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How We Deliver First Class Digital and Services to Our Customers Thanks to Splunk

...from our own true story on software journey

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Orange Applications for Business, a Business Unit of Orange Business Services

Orange Business Services

3,000+
multinational customers

21,000+
employees dedicated to serving enterprises

2,000,000+
professional, small and medium-sized enterprises and business customers in France

6.4
billion euros in revenue 2015



A global presence

Our Group provides services for residential customers in 28 countries and for business customers in 220 countries and territories.

Orange Applications for Business

Software & Services company

3 core pillars
customer Experience
data
IoT
System Integration

2,500 +
employees

1,000+
managed applications in production

2,000
software people

400 +
simultaneous projects



Speaker Biopic

- ▶ CTO of Orange Applications for Business
- ▶ Tech and digital evangelist with 20+ years in software, services and innovation
- ▶ Core missions:
 - Corporate technical strategy (Cloud, mobile, data, bots, software production pipeline)
 - Software delivery and production (Tools, services and infrastructures)
 - Strategic partnerships management and start-up scouting
 - Product delivery industrialization
- ▶ I have a strategic observation post on the evolutions, changes, practices and tools of the Digital, Cloud and Software cultures
- ▶ I love to share my expertise and experiences with customers, partners, analysts and journalist in keynotes, sessions or seminars



Moving in a Software World

How we deliver first class digital and services to our customers thanks to Splunk

Everything Is or Becomes Software

Moving in a Software World

- ▶ Cloud, Social Networks, Mobile, Analytics, ... the common denominator is the software
- ▶ The level of demand and expectation of users is increasing constantly, in all industries
- ▶ Software provides a continuous relationship with the user or extend the life of products and goods

Software has become a critical asset to master and produce

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130.60.4 - - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=5D15LAF10ADFF10 HTTP 1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemId=EST-6&product_id=FI-SW-01"
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The Daft Punk Syndrome

**“ Better,
Cheaper,
Stronger,
Faster ”**

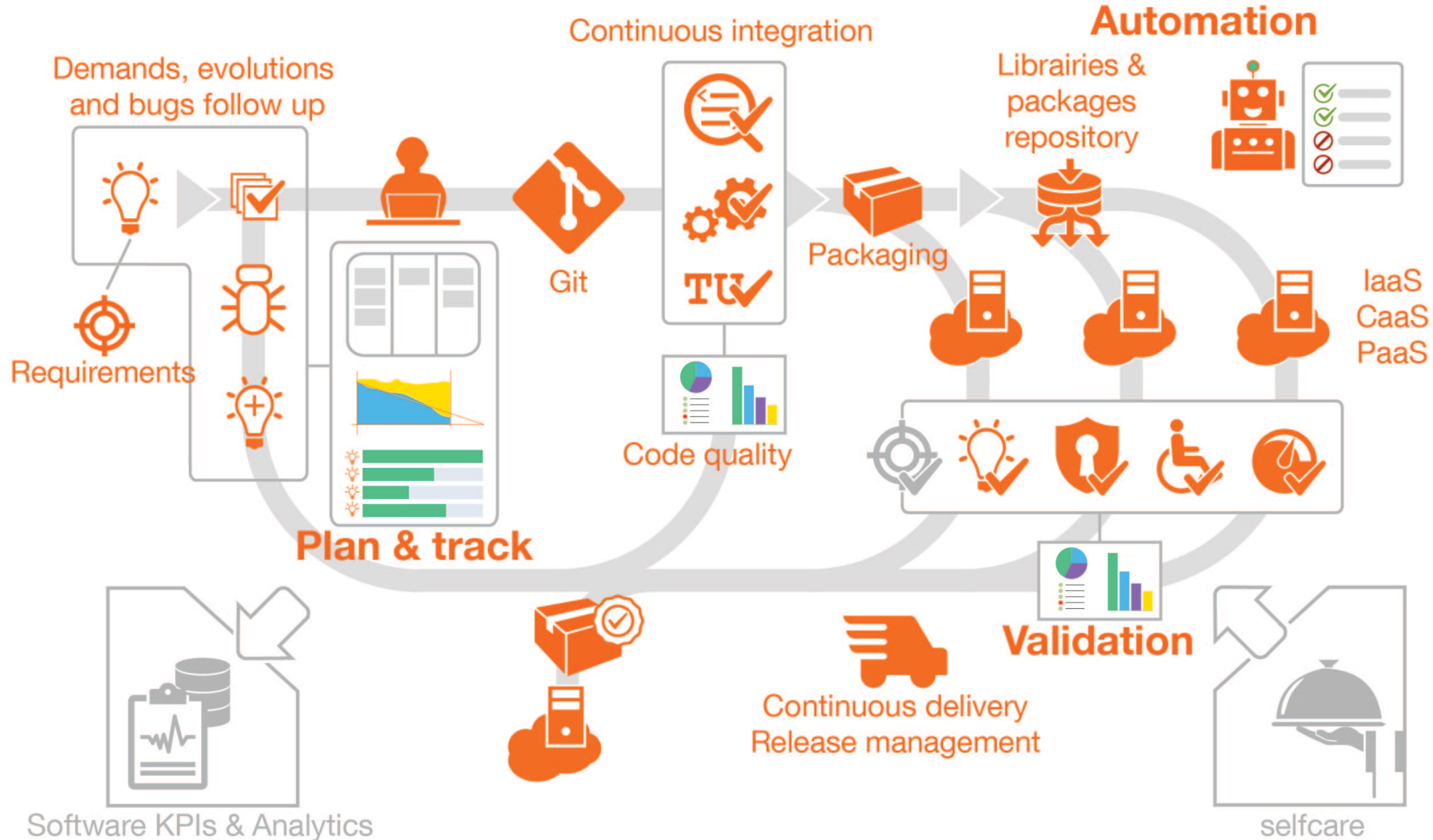
The true rythm of
software development in
a digitalized world

Act As a Software Manufacturer

How we deliver first class digital and services to our customers thanks to Splunk

Application Lifecycle Management...

A Continuum from Ideas to Operations



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130.60.4 - - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=SD5L9FFIADFF3 HTTP 1.1" 200 3322 "http://buttercup-shopping.com/cart.do?action=view&itemId=EST-6&product_id=FI-5W-03"
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Two Tracks of Software Pipeline Tooling

Open Source ALM

Atlassian
JIRA

git

 **Jenkins**

squash
TM



Microsoft ALM



Team Foundation Server

sonarqube

 **JFrog Artifactory**

130.60.4 - - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=5D1SLAFF10ADFF10 HTTP 1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemId=EST-6&product_id=FI-SW-03" "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_11_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/50.0.2688.130 Safari/537.36"
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Corporate Stakes

Tools Deployment in every Delivery Team

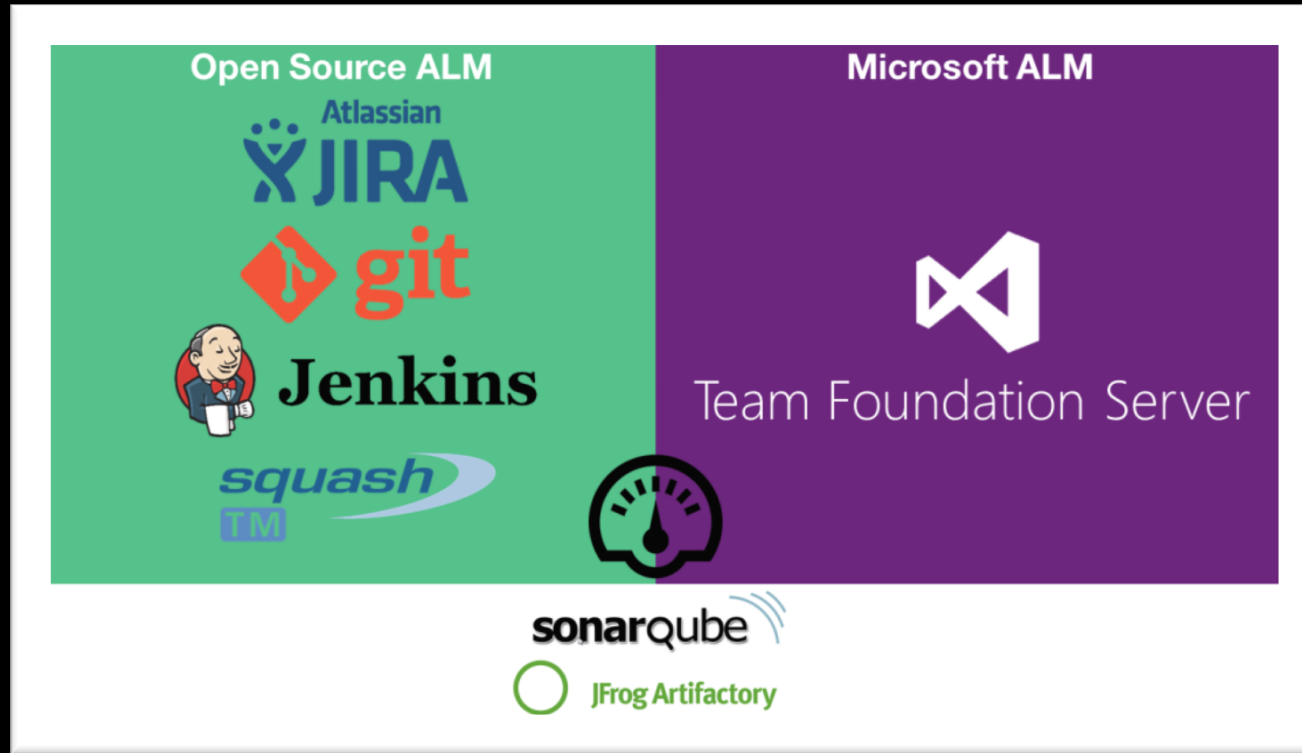
- ▶ Secure tools set up at corporate scale and move to a self service infrastructure delivery for software production
- ▶ Ensure that projects do not put in place specific tools and bear the associated costs (i.e. reduce legacy and manage corporate assets)
- ▶ Speed-up project bootstrap and delivery
- ▶ Develop and harmonize practices between projects
- ▶ Motivate cross geographic software delivery thanks to common tools and practices

Be more efficient and productive for the best software quality



A Broad And Wide Ecosystem To Address >10 Technical Streams

Data oriented



C#

C/C++

PHP

Python

Java

node.JS

Web Mobile

Cross platform Mobile

Native Mobile

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How We Move Forward ...

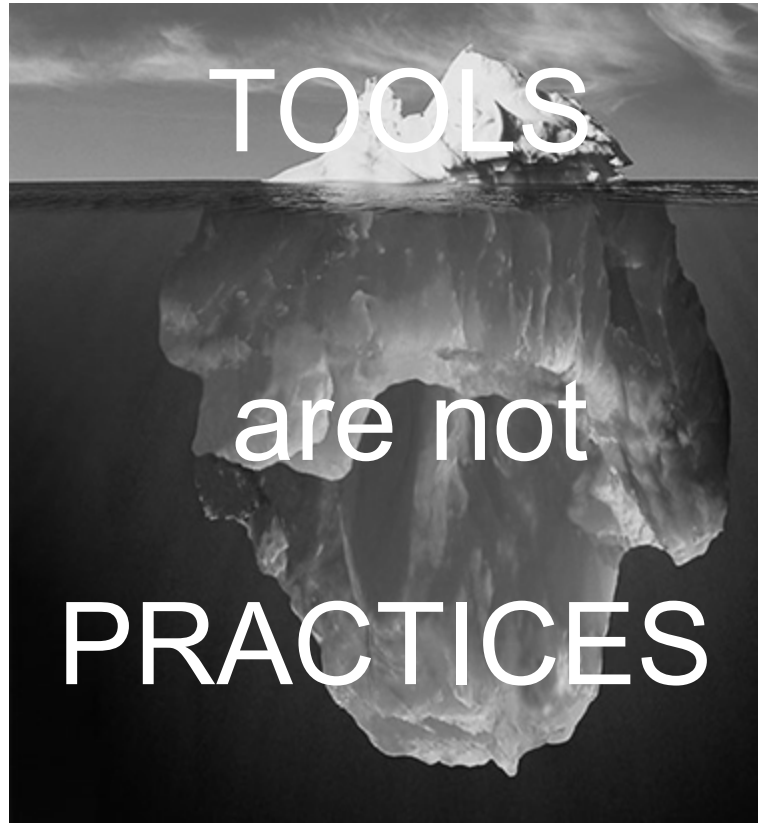
How we deliver first class digital and services to our customers thanks to Splunk

Quality, Efficiency and Productivity at Scale



1 project

10 people team
doing software



400+

simultaneous
projects

2,000 people
doing software



Impossible to navigate by sight to target a software
delivery at corporate scale



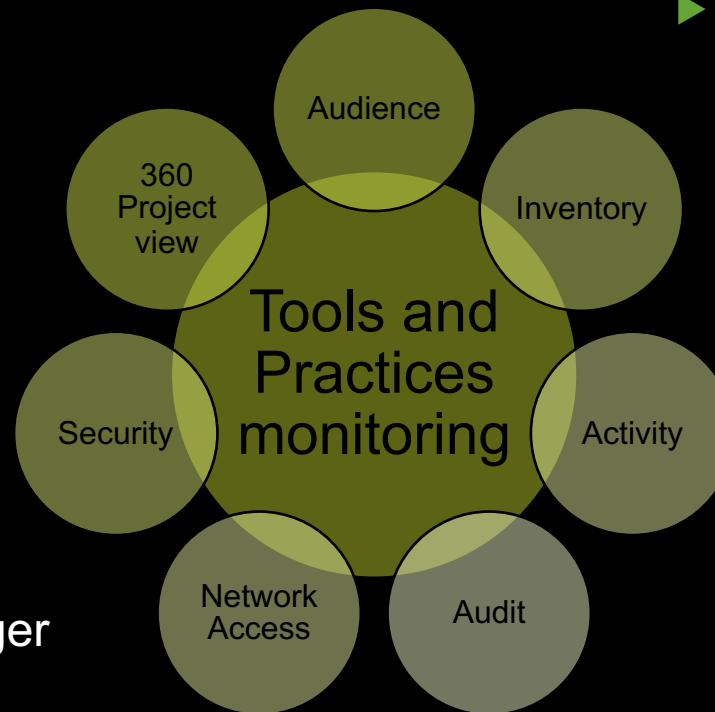
Be Natively Customer Oriented

~ 50 Dashboards to Monitor Tools and Practices

WHAT

- ▶ Identify which tools are used by projects
 - Lack of information
 - Lack of training
 - Lack of support
- ▶ Identify core practices on Project Follow-up, Automation and Tests
- ▶ Identify referents to set up tools + practices networks
- ▶ Identify projects in difficulty or danger

HOW

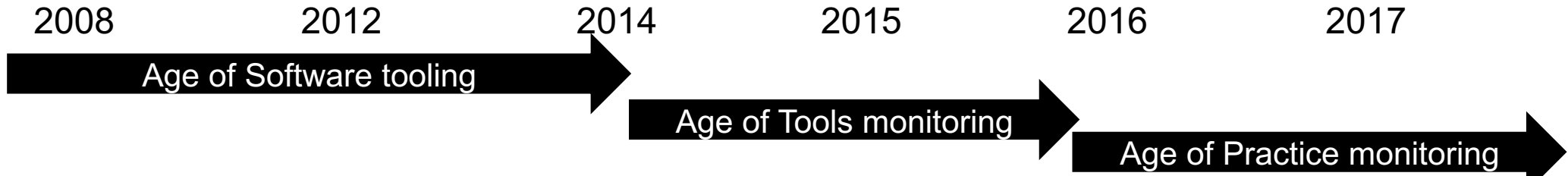
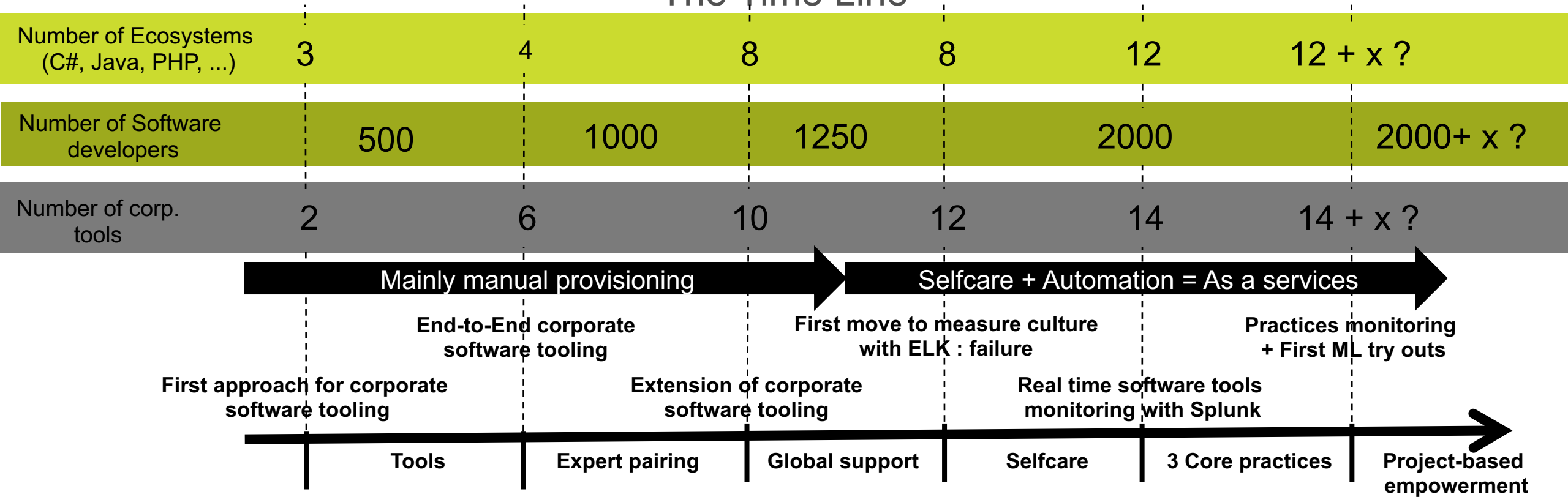


WHY

- ▶ Visibility at scale allow to :
 - Better anticipate project overruns
 - Take into account software quality in the full life cycle
 - Give support to operational project teams
 - Produce in a better and at a more sustainable pace
 - Provide live insights and feedbacks to tools owners

What We Have Done (At Scale) To Move Forward

The Time Line



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130.60.4 - - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=SD1SLAFF10ADFF10 HTTP/1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemId=EST-6&product_id=FI-SW-01"
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```


What We Have Done (At Scale) To Move Forward

The Big Idea

Tools

Store
Financial ERP
Atlassian
JIRA
SVN
git
Jenkins
squash
TM
TFS
sonarqube
JFrog Artifactory
...

Connections

REST
API
Forwarder

Business

Process
Scripts

Platforms

Splunk
Single
Pre-Prod
platform
splunk>
Splunk
Cluster
Production
platform
splunk>

KPI

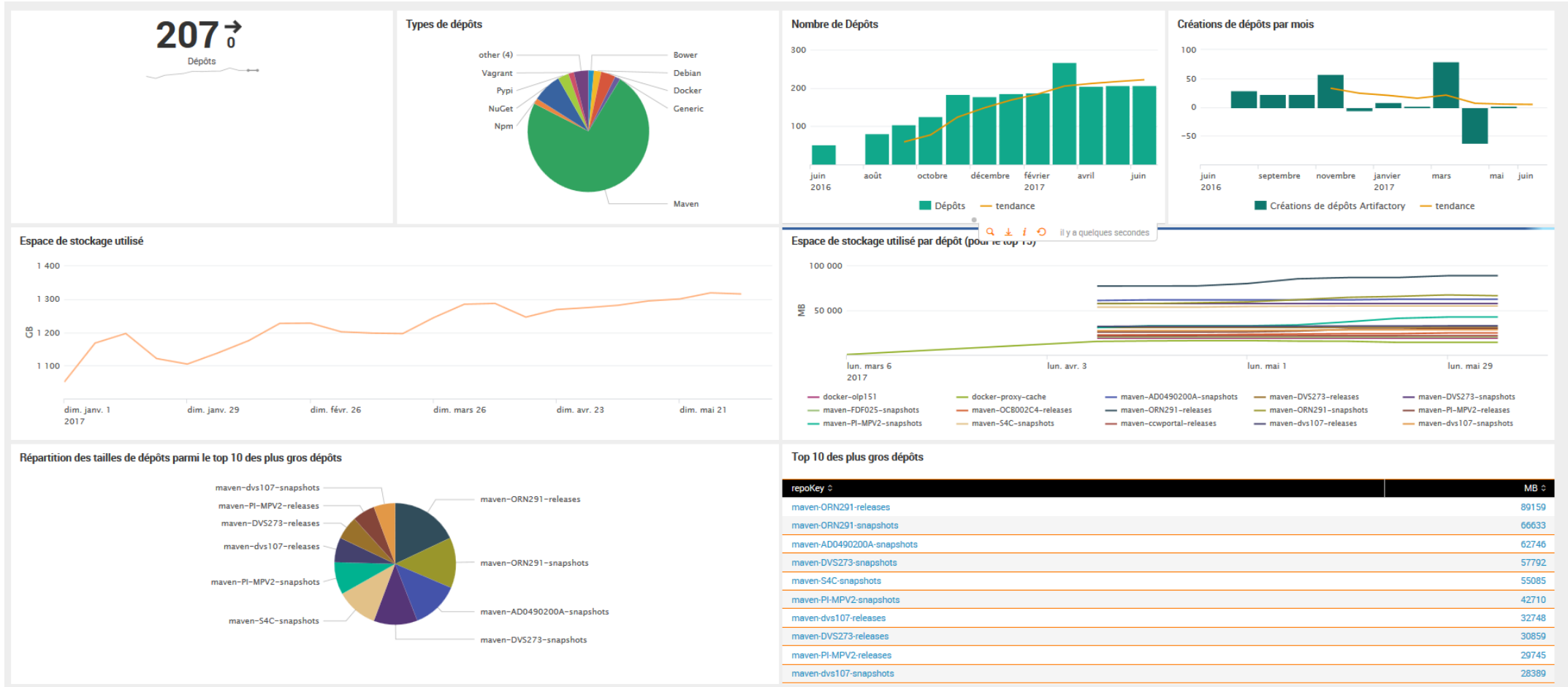
Project at lowest level

Dashboard icons including pie charts, bar graphs, a cloud with a pulse, a checkmark, and a window with a gear.

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130.60.4 - - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=5D15L9FF1ADFF3 HTTP 1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemId=EST-6&product_id=FI-5W-01"
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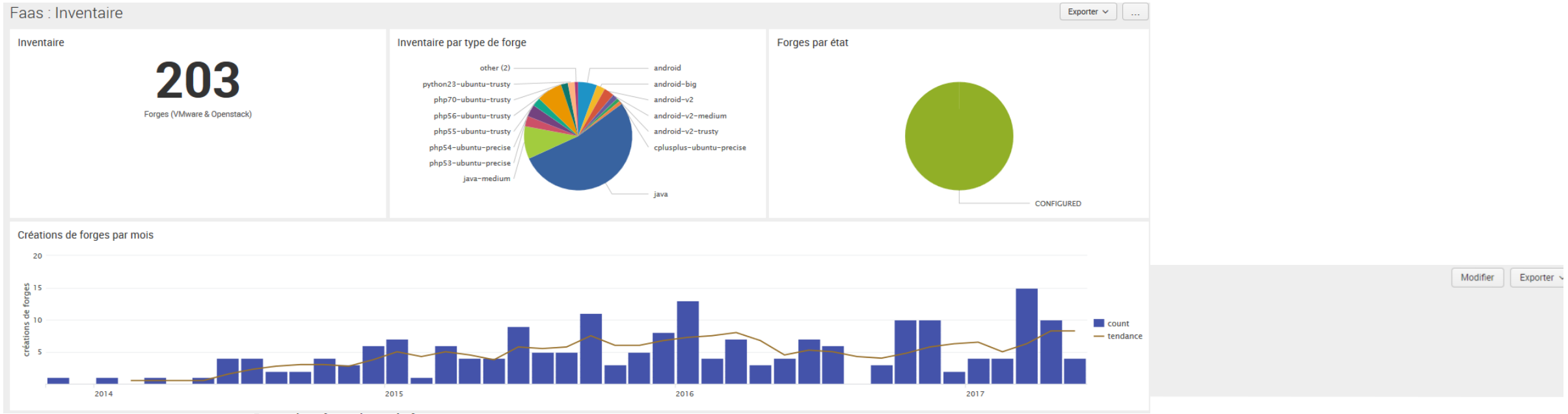

Capacity Planning (ex: Artifactory)

Understand the Real Use of Tools to Take Decision and Plan for Future



Practices Follow-Up

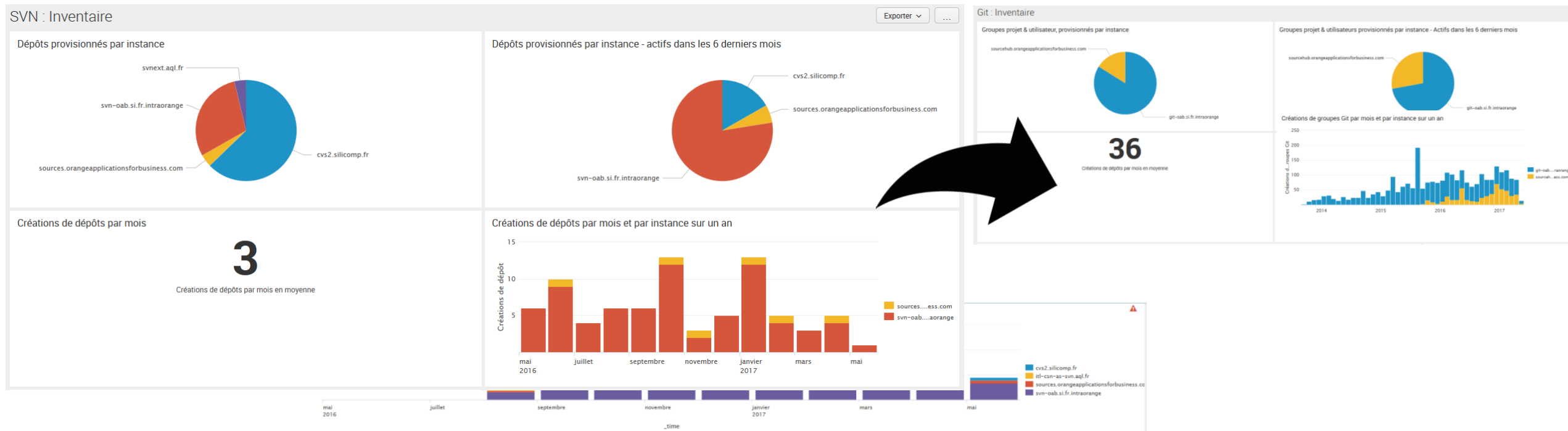
Follow Which Tools are Really Used on Projects and their Trends in Practices



| PROJECT_ID | GitCommitsYesterday | Git_trend | BuildHealth | BuildHealth_trend | WorkItemHealth | WorkItemHealth_trend | TestHealth | TestHealth_trend |
|------------|---------------------|-----------|-------------|-------------------|----------------|----------------------|------------|------------------|
| | 2 | | 87 | | 0 | | 0 | |
| | 0 | | 85 | | 0 | | 0 | |
| | 0 | | 81 | | 0 | | 0 | |
| | 1 | | 80 | | 0 | | 0 | |
| | 0 | | 80 | | 0 | | 0 | |
| | 4 | | 80 | | 0 | | 0 | |
| | 0 | | 78 | | 0 | | 0 | |
| | 0 | | 77 | | 0 | | 0 | |
| | 0 | | 77 | | 0 | | 0 | |
| | 0 | | 75 | | 0 | | 0 | |

Deprecated Assets and Legacy Management

Monitor Old Tools to Promote New Ones



138.60.4 - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=5D15L9FF10ADFF10 HTTP 1.1" 200 1318

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What's Next on the List?

Toward a Continuous Improvement Process

- ▶ Open KPIs and dashboards to projects
- ▶ Extend Build perimeter monitoring to Run ecosystem
- ▶ Tools practices natively monitored to identify impacts and benefits on projects
- ▶ Moving to machine learning to detect abnormal software patterns and weak signals



Conclusion

How we deliver first class digital and services to our customers thanks to Splunk

Feedback from the Trenches

Before, we had feelings, today we have facts

- ▶ Move to measurement culture to continuously improve your software journey
- ▶ KPI and dashboards on real projects data are enhanced communication and dialogue tools to make the right decision
- ▶ Tools (1st step) are much simpler to monitor and manage but value is on practices (2nd step)
- ▶ A sustainable step-by-step approach that enriches the global data value
- ▶ Introduction of ML must help monitoring trends for better decision making

Valuable ROI with Splunk (time invested + price / results)



If I Have Some Advice To Share...

To Produce Software at Scale

► Start **SMALL** and Think **BIG**

- Add one tool after another... the more you have, the best value you will benefit

► Focus on **Tools** then on **Practices**

- Target first KPI and dashboards on **tools portfolio usage** to ensure that tools are used at scale
 - Drive transformation with the good level of training, support and information to the dev team
- To embrace **practices** once tools are used at state of the art practices

► A **progressive** dashboards and KPI **production**

- Tools Inventory >> Capacity Planning >> Audience >> Software Activities >> 360° project overview >> Practices

► **Break silos** and **correlate information** between tools to have the global picture on your software delivery

Thank You

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