# Gaining Insights to Business and Operations by Using Splunk's Business Analytics Capabilities

## Going Beyond IT/Security To Improve Business Operations Using Splunk

**Clara Merriman: Splunk Engineer**

cmerriman@splunk.com

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# 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.

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# Introduction

**Who and what?**

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# Bio: Clara Merriman

## Splunk Engineer – SplunkZero Team, Splunk, Inc.

- Own the best dog ever, **Sadie**
- **B.S. in Mathematics** from University of South Dakota
- Joined Splunk in June 2018
- Lead BI Engineer @ SONIFI Solutions
- Started using Splunk in late 2013
- Splunk Community leader
  - **Splunk Blogs** author
  - **Splunk User Group** leader
  - **SplunkTrust** member *(MVP Program)*

https://www.linkedin.com/in/clara-merriman-5a871299/

splunk> .conf18
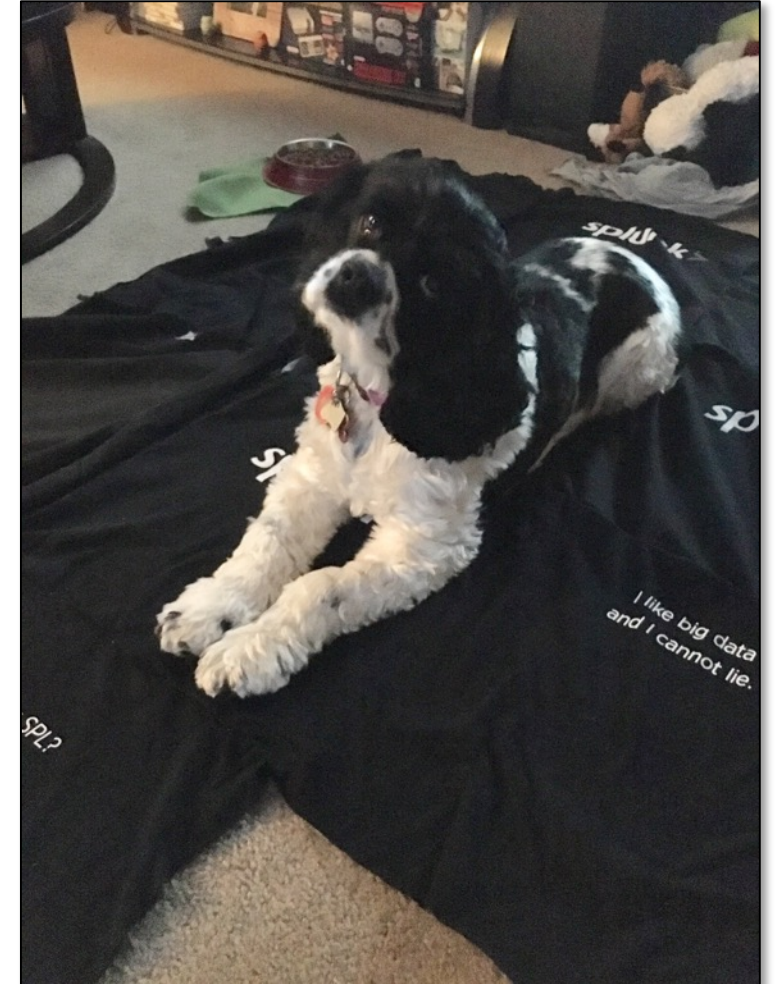
# What's on the lineup?

**…and now to interrupt your regularly scheduled program to bring you this…**

► Why is leveraging machine data outside of IT/Security important?

► Examples use cases for the business

► Best practices for getting started

130.60.4 - - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=SD1SL4FF10ADFF10 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=SD5SL7FF6ADFF9 HTTP 1.1" 404 3322 "http://buttercup-shopping.com/cart.do?action=purchase&itemId=EST-26&product_id=GIFTS"
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"Data is what you need to do analytics. Information is what you need to do business."

**John Owen**

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# Importance

It's worth it

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# How Have You Benefitted From Splunk Already?

**Splunk> More flexible than an Olympic gymnast**

Splunk's unique schema-on-read approach to processing and analyzing machine data helps **identify and remediate problems faster and better**

So what could you do if you applied this approach outside of IT and Security?

- Improve ROI of products/services
- Identify risks
- Increase operational efficiency
- Gain competitive advantage
- Understand customers

130.60.4 - - [07/Jan 18:10:57:153] "GET /category.screen?category_id=GIFTS&JSESSIONID=SD15L4FF10ADFF10 HTTP 1.1" 404 720 "http://buttercup-shopping.com/cart.do?action=view&itemId=EST-6&product_id=FL-SW-01" "Opera/9.1 ...
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317 27.160.0.0 - - [07/Jan 18:10:56:156] "GET /oldlink?item_id=EST-26&JSESSIONID=SD5SL9FF1ADFF3 HTTP 1.1" 200 1318 "http://buttercup-shopping.com/cart.do?action=changequantity&itemId=EST-6&JSESSIONID=SD1BSL8FF2ADFF9 HTTP 1.1"...

# Monitoring Data That Is Higher In The Stack Opens New Ways To Use Splunk For You

**Customer Generated**

**Business Processes**

**Applications**

**Services**

**Networks and Endpoints**

**IT Infrastructure**

Aggregate and analyze data to diagnose and visualize root causes of problems with internal and external business processes

Aggregate and analyze data to diagnose and visualize root causes of problems with technical apps/services

Aggregate and analyze data to diagnose and visualize root causes of problems with technical systems

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# Monitoring Data That Is Higher In The Stack Opens New Benefits For You

**Customer Generated**

**Business Processes**

**Applications**

**Services**

**Networks and Endpoints**

**IT Infrastructure**

**Business Process Monitoring**

**Customer Experience Monitoring**

**Product Operations Insights**

**Marketing Operations Insights**

**Lower customer churn**

**Lower operational costs**

**Lower compliance risks**

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# Example Data Sources For Business Use Cases

- **Business Process Logs** (Payments status, customer order status, etc.)

- **Web logs, Application logs**, middleware logs, transaction logs, mobile app page views

- **POS** (Point of Sale) transaction logs, sales

- **Call Detail Records**, Call Center IVR logs

- **NPS** Customer Survey records

- **Marketing/CRM** Interactions: emails, calls, leads, opportunity event

- **ERP/Finance** Billing & Invoicing, Procurement & Revenue, Quotes, Orders

- **Referential lookup** data from structured data

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# Industry Examples of Business Use Cases

| Industry | Use Case Ideas | |
| --- | --- | --- |
| Education | Predict at-risk students | Admission rates |
| Retail | Website journey | Sales and promos |
| Banking | In-branch or Online | Service adoption |
| Manufacturing | Operating expenses | Process enhancements |
| Government | Intelligence-Led Policing | Human services |
| Healthcare | Re-admit rate | Satisfaction scores |
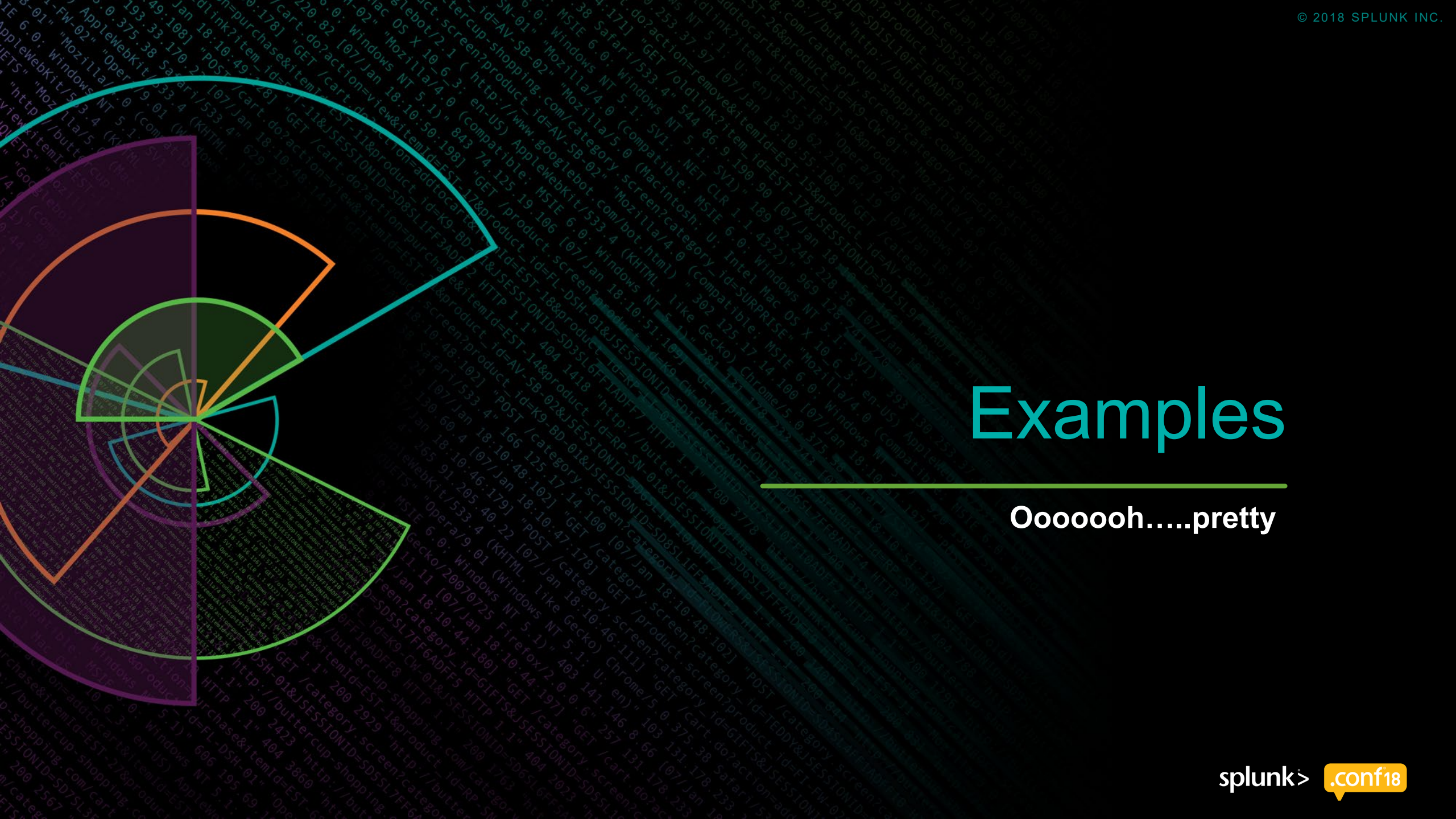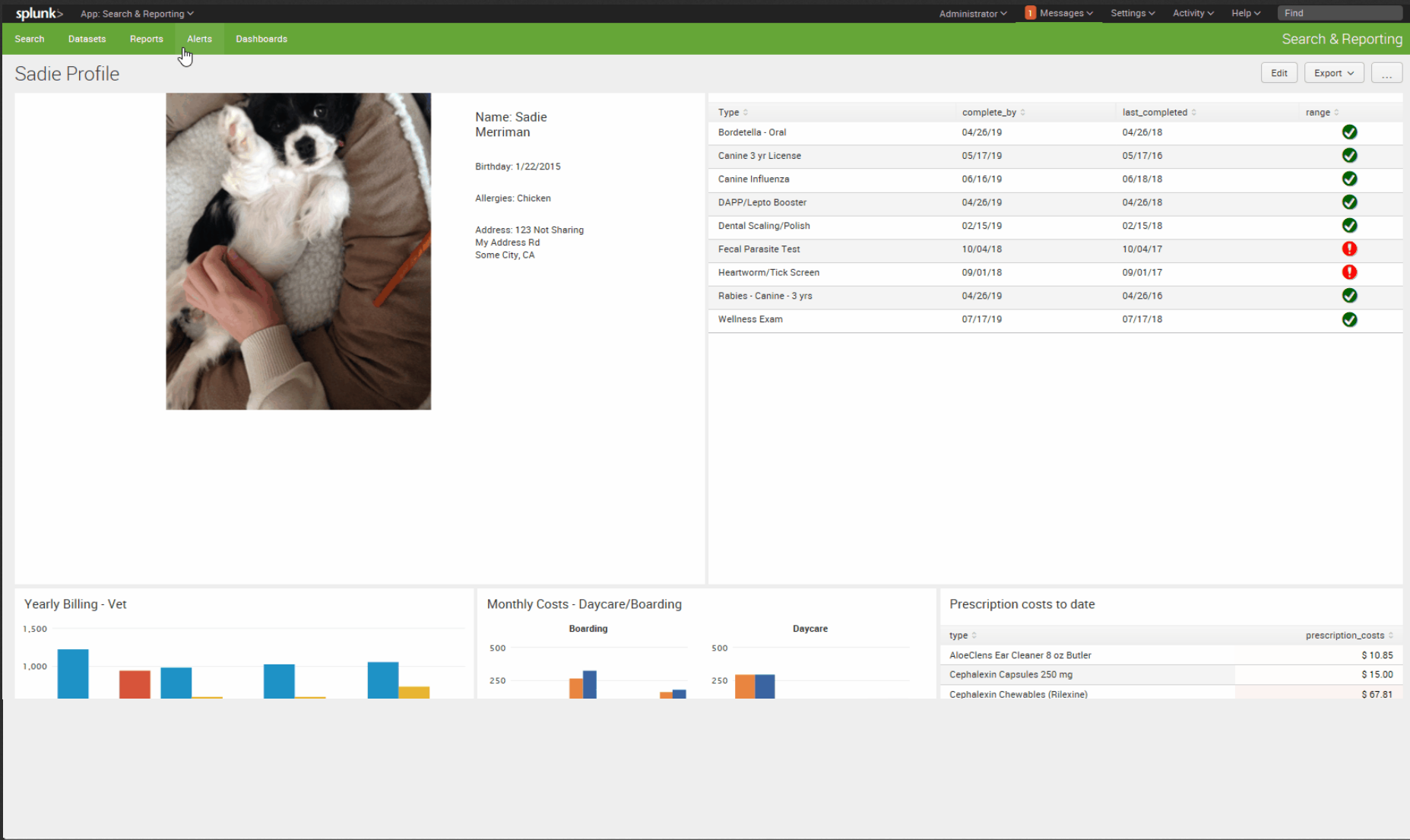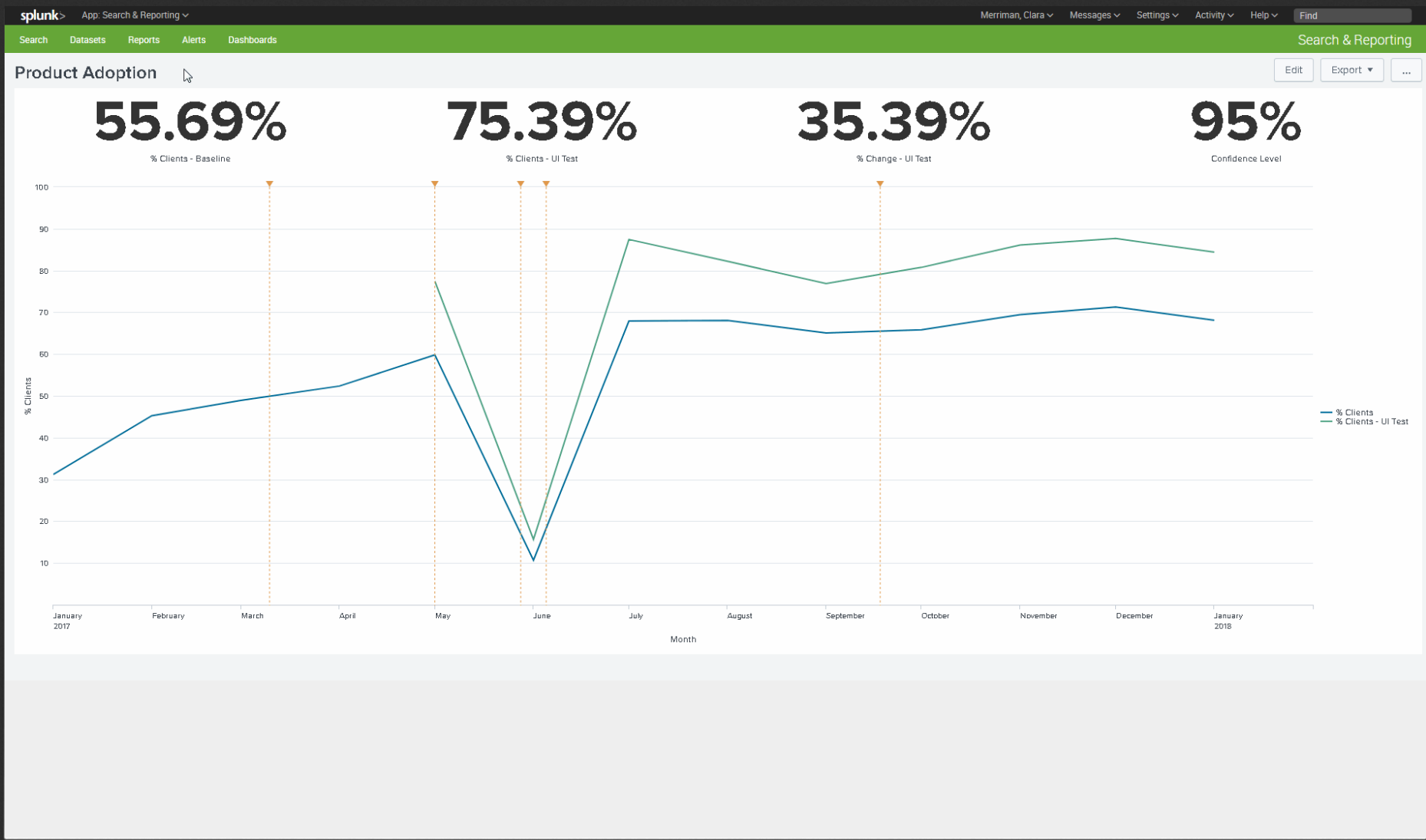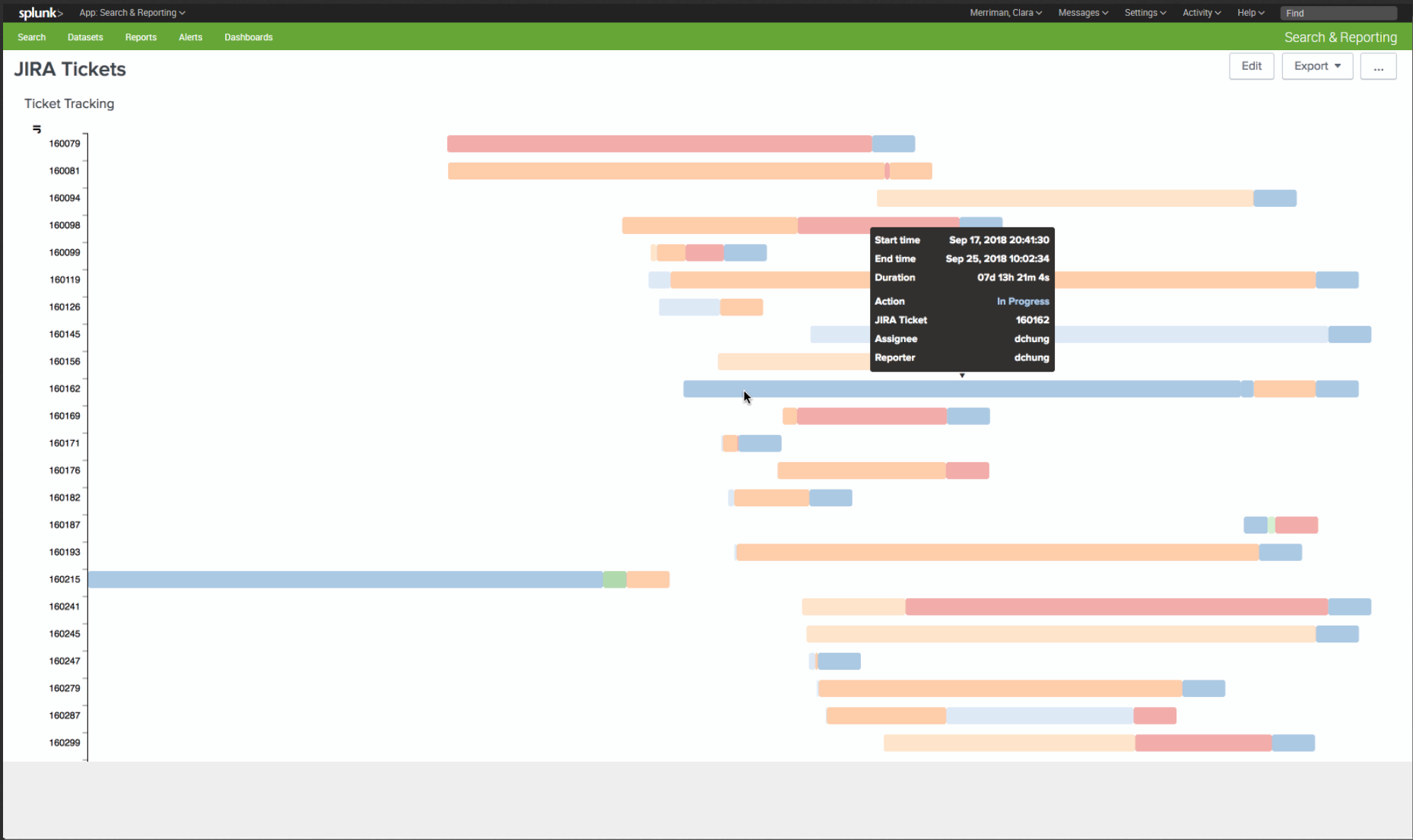
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# Examples

**Oooooooh…..pretty**

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splunk> App: Search & Reporting ∨

Merriman, Clara ∨    Messages ∨    Settings ∨    Activity ∨    Help ∨    Find

Search    Datasets    Reports    Alerts    Dashboards                                                    Search & Reporting

## Customer Journey                                                                          Edit    Export ∨    ...

**How many clients use various features of a website**

Top Level Services

| Account Summary | Messages | Offers | Products | Support | Tools |
|---|---|---|---|---|---|
| **24.44%, 491 clients** | **9.61%, 193 clients** | **6.92%, 139 clients** | **9.21%, 185 clients** | **62.02%, 1246 clients** | **3.68%, 74 clients** |

About    Support    File a Bug    Documentation    Privacy Policy
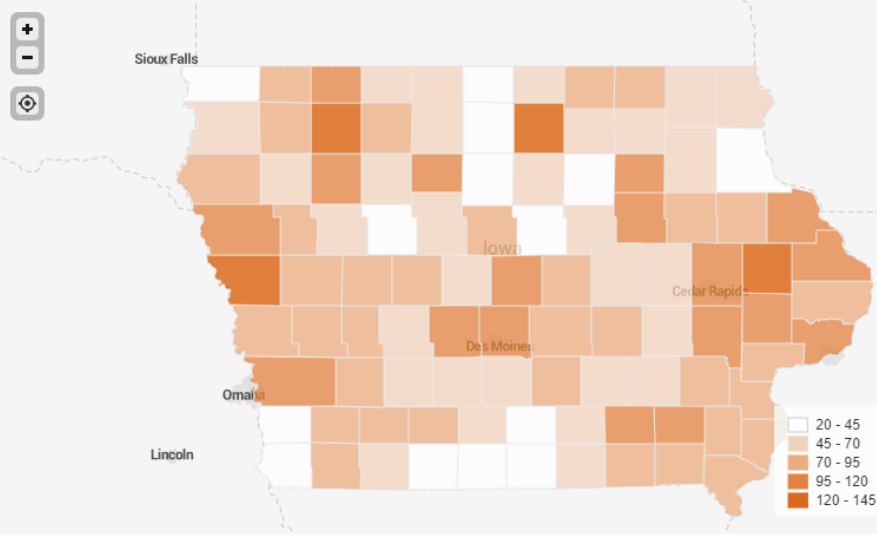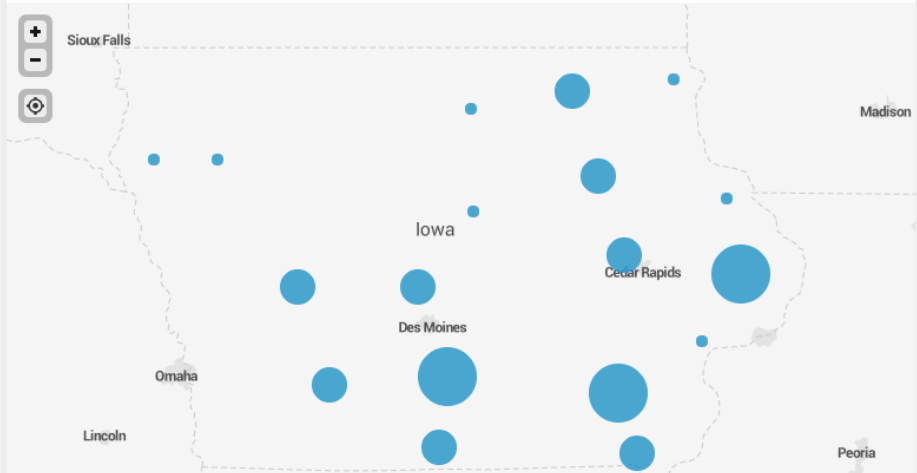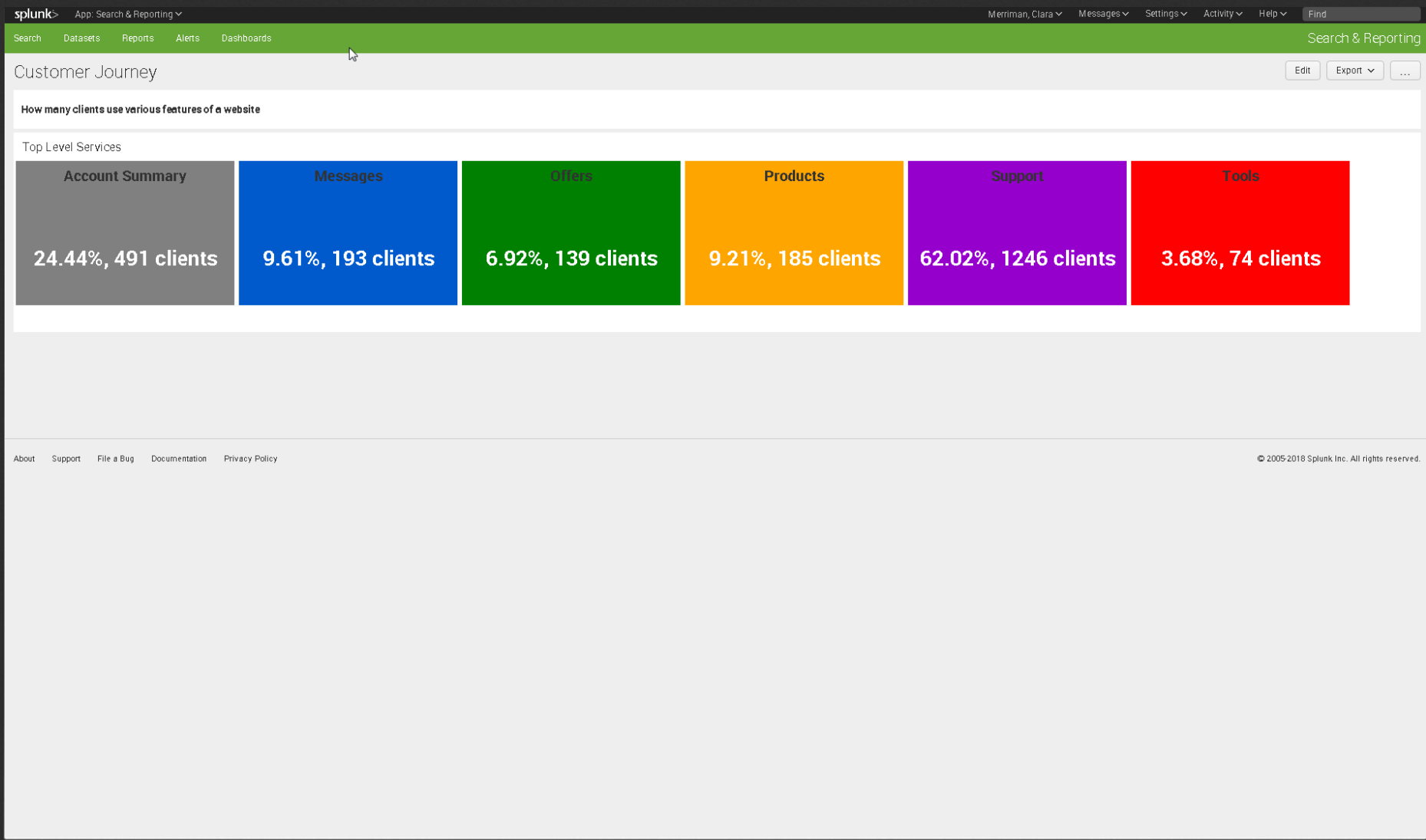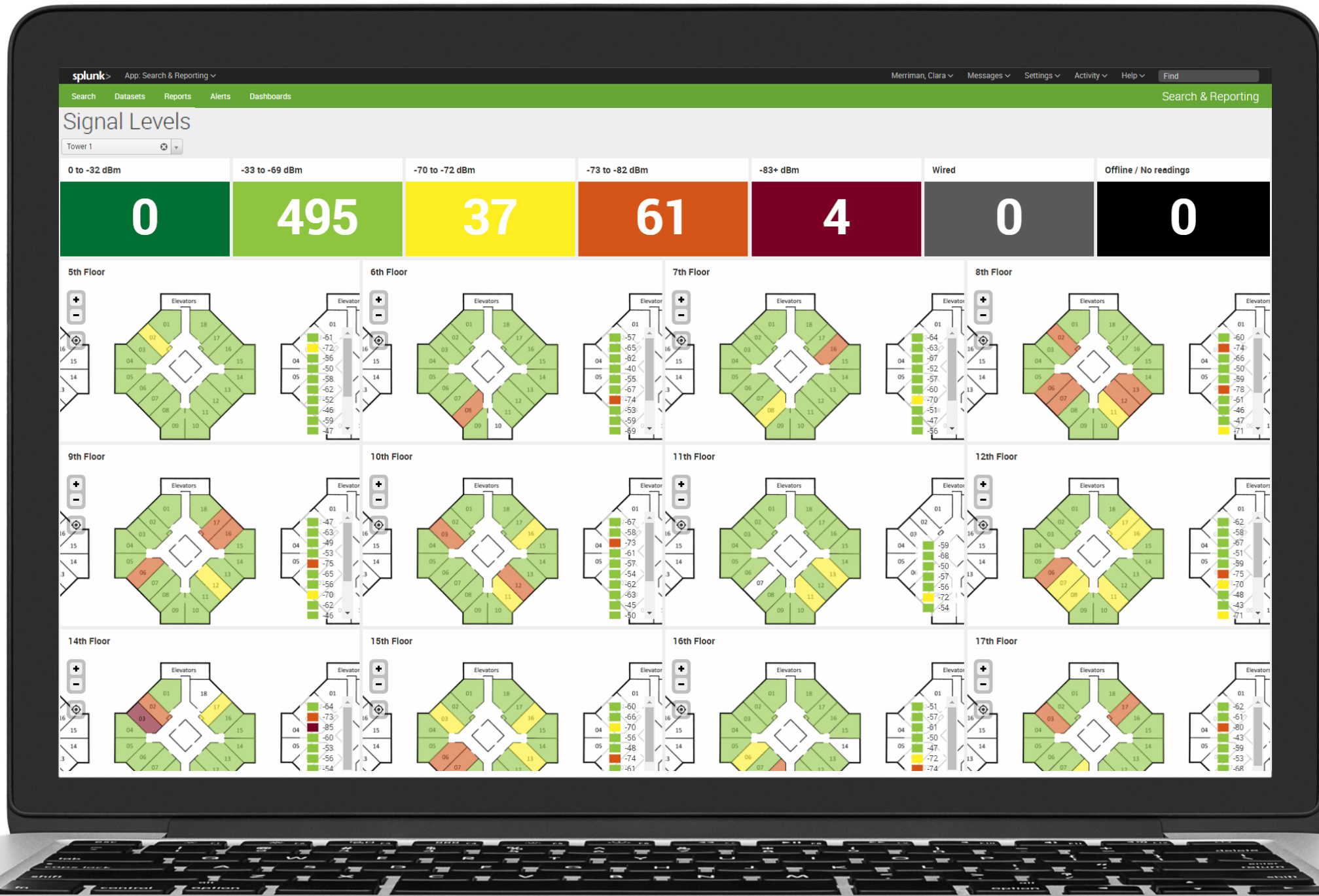
# Return

**Dolla Dolla Bills Ya'll**

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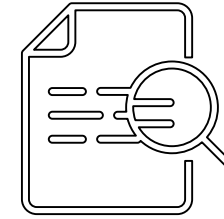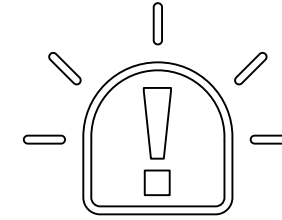
# Customer Behavior Billing Decisions ROI

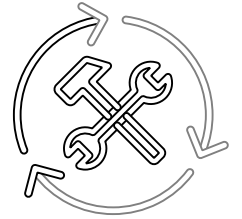**Splunk> I like big data and I cannot lie**

▶ Customer Behavior Analytics

- **Correlate** viewing habits with billing data
- Detect **questionable** cancellations
- Implement **preventative** processes

**Event Correlation**

**Anomaly Detection**

**Prevention**

## $100,000

**monthly savings**

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# Steps to Success

## Splunk> Looking for Trouble

**Step 1**

**Start slow**
Ask one question > ingest needed data > find insights

**Step 2**

**Explore**
Explore data to find new insights and answer new questions

**Step 3**

**New data, new questions**
Start asking new questions with other data. Bring in other departments

**Step 4**

**Enrich data from external sources or other datasets**
Slice data in new ways

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# How Splunk Community Can Help

**Splunk> Now with 50% more Fez**

▶ Splunk Community = Customers, Partners, Splunkers, and You

▶ Resources

- **Splunk Answers** - 81K questions asked with 106K answers, >18K active users
- **Slack** – topic-specific Channels with >800 active users weekly
- **User Groups** – 93 groups worldwide

**Splunk Answers**

Q&A Forum

answers.splunk.com

**Slack Chat**

Online, real-time interaction

http://splk.it/slack

**User Groups**

Face-to-face interaction

usergroups.splunk.com

**SplunkTrust**

MVP Program

splk.it/splunktrust

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# Key Takeaways

**Splunk>**

**The end of meh-trics**



I EAT SUCCESS FOR BREAKFAST

1. Splunk can be used in new ways to drive new forms of value

2. Splunk can be applied to many new use cases

3. Always ask questions and ask for help

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# Learn More About Splunk For Business Analytics at .conf!

| Breakout Session | Speaker | Day | Time |
|---|---|---|---|
| ~~Idea to Reality – Transforming Business Activity Monitoring with Splunk~~ | ~~Freddie Mac~~ | ~~Tuesday~~ | ~~2:15PM~~ |
| ~~Unlock Value with Real-Time Customer Journey Tracking~~ | ~~Shelde~~ | ~~Tuesday~~ | ~~3:30PM~~ |
| ~~Combine Customer Feedback and Operational Analytics for Improved Customer Experience~~ | ~~Splunk~~ | ~~Tuesday~~ | ~~4:45PM~~ |
| ~~WHAT'S NEW for Splunk and Business Analytics~~ | ~~Splunk~~ | ~~Wednesday~~ | ~~11:30AM~~ |
| ~~Gaining Insights to Business and Operations by Using Splunk's Business Analytics Capabilities~~ | ~~Splunk~~ | ~~Wednesday~~ | ~~12:45PM~~ |
| Demystifying the Data Scientist: A Case study From BankID Norway | BankID Norge AS | Wednesday | 3:15PM |
| Small Business, Big Data:  Adopting Splunk for Small Enterprises | ATB Financial | Thursday | 12:15PM |
| Addressing Customer Issues With Splunk | Intuit | Thursday | 12:15PM |
| Transforming IT from a Cost-Center to a Strategic Asset: Splunk in the City of Newberg | City of Newberg | Tuesday | 4:00PM |

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