### **APM und Agile Operations**

### **APM Roadmap**

Stig Skilbred, Sr. Presales Consultant

**December 10, 2015** 



# "Software is eating the world"

- Marc Andreeson

Wall Street Journal, WS Software is Eating the World, August 2011





# \$316B

Public cloud services market expected to grow to \$316 Billion by 2019



# welcome to the Application Economy



By 2017, mobile apps will be downloaded more than 268 billion times<sup>2</sup>







50%

By 2018, more than 50% of B2B collaboration will take place through Web APIs<sup>3</sup>

### How CA supports your digital transformation



### AGILE MANAGEMENT

Scalable, enterprise-class SaaS agile platform

Most experienced agile coaching and consulting staff in the industry







#### **DEVOPS**

Speed and quality across all stages of application lifecycle

Solutions that enable collaboration across both dev and ops

End-to-end security covering apps, data and APIs



Identity management based on analytics delivers a frictionless user experience



### CA solutions to support your digital transformation



### AGILE MANAGEMENT

Agile &
Transformation
Consulting

Project & Portfolio Management

Agile Application Lifecycle Management





#### **DEVOPS**

API Management

Continuous Delivery

Application Performance Management

Unified Infrastructure Management

Identity & Access Management



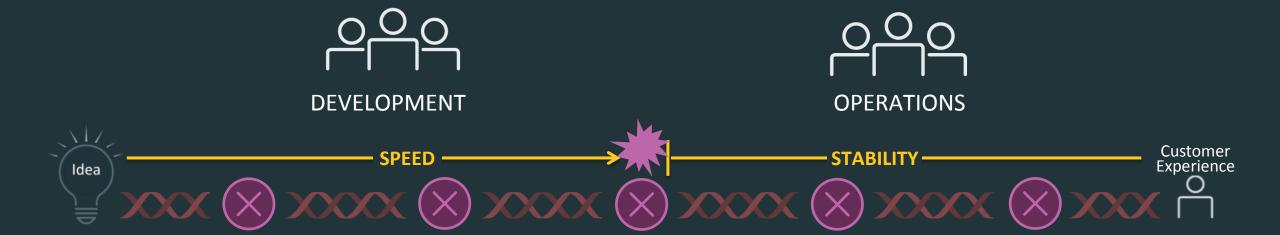
**OPERATE** 

API Management Payment Security



DEPLOY

### Why do we Struggle to Meet Expectations?



Agile, lean

**Bring features/products to market faster** 

Cloud, open source, infrastructure-as-code



ITIL, process, SLAs

**Ensure availability; MTBF** 

Legacy and proprietary apps/infrastructure



### DevOps Transforms People, Process AND Technology







Communication and shared metrics and goals – driving business value

Collaboration and continuous feedback

Technology toolset enabling DevOps



### Changing Imperatives for IT Operations

#### **Assurance**

Reliability, avoid risk

System Performance

Incremental

In-house, Static

Internal processes, transactional

Long (months)



**MINDSET** 

**FOCUS** 

**METHOD** 

**INFRASTRUCTURE** 

DNA

PACE

### **Agility**

Innovate, adapt to change

Revenue, brand, user experience

**Iterative** 

Elastic, outsourced, dynamic

Customer-centric, contextual

Short (days/weeks)







#### **AGILE OPERATIONS**



End-to-End Transaction Visibility

Follow transactions across all apps & infrastructure

Quickly identify what changed, where and when

Continually optimize user experience

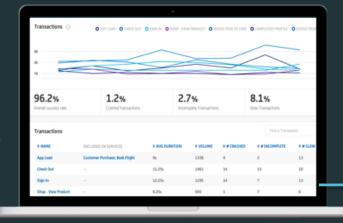
Systems of Engagement

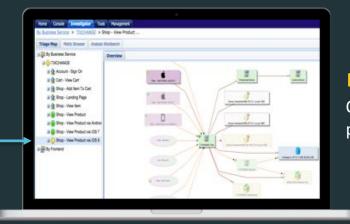


#### **MOBILE TO MAINFRAME**

#### **DEEP ANALYTICS**

Visibility in a customer context – crashes, usage, speed...





#### **FULL TRACEABILITY**

Quickly pinpoint problem transactions

#### QUICKLY IDENTIFY UNDERLYLING CAUSES FOR FAILED TRANSACTIONS – IN INFRASTRUCTURE OR APPS

Clear visibility spanning complex business processes



### The Light Bulb Moment – Monitoring in Pre-production



"Getting that insight in production is fantastic, but what is perhaps more brilliant is getting that insight in the development - and - test environment... We have been able to show that by putting APM into development and test — making it part of the process in those areas — you can stop defects from getting into production".

Prevented 10 high-severity incidents, saving more than a dozen hours of investigations.

Another partner improved performance by 85%.

http://rewrite.ca.com/us/articles/management-cloud/customer-obsessed.aspx



### In the App Economy, Applications are Architected Differently

#### Monolithic

#### Microservices

Tightly-coupled, dependent, waterfall, change intolerant

Agile, loosely-coupled, independent, continuous delivery









DevOps: Getting Cake Delivered



Developer or Development?







### DevOps Journey

### **Direct**

Brilliant Color Build your business

### Manage

**Shades of Grey** 

Improve performance

### React

Black & White

Determine availability

DevOps Maturity Model



App-Flow Analytics
User-Frustration Index
Business Insights Reporting
User-Experience Collaboration

Dashboards
Assisted Triage
Application Maps
App-Flow Screens
Performance Heat Map
Timelines: Impact of Change

Alerts
Crash Analytics
Transaction Traces
Agent Metric Feeds
Resource Utilization

Hour system

#### **User Experience Design (UXD):**

The process of enhancing user satisfaction by improving the usability, accessibility, and pleasure provided in the interaction between the user and the brand.

### Manage

React

DevOps Maturity Model

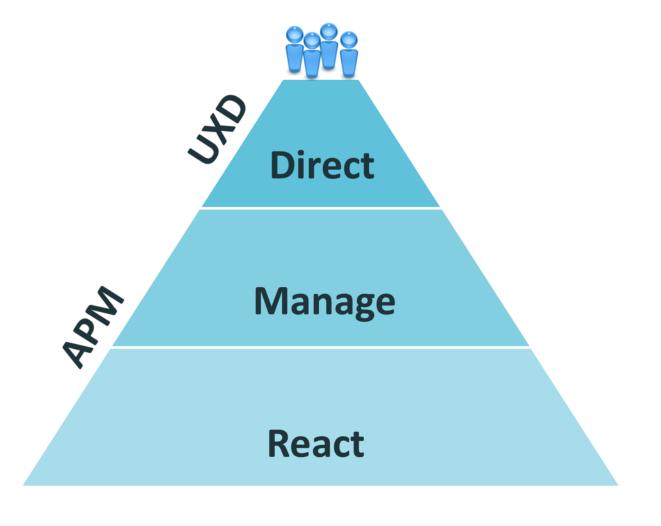
Arion borron

tour brand

Your experts

Your system

### Building Roadmaps in the App Economy: Durable Problems



#### **UXD Portfolio**

User-Experience Analytics

**Proactive Customer Support** 

Triage for App Owners

**Business Insights** 

**User-Frustration Index** 

#### **APM Portfolio**

**Assisted Triage** 

Zero-Config Agent

Impact of Change

Mean Time to Resolution (MTTR) < 0

Easy Proactive Intelligent Collaborative



Moving from DESCRIPTIVE

to PRESCRIPTIVE



### Protecting Your Experts in the App Economy

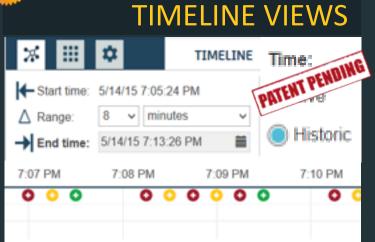


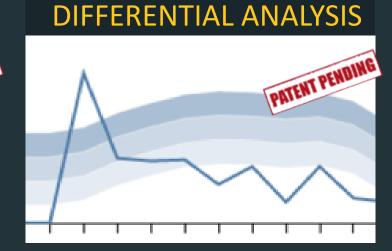


#### CA APM 10

Delight your end user, protect your experts







Shared Expertise
means
Continual Optimization

Faster Resolution drives
Improved Uptime

Higher Efficiency reduces

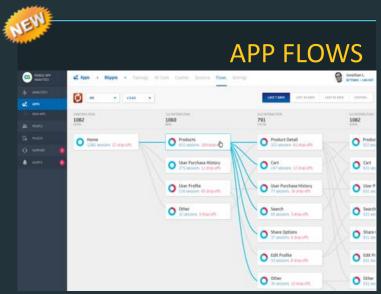
Ownership Costs

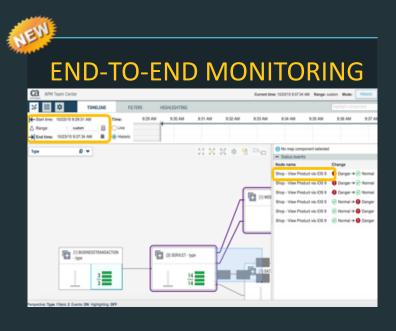


#### **CA MAA 15.4**

#### Where visibility meets mobility







Visualization
means
Quicker Insight

Behavior Analysis

drives

App Improvements

Deep Visibility
reduces
Mean-Time-To-Repair



### Marquee Features Delivered

**Delivery Cadence Quickens** 



CA APM 9.7 – December 2014

- Smart Instrumentation (SI) –
   Automatic Evidence Collection
- End-to-end Mobile-Transaction Monitoring
- New PHP agent
- Enhanced Real-time Business-Transaction Metrics
- Java 8 Support
- Modern integration SDK (EPAgent RESTful API)



CA APM 10.0 – June 2015

- All-new UI in APM Team Center with Custom Perspectives
- New Timeline View
- Analytics: Differential Analysis
- All-new Browser Agent
- APM Command Center 1.1:
   Agent-Management API's
- HTTP Correlation & REST Support
- Smart Instrumentation:Automatic Entry-Point Detection



CA APM 10.1 – October 2015

- New Node.js Agent
- Team Center API's for customattribute decoration
- Team Center uses traces to create map relationships
- Domain changes require no EM restart
- ACC: Remote Controller Upgrades
- Maintenance Updates



### New Platform Support

#### **Supported with 9.7 (December 2014)**

- IBM WebSphere Portal 8.5
- JBoss 6.4, 7
- Agent support for Oracle Java 8, Open JDK
- SQL Agent support for SQL Server 2014 database
- Agent support for Oracle 12c DB on Z/OS 2.1.x
- Browser support for WebView and CEM
  - IE 10, Firefox 28, 29, Chrome

#### Supported with 10.0 (June 2015)

- Postgres DB on Solaris 11
- Tomcat 8
- IBM WebSphere App Server 8.5.5
- Tibco EMS 8.1, 8.2
- Axis 2 1.6
- Axis CXF 3.0
- G1 Garbage Collection
- Siteminder Manager 12.0.4 on RHEL 6.6

- EM on RHEL 7, SLES 12, OEL 7
- BRTM Agent Support
  - JQuery 2.0
  - Adobe CQ 5.x
  - IE (9,10,11), Firefox (v3x), Chrome (v3x), Safari (IOS 7.x, 8.x)
- Generic HTTP Correlation
  - Apache HTTP Client (3.x, 4.0 4.3)
  - JDK's built-in URL Connection (Java 6, Java 7, Java 8)
  - Spring HTTP Client (3.x and 4.x)
- Browser support for WebView and CEM
  - IE 11, Firefox 34, Chrome 38
- Workstation on Java 8
- IBM BPM 8.5.6



### **New Platform Support**

#### **Supported with 10.1 (October 2015)**

- APMDB on Oracle 12c
- EM on Windows 10, OEL 7
- TIM on RHEL 6.6
- Jboss 9 / Wildfly

#### **Supported Fieldpacks**

- PowerPack for WebSphere Portal
  - Updated for "new mode"
- SQL agent with parameters
- Oracle SOA-BPEL-OSB 12c
- WebLogic Communication Tracing
- Tibco BW 5.12
- IBM IIB 10

(Contact CA Support for software access)

**NOTE**: Additional field packs are being certified regularly for official support; contact your presales or services consultant for more details.



### CA APM Open-Source Developer Community

Extending the Reach of CA APM

**Come & Contribute** 

#### **Updated API**

EPAgent RESTful
API now makes it
easier (and more
efficient) than ever
to integrate
outside data
sources into CA
APM.

#### Hackathon

CA recently held an event to foster innovation and collaboration. 18 new ideas were conceived and prototyped for fieldpacks.

#### Teamwork

Learn from those who have done it before. Code examples, tips & tricks, recipes and more are all available.

#### Join Today!

http://bit.ly/caapm\_dev/





### CA APM Beta Community

Come Peek Inside the APM Factory

Collaborate & Influence the Evolution of APM!

#### **Details**

Gain access to more-detailed information about planned and under-consideration features.

#### Feedback

Share your voice in design reviews and solution concepts long before the traditional betatesting phase.

#### Access

Touch the software and features while the paint is still wet and updates can be made.

### Join Today!

http://bit.ly/ apmbeta instructions



Easy. Proactive. Intelligent. Collaborative.

**Driving Toward** 

E.P.I.C. APM

The Key to Stimulate User Loyalty and Differentiate Your Business in the App Economy

