

Introduction to Splunk IT Service Intelligence

Alok Bhide

Principal Product Manager, IT Service Intelligence

David Millis

Splunk Staff Architect, IT Operations Analytics

.conf2016

splunk >

Let's Start a **REVOLUTION**

Alok Bhide

Principal Product Manager, IT Service Intelligence

David Millis

Splunk Staff Architect, IT Operations
Analytics

.conf2016

splunk >

What Is IT Operations?



Keep It All Running, Somehow

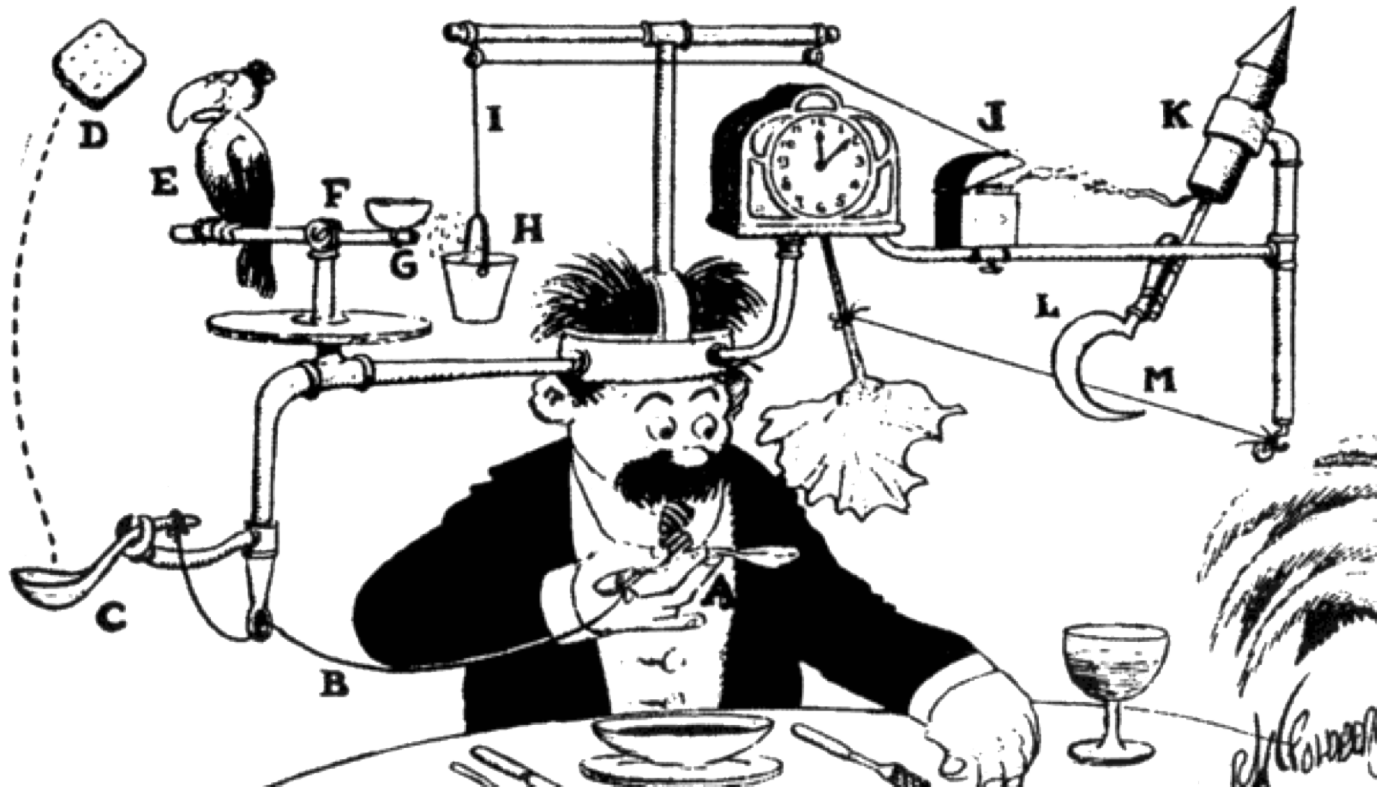


The IT Ops industry is older than you
are

The First Age of IT Operations: Little Data



First Age: Brittle Instrumentation



First Age: Obsession with Faults

Finding your faults, just like Mom

First Age: Obsession with Faults

Ignore the good things,
focus on the bad things,
just like Dad

First Age: Focus on Components



First Age of IT Operations



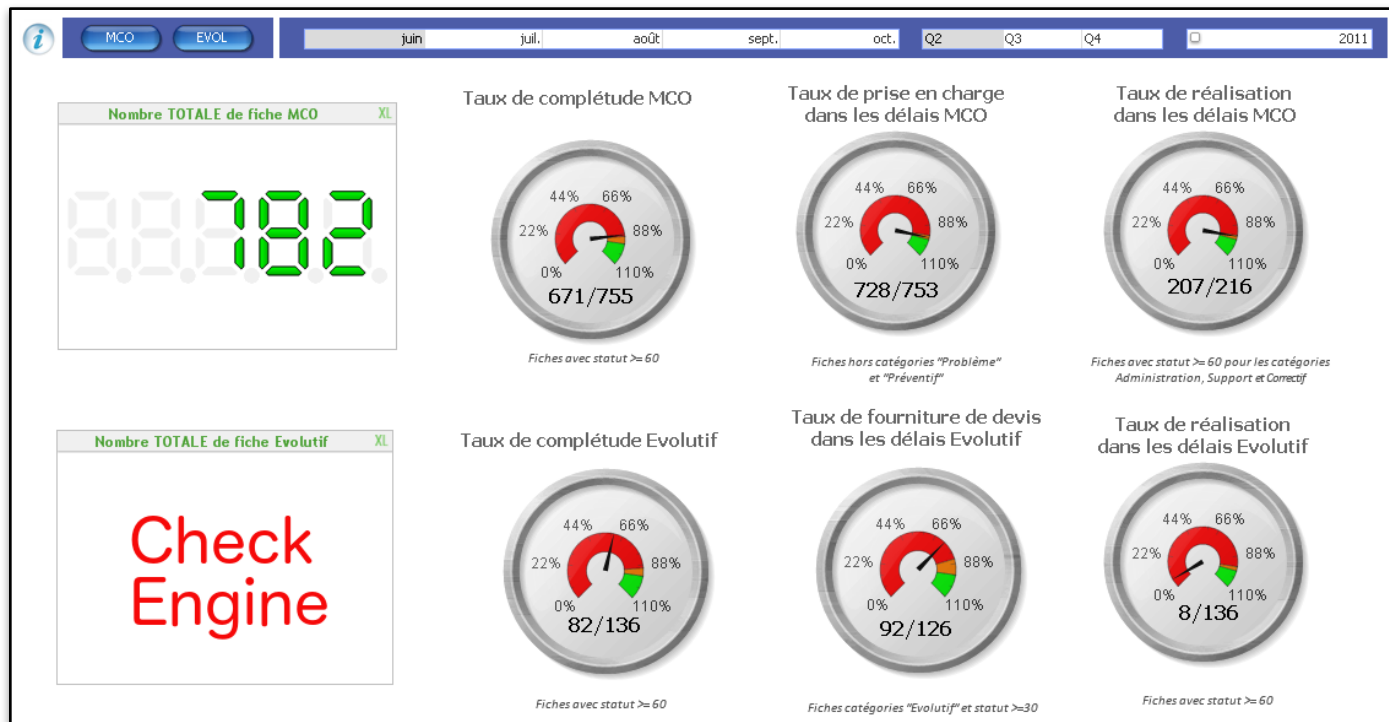
We've Monitored Our Cars in the Same Way



We've Monitored Our Cars in the Same Way



First Age IT Dashboards



Why Is This Not Good Enough?

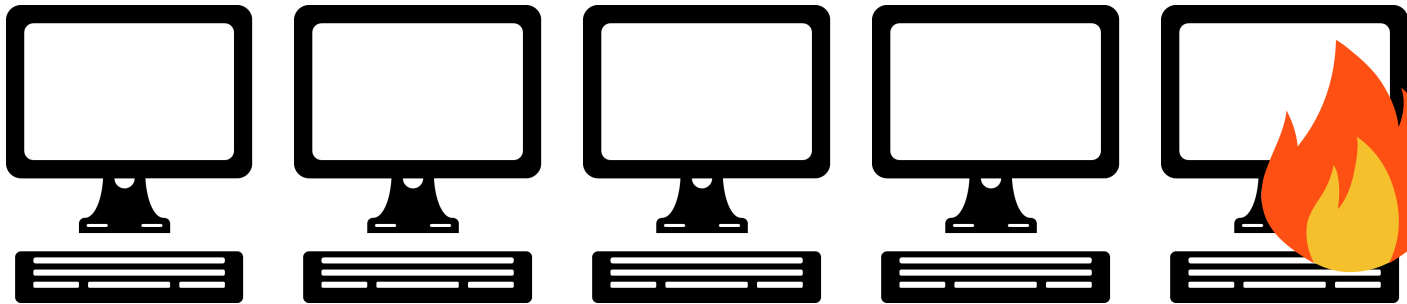
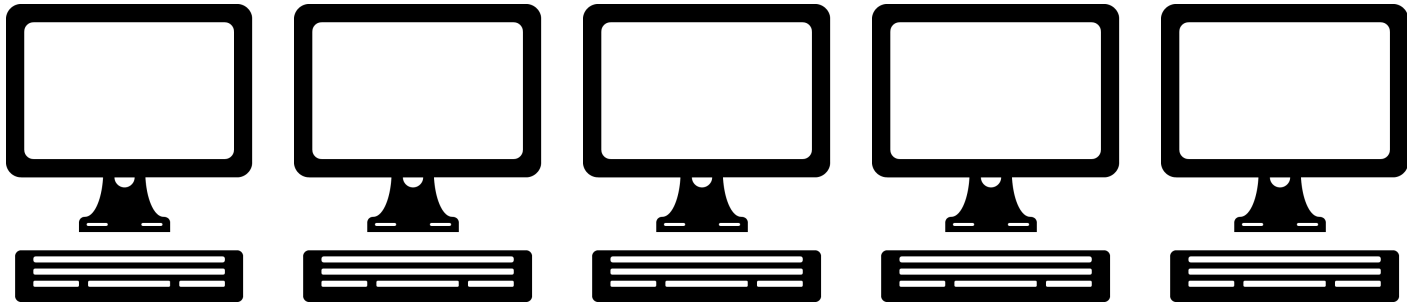
Component-level health,
without service context (“big picture”),
is not very helpful

Why Is This Not Good Enough?

Component-level health,
without service context (“big picture”),
is not very helpful

The “big picture,” without correlation
to component-level details,
is incomplete







Context Is Everything!







42	Host17	-42	Router3	5,314	280.3
17,302	Server5	17:30	426 24th	Check Engine	15.9
Trump	4.2	Walt	3×10^8	18.30	10:08
-9.8	6×10^{23}	Daily Double	1968	Clinton	1138
B+	Cleveland	2017	Oh God	549	Stock Price

Not Necessarily Bad

42	Host17	-42	Router3	5,314	280.3
17,302	Server5	17:30	426 24th	Check Engine	15.9
Trump	4.2	Walt	3×10^8	18.30	10:08
-9.8	6×10^{23}	Daily Double	1968	Clinton	1138
B+	Cleveland	2017	Oh God	549	Stock Price

Not Necessarily OK

42	Host17	-42	Router3	5,314	280.3
17,302	Server5	17:30	426 24th	Check Engine	15.9
Trump	4.2	Walt	3×10^8	18.30	10:08
-9.8	6×10^{23}	Daily Double	1968	Clinton	1138
B+	Cleveland	2017	Oh God	549	Stock Price

The Second Age of IT Operations

BIG DATA!

Second Age

~~A few metrics from brittle instrumentation~~

LOTS of metrics from machine data

Second Age

~~A few metrics from brittle instrumentation~~

LOTS of metrics from machine data

~~Look at “bad news” data~~

Look at everything

Second Age

~~A few metrics from brittle instrumentation~~

LOTS of metrics from machine data

~~Look at “bad news” data~~

Look at everything

~~Focus on up & down~~

Focus on normal vs. not normal

The Third Age of IT Operations – Data Behavior (Intelligence)



The Third Age of IT Operations – Data Behavior (Intelligence)

LET

THE

REVOLUTION

BEGIN

Here's ITSI

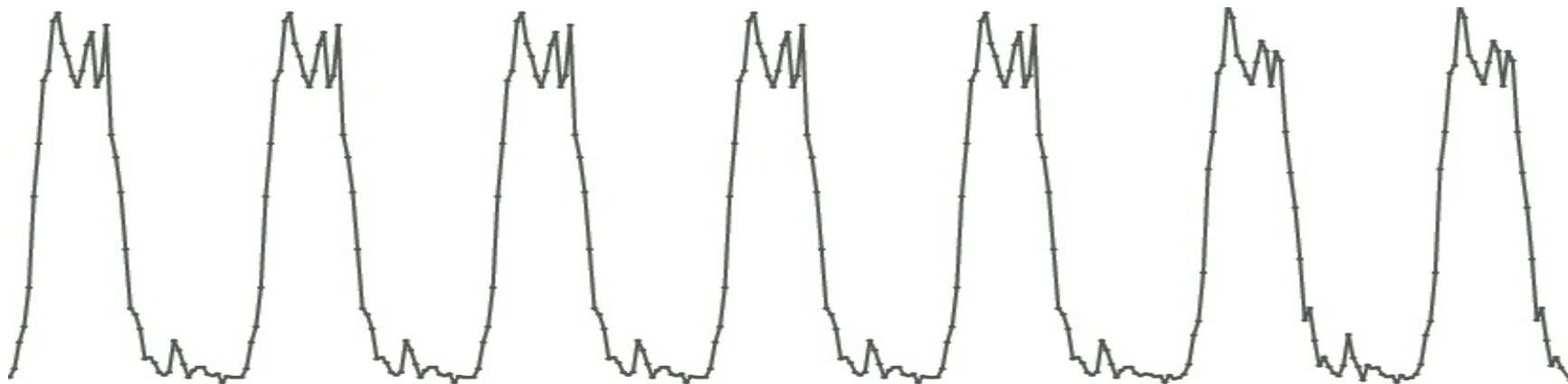


.conf2016

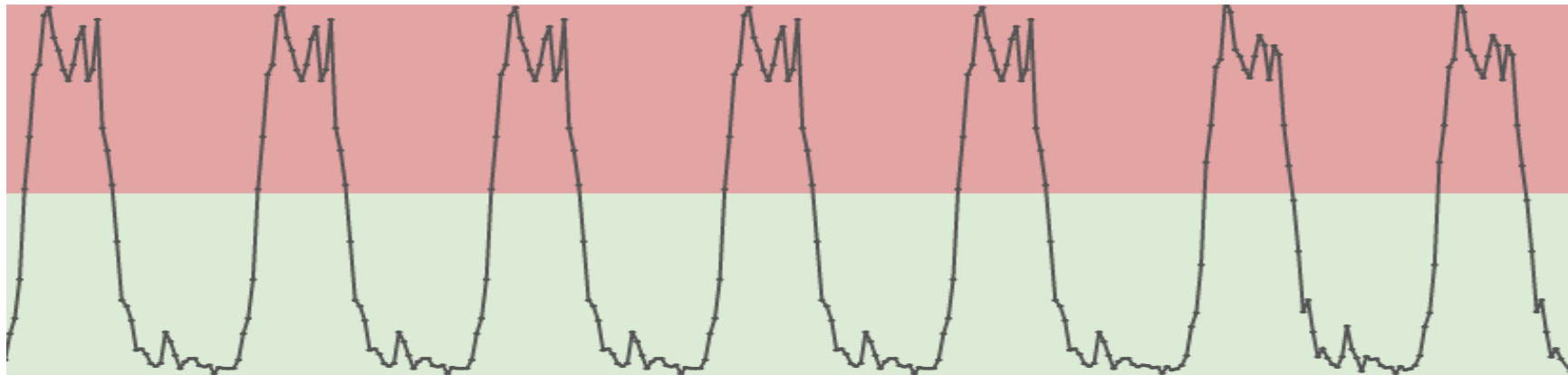
The Third Age of IT Operations – Data Behavior (Intelligence)



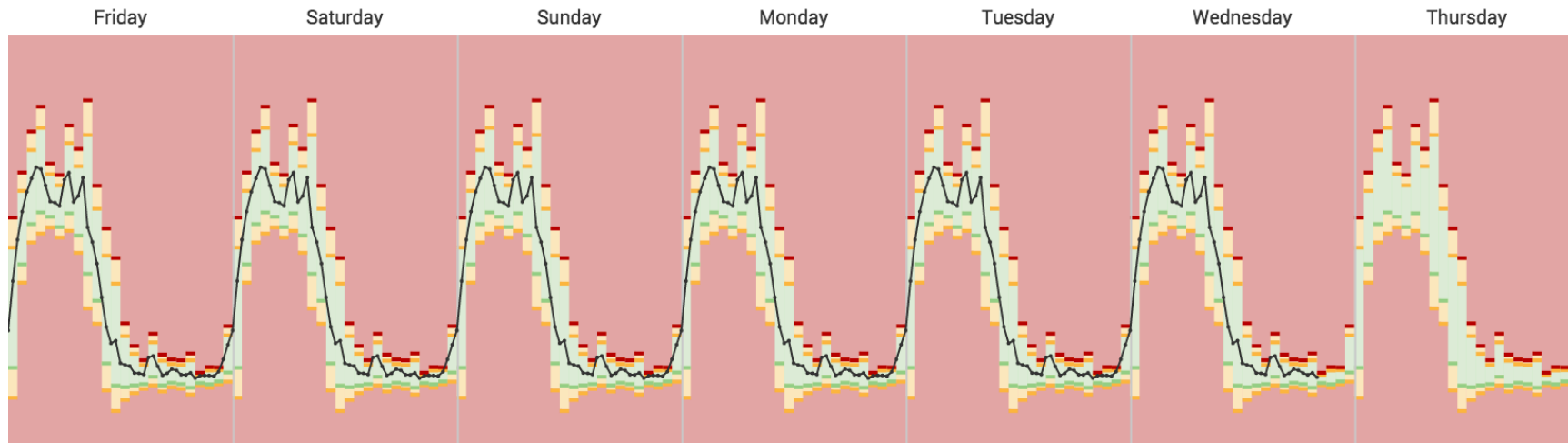
Real-World Data



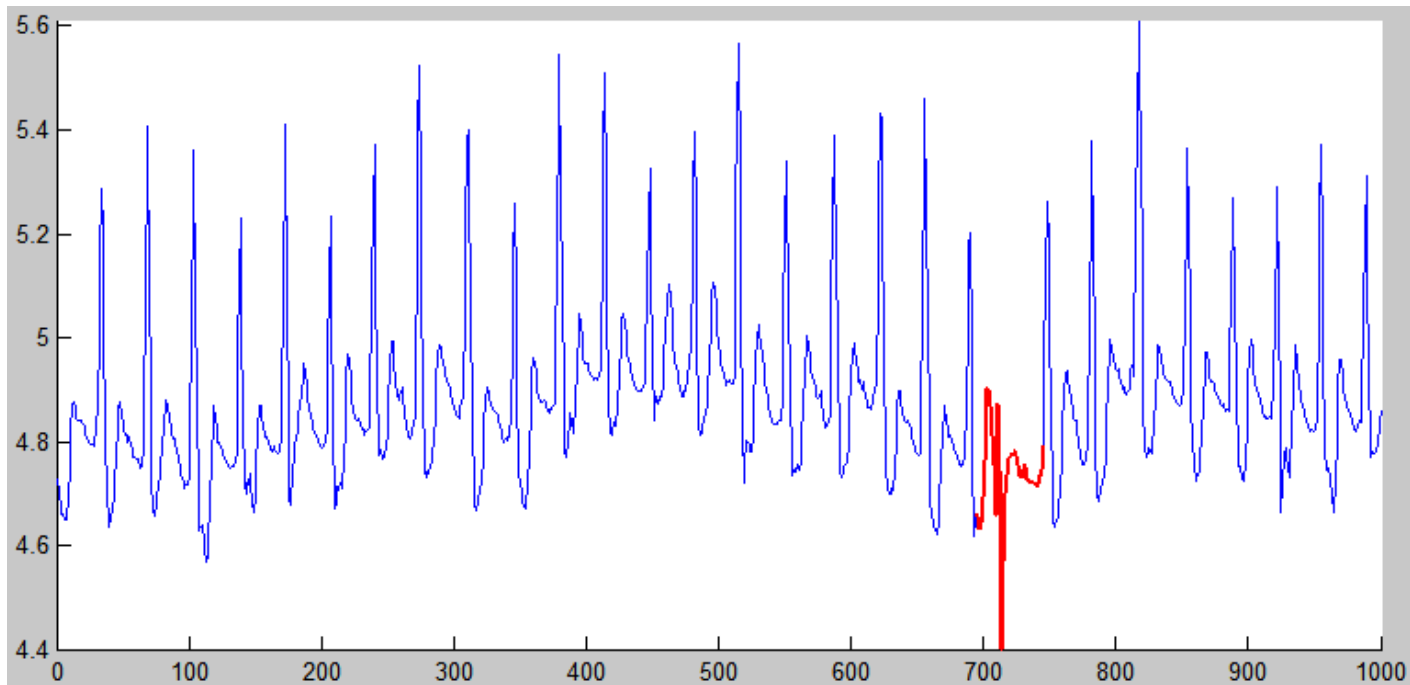
Static Thresholds



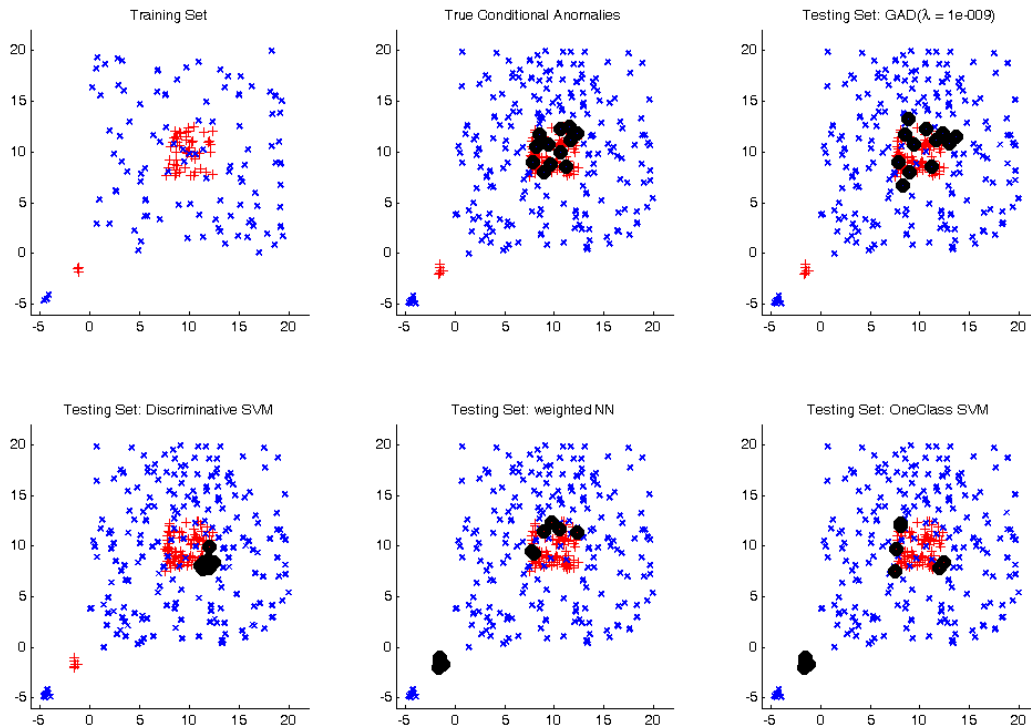
Adaptive Thresholds



Anomaly Detection



And We're Just Getting Started...



A Story About Mom and Her Car

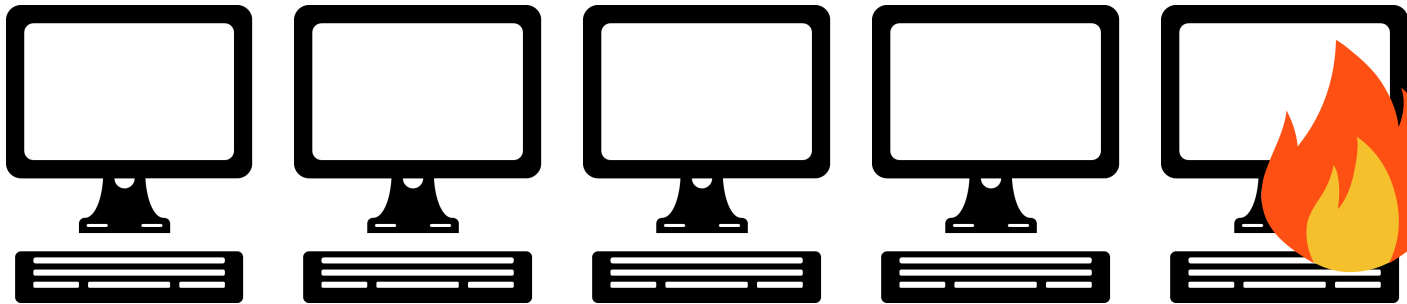
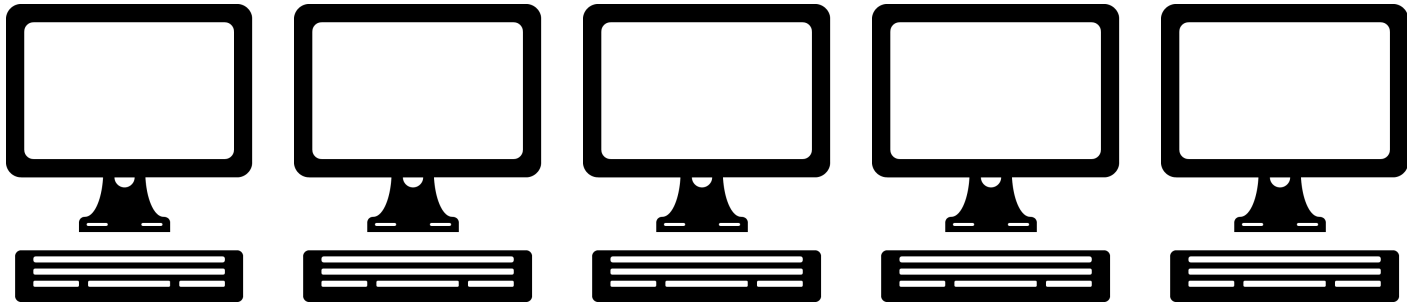


... In Analytical Terms



A Financial Services Customer







Third Age Possibilities

Machine Data

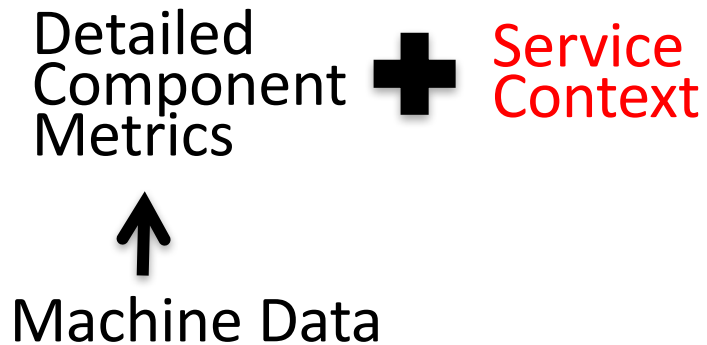
Third Age Possibilities

Detailed
Component
Metrics

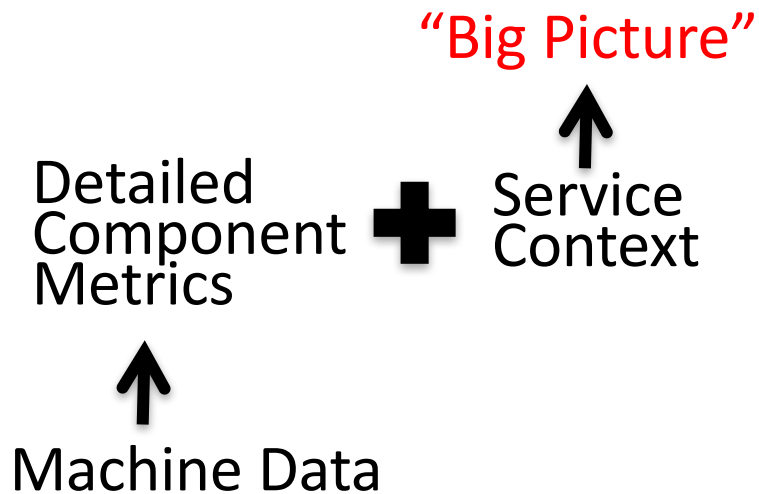


Machine Data

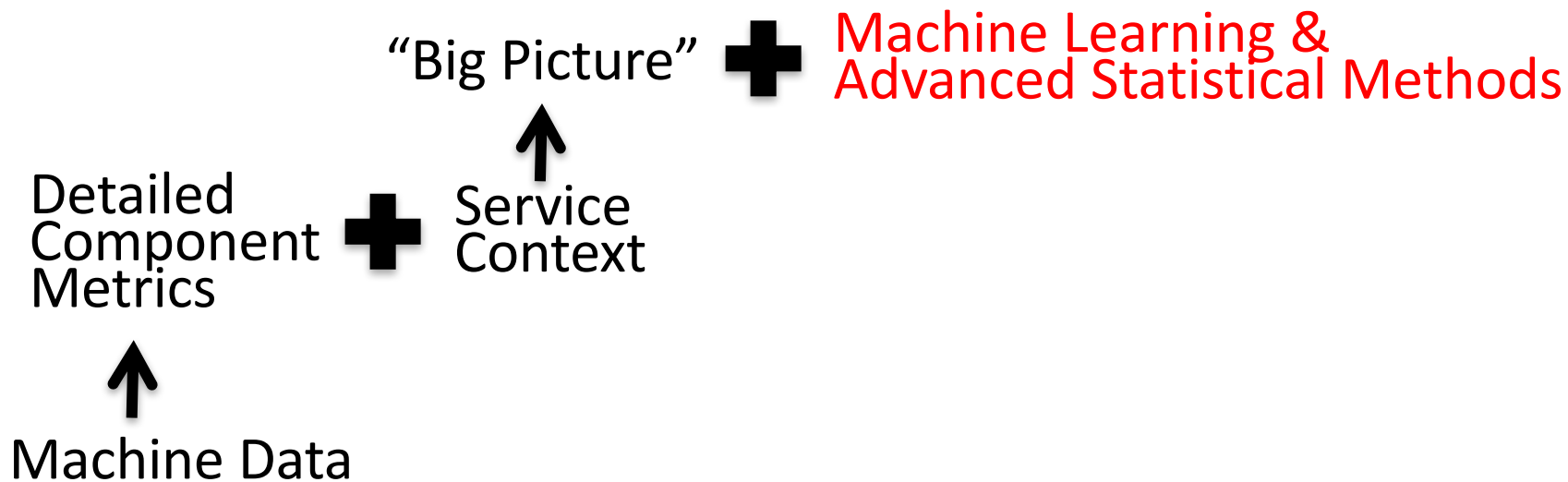
Third Age Possibilities



Third Age Possibilities

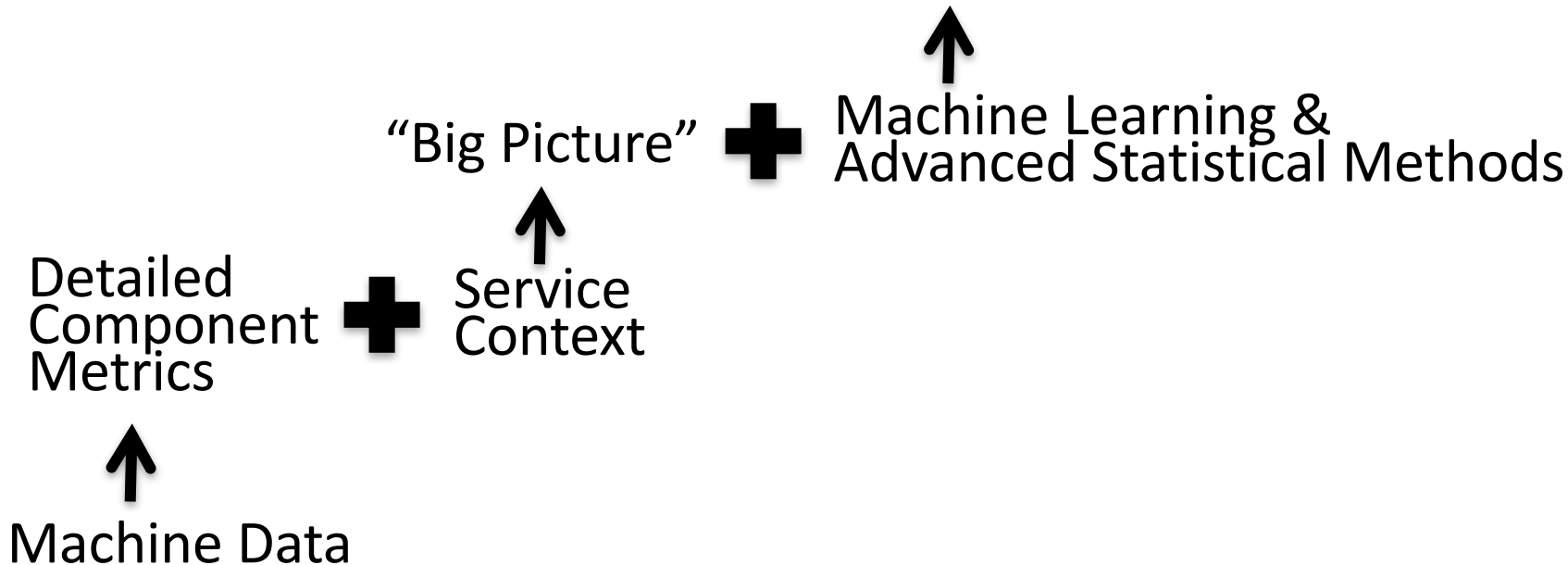


Third Age Possibilities



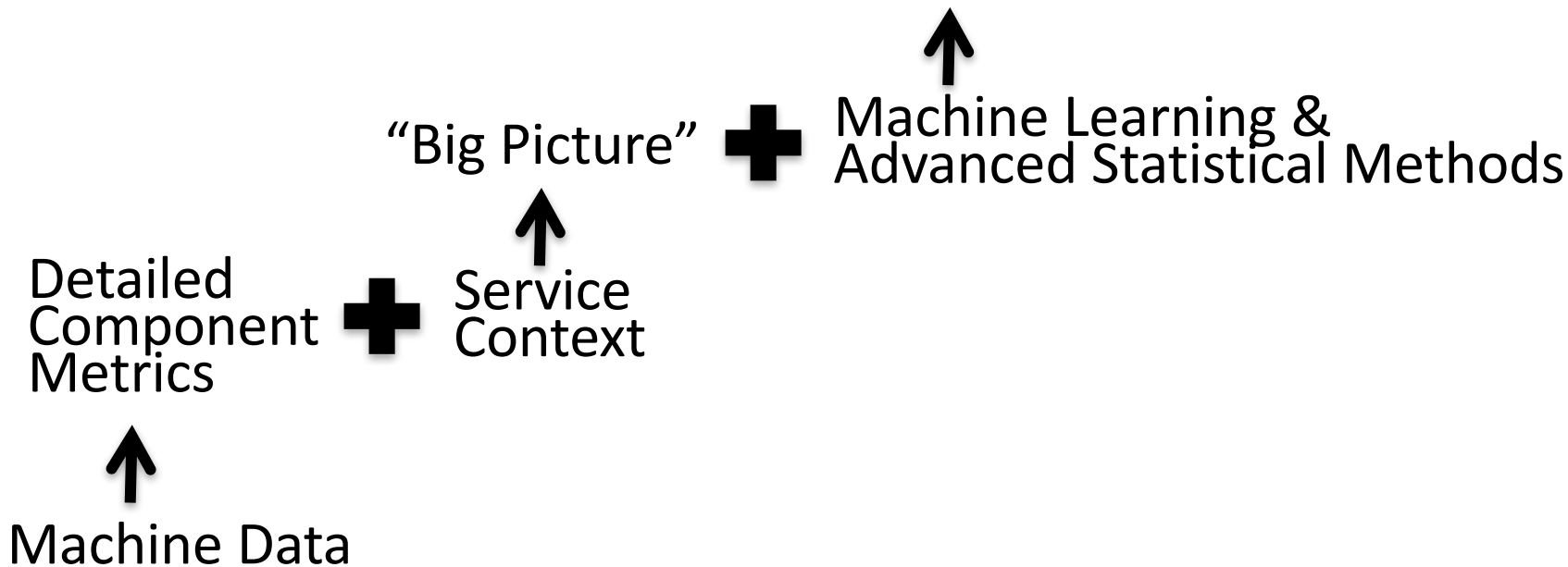
Third Age Possibilities

UNDERSTANDING!



Third Age Possibilities

A **REVOLUTION** in IT Ops



Where We've Been

	FIRST AGE (LITTLE DATA)
What's Measured	Faults
Amount of Data	Very little
Understanding and Skill Required	Extreme (sorcerers)
Tools	HPOV, IBM Netcool, etc.

Where We've Been

	FIRST AGE (LITTLE DATA)	SECOND AGE (BIG DATA)
What's Measured	Faults	Everything
Amount of Data	Very little	Lots
Understanding and Skill Required	Extreme (sorcerers)	Substantial (experts)
Tools	HPOV, IBM Netcool, etc.	Splunk

Where We've Been

	FIRST AGE (LITTLE DATA)	SECOND AGE (BIG DATA)	THIRD AGE (INTELLIGENCE)
What's Measured	Faults	Everything	Everything + User Feedback
Amount of Data	Very little	Lots	Even more than "lots"
Understanding and Skill Required	Extreme (sorcerers)	Substantial (experts)	Reasonable (the rest of us)
Tools	HPOV, IBM Netcool, etc.	Splunk	Splunk + ITSI + ML

JOIN THE REVOLUTION



Splunk IT Service
Intelligence™

Mary Ruth Millis
1929 – 1996
Thanks, Mom!

THANK YOU

Alok Bhide
David Millis

.conf2016