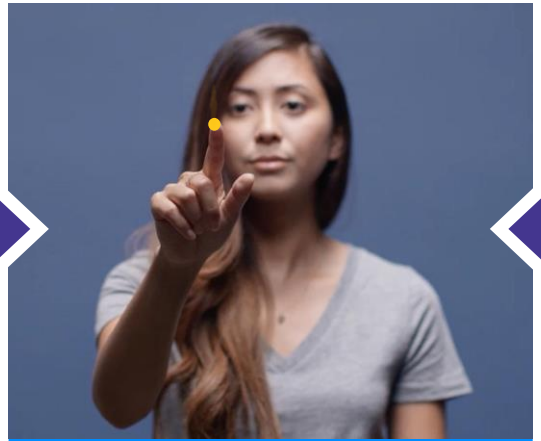
# Optional Slides



# CA Agile Operations Vision

## UNIFIED VIEW

via a common data-collection platform for app, infra, and edge



## USER EXPERIENCE

Is the measure of IT and business success

## ANALYTICS

to augment humans with data & machine intelligence

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# Align to the Customer Experience with Analytics

## OPERATIONAL PERFORMANCE
Inside-Out View

## USER BEHAVIOR & EXPERIENCE
Outside-In View

**Optimize**
customer journey

**Design**
for the experience

**Improve**
digital performance

## CA App Experience Analytics

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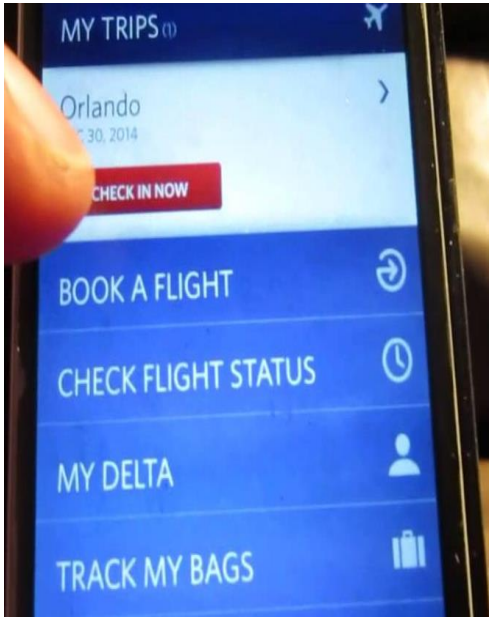
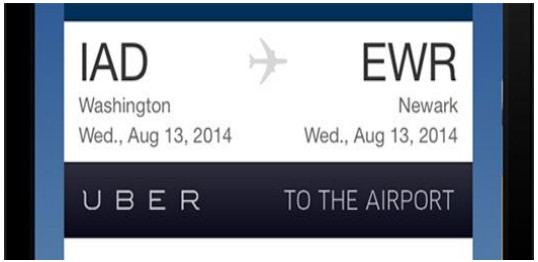
# The App Economy Transforms Customer Experiences



.....means MORE users, apps, devices and partners EVERY day

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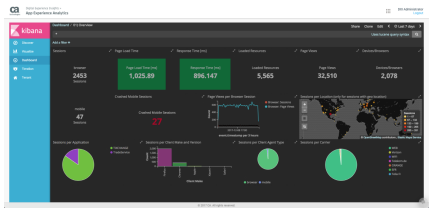
# CA App Experience Analytics Key Capabilities

**Data Studio & Blueprints**
Flexible Dynamic Dashboards



**Performance Analytics**

**User Experience Analytics**
across web, mobile, wearables

**SaaS & on premise**
end-to-end encryption, flexible offerings

**Mobile Analytics**

- Crash Analytics
- User Session Playback
- App Flows
- Heat Maps

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# CA App Experience Analytics

## "Optimizing your Digital Transformations One User Experience at a Time"

For Application Owners responsible for Digital Transformations, who need to deliver a five star customer experience across web, mobile and wearables, CA App Experience Analytics provides proactive real-time insights into real user behavior, buyer trends, log analytics and omnichannel performance.

Built on an open, flexible SaaS analytics foundation that uniquely combines user behavior with operational performance CA App Experience Analytics provides intuitive reports for a deeper understanding into your customers' overall digital experience. By optimizing your users' journey, you'll be better equipped to both retain and attract new customers resulting in an increase of revenue, improve user experience with 40% faster resolution times, and deliver innovations quickly by increasing development productivity by 15%.

Sources:
1- Forrester Research, the Total Economic Impact of APM, April 2015
2- CA ROI business value estimates

# Why CA App Experience Analytics?

## OPERATIONAL PERFORMANCE
Inside-Out View

## USER BEHAVIOR & EXPERIENCE
Outside-In View

**CA App Experience Analytics**

Forrester Research, the Total Economic Impact of APM, April 2015

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