SAPinsider

Case Study: How C Spire Leveraged SAP BusinessObjects Design Studio to Build Interactive Dashboards for Multiple User Types and Multiple Data Sources

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C Spire

In This Session

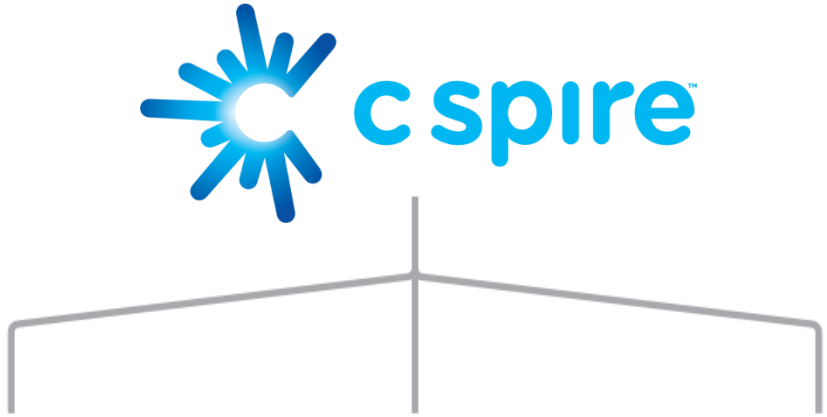
- Hear how C Spire consolidated multiple reports and choice metrics on an interactive dashboard using SAP BusinessObjects Design Studio and SAP HANA to reinvent how store managers organize and process store and employee performance data
- Learn how a very manual, daily process was reduced to a simple point-and-click process providing greater insight into their stores and employees by exploring:
  - The pros and cons of SAP BusinessObjects Design Studio for its data visualization needs
  - Dashboard features used to achieve C Spire's five key design goals and deliver business user requirements to both desktop and mobile devices
  - Features and functions utilized to provide multiple views and drill down capabilities in a single dashboard to accommodate needs of corporate hierarchy

What We'll Cover

- About C Spire
- Understanding the design goals for the project and why each goal is important
- Choosing SAP BusinessObjects Design Studio and SAP HANA to implement the Retail Dashboard Project
- Exploring the dashboard layout and format
- Reviewing the project outcome
- Lessons learned
- Wrap-up

About C Spire

Company Information



c spire wireless

- Largest privately held wireless provider and 6th largest in U.S.
- Approx. 1 million subscribers
- Extended range 4G LTE network
- More than $1 billion in network infrastructure since 2003

c spire business solutions

- Tier 3+ data center
- IP Voice, cloud services
- Hosted Exchange
- Unified communications
- Fiber ring redundancy
- 1.5 Mbps to 10 Gbps
- Small business Internet

c spire fiber

- 1 Gbps Fiber to the Home
- Super HD TV service
- Digital home phone
- 7,000 fiber route miles
- Consumer wireless service

SAP BusinessObjects Installation Member

Our SAP Landscape

- SAP BusinessObjects BI Suite
  - Web Intelligence
  - Dashboards (formerly Xcelsius®)
  - Explorer
  - Lumira
  - Design Studio
  - Crystal Reports
- Upgraded to 4.1 before the project

- ETL and Databases
  - Data Services
  - IBM Netezza
  - SAP HANA
    - 2 units
    - 128GB or 64GB of usable space
- SAP HANA was purchased and introduced to the environment with SAP BusinessObjects 4.1 upgrade

The C Spire Self-Service User Community

- 9 business organizations
- ~130 users
- 50 SAP Lumira client licenses assigned
- 25 SAP Lumira client licenses actively used
- 23 Data Sets designed for self-service
- 18 self-service data marts in Netezza
- 5 self-service data marts in SAP HANA

Understanding the design goals for the project and why each goal is important

ROI Justification

Item	Amount	Description
Number of Stores	67	Stores
Number of Stores with Assistants	30	Stores
Total Retail Store Users	97	Managers and Assistant Managers
Time Savings Per Day Per Person	15	Minutes
Time Savings Per Six Day Week Per Person	90	Minutes
Time Savings Per Year Per Person	75	Hours
Time For all Retail	7275	Hours
Assume Payrate of $20.00 Per Hour ($41,600 Annualized)	$ 145,500	Twelve Months Savings
	$ 218,250	Eighteen Months Savings

Challenges

- Problem
  - Retail Managers time commitment to process daily sales reports is too high
  - Sales Reps do not receive an individual sales performance. All individual rep's metrics are posted to a white marker board.
- Background
  - Retail Managers receive in excess of 20 reports every day
  - Managers manually assemble a spreadsheet with select metrics to review with the sales team both collectively and individually
- Project Goals
  - Reduce the amount of time required by each Retail Store Manager or designee by at least 15 minutes
  - Provide an Individual Sales Performance Report to each Retail Sales Rep for consumption over their smartphone

5 Key Design Goals for the Project

Goal	Justification
Incorporate best practices of Information Dashboard Design	Wanting to prevent mistakes others had made
Minimize mouse clicks	Keep it simple
Intuitive	Little to no training required
Self-evident	Little to no training required
Clear and concise definitions	Little to no training required

Choosing SAP BusinessObjects Design Studio and SAP HANA to implement the Retail Dashboard Project

Selection Process for Design Studio

Xcelsius – the incumbent

- Did not have a huge investment
- Many dashboards should have been written in Webl
- Difficult to expand
- Mockup concepts quickly
- Adobe Flash

Design Studio

- Ease of transition from JavaScript
- Very Flexible
- Scales to mobile platforms better
- HTML5
- Works well with SAP HANA

* Xcelsius is now called SAP BusinessObjects Dashboards

Implementing the Retail Dashboard Project Using SAP BusinessObjects Design Studio and SAP HANA

- Our expectations for using Design Studio and SAP HANA
  - Improved performance – the response time in our test using Netezza was not sufficient
  - Improved customization – SAP BusinessObjects Dashboards (formerly Xcelsius) is difficult to expand after initial construction
  - Improved visualization – charts and crosstabs needed to scale better
  - Agility/Flexibility – the developers wanted a more flexible tool
  - Mobile access to data – using FLASH was becoming a problem

Implementing the Retail Dashboard Project Using SAP BusinessObjects Design Studio and SAP HANA? (cont.)

- SAP BusinessObjects Design Studio
  - Provides design flexibility
  - Enables the desired look-and-feel of the end product
  - Easily scales to mobile platforms
  - The developers liked working with Design Studio more than SAP BusinessObjects Dashboards
- SAP HANA
  - Provides near instantaneous speed

Exploring the dashboard layout and format

Choosing the Dashboard Layout and Format

- To incorporate best practices into our process we studied the works of Stephen Few
  - Place data into proper context
  - Arrange the data appropriately
  - Eliminate “noise” or clutter from the dashboard
  - Reduce the use of color and shapes
  - Create an appealing display
- Reviewed and discussed the experience with our vendor partner
  - Expressed the principles we wanted embedded in the final product
  - Reviewed prior work that followed these principles
  - The user selected an existing structure they liked from the review of prior work

Choosing the Dashboard Layout and Format (cont.)

- Finding the right partner:
  - We invested time and effort to find a partner that best fit us
  - Everything about this project was new to us
  - We wanted someone who had done this before
  - We only use SAP BusinessObjects. We wanted a vendor that was focused on SAP BusinessObjects.

Choosing the Dashboard Layout and Format (cont.)

- Finding the right partner: (cont.)
  - Needed the business built around support for SAP BusinessObjects and the SAP BusinessObjects Space
  - Needed to have a proven track record
  - Needed to be recognized for their work
    - Nationally recognized BI authority
    - SAP Gold Partner
    - Partner of the Year
  - Has a history of developing SAP Solutions for Analytics, EIM, Data Warehousing, and SAP HANA

Choosing the Dashboard Layout and Format (cont.)

Who will use it?

- Store Managers
- Regional Managers
- Corporate Staff

Where will the dashboard be used?

- The Store Manager's desk
- The Regional Manager's laptop
- Sr. Managements' desktop
- iPads

What information needs to be communicated?

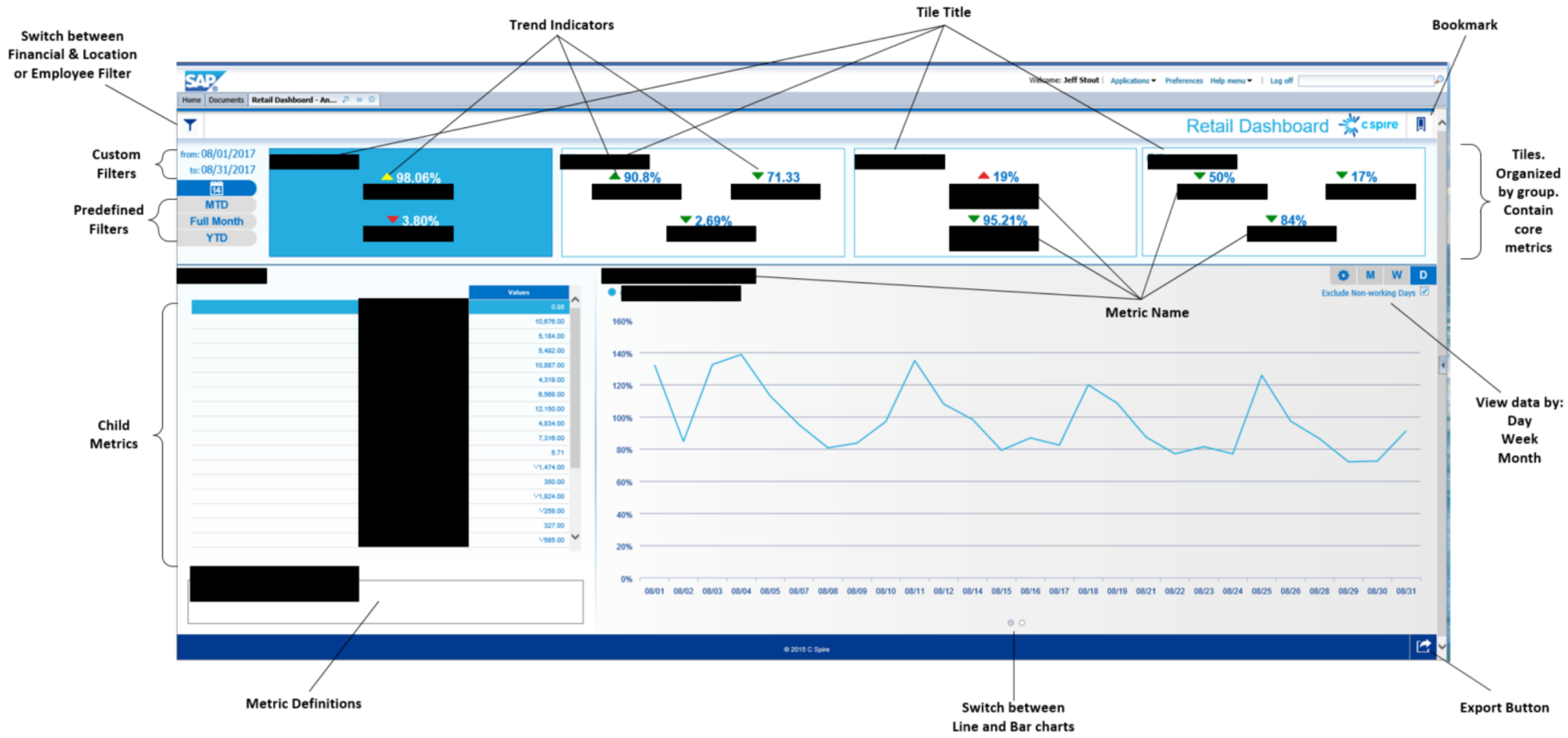
- Store Performance Metrics
- Employee Performance Metrics
- Individual Performance Report

What is the purpose?

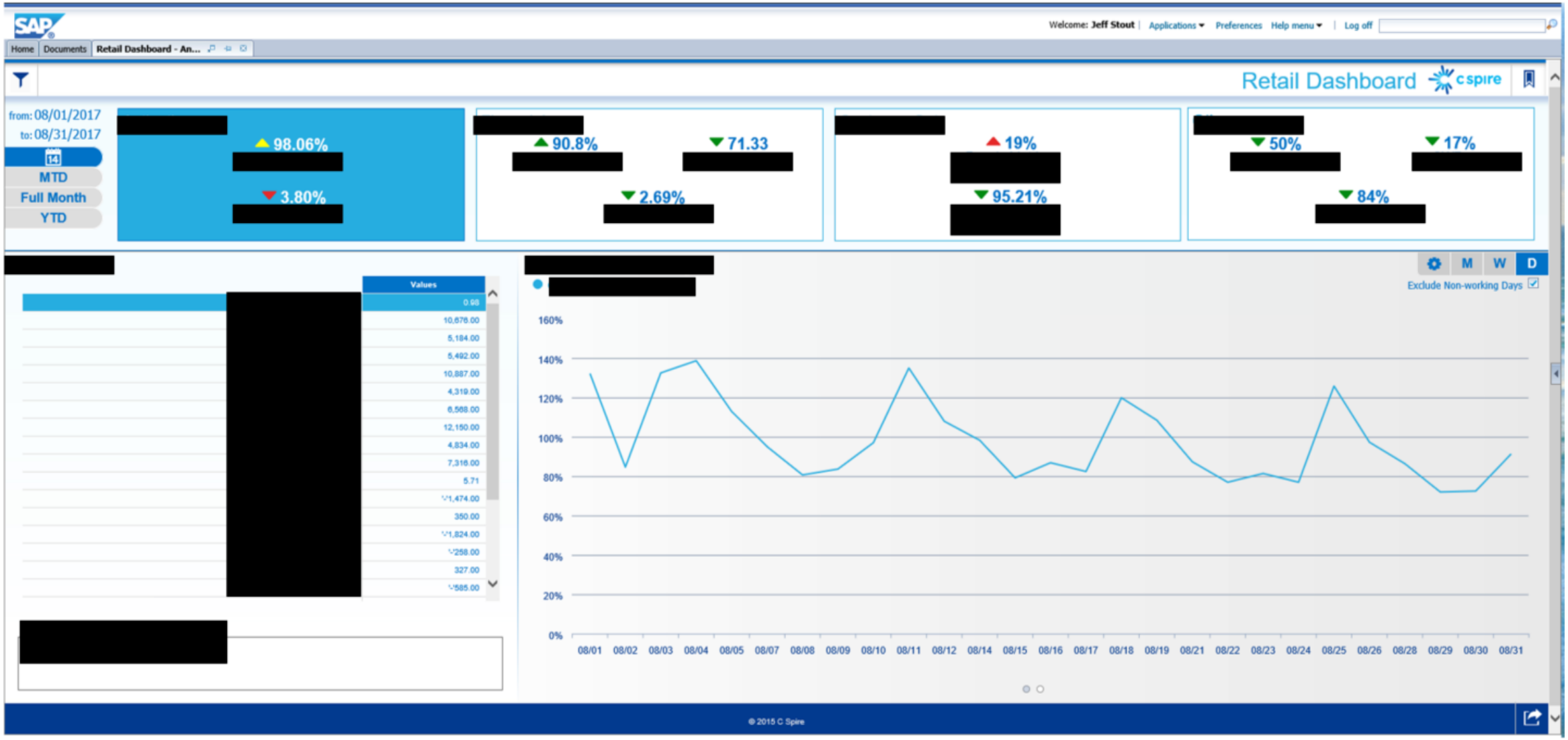
- Replace the whiteboard in the back office
- Reduce the amount of time required to collect and assemble metric data and manual reports

Reviewing the project outcome

The Outcome of the Project



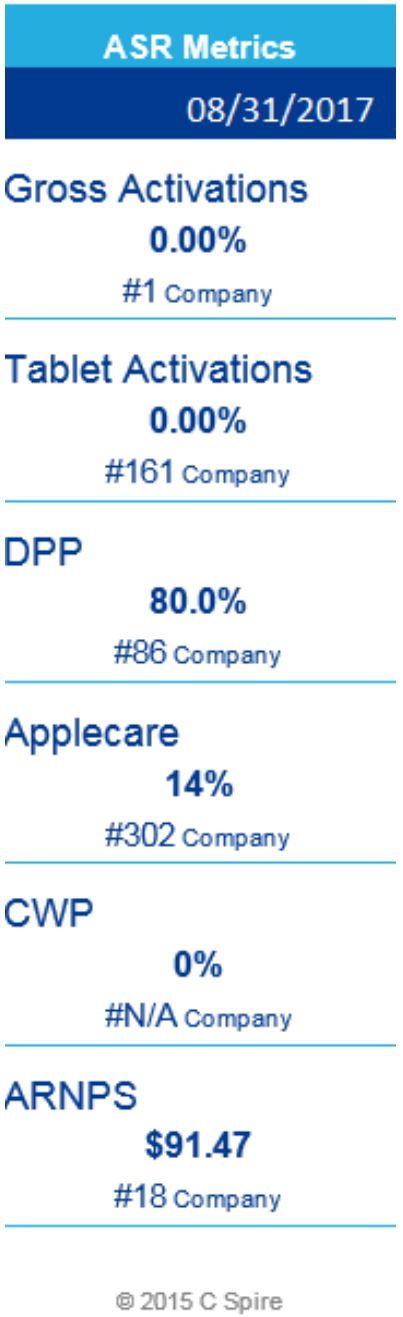
The Outcome of the Project (cont.)



The Outcome of the Project (cont.)

ASR Performance Report

Each metric was selected by the Retail Business Owners. The report is published to each sales rep. The report is designed to be consumed on the rep's phone.



The Outcome of the Project (cont.)

1. Consolidation of key retail metrics
2. Extremely fast response times
3. Managers save an average of over 20 minutes daily
4. Managers save an average of over 45 minutes per week preparing for one-on-one meetings
5. Managers say the dashboard is very intuitive and easy to use

The Outcome of the Project (cont.)

Separated the most important metrics

Trends easily visible

Removed or reduced "noise" from the charts

Provided the capability to easily see the values behind each metric

Some training was required

The ASRs received feedback daily

Lessons learned

Lessons Learned

- The ETL design is not flexible nor adaptable to changes in metrics or metric formulation
- The Custom Date Range had some value but came at a high cost
- The filter to switch between the Store view and Employee view is not intuitive
- The response to the Employee Performance Report delivered to the Sales Rep's phone was far more positive than we had expected
- The time savings were more than expected
- Including the time savings for the one-on-one meetings would have further reduced time required for the ROI
- Everything should refresh at the same speed

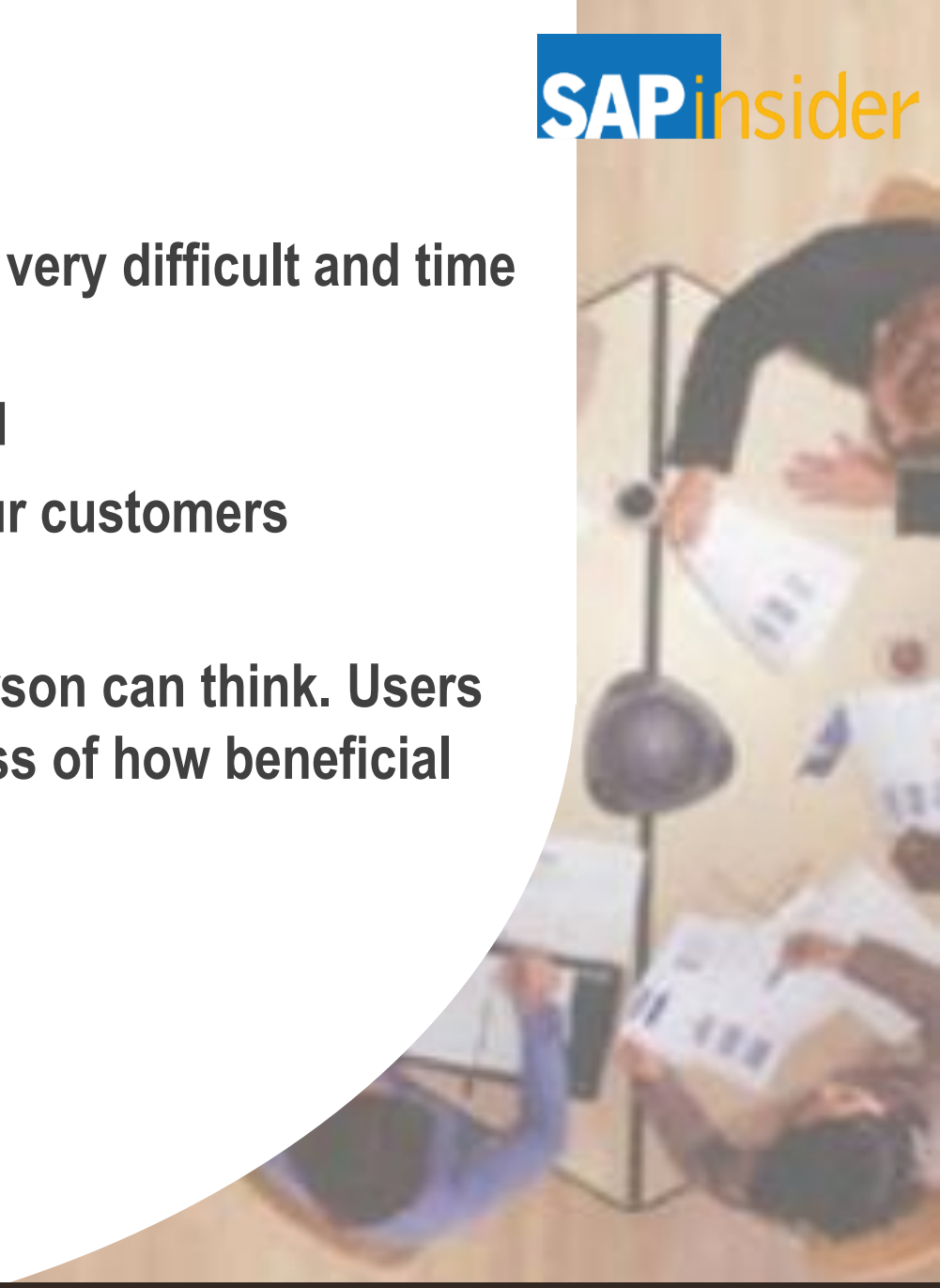
Wrap-up

Where to Find More Information

- https://help.sap.com/viewer/p/SAP_ANALYTICS
  - SAP Analytics on the SAP Help Portal
- https://help.sap.com/viewer/p/SAP_BUSINESSOBJECTS_WEB_INTELLIGENCE
  - SAP BusinessObjects Web Intelligence on the SAP Help Portal
- www.sap.com/products/hana.html
  - SAP HANA product page
- Stephen Few resources:
  - www.perceptualedge.com – Perceptual Edge, Stephen Few's website
  - Stephen Few, *Information Dashboard Design: The Effective Visual Communication of Data* (Analytics Press, 2006).
  - Stephen Few, *Show Me the Numbers: Designing Tables and Graphs to Enlighten* (Analytics Press; 2nd edition, 2012).

Key Points to Take Home

- Driving a BI project from bottom-up versus top-down is very difficult and time consuming
- A champion or sponsor at an executive level is required
- Must develop and maintain a solid relationship with your customers
- If using new technologies, find the right partner
- Dashboard responsiveness needs to be as fast as a person can think. Users waiting for content to load will be driven away regardless of how beneficial the dashboard may be.
- Design to modify or replace metrics quickly
- Pre-calculate metrics



Your Turn!

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Thank You
Any Questions?

Please remember to complete your session evaluation

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