



Creating Internal Transparency to Forecast Workforce Needs

Robert D. Motion
Director, Workforce Planning & Strategy
Intelligence, Information & Services
November 17, 2016

Copyright © 2016 Raytheon Company. All rights reserved.

Initiative Background



BURNING PLATFORM

Talent is the foundation of the software and services business for a major defense contractor:

- People directly drive revenue and margins, and every open seat is potential lost revenue;
- Business growth and successful execution are inhibited by not having the right people in the right place at the right time and at the right cost.

CURRENT STATE

“Lots of smart people doing the best they can with limited resources”

- Matrixed organization leads to siloes, limited communication, and no accountability
- Volatility accepted as the norm without asking “why”
- Resource intensive with 250+ employees involved in staffing planning
- High variability in process – no one does this the same
- Inefficiencies increase costs and impact competitiveness
- Creates constant strain and stress on the organization

How to increase the predictability and alignment of workforce forecasts and plans to minimize risk?

Workforce Planning Stakeholder Perspectives



Responsible for strategy and capturing new business

Key metrics: bookings, capabilities



Manages program execution

Key metrics: FTEs bid/in baseline



Provides technical staff to programs

Key metrics: "Staffing" of engineers by skill



Site planning

Key metrics: capacity utilization, heads on-site/ft²



Forecasting and managing margins, revenue, rates

Key metrics: \$\$\$, Direct charging heads



Hiring, development, retention (etc) for all employees

Key metrics: hires, voluntary turnover, time to fill, headcount

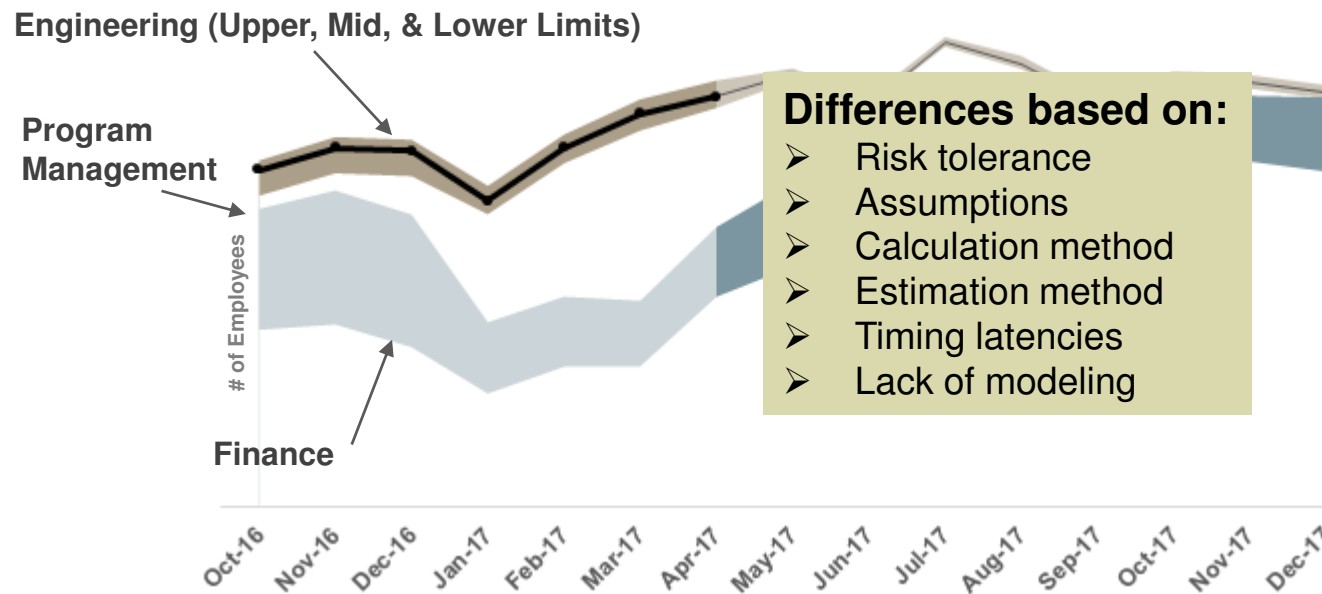
Multiple stakeholders with different care-about's involved in planning

Where We Were: A Picture Is Worth 1,000 Words

RAYTHEON PROPRIETARY



Headcount Projections, Oct 2016-Dec 2017



Putting different perspectives on paper crystalized the issue

RAYTHEON PROPRIETARY

Where We Went: Exchange of Information

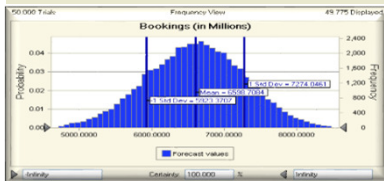
RAYTHEON PROPRIETARY

Raytheon

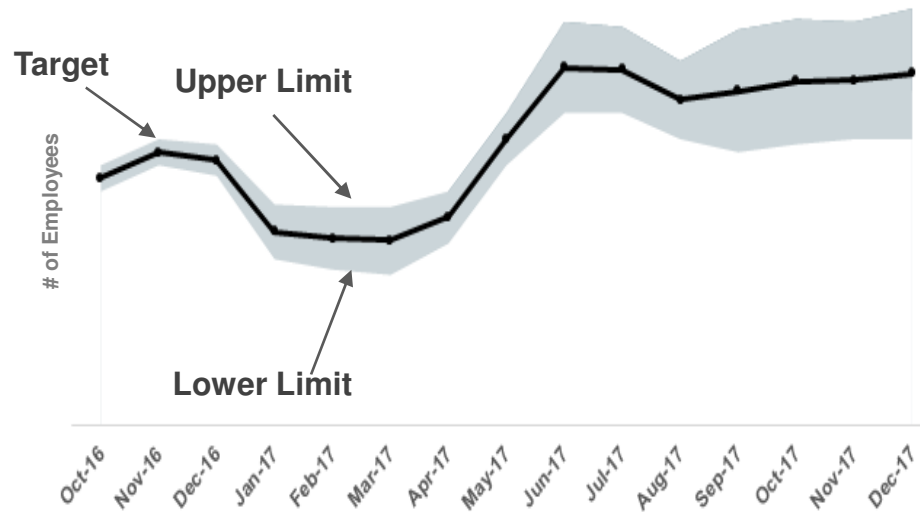
1. Align on Assumptions



2. Monte Carlo Simulation & Trending Analytics



3. Stakeholders agree on forecast – with tolerances



Transparency and communication led to alignment

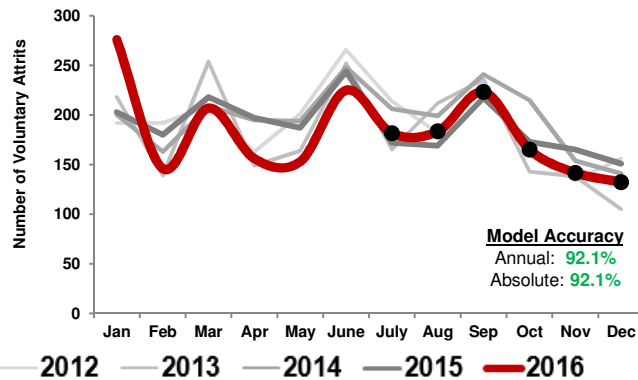
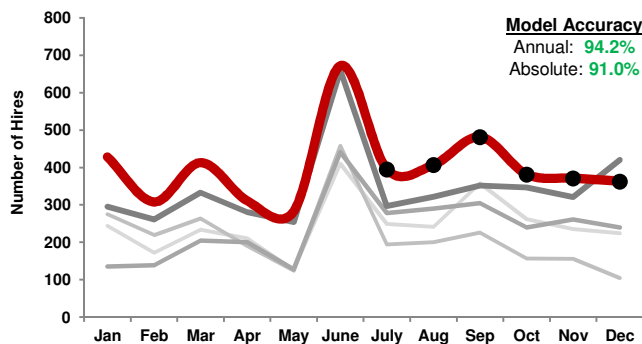
RAYTHEON PROPRIETARY

11/17/2016 | 5

The Case For HR Data Transparency: Increase Plan Fidelity and Actionability

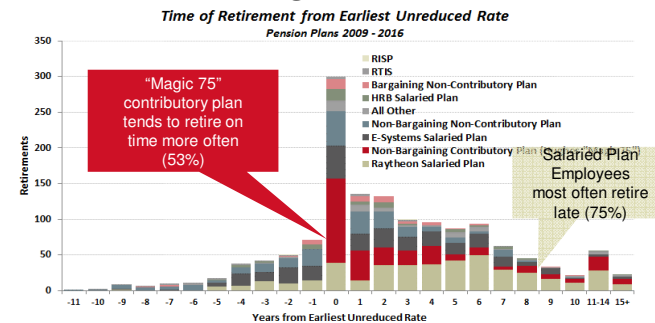


Application of cyclical models to identify and validate outliers



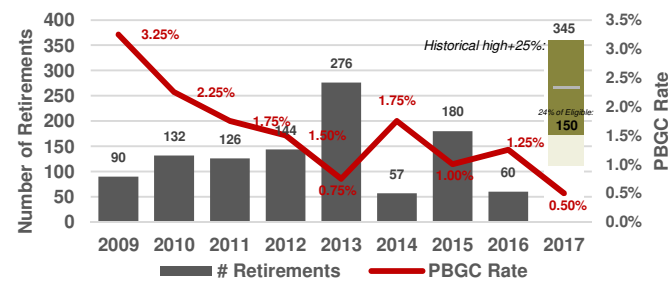
— 2012 — 2013 — 2014 — 2015 — 2016

Pinpointing and forecasting retirement based on timing and environment



Employees on PBGC-Impacted Plans tend to retire closer to eligibility;
Others tend to work longer and retire later

PBGC-Impacted Plan Retirements vs. PBGC Rate



More employees on PBGC-Impacted Plans Tend to retire when rates drop
Historical ceiling is 92 retirements in 2013

PBGC-related retirements have ranged between 5%-24% as a % of PBGC-Related employees eligible to retire

Trends and data created checks and balances in forecasting

11/17/2017 | 6

Lessons Learned

- ❖ Stakeholders have different perspectives for a reason – seek to understand them to bridge gaps
- ❖ Decision science with visualization enables and accelerates alignment
- ❖ Leverage everyone's individual expertise to benefit the collective whole
- ❖ Analytics in isolation has limited impact



Data Transparency Drives Alignment and Action