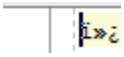
1. Pre-process input files

Change the encoding into UTF-8 for table loading; otherwise the special characters are showed up at the beginning of first line



2. Create tables

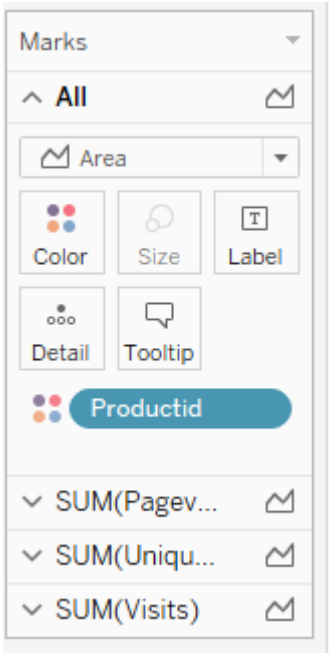
Create tables in ORACLE database

CREATE_tables_oracle.sql

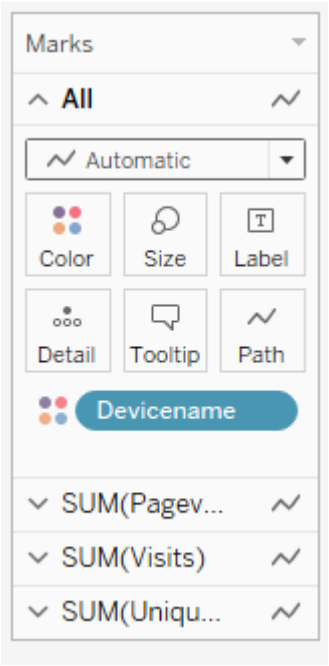
3. Reporting design

a) User should be able to select multiple sites, and devices to compare performance

For multiple sites, put Productid into Color

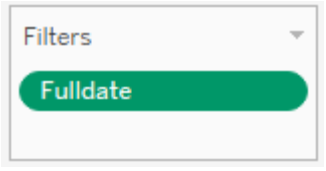


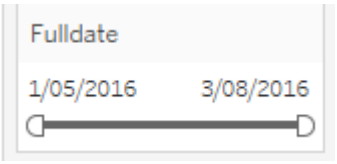
For multiple devices, put Devicename into Color



b) User should be able to select a date range OR prior day range (eg last 30 days) – time range in tableau

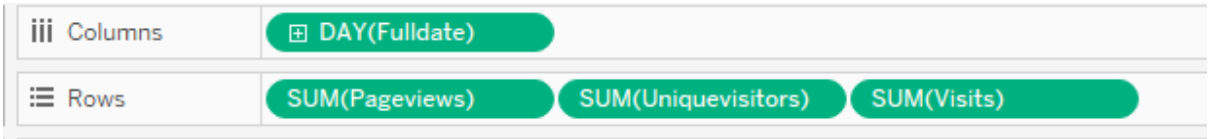
Put the fulldate into Filters as Range filter in tableau and choose Show Filter





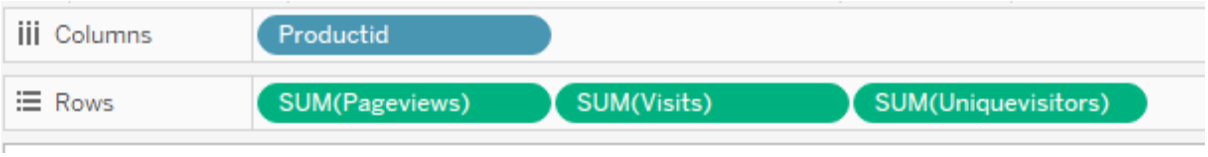
c) Site metrics to use are PageViews, Visits, Unique Visitors

Put Fulldate in to Columns and put SUM(Pageviews), SUM(Visits) and SUM(Uniquevisitors) into Rows



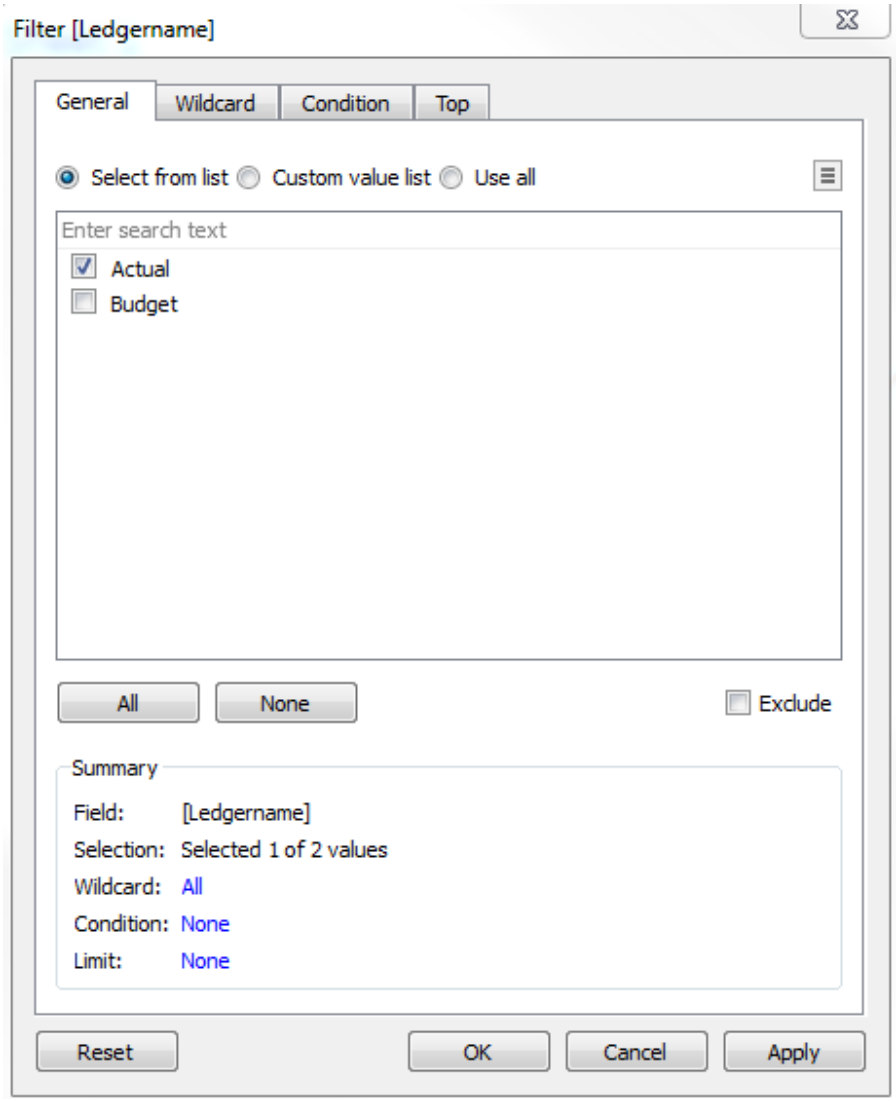
Put Productid(or Deviceid) in to Columns and put AVG(Pageviews), AVG(Visits) and AVG(Uniquevisitors) into Rows

Put Productid(or Deviceid) in to Columns and put SUM(Pageviews), SUM(Visits) and SUM(Uniquevisitors) into Rows



d) Should use only LedgerName='Actual'

Right click data source, choose ‘Edit Data Source Filters‘, add a new filter, choose ‘Ledgename’, tick ‘Actual’ and click ‘OK’



This filter can also be put into ‘Filter’ panel in WorkSheet directly.

e) Data connection should use a read-only SQL User

Create a new schema in DB and grant read-only permission on it, which is for accessing source data from tableau

4. Reporting implementation

a) Daily performance per Product

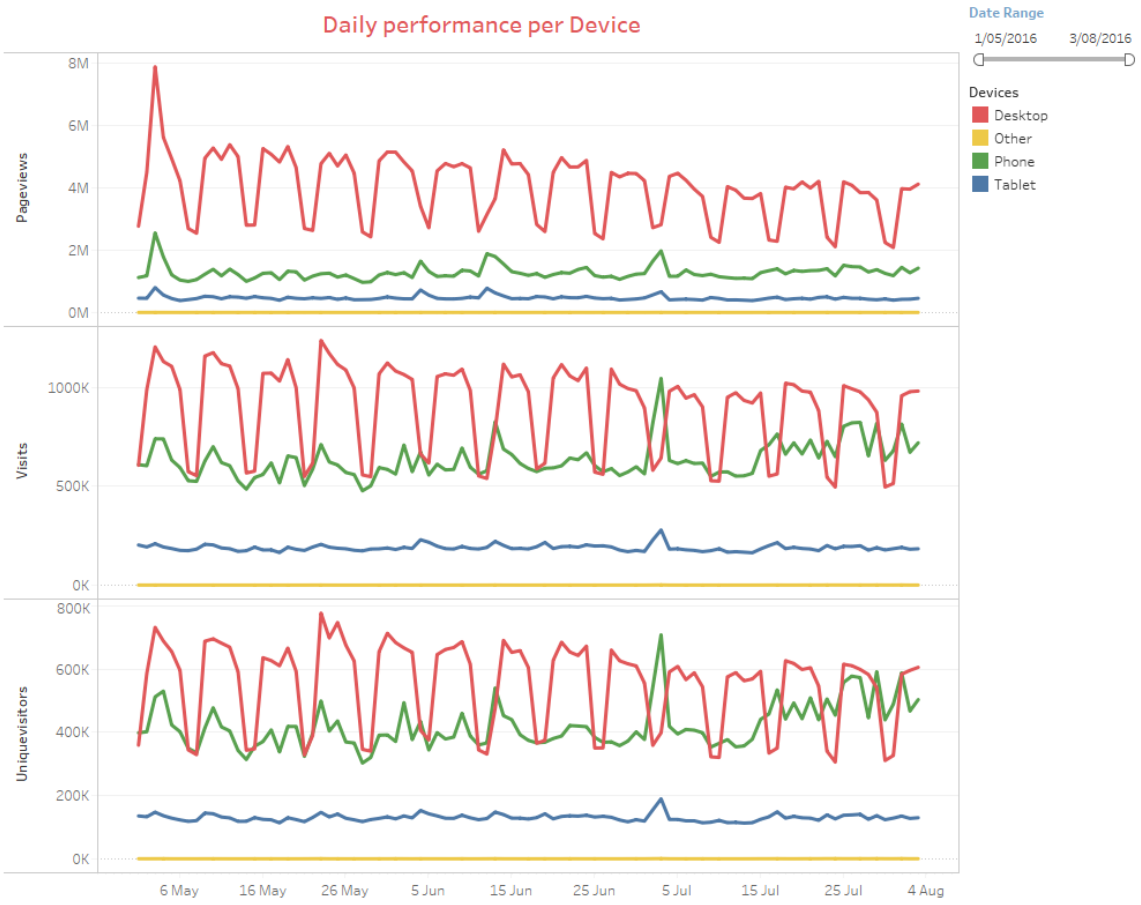
This dashboard showed the number of Pageviews (Visits, Uniquevisitors) for each product in daily basis. The date range can be chosen in ‘Date Range’ bar on top right. Moreover, the performance of all the products or one or more specific products can be selected in ‘Product’ bar. Additionally, for diagram itself, when the mouse is over one specific part, the details would be showed.

The reason I designed in way is because that in this diagram, it is easy to see the visiting number changed day by day and easy to compare the visiting number between different products.

b) Daily performance per Device

This dashboard showed the number of Pageviews (Visits, Uniquevisitors) for each device name in daily basis. The date range can be chosen in 'Date Range' bar on top right. Moreover, the performance of all the devices or one or more specific devices can be selected in 'Devices' bar. Additionally, for diagram itself, when the mouse is over one specific line, the details would be showed.

The reason I designed in way is because that in this diagram, it is easy to see the visiting number changed day by day and easy to compare the visiting number between different devices.



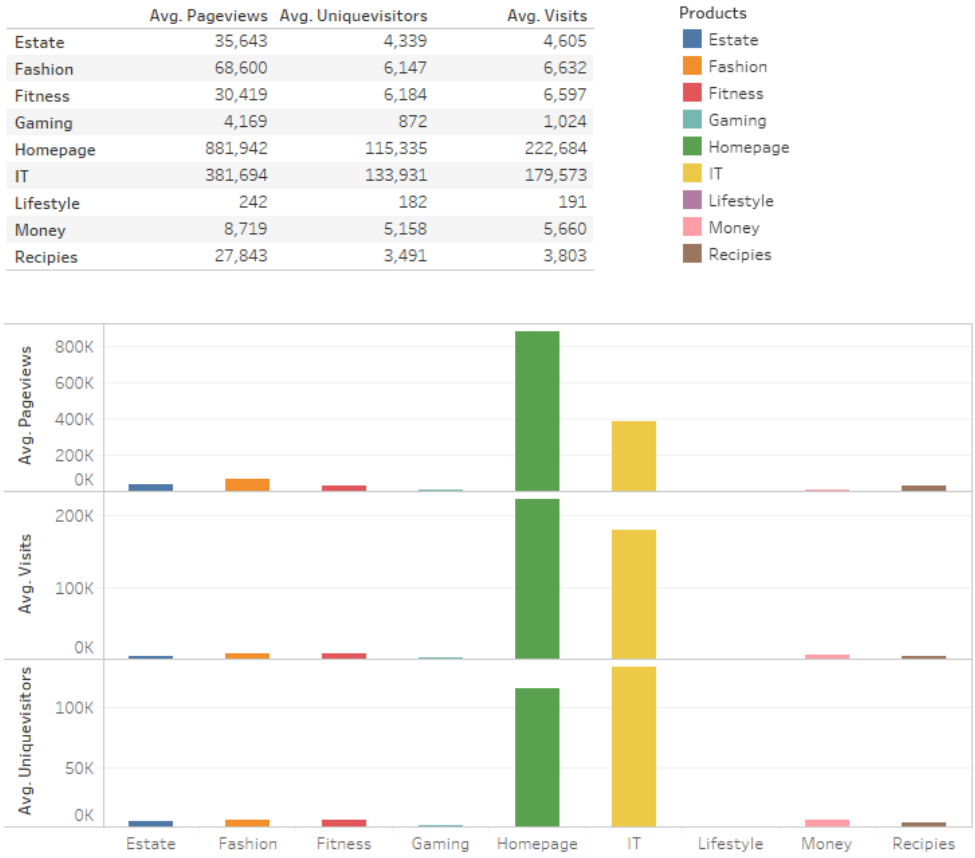
c) *Avg performance per product*

This dashboard showed the average performance for each product in all the time period. In the table on top left, it showed the specific values in each part and in histogram it showed the distribution of each product. In addition, all the products or one or more specific products can be selected in 'Products' bar on top right.

The reason that I designed the dashboard in the combination of table and histogram is that it is more obvious to see the distribution in histogram rather than table. However, because of proportional scale, some data looks quite closed to 0 in histogram. In this case, some values only can been showed in table, such 'Lifestyle'.

Avg performance per product

	Avg. Pageviews	Avg. Uniquevisitors	Avg. Visits
Estate	35,643	4,339	4,605
Fashion	68,600	6,147	6,632
Fitness	30,419	6,184	6,597
Gaming	4,169	872	1,024
Homepage	881,942	115,335	222,684
IT	381,694	133,931	179,573
Lifestyle	242	182	191
Money	8,719	5,158	5,660
Recipies	27,843	3,491	3,803



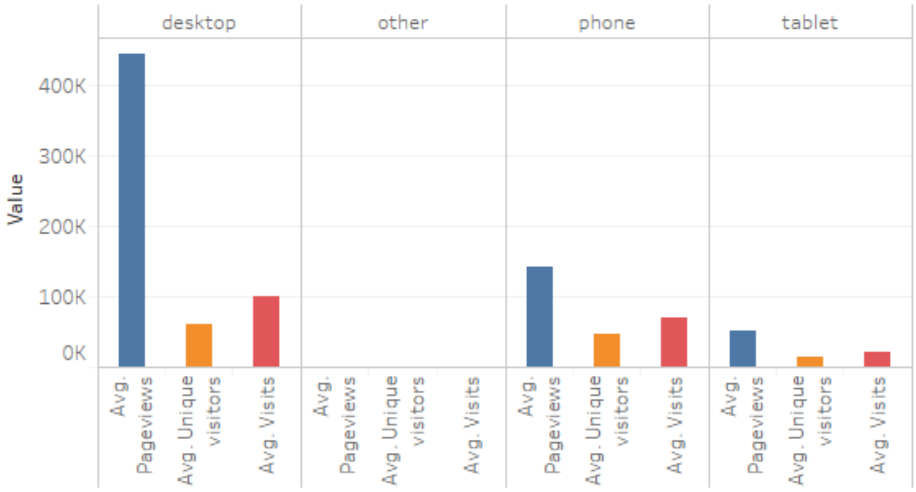
d) Avg performance per device

This dashboard showed the average performance for each device in all the time period. In the table, it showed the specific values in each part and in histogram it showed the distribution of each device.

The reason that I designed the dashboard in the combination of table and histogram is that it is more obvious to see the distribution in histogram rather than table. However, because of proportional scale, some data looks quite closed to 0 in histogram. In this case, some values only can been showed in table, such as ‘other’.

Avg performance per device

	Avg. Pageviews	Avg. Uniquevisitors	Avg. Visits
desktop	445,045	61,125	99,893
other	164	64	88
phone	142,494	46,816	70,441
tablet	52,095	14,534	21,078



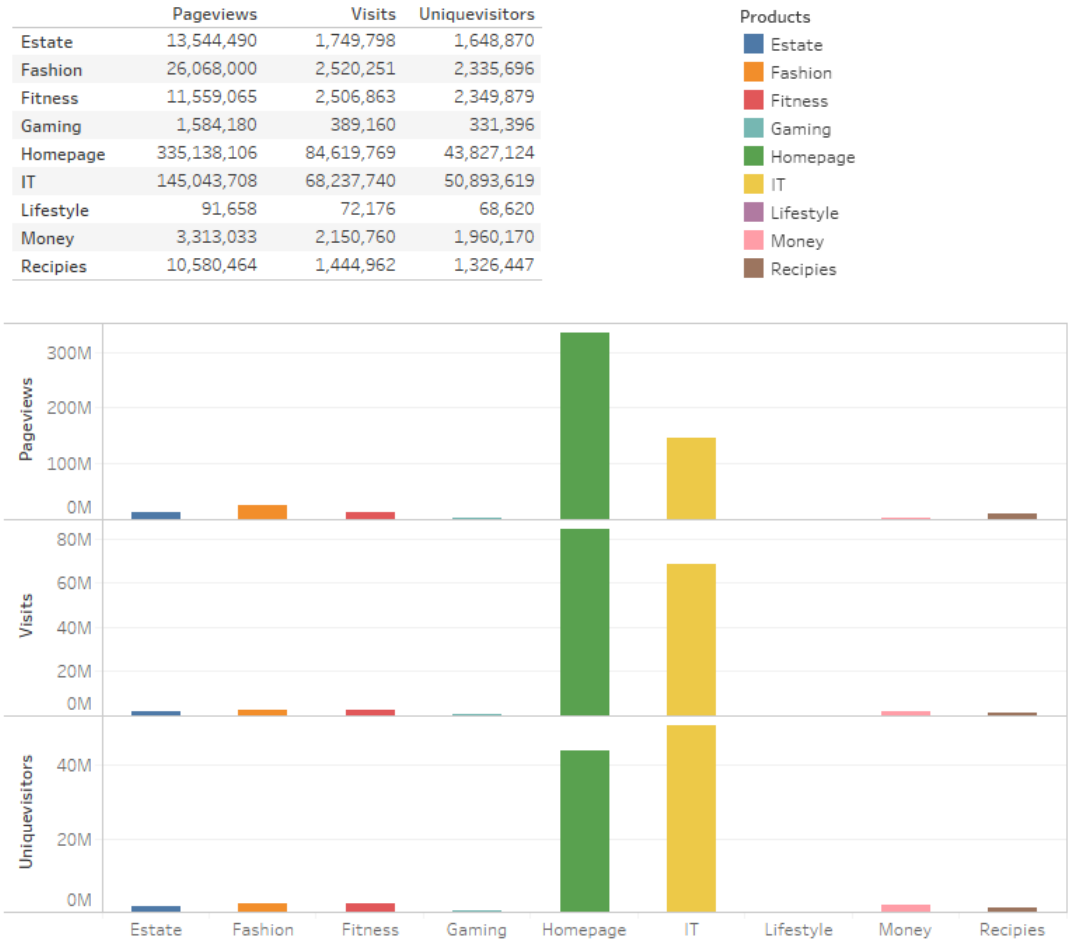
e) Total performance per product

This dashboard showed the total performance for each product in all the time period. In the table on top left, it showed the specific values in each part and in histogram it showed the distribution of each product. In addition, all the products or one or more specific products can be selected in 'Products' bar on top right.

The reason that I designed the dashboard in the combination of table and histogram is that it is more obvious to see the distribution in histogram rather than table. However, because of proportional scale, some data looks quite closed to 0 in histogram. In this case, some values only can been showed in table, such as 'Lifestyle'.

Total performance per product

	Pageviews	Visits	Uniquevisitors
Estate	13,544,490	1,749,798	1,648,870
Fashion	26,068,000	2,520,251	2,335,696
Fitness	11,559,065	2,506,863	2,349,879
Gaming	1,584,180	389,160	331,396
Homepage	335,138,106	84,619,769	43,827,124
IT	145,043,708	68,237,740	50,893,619
Lifestyle	91,658	72,176	68,620
Money	3,313,033	2,150,760	1,960,170
Recipies	10,580,464	1,444,962	1,326,447



f) Total performance per device

This dashboard showed the total performance for each device in all the time period. In the table, it showed the specific values in each part and in histogram it showed the distribution of each device.

The reason that I designed the dashboard in the combination of table and histogram is that it is more obvious to see the distribution in histogram rather than table. However, because of proportional scale, some data looks quite closed to 0 in histogram. In this case, some values only can been showed in table, such as ‘other’.

Total performance per device

	Pageviews	Uniquevisitors	Visits
desktop	380,513,456	52,262,253	85,408,625
other	140,350	54,408	75,611
phone	121,832,085	40,027,535	60,227,391
tablet	44,436,813	12,397,625	17,979,852