

Anticipatory Knowledge Delivery

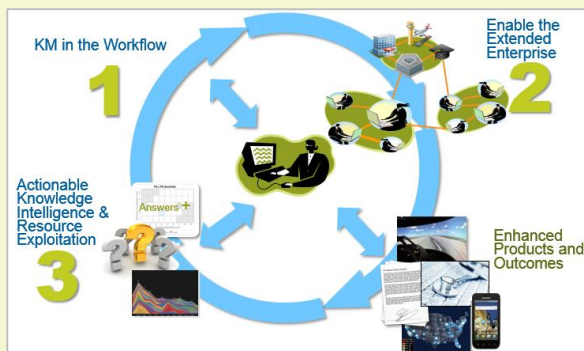
PoC: Dr. Donna L. Cuomo

**Associate Director,
Knowledge, Information & Collaboration Solutions**

September, 2017

Themes for This Meeting

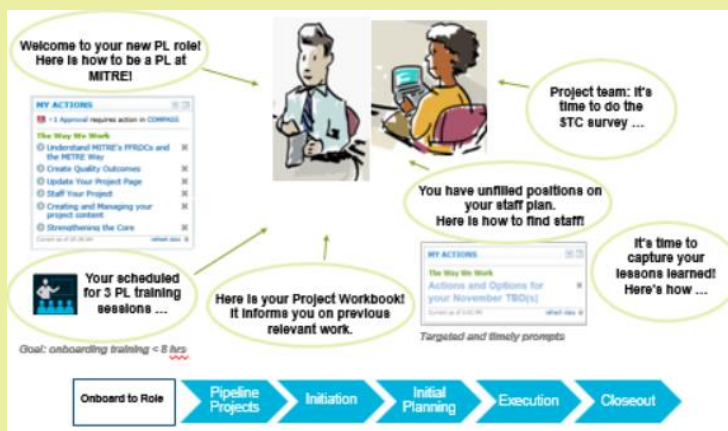
Knowledge Driven Enterprise - 2015



Collaborative and Neighborhood Spaces



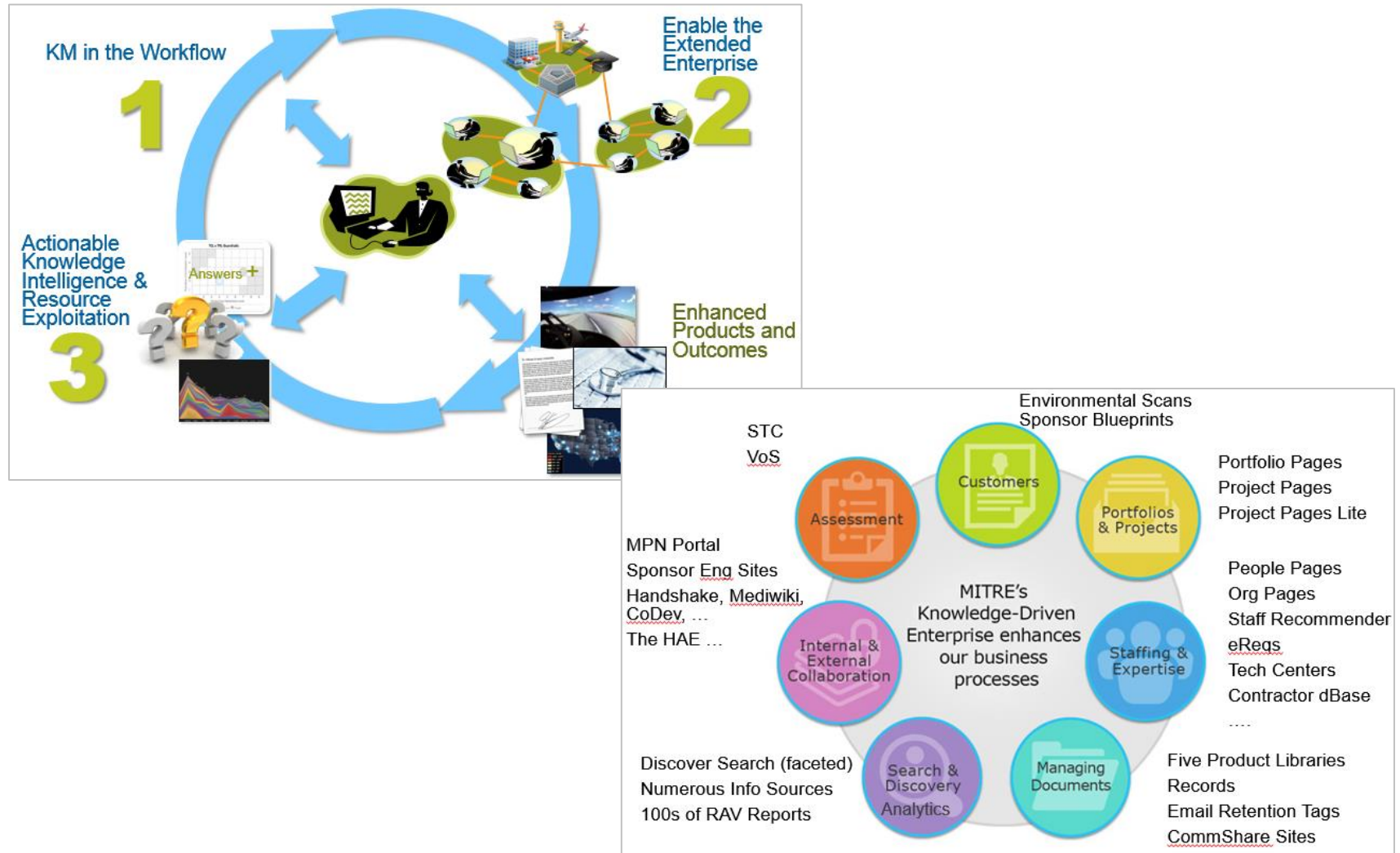
Anticipatory Knowledge Delivery: "Intelligent Digital Assistants"



Human-Machine Teaming: Calibrated Trust



Background: Three Year Strategy Knowledge Driven Enterprise

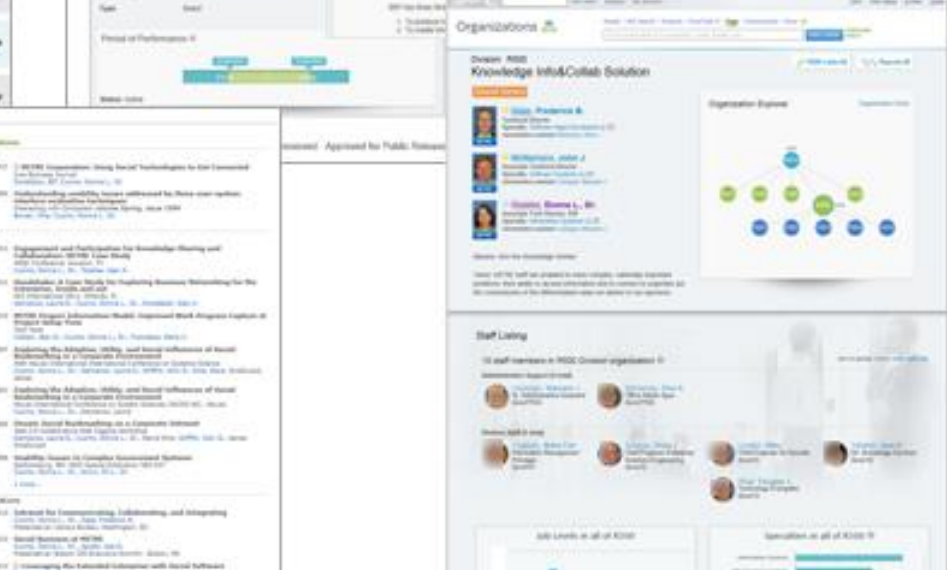


People, Portfolio, Project, Organization Pages

Portfolio Pages - Strategic, Outcome-Based Work Program Management



Project Pages - Yearly Project Plans and Outcomes



MyMII – Customized Information, Resources at Your Fingertips

The screenshot displays the MyMII web application interface. At the top, there's a navigation bar with links like FastJump, People, MII Search, and a dropdown menu. Below this, a personalized greeting "Good morning, Donna" is shown. The main content area is divided into several sections:

- MITRE NEWS:** Features a "A Look Back at 2016" article with a photo of a beach and a list of news items including "In Memory: Frank", "HR Service Anniversaries January 2017", and "MITRE Named Best Workplace for Commuters".
- HANDSHAKE NOTIFICATION:** Displays a notification about "What are you Thinking?" and a group update from "Manya on Marsha".
- MY TRIPS:** Shows a "Reservation Summary" table with columns for Destination, Start Date, and Confirmed. It lists a trip to Orlando on Jan 31, 2016.
- MY ACTIONS:** Lists tasks such as "3 machines need action in Desktop Steward" and "1 case requires your review in the Public Release System".
- MY LINKS:** A section for quick access to various resources.

A red box highlights the "More" dropdown menu, which lists various resources like Digital Libraries, Portfolios, Public Release, Archived Products, Communities, Email Lists, TEMs, Bookmarks, AskIT, Multimedia, Services, and All Profiles. An arrow points from the text "Easy access to well-stewarded high value knowledge assets" to this menu.

Retrieval Capabilities in Faceted Search, Query Refinement

People Projects Portfolios Orgs Communities PRR Products ...

The screenshot displays the MITRE MII search interface. The main header includes navigation links: FASTJUMP, PEOPLE, MII SEARCH, TRS, Site Map, Index, Help. The search results are for 'CENTER PRODUCTS SEARCH' with 6736 results. The left sidebar shows various filters:

- Portfolio:** MIP (2534)
- Project/Task Type:** Direct (4719), Research (2914), Indirect (176), Other (125)
- Fiscal Year:** 2015 (756), 2014 (1030), 2013 (1061), 2012 (1424), 2011 (1323), More...
- Organization:** MITRE (50), NSEC (489), Prog&Tech (472), CCG (90), CCG P&T (214), CAASD (625), C&T (61)
- Business Title:** A-E (1911), F-J (1746), K-O (1501), P-T (2159), U-Z (65), Enter Title
- Education Degrees:** Contract Engineers (44), CSO (259), Finance (444), GenCounsel (76), Ofc of HR (166), Technology (6), Enter Organization
- Refine 6736 results by:**
 - Library:** All Libraries (6736), CNS (1144), CCG (113), HLSC (5479)
 - Project Org:** MITRE Legacy (573), CCG MC (5043), CNS MC (1109), Enter Organization
 - Fiscal Year:** 2016 (34), 2015 (2607), 2014 (2026), 2013 (1535), 2012 (472), 1900 (5)
 - Creator/Author:** A-E (1652), F-J (1519), K-O (2326)

The main results area shows a list of documents with details such as title, author, date, and project information. For example, one result is 'NMEC October 2015 Monthly Status Report (MP00101685)' by Grover, Justin N.; Siems, Jeffrey M., dated 11/10/2015.

On the right, there is a section titled 'About the Results' explaining that the search is for center-specific libraries of MITRE products and that sensitive deliverables are included. Below this is a section titled 'Groups of Similar Center Products' with a link to 'etc., white paper, technical report (mtr, trademark, other project status reporting (quarterly, hs sedi)'. At the bottom, there is a link to 'MITRE Project Information Model: Improved Work'.

Future: Customers Ent Reqs Web Sites ...

PEOPLE

Tags

- Tags WS
- Tech Stature tags

Peoplesoft

- MITRE API Person WS
- Education, Last Job prior to MITRE, Courses taken via MITRE, MITRE awards, Military experience, Foreign lang

Public Release System

- Web service
- Public released docs

Clarity Clearances

- Web service
- Collateral clearance

Clarity Availability

- Web service
- Allocation to Projects

Project Outcomes

Handshake groups and colleagues

Memberships

Roles

Public release repository prr

Spigit

EDW ODS

- Mitre API Person WS
- Core Person data

LUIS

- Person WS and Sites WS
- Office phone and alternative contact push

Oracle Fin

- IW Service
- Project charges

Cucres

- Static directory
- Employee photos

Exchange

- Availability WS
- Free busy info

Sharepoint

- Comshare Docs and Communities Srv
- List of Comshare docs with doc site, and urls, communities and urls

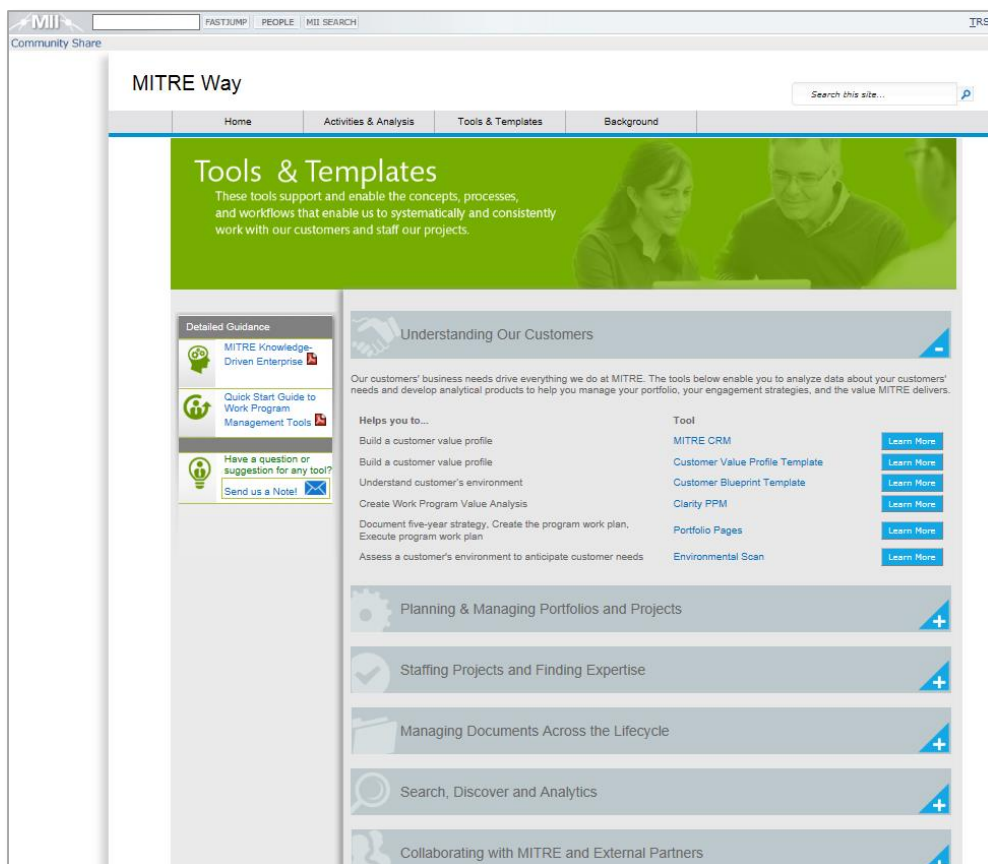
Presence

- DLL MSFT Office
- Presence status

Empshare

- Transfer folder
- List of docs in Transfer folder

Communicated with Traditional Techniques: Website, One Pager, News Story



Grouping tools, guidance, and training by business process phase
FJ: MITRETools

Realization: Staff Need On-going Assistance with Knowledge and Business Processes

- Staff are not aware of all the capabilities
- 100s of applications, tools, features, processes, knowledge bases, techniques, actions, collaboration opportunities
- Consistent role-based onboarding was lacking
- 600 – 700 new employees per year
- It's always evolving
- Staff are focused on doing and managing the work

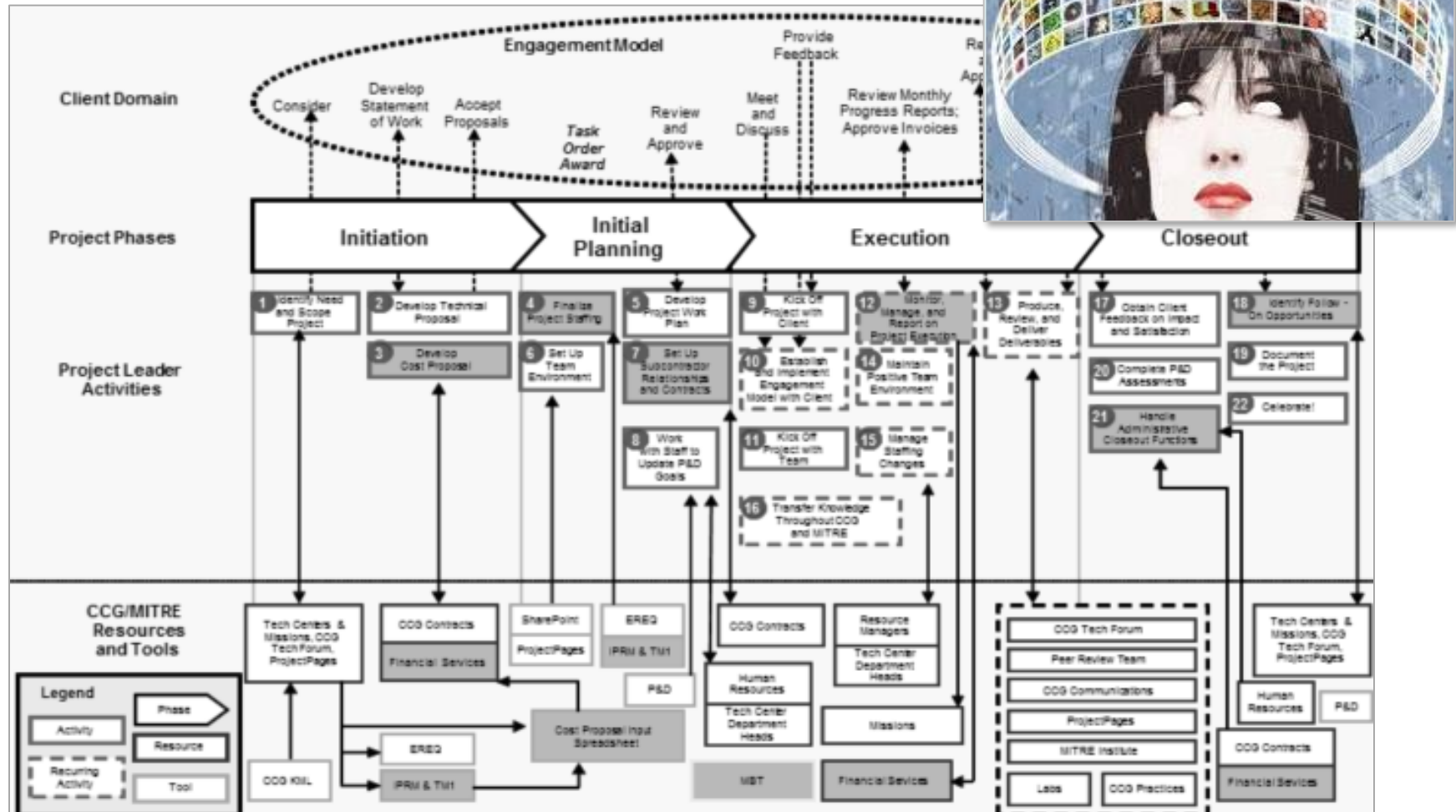


<https://plus.google.com/+Transformsolution>

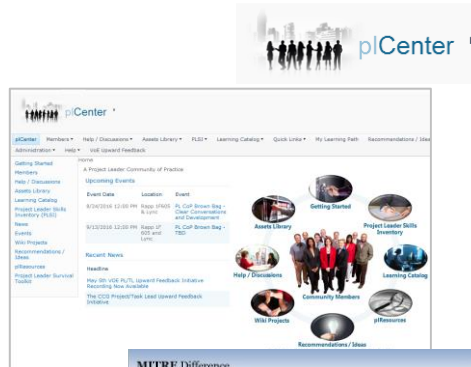
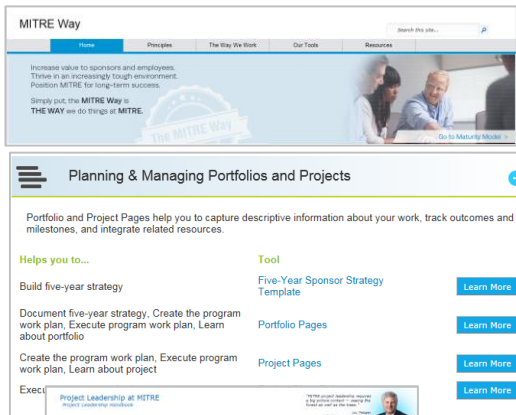
**Need Anticipatory Support:
“Knowledge and Business
Process Digital Assistants”!**



Past: “Navigate Work Program Processes and Onboarding” on Your Own



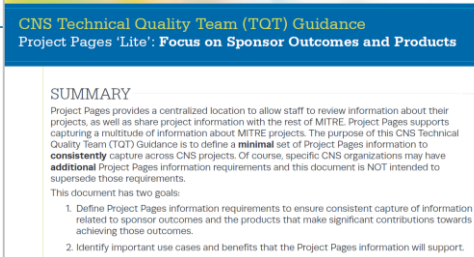
Past: Navigate Process Content and Knowledge Bases on Your Own



2016 Overview

Strengthening the Core

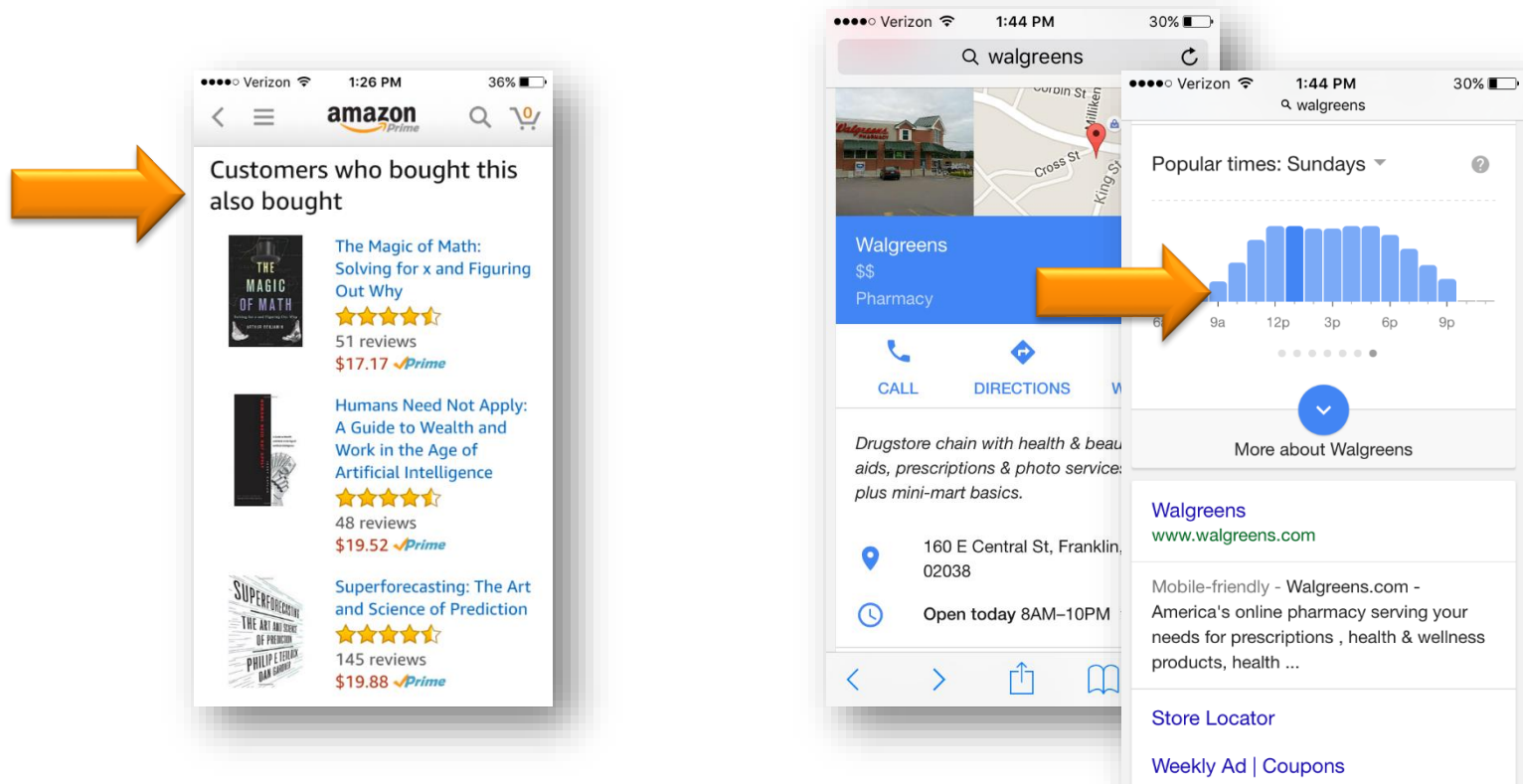
Project Assessment – Version 4 Release 2



- Content overload
- Don't know what exists
- 100s of pages of out-of-date project guidance
- Lack of "quick start" guides
- User experience not coordinated across the enterprise
- Inconsistent practices and processes

Anticipatory Knowledge Delivery

‘Anticipate’ your needs and deliver knowledge to help you

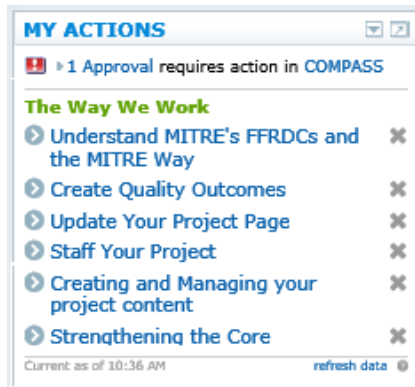


*What are the possibilities for automating support to employees?
Anticipating their knowledge and process needs?
“Right information to the right person at the right time”*

“Anticipatory Assistance” for Staff

ASSIST the staff throughout critical business processes and role onboarding

Welcome to your new PL role!
Here is how to be a PL at MITRE!



Project team: It's time to do the STC survey ...

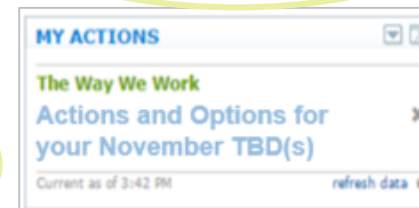
You have unfilled positions on your staff plan.
Here is how to find staff!

It's time to capture your lessons learned!
Here's how ...



Your scheduled for 3 PL training sessions ...

Here is your Project Workbook!
It informs you on previous relevant work.



Targeted and timely prompts

Goal: onboarding training < 8 hrs

Onboard to Role

Pipeline
Projects

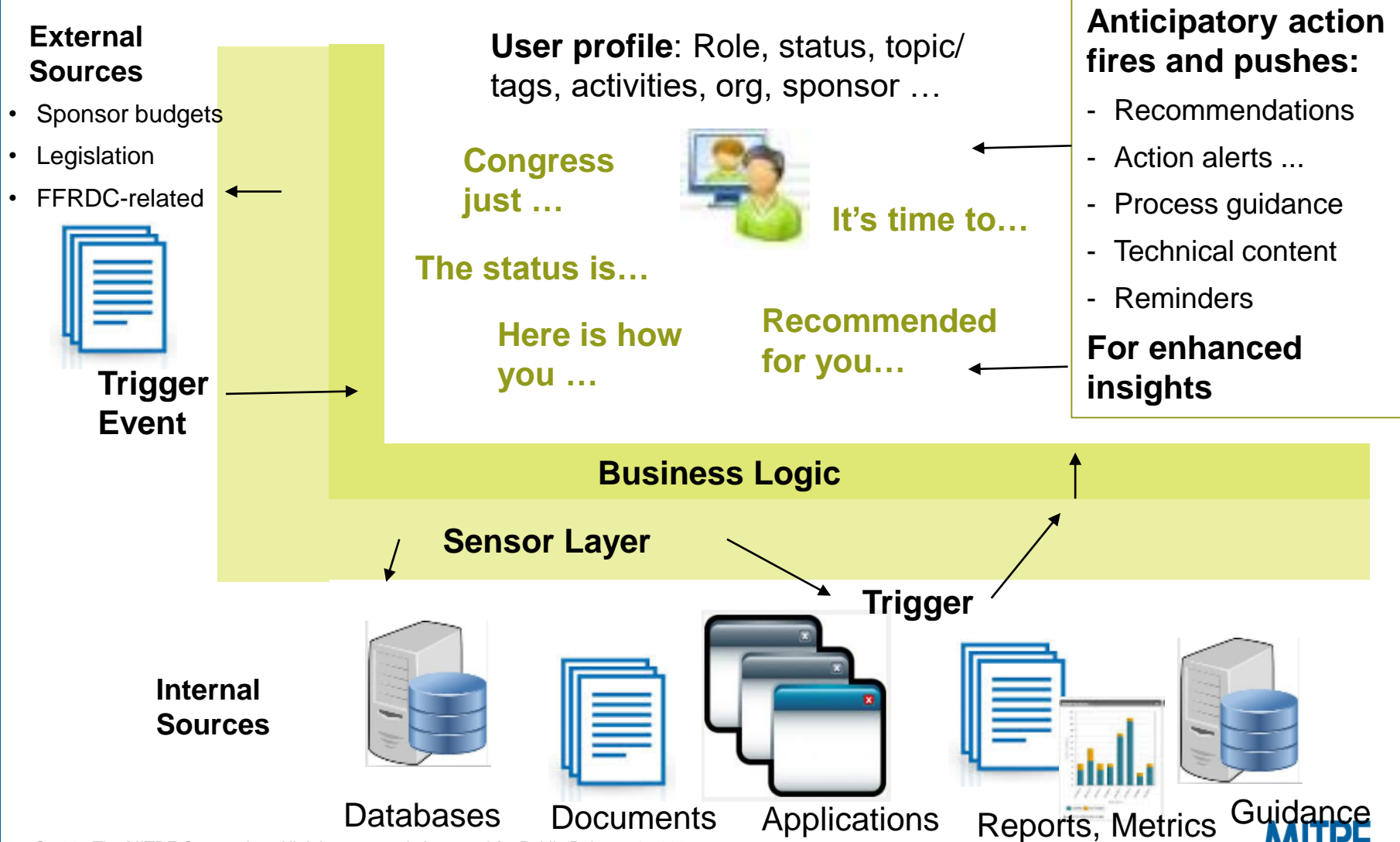
Initiation

Initial
Planning

Execution

Closeout

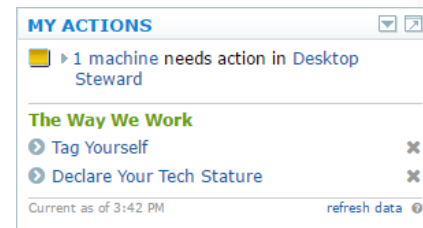
Anticipatory Knowledge Delivery (AKD) Concept



Anticipatory Knowledge Delivery (AKD) Use Cases Deployed in FY16 and FY17

■ Business Process, Role-based Use Cases

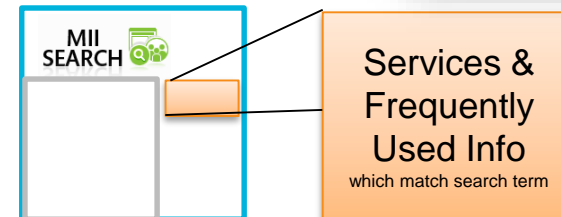
- New Employee
- New Project Leader
- New Staffing Need (PL)
- New Portfolio Leader
- Operational Portfolio notifications
- Operational Project notifications
- Operational HR notifications



- 1 Tag Yourself**
Add tags to your People Profile so others know what skills and expertise you have.
- 2 Declare your Tech Stature**
Share your experience, professional activities, and accomplishments on your Tech Stature page.
- 3 Discover People with Similar Interests**
Use the People Search to find other employees with similar skills and backgrounds.
- 4 Share your Resume**
Upload your current resume to your About Me folder where it will be searchable.

■ Anticipatory MII search pilot

- Provide an additional panel of useful service information which matches your search term



■ External alerts to MITRE senior managers

- Sponsor budget changes/drift
- Legislation that affects MITRE or other FFRDCs

The House passed the bill late last night. Below the article's text are highlights from a similar article from CQ:

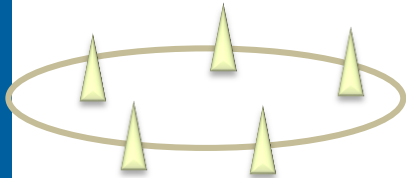
The Hill
July 8, 2016

<http://thehill.com/policy/finance/286950-house-passes-financial-services-spending-bill>

The House late Thursday passed a financial services spending bill that cuts funding for the Internal Revenue Service and the Securities and Exchange Commission. The measure was approved by a largely party-line vote of 239 to 185. In total, the bill provides \$21.7 billion for various agencies and programs in fiscal year 2017, \$1.5 billion less than this year's enacted level. IRS funding would be cut by \$236 million and SEC funding would be cut by \$50 million. The bill would cut FCC funding by \$69 million and curbs the agency's ability to take action on its proposed set-top box rule until a study is finished.

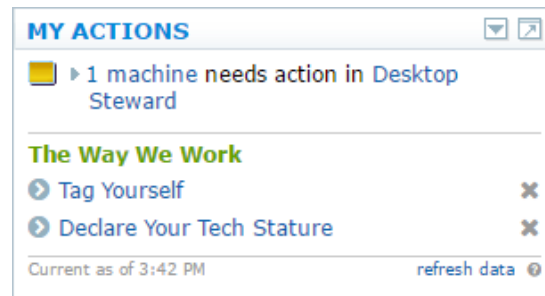
AKD Concept Overview

Define the “trigger event” – anticipate staff has a need



Event messaging system detects, acts upon, and persists the events

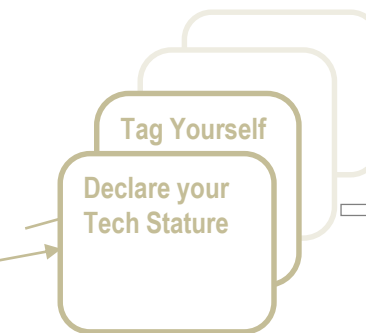
“The Way We Work” Notifications Delivered over Time



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
PL JumpStart Week	Designated New PL this week	PL JumpStart (+1)		Update your Project Page & Outcomes (+1 to +4)		
MITRE Way & STC Week		MITRE Way (+8)		Strengthening the Core (+10)		
Leadership & Staffing Week		Staffing (+15)		Leadership (+17)		
PL Connect Week		Connect & Stay Informed (+22)		Reference (+24)		PL Self-assessment (+ 3 months)

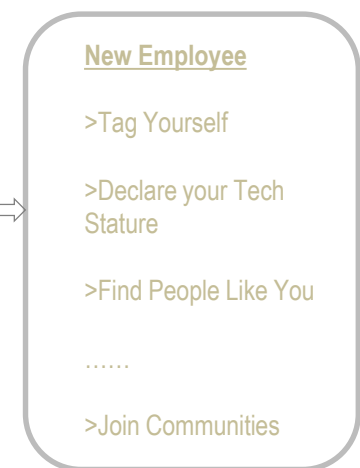
Define the notifications, their timing and sequencing

“Bite size information”



- Bite-size statement of “why” and “how to” quick start
- One per notification

“Show me all”



- List of all notifications with “the why”, “the action”, and pointer to “how to”

The AKD User Experience

MY ACTIONS

- 1 Approval requires action in COMPASS
- 1 machine needs action in Desktop Steward
- 2 cases require your review in the Public Release System

The Way We Work

- Understand MITRE's FFRDCs and the MITRE Way
- Create Quality Outcomes
- Update Your Project Page
- Staff Your Project
- Creating and Managing your project content
- Strengthening the Core
- Leadership Resources
- Next Steps

Current as of 10:36 AM refresh data

The Way We Work

The Way We Work* is about delivering the right information, to the right people, at the right time. Leveraging knowledge and expertise target your role enhances sponsor outcomes and products and helps to enable informed decision making. It enables the MITRE Way by delivering business process information to users when it is most relevant, and therefore, most useful to them.

New Employees

Tips for connecting with people, finding information using Discover Search, connecting with communities of interest and more.

For more information, contact [Krista Kennedy Groenwoldt](#) or [Marsha Nunes](#)

New Project Leaders

Tips for filling out your Project Page, links to resources such as the MITRE Way Playbook, info about the role of an FFRDC and more.

For more information, contact [Dede Ball](#)

Signaling Demand and Staffing Your Project

Project staffing is a dynamic system and this linear guide streamlines your actions or options to help satisfy your particular TBD.

For more information, contact [Beth Lavender](#)

Anticipatory Search

Anticipatory Search aims to anticipate what a user is searching for and deliver relevant, timely information that is easier to find and browse than traditional search results lists. The current pilot summarizes the information that users commonly seek in a knowledge panel on the right side of the MII Search results page.

For more information, contact [Mary Parmelee](#) or [Rob Joachim](#)

External News

Current Pilot is Budget, Government and News to determine if there are additional tools project.

For more information, contact [Stephanie Murphy](#)

The Way We Work

For New Project Leaders

Project Pages and Quality Outcomes Week One, Day 4

Create Quality Outcomes

For a project to succeed, it is crucial to first understand the outcome the sponsor is trying to achieve. MITRE's work for government sponsors should be designed to have significant positive impacts in helping achieve the sponsor's mission or high-priority goals. The "SMART" formula below will help you get started in specifying the outcome(s) for your project.

- Check out the slide deck from the [Outcome Writing Workshop](#)
- Read the Project Leadership Guide section on "Framing Sponsor Outcomes"
- Watch the "Framing Outcomes" (1 hour) training video
- Ensure Alignment with your Portfolio Strategy

What is an Outcome?

Definition: A measurable and explicit achievement relevant to how the sponsor measures success. The outcome focuses on what the sponsor values, not on internal MITRE goals.

FJ: thewaywework

Use Case: Modernizing the New Employee Onboarding Experience

New Employee Onboarding Experience

pre-January 2016

■ New Employees

- Received approximately ~54 forms and 84 pieces of documents between the time they accept the position & the first day
- Went through a ½ day orientation and released to their department
- Computers were delivered to the office
- Had 10-12 emails from Corporate level in their inbox on the first day (in addition to about 25 others)
- Some centers had their own ½ to full day orientation

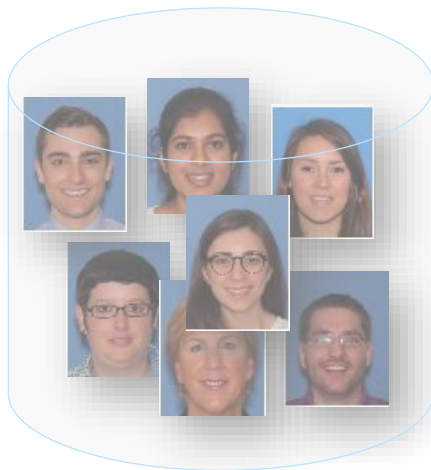
■ Findings

- ½ day wasn't enough time
- Weren't using industry best practices
- Sites had separate and inconsistent programs
- Help Desk calls spiked with new employees every Monday
- Dated website

New Employee AKD Use Case

Goal: Create a welcoming experience and provide a foundation for new hires to begin their career at MITRE

Detect New Employees



Deliver Notifications over a Period of Time

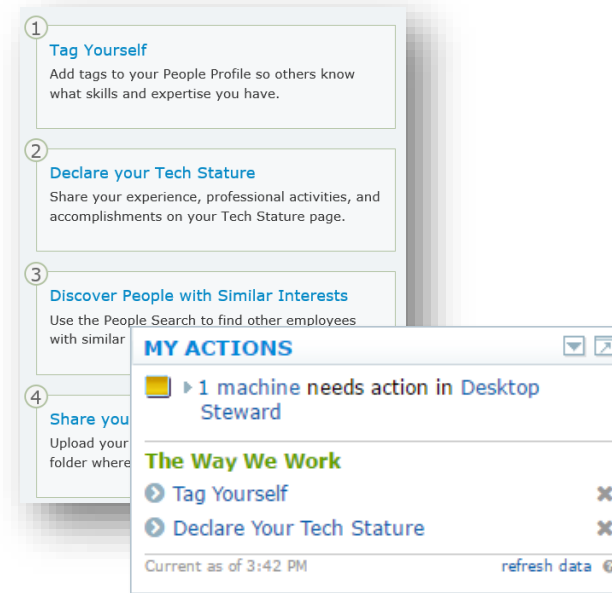


“The Way We Work”
notifications

Event Messaging System
Detect, act upon, and persist system events



Provide Enterprise Guidance in a New Format



Week 1

Tags

Tech Stature

Week 2

People Search

About Me

Project Search

Week 3

Communities

Handshake

Discover

New Website for New Employees (Employee View and Manager View)

Enforces the notion that onboarding is a process that occurs *over time*

The screenshot displays the MITRE New Employee Integration website. The header includes the MITRE logo, navigation links (FastJump, People, MII Search), and a user profile (Cuomo, Donna L.). The main content area features a large banner with a group of smiling employees. Below the banner, the 'Welcome Donna' section is visible, featuring a 'First Week' checklist and 'Mandatory Training' links. The 'First Week' checklist includes tasks like setting up voice mail, initializing SecurId, and configuring printers. The 'Mandatory Training' section lists required training modules. A 'Useful Resource' sidebar on the right provides links to various resources like 'Know it Now', 'Orientation Briefings', and 'Travel & Expenses'.

MITRE | Welcome to New Employee Integration

HOME HIRING MANAGER/WELCOME TEAM NEW EMPLOYEES

Welcome **Donna**

First Week

- 30 Days
- 90 Days
- 120 Days
- First Year

Your First Week Checklist

- [Set up your voice mail](#)
- [Initialize your SecurId remote](#)
- [Personalize your Outlook calendar](#)
- [Configure Printers](#)
- [Register Car \(Bedford/Washington only\)](#)
- [Set up Skype Pin](#)
- [Review Benefits](#)
- [Set up timecard reminders](#)

Mandatory Training

Needs to be completed within your first 30 days

- [Time Reporting Awareness](#)
- [Program for Ethics & Compliance Education](#)
- [Employee Ergonomic Training](#)
- [MITRE InfoSec Awareness Training](#)

Helpful Information

- [Welcome Briefing](#)
- [Contact List](#)

Useful Resource

- [Know it Now](#)
- [Orientation Briefings](#)
- [Your Systems & Account](#)
- [Collaboration & Sharing](#)
- [Education & Training](#)
- [News](#)
- [Travel & Expenses](#)
- [Benefits & Lifestyle](#)

New Employee Experience – 2016 - Present

Staff “journey” at the heart, utilizes a combination of techniques

How does it look at a high level today

Applicant Response

Acceptance Letter

To: _____
(name of the recipient)

(designation of the recipient)

(name of the organization)

Address of the organization: _____

Date: _____

Subject: Acceptance for the position of _____
(name of the position)

Requested: _____
(name of the recipient with appropriate title before it)

I am accepting your offer to join your organization for the position of _____
(position title). This great job opportunity for me and the experience of working in your organization will be a boost for my career.

I have already given resignation in my current organization and the notice period is _____
(number of days or months). Looking forward to start work in your organization.

Thanking you,

(signature)

(name)

1st Day Welcome



New Employee Orientation



2nd Day Welcome Team



First Week Integration

Coffee With A Colleague



Integration Occurs 30 Days thru 180 Days...



Integration Occurs 180 days thru Year...



MITRE and Our Work



New Employee Feedback: What's Been Working Well

■ High level survey results

- Feel welcomed on the first day
- Very satisfied with orientation
- Felt engaged during their first 30 days with their department, work programs & organization

■ Orientation

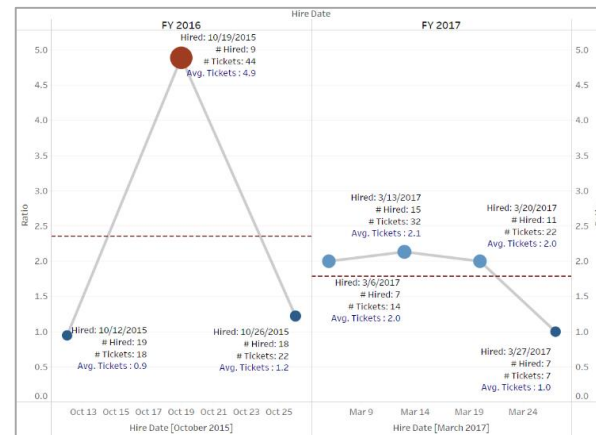
- Computer
- MII / FastJump

■ First Few Weeks

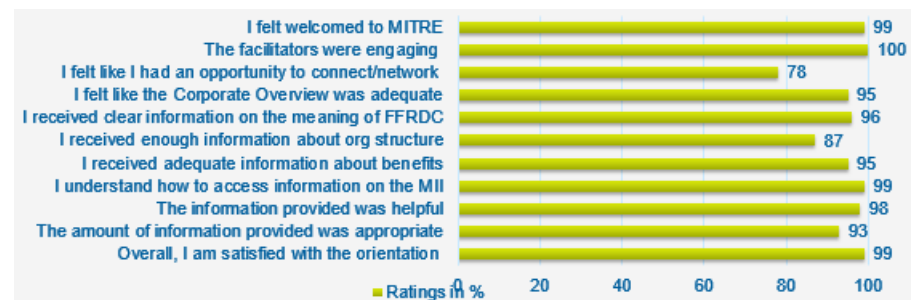
- Ambassador emails
- AKD Notifications
- New Employee site

■ Over the course of the year

- People
- MII & FastJump
- Managers put in a lot of effort into onboarding



New Employee Help Desk Calls Down

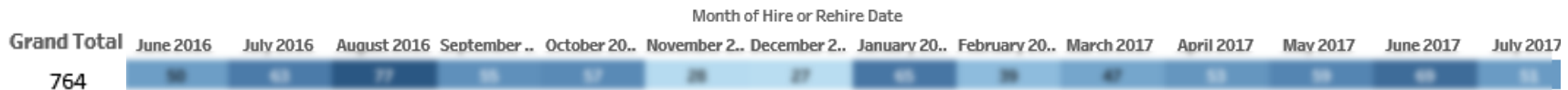


New Employee Onboarding Satisfaction Up

New Hire Notifications

As of 8/14/17

Total New Hires with Notifications Sent



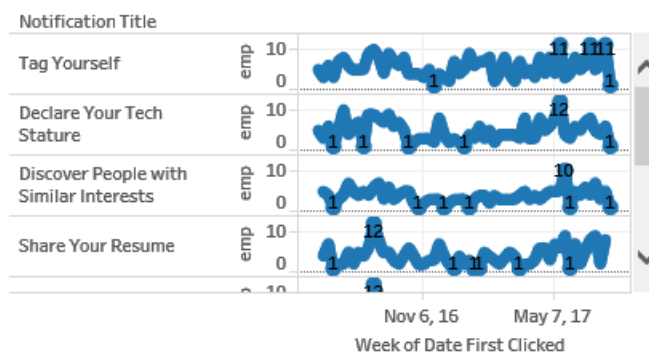
NH Clicked Stats by Notification Title

Notification Title	Clicked On Notification		New Hire Count	
	Yes	No		
	%	%		
Tag Yourself	45%			
Declare Your Tech Stature	39%			
Discover People with Similar Interests	30%			
Share Your Resume	31%			
Find Projects Like Yours	25%			

NH Median Clicked Days by Notification Title

Notification Title	
Grand Total Avg.	9
Tag Yourself	5
Declare Your Tech Stature	4
Discover People with Similar Interests	3
Share Your Resume	5
Find Projects Like Yours	13
Join Communities of Interest	7
Connect on Handshake	8

NH Clicked Trend by Notification Title Tag Yourself, Declare Your Tech Stature, Discover People with Similar Interests and 5 more



NH Dismissed Stats by Notification Title Tag Yourself, Declare Your Tech Stature, Discover People with Similar Interests and 5 more

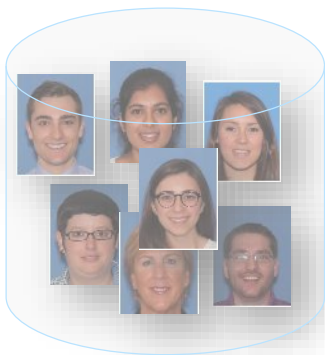
Notification Title	NHs th at Dis missed	NHs th at Dis missed without C...	Dis mis sed wit hout Cl icking %..	NHs th at Dis missed after C li..
Tag Yourself	238	72	9%	166
Declare Your Tech Stature	187	66	9%	121
Discover People with Similar Interests	139	61	8%	78
Share Your Resume	153	63	8%	90

- Click rate is good (not all items would apply to all staff)
- Those that haven't clicked yet also are not dismissing
- User can "read ahead" once on the guidance page
- Design: users didn't always realize these were "actions"
- Design: we didn't always have feedback on whether activity was completed

Use Case: Modernizing the Project Leader Experience

New Project Leader (PL) AKD Use Case

Detect New Project Leaders

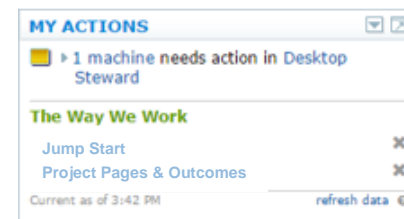


- Initial assignment as PL in O*F
- *8 digit direct* projects only
- Not previously named as a PL in the past 3 years, AND/OR
- Is new to MITRE within the past two years
- Later added additional PLs manually

Deliver Notifications over a period of time



Provide actionable & referential resources



› Understand MITRE's FFRDCs and the MITRE Way
[Week One, Day 2](#)

› Project Pages and Quality Outcomes [Week One, Day 4](#)

› Staff Your Project [Week Two, Day 8](#)

› Connect and Stay Informed [Week Two, Day 10](#)

› Highlights of the MITRE Way for Project Leaders
[Week Three, Day 15](#)

› Strengthening the Core (STC) [Week Three, Day 17](#)

› Leadership Resources [Week Four, Day 22](#)

› Next Steps [Week Four, Day 24](#)

Drove a Project Leader Process Materials Update and Consolidation

New PL@M Site and Guide

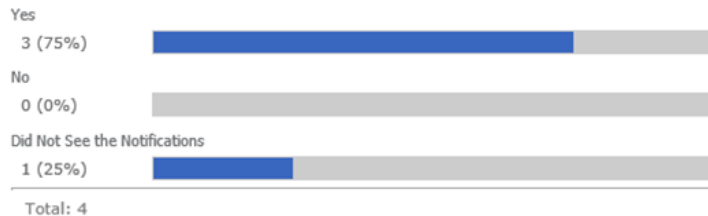


Impact of New PL AKDs

- **180 PL participants received notifications as of July 2017**
 - In May 2017, added 48 PL participants manually at MITRE < 3 years
- **September 2016 emailed all PLs (604) and their managers (327) to introduce the pilot**
- **336 hits/month on average to the New PL AKD page!**
- **Same pattern of use as new employees**
 - Some drop off in notification clicks over the sequence
 - But they were not dismissing them
 - Less certainty on our part of whether these actions are needed by all participants, if it is the appropriate time of year, if it is part of their role
 - We need feedback for better targeting
- **STC Operations notification**
 - 40% responded to notification

Phase 1 Feedback Initial survey, small sample size (4), 5/17

1. Did you find the New Project Leader program helpful?



“I am very pleased with the content and availability thus far”

“My project was over by the time I realized this was there... I think most of the content would be great for new employees, no matter what the level”

4. Is "My Actions" the best way for you to be provided this information? If not, w



“important thing to me is that I **don't have to go digging for this information.** I won't dig ... I wouldn't want you to take them away”

3. Is there any content you would recommend adding that would help you be a better Project Leader? Please describe.

I am glad those links are there and I really will get to them someday. The important thing to me is that I don't have to go digging for this information. I won't dig, you putting it on my MII page means it will get read and followed. I wouldn't want you to take them away.



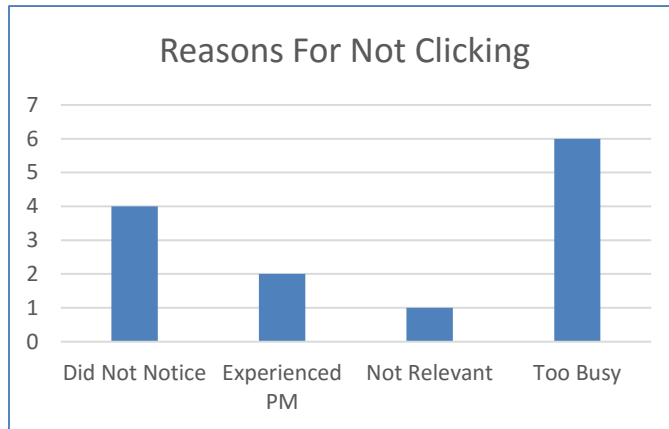
Not to my knowledge. Having any content at all pushed to me was very unexpected and helpful.



Total: 2

“having any content at all pushed to me **was very unexpected and helpful**”

New PL AKD User Feedback Summary



Email responses from those who **never clicked** (13)

- Six PLs: 'too busy' but almost all felt the pilot was worthwhile and would get to materials eventually
- Four PL did not notice the MyActions, two use CAASD hub as home page

Phone interviews (3)

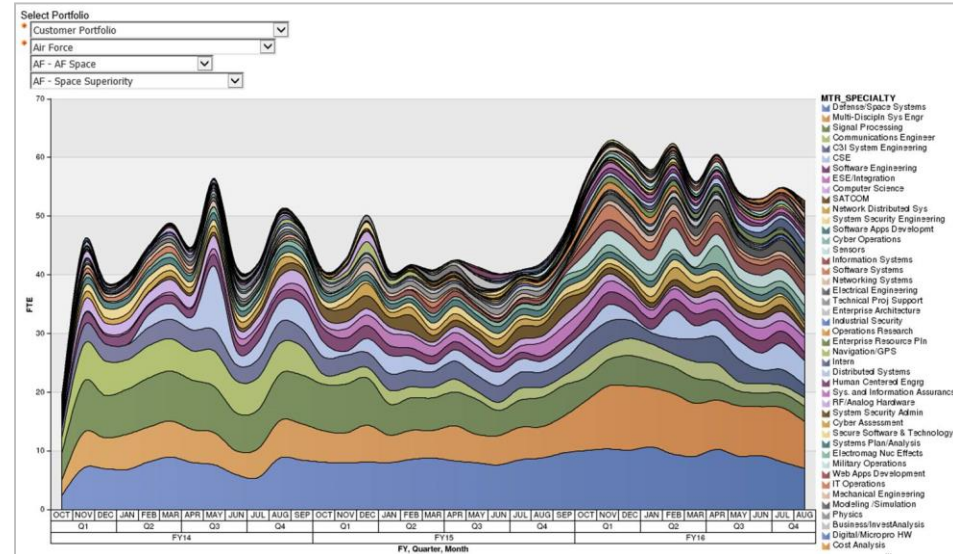
- Did they notice the "MyActions" – split responses
 - One respondent cited poor connectivity from sponsor site, rarely checks MII
- Content helpful? – all responded the content was useful
 - Content recommended for all staff
 - Suggestion to identify and include 'soon to be' PLs
- Delivery mechanism – all preferred MyActions, with one request for initial email
 - Several respondents stated they did not dismiss the notification as they retained content as reference material
- Overall comments and feedback
 - Let people know the content is there
 - Would prefer the material all at once rather than over four weeks
 - Would like to see guidelines for resource consumption for specific activities

AKD for Project Staffing

Just-in-Time Guidance on Finding Staff

■ Finding right staff is a challenge

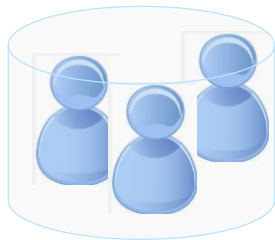
- 3000+ staff in 10 Tech Centers, 3400+ in Program Divisions
- 1500+ Projects
- >20% staff charge 3-6 projects
- 800+ new hires in CY2016
- Special clearances
- 10+ PL considerations: skills, experience, clearances, team fit, soft skills, domain knowledge, interest/passion, cost, location, timing,
- 5+ Staff considerations – interest/passion, location, team fit, travel, career, ...
- .. and come in on target (budget)



“Project Staffing” AKD Operational Use Case

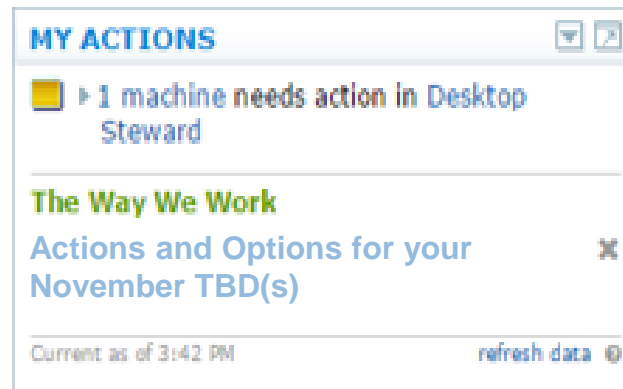
Trigger

“TBDs” in the next fiscal month in Clarity Projects Staff Plans



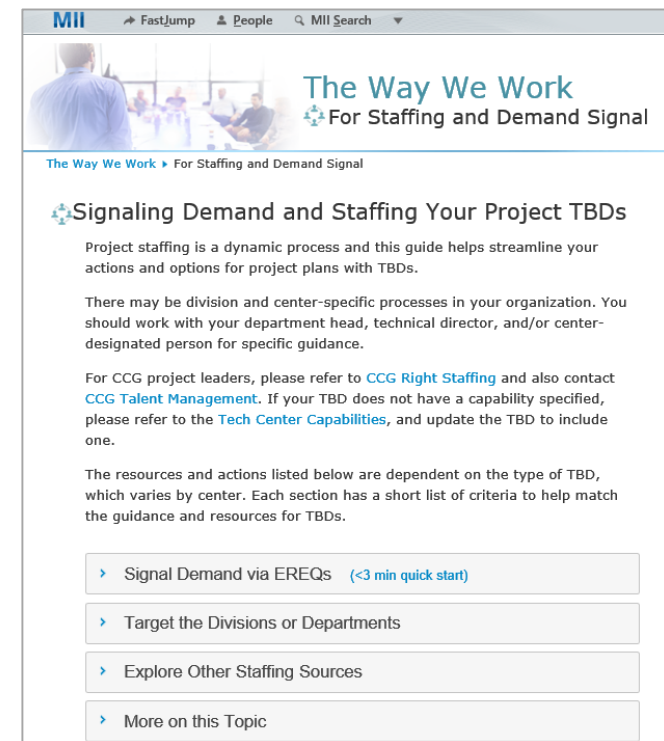
Action

PL will have notification in the “The Way We Work”



66% of recipients clicked on this (just in time) staffing notification

Actions, Guidance, and Resources



Initial Overall AKD Findings

- **“MyActions”, while the preferred notification method, needs augmentation to ensure staff are aware of the materials**
 - MyActions not always noticed
 - Staff may not have MII as home page (e)
 - Staff at sponsor sites may have connecti to the MII
- **Staff who clicked on content all felt it wa**
 - However, the click rate dropped off for la
 - We don’t know if they read ahead or not
- **Staff who self-reported they were too bu**
valuable and planned to get to it eventual
 - Several reported content would be usefu
 - requested their Associate PLs be manua
- **Several participants plan to retain the ma**
to never dismiss) so its present when ne
 - This could cause “noise” on the My Actio

Take Aways from User Feedback

- Send an introductory email to introduce staff and their managers to the campaigns
- Prompt users to do the activities by introducing some urgency via due dates
- Design a feedback mechanism into the notifications so we know if action completed, or why not
- Provide easy access to the materials for future reference so users are comfortable dismissing the notifications
- Continue to fine-tune audience targeting

Piloting a Revised Concept

Action-oriented language with due dates

MY ACTIONS

1 machine needs action in Desktop Steward

Submit your Benefit Elections by Aug 23, 2017

Act: Submit your Benefit Program Elections

Why: Deadline to enroll is 31 days from your hire date.

Help: Contact the HR Service Center or 781-271-4700.

I'M DONE

Real-time feedback on whether they completed action, or why not

Submit your Retirement Elections by Sept 21, 2017

Act: Submit your Retirement Program Elections

Why: Deadline to join is 60 days from your hire date.

Help: Contact the HR Service Center or 781-271-4700.

I'M DONE

☐ I have sent my election form to the Payroll office M/S M110

☐ I have sent my waiver form to the Payroll office M/S M110

- Try a “Act, Why, Help” format
- Collect real-time user feedback on whether they completed the actions
- Deploy a “PL Reference Shelf” gadget for persistent access to the materials

PROJECT LEADER REFERENCE SHELF

“...very important and relevant information available for new PLs like me”
— MITRE Project Leader

- Project Leadership at MITRE
- Understanding MITRE's FFRDCs and the MITRE Way
- Create Quality Outcomes
- Update Your Project Page
- Staff Your Project
- Connect and Stay Informed
- Highlights of the MITRE Way for Project Leaders
- Creating and Managing your Project Content
- Strengthening the Core
- Leadership Resources

“Subscribe to Employee Newsletters” New Employee Notification, Using the New Format

- **65 new employees received “Subscribe to Employee Newsletters” notifications so far, with the new UI**
- **21 Responded to date (32%) – good response rate**
 - 14 people signed up for newsletters
 - 4 said “No”
 - 3 said “Remind me later”
- **We are assured they have awareness of the capability**
 - With “find it yourself” technique, traditionally could take from months to never
- **Practically “free” to acquire these users**
- **Gives us feedback on the interest, the targeting accuracy, the “why not”**

Elements of the AKD Campaigns

Determining the audience

- Via algorithm, specificity
- Manual list creation
- Combo

Knowledge provisioning reports

- Track over time who has been exposed to which knowledge
- Report to managers

Create the notifications

- Level of granularity
- Actionable action vs guidance/ learning activity
- Design the content and the referenced content
- De-dup across campaigns

Feedback mechanism

- Can we track the action from the back-end system?
- Feedback from the user on what they actually did

Event push stream

- Automatic sequencing vs one time push
- The timing of the sequencing
- The timing of the initiation
- Delivery channel
- Deadline?
- Expiration?
- Escalation?

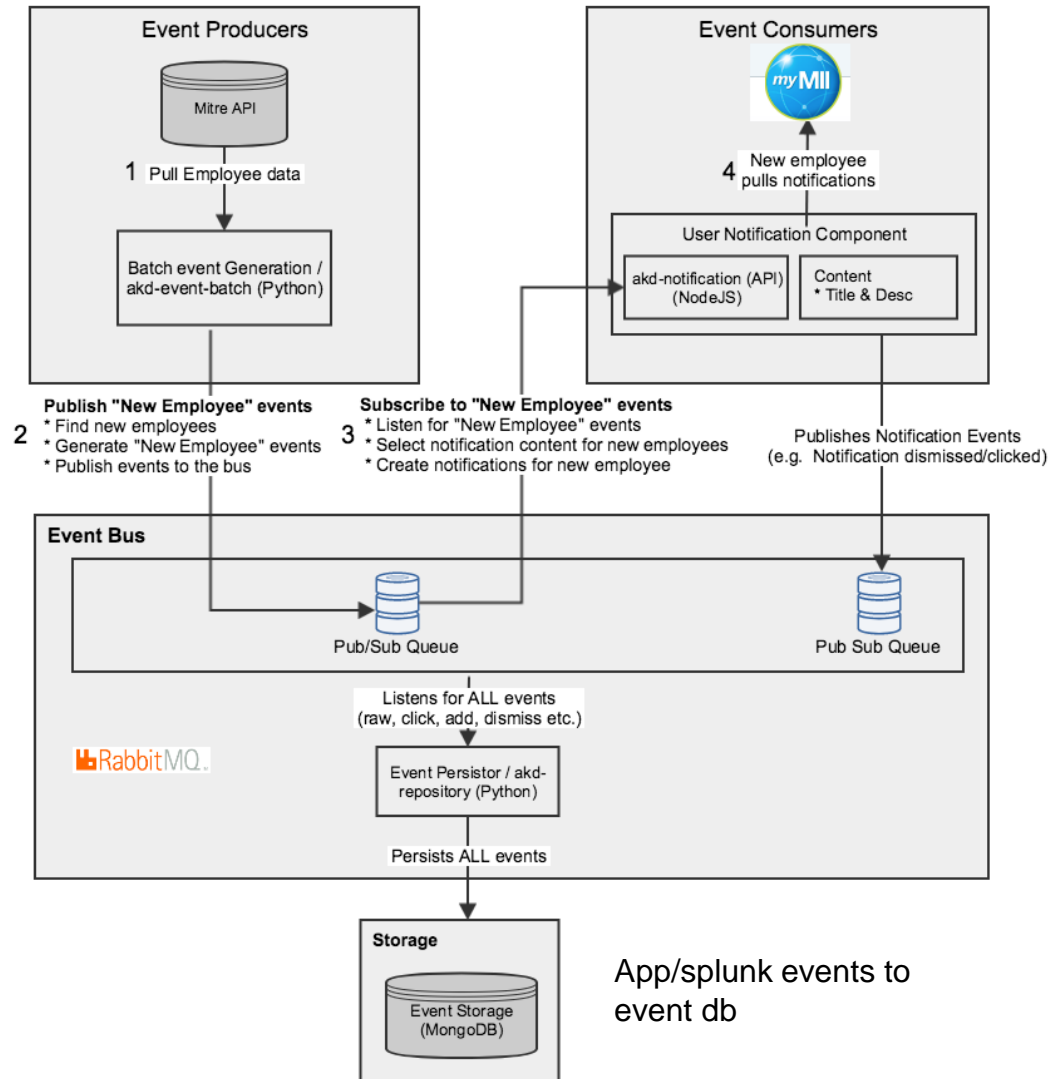
Tracking the metrics

- Metrics of the notification clicks (enhanced with a user response)
- Metric of the action (whether the action was taken, which may be reading something)
- Could read ahead (ambiguity)

May be part of other training/ onboarding or business process support activities

Event Bus Architecture and Planned Updates

New data warehouse design for AKD – organizing our data for efficiency (esp history which is key to this)



Explore Bluemix and others; alignment and opportunities to move to cloud

Audience Targeting – New PL Example

EDW Project history table

Has PL field changed or a new project added?

Is project a direct project

PL in past 3 years?

	PL	Start date	End Date
01AOH621	12345	9/1/13	8/1/14



SWP Portfolio table

Is not a Portfolio Leader?

Port ID	PfL	
MWP-0252	12377	



ODS People table

- Full time employee?

Emp id	Emp Type
12345	Full Time



Python script

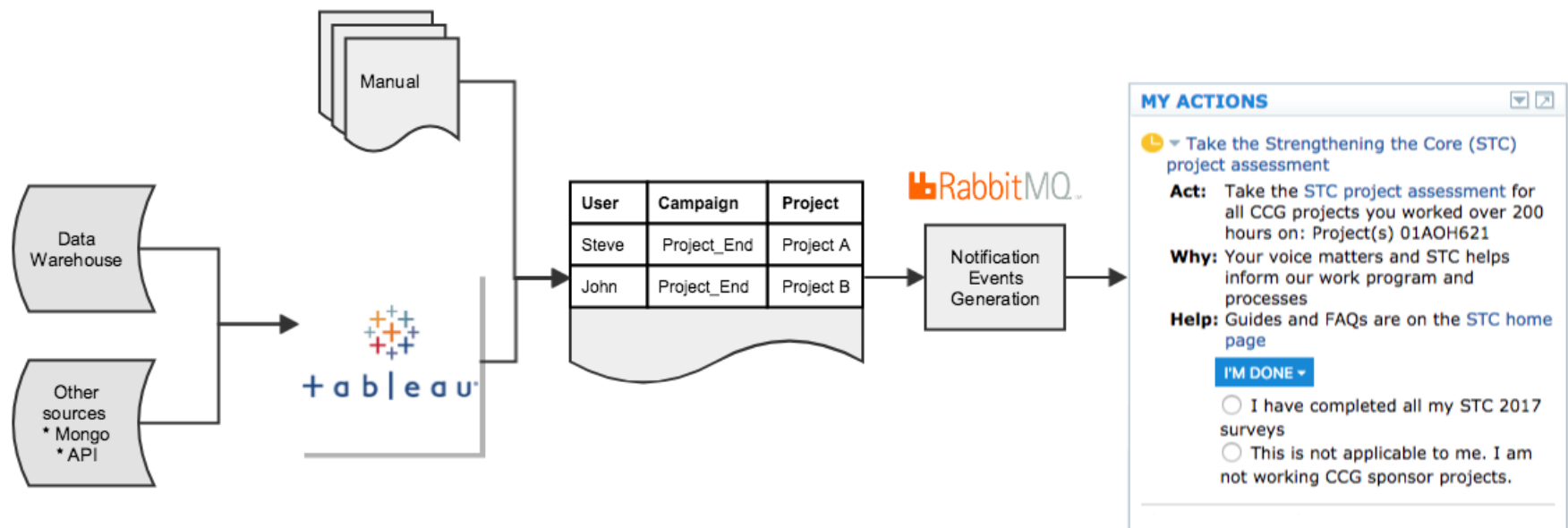
Emp id

12345
12346
12347
12348
12349

Architecture Updates

■ Goals

- Ability to handle very custom notifications. Not easily automated
- Reduce effort required to add new campaigns



AKD Administration

AKD Admin Tool

Publish Event

Event type: Person - AGE [Edit schema](#)

Routing key: event Quantity: 1337 [Run](#)

Run Job

Current Hire Anniversary Event

Date: YYYY-MM-DD [Run](#) ☐ Rewrite job history

New Project Leader Event

Start Sequence #: 0 End Sequence #: 0 [Run](#) ☐ Rewrite job history

Staffing Plan

Date: YYYY-MM-DD [Run](#) ☐ Rewrite job history

New Portfolio Leader Event

Date: YYYY-MM-DD [Run](#) ☐ Rewrite job history

Manual Notifications

Select Use Case: [Create](#)

Enter a comma-separated list of MITRE employee ID's (e.g. 12345, 99999)

Users: [Create](#)

Notification Date Manipulation

Notification Offset

Testing Only: Add an offset in days to the deploy date in order to retrieve future notifications.

[Get Offset](#)

Notification Timeout Date Override

Testing Only: Simulate changing the current date to a date in the future for notification timeout calculation.

[Get Timeout Date](#) [Delete Timeout Date](#)

The timeout date is not set.

Timeout Date: YYYY-MM-DD [Update](#)

Create Notification Tracking Report

Report format: Excel Report Type: Current Hire

From notification date: YYYY-MM-DD To notification date: YYYY-MM-DD [Download](#)

AKD Manage Notification Content

Select Campaign

Select which notification set you would like to work with OR opt to create a new one.

Campaign: NewPortfolioLeader

Replace existing campaign: ☐

*** "Replace existing campaign" mode is used to create completely new notifications for an existing campaign. Only future notification recipients will receive the new campaign notification set. Existing notification recipients will receive the original notification set. Adding notifications to a notification set is only supported in "Replace existing campaign" mode.**

If you replace an existing campaign, you must contact the AKD development group and John Moore, AKD Data Analyst as this will impact reporting for this notification campaign.

Notifications for NewPortfolioLeader Campaign

Below is the notification set for this campaign. In this section you can:

- Make modifications to the existing notifications (default) OR
- Replace the notification set for an existing campaign (select 'Replace existing campaign' above) OR
- Create a new campaign with a new notification set (select 'Create new campaign' from dropdown)

Changes (including removing notifications) will not be applied until you click 'Save changes'. You can use 'Clear changes' at any point before a save to clear out all changes and revert to the original notifications.

There are 2 existing notification(s) for this campaign.

Campaign Key:

NewPortfolioLeader

1. Title: Review Your Portfolio Page

Description: Your Portfolio Page is a centralized location to share your Portfolio's Mission, Vision, Goals, Outcomes, and other high level Portfolio Information.

Delivery Delay: 0

[Remove](#)

2. Title: Help

Description: Useful tips and links to help you in your new Portfolio Director or Manager role.

Delivery Delay: 0

[Remove](#)

[Clear changes](#)

[Save changes](#)

Set Properties for Campaign

These properties define how the notification set will be sent to notification recipients. For existing campaigns, this can be updated separately from the notification content edits in section above. For a new campaign, the properties must be filled out and will be automatically saved when the campaign is created.

Should notification recipients be able to see this content a second time?

☒ Yes

☐ No

How long should notification recipients wait to see the content again?

☐ No wait

☒ Set wait period

Wait for:

365

Day(s)

Note: If "month" or "year" unit of time is selected, notification recipients are eligible to receive content on the first day of the selected month or year.

[Save changes](#)

Future Steps

- **Evolve toward intelligent “business and knowledge process assistants”**
- **Continue working with other groups across the company to continue to refine the overall experience of these ‘journey maps’**
 - AKD is usually just one component
 - F-2-F training, guidance materials, process materials, tools, delivery mechanisms, etc
- **Refining the design of the notification campaigns**
 - Circle back and integrate the older “My Actions” into one comprehensive system with governance
- **Adding other roles, new personalized triggers**
 - Triggers based on what a user has not used, for example
- **Piloting machine learning capabilities to automate or semi-automate content, other types of recommenders, audience definition**
- **There is a “trust” component**
- **Just-in-time training based on user actions**
- **Knowledge provisioning reports for managers**
- **Incentivize or reward staff for effective behaviors**

Reflections

- **You can get the critical information to employees ‘just in time’ using today’s technologies**
 - It does involve putting structure on information, using information already available about employees, process status, and using “push techniques”
 - Can even be manual, initially
- **Identify some *critical* business processes or activities fundamental to your companies success to get started**
 - Are they well-defined and well-supported at the enterprise level?
 - What do you know already about the critical knowledge objects and process states, from existing systems and data? Build on this.
 - Start small, be agile, don’t tackle every role/process, start with the high-value ones
- **Spend time thinking about what it is important for staff to know, what you want them to do, and when**
 - If you can’t concisely state this for key roles and key business processes, then your users can’t either
 - Talk to staff who have been in a new role for a year or two and ask them what they wished they knew initially
 - Talk to managers and ask them what questions they get the most for various roles and activities
 - How can you determine that staff are in a particular process state?

- **Questions?**

Started by “Massaging” Existing Content

■ Jump Start

- FFRDC Whiteboard Explainer Video
 - (FJ: Difference, About FFRDCs tab)
- Explore MITRE’s 7 FFRDCs & 4 Capabilities
 - (FJ: Difference, our unique value tab)
- MW Principles and Norms



■ Outcomes & Project Pages

- Quality Outcomes Examples
- Framing Outcomes Video
- Project Pages Lite
- Update Project Page (FJ: Project Pages)



■ The MITRE Way

- MW Preamble
- MW Position Descriptions
- MW for Project Leaders Video
- MITRE Product Libraries – centers
- MITRE Way Tools Site (FJ: mwtools)



■ Strengthening the Core

- STC Overview (FJ: STC)
- STC Project Assessment Guide (FJ: STC)



■ Staffing

- Clarity Role Page
- Tech Center Site
- Organization Primer
- Finding Resources

■ Leadership

- Project Leader Skills Inventory (FJ: PLSI)
- Systems Engineering Process Office (FJ: SEPO)
- Systems Engineering Guide (FJ: SEG)



■ Connect & Stay informed

- Discover Search (FJ: projectsearch)
- Handshake (FJ: handshake)
- Mailing Lists (FJ: lists overview)