

Some notes from ‘Advanced Planning Techniques’ module

Part of BSc (hons) Customer Contact Planning & Management

BSc (Hons) Customer Contact Planning & Management

- First global degree for those in Contact Centre Industry
- Has a dedicated pathway for Resource Planners
- Delivered by The Forum & Ulster Business School
- Can be completed in 2 years for less experienced in industry or 15-18 months for those with extensive experience
- Contact john.casey@theforum.social for more info

Forecast Accuracy

Measuring Forecast Accuracy						
		Forecast	Actual	Difference	Percent	
08:30	09:00	342	291	-51	-14.9%	
09:00	09:30	399	343	-56	-14.0%	
09:30	10:00	461	499	38	8.2%	
10:00	10:30	511	582	71	13.9%	
10:30	11:00	576	649	73	12.7%	
11:00	11:30	605	578	-27	-4.5%	
11:30	12:00	572	513	-59	-10.3%	
12:00	12:30	505	412	-93	-18.4%	
12:30	13:00	456	540	84	18.4%	
		4427	4407	-20	-0.5%	

Accuracy of Forecasting must be measured here

....



NOT HERE!



Forecast Accuracy – DO THIS

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		4427	4407	552	

Make all differences positive

This shows that positive and negative are equally inefficient

Forecast Accuracy – DO THIS

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12:00	12:30	505	412	93	18.4%	
12:30	13:00	456	540	84	18.4%	
		4427	4407	552	12.46%	

Divide the total of the differences by the forecast total.

This figure gives you weighted average of the differences across day

Targets

- 5% accuracy is urban myth
- Poisson distribution shows the effect of noise / randomness
- Need 1600 calls per interval to be consistently 2.5% over or under – and this only 2/3 of the time. Will hit double that (5% over or under) 95% of time
- Assumes all other factors and call reasons do not change

AVERAGE CALL VOLUME PER INTERVAL	POISSON LIMIT $\sqrt{\text{call volume}}$	% SPREAD $\sqrt{\text{call volume}} / \text{call volume}$
10	3.16...	33%
25	5	20%
64	8	13%
100	10	10%
400	20	5%
1600	40	2.5%

Targets

The best target is to try and make your next forecast accuracy better than the previous!

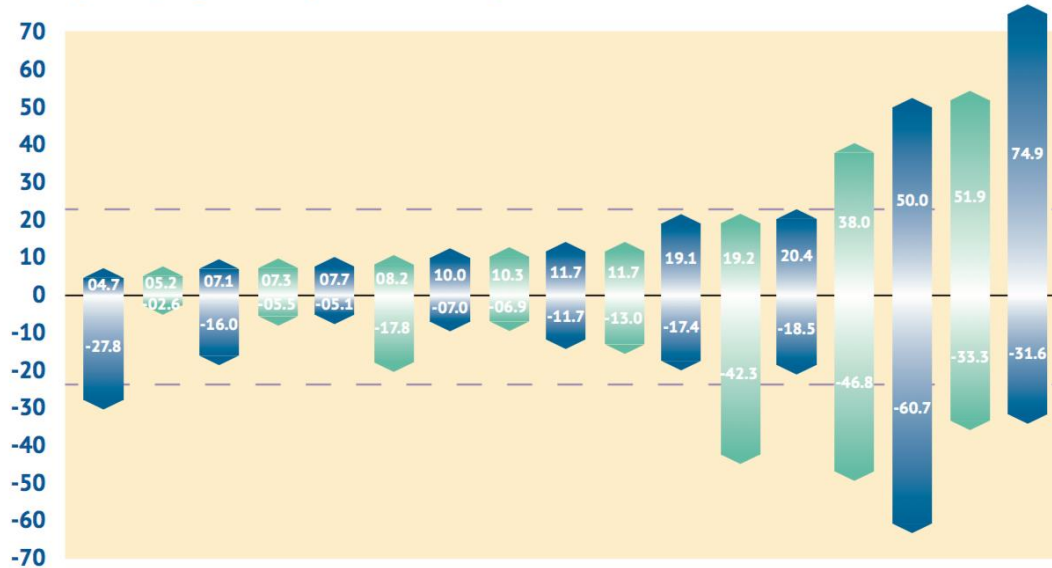
Understand scale

Calls/day	5% inaccuracy	Extra Agents	Cost (UK) / yr
100	+/- 5	0	Nil
500	+/- 25	0.5 - 1	£20,000
1000	+/- 50	1 - 3	£50,000
5000	+/- 250	5 - 10	£250,000

Can a 5000 calls per day centre live with always being 5% inaccurate?

Assuming agent takes 20 – 30 calls per day. Total loaded cost of agent £25,000 per year.

Don't ignore volatility



Scale is relative to your chosen staffing position

Shows volume variation for several centres from the average volume.

e.g. One company can be 75% above average or 31% below across period of time.

Student Thoughts

- A lot of forecast inaccuracy is caused by colleagues in the business doing 'dumb things'.
- It's the intraday which is unstable and of course that is what our key customer (Schedulers) need to be accurate
- I have just realised what a difference I can make – 1% forecast accuracy equals 20FTE or £500,000 per annum