<u>LIFECYCLE</u>

1. **<u>What are the names of the stages of the data lifecycle?</u>**
   Data generation, Collection, Storage, Visualisation, Analysis, Intelligence

2. **<u>What activities would you need to do before undertaking this project? Think about where the data came from.</u>**
   The data for this project had already been generated, collected and stored. So if I were to start this project from scratch, I would ask Dental Pharma to collect their data via surveys for example, then store in a reliable hard drive or cloud storage to then be extracted from for the tasks I have already performed.

3. **<u>What would you need to do if the data changed?</u>**
   Assess the impact, understand what changed, possibly reschedule the deadline depending on these factors, validate the new data then make insights on possible new trends. For example, I have removed data from May - July 2018 on some charts in the Tableau project because the data for these months do not show any kind of trend due to lack of data points.

4. **<u>Which aspects of the data analysis lifecycle are you primarily involved with in this project?</u>**
   Mainly visualisation and analysis. The visualisation side comes from the dashboard and charts I have created. The analysis side comes from presenting the findings from this project.

5. **<u>How does this project fit into a broader data lifecycle?</u>**
   It fits into the data lifecycle by providing the glue between raw data and intelligence. Visualisations and insights are gained from the raw data, which then turns it into intelligence for Dental Pharma to act upon.

REQUIREMENTS

1. **Summarize the process you used from the business requirements to a clear design for your dashboard.**

   I made a note of the requirements given to me and made sure I executed them by creating a dashboard blueprint using a dashboard mockup that met the standards I needed to hit. All I needed to do from there was create the dashboard similar to the mockup design and was able to be filtered by the user requirements in the dashboard blueprint.

2. **How would you make sure this design actually met the needs of the business?**

   I made a note of the requirements given to me and made sure I executed them by testing the dashboard with lots of trial and error to come up with, what I feel to be the best solution to these requirements. One particular part of the dashboard I had to improvise on was the alerts requirement. Instead of making an alert (which is only available on the paid Tableau platform) I created a calculated field to highlight any data over the threshold so that this can be easily seen by all managers. Once this is done I would make sure to get approval from the client.

3. **What other techniques could you use to make the design clearer?**

   I could have possibly explored the formatting features more to create a consistent layout (aside from the default colours). I also changed the date range for some of the charts because in some months there was only around 5-10 data points to represent a whole month, which I believe is not reliable data for the timeframe.

	Project ID	Project Type	Country	Phase	Start Date	Actual_Duration	Actual_Cost	Planned_Duration	Planned_Cost	Var_Deliverables
483	60	IT - CRM Implementation	Poland	Testing	22/03/2018	40	3332	43.5	2800	-0.12
484	32	Marketing - Launch of new product	Turkey	Phase 2 - Initiation	23/03/2018	25.5	127000	23	100000	-0.05
485	66	IT - CRM Implementation	Slovenia	Deployment	23/03/2018	24	0	22	0	-0.07
486	62	IT - CRM Implementation	Slovakia	Deployment	24/03/2018	24.5	0	19.5	0	-0.11
487	28	Marketing - Launch of new product	Russia	Phase 2 - Initiation	25/03/2018	57	204000	46	200000	-0.12
488	79	IT - CRM Implementation	Sweden	Deployment	25/03/2018	25	0	19	0	-0.01
489	75	IT - CRM Implementation	Russia	Testing	26/03/2018	28.5	5320	30.5	5600	-0.12
490	73	IT - CRM Implementation	Portugal	Testing	27/03/2018	28.5	3360	41	2800	-0.03
491	81	IT - CRM Implementation	Norway	Initiation	02/04/2018	10	840	10	700	-0.11
492	48	Marketing - Launch of new product	Slovenia	Phase 4 - Manufacturing	03/04/2018	39.5	990000	36	900000	-0.13
493	55	IT - CRM Implementation	Luxembourg	Initiation	03/04/2018	11.5	847	11.5	700	0
494	48	Marketing - Launch of new product	Slovenia	Phase 3 - Implementation	04/04/2018	49.5	330000	45	300000	-0.13
495	41	Marketing - Launch of new product	Slovakia	Phase 4 - Manufacturing	06/04/2018	42.5	1071000	36	900000	-0.11
496	41	Marketing - Launch of new product	Slovakia	Phase 3 - Implementation	07/04/2018	53	357000	45	300000	-0.11
497	23	Marketing - Launch of new product	Switzerland	Phase 4 - Manufacturing	08/04/2018	44	1098000	36	900000	-0.06
498	23	Marketing - Launch of new product	Switzerland	Phase 3 - Implementation	10/04/2018	55	366000	45	300000	-0.06
499	51	Marketing - Launch of new product	Sweden	Phase 4 - Manufacturing	11/04/2018	46	1044000	36	900000	-0.13
500	51	Marketing - Launch of new product	Sweden	Phase 3 - Implementation	12/04/2018	57.5	348000	45	300000	-0.13
501	71	IT - CRM Implementation	Turkey	Testing	13/04/2018	20.5	2604	7.5	2800	-0.14
502	74	IT - CRM Implementation	Ukraine	Testing	14/04/2018	20.5	2856	19	2800	0
503	61	IT - CRM Implementation	Czech Repu	Testing	15/04/2018	36	6160	22	5600	-0.09
504	48	Marketing - Launch of new product	Slovenia	Phase 2 - Initiation	20/04/2018	50.5	220000	46	200000	-0.13
505	75	IT - CRM Implementation	Russia	Initiation	24/04/2018	9	665	9	700	-0.12
506	41	Marketing - Launch of new product	Slovakia	Phase 2 - Initiation	25/04/2018	54	238000	46	200000	-0.11
507	73	IT - CRM Implementation	Portugal	Initiation	25/04/2018	9	420	9	350	-0.03
508	23	Marketing - Launch of new product	Switzerland	Phase 2 - Initiation	28/04/2018	56.5	244000	46	200000	-0.06
509	51	Marketing - Launch of new product	Sweden	Phase 2 - Initiation	01/05/2018	58.5	232000	46	200000	-0.13
510	60	IT - CRM Implementation	Poland	Initiation	02/05/2018	12.5	416.5	12.5	350	-0.12
511	71	IT - CRM Implementation	Turkey	Initiation	04/05/2018	6.5	325.5	6.5	350	-0.14
512	74	IT - CRM Implementation	Ukraine	Initiation	04/05/2018	6.5	357	6.5	350	0
513	82	IT - CRM Implementation	Switzerland	Testing	16/05/2018	34.5	5656	30	5600	-0.04
514	61	IT - CRM Implementation	Czech Repu	Initiation	22/05/2018	11	770	11	700	-0.09
515	66	IT - CRM Implementation	Slovenia	Testing	28/05/2018	39	7168	6.5	5600	-0.07
516	62	IT - CRM Implementation	Slovakia	Testing	31/05/2018	40	7112	10.5	5600	-0.11
517	79	IT - CRM Implementation	Sweden	Testing	02/06/2018	40.5	6216	2.5	5600	-0.01
518	82	IT - CRM Implementation	Switzerland	Initiation	20/06/2018	10.5	707	10.5	700	-0.04
519	66	IT - CRM Implementation	Slovenia	Initiation	07/07/2018	12	896	12	700	-0.07
520	62	IT - CRM Implementation	Slovakia	Initiation	11/07/2018	12.5	889	12.5	700	-0.11
521	79	IT - CRM Implementation	Sweden	Initiation	13/07/2018	12.5	777	12.5	700	-0.01

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424	51	Marketing - Launch of new product	Sweden	Phase 1 - Planning	12/02/2018	77.5	116000	61	100000	-0.13
429	79	IT - CRM Implementation	Sweden	Preparation	12/02/2018	151	17871	129	16100	-0.01
452	79	IT - CRM Implementation	Sweden	Development	25/02/2018	109.5	23310	97.5	21000	-0.01
470	79	IT - CRM Implementation	Sweden	Post-deployment	09/03/2018	10	3108	10	2800	-0.01
488	79	IT - CRM Implementation	Sweden	Deployment	25/03/2018	25	0	19	0	-0.01
499	51	Marketing - Launch of new product	Sweden	Phase 4 - Manufacturing	11/04/2018	46	1044000	36	900000	-0.13
500	51	Marketing - Launch of new product	Sweden	Phase 3 - Implementation	12/04/2018	57.5	348000	45	300000	-0.13
509	51	Marketing - Launch of new product	Sweden	Phase 2 - Initiation	01/05/2018	58.5	232000	46	200000	-0.13
517	79	IT - CRM Implementation	Sweden	Testing	02/06/2018	40.5	6216	2.5	5600	-0.01
521	79	IT - CRM Implementation	Sweden	Initiation	13/07/2018	12.5	777	12.5	700	-0.01