

.conf2014

YOUR DATA ADVENTURE

MAKE Splunk HAPPEN

Greg Kollias

Software Engineer, Staples

splunk>

Disclaimer

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 the 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.

STAPLES

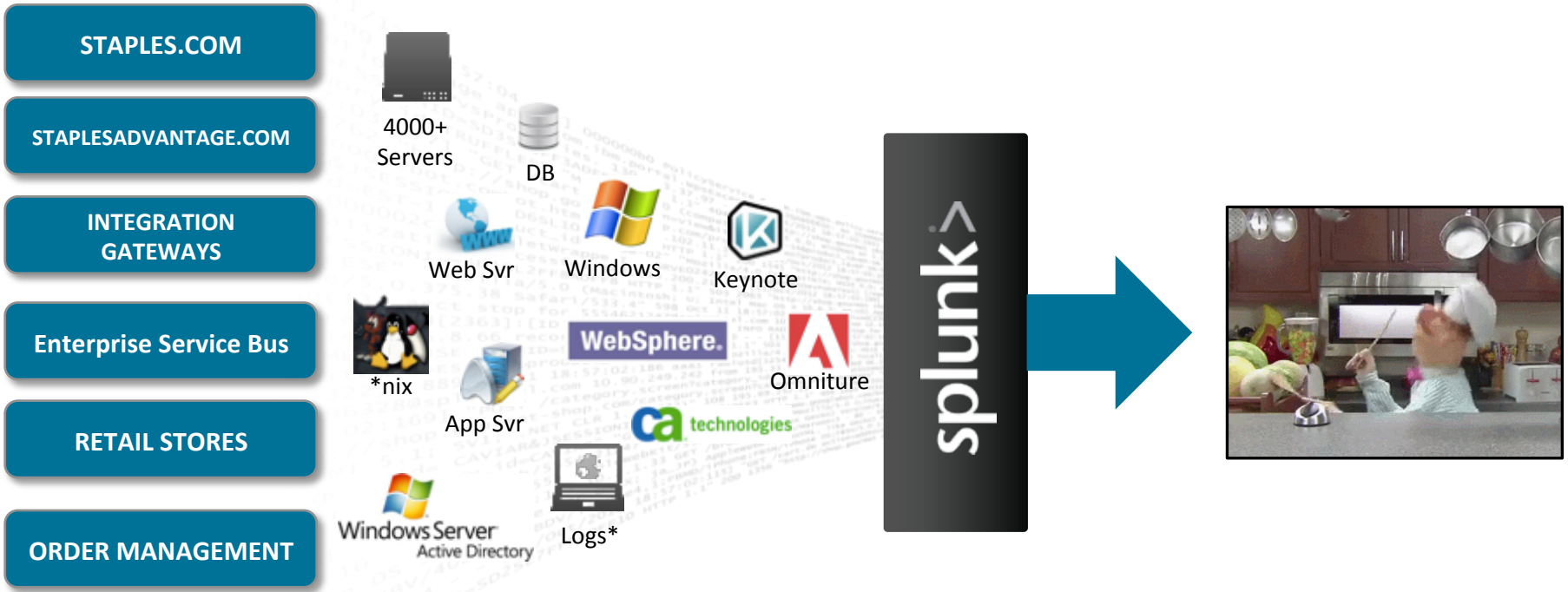


- Invented office superstore concept in 1986
- Operations in 25 countries
- Over 83,000 associates worldwide
- World's largest office products company
- Provides products, services and expertise in office supplies, copy & print, technology, facilities and furniture

An Introduction – Greg Kollias

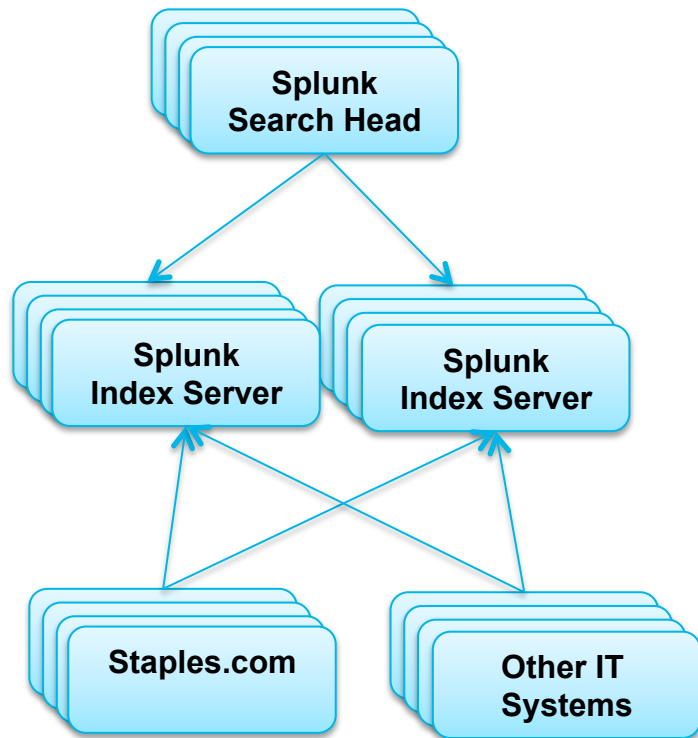
- Software Engineer – Enterprise Integration Services
- Been with Staples for 1.5 years
 - Held internship position at Staples prior to Splunk role
- ½ of the core Splunk Team at Staples
- Responsible for:
 - Installation of Splunk forwarders/ configurations for data forwarding
 - Consulting with application teams to create Splunk artifacts
 - Assisting with creating searches, building dashboards, brown-bag training

Get Machine Data into Splunk and Make Use of It!



* Audit logs, agent logs, server logs, config logs

Staples Production Splunk Infrastructure



9 Splunk Search Heads

- End-user Searching/Dashboards
- Dedicated *Scheduled Search* instances
- Single Pane of Glass instances
- Deployment Server/License Manager

8 Splunk Index Servers

[Can handle 1TB of data per day for indexing]

~4,500 application servers

forwarding data to Splunk

...And Multiple Use-cases

OPERATIONAL SUPPORT

APPLICATION INSIGHTS

BUSINESS INTELLIGENCE

splunk> App: ESB Prod Dashboard

Links ▾ ESB Home ESB Trends ESB Errors ESB Real Time ESB User Utilities ESB QOS Home Search ESB Prod Dashboard

Search Form

Service Count Chart

Transaction Details

Yesterday ▾

Time Results For: 07/28/2014 00:00:00.000 Thu: 07/29/2014 00:00:00.000

11,666,369 Transactions Total **486,099** Transactions (hour)

OPERATIONAL SUPPORT

Service Count Data Table

1 SplaPublishInventory.nadwms.v1.services.recvNADWMSInventoryChangeRqst

2 SplaPublishRetailTransaction.rms.v1.services.recvRetailTransactionRqst

3 SplaPublishInventory.nadwms.v1.services.recvNADWMSInventoryReserveRqst

splunk> App: Staples Splunk Infrastructure

Search Dashboards ▾ Views ▾ Searches & Reports ▾ Staples Splunk Infrastructure

Group Splunk License Usage Overview

License Usage Trends

Staples Group: **Staples_Dotcom** Daily License: **145** GB Avg Daily Usage: **157** GB 90th Percentile Usage: **217** GB

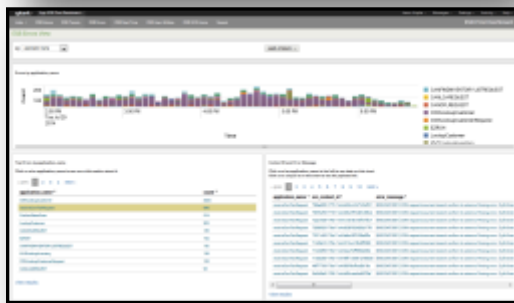
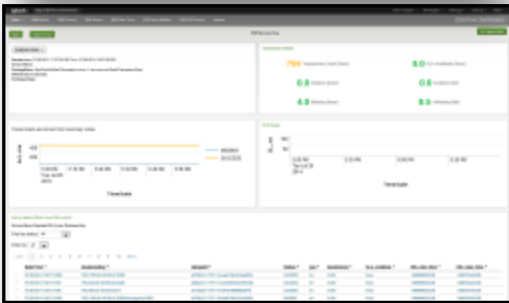
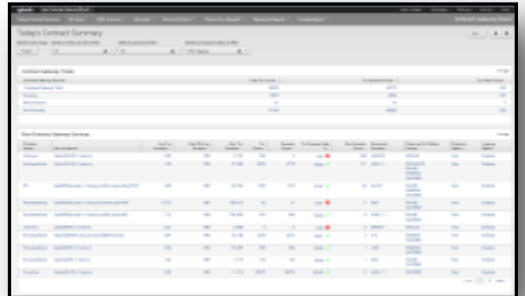
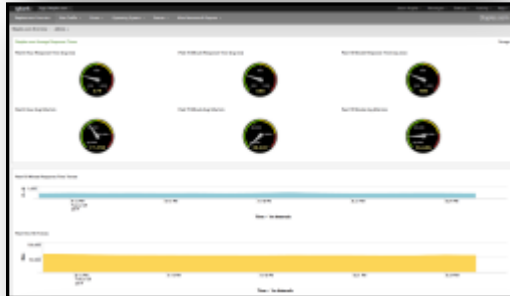
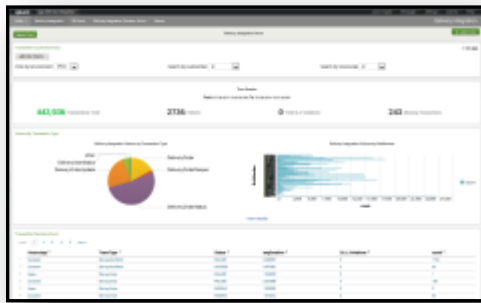
Max License Usage: **254** GB License Status: **This group is regularly exceeding its purchased license**

90-Day Daily License Usage

List of days which exceeded available license

Date	Actual Indexed (GB)	License Capacity (GB)	License Usage %
07/03/2014 00:00:00	253.8584	85	298.66
07/09/2014 00:00:00	251.4609	85	295.84
06/27/2014 00:00:00	242.7451	85	285.58

OPERATIONAL SUPPORT



From: [redacted]
To: [redacted]
Cc: [redacted]
Subject: [Splunk] CTG - Transactions seem slow [300% slower than last week] [redacted]

Sent: Mon 4/28/2014 9:31 AM

APPLICATION INSIGHTS

[https://\[redacted\]/en-US/app/\[redacted\]/ctg_slow_txn_issue_overview](https://[redacted]/en-US/app/[redacted]/ctg_slow_txn_issue_overview)

The following time periods had overall avg txn durations >300% over last week. CTG might be having issues. Click above link for more information.

Time	Current Avg Txn Duration(s)	Last Week Avg Txn Duration(s)	% Difference
04/28 08:30:00	12.11	2.451	389.55
04/28 10:00:00	7.6	1.429	432



splunk > Project Urcomi

Search Dashboards Views Search & Reports

Denver Retail Stores

Denver Retail Stores Purchases Map

Denver Retail Stores Purchases List

Store Number	Store Address
1418	878 South Colorado Blvd, Glenasm, CO 80246
1429	10803 US Highway 285 Conifer, CO 80433
1420	16626 West Colfax Golden, CO 80401
1423	8055 S West Bowles Ave Suite 3 Lakewood, CO 80126
1444	6787 S Vine Street Centennial, CO 80122
1445	9449 S University Blvd Highlands Ranch, CO 80126
1481	7388 Venable Camino Lakeside, CO 80228

BUSINESS INTELLIGENCE

splunk > Project Urcomi

Search Dashboards Views Search & Reports

Retail Store Detail

Store Number 1418

Address:
878 South Colorado Blvd, Glenasm, CO 80246

Phone Number:
303.756.0000

Store transactions over time

Individual Transaction History

_time	POS Transaction Identifier	Register Number	Original Total	Transaction ID
5/12/14 2:20:34.21	POS.1418.20140512.1.05149	1	20140512	05149
5/12/14 9:04:28.67	POS.1418.20140512.1.05022	1	20140512	05022
5/12/14 9:00:38.302	POS.1418.20140512.1.04911	1	20140512	04911
5/12/14 9:06:13.180	POS.1418.20140512.3.10075	3	20140512	10075
5/12/14 9:07:10.253	POS.1418.20140512.1.04910	1	20140512	04910
5/12/14 9:11:42.507	POS.1418.20140512.2.30054	2	20140513	30054
5/12/14 9:12:08.389	POS.1418.20140512.7.9824	7	20140513	9824
5/12/14 12:08:13.877	POS.1418.20140512.1.05009	1	20140513	05009
5/12/14 7:50:19.003	POS.1418.20140512.1.04902	1	20140512	04902
5/12/14 9:18:32.142	POS.1418.20140512.5.20070	5	20140512	20070

Transaction Breakdown by Register Number

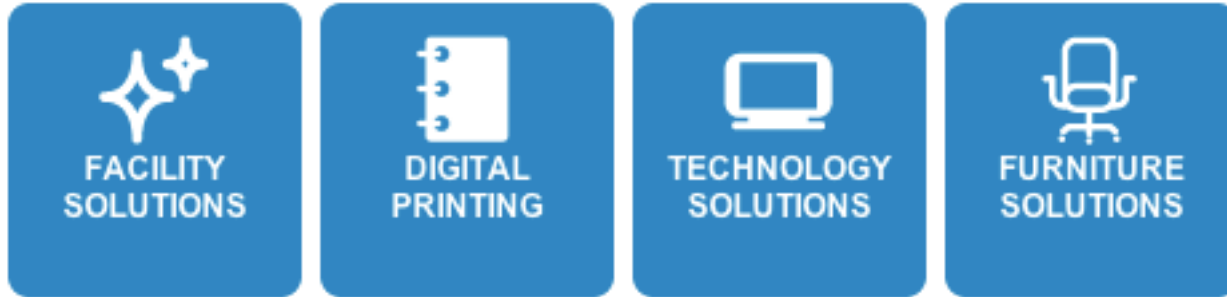
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YOUR DATA
ADVENTURE

Splunk @
Staples Advantage

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What Is Staples Advantage?



ONE SOURCE FOR EVERYTHING THE BUSINESS NEEDS

Why Splunk?

“Splunk gives us the flexibility to consume any and all data. It provides a powerful means to analyze data that is most meaningful to our organization and users.”

Splunk @ Staples Advantage

Consolidation of all our machine data for unified visibility



Web apps



Operational
logs, Event logs,
Crash logs



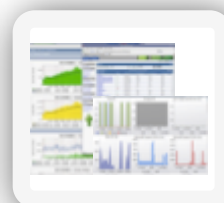
Message
Queues



Win/Unix
metrics



Web and
App server
metrics



Monitoring
Tools

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Two Primary Use Cases

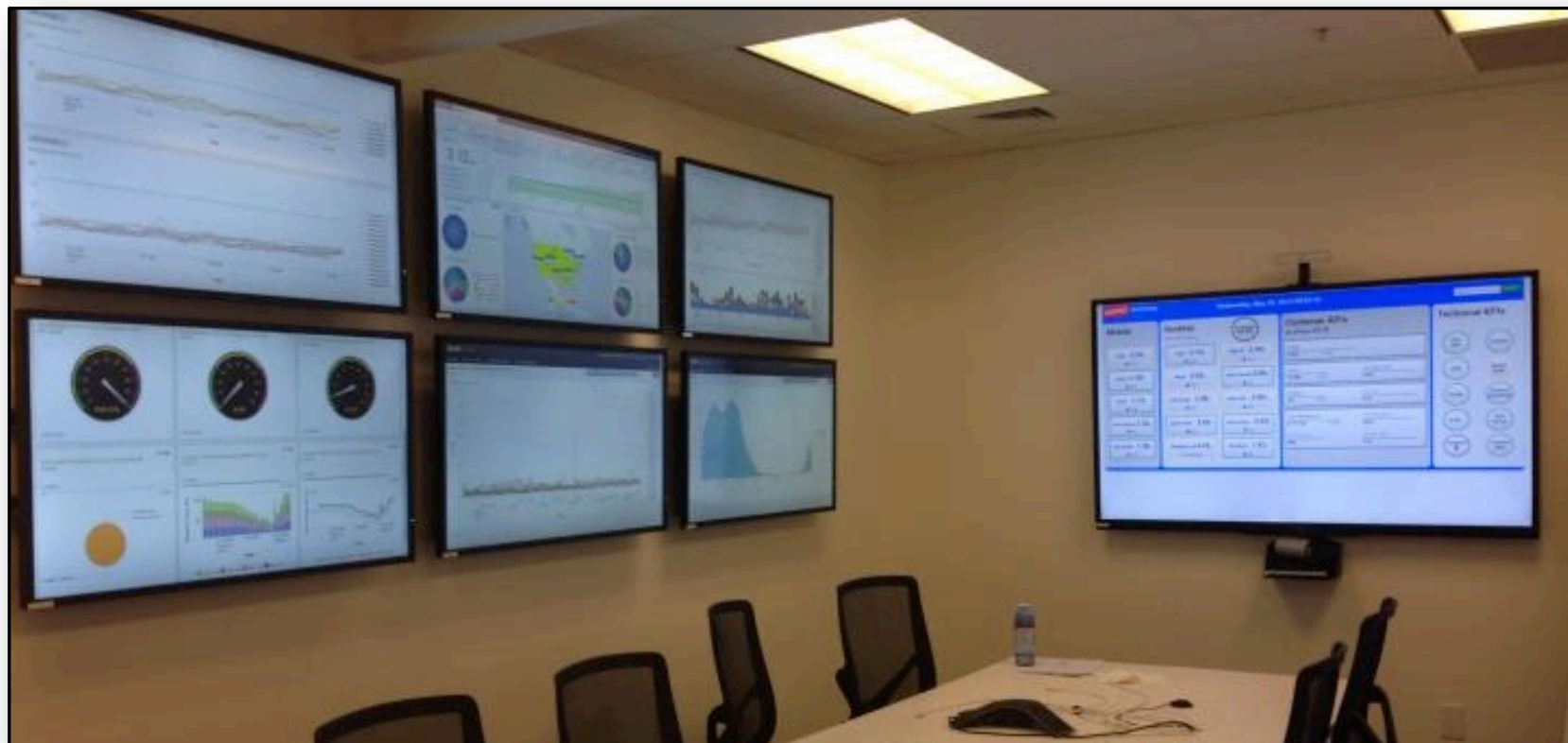
**HEALTH OF ADVANTAGE
WEBSITE**

**7 MONITORS IN OUR OPERATIONS
CENTER SHOWCASE KPI
DASHBOARDS**

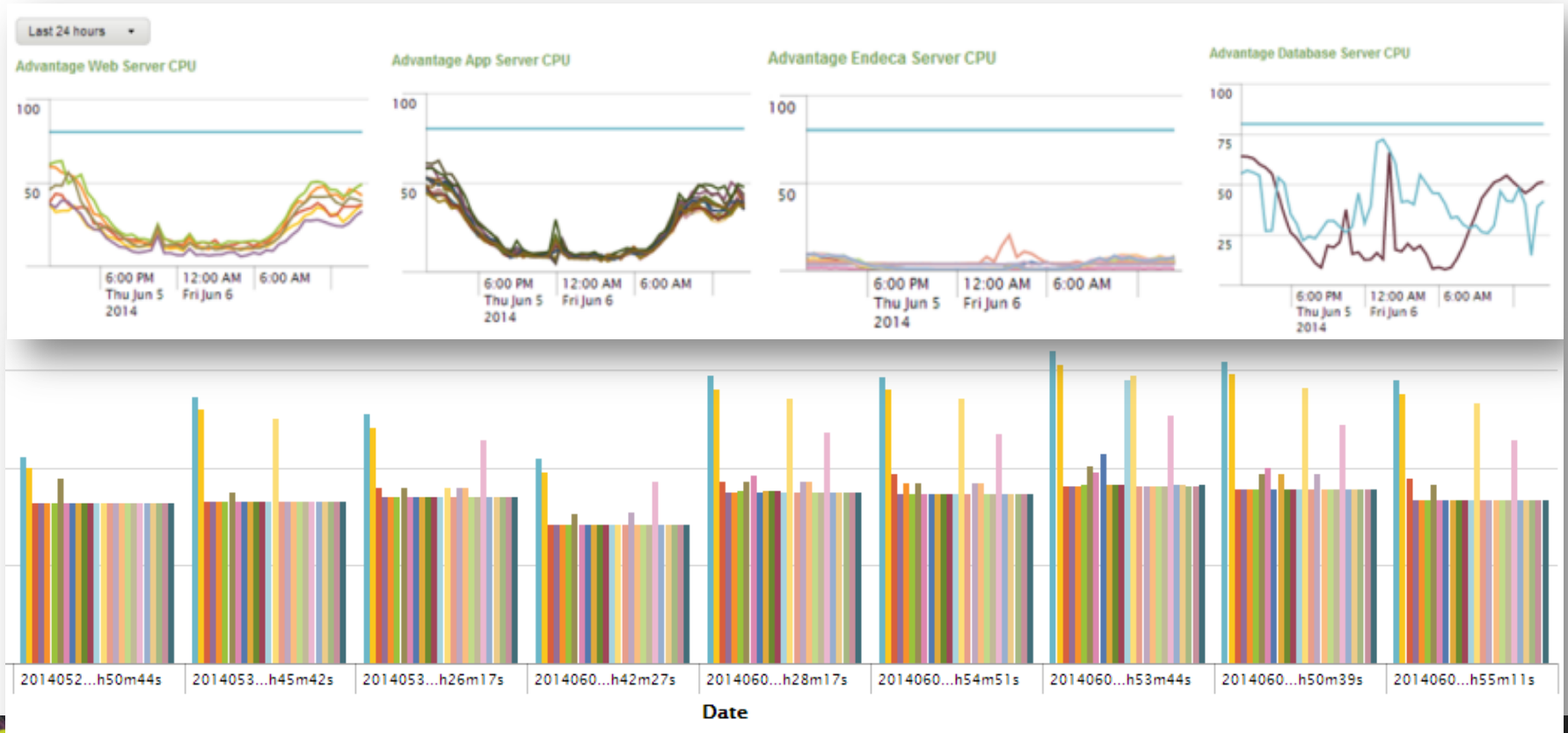
**BUSINESS & OPERATIONAL
ANALYTICS**

**FLEXIBLE ANALYTICS
ON-DEMAND MOBILE REPORTS
FOR BUSINESS AND IT**

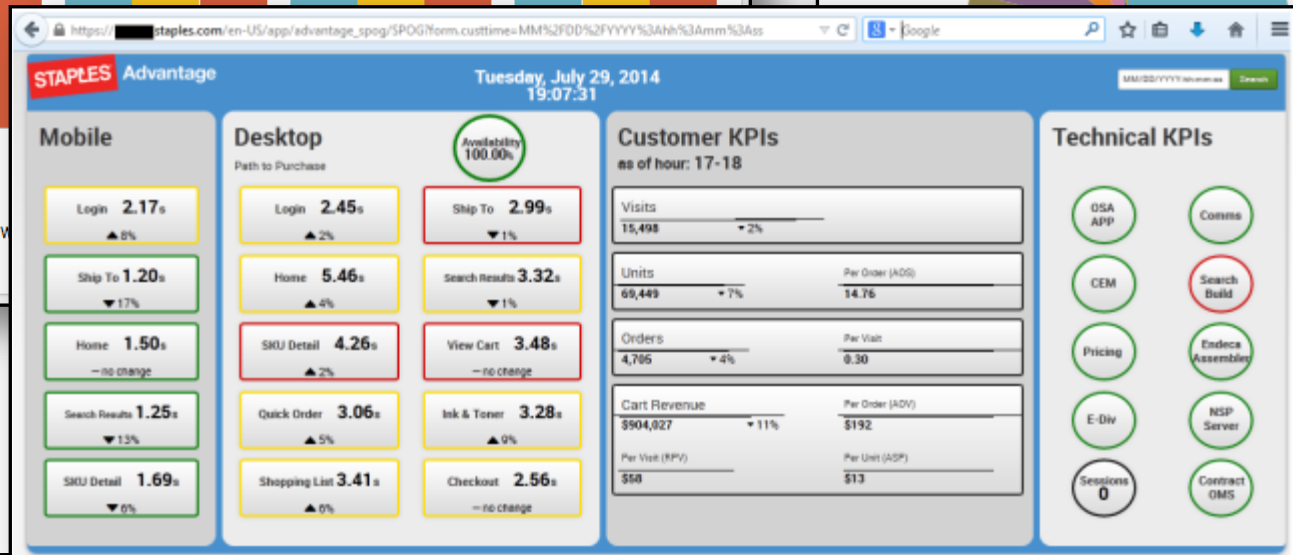
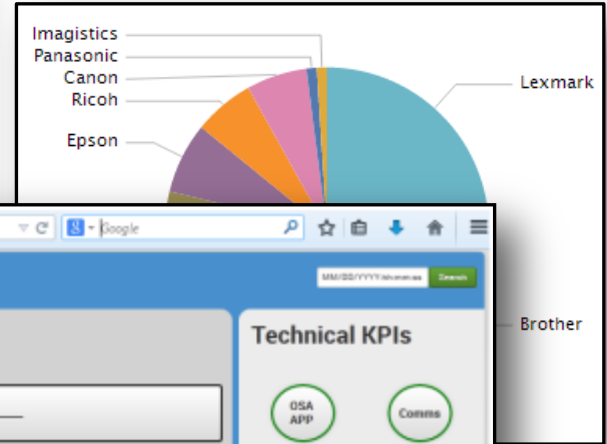
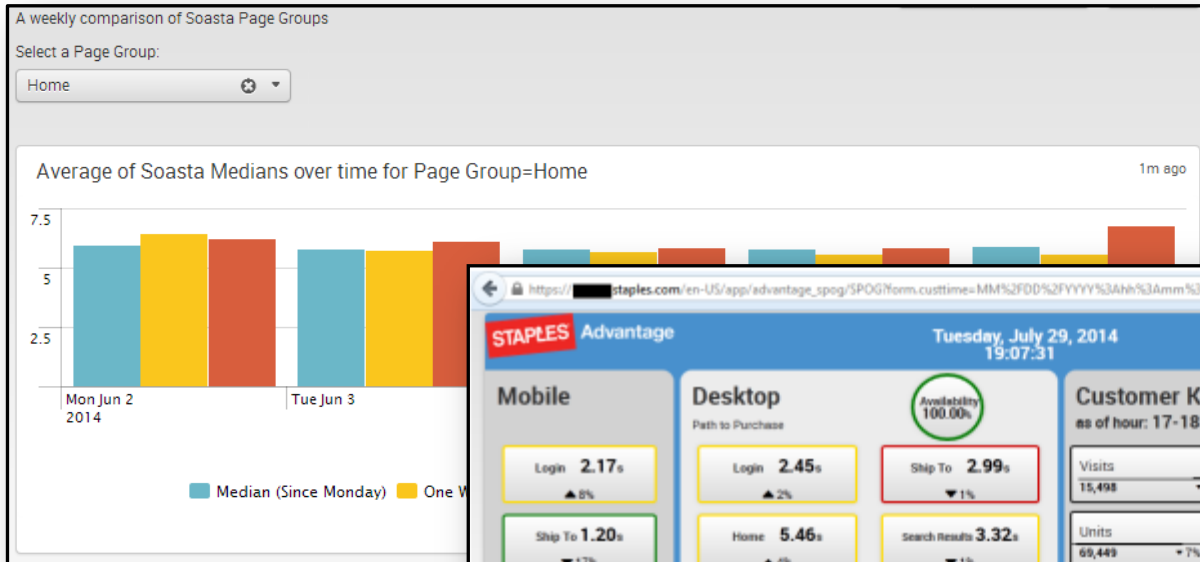
Staples Advantage Operational Intelligence



Comprehensive Insights Into The Infrastructure



Mapping Application Performance to User Experience



Splunk Delivers Business Value

Manual to automatic monitoring
saves time, effort and money

User/usage correlation with
application and infrastructure

Optimizing searches on website
with analytics

Real-time insight into customer
experience

Splunk Saves The Day Numerous Times

Dramatic increase of
page load times by
20%



Instantly detected
failed connections
between application
servers and
database servers



**Significantly
reduced MTR from
multiple days to less
than 24 hours**

Latencies in service
potentially affected
end-users



Proactively
identified issues
with service
provider using
Splunk reports and
dashboards



**Avoided impact to
end-users and
customer
experience**

Adoption Has Been Organic and Viral

DATA VISIBILITY

- Index any type of data from any data source
- Staples Advantage Command Center

EASE OF USE

- 8 of the 9 EVPs using Splunk across Staples IT
- Create Dashboards and Alerts with Quick Turn-Around

FLEXIBLE SOLUTION

- Scalable platform to access reports and data in any device
- Flexible reporting across a variety of use cases
- One-Stop for Staples Data

Value Across the Business

“Splunk saves everyone a lot of time. It’s easy to use, helps us to be proactive, and allows us to report on exactly what we need.”

If not for Splunk, we would need multiple tools to accomplish what we now take for granted.”

**I DON'T ALWAYS
USE BIG DATA**



**BUT WHEN I DO I
ALWAYS USE SPLUNK>**

THANK YOU

splunk>