



The IC Space

Case Study: How to fill in gaps in your data - interpolation

This approach is automatically used in the dashboard template but it's useful to know how to do it.

Instruction

This spreadsheet shows two metrics over a 22-week period. Hits on the intranet are easy to collect weekly but we may be reliant on quarterly surveys to pull in staff views on clarity of internal news (or perhaps they may be too resource intensive to collect frequently).

It may be that both of these metrics feed into a high level objective so we need to combine them. Clearly clarity of messages does not drop to zero during weeks 5 to 21 so we interpolate (or assume a straight line between the actual data points in weeks 4 and 22).

So at week 9 we can say the average is 94.4 as opposed to $104/2$ (52) which would clearly be incorrect. Consequently we can plot a new chart showing the average over the same period and compare this over time.

Week no	1. Clarity of comms (%)	2. Clarity of comms (%)	Average
1		93	
2		103	
3		92	
4	83.2	87	
5	83.5	89	
6	83.9	93	
7	84.2	92	
8	84.6	96	
9	84.9	104	94.4
10	85.2	109	
11	85.6	94	
12	85.9	105	
13	86.3	110	
14	86.6	112	
15	86.9	114	
16	87.3	113	
17	87.6	108	
18	87.9	99	
19	88.3	103	
20	88.6	107	
21	89.0	111	
22	89.3	121	

Interpolated data points (straight line)

Real data points from surveys