



DevOps Intelligence

Deriving Value Rapidly in Agile Sprints with Real-time DevOps Analytics

Bryan McCauley, Yann Charneau, Mark Difilippo | Accenture

Sept 2017 | Washington, DC

Forward-Looking Statements

During the course of this presentation, we may make forward-looking statements regarding future events or the expected performance of the company. We caution you that such statements reflect our current expectations and estimates based on factors currently known to us and that actual events or results could differ materially. For important factors that may cause actual results to differ from those contained in our forward-looking statements, please review our filings with the SEC.

The forward-looking statements made in this presentation are being made as of the time and date of its live presentation. If reviewed after its live presentation, this presentation may not contain current or accurate information. We do not assume any obligation to update any forward looking statements we may make. In addition, any information about our roadmap outlines our general product direction and is subject to change at any time without notice. It is for informational purposes only and shall not be incorporated into any contract or other commitment. Splunk undertakes no obligation either to develop the features or functionality described or to include any such feature or functionality in a future release.

Splunk, Splunk>, Listen to Your Data, The Engine for Machine Data, Splunk Cloud, Splunk Light and SPL are trademarks and registered trademarks of Splunk Inc. in the United States and other countries. All other brand names, product names, or trademarks belong to their respective owners. © 2017 Splunk Inc. All rights reserved.

Welcome!



Bryan McCauley



Yann Charneau



Mark DiFilippo



- ▶ World largest independent technology service provider
- ▶ 94 of Global Fortune 100
- ▶ ¾ of Global Fortune 500
- ▶ 410,000 employees
- ▶ #1 Partner for SAP, SFDC, Oracle, MSFT, HP

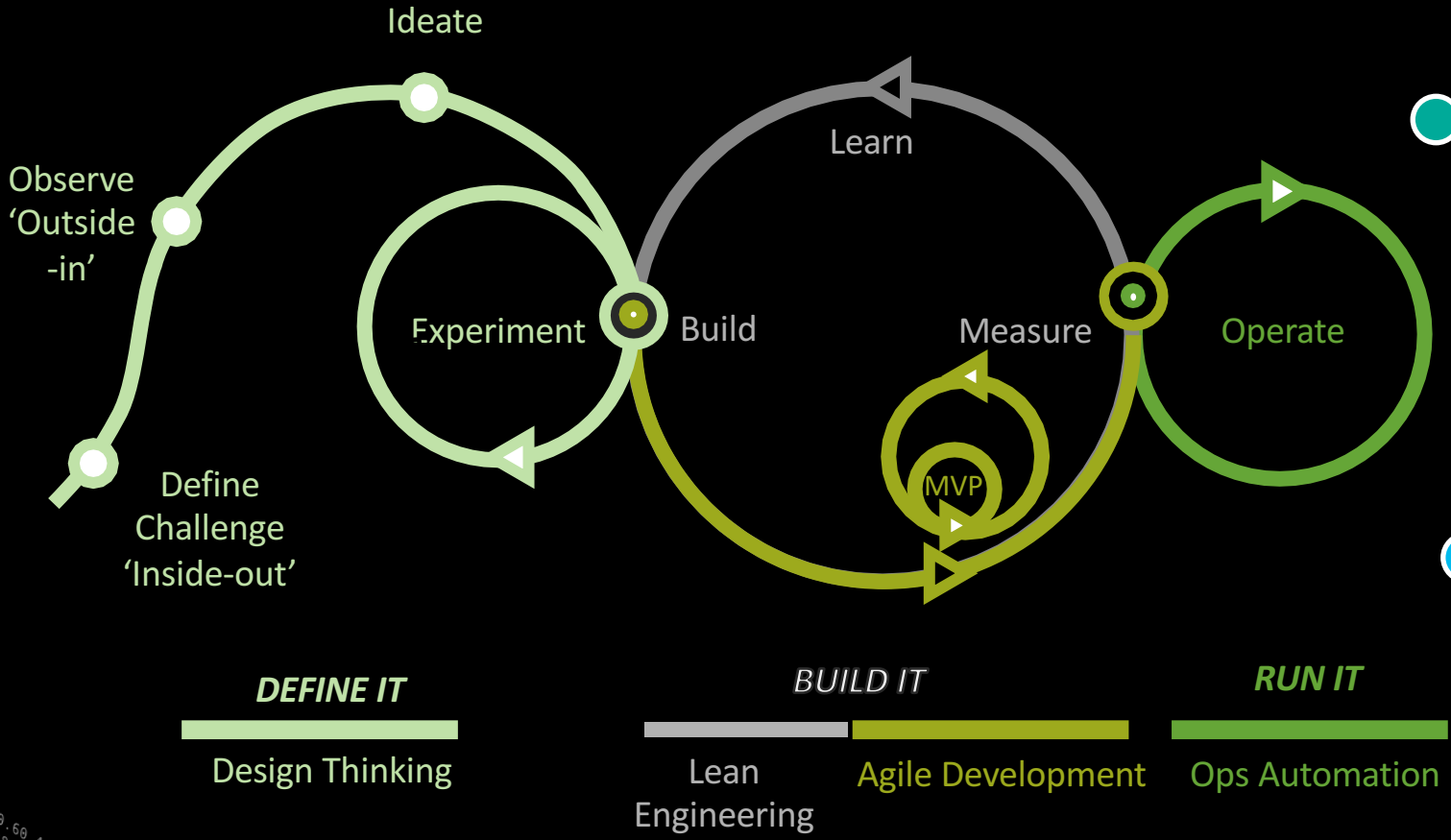
```

130.60.4 - - [07/Jan 18:10:57:123] "GET /category.screen?category_id=GIFTS&JSESSIONID=SD15L9FF1ADFF3 HTTP/1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemId=EST-6&product_id=FL-SW-01"
128.241.220.82 - - [07/Jan 18:10:57:123] "GET /product.screen?product_id=FL-DSH-01&JSESSIONID=SD55L7FF6ADFF9 HTTP/1.1" 404 3322 "http://buttercup-shopping.com/cart.do?action=purchase&itemId=EST-20&product_id=K9-CU-01"
317.27.160.0 - - [07/Jan 18:10:56:150] "GET /oldlink?item_id=EST-26&JSESSIONID=SD55L9FF1ADFF3 HTTP/1.1" 200 1316 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=SD10SL9FF2ADFF9 HTTP/1.1" 200 2423 "http://buttercup-shopping.com/cart.do?action=remove&itemId=EST-1"
130.60.4 - - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=SD15L9FF1ADFF3 HTTP/1.1" 404 720 "http://buttercup-shopping.com/category.screen?category_id=GIFTS"
128.241.220.82 - - [07/Jan 18:10:57:123] "GET /product.screen?product_id=FL-DSH-01&JSESSIONID=SD55L7FF6ADFF9 HTTP/1.1" 404 3322 "http://buttercup-shopping.com/cart.do?action=purchase&itemId=EST-20&product_id=K9-CU-01"
317.27.160.0 - - [07/Jan 18:10:56:150] "GET /oldlink?item_id=EST-26&JSESSIONID=SD55L9FF1ADFF3 HTTP/1.1" 200 1316 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=SD10SL9FF2ADFF9 HTTP/1.1" 200 2423 "http://buttercup-shopping.com/cart.do?action=remove&itemId=EST-1"
130.60.4 - - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=SD15L9FF1ADFF3 HTTP/1.1" 404 720 "http://buttercup-shopping.com/category.screen?category_id=GIFTS"
128.241.220.82 - - [07/Jan 18:10:57:123] "GET /product.screen?product_id=FL-DSH-01&JSESSIONID=SD55L7FF6ADFF9 HTTP/1.1" 404 3322 "http://buttercup-shopping.com/cart.do?action=purchase&itemId=EST-20&product_id=K9-CU-01"
317.27.160.0 - - [07/Jan 18:10:56:150] "GET /oldlink?item_id=EST-26&JSESSIONID=SD55L9FF1ADFF3 HTTP/1.1" 200 1316 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=SD10SL9FF2ADFF9 HTTP/1.1" 200 2423 "http://buttercup-shopping.com/cart.do?action=remove&itemId=EST-1"

```


Promise of Agile

DevOps enables IT to deliver at the pace the business demands...



Leverage technology and automation optimizes development and operations

Highly flexible and adaptable process allows for dynamic change

Increased predictability and frequency of code releases

```

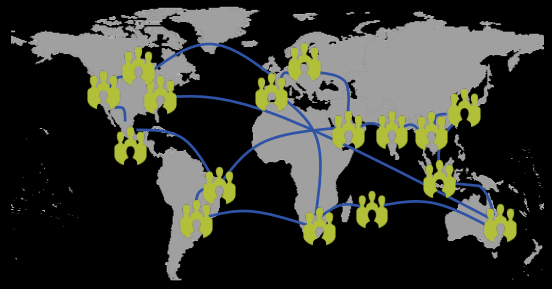
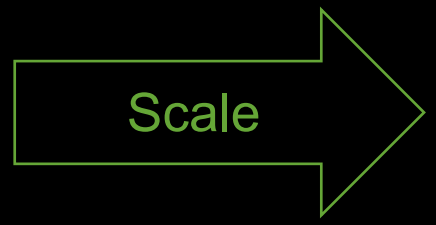
130.60.4 - - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=SD5L9FF1ADFF3 HTTP/1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemId=EST-6&product_id=FL-SW-01" "Opera/9.80...
128.241.220.82 - - [07/Jan 18:10:57:123] "GET /product.screen?product_id=FL-DSH-01&JSESSIONID=SD5L7FF6ADFF9 HTTP/1.1" 404 3322 "http://buttercup-shopping.com/category.screen?category_id=GIFTS" "Mozilla/4.0...
317.27.160.0 - - [07/Jan 18:10:56:156] "GET /product.screen?product_id=FL-DSH-01&JSESSIONID=SD5L9FF1ADFF3 HTTP/1.1" 200 1316 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=SD5L9FF1ADFF3 HTTP/1.1" 200 2423 "http://buttercup-shopping.com/...
"GET /category.screen?category_id=FLOWERS&JSESSIONID=SD5L9FF1ADFF3 HTTP/1.1" 200 3865 "http://buttercup-shopping.com/product.do?action=detail&itemId=EST-16&product_id=RP-LI-02" "Opera/9.80...
"GET /cart.do?action=remove&itemId=EST-18&product_id=AV-CB-01&JSESSIONID=SD5L9FF1ADFF3 HTTP/1.1" 200 189 "GET /category.screen?category_id=FLOWERS&JSESSIONID=SD5L9FF1ADFF3 HTTP/1.1" 200 3865 "http://buttercup-shopping.com/oldlink?item_id=EST-26&JSESSIONID=SD5L9FF1ADFF3 HTTP/1.1" 200 189 "GET /category.screen?category_id=FLOWERS&JSESSIONID=SD5L9FF1ADFF3 HTTP/1.1" 200 3865 "http://buttercup-shopping.com/product.do?action=detail&itemId=EST-16&product_id=RP-LI-02" "Opera/9.80...

```

...but new models, processes, and technologies pose **new challenges**



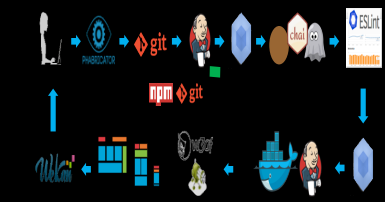
Small Teams



Distributed Operations



Limited Tools



Broad Ecosystem



Operational Complexity

Large development teams and legacy processes



Poor Collaboration

Development happening in silos without cross-seeding



Lack of Visibility

Numerous bespoke technologies silo's data required for process intelligence



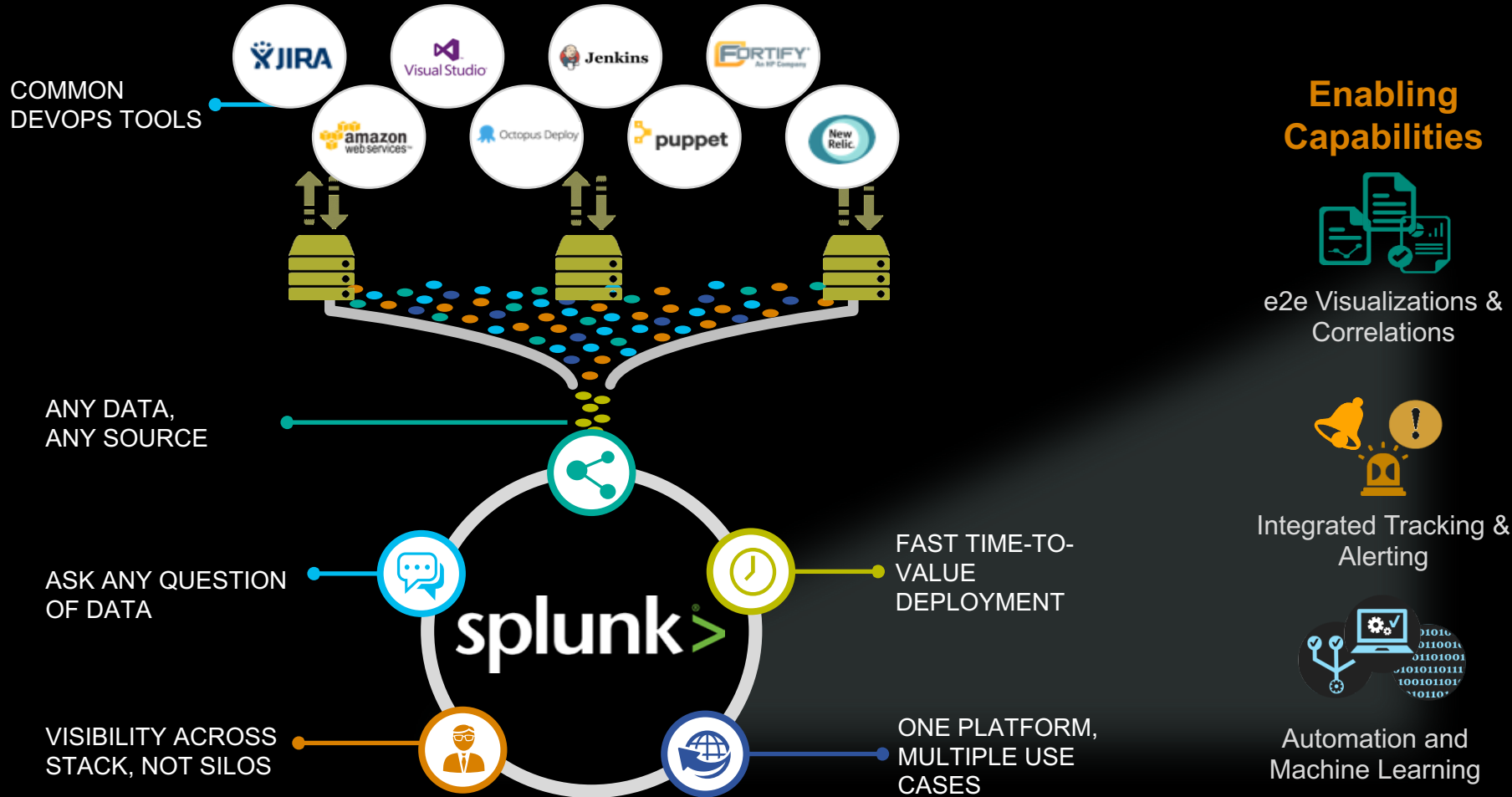
Lack of Control & Flexibility

Poor control and lack of standardised delivery metrics



Solution: Intelligence From Splunk

Build an **E2E analytics capability** across the DevOps ecosystem to improve development velocity, quality, stability and performance



Guiding Principle 1: Ask the Right Questions

Measuring the effectiveness of an IT organization is multi-dimensional and often spans organizational entities

*Non-exhaustive

Business Outcomes

Strategic Drivers

Measurements

Levers*

• Improved Quality

• Faster Speed-to-Market

• Reduced Opex Spend

• Improved Customer Satisfaction

• Improved Employee Experience

Availability

Agility

Uptime

Resolution Time

Feature Release Time

Process Cycle Efficiency

Fault Tolerant Design

Graceful Degradation

Zero Downtime Deployments

System Performance

Service Monitoring

Early Detection

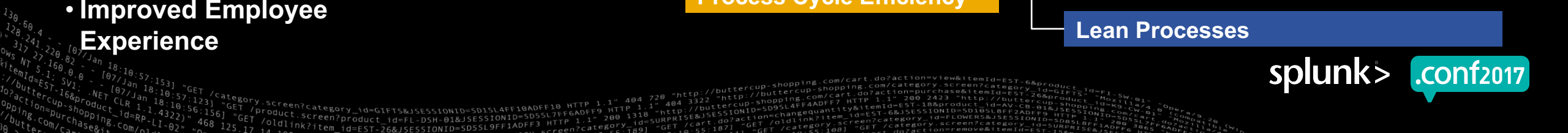
Self Healing

Continuous Integration and Delivery

Code Maintainability



















Test Automation

Lean Processes



Guiding Principle 2: Stay Flexible

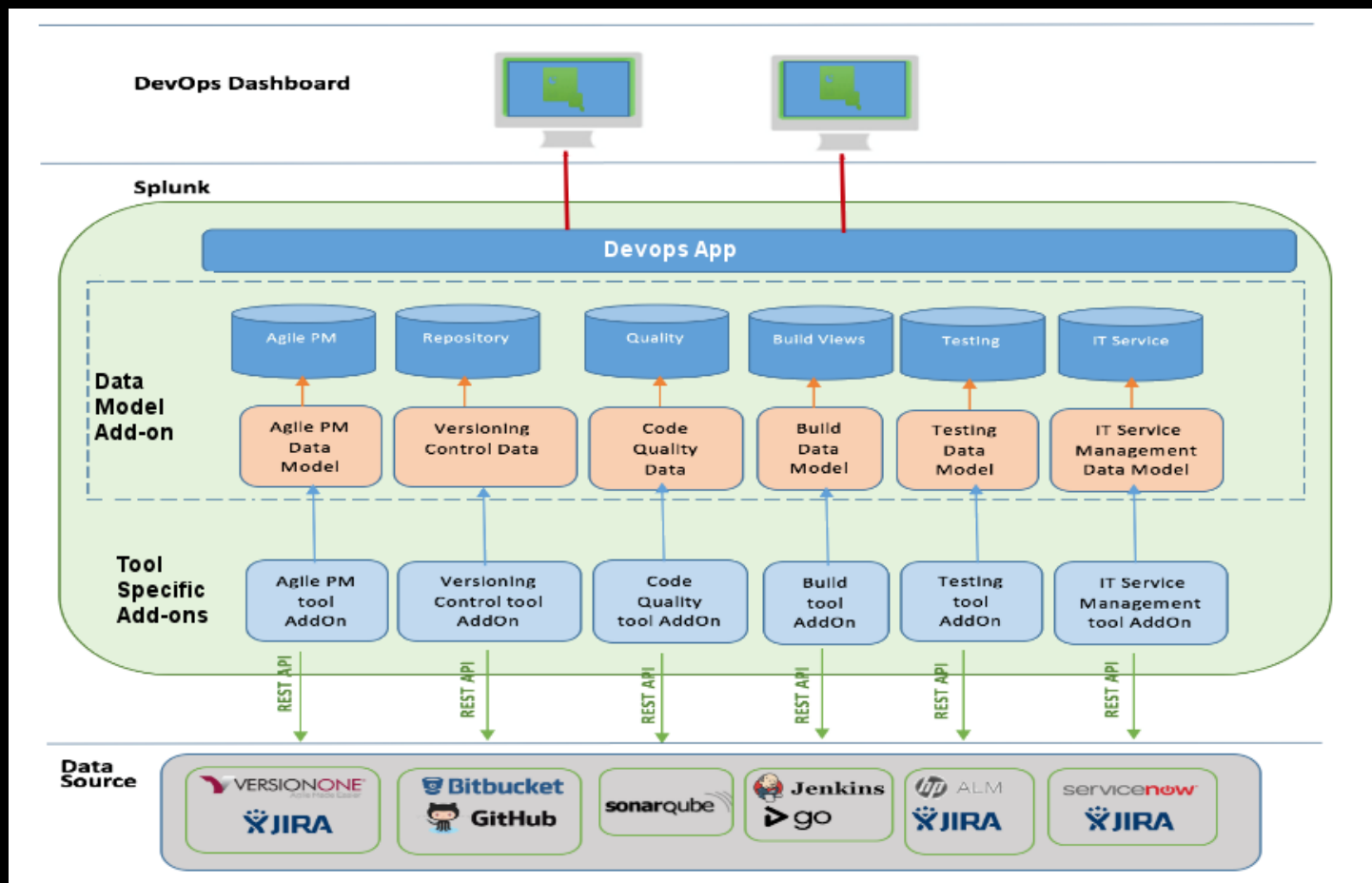
An effective solution needs to accommodate an ever changing systems landscape

DevOps Analytics Supported Tools	
Planning & Scoping	<div style="display: flex; justify-content: space-around; align-items: center;">    </div> <ul style="list-style-type: none"> Agile-based issue management Issue types: Epic, Story, Task, Bug Agile project management with Kanban & Scrum
Version & Build Deployment	<div style="display: flex; justify-content: space-around; align-items: center;">        </div> <ul style="list-style-type: none"> Source control NewsSource = Gitorious based repository Wiki functionality Continuous Integration Continuous Delivery App build pipelines Automated test execution Reporting & transparency
Quality Management, Automation	<div style="display: flex; justify-content: space-around; align-items: center;">      </div> <ul style="list-style-type: none"> Code Quality Line Converge Code Complexity Code Vulnerabilities Automation Test Case Executions Regression Test Case Executions
Service Management	<div style="display: flex; justify-content: space-around; align-items: center;">    </div> <ul style="list-style-type: none"> Incident Management Request Management Operation Support

Build or Borrow?

Guiding Principle 3: Stable and Repeatable

While ecosystem components vary from client to client, the process is common



What is the right data structure?

Continuous Improvement!

Important to continue to harvest and develop new innovations

Media / Entertainment
Conglomerate



Global Telecommunications
Conglomerate



Multinational Mining
Corporation



- ▶ Real-time vs. Manual Dashboards
- ▶ Insights between Dev vs. Test groups
- ▶ Improved budgeting granularity

- ▶ Customized Add-ons
- ▶ Global view
- ▶ Promote agile methodology adoption

- ▶ Wrapped machine learning
- ▶ Chatbot – status inquiries



Q&A

Please Stop By Our Booth or Contact Us!
Bryan.McCauley@Accenture.com

Thank You

Don't forget to **rate this session** in the
.conf2017 mobile app

splunk> .conf2017