Credit Union Analytics User Group

Virtual Meetup: December 17th, 2020

Mortgage Dashboards In The House

We will be starting shortly!

The recording and deck will be emailed to you.

- Please add questions to the Q&A box.
- Feel free to introduce yourself, your role, your CU in the CHAT box.

If you would like to receive future invitations, register here:
https://go.callahan.com/AnalyticsCommunity.html

Hosted by:

tableau
Credit Union User Group

Agenda

Introduction & Community Updates

Mortgage Dashboards In The House

Q&A

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Introduction & Community Updates

Charlotte Taft | Sr. Director of Business Intelligence

Callahan & Associates | Washington, DC | ctaft@callahan.com

CALLAHAN & ASSOCIATES
the credit union company

Today’s Registered Attendees

Interested in speaking?

Interested in hosting?

Interesting in planning?

Got ideas you want covered?

WE WANT YOU!

FOR THE CU TUG!

Contact Us
Charlotte Taft | ctaft@callahan.com

Don’t Miss An Update

Sign up using the below link to get email updates – you can select which updates you’d like to receive:

Analytics Community Email Sign-Up

- Tableau Community page
- Power BI community page

2021 Planning!

Invites were sent out TODAY for an all-industry planning session for the larger CU Analytics Community.

1/12/21 3PM ET

Didn’t receive it? Email me! (dratted spam filters)

Want to join? Email me! ctaft@callahan.com

January 2021 TUG

Save the Date (ish)

Coming the third week in January…

CU Tableau User Group:
Data Warehouse Edition
(working title ☺)

Pentagon Federal Credit Union

Mclean, VA ($26B)

	PenFed	Credit Unions Over $10B	Credit Unions $1B-$10B	Credit Unions $500M-$1B	Credit Unions $250M-$500M	CUs Under 250M	All Credit Unions in U.S.
Assets	$26,257,438,559	$26,092,215,610	$2,561,281,057	$704,647,513	$349,616,373	$49,795,772	$344,616,984
Members	2,079,534	1,755,472	159,235	51,354	27,584	4,641	23,838
Loans	$20,827,558,765	$16,928,494,296	$1,712,441,131	$464,454,675	$218,797,356	$27,223,318	$222,729,509
Shares	$19,189,046,290	$21,747,015,457	$2,192,165,787	$607,688,796	$305,736,086	$43,580,766	$294,866,497
12-Month Asset Growth	6.0%	17.4%	17.5%	15.7%	15.0%	13.4%	16.6%
12-Month Member Growth	13.3%	8.2%	4.5%	2.1%	1.2%	-0.3%	3.9%
12-month Loan Growth	5.3%	7.6%	7.5%	6.5%	5.2%	2.0%	6.7%
Return on Assets	0.6%	0.6%	0.8%	0.6%	0.5%	0.5%	0.7%
Net Worth	$2,803,219,806	$2,603,311,118	$266,952,644	$72,743,631	$36,811,122	$5,664,815	$35,979,974
Operating Expense Ratio	2.3%	2.7%	2.9%	3.4%	3.5%	3.5%	3.0%
FTEs	2,662	3,559	403	147	80	13	60

Data as of 9/30/2020

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Credit Union User Group

Mortgage Dashboards In The House!

Bill Andrews
Manager, Mortgage Data Science
Pentagon Federal Credit Union

Daniel Shepherd
Data Scientist
Pentagon Federal Credit Union

PENFED® CREDIT UNION

MORTGAGE DASHBOARDS IN THE HOUSE

DECEMBER 17, 2020

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WHO WE ARE

BILL ANDREWS
Manager, Mortgage Data Science

Bill Andrews entered the Analytics space at PenFed in late 2015. During that time, he drove mortgage business intelligence from manual Excel delivery to automated reporting and BI dashboards. In that time, he built an analytics-focused relational database with historical, daily, and near-real time data from disparate sources. Using that as a foundation, he led a small team to develop a suite of Tableau dashboards in the Tableau server environment and garner adoption within PenFed's entire mortgage division. Bill has a BS in Data Analytics and is expected to graduate with a Master's in Business Analytics at UVA Darden in August 2021.

DAN SHEPHERD
Data Scientist

Dan Shepherd has been a Data Scientist at PenFed since 2018. Prior to PenFed, his primary role was financial modeling and decision management at Booz Allen Hamilton. As a data scientist, he is consistently developing innovative BI dashboards and data processes that help drive process efficiencies. Dan has been instrumental in gaining the business's adoption of Tableau, partnering closely with stakeholders, and solving to the business need. Dan graduated from Virginia Tech with a dual-degree in Finance and Economics and is expected to graduate with an MBA at Johns Hopkins in December 2021.

NEW LEADERSHIP, NEW LOS, NEW DIRECTION

THE BACKGROUND

LONG AGO…IN MID 2019

- The PenFed Real Estate division underwent a change in leadership
  - Had to adapt quickly to fill data and reporting gaps
  - Mortgage process revamp
- Changing hands during conversion to new LOS led to new data challenges
  - Enterprise data solution for new LOS was unsuccessful
  - Running two LOS's at one time during transition
- Our team had just started publishing our first dashboards a few months prior
- Approached to develop a new dashboard to track the mortgage supply chain at all levels

A SIMPLE ASK: EVERYTHING, NOW

THE ASK

- Mortgage Supply Chain Management tool that drives pipeline movement through focus on key SLAs
- Hierarchical
  - Managers see loans that roll up from their employees
  - Had to be easily accessible for all levels
- Intraday updates - improve from daily
- Drive process standardization through key SLAs

INTRADAY LOS & HR ROLLUP FEEDS

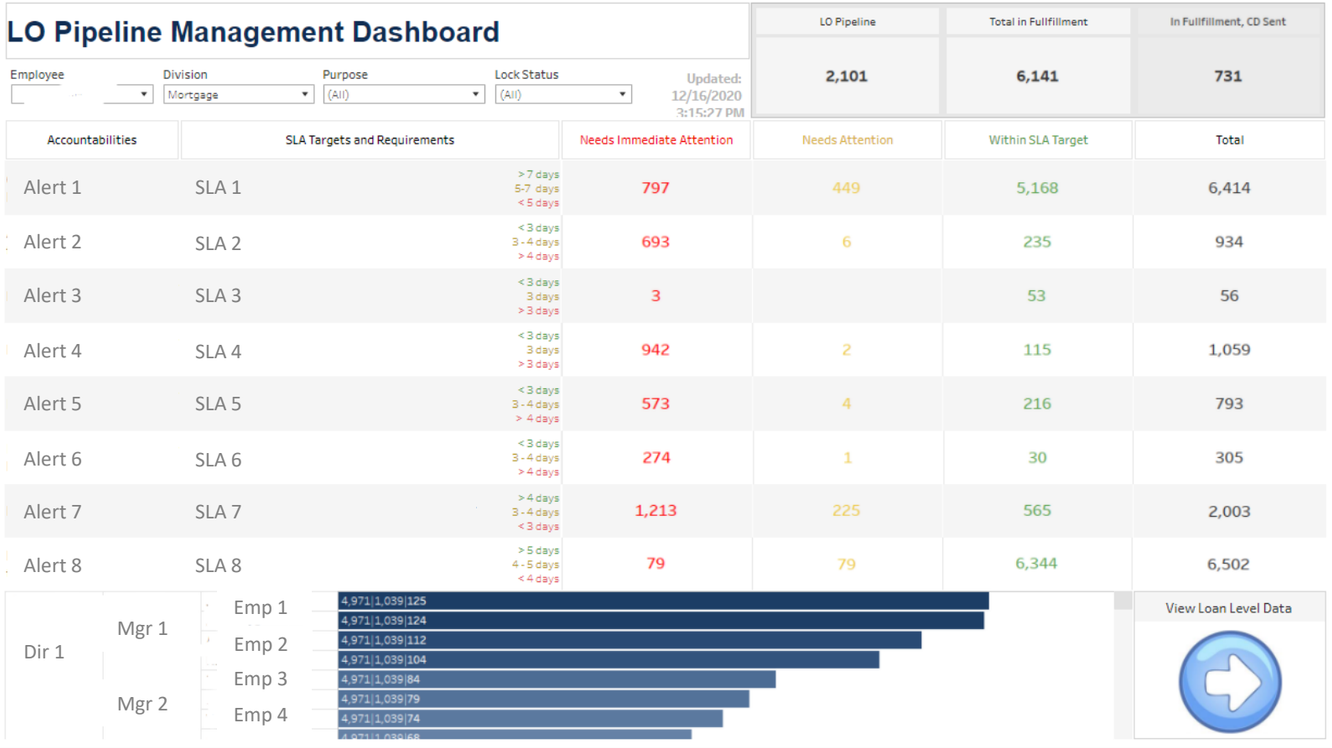
THE DATA

- Leverage Data from two major sources:
  - LOS data
    - Went through three different iterations and combinations to make this work
    - Think creatively and with scale in mind
  - HR System Data
- We encountered major performance issues when letting Tableau handle too much of field calculations
  - Had to offload the calculations to the table level to improve performance

WIREFRAMES TAKE MORE THAN AN HOUR

THE DESIGN (PT 1)

- Partnered with leadership to confirm content & definitions
- Partnered with SMEs to ensure accuracy
- Continued development as we received feedback and monitored usage
- Good Product, Great functionality, Little use



BILL AND DAN'S EXCELLENT ADVENTURE

THE CHALLENGE

- BUY-IN!
- Questioning of Data Accuracy
- Feedback received
  - Too many items to track
  - One-stop shop combination for workflow and loan level detail
  - Certain visualizations were not being used
- Overall - too much information on one screen

How do we solve to that without limiting information?

https://throughanamateurseyes.files.wordpress.com/2017/06/challenge-accepted-meme.jpg

THE NEW AND IMPROVED SECRET SAUCE

THE PARTNERSHIPS

- Working sessions with end users/managers/directors

http://www.keypersonofinfluence.com/wp/wp-content/uploads/2017/03/dent-Partnership-key-person-of-influence-v2.jpeg

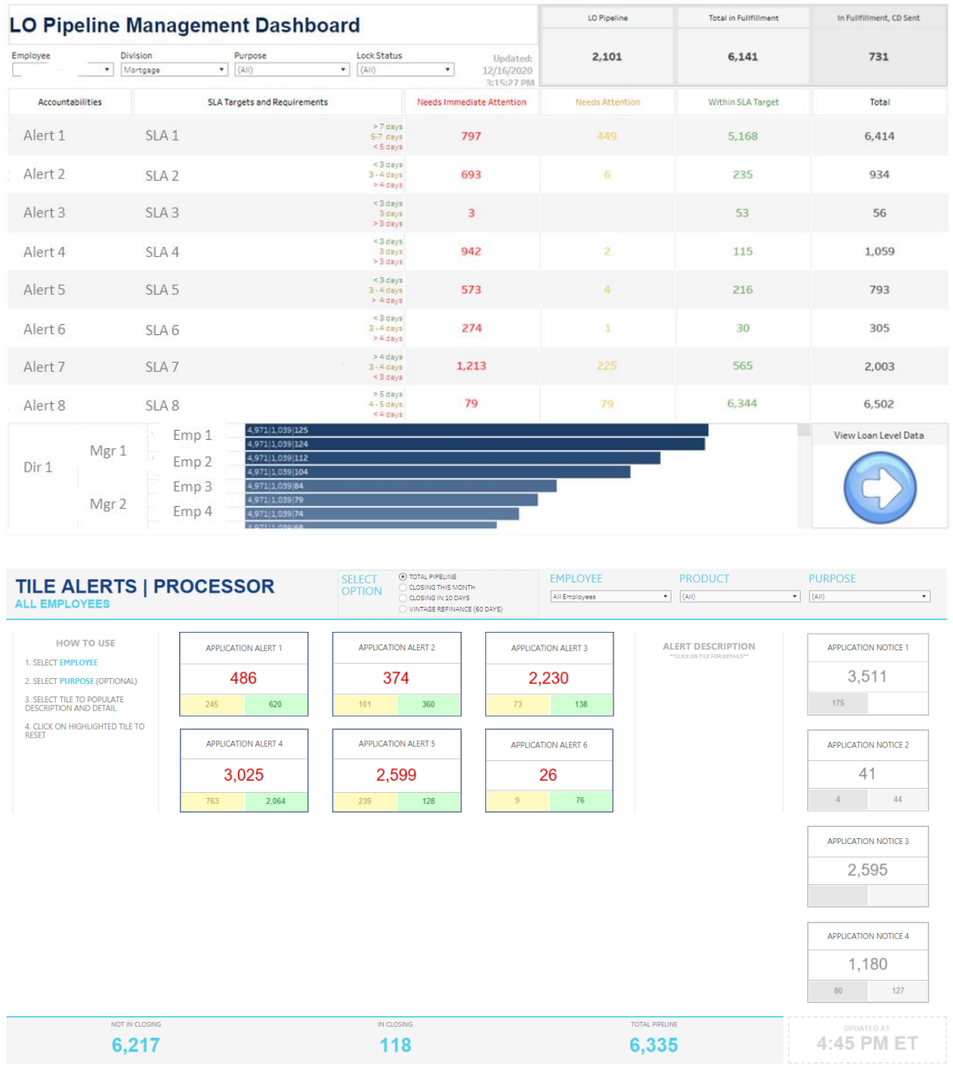
- Get buy-in during revamp development (Drive Train-the-Trainer)

- Most "troublesome" stakeholder became our greatest ally
  - Focus on your most vocal opponents

FIXER UPPER: STARRING CHIP AND JOJO

THE DESIGN (PT 2: THE REDESIGN)

- **LESS IS BETTER**
  - Not information/data but visually
  - Focus on white space
- Use of positioning and colors
  - More important tasks in the forefront colored/Awareness tasks greyscale
  - Loan-level list and window hiding
- Surveying users for first things people notice when opening the dashboard



WHAT MADE THESE DASHBOARDS WORK

THE FEATURES

- Near-Real Time data updates
- Data Parameterization
- Action filters
- Sheet hiding
- Active titles
- Auto-Persona Identification using Network IDs
  - Subscriptions send personalized view for each employee/level
- Loan Comments within the 2nd page table
  - Cuts down email communication by notating roadblocks on applications (each role has the same view)

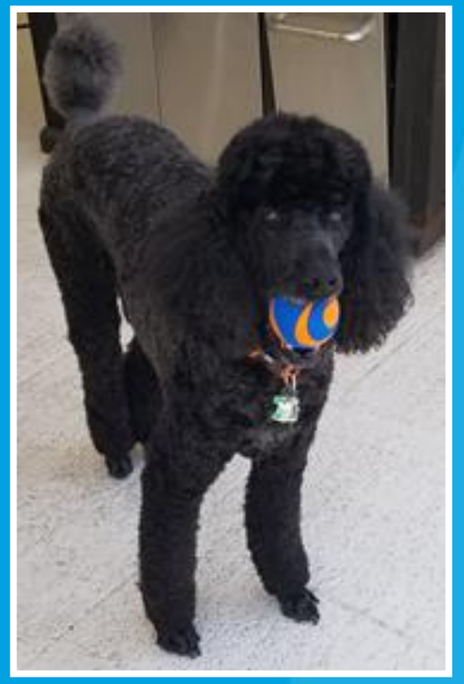
HORSES WILL DRINK WHEN THEY'RE READY

THE LESSON

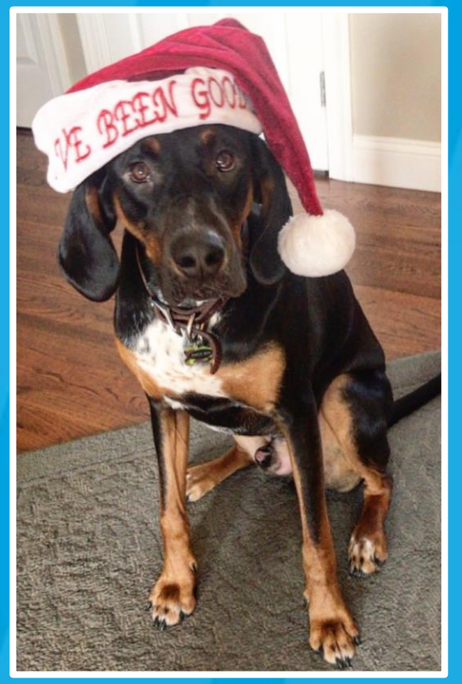
- Know who your stakeholders are
- Keep driving past "It's great"
- It's dangerous to go alone, take friends

http://wheelhouseworkshop.com/wp-content/uploads/2017/04/TakeThis-1.jpeg

QUESTIONS?



Beaumont
(Bill)



Hank
(Dan)