

Data & Dairy



Victoria Hicks – Kite Consulting



“I DON'T
DO
DATA”



1

What do you *really* know now that you have data, that you thought you knew before?

2

What difference has having more information made to your decision making?

3

What are your main challenges with data and how do you overcome these?

1 What do you *really* know now that you have data, that you thought you knew before?

“Having the data supports staff reports of what’s happening on farm”

“We thought we could recognise a sick cow pretty well, but Cow Scout picks up mastitis cases 8 hours before we would. It’s revolutionised animal welfare and fertility”

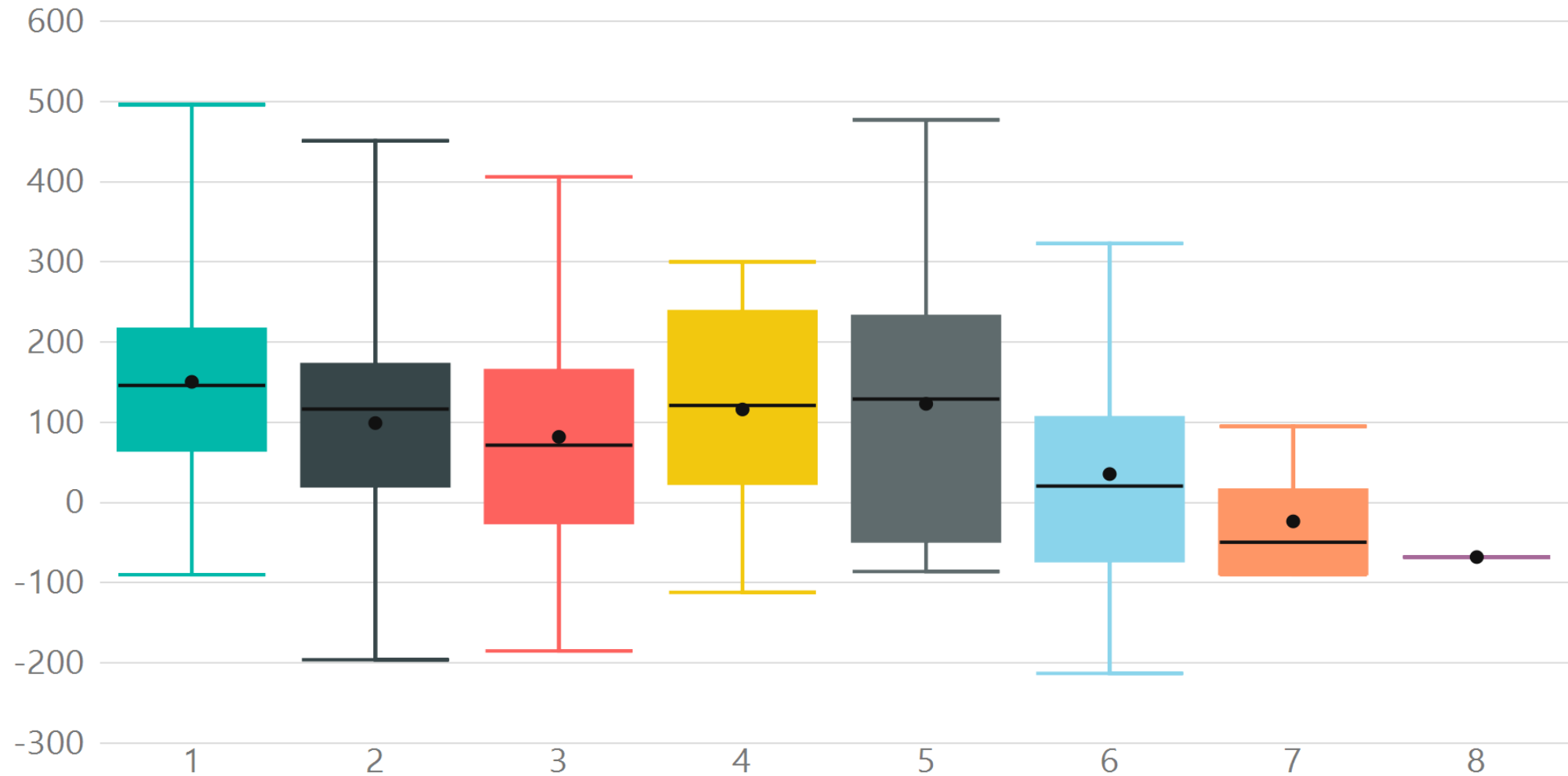
“I know how well the cows are milking on a daily basis and per milking. Having this info isn’t only good for me, but helpful to show the milking team”

There are three kinds of lies:
lies, damned lies, and statistics.

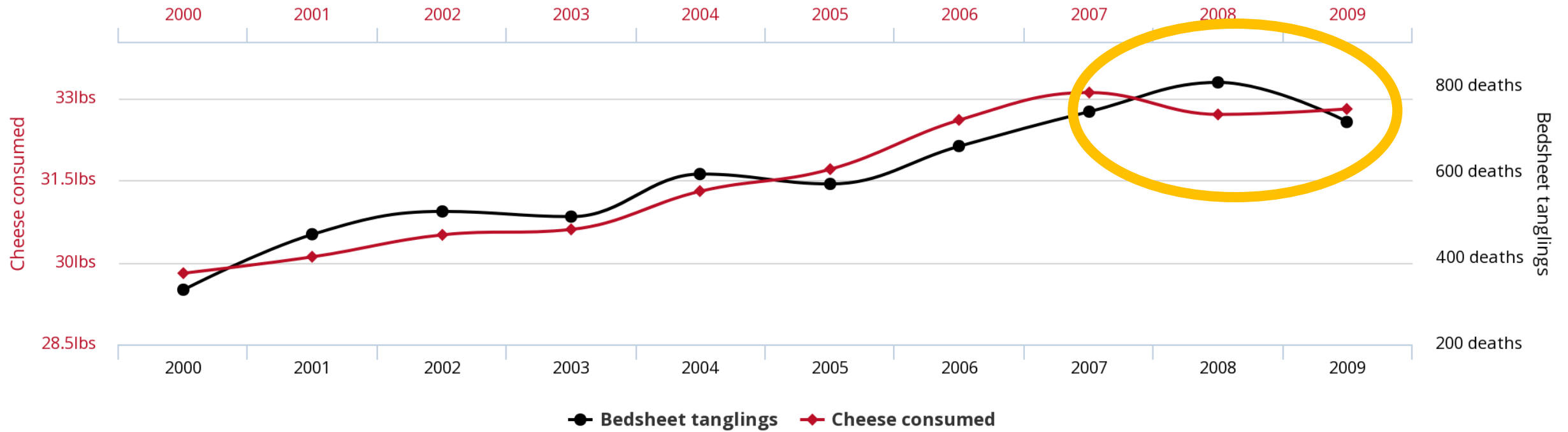
– *Benjamin Disraeli*



£PLI by Lactation number



Per capita cheese consumption correlates with Number of people who died by becoming tangled in their bedsheets



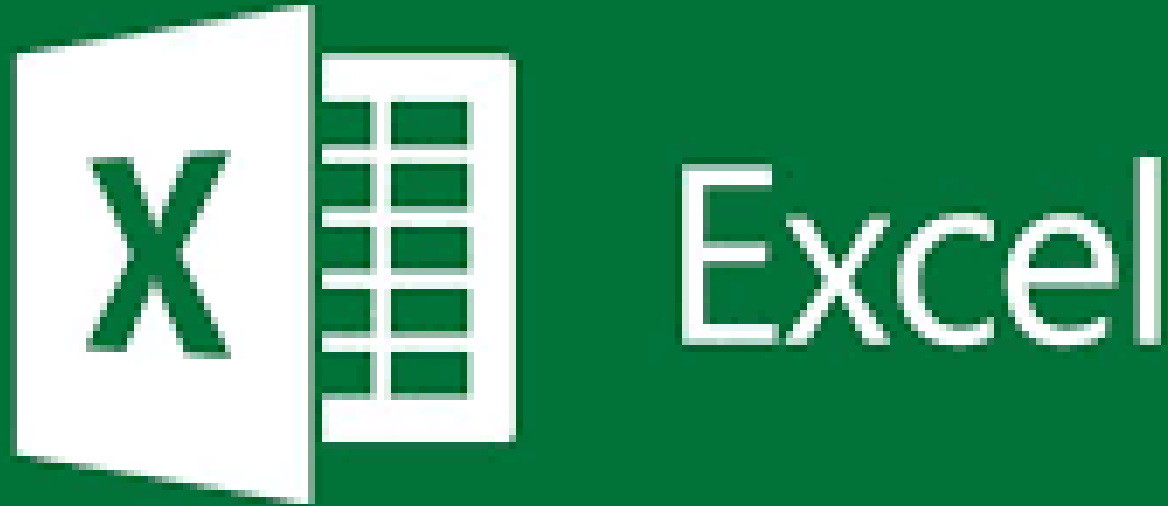
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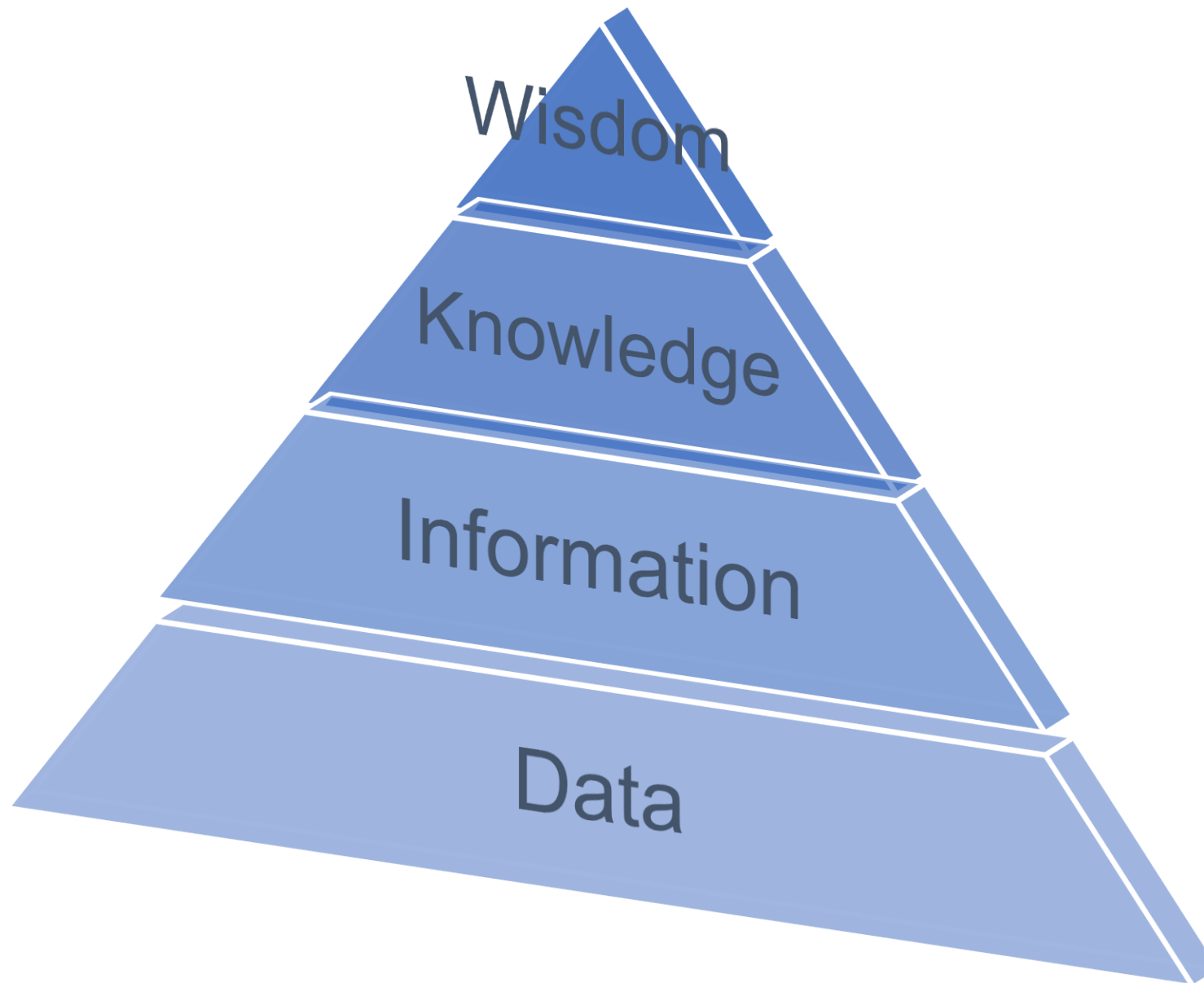
2 What difference has having more information made to your decision making?

1. Impulsive
2. Compliance
3. Delegating
4. Avoidance & deflection
5. Balancing
6. Prioritise & reflection

What's your decision style?

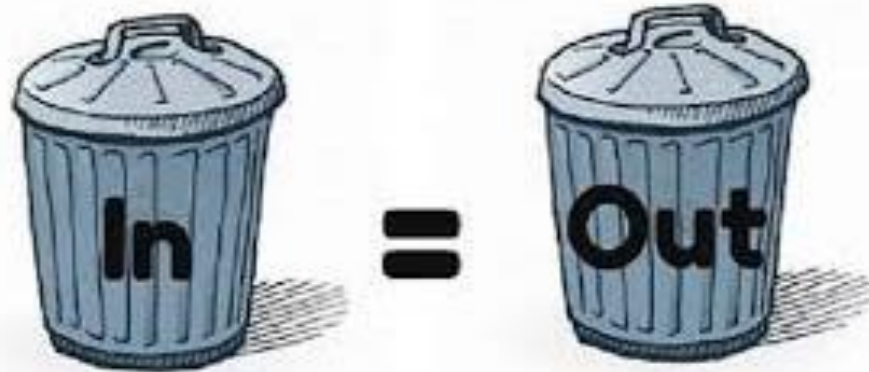
3 What are your main challenges with data and how do you overcome these?





**Decision
Risk**

**TO Mismeasure,
is to MISmanage**

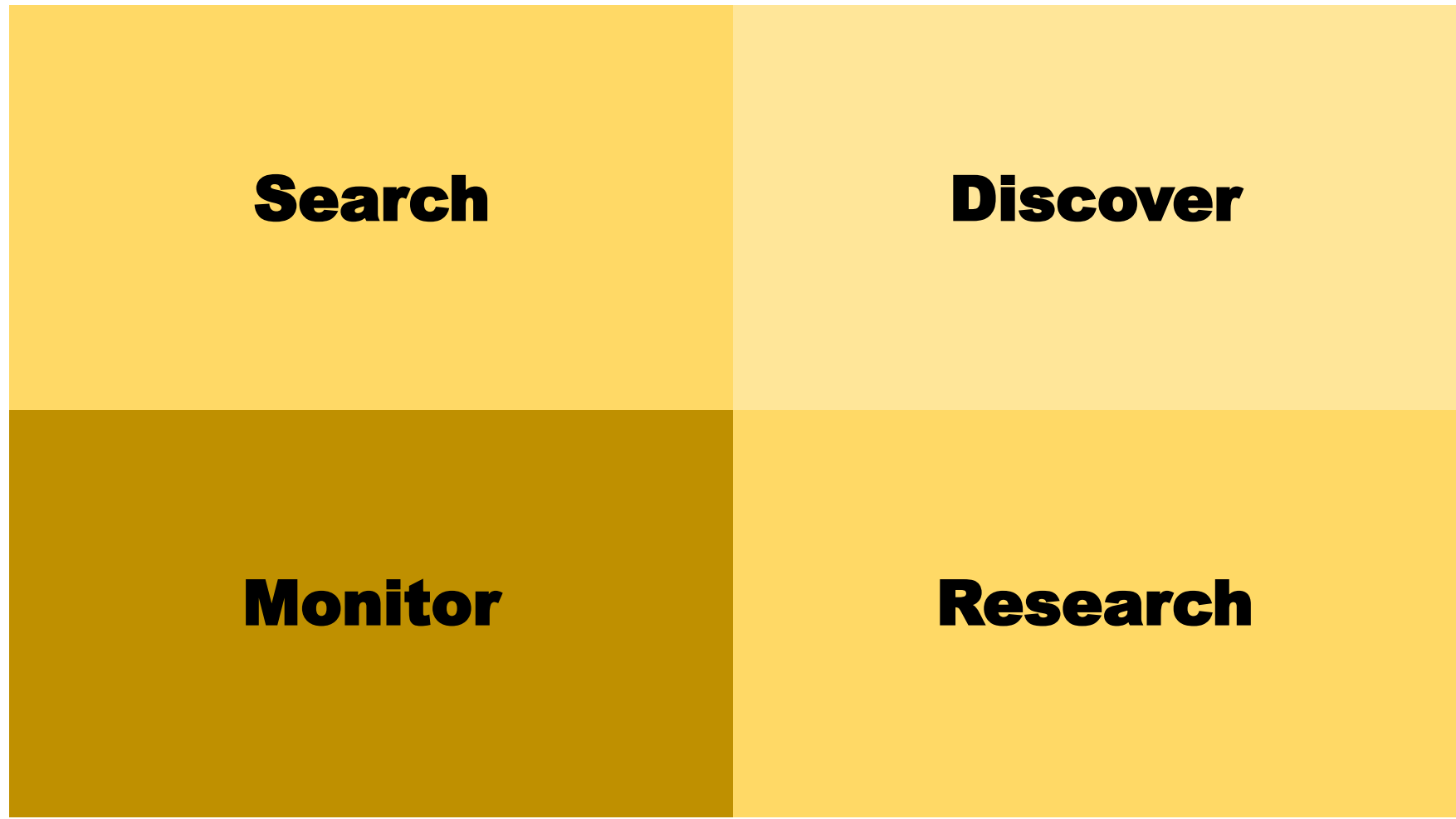


Location
Where is it?



Unknown

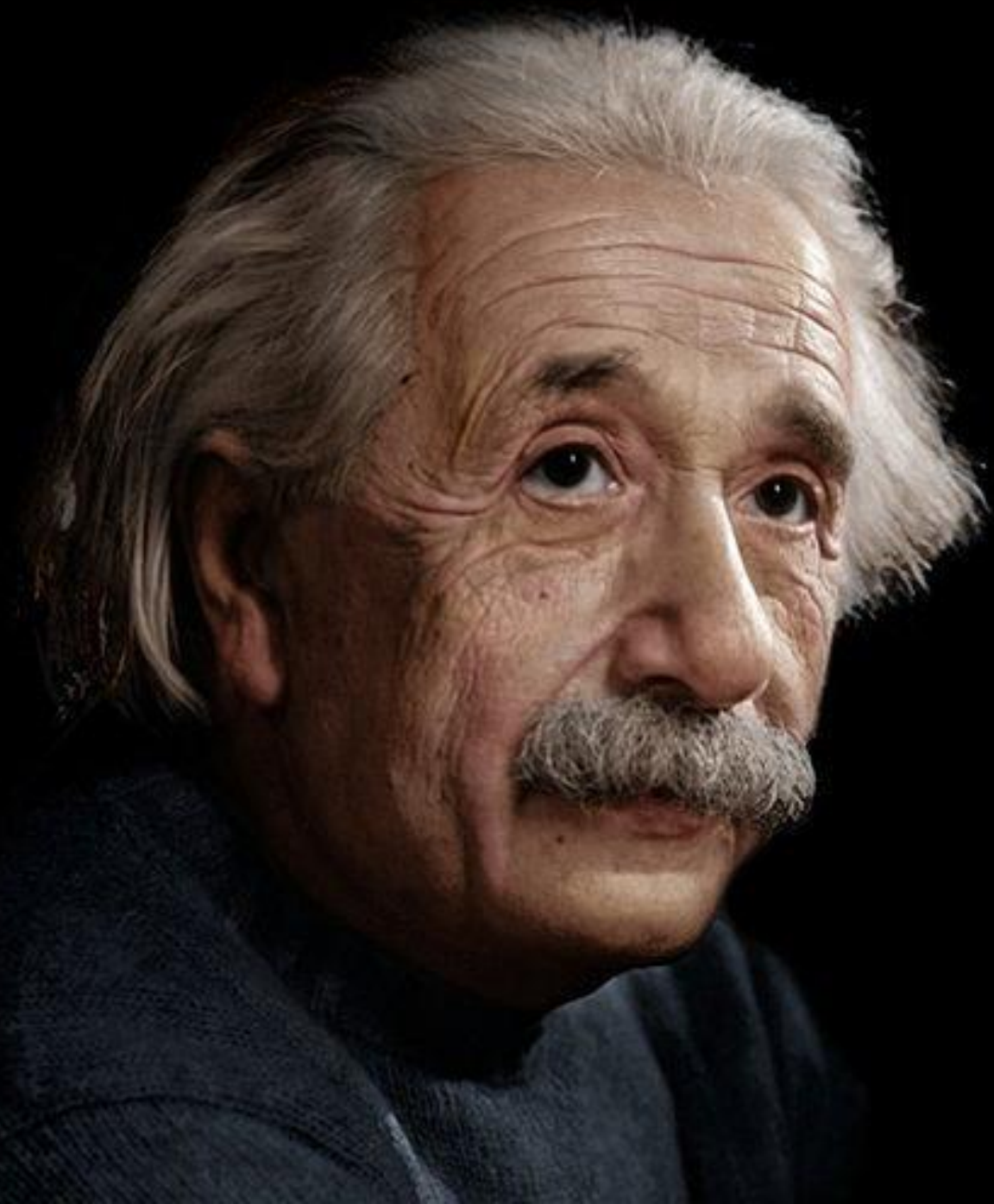
Known



Known

Unknown

Content
What is it?



I have no special talents. I am only passionately curious.

Albert Einstein

Revolutionising benchmarking...

Familiar territory

- Carbon
- Feed efficiency
- Antibiotic usage
- Labour efficiency
- Resilience
- Cost of production
- Welfare outcomes

Unfamiliar territory

DATA
ENVELOPMENT
ANALYSIS

What's the i-DEA??

- Uses exactly the same information as traditional ratios
- Combines multiple input and output scenarios
- Produces a single efficiency result
- Can be used to set targets
- Indicates the level of 'slack' at either an input or output level
- Identifies 'reference' farms for inefficient farms
- Removes uncertainty surrounding use of averages

DEA in action:

Efficient Farms

Average Herd Size	Feed ppl	Labour ppl	ECM Litres Sold	Output ppl
145	3.03	6.00	650,701	34.42
130	7.87	3.80	753,684	36.68
618	9.80	3.06	7,284,840	32.93
405	8.74	2.83	4,216,032	36.62
636	10.31	5.27	7,381,277	35.56
747	7.95	3.67	7,916,103	33.61
106	5.71	3.76	1,134,543	33.66
453	7.94	5.17	4,835,129	36.36
174	6.10	2.10	1,635,259	34.53
308	5.41	5.78	2,951,611	35.88
540	12.97	4.00	6,121,344	39.84
151	8.48	8.16	1,850,911	36.55
1495	9.24	3.49	14,649,017	33.92
182	15.08	3.11	1,383,927	43.80

Inefficient Farms

Average Herd Size	Feed ppl	Labour ppl	ECM Litres Sold	Output ppl	Efficiency
158	7.39	4.55	1,765,370	33.23	99%
196	10.58	2.97	1,912,035	32.28	94%
448	9.68	5.46	4,907,740	33.48	93%
162	7.90	4.45	1,664,032	34.19	92%
450	12.23	4.23	4,656,383	37.96	92%
159	8.12	3.48	1,443,639	34.77	91%
220	8.60	5.74	2,231,230	33.32	88%
360	9.00	3.09	3,479,289	33.16	87%
201	9.01	3.88	1,883,882	33.13	86%
358	10.09	7.13	3,497,001	33.34	83%
140	7.75	6.38	1,282,345	33.33	82%

DEA in action:

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Slacks

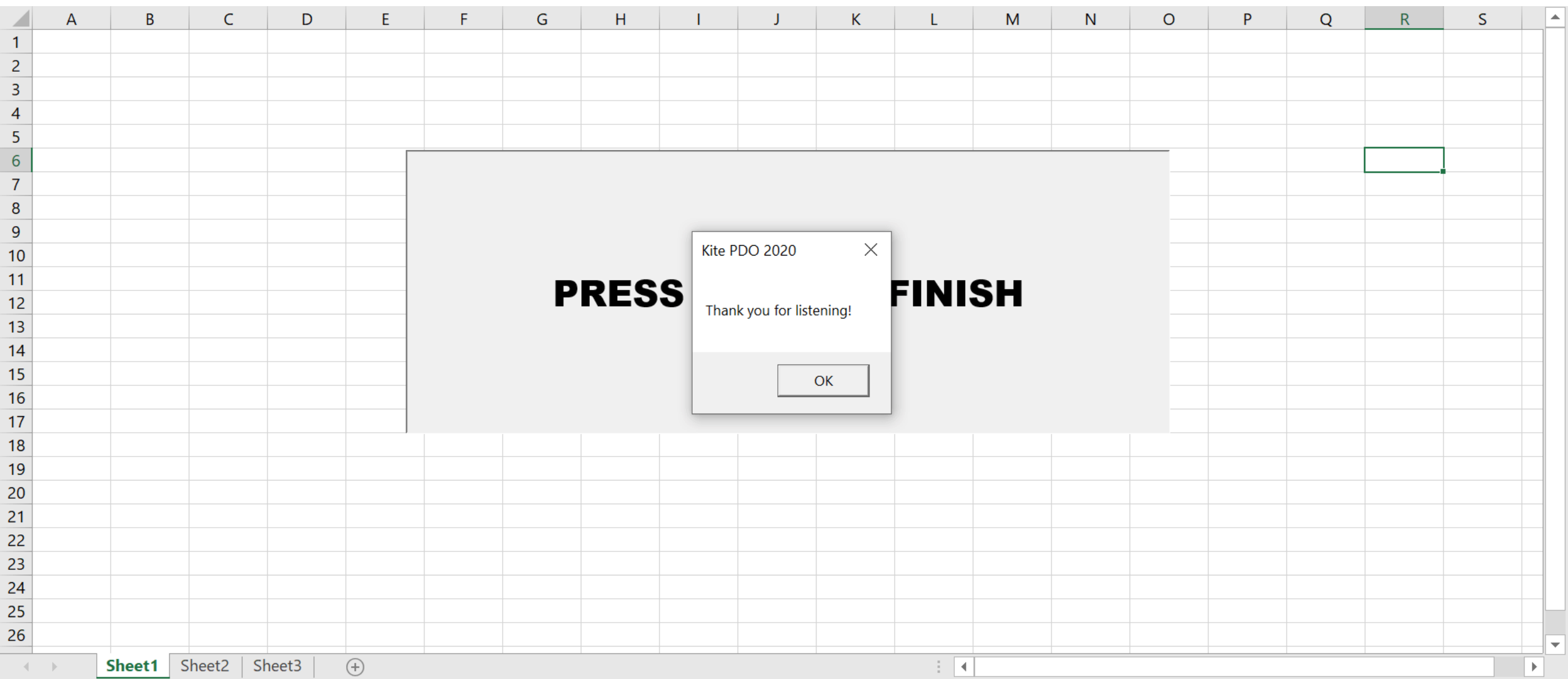
Average Herd Size	Feed ppl	Labour ppl	ECM Litres Sold	Output ppl
	0.75			0.89
	3.73			1.79
		0.25		0.71
	0.85			
	0.43			
	0.75			
	0.38			1.13
	0.56			0.68
	1.56			0.63
		0.33		1.41
	0.10	0.59		0.93



“Without data, you are just
another person with an opinion

– W. Edwards Deming





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