UNIVERSITY OF MALTA

L-Università ta' Malta

MSc in Strategic Management and Digital Marketing

MRK5812 - Digital Analytics for Marketing Management

Karsten Guenther (0295697)

Jashid Munshi (1905943)

Abhishek Shah (1906057)

Assignment Part 1 – Word Clouds

An online article from Times of Malta website was selected so that it would provide us with a data set which can be utilised for the purpose of creating a world cloud chart (Figure 1).

The data is copied from the downloaded article and pasted into Note++ since we need to do some data pre-processing so that we could utilise it in Tableau. This step is required so that I can transform raw data into more appropriate refined data which will be used for analysis purposes and chart mapping

In this step I convert all text to lowercase and removed punctuation and split text by space which allows me to transform the data from paragraph form into a list which makes it easier for tableau to access and process. This text file saved as 5GTOM.txt and opened with tableau to start the process of creating a word count. Figure 2& Figure 3.
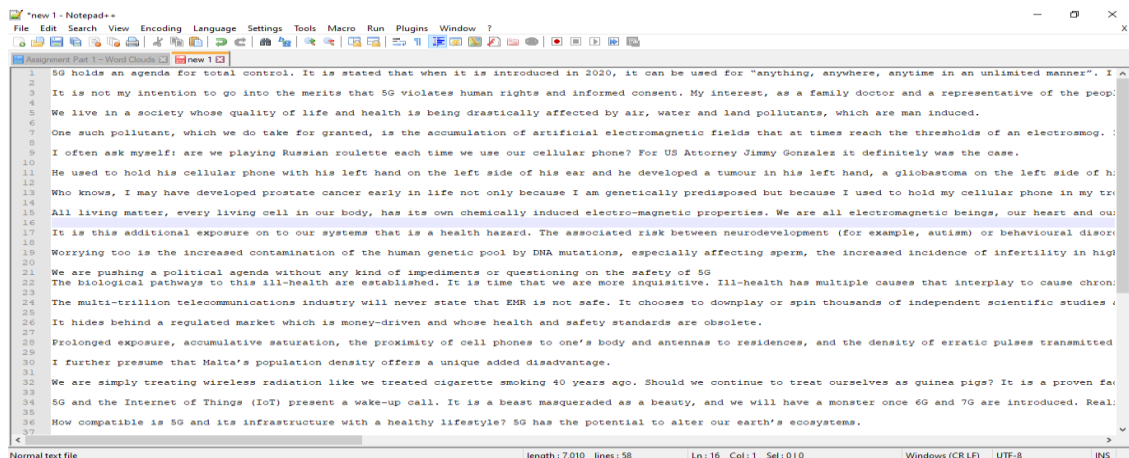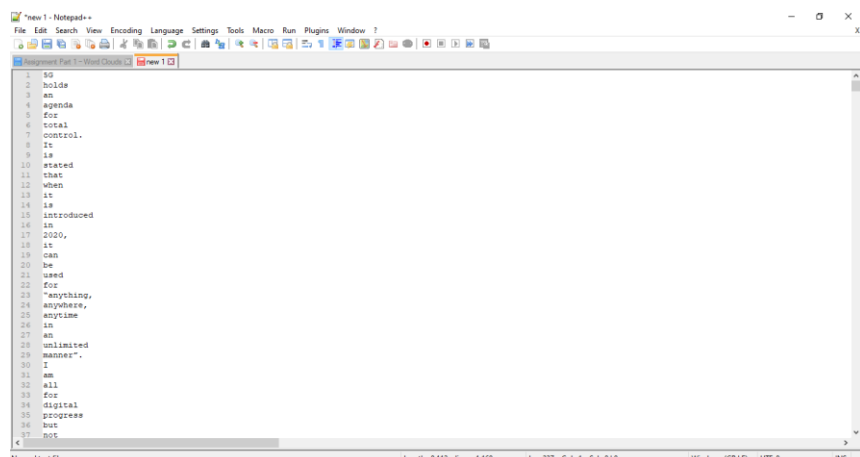
Figure 1

Figure 2

Figure 3

As we can see form Figure 4, I opened the text file 5GTOM.txt on which the pre-processed data is available (data source) and opened a sheet on which I shall start the word cloud. moving to sheet one I started dragging '5G' which marks the data to be used to 'Text' and 'Size' into the 'Marks Box'. I did this step since I need the Words to be displayed and their relative cumulative appearances. I right clicked on the second '5G' and choose Measure and then Count. This ensures that we are showing the words by count.
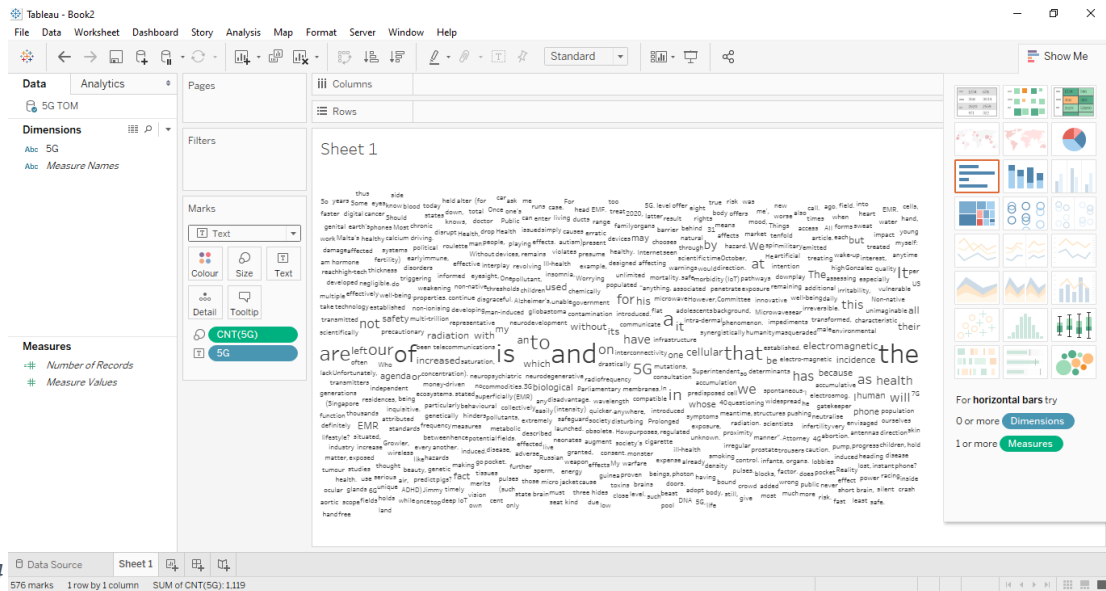

Figure 4

In Figure 5 we can see that I dragged the data source '5G' into the 'Filters Box'. I edited the filter to display words only that appear more than 4 times in the document. Then I dragged '5G' to colour to give the word cloud colour and represent each word frequency with a different shade of blue. By changing the measure to 'count'. The darker the blue is the more frequent the word was in the data.
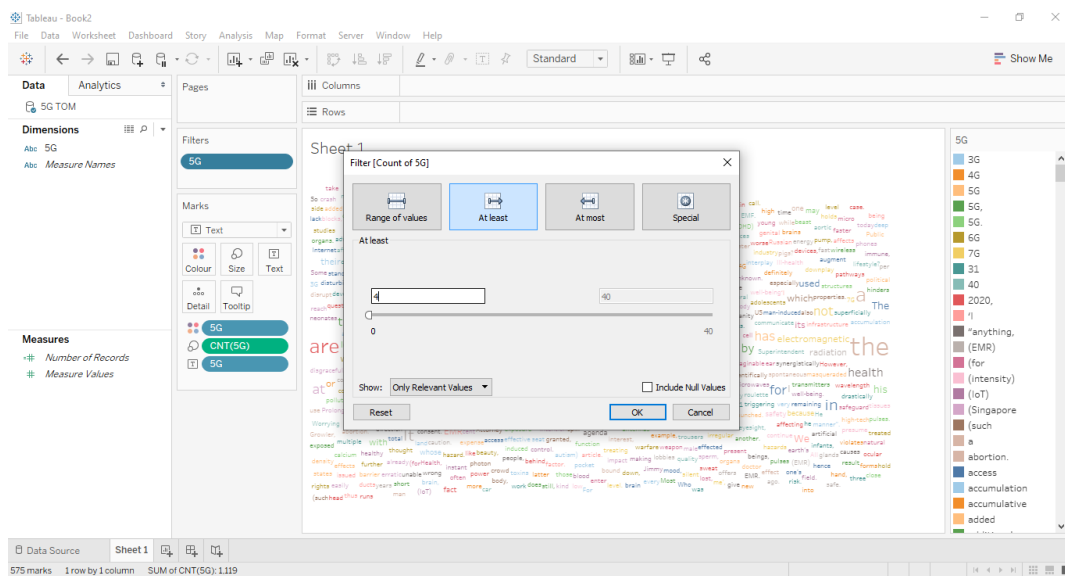

Figure 5

In Figure 6 we can see that I created a new data source ' StopWords' which consistes of common stop words that need to be eliminated so that we have a more robust word cloud. This excel file was created and the stop words were typed and saved to the file. The 'Stop Words' was dragged to 'Filters' and I edited the filter to exclude the words that were both in that word cloud and in 'StopWords'. This gave me an error and told me that I had to blend the data sources in order to be able to use the data together . This step is shown in Figure 6. I went to 'Data' and 'Blend Relationships' and selected both sources to be utilised for this proceedure.
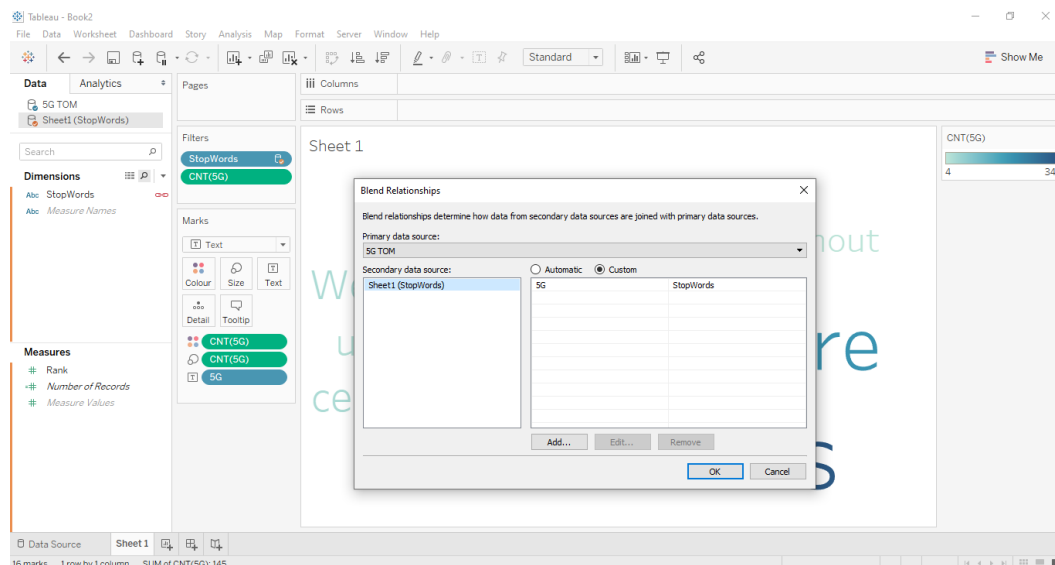

Figure 6

A couple of finishing touches for the sake of representation the colour of '5G' in the 'Marks Area' is edited to count so that it reflects the number of appearances in the data source.

Figure 7

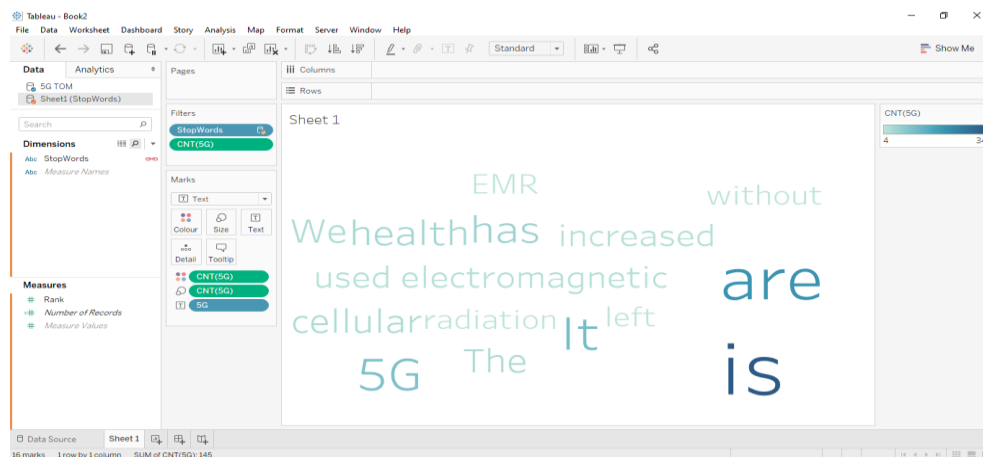| Summary:	
StopWords/Filters	Data Source used to eliminate useless words from our Main Data Source
CNT(5G)/Filters	Filters and displays words that appear more than 4 times
CNT(5G) Colour/Marks	Colour Codes the words by number of appearances
CNT(5G) Size/Marks	Displays the words in the size according to their appearances
5G Text/Marks	Displays the words

Comparing 2 Articles:

1. 2 articles from climate.nasa.gov were selected so that we can compare the word cloud that they produce.
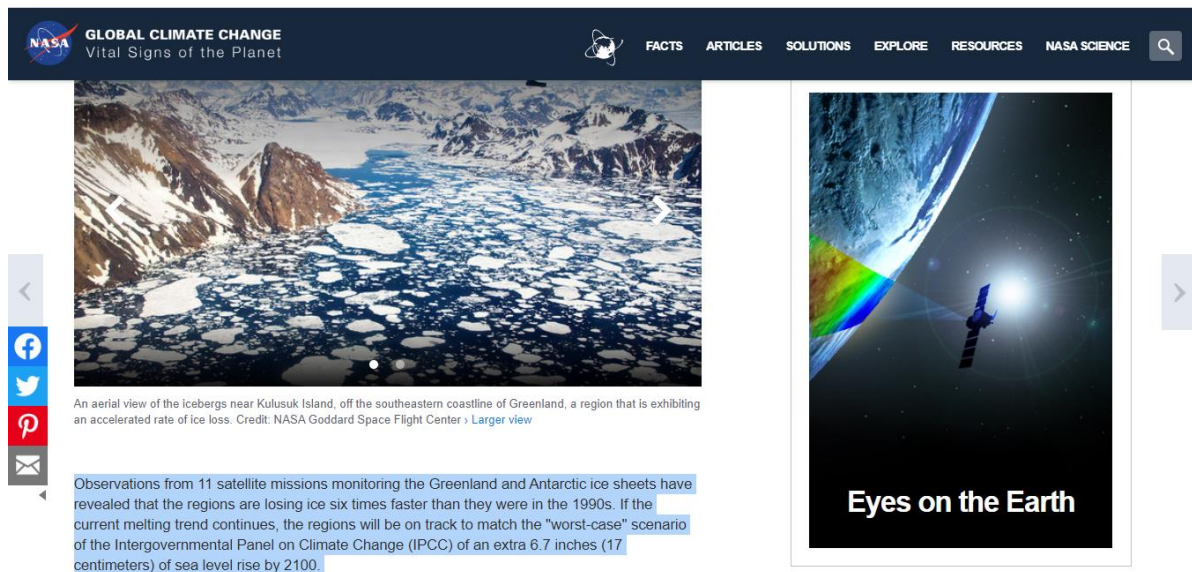
2. The contents are then pasted into a Note++ file so that we can prepare the data for processing in tableau.

   - This step involves converting every word as a separate cell and clean the data by replacing any spaces with a new line and cleaning the data from any fonts and punctuation.

3. The text files are opened with Tableau and I proceeded by opening a sheet and the following steps were executed:
   - The dimension to be analysed was renamed to words so that it would be easier.
   - Dragged 'Words' to 'Text' in 'Marks'.
     i. This would visualise all the words on the screen.
   - Dragged 'Words' to 'Size' in 'Marks' and measured the result by count.
     i. This would visualise all the words according to their occurrences in the data source.
   - We changed Marks to text as we are dealing with text and not numbers.

4. A list of stop words was created by searching for stop words on the internet and copying them into a text file so that they can be used when processing the data. This file was added to the worksheet as another data source which will serve to filter out any unnecessary words in the word cloud.
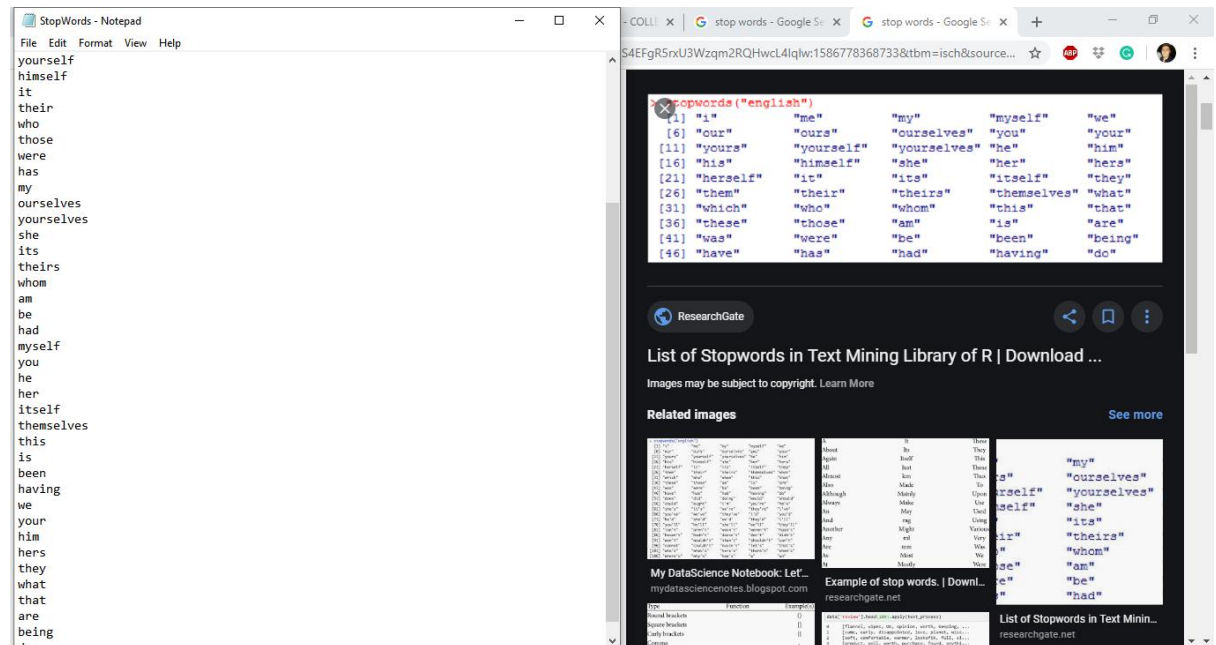
5. In this step I dragged 'StopWords' to 'Filters' selected all the values except for Null to exclude all the words from the cloud and I applied the filter
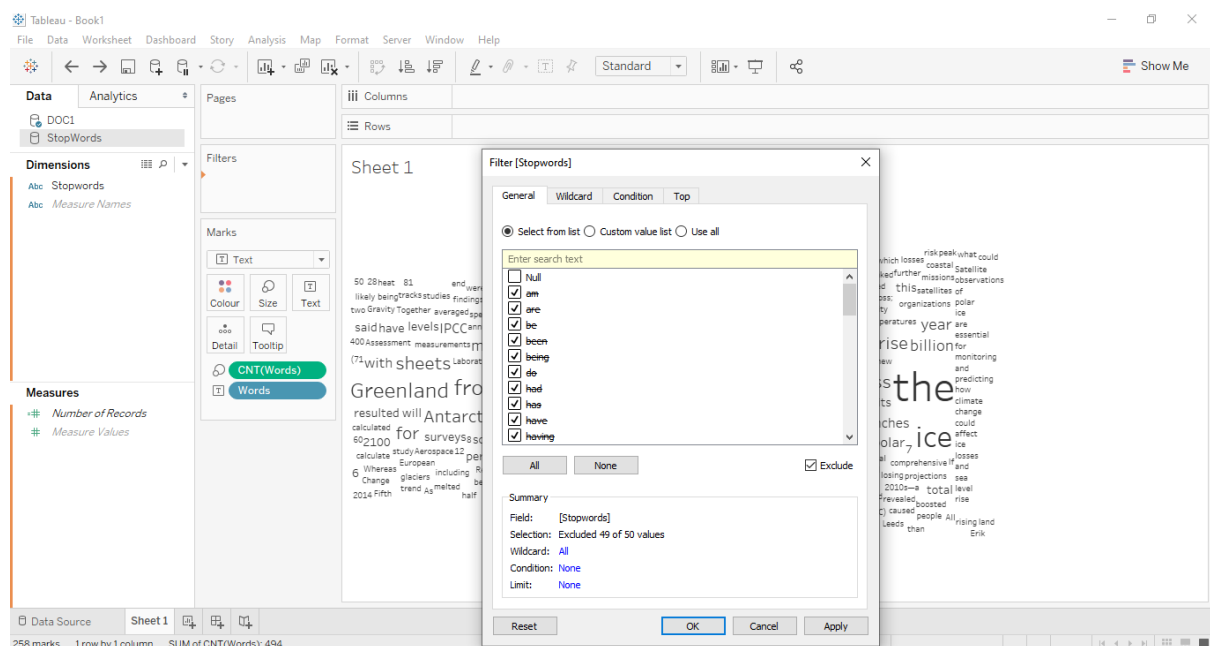
6. An error occurred since I had to blend the data between the two data sources so that they can be used together before trying to filter out the stop words. To overcome this problem, I went to Data – Edit Blend Relationships - Custom – Ok.
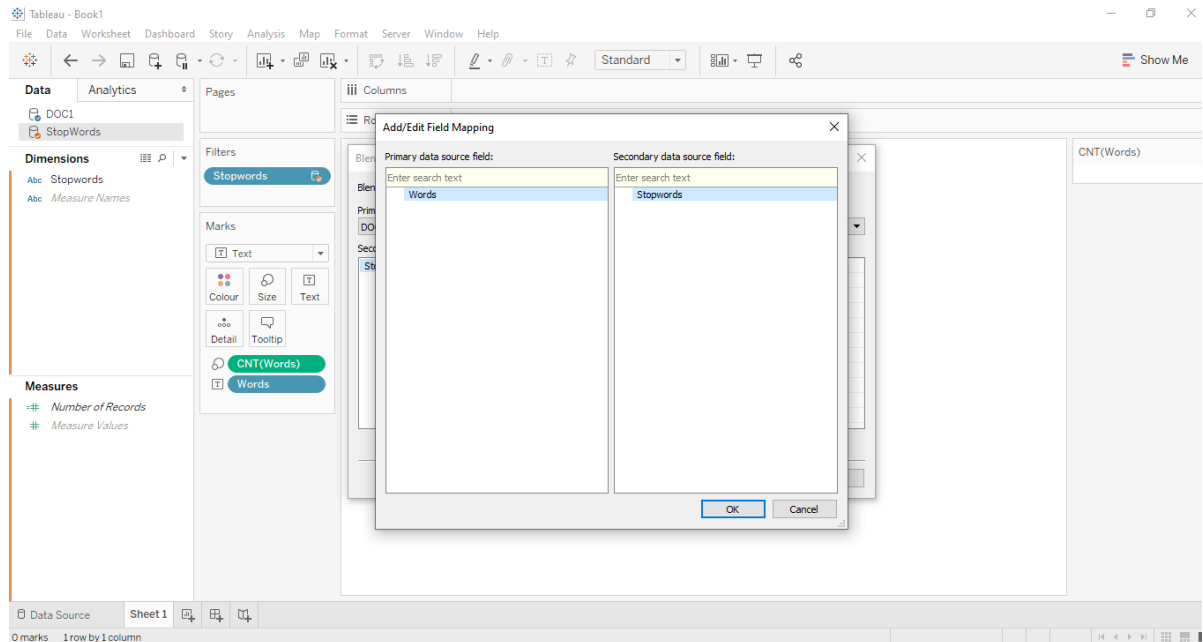
- The Result of applying the 'StopWord' filter
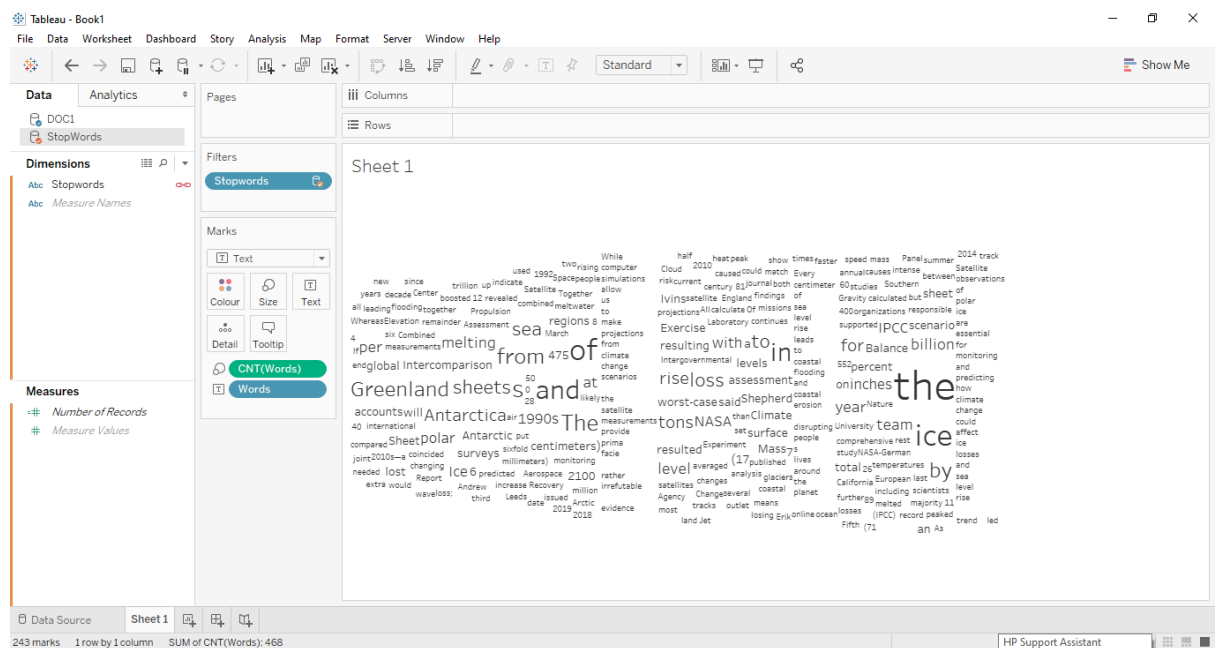
7. After applying the 'StopWord' Filter we had to reduce the words to those that appear more than 4 times in the data source. This was done by selecting 'CNT(Words)' from 'Marks' and 'Edit Filter' – 'At Least' - and set it to 4 meaning the number of occurrences in the document.
   - The following is the result of the first document what was processed, and a word cloud was visualised.
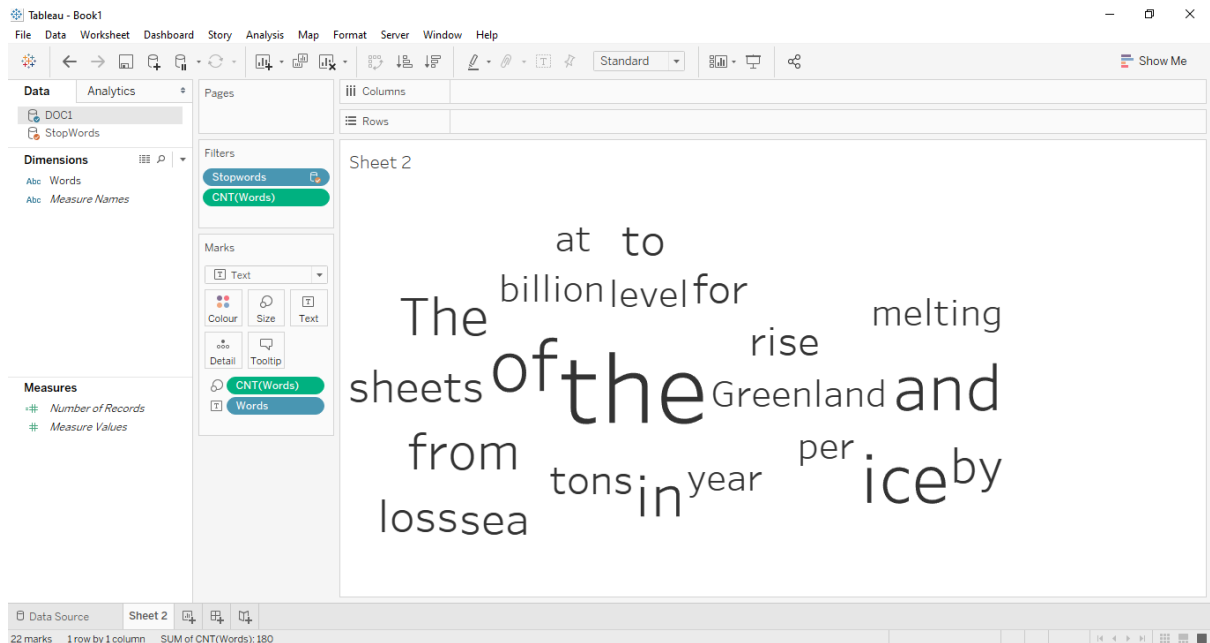
   - This is the result the 2nd Document that needed to be processed and a word cloud to be formed.
   - In this document I had a hyphen which was occurred 4 times in the document, so I had to exclude it manually since it did not add any value to the word cloud.
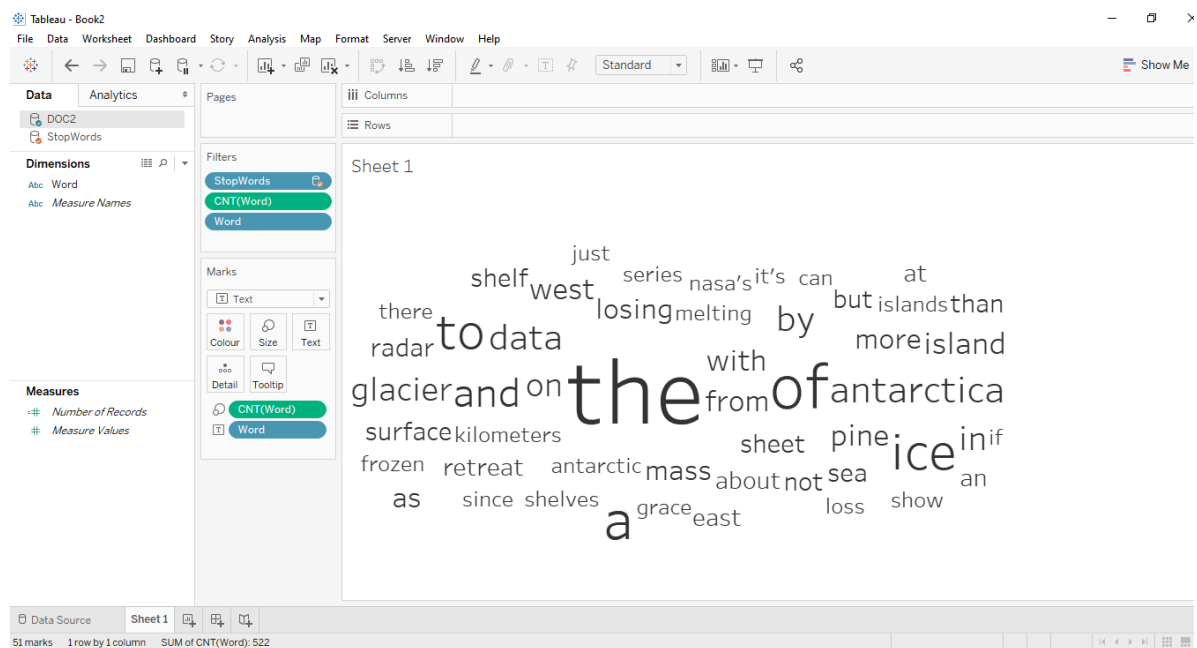
The main differences between the 2 documents are that the more words the data source has the more populated the word cloud is. The first document had a total of 557 words whilst the second one had a total of 1281 this increases the instances where each word can be used. The most common words we visible with a larger font and those were 'the' and 'of' 'to' and 'ice'. Both word clouds' topics were evident since some words were repeated enough to give the viewer enough words to understand what the word cloud is about.

Assignment Part 2:

@timesofmalta Facebook page is the official Facebook news platform for the media company Times of Malta and its page is followed by over 200,000 followers and in this report we will analyse key metrics which will give us interesting insights over the 10 day period from Friday 13th March 2020 to Monday 23rd March 2020. The key metrics to be analysed are:

Number of Posts for March 13 - March 23
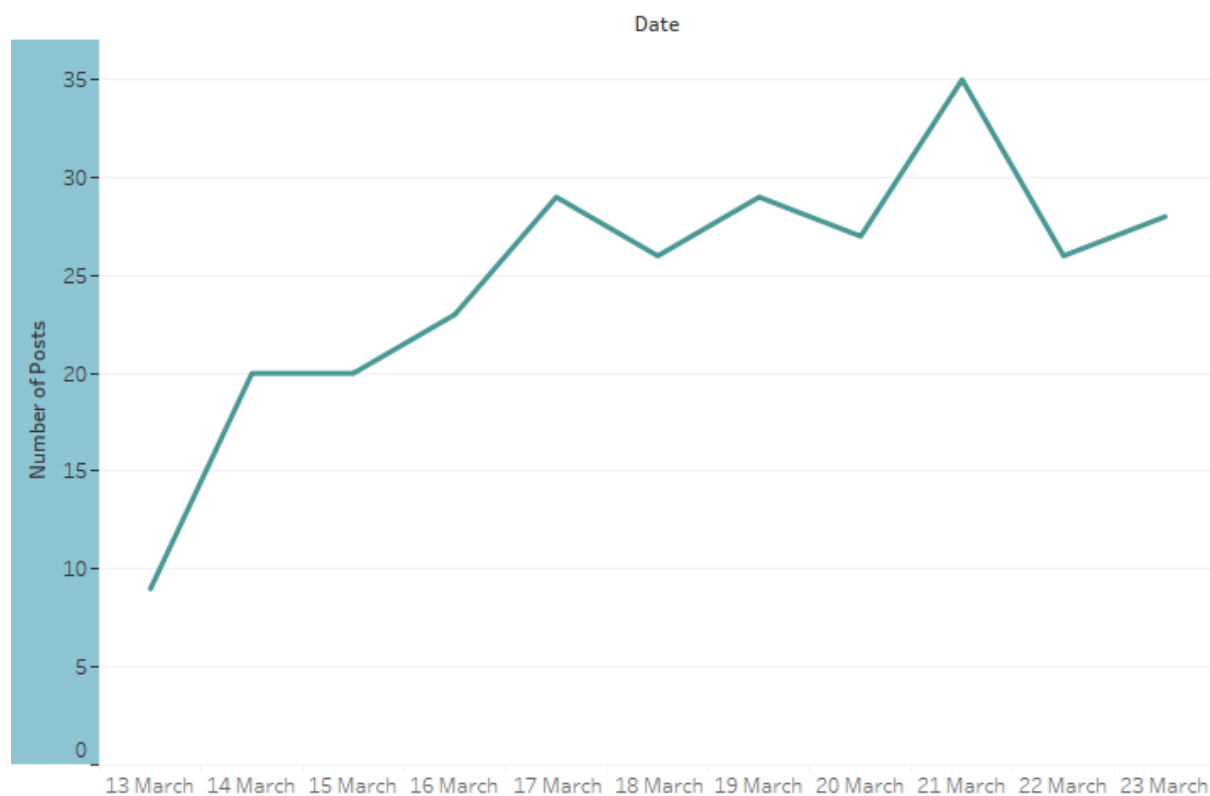
The trend of sum of Number of Posts for Date. The view is filtered on Date, which excludes Null.

The number of posts on March 13 amounts to 9 due to the fact the Facebook page was scraped from 17:30 onwards and thus only captured 9 posts on that day. Nonetheless we can see that the frequency of posts increased steadily as the weekend was approaching. The 'weekend posting' is a great way to generate content and organic traffic thanks to the Facebook page since people will be more active during the weekend. The daily analysis of the page posting is analysed next in the next section where we can see at what times the posts generated most traction. As the analyst I assumed that people commenting on a post is more interactive than just sharing the post since people would have read and contributed to the page by means of their opinion, therefore I generated a chart that visualises the time of the post with the associated number of shares and comments.

Since in the data set had its limitations hindered me from analysing the true representation of the actual activity on the page by collating the number of comments and other interactions at time of occurrence I analysed what time the post with the most interactions was posted.

The problem that I faced when analysing the comments is that I assume that the web scraping tool used combines comments at the same time under one time and merged the time for the comments, when coming to analyse every single comment unmerging them would have created empty cells in the document. This would have to be done for all the comments posted at a certain time.

Figure 9 Merged Sheet

Figure 8 Unmerged Sheet

The daily Interactions on the posts are found in this section:

Friday 13th 2020
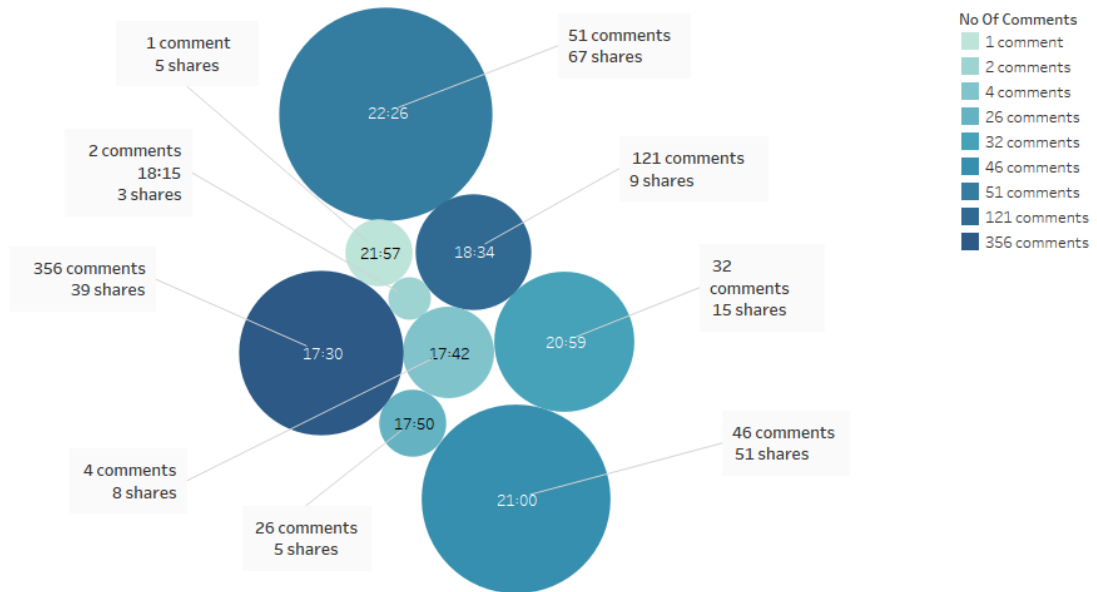
1 comment
5 shares

51 comments
67 shares

22:26

2 comments
18:15
3 shares

121 comments
9 shares

21:57

18:34

356 comments
39 shares

32
comments
15 shares

17:30

17:42

20:59

17:50

4 comments
8 shares

21:00

46 comments
51 shares

26 comments
5 shares

No Of Comments
1 comment
2 comments
4 comments
26 comments
32 comments
46 comments
51 comments
121 comments
356 comments

Time. Colour shows details about No Of Comments. Size shows details about No Of Shares as an attribute. The marks are labelled by Time.

Saturday 14th 2020

111 comments
17 shares

309 comments
53 shares

12:16

13:20

219 comments
27 shares

13:08

08:14

08:35

53 comments
13 shares

08:50

09:05

10:31

09:58

111 comments
172 shares

335 comments
176 shares

No Of Shares
2 shares
3 shares
13 shares
17 shares
24 shares
27 shares
53 shares
172 shares
176 shares
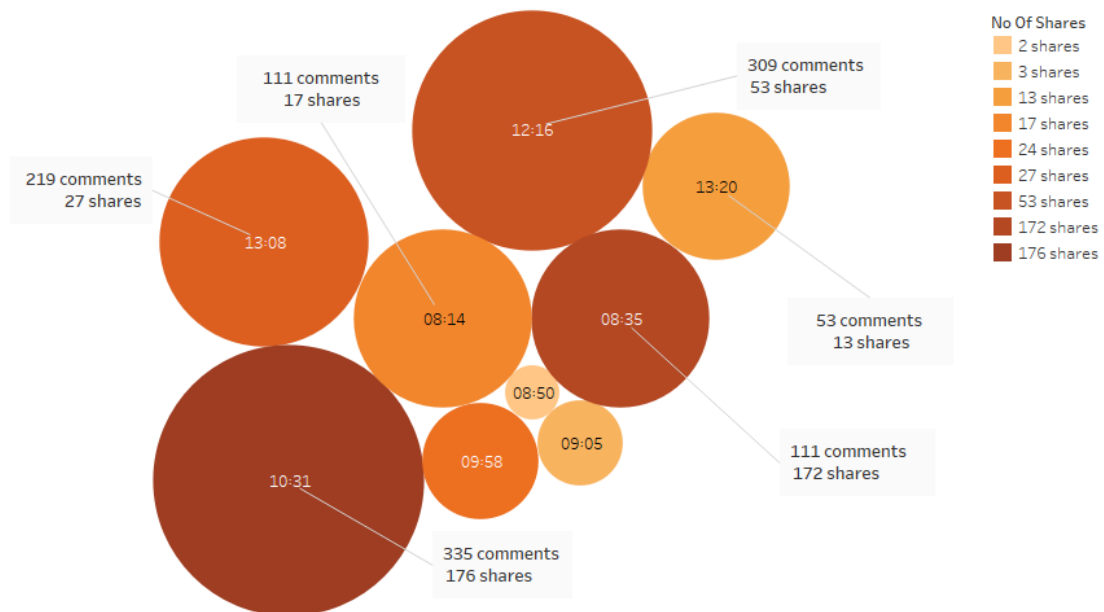
Time. Colour shows details about No Of Shares as an attribute. Size shows details about No Of Comments as an attribute. The marks are labelled by Time. The view is filtered on No Of Shares as an attribute, which excludes Null.

Sunday 15th 2020
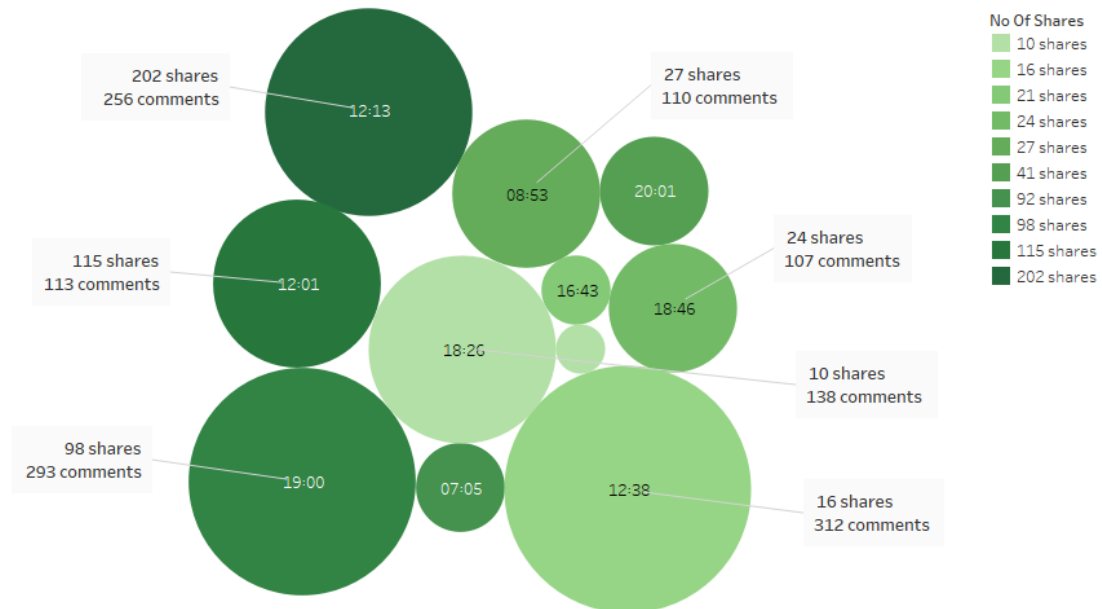
202 shares
256 comments — 12:13

27 shares
110 comments — 08:53

20:01

115 shares
113 comments — 12:01

16:43

24 shares
107 comments — 18:46

18:20

10 shares
138 comments

98 shares
293 comments — 19:00

07:05

12:38

16 shares
312 comments

Time. Colour shows details about No Of Shares. Size shows details about No Of Comments as an attribute. The marks are labelled by Time. The view is filtered on No Of Shares, which excludes Null, 1 share, 12 shares and 3 shares.
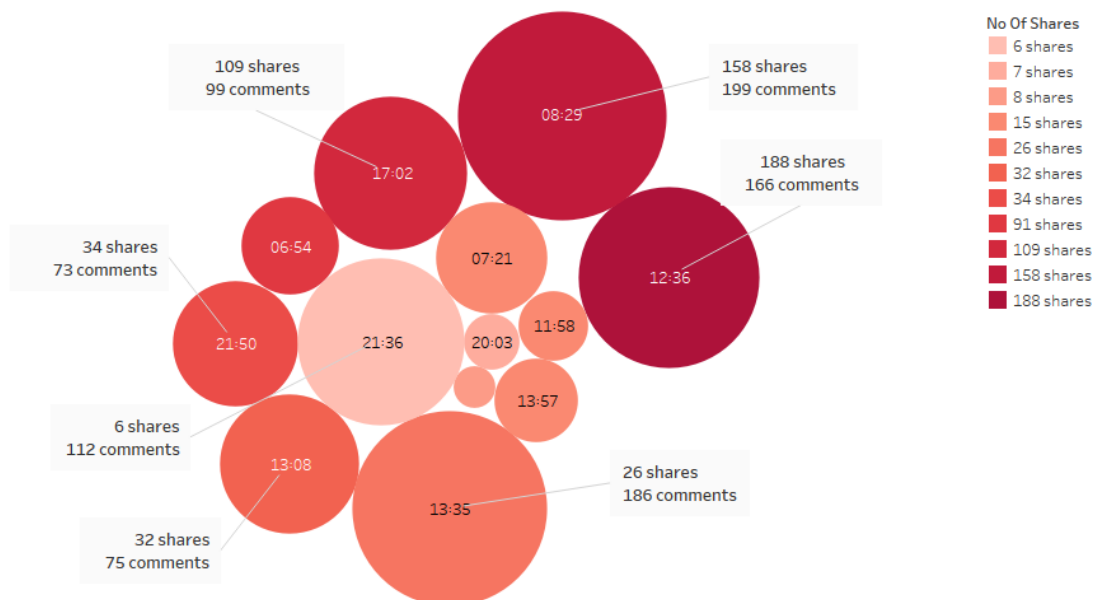
No Of Shares
- 10 shares
- 16 shares
- 21 shares
- 24 shares
- 27 shares
- 41 shares
- 92 shares
- 98 shares
- 115 shares
- 202 shares

Monday 16th 2020

109 shares
99 comments — 17:02

158 shares
199 comments — 08:29

188 shares
166 comments — 12:36

34 shares
73 comments — 21:50

06:54

07:21

21:36

20:03

11:58

6 shares
112 comments — 13:57

26 shares
186 comments

13:08

13:35

32 shares
75 comments

Time. Colour shows details about No Of Shares. Size shows details about No Of Comments as an attribute. The marks are labelled by Time. The view is filtered on No Of Shares, which excludes Null, 1 share, 2 shares, 3 shares and 4 shares.

No Of Shares
- 6 shares
- 7 shares
- 8 shares
- 15 shares
- 26 shares
- 32 shares
- 34 shares
- 91 shares
- 109 shares
- 158 shares
- 188 shares

Tuesday 17th 2020
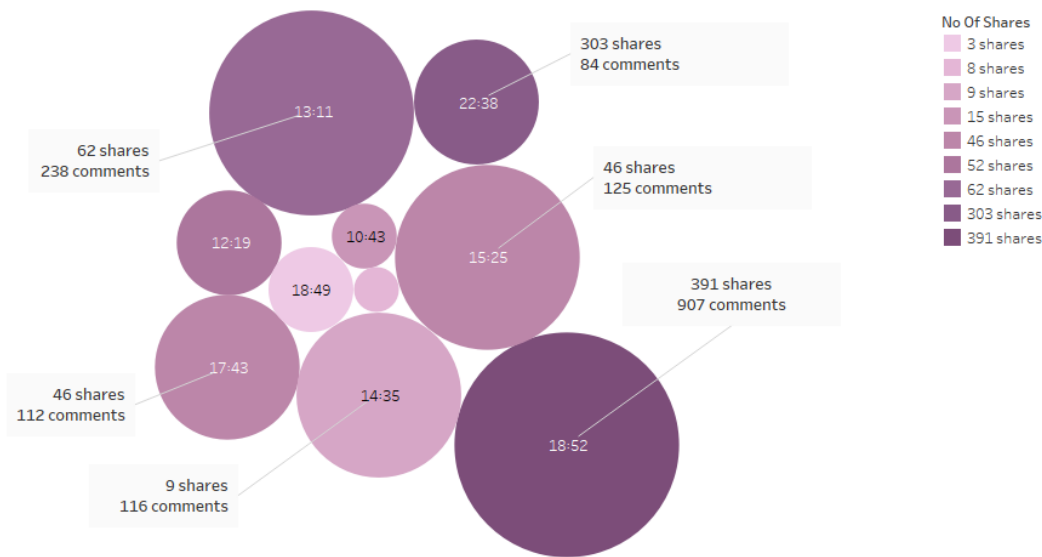
62 shares
238 comments

303 shares
84 comments

46 shares
125 comments

391 shares
907 comments

46 shares
112 comments

9 shares
116 comments

13:11
22:38
12:19
10:43
18:49
15:25
17:43
14:35
18:52

No Of Shares
- 3 shares
- 8 shares
- 9 shares
- 15 shares
- 46 shares
- 52 shares
- 62 shares
- 303 shares
- 391 shares

Time. Colour shows details about No Of Shares. Size shows details about No Of Comments as an attribute. The marks are labelled by Time. The data is filtered on No Of Comments and Exclusions (No Of Comments,Time). The No Of Comments filter keeps 10 of 22 members. The Exclusions (No Of Comments,Time) filter keeps 28 members.

Wednesday 18th 2020
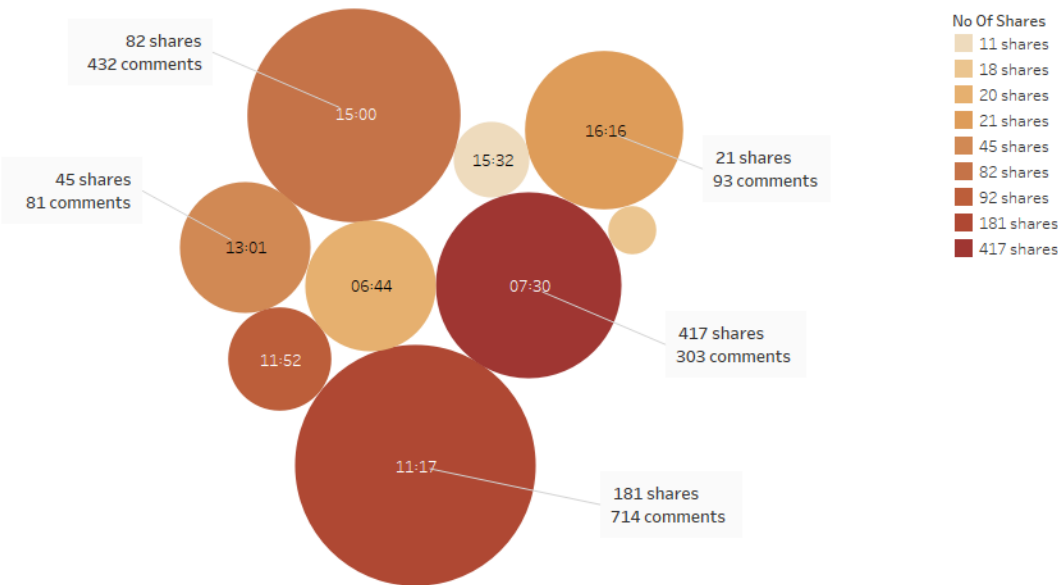
82 shares
432 comments

45 shares
81 comments

21 shares
93 comments

417 shares
303 comments

181 shares
714 comments

15:00
15:32
16:16
13:01
06:44
07:30
11:52
11:17

No Of Shares
- 11 shares
- 18 shares
- 20 shares
- 21 shares
- 45 shares
- 82 shares
- 92 shares
- 181 shares
- 417 shares

Time. Colour shows details about No Of Shares. Size shows details about No Of Comments as an attribute. The marks are labelled by Time. The data is filtered on No Of Comments, which excludes 10 members. The view is filtered on No Of Shares, which excludes 7 shares, 8 shares and 9 shares.

Thursday 19th 2020
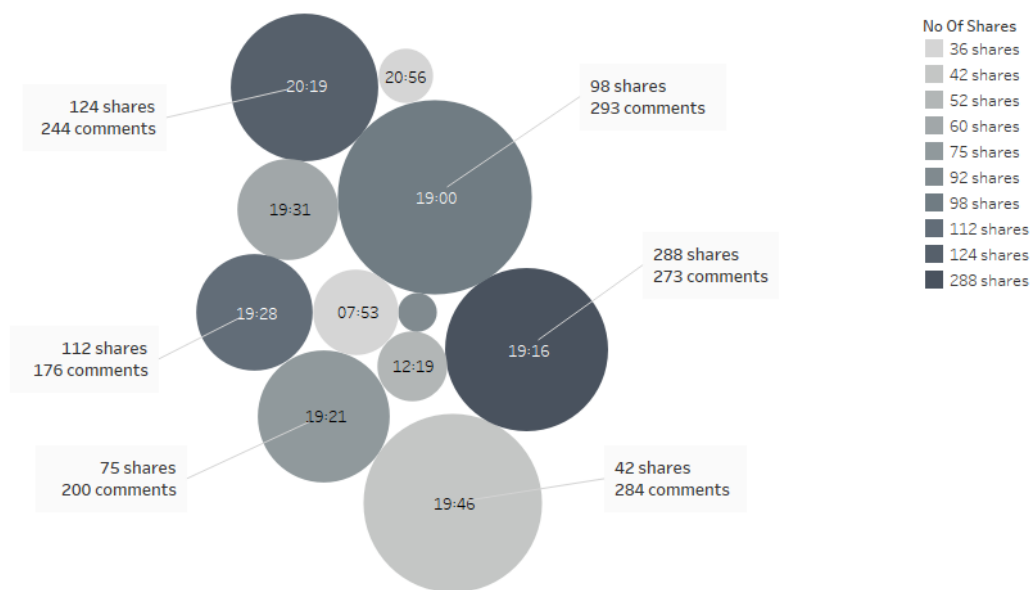
124 shares
244 comments

20:19

20:56

98 shares
293 comments

19:31

19:00

288 shares
273 comments

19:28

07:53

19:16

112 shares
176 comments

12:19

19:21

75 shares
200 comments

19:46

42 shares
284 comments

No Of Shares
- 36 shares
- 42 shares
- 52 shares
- 60 shares
- 75 shares
- 92 shares
- 98 shares
- 112 shares
- 124 shares
- 288 shares

Time. Colour shows details about No Of Shares. Size shows details about No Of Comments as an attribute. The marks are labelled by Time.
The view is filtered on No Of Shares, which keeps 10 of 31 members.

Friday 20th 2020
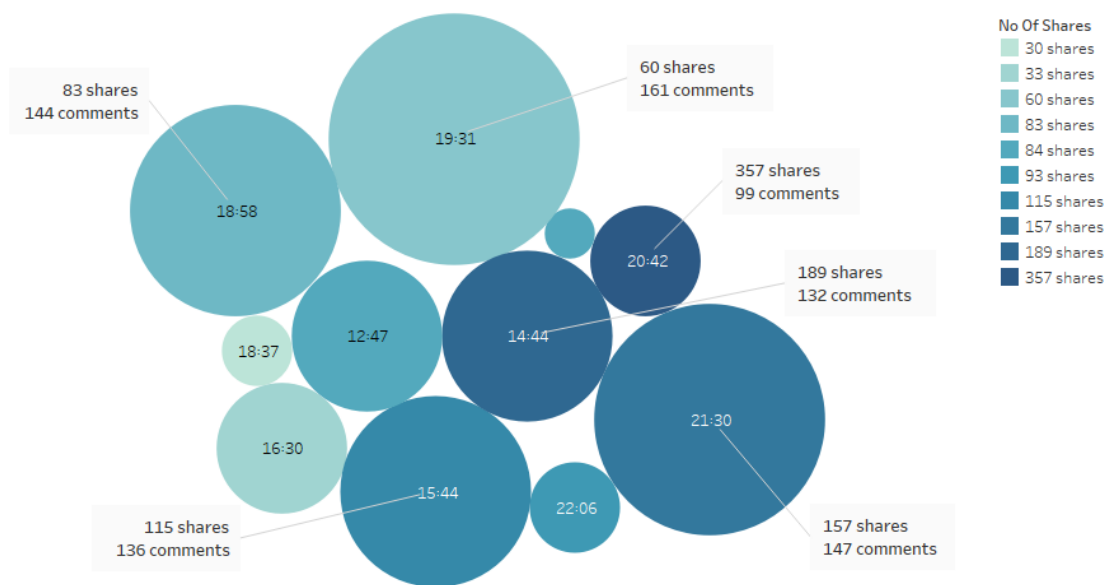
83 shares
144 comments

60 shares
161 comments

18:58

19:31

357 shares
99 comments

20:42

189 shares
132 comments

18:37

12:47

14:44

16:30

21:30

15:44

22:06

115 shares
136 comments

157 shares
147 comments

No Of Shares
- 30 shares
- 33 shares
- 60 shares
- 83 shares
- 84 shares
- 93 shares
- 115 shares
- 157 shares
- 189 shares
- 357 shares

Time. Colour shows details about No Of Shares. Size shows details about No Of Comments as an attribute. The marks are labelled by Time.
The view is filtered on No Of Shares, which keeps 10 of 22 members.

Saturday 21 2020
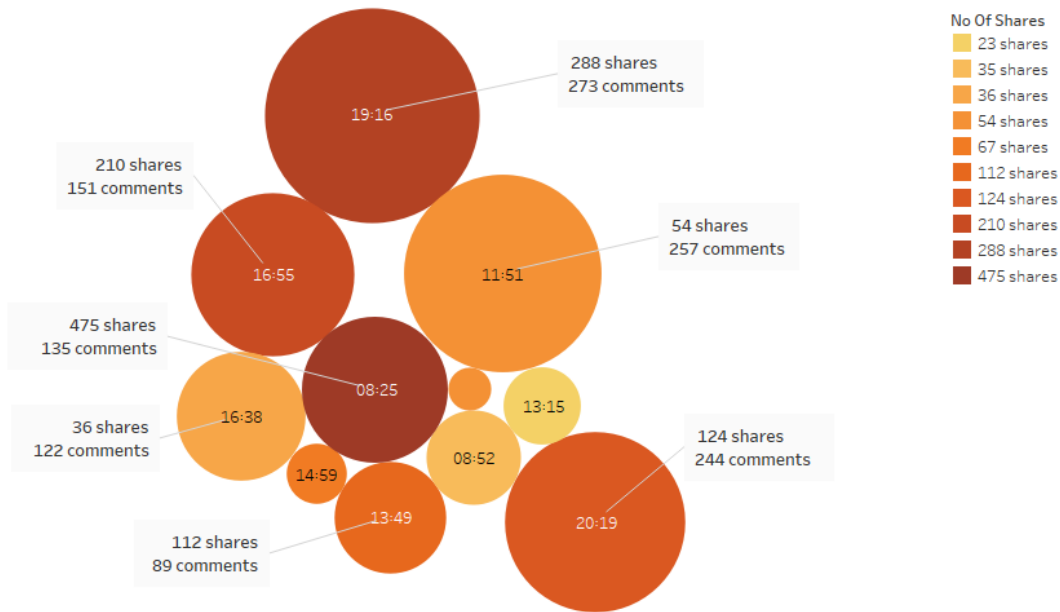
288 shares
273 comments

210 shares
151 comments

54 shares
257 comments

475 shares
135 comments

36 shares
122 comments

124 shares
244 comments

112 shares
89 comments

No Of Shares
- 23 shares
- 35 shares
- 36 shares
- 54 shares
- 67 shares
- 112 shares
- 124 shares
- 210 shares
- 288 shares
- 475 shares

Time. Colour shows details about No Of Shares. Size shows details about No Of Comments as an attribute. The marks are labelled by Time. The view is filtered on No Of Shares, which keeps 10 of 21 members.

Sunday 22nd 2020
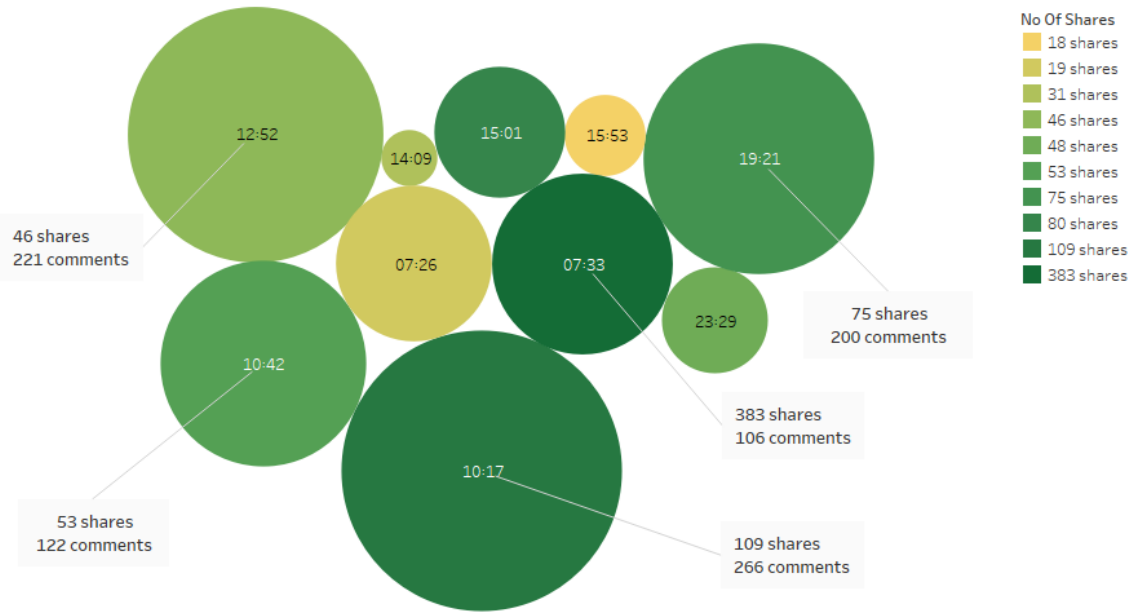
46 shares
221 comments

75 shares
200 comments

383 shares
106 comments

53 shares
122 comments

109 shares
266 comments

No Of Shares
- 18 shares
- 19 shares
- 31 shares
- 46 shares
- 48 shares
- 53 shares
- 75 shares
- 80 shares
- 109 shares
- 383 shares

Time. Colour shows details about No Of Shares. Size shows details about No Of Comments as an attribute. The marks are labelled by Time. The view is filtered on No Of Shares, which keeps 10 of 21 members.

Monday 23rd 2020
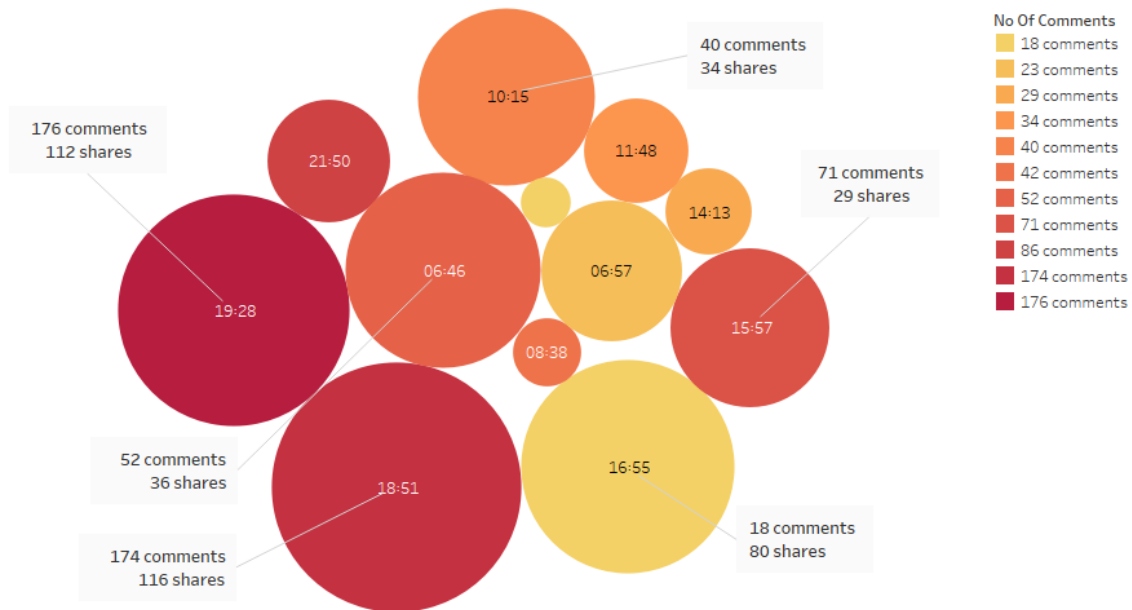
40 comments
34 shares

176 comments
112 shares

71 comments
29 shares

52 comments
36 shares

174 comments
116 shares

18 comments
80 shares

No Of Comments
- 18 comments
- 23 comments
- 29 comments
- 34 comments
- 40 comments
- 42 comments
- 52 comments
- 71 comments
- 86 comments
- 174 comments
- 176 comments

Time. Colour shows details about No Of Comments. Size shows details about No Of Shares as an attribute. The marks are labelled by Time. The view is filtered on No Of Comments, which excludes 9 members.

Top Commentors for the Period 13/03/2020 to 23/03/2020
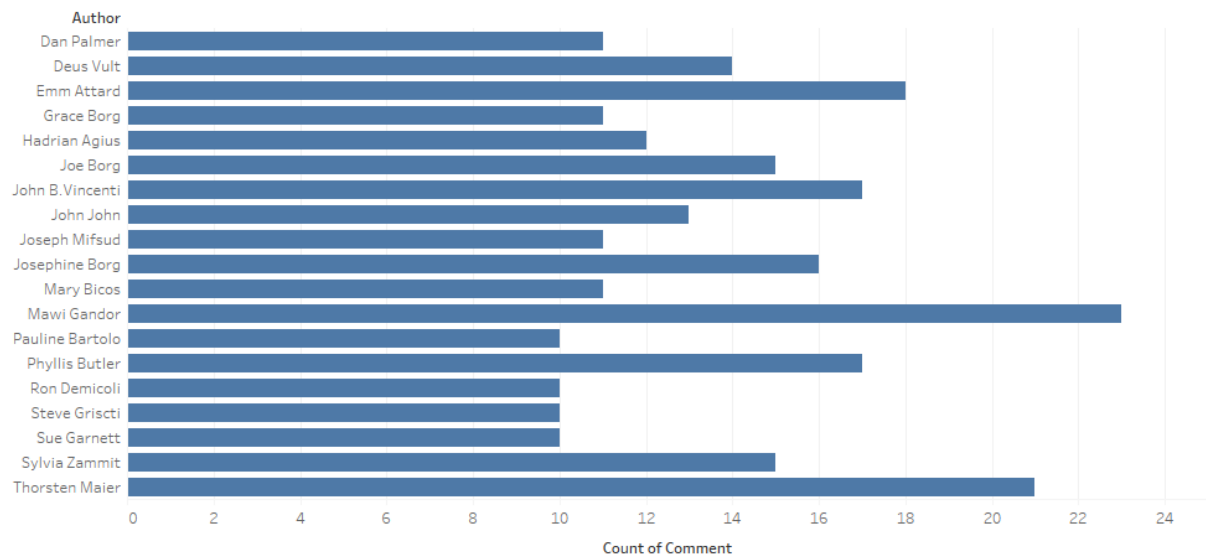
Count of Comment for each Author. The view is filtered on Author and count of Comment. The Author filter excludes Null. The count of Comment filter includes values greater than or equal to 10.

The last two graphs show the most active follower which is Mawi Gandor and the posts with the greatest number of different emotions are found in the last graph.

Top Posts By Emoticon

Sum of ANGRY, sum of HAHA, sum of LIKE, sum of LOVE, sum of WOW and sum of SAD for each Post.
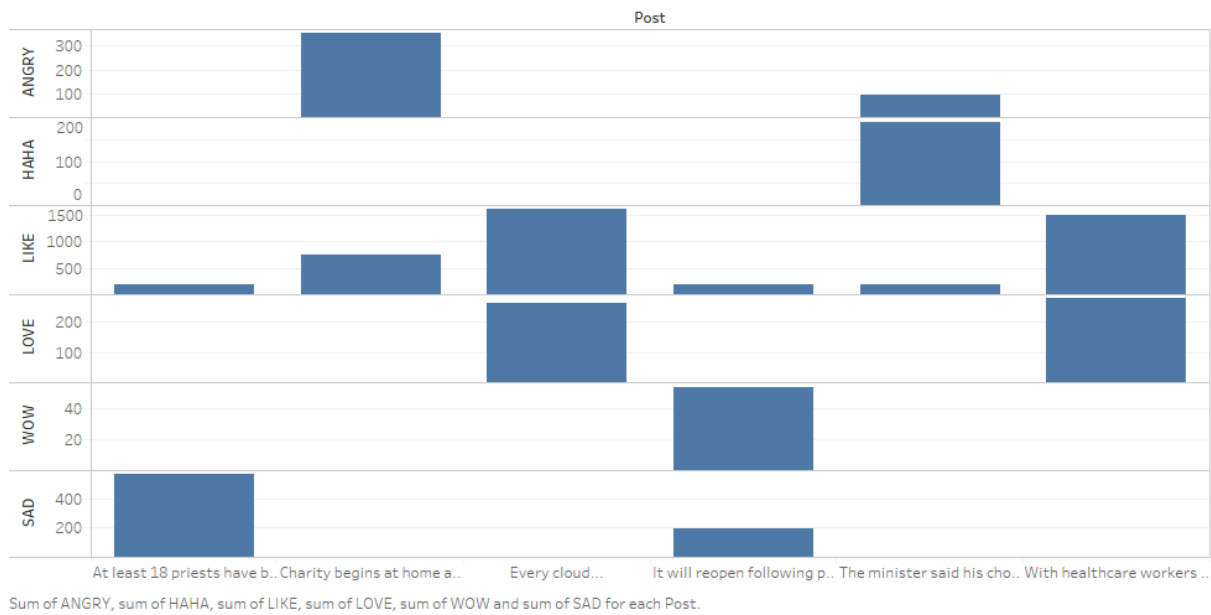
Section 3:

A web-based corporate dashboard for the queries using data provided (Sample – Superstore) is presented below.

Top 5 Products '16 - '17 by Year and State

Rank of Sal..
North Rhine-
Westphalia

| £2,690 |
| £3,617 |
| £4,611 |
| £7,799 |
| £12,784 |
| £17,253 |
| £17,456 |

£0   £20,000

Top 5 Manufacturers by Sales

Manufactur..
Hoover Sto..
Nokia Smar..
Samsung S.

£0   £40,000
Sales

Shipping Mode by Period

Ship Mode
2016

| 100 |
| 41 |
| 120 |

0   200   400
Distinct count o..

Manufacturer by Highest Profit Ratio

Profit Ratio
Novimex Shipping Labe   Abc

Sales by Country, State, City

City
Austria

| £7,486 |
| £2,897 |
| £1,358 |
| £4,440 |
| £7,545 |
| £4,380 |
| £758 |
| £59,911 |

Belgium

| £11,052 |
| £3,801 |
| £1,050 |
| £11,949 |
| £387 |
| £276 |
| £1,641 |
| £3,046 |
| £382 |
| £235 |
| £398 |
| £86 |
| £7,005 |
| £4,885 |
| £44 |

£0   £100,000
Sales

Top 10 Customers by Quantity

Customer Name	Rank of Qu..	
Mathew Reese	1	491
Gary Hwang	2	372
Susan Pistek	3	369
Alan Shonely	4	358
Maureen Gnade	5	320
Tom Stivers	6	245
Olvera Toch	7	244
Edward Hooks	8	214
Susan Gilcrest	9	213
Mike Pelletier	10	211

0   200   400   600
Quantity

Top 10 Customers by Sales

Customer Name	Rank of Sal..	
Susan Pistek	1	£78,565
Mathew Reese	2	£33,729
Patrick Jones	3	£32,384
Mike Pelletier	4	£20,410
Maureen Gnade	5	£20,216
Gary Hwang	6	£19,973
Olvera Toch	7	£19,877

£0   £50,000
Sales

Top 5 Manufacturers by Quantity

Manufacturer
Boston Pencil Sharpener, ..
Sanford Pencil Sharpener,..
Binney & Smith Sketch Pa..
Cardinal Binding Machine,..
Stanley Pencil Sharpener, ..

0   50   100
Quantity

State/Province
England
North Rhine-Westpha..

Quantity
211   491

Sales
£17,198   £78,565

Sales by State

State/Provi..
Abruzzi
Alsace-Cha..
Andalusía
Antwerp

£0
Sales

Ship Mode
First Class
Same Day
Second Class
Standard Class

Country/Region
Austria
Belgium
Denmark
Finland
France
Germany
Ireland
Italy
Netherlands
Norway
Portugal

Data worksheets for the dashboard for reference are presented below:

Sales by Year

Year of Ord..

| 2016 |
| 2017 |
| 2018 |
| 2019 |

£0   £200,000   £400,000   £600,000   £800,000   £1,000,000   £1,200,000
Sales

Year of Order Date
2016
2017
2018
2019
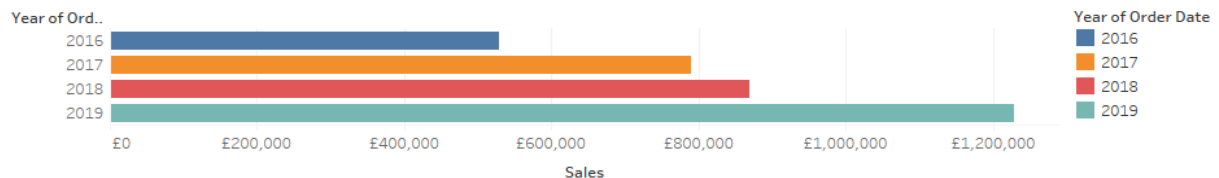
Sum of Sales for each Order Date Year. Colour shows details about Order Date Year.

Sales by Year grouped by Quarters

Quarter of Order Date

2016 Q4

2017 Q4

2018 Q4

2019 Q4

£0   £50,000   £100,000   £150,000   £200,000   £250,000   £300,000   £350,000   £400,000
Sales

Year of Order Date
2016
2017
2018
2019
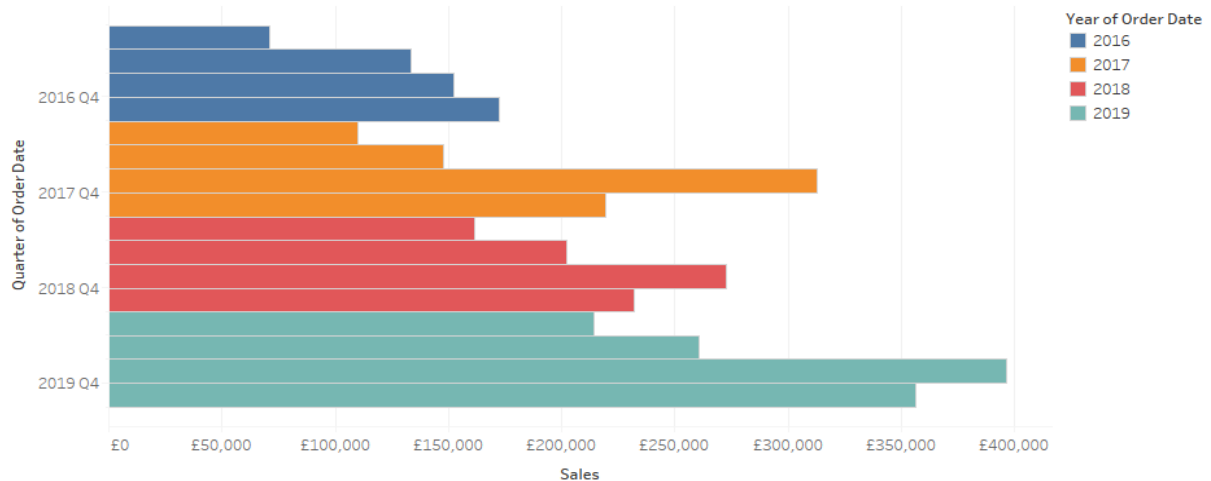
The plot of sum of Sales for Order Date Quarter. Colour shows details about Order Date Year.

Sales by Category & Subcategory

Category	Sub-Catego..
Furniture	Bookcases
	Chairs
	Furnishings
	Tables
Office Supplies	Appliances
	Art
	Binders
	Envelopes
	Fasteners
	Labels
	Paper
	Storage
	Supplies
Technology	Accessories
	Copiers
	Machines
	Phones

Sales axis: £0, £50,000, £100,000, £150,000, £200,000, £250,000, £300,000, £350,000, £400,000

Sales

Category
- Furniture
- Office Supplies
- Technology

Sum of Sales for each Sub-Category broken down by Category. Colour shows details about Category.

Sales Forecast '20 - '21

Sales axis: £0, £200,000, £400,000, £600,000, £800,000, £1,000,000, £1,200,000, £1,400,000, £1,600,000

Sales

Year of Order Date axis: 2015, 2016, 2017, 2018, 2019, 2020, 2021

Year of Order Date

ATTR(Forecast indicator)
- Actual
- Estimate

The trend of sum of Sales (actual & forecast) for Order Date Year. Colour shows details about ATTR(Forecast indicator).

Sales '16 - '17 by Category

Year of Ord..	Category
2016	Furniture
	Office Supplies
	Technology
2017	Furniture
	Office Supplies
	Technology
2018	Furniture
	Office Supplies
	Technology
2019	Furniture
	Office Supplies
	Technology

Sales axis: £0, £100,000, £200,000, £300,000, £400,000, £500,000

Sales

Category
- Furniture
- Office Supplies
- Technology

Sum of Sales for each Category broken down by Order Date Year. Colour shows details about Category.

Top 5 Manufacturers by Sales

Manufacturer

Hoover Stove, Red	
Nokia Smart Phone, Full Si..	
Samsung Smart Phone, Co..	
Bush Classic Bookcase, Tr..	
Ikea Classic Bookcase, Me..	

£0   £5,000   £10,000   £15,000   £20,000   £25,000   £30,000   £35,000   £40,000   £45,000

Sales

Sales
£23,974   £45,023

Sum of Sales for each Manufacturer. Colour shows sum of Sales. The view is filtered on Manufacturer, which has multiple members selected. selected.

Top 5 Manufacturers by Quantity

Manufacturer

Boston Pencil Sharpener, ..	
Sanford Pencil Sharpener,..	
Binney & Smith Sketch Pa..	
Cardinal Binding Machine,..	
Stanley Pencil Sharpener, ..	

0   10   20   30   40   50   60   70   80   90   100   110   120   130   140

Quantity
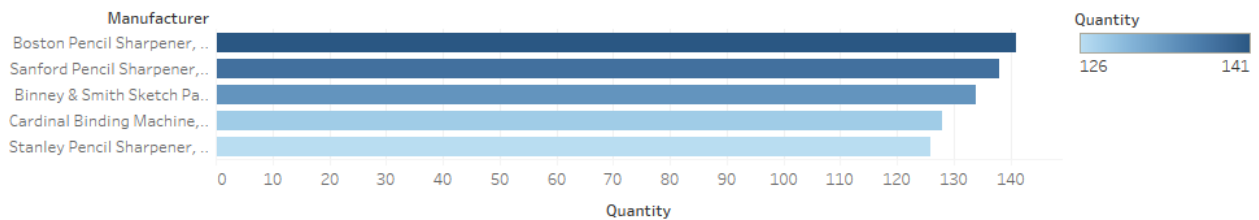
Quantity
126   141

Sum of Quantity for each Manufacturer. Colour shows sum of Quantity. The view is filtered on Manufacturer, which has multiple members selected.

Top 5 Products '16 - '17 by Year and State

State/Provi..	Year of Ord..	Product Name	Rank of Sal..	Sales
England	2016	Sauder Classic Bookcase, ..	5	£2,624
		Chromcraft Computer Tab..	4	£3,119
		Tenex Lockers, Single Wid..	3	£3,471
		Nokia Smart Phone, Cordl..	2	£4,453
		Cisco Smart Phone, Cordle..	1	£5,277
	2017	Stanley Canvas, Water Co..	5	£3,554
		Hoover Stove, Red	4	£3,979
		Samsung Smart Phone, V..	3	£4,454
		Motorola Smart Phone, C..	2	£5,785
		Nokia Smart Phone, Full S..	1	£9,166
North Rhine-Westphalia	2016	Boston Canvas, Blue	5	£1,287
		Nokia Smart Phone, Full S..	4	£1,908
		Hoover Stove, White	3	£2,040
		Samsung Audio Dock, Full ..	2	£2,690
		HP Wireless Fax, Color	1	£3,617
	2017	Enermax Router, Ergano..	5	£4,611
		Motorola Signal Booster, ..	4	£7,799
		KitchenAid Refrigerator, ..	3	£12,784
		Samsung Smart Phone, Co..	2	£17,253
		Bush Classic Bookcase, Tr..	1	£17,456

£0   £5,000   £10,000   £15,000   £20,000

State/Province
England
North Rhine-Westphalia

Sum of Sales for each Rank of Sales broken down by State/Province, Order Date Year and Product Name. Colour shows details about State/Province. The marks are labelled by sum of Sales. The view is filtered on Order Date Year, State/Province and Rank of Sales. The Order Date Year filter keeps 2016 and 2017. The State/Province filter keeps England and North Rhine-Westphalia. The Rank of Sales filter keeps 1, 2, 3, 4 and 5.

Sales by State

State/Province

Abruzzi
Alsace-Champagne-Arden..
Andalusía
Antwerp
Apulia
Aquitaine-Limousin-Poito..
Asturias
Auvergne-Rhône-Alpes
Aveiro
Baden-Württemberg
Balearic Islands
Basel-Stadt
Basilicata
Basque Country
Bavaria
Berlin
Bern
Bourgogne-Franche-Comté
Braga
Brandenburg
Bremen
Brittany
Brussels
Buskerud
Calabria
Campania
Cantabria
Carinthia
Castile and León
Castile-La Mancha
Catalonia
Central Jutland
Centre-Val de Loire
Ceuta
Coimbra
Cork
Corsica
Drenthe
Dublin
East Flanders
Emilia-Romagna
England
Extremadura
Finland Proper
Flemish Brabant
Friesland
Friuli-Venezia Giulia
Galicia
Gelderland
Geneva
Groningen
Hainaut
Halland
Hamburg
Hauts-de-France
Hedmark
Hesse
Hordaland
Hovedstaden
Ile-de-France
Kymenlaakso
Languedoc-Roussillon-Mid..
Lazio
Leiria
Liège
Liguria
Limburg
Limerick
Lisbon
Lombardy
Lower Saxony
Lucerne
Madrid
Marche
Mecklenburg-Vorpommern
Melilla
Murcia
Namur
Navarra
Normandy
North Brabant
North Holland
North Rhine-Westphalia
Oslo
Overijssel
Pays de la Loire
Piedmont
Porto
Provence-Alpes-Côte d'Az..
Rhineland-Palatinate
Rogaland
Saarland
Salzburg
Sardinia
Saxony
Saxony-Anhalt
Schleswig-Holstein
Scotland
Sicily
Skåne
Södermanland
South Denmark
South Holland
St. Gallen
Stockholm
Styria
Thuringia
Trentino-Alto Adige
Tuscany
Tyrol
Umbria
Upper Austria
Uppsala
Utrecht
Uusimaa
Valenciana
Värmland
Västra Götaland
Vaud
Veneto
Vest-Agder
Vienna
Wales
West Flanders
Zealand
Zeeland
Zürich

£0   £50,000   £100,000   £150,000   £200,000   £250,000   £300,000   £350,000   £400,000   £450,000   £500,000

Sales

Sum of Sales for each State/Province.

Top 10 Customers by Quantity

Customer Name	Rank of Qu..		Quantity
Mathew Reese	1	491	
Gary Hwang	2	372	
Susan Pistek	3	369	
Alan Shonely	4	358	
Maureen Gnade	5	320	
Tom Stivers	6	245	
Olvera Toch	7	244	
Edward Hooks	8	214	
Susan Gilcrest	9	213	
Mike Pelletier	10	211	

Quantity
211 — 491

Sum of Quantity for each Rank of Quantity broken down by Customer Name. Colour shows sum of Quantity. The marks are labelled by sum of Quantity. The view is filtered on Rank of Quantity, which keeps 10 members.

Top 10 Customers by Sales

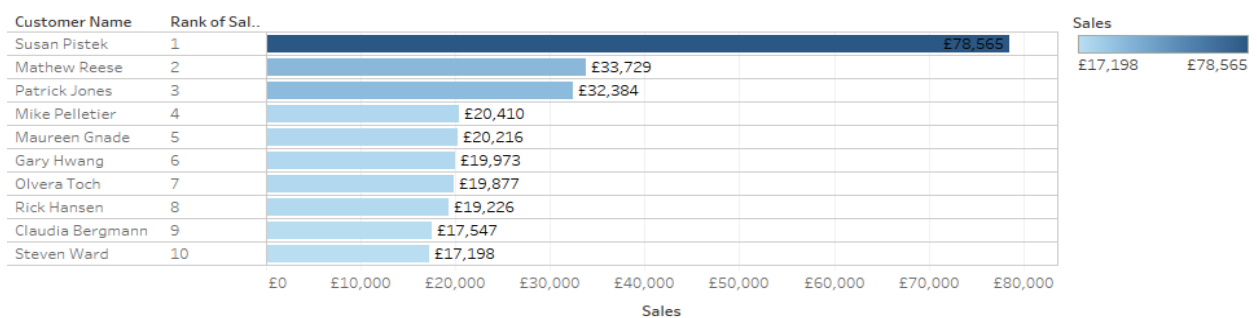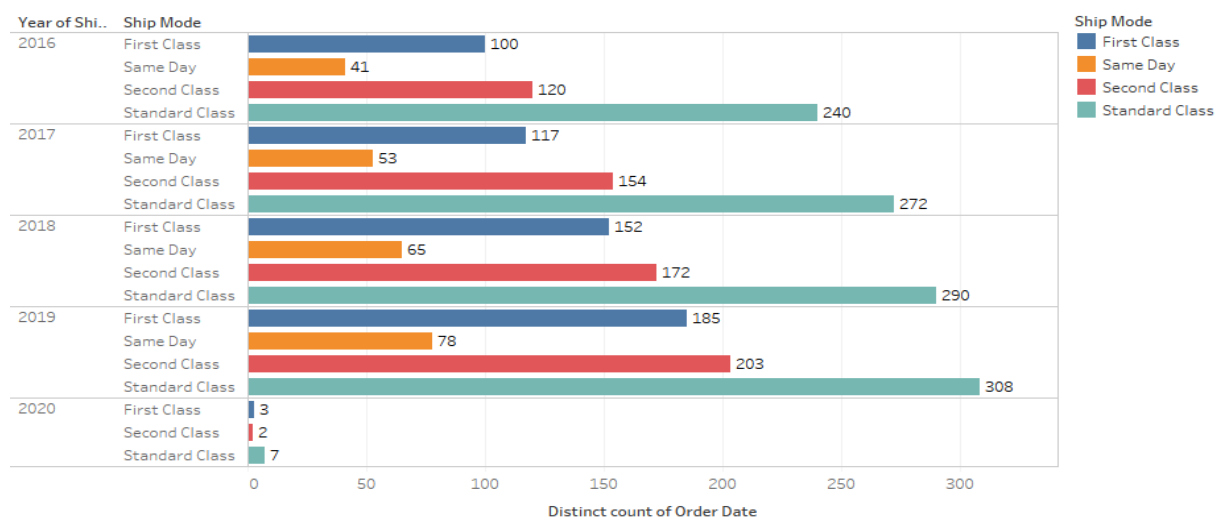| Customer Name	Rank of Sal..	Sales
Susan Pistek	1	£78,565
Mathew Reese	2	£33,729
Patrick Jones	3	£32,384
Mike Pelletier	4	£20,410
Maureen Gnade	5	£20,216
Gary Hwang	6	£19,973
Olvera Toch	7	£19,877
Rick Hansen	8	£19,226
Claudia Bergmann	9	£17,547
Steven Ward	10	£17,198

Sales
£17,198 — £78,565

Sum of Sales for each Rank of Sales broken down by Customer Name. Colour shows sum of Sales. The marks are labelled by sum of Sales. The view is filtered on Rank of Sales, which keeps 10 members.

Manufacturer by Highest Profit Ratio

Manufacturer	Product Name	Rank of Profit Ratio	Profit Ratio	
Novimex Shipping Labels, Alphabetical	Novimex Shipping Labels, Alphabetical	1	50%	Abc

The view is broken down by Manufacturer, Product Name, Rank of Profit Ratio and Profit Ratio. The view is filtered on Profit Ratio and Rank of Profit Ratio. The Profit Ratio filter keeps 6 members. The Rank of Profit Ratio filter keeps 1.

Shipping Mode by Period

Year of Shi..	Ship Mode	Distinct count of Order Date
2016	First Class	100
	Same Day	41
	Second Class	120
	Standard Class	240
2017	First Class	117
	Same Day	53
	Second Class	154
	Standard Class	272
2018	First Class	152
	Same Day	65
	Second Class	172
	Standard Class	290
2019	First Class	185
	Same Day	78
	Second Class	203
	Standard Class	308
2020	First Class	3
	Second Class	2
	Standard Class	7

Ship Mode
- First Class
- Same Day
- Second Class
- Standard Class

Distinct count of Order Date for each Ship Mode broken down by Ship Date Year. Colour shows details about Ship Mode. The marks are labelled by distinct count of Order Date.