



Dairy for life

Influencing Data Culture to Optimise Data Utilisation

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Lead Research Statistician

eResearch 13 February 2020



Fonterra

Delivering dairy nutrition
to the world







**Machine
Learning**

**Data
Science**

**Artificial
Intelligence**

**Advanced
Analytics**

Book1.xlsx ...



Book1 - Excel

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW

Clipboard: Paste, Cut, Copy, Format Painter

Font: Calibri, 11, Bold, Italic, Underline, Color, Background Color

Alignment: Wrap Text, Merge & Center

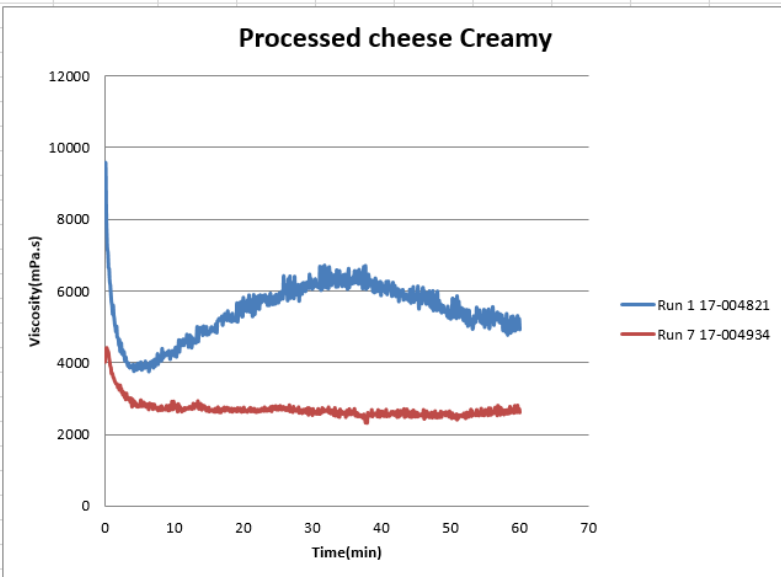
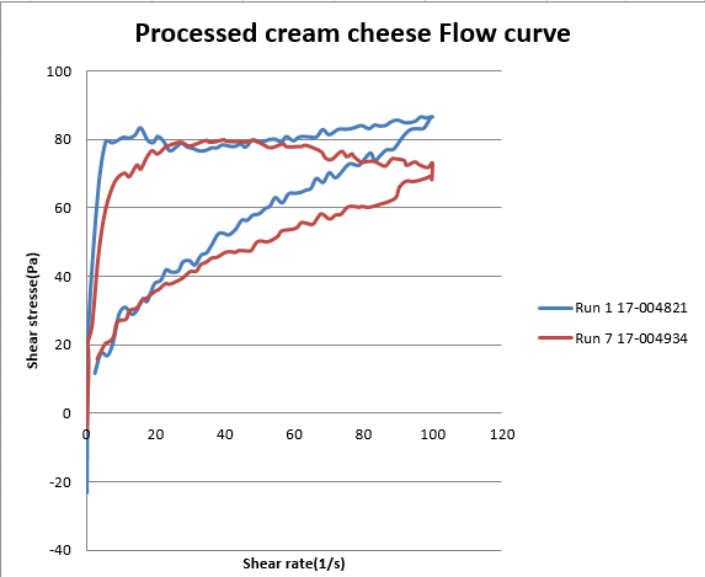
Number: General, Percent, Number, Text, Scientific, Date, Time, Accounting

Styles: Normal 3, Normal 4, Percent 2, Percent 2 2, Percent 3, Percent 4, Normal, Bad, Good, Neutral

Cells: Insert, Delete, Format

Editing: AutoSum, Fill, Clear, Sort & Filter, Find & Select

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA
1		Flow curve								Creaming											Expressible serum						
2		PP20171012-R1	17-004821			PP20171012-R7	17-004934			PP20171012-F	17-004821		PP20171012-F	17-004934													
3		Time	11:23:13	Date	30/10/2017	Time	10:02:08			Elapsed	Mean Viscosity		Elapsed	Viscosity							Expressible Serum	Pilot Plant Trial processed crea	Manufactured 1				
4		Shear Rate" Shear Stress				Shear Rate" Shear Stress				[min]	[mPa.s]		[min]	[mPa.s]							Test Date	Sample	Wt Whey		Whey	Average Whey	
5		[1/s]	[Pa]																		Trice it No		(g)		(%)	(%)	
6		0.173333333	-23.413333			0.293333333	-5.13333			0.08	9561.245		0.08	4337.803						2/11/2017	17-004821	Run 1	15.4896	120	12.9	13.0	
7		0.29	1.7033333			0.786666667	11.86667			0.17	8271.515		0.17	4390.25						2/11/2017		Run 1	15.595	120	13.0		
8		0.286666667	15.136667			0.72	18.73333			0.25	7604.145		0.25	4405.69						2/11/2017	17-004934	Batch 2	7.9042	120	6.6	6.7	
9																				2/11/2017		Batch 2	8.2805	120	6.9		
10																											
11																											
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33		42.71666667	77.753333			42.33	79.43333			2.23	4300.03		2.27	3274.023													
34		44.55	78.48			44.59	79.33			2.33	4558.125		2.35	3285.253													
35		45.95333333	77.613333			46.51333333	79.33333			2.42	4256.945		2.42	3167.277													
36		47.91666667	79.73			47.55	79.73			2.5	4284.06		2.52	3214.877													
37		49.52666667	79.25			49.01333333	79.51667			2.58	4358.755		2.58	3105.83													
38		51.15333333	79.203333			50.90333333	78.65333			2.67	4208.68		2.67	3185.49													
39		52.74333333	79.82			52.76333333	77.68			2.75	4305.64		2.75	3099.073													
40										2.83	4100.865		2.83	3035.517													

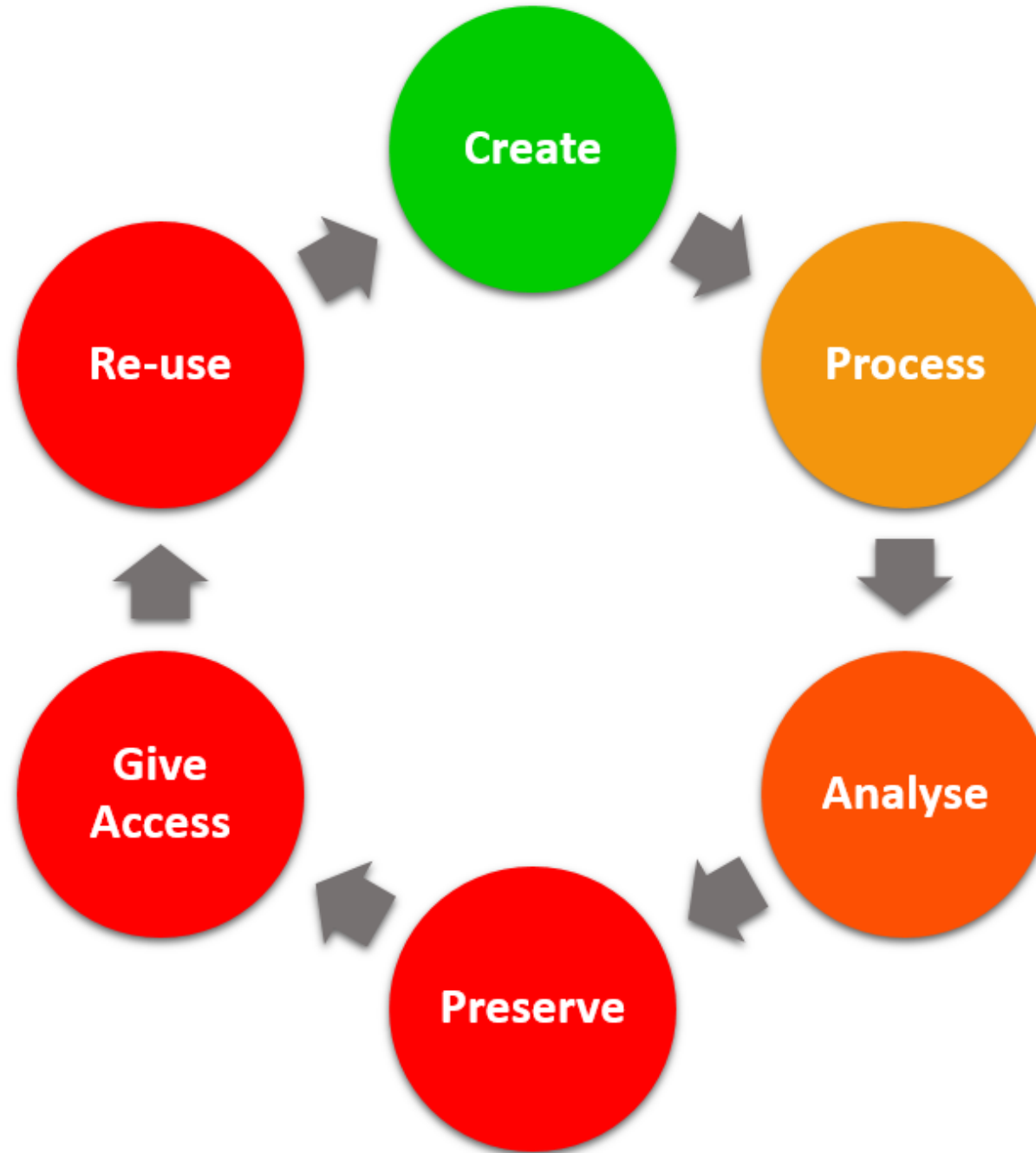


Rheometer and double compression could not be done as the samples were too soft to



This is MY
(data) swamp!

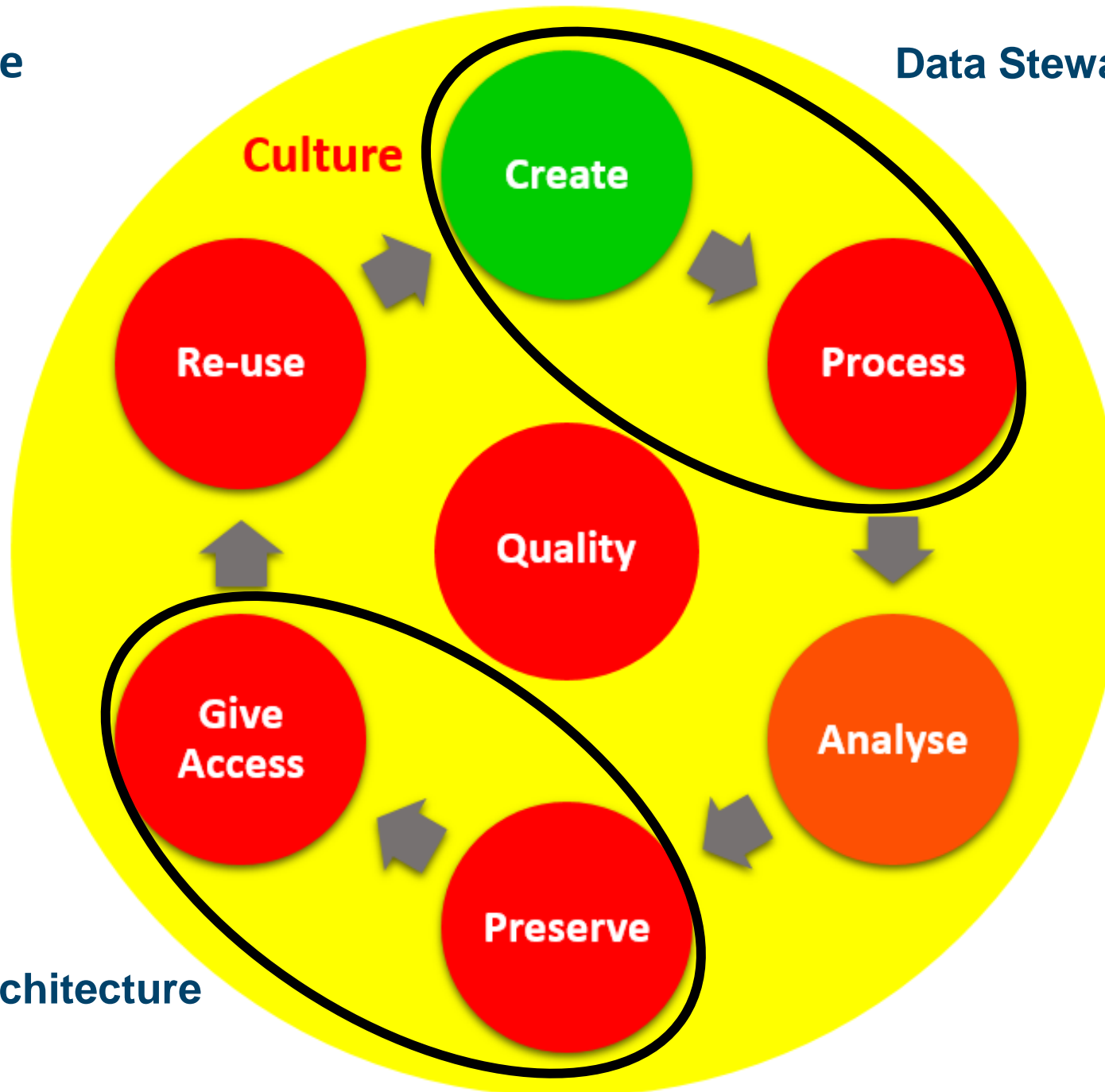
Data Lifecycle



Data Lifecycle

Data Stewards

Data Architecture



Data Stewards



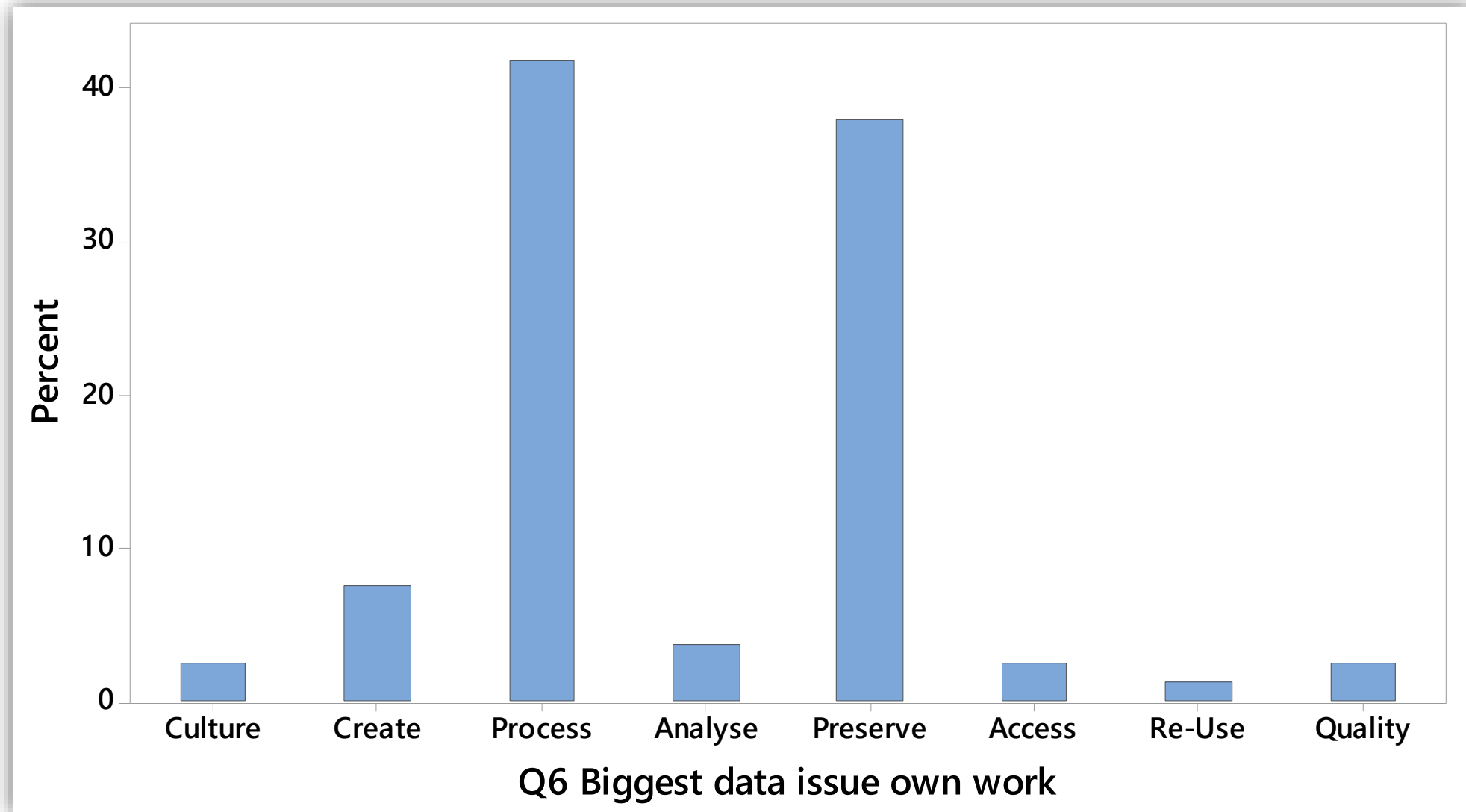
50% of respondents spend *1 day per fortnight* **cleaning** or **searching** for data.

Data Architecture



25% of respondents are *not re-using* data because of **access** challenges.

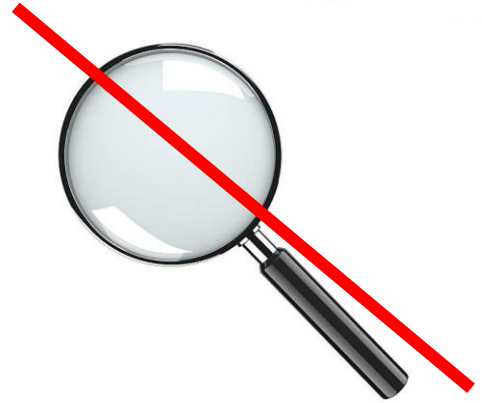
Biggest Data Issue in Own Work



Survey conducted in March 2019 with 91 respondents

Data Steward

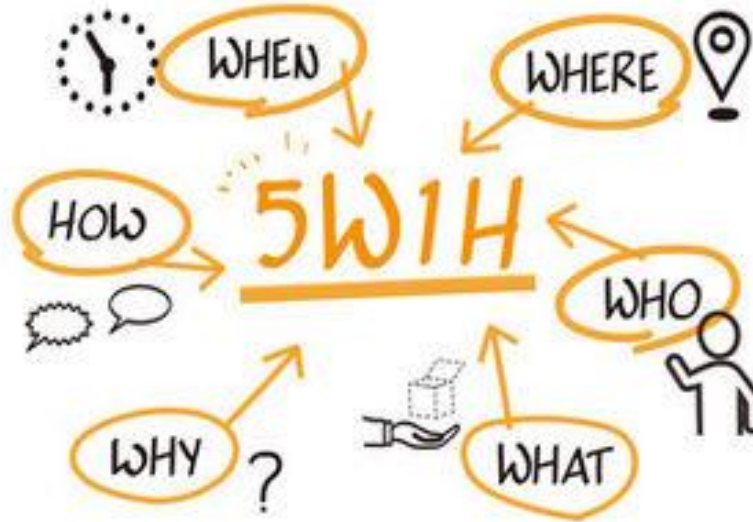
A person who's responsible for managing your business' data resources, (aka, the one person at work you can't possibly live without.)



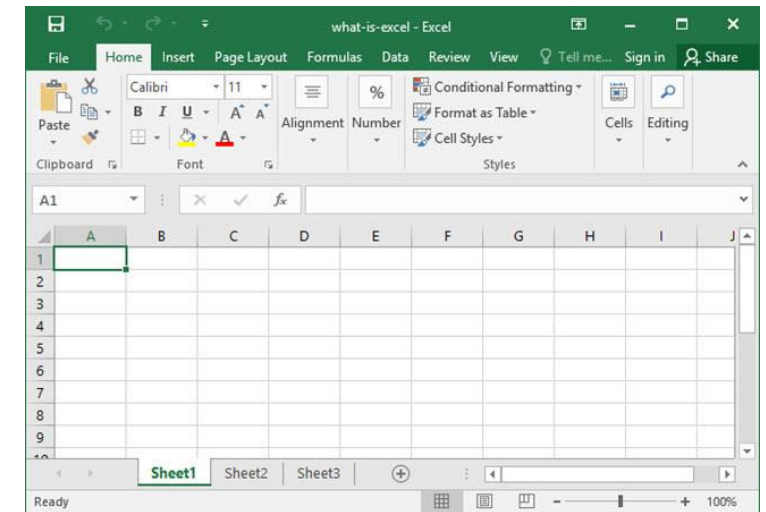
Unique Identifiers



Trial Metadata



Data Templates



TIME WELL SPENT™

YOU THINK THAT'S A CHALLENGE?
TRY WRANGLING BIG DATA.



Workforce Innovation That Works™

CREATED BY marketoon studios

KRONOS.COM/TIMEWELLSPENT



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Data Puddles & Change Management



Unfreeze



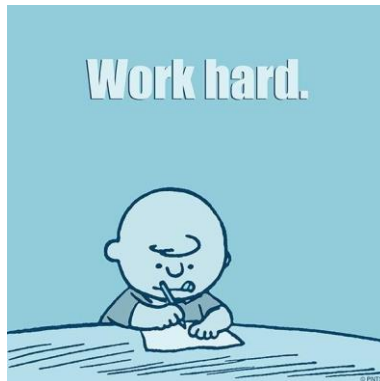
Change



Refreeze

Keen people work hard Generate stacks of data Miss nuggets of gold

- Bruce Philpott



97540038 89058924 11203660 67110393 77180775 31157173 48605971
95061909 02022164 77739874 60984146 61119174 53359697 88138466
39966630 19951776 16391156 68348039 64379956 15695047 09287812
77226413 51166939 76904118 63621137 75978018 29045161 49974612
81376873 35452092 01990879 19154686 82330997 28955302 95237399
43476489 23762475 35131499 89077156 06201281 10501824 33154167
19711389 51111229 32502896 81587097 79880877 33104567 43560122
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42903681 49946891 82756006 74687826 24772707 59051979 57986317





Questions?



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