The A, B, and Cs of Capacity Planning

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Real Numbers

Today's chat: Contact center plan basics

- The importance of strategic planning

- The steps to build a plan

- Common spreadsheet metrics and, generally, how to calculate them

- Learning curves and AHT definitions

- Staffing calculation methods and validation

- **Resources**– places to go for help

There's a lot here! We will give you an overview, but are happy to help after.

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What is Capacity/Strategic/Long-Term Planning?

Staff (FTEs)

Determine the contact center resource plan(s) that maintain the (appropriate) service standards, at least cost, *over time*.

WFM systems manage the number of agents **that you already have** – *strategic* planning is where you determine how many agents you need and how to get them on the floor!

Planned

Required

Time (weekly over 18 months or so)

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Important things to note!

- Strategic planning = capacity planning = long term planning

- Cap planning is the only big picture view into the contact center

- Analytics can spot trends, but strategic planning is where important what-ifs are done

- Huge efficiencies can be achieved by developing efficient strategic plans

You

Your planning spreadsheet or system

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Q&A

Q: How often should you develop a staff plan?

A: Every week you should import new data and check for deviations between performance to plan. Meet with decision-makers monthly to give a status– unless something is changing and is worrisome

Q: How long out should the plan be?

A: 18 months, even if you only show your execs the plan out 12 months or so

Q: What is the appropriate level of strategic planning detail?

A: Week-over-week. If you calculate monthly numbers or longer, you lose a lot of important info, and daily is silly. (Note, finance may require monthly roll ups, and that is OK, but your plans should be weekly)

Q: Building a cap planning spreadsheet is hard!

A: It is. These things grow out of control!

Q: Where can I get help?

A: By calling us. Also, there's a list of resources at the end of this presentation

What a typical planning cycle looks like

(This is what Co-Pilot's AI thinks a "planning analyst" looks like)

1. Monday morning, read in new data from last week or last month

2. Compare actual volumes, AHTs, and shrinkage to that forecasted. Are there major deviations from plan?

3. Is the operation meeting its hiring and staffing goals?

4. If anything has changed significantly, reforecast the metrics that are changing, develop new staff requirements, a new staffing projection, and a revised variable labor cost

5. Communicate the changes in the plan. Decide with senior management to either implement this new plan or to keep the current plan and monitor operational performance

6. BONUS JOB: Answer all what-if questions anyone has

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What does a good capacity planning process do?

Forecasts everything → Develops accurate staffing requirements → Develops ramp plans (hiring & OT/UT) → Produces a budget
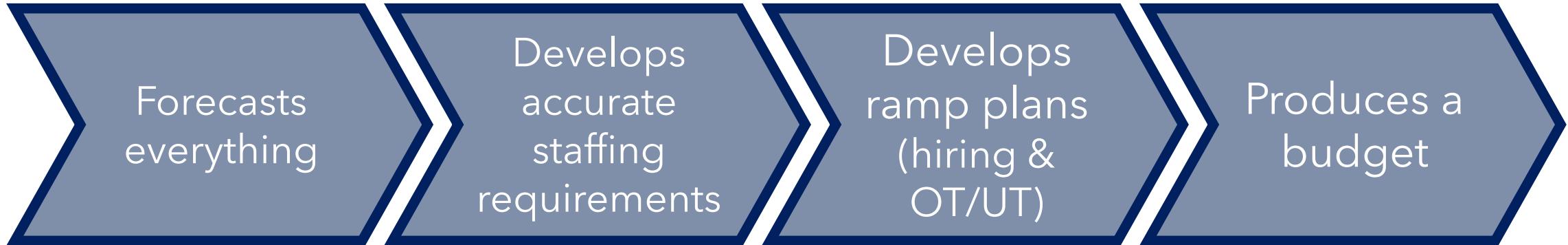
Key features of a good capacity planning tool:

- It does the four things above quickly!

- Automates both development of plans and what-if analyses

- Is **fast, optimal, and accurate**

- Is locked down: the system makes it harder to make costly mistakes

- Understands local efficiencies and skills

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Data Gathering → Forecasting (or customer requirements) → Staffing Requirements → Ramp Plans (Hiring & ET/UT) → Budget Planning and Costing

- *Contact data*: What contact types (say, queues) are similar, how many contacts did we have, and what were their handle times? (ACD data)

- *Staffing data*: How many resources did we have available? How are our teams organized? (ACD and WFM data)

- *Staffing to contact data*: Where and when did contacts get serviced? What was the historical performance there? How efficient are we? (ACD and WFM data)

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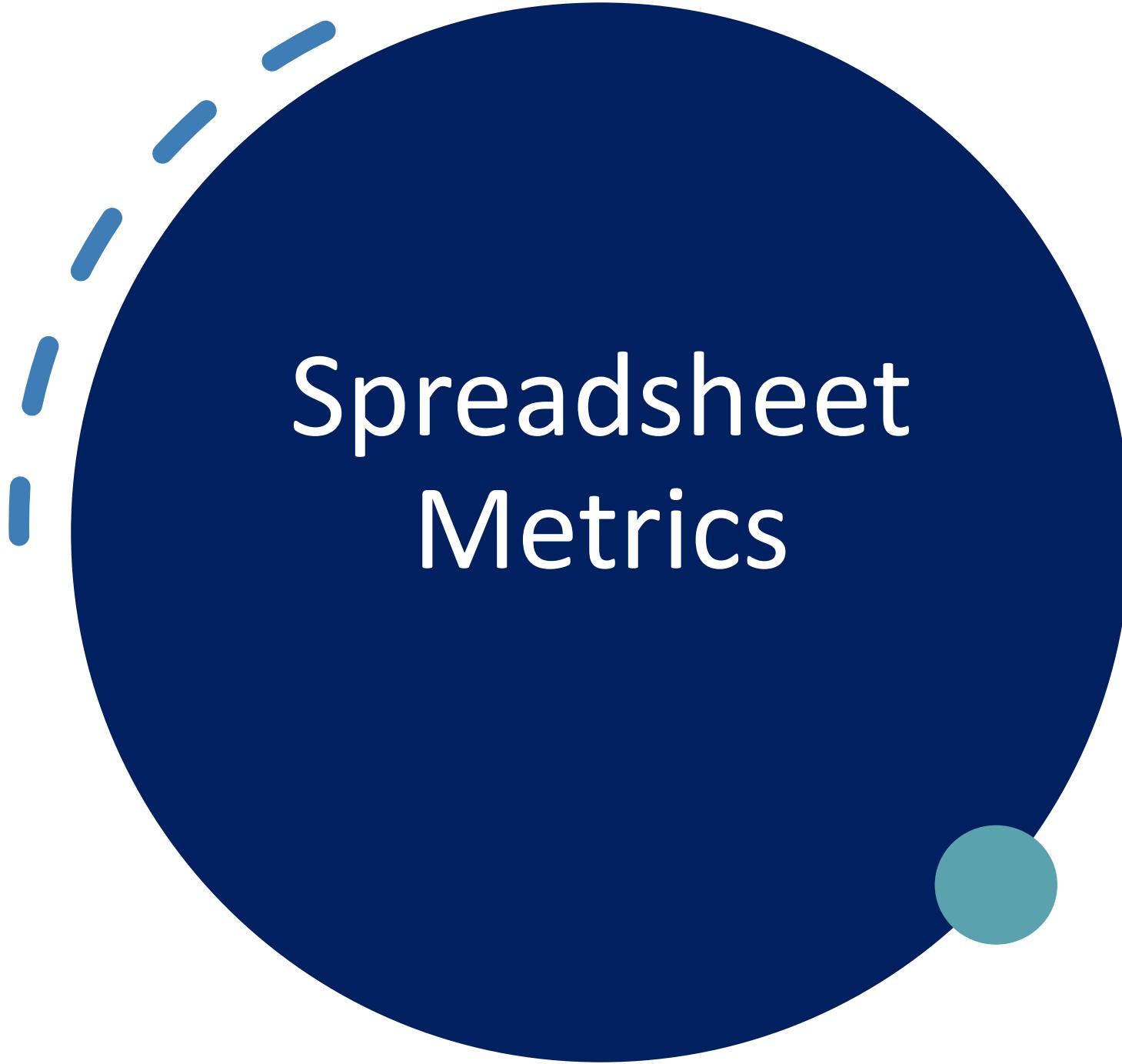
Spreadsheet Metrics

What sorts of metrics should you put in your cap plan?

Metric / Period	01/17/25	01/24/25	01/31/25	02/07/25	02/14/25	02/21/25	02/28/2
❯ Staff	83.0	81.3	74.3	72.3	76.0	85.9	83.4
❯ Planned Shrink	7.5	10.8	11.4	25.5	6.7	18.6	7.0
❯ Unplanned Shrink	4.9	5.5	9.1	6.4	3.6	4.3	5.0
❯ Staff Totals	68.9	61.7					
❯ Contacts	19,500.0	22,00					
❯ Service Quality	83.6	46.					
❯ Staff Efficiency	78.5	95.					

- All planning spreadsheets are correctly different
  - Data comes from your ACDs, your WFM, possibly HR systems, finance and more
  - Different ACDs have different definitions of "common" metrics
  - Different execs have different business problems to solve
- Judgment is required to "simplify" the problem
  - What teams combine into common staff groups?
  - What queues combine into common contact groups?
  - Which locations do we staff for (incl. work from home)?

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Staffing Calculations

Metric / Period	01/17/25	01/24/25	01/31/25	02/07/25	02/14/25	02/21/25	02/28/25	03/07/25	03/14/25
˅ Staff	83.0	81.3	74.3	72.3	76.0				
Top Line Agents (FTE)	83.0	81.3	74.3	72.3	76.0				
New Hires (FTE)	5.0	12.0	0.0	2.0	0.0	6.0	0.0	0.0	0.0
Transfers In (FTE)	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0
Transfers Out (FTE)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Terminations (FTE)	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Agents in New Hire Training (FTE)	0.0	0.0	0.0	0.0	0.0	0.0			
Agents In Learning Curve (FTE)	0.0	4.5	15.3	15.3	17.1	12.6			
Attrition (%)	2.3	1.4	3.0	2.0	3.0	3.2	1.1	1.5	2.1
Attrition (FTE)	1.7	1.0	2.0	1.3	2.1	2.5	0.8	1.1	1.6
Agents on Loan (FTE)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overtime (%)	0.0	5.0	11.0					0.0	0.0
Overtime (FTE)	0.0	3.7	7.4					0.0	0.0
Undertime (%)	0.0	0.0	0.0					0.0	0.0
Undertime (FTE)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Agents (FTE) with learning curve	81.3	77.9	79.6	80.1	89.1	86.5	82.6	83.5	81.9

First week in scenario, put actual staffed. Every other week is calculated

New hires require a learning curve, since they are slower than a seasoned agent

Except for attrition, every line item here comprises of (big) decisions we make

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Staffing Calculations

Effective Staffing – Planned Shrink – Unplanned Shrink + Lost Time = Bottom Line Agents (Rears in Seats)

Effective Agents (FTE) with learning curve	81.3	77.9	79.6	80.1	89.1	86.5
∨ Staff Totals	68.9	61.7				63.6
Bottom Line Agents (FTE)	68.9	61.7	59.1	48.2	78.8	63.6
Required Staff (FTE)	67.2	79.8	81.0	78.5	87.1	72.1
Over/(Under) Staffed (FTE)	1.7	-18.0	-21.9	-30.3	-8.2	-8.5
> Staff Efficiency	78.5	95.1	96.3	100.0	87.5	87.1

Have a common definition of an FTE (full time equivalent)

"Required" and over/under staff is algorithmically determined (more on this later)

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Unplanned Shrinkage (Uncontrollable Shrink)

Metric / Period	01/17/25	01/24/25	01/31/25	02/0			
⌄ Unplanned Shrink	4.9	5.5	9.1	6.			
Sick (%)	6.0	7.0	9.4	8.			
Sick (FTE)	4.9	5.5	7.5	6.			
FMLA (%)	0.0	0.0	2.0	0.			
FMLA (FTE)	0.0	0.0	1.6	0.			
Absent (%)	0.0	0.0	0.0	0.			
Absent (FTE)	0.0	0.0	0.0	0.			
TOTAL Unplanned Shrink (%)	6.0	7.0	11.4	8.			
TOTAL Unplanned Shrink (FTE)	4.9	5.5	9.1	6.4	3.6	4.3	5.0
⌄ Service Quality	83.6	46.3	39.1	21.0	69.4	67.2	68.7

Uncontrollable shrinkage is controlled by agents. Some thoughts:

- We *forecast* uncontrollable shrink! Time series forecasting techniques usually do well

- They are usually locally forecastable, meaning different locations may have higher or lower shrink and different seasonality from other locations

- These categories can be affected by management, through changes in policy

- Look at your data and see if there is a seasonal component to these– if there is, try not to flat-line your shrink assumptions!

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Forecasting methods

Training data and fitted model   Test   Forecast
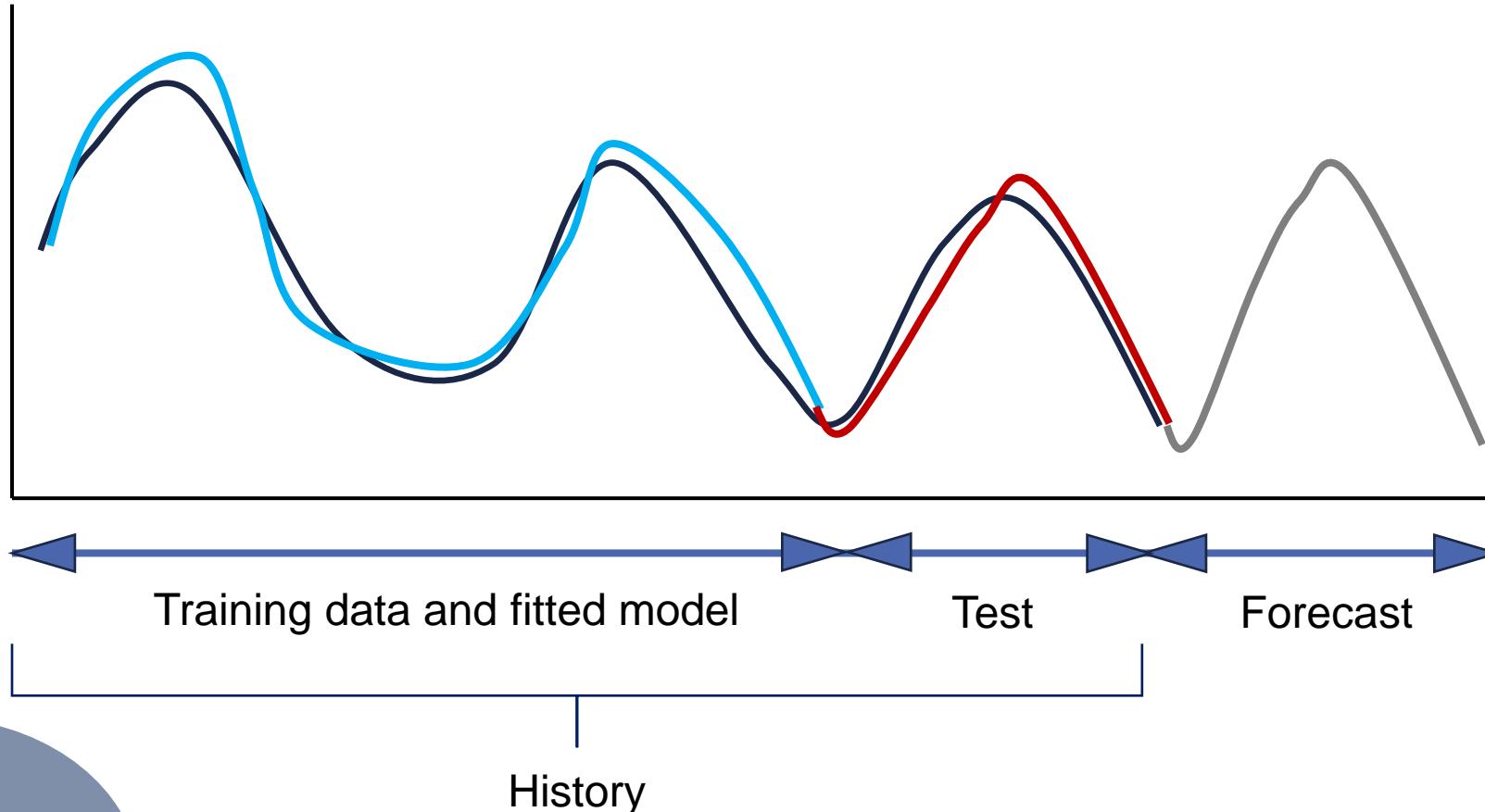
History

Rules:

- Naman's rule: two parts history to one part forecast
- You need to process your history: remove outliers and fill in missing data. Make your best guess!
- Put all values in a common time zone!
- There are different methods based on how your forecast "looks"
  - Does it have seasonality?
  - Is it trending up or down?
  - Does it bounce around a mean value?
- Find a method (see links) and test it!

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Trend models, well, are used for data that trend up or down

Linear trend model for X2_   (1 variable, n=30)
Predicted X2_ = 14.959 + 0.861*T
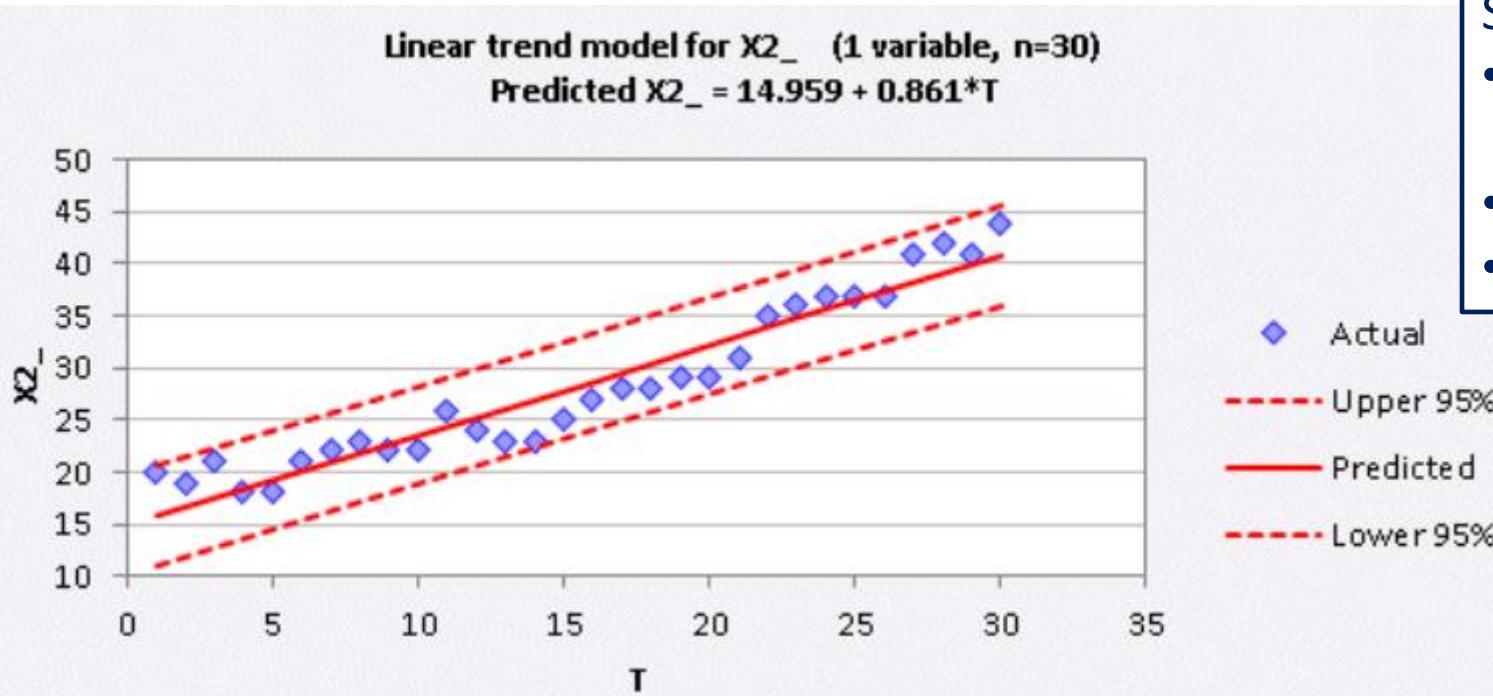
Some trend forecasting methods:
- Simple or linear weighted moving average
- Point estimate(s)
- Double exponential smoothing

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Seasonal forecasts concern different (seasonal) repeating patterns
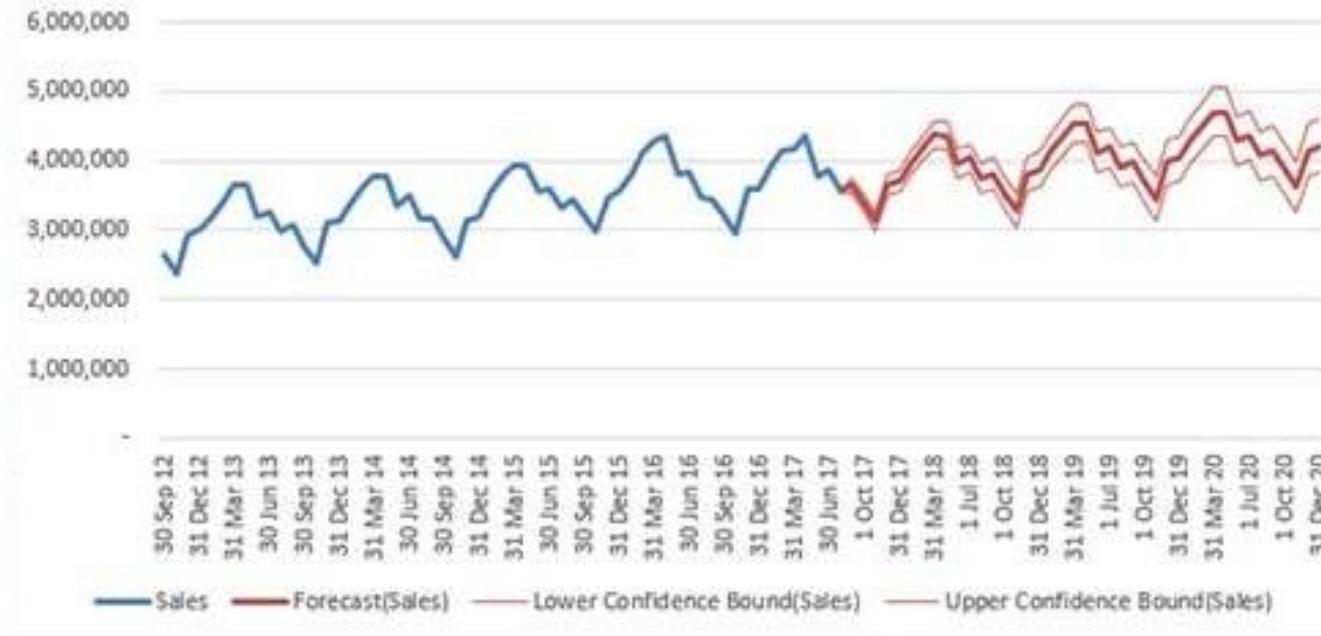
Some seasonal forecasting methods:
- ARIMA
- Decomposition(s)
- Holt-Winters (several types)

Planned Shrinkage (Controllable Shrink)

Metric / Period	01/17/25	01/24/25	01/31/25	02/07/25	02/14/25	02/21/25	02/28/25	03/07/25	03/14/25	03/21/25	03/28/25
˅ Planned Shrink	7.5	10.8	11.4	25.5	6.7	18.6	7.0	5.5	3.5	16.9	7.6
Vacation (FTE)	2.4	2.3	2.4	2.4	2.7	2.6	2.5	2.5	2.5	2.6	2.6
Vacation (%)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			
VTO (FTE)	5.1	6.1	5.1	7.1	4.1	9.1	2.0				
VTO (%)	6.2	7.8	6.4	8.9	4.5	10.5	2.5				
AWOP (FTE)	0.0	2.3	0.0	4.8	0.0	0.0	2.5				
AWOP (%)	0.0	3.0	0.0	6.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Training (FTE)	0.0	0.0	4.0	11.2	0.0	6.9	0.0	0.0	0.0	10.3	0.0
Training (%)	0.0	0.0	5.0	14.0	0.0	8.0	0.0				
Scheduled Absent (FTE)	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Scheduled Absent (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Coaching (FTE)	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Coaching (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Group Meetings (FTE)	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Group Meetings (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Lost Time (FTE)	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Lost Time (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
TOTAL Controllable Shrink (FTE)	7.5	10.8	11.4	25.5	6.7	18.6	7.0				
TOTAL Controllable Shrink (%)	9.2	13.8	14.4	31.9	7.5	21.5	8.5	6.6	4.2	19.7	8.9
˃ Service Quality	83.6	46.3	39.1	21.0	69.4	67.2	68.7	83.9	80.9	91.6	78.8

Controllable shrink are those metrics that take agents away from the floor. Planners determine the amount every week, it is a decision we make

Lost time is not controllable (this is in the wrong category), but is a form of uncontrollable shrink.

It represents the difference between the top line staffing, minus all shrink, and the bottom line ACD staffed hours in your history.

Usually there is a disconnect between these different systems (WFM and ACD), and lost time is the plug metric. It should be consistent over time and forecastable.

AHT adjustments

- Definition of AHT: every metric that makes an agent busy because they answered a contact:

    Talk time +

    After call work +

    Hold time (if not included in talk time) +

    Outcalls (if not included in talk time) +

    Every ACD (Automatic Call Distributer) has a different definition of AHT and their components. Learn yours! (what's missing?)

- If multi-site: every site has its own AHT, and we should expect different handle times. It is important to understand the differences!

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Contacts and calculations

Metric / Period	01/17/25	01/24/25	01/31/25	02/07/25	02/14/25			
⌄ Contacts	19,500.0	22,000.0	19,500.0	19,500.0	23,000.0			
Average Talk Time	383.5	383.5	383.5	383.5	383.5			
After Call Work (ACW)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Base AHT	413.5	413.5	413.5	413.5	413.5	413.5	413.5	413.
New Hire AHT	0.0	827.0	827.0	745.9	580.4	590.7		
New Hire Adjusted AHT	413.5	441.5	502.8	487.7	460.7	440.2		
Volume	19,500.0	22,000.0	19,500.0	19,500.0	23,000.0	19,500		
⌄ Service Quality	83.6	46.3	39.1	21.0	69.4	67.2		
Contacts Handled	18,844.0	19,135.2	16,308.9	14,344.4	21,549.8	18,129		
Service Level (X Seconds)	83.6					67.2	68.7	83.9
Average Speed of Answer	10.7					22.7	21.2	10.6
Abandons	656.0					1,371.0	1,380.8	649.
Abandon (%)	3.4	13.0	16.4	26.4	6.3	7.0	6.6	3.3
Handled Threshold	16,309.2	10,195.9	7,630.9	4,086.7	15,958.2	13,107.2	14,418.4	16,354

Other categories of time should be here, too, if required. Outcalls and hold time may be accounted in talk time.

Volume and ATT and ACW is forecasted. AHT is adjusted for new hires and their learning curve.

Volume includes callbacks after abandons. This is not a problem in almost every case…

Calculating expected service is model-driven (often Erlang equations). More on this in a bit.

Learning curves

AHT percentage difference of a new hire when compared to a seasoned agent

8% higher

6% higher

4% higher

How much longer is a new hire's AHT, when they first hit the floor?

Wk 1   Wk 2   Wk 3

Fully proficient

Time since leaving training and hitting the floor (usually weeks to a few months)
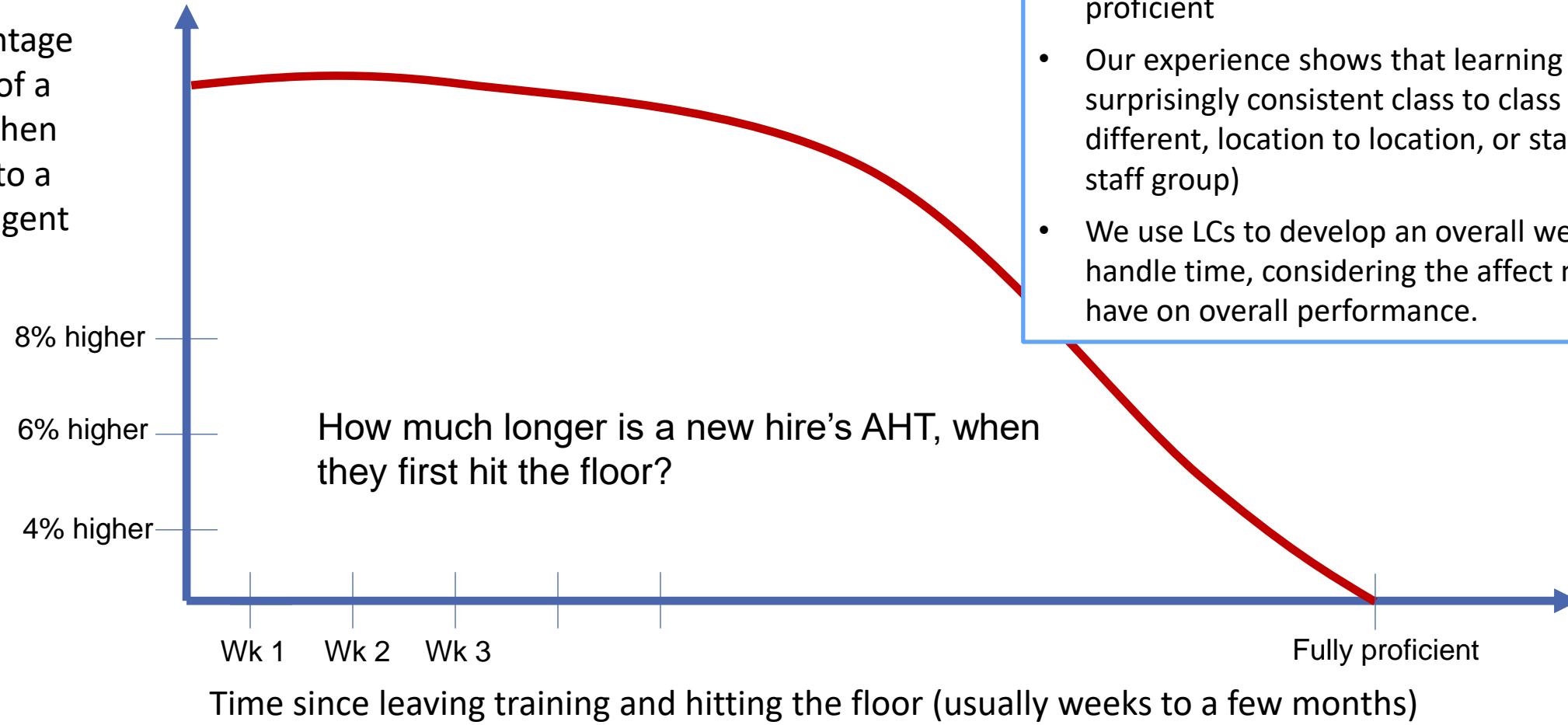
Things to note:

- If you hire a lot of agents at one time, your overall AHT will increase until they are proficient

- Our experience shows that learning curves are surprisingly consistent class to class (but different, location to location, or staff group to staff group)

- We use LCs to develop an overall weighted handle time, considering the affect new hires have on overall performance.

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Staffing decisions

| Metric / Period	01/17/25	01/24/25	01/31/25	02/07/25	02/14/25	02/21/25	02/28/25	03/07/25	03/14/25	03/21/25	03/28/25
⌄ Staff	83.0	81.3	74.3	72.3	76.0	85.9	83.4	84.6	83.5	87.9	85.4
Top Line Agents (FTE)	83.0	81.3	74.3	72.3	76.0	85.9					
New Hires (FTE)	5.0	12.0	0.0	2.0	0.0	6.0					
Transfers In (FTE)	0.0	0.0	0.0	0.0	7.0	0.0					
Transfers Out (FTE)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Terminations (FTE)	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Agents in New Hire Training (FTE)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Agents In Learning Curve (FTE)	0.0	4.5	15.3	15.3	17.1	12.6	7.2	7.2	5.4	5.4	0.0
Attrition (%)	2.3	1.4	3.0	2.0	3.0	3.2	1.1	1.5	2.1	3.1	8.0
Attrition (FTE)	1.7	1.0	2.0	1.3	2.1	2.5	0.8	1.1			
Agents on Loan (FTE)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Overtime (%)	0.0	5.0	11.0	14.0	12.0	4.0	0.0	0.0	0.0	0.0	0.0
Overtime (FTE)	0.0	3.7	7.4	9.1	8.2	3.1	0.0	0.0	0.0	0.0	0.0
Undertime (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Undertime (FTE)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Agents (FTE) with learning curve	81.3	77.9	79.6	80.1	89.1	86.5	82.6	83.5	81.9	85.4	85.3
⌄ Staff Totals	68.9	61.7	59.1	48.2	78.8	63.6	70.7	74.6	68.6	59.2	65.7
Bottom Line Agents (FTE)	68.9	61.7	59.1	48.2	78.8	63.6	70.7	74.6	68.6	59.2	65.7
Required Staff (FTE)	67.2	79.8	81.0	78.5	87.1	72.1	78.9	72.7	69.3	52.0	67.2
Over/(Under) Staffed (FTE)	1.7	-18.0	-21.9	-30.3	-8.2	-8.5	-8.2	1.9	-0.7	7.2	-1.4
❯ Staff Efficiency	78.5	95.1	96.3	100.0	87.5	87.2	87.1	78.7	80.4	68.4	81.5

Effective Staffing – Planned Shrink – Unplanned Shrink + Lost Time = Bottom Line Agents (Rears in Seats)

Playing with your "levers" to smooth out your "over/under"

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Interval Staffing Models (for calls)

| Model	Assumptions	Accurate?	Notes
Contacts per agent	Assumes a specific capacity per agent	Only with very flat volumes and workloads week-over-week. Otherwise, it is not accurate	Only use in the simplest of operations
Occupancy-based	"Forecast" occupancy, and calculate staff from there	If you know occupancy, you know staffing. Being off a smidge on the occupancy forecast can lead to significant staffing error	A real simplification that many use. Easy to code, but follows the logic: "predict staffing by assuming staffing" since they are substitutes for each other in the staffing/occupancy equation. What-ifs are very limited
Erlang C	No abandons, common distributions of arrivals	Accurate when very, very high customer patience. Otherwise overstaffs significantly	Industry standard, but can overstaff inconsistently & significantly. Many calculators are available, easy to add to your spreadsheet.
Erlang A/X	Assumes a mean time to abandon, common arrival distributions, and a patience distribution	Tends to overstaff	Harder to code, but adds some accuracy. Can buy a calculator.
Simulation (and hybrid models)	Derive patience, arrival distributions, and call routing from ACD data	Can be perfect, but is harder to set up and code	Absolutely the best approach, but is almost impossible to put in a spreadsheet. Look for systems that use this technique
"AI"/Regression	Use history and other data to derive staffing required (AI model!).	Can *look* accurate for a controlled validation. But is weirdly and quirkily inaccurate at the wrong time	Data scientists will gravitate to these models. They are data constructs that produce great validations but weird disconnects in logic. AI is absolutely the wrong tech for determining staffing

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Inaccuracy has a significant (hidden) cost

Service Level by Agents
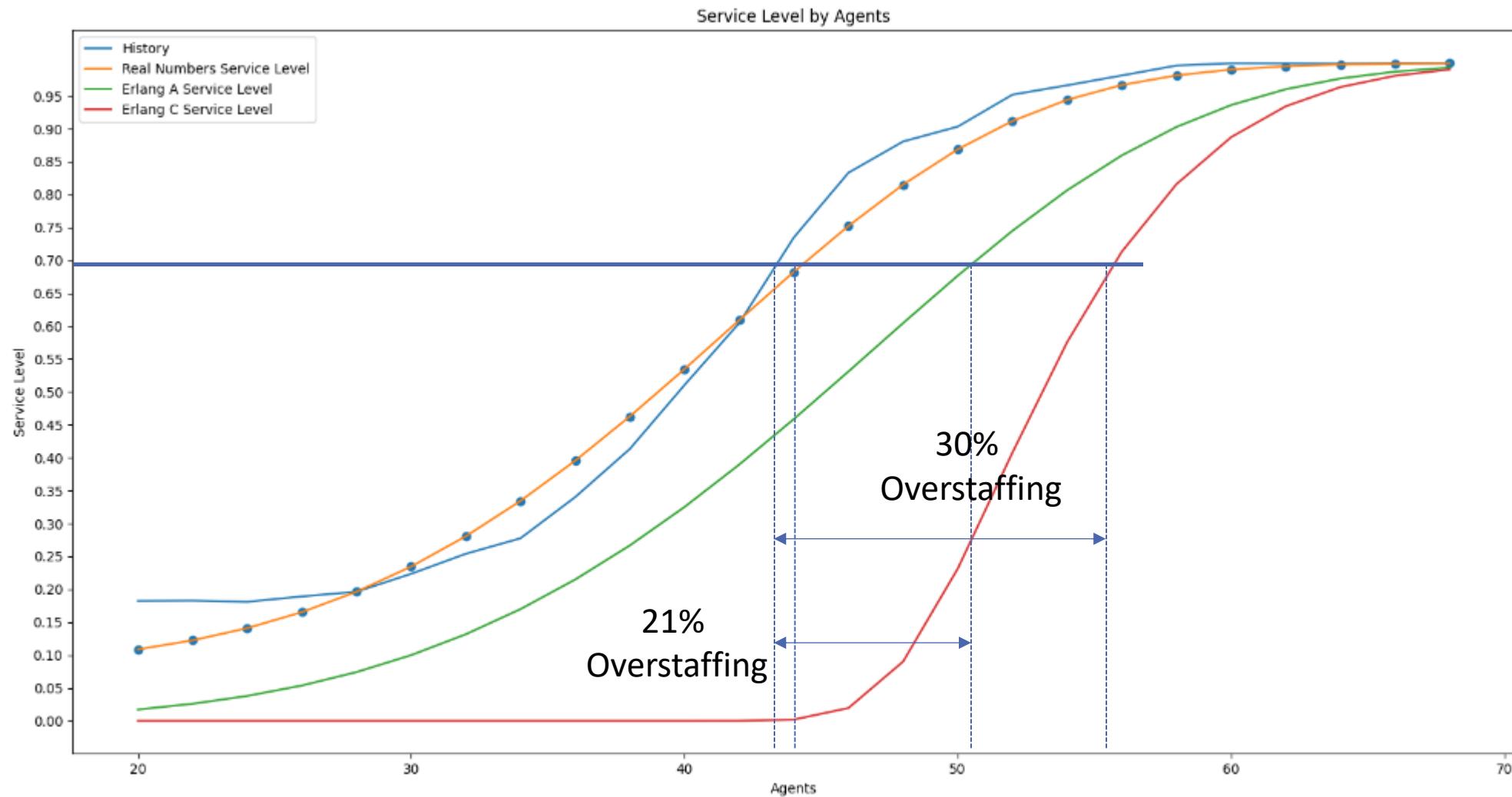
Rolling up to a weekly view

- You need to convert an interval model to a weekly model.

- A common way to calculate weekly staffing numbers is to calculate the staffing required at each interval and add them up. A problem: It assumes perfect staffing.

- Another is to treat the average volume and average handle time as though they are common across the week and calculate an average staffed number. A problem: You lose much of the peaks and valleys across the week. Not sure if this will be close to accurate!

The trick: Pick a method, and test its assumptions by plugging in your actuals to see how far off you are from the predictions! (This is called model validation)

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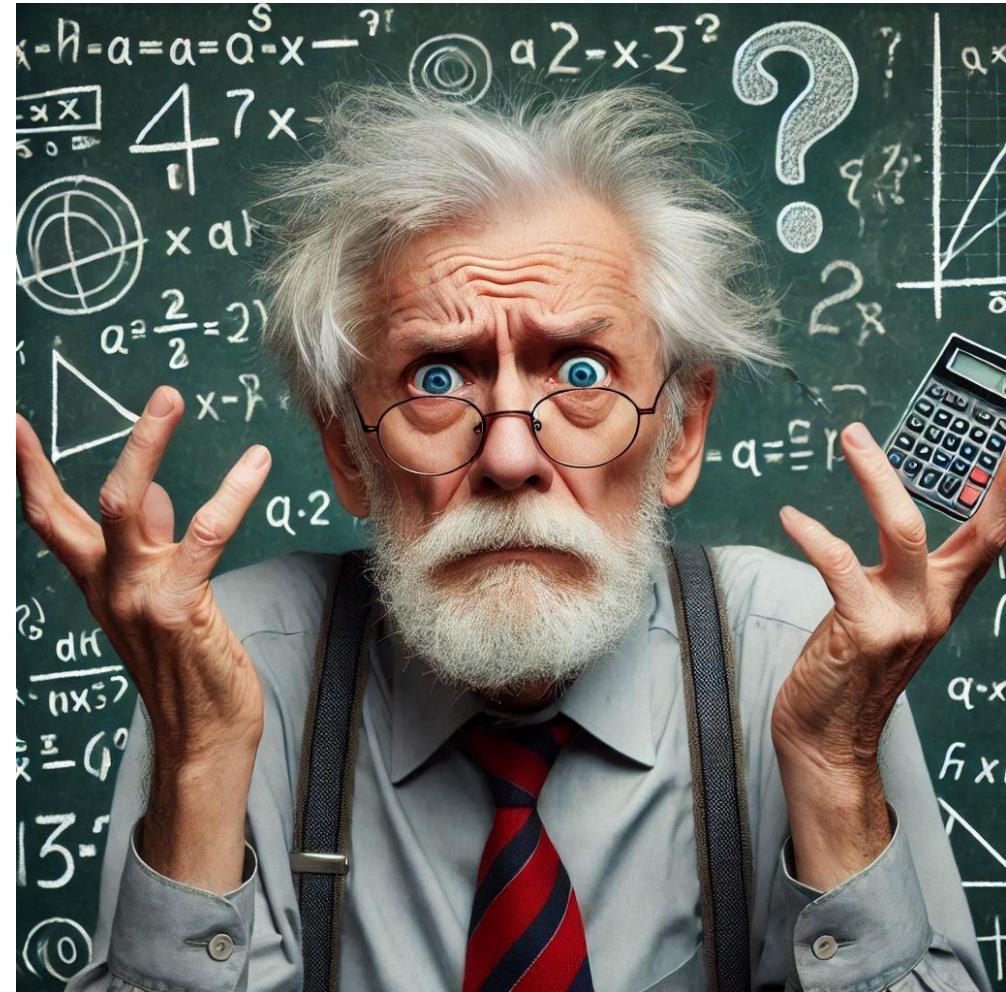
Validating your capacity planning model

Weekly staff required

Legend:
- Predicted
- Actual - file
- Erlang C Weekly Inputs

Week-Over-Week Error
Erlang C: 22.36%
Real Numbers Sim: 2.86%
~FTE Savings = $3.3MM per year

FTEs Available and Model Requirements
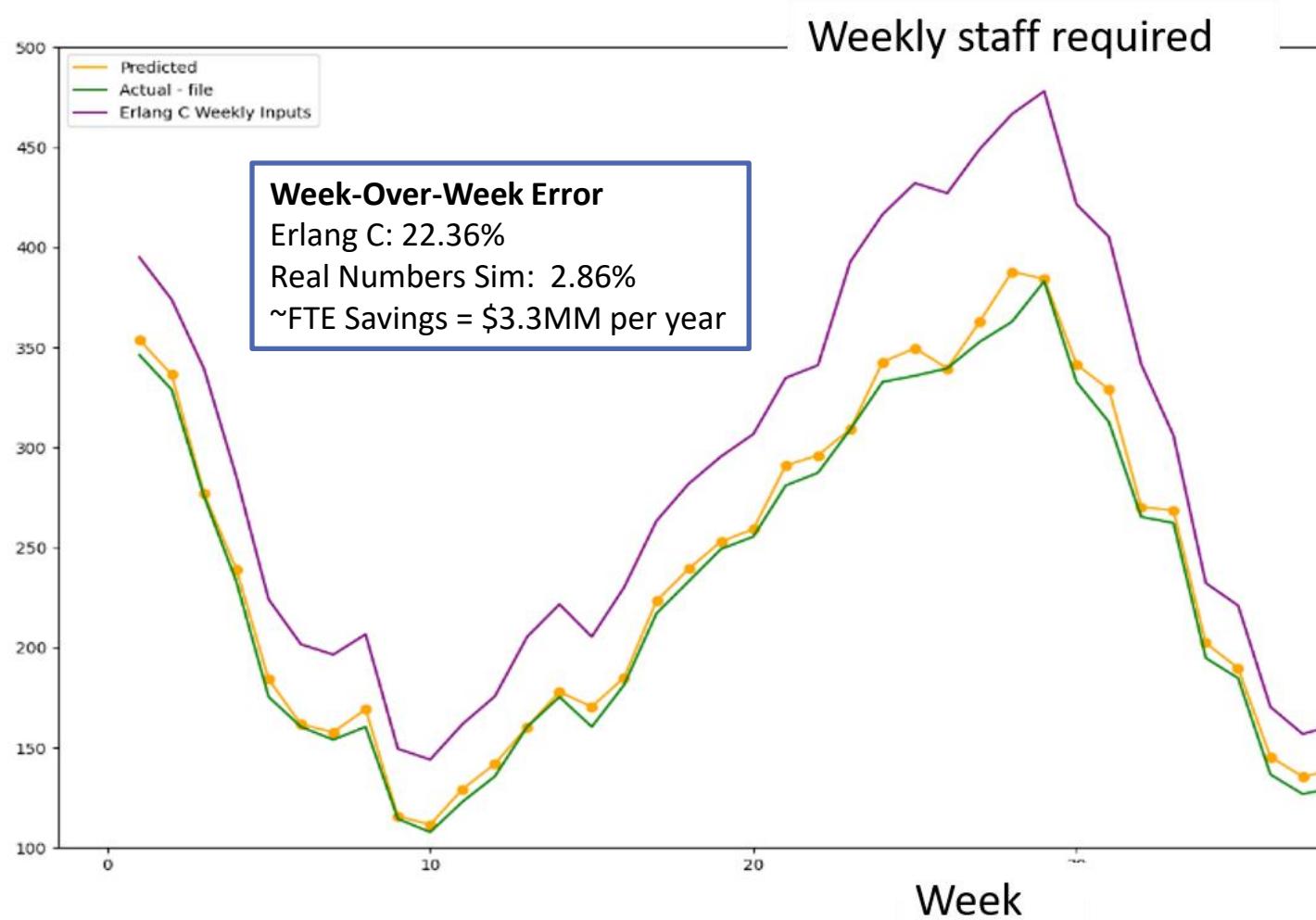
Week

To verify the accuracy of your capacity planning model, follow these steps: Pretend that last week's service level is your target. Input this service level along with last week's handle time and volume into your capacity planning model. Determine how many rears-in-seats it predicts you will need. Plot this prediction against the actual number of full-time equivalents (FTEs) you had. Repeat this process for the entire year.

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Service and Efficiency

Metric / Period	01/17/25	01/24/25	01/31/25	02/07/25	02/14/25	02/21/25	02/28/2
⌄ Staff Efficiency	78.5	95.1	96.3	100.0			87.1
Agent Occupancy (%)	78.5	95.1	96.3	100.0	87.5	87.2	87.1
Idle Time (%)	21.5	4.9	3.7	0.0	12.5	12.8	12.9
Worked to Paid Time (%)	92.0	84.0	88.0	74.0			0
⌄ Service Quality	83.6	46.3	39.1	21.0			7
Contacts Handled	18,844.0	19,135.2	16,308.9	14,344.4			9.2
Service Level (X Seconds)	83.6	46.3	39.1	21.0	69.4	67.2	68.7
Average Speed of Answer	10.7	42.7	53.9	87.8			2
Abandons	656.0	2,864.8	3,191.1	5,155.6			0.8
Abandon (%)	3.4				6.3	7.0	6.6
Handled Threshold	16,309.2				15,958.2	13,107.2	14,418.4

Occupancy is an output of your staffing decisions!

Worked to paid time is a great metric that looks at the ratio of what you pay– your costs– against how many hours of actual work you get.

Ideally, you would calculate all service metrics from your staffing decisions. (Using simulation helps)

Note: Most spreadsheets stop at finding "staff required"

Staffing optimizers

Create Optimizer

Title | 2025 Optimizer Parameters

Service Goals

Service Level (%)	Service Level (Threshold, seconds)	Average Speed of Answer (seconds)	Abandons (%)	Occupancy (%)
80	20	20	5	80

Location	Min Total Agents (FTE)	Max Total Agents (FTE)	Hiring Ratio (%)	Max Hires per Period (FTE)	Hiring Time Period (Weeks)	Max Class Size (FTE)	Min Class Size (FTE)	Concurrent Classes Allowed	Max OT per Period (%)	OT Time Period (Weeks)	Max UT per Period (%)	UT Time Period (Weeks)
Default Center	35	225	0	25	1	12	5	2	7	3	10	3

Include in Output

☑ Hiring ☑ Overtime ☑ UnderTime ☑ Recurrent

Optimizer Constraints

Recurrent Training Hours Per Quarter per FTE: | 20

Max Recurrent Training FTEs Per Week: | 20

Date Range of Valid Recurrent Training:
Start Date: 📅 October 14, 2024
End Date: 📅 December 31, 2024

Date Range of Optimization:
Start Date: 📅 Pick Start Date
End Date: 📅 Pick End Date

- Automating hiring and overtime and undertime and recurrent training planning is a great step that removes guessing and testing.
- There are math optimizers that do this with terrific efficiency (see linear programming)
- You choose your goals and the constraints that describe your operation. The math will find the staff plan that is most efficient

Budgeting and financials

- You have a lot of detail with your staff plan that can be evaluated for cost

- A simple way to approximate costs is to have a loaded wage rate

- But you know:
  - Number of centers and their fixed costs
  - Ratio of sups to agents
  - Ratio of management to agents
  - Number of agents staffed per week
  - Amount of recurrent and new hire training… so you can calculate training costs
  - Their vacation, sick, all shrinkage categories… so you can calculate vacation costs, etc…
  - Calls answered handle times, outcalls… so you can calc telecom costs

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Benefits of doing strategic planning well

Hugging the requirements curve means:

- Lower costs

- More consistent service delivery

- Appropriate abandons and customer experience

- Consistent occupancy and workload → lower attrition

- An easier WFM process

Plus!

- More business intelligence and what-if analytics

- Better, more accurate, and quicker decision-making. It's the canary in the coal mine!

- Fewer terrible meetings with the boss!
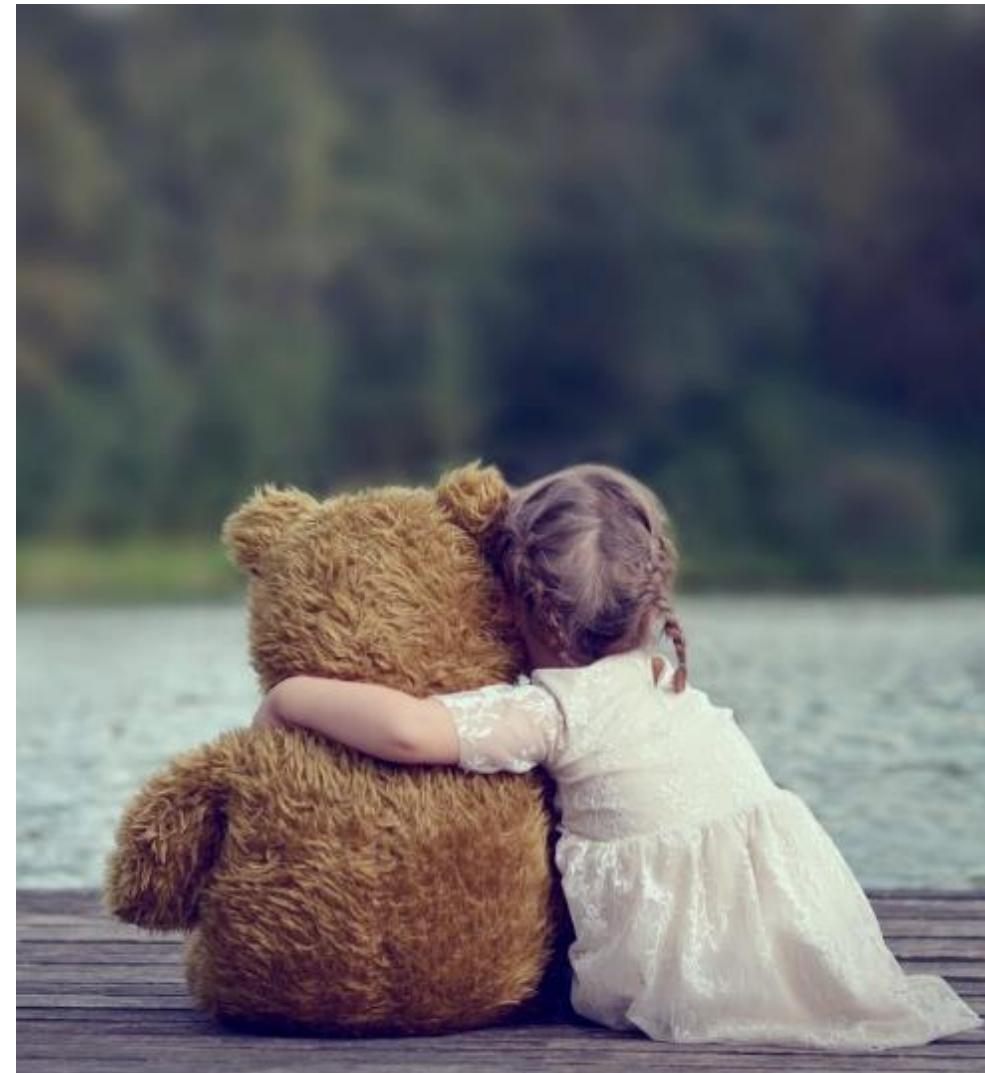
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Resources

- Ric and Chris: Ric@realnumbers.com, Chris@realnumbers.com

- Call Centre Helper is a great source of articles and spreadsheet tools. Included are Erlang calculators and forecasters. See: https://www.callcentrehelper.com/articles/contact-centre-tools

- CCMath has inexpensive add-ins for Excel, including Erlang C and A: ccmath.com

- The Society for Workforce Planning Professionals (swpp.org). Single best organization for any of us to join. Great resources and a great community to learn from. Their conference is this April in Nashville. Go!

- Vicki Herrell, Maggie Klenke, and Penny Reynolds. Find them on LinkedIn and they'll be at SWPP. Great books

- Donna Fluss/DMG Consulting: A seriously smart company, always looking toward the future of our industry

- Some folks to follow on social media! (WFM Unfiltered, Doug Casterton, Perry Fletcher, WFM Labs, Juanita Coley)

- Forecasting library:
  - https://www.exceldemy.com/forecast-in-excel-based-on-historical-data/
  - https://www.callcentrehelper.com/forecasting-excel-template-73193.htm
  - this is a bit technical: https://www.analyticsvidhya.com/blog/2021/07/time-series-forecasting-complete-tutorial-part-1/
  - You can play around with some techniques in python here: https://www.tensorflow.org/tutorials/structured_data/time_series
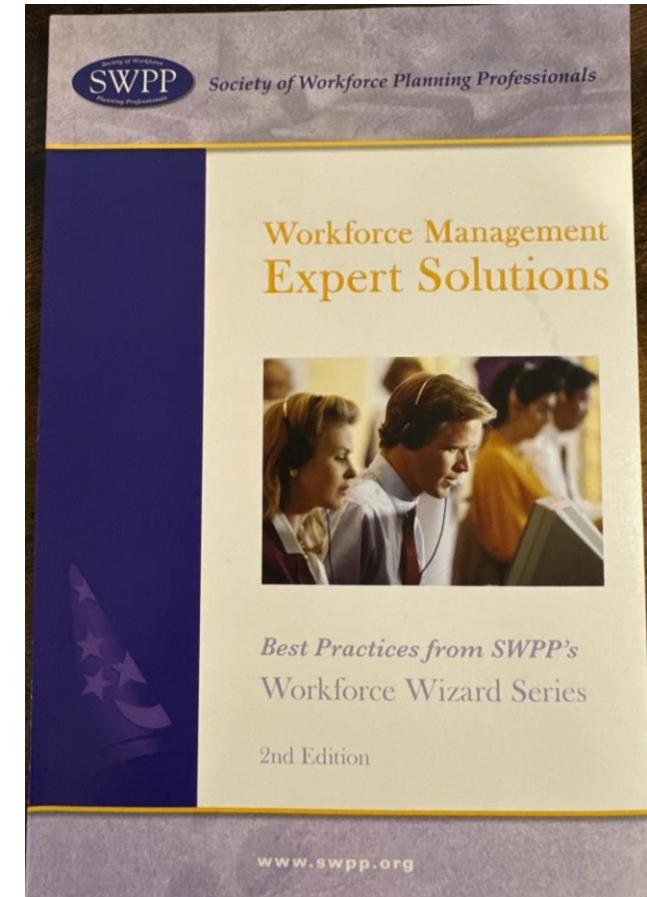
A Jeff Becze recommendation!

Get a free t-shirt

(Artist's initial drawing)

- We'd love to connect on LinkedIn
- Contact info:

  Ric@RealNumbers.com

  (410) 562-1217

  Chris@RealNumbers.com

  (443) 875-3548

- We'd truly would like to learn about your center and problems– we are happy to be a sounding board!
- Also, if you want to improve your cap planning process, call us!

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