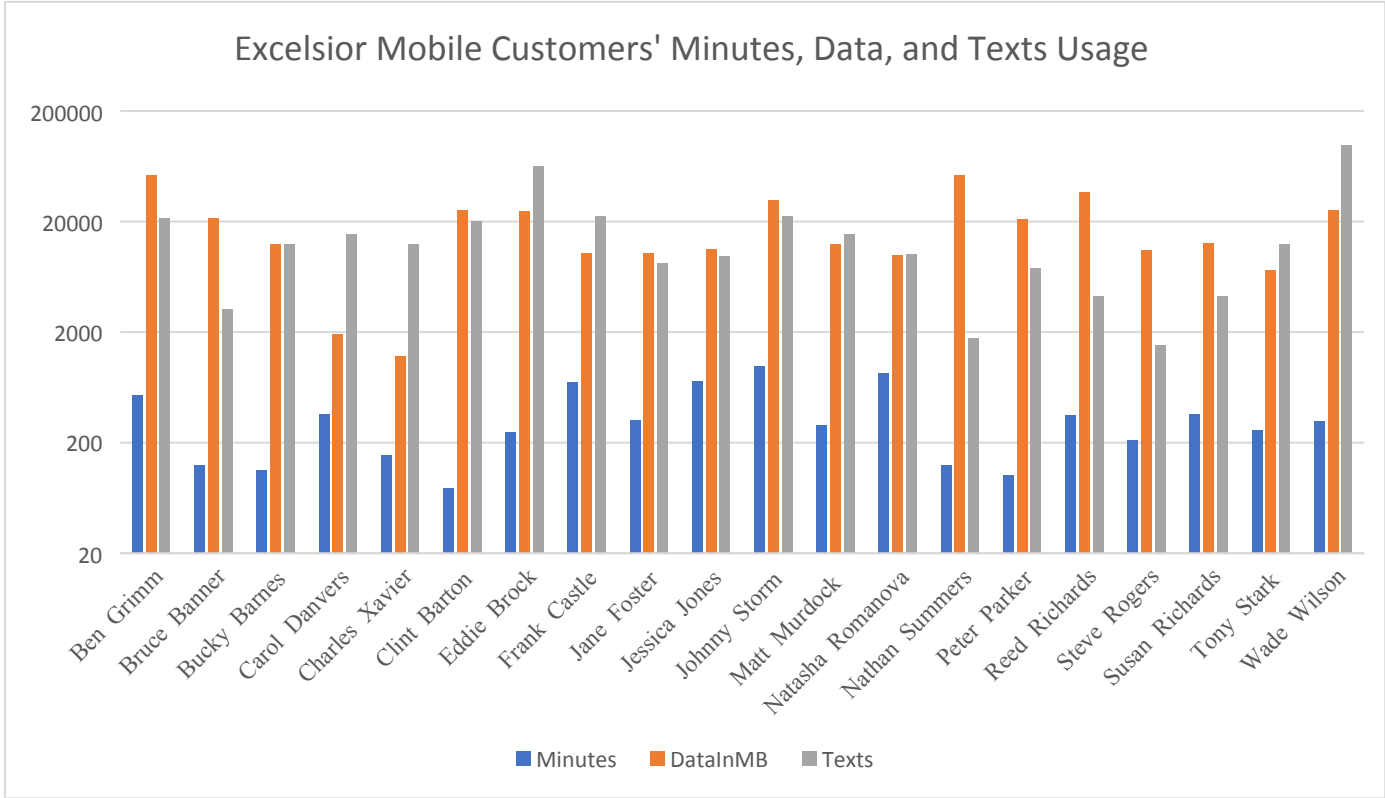
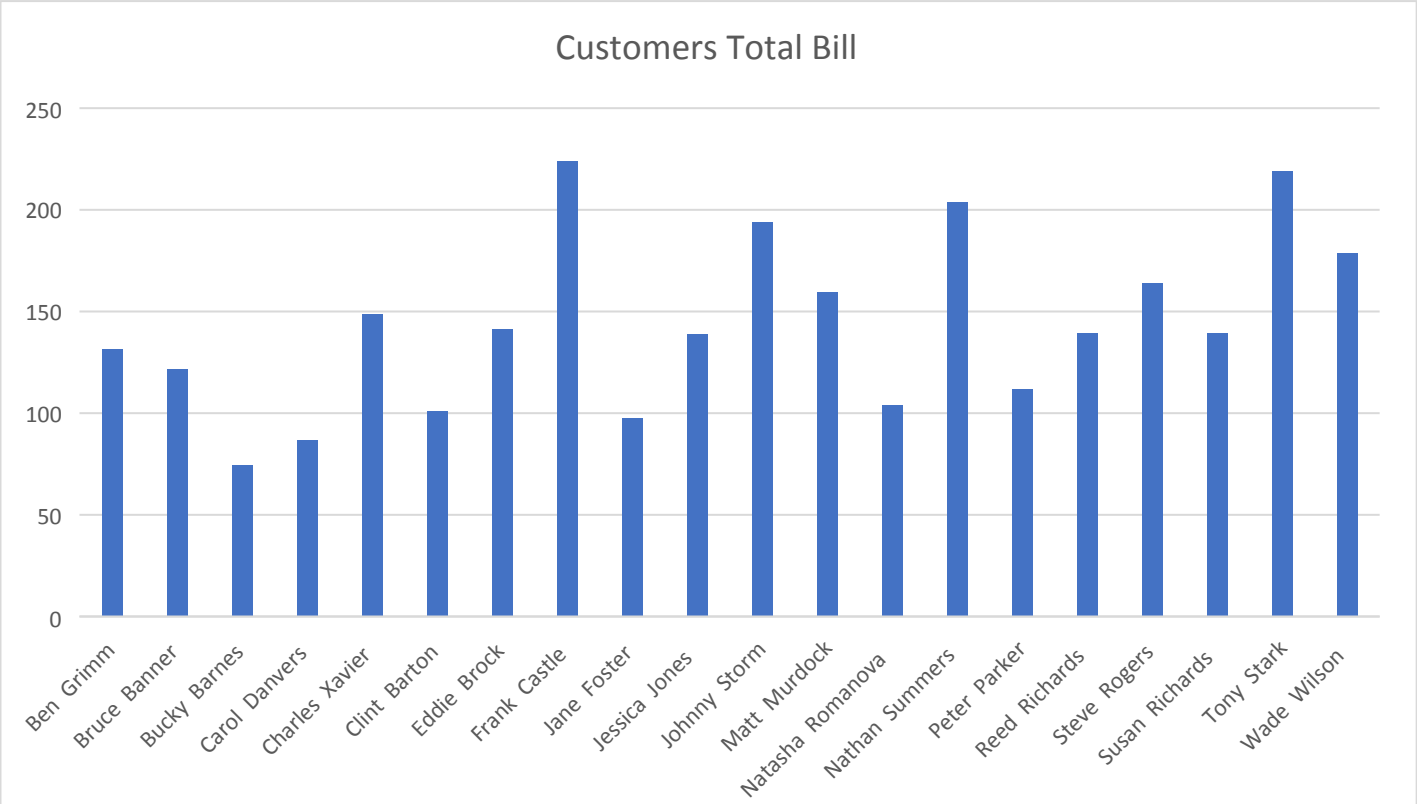


FullName	Minutes	DataInMB	Texts	Total
Ben Grimm	533	52339	21332	131.5
Bruce Banner	125	21563	3252	121.5
Bucky Barnes	112	12356	12452	74.71
Carol Danvers	359	1912	15332	87
Charles Xavier	155	1221	12335	149
Clint Barton	78	25352	20159	101
Eddie Brock	250	25003	63352	141.5
Frank Castle	702	10235	22542	224.12
Jane Foster	320	10256	8449	97.62
Jessica Jones	715	11256	9663	139
Johnny Storm	988	31022	22368	194.26
Matt Murdock	288	12568	15236	159.41
Natasha Romanova	855	10000	10121	104
Nathan Summers	125	52669	1752	204
Peter Parker	101	21052	7596	112
Reed Richards	352	36588	4253	139.41
Steve Rogers	212	10950	1533	164
Susan Richards	365	12635	4256	139.41
Tony Stark	257	7259	12369	219
Wade Wilson	311	25332	98254	179

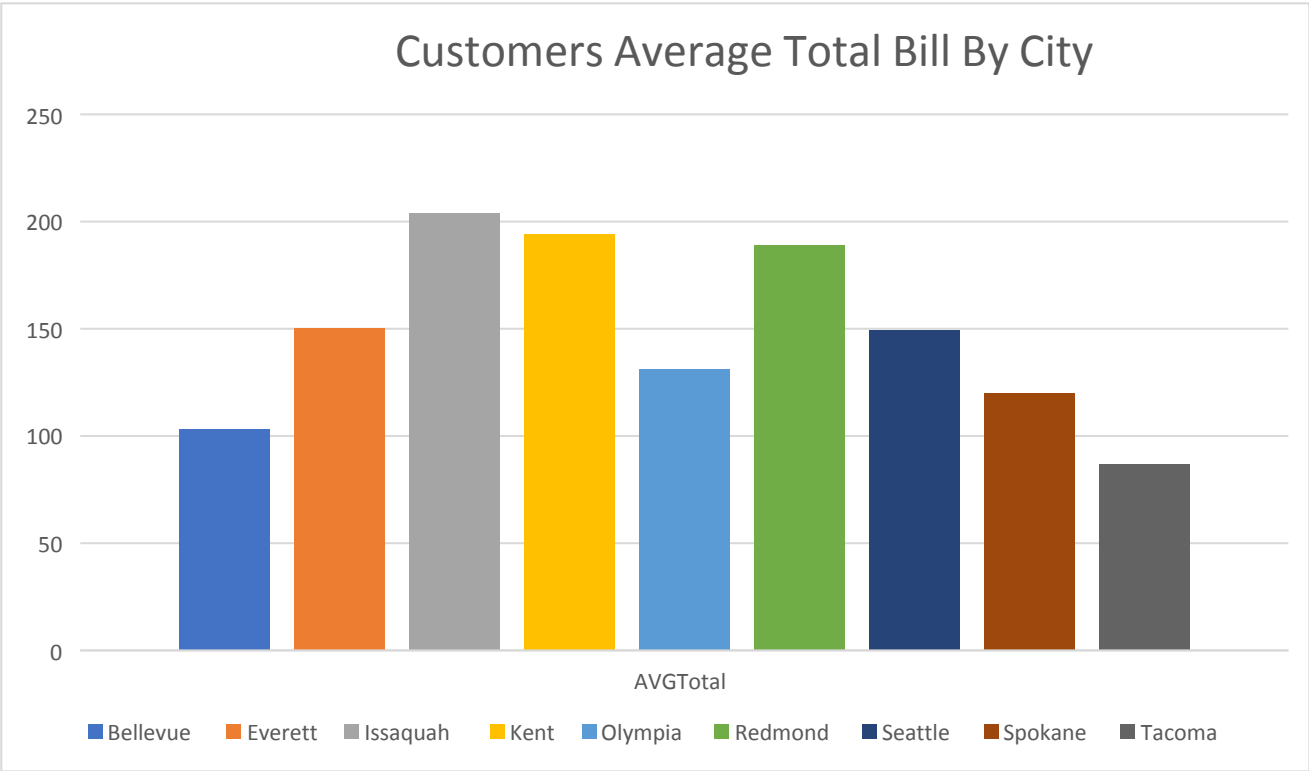
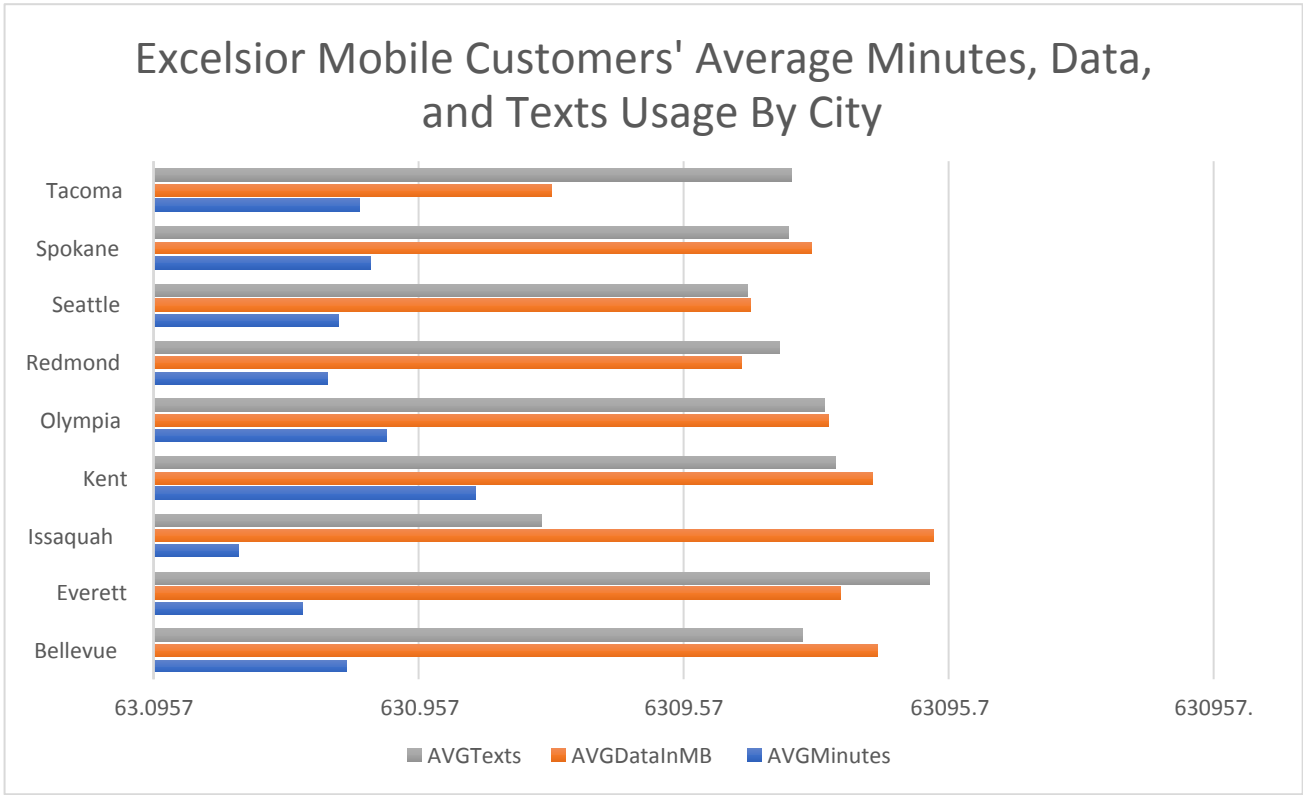


This table and graph show the distribution of minutes, data in MB , texts each customer uses In Excelsior Mobile. Starting with the minutes usage, we can see that Johnny storm, Natasha Romanova, and have the highest minutes usage. Nathan Summers and Ben Grimm have the highest usage of data, and finally Wade Wilson and Eddie Brock have the highest usage of texts. Once Excelsior Mobile wishes to give its loyal customers benefit discounts according to which program that they use they can use this data for that. When giving promotions and discounts to these clients and mentioning it publicly, it will make more people start using thier plans even more hence benefiting Excelsior Mobile in terms of profit.



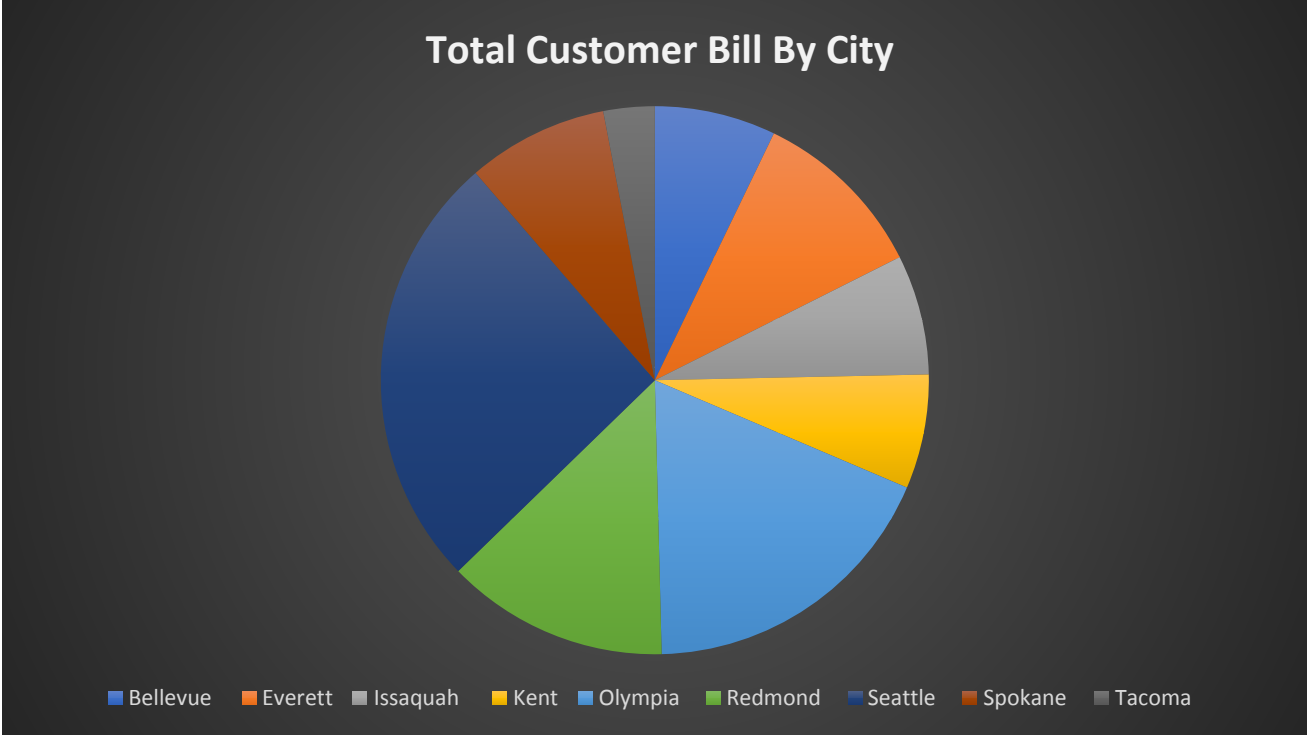
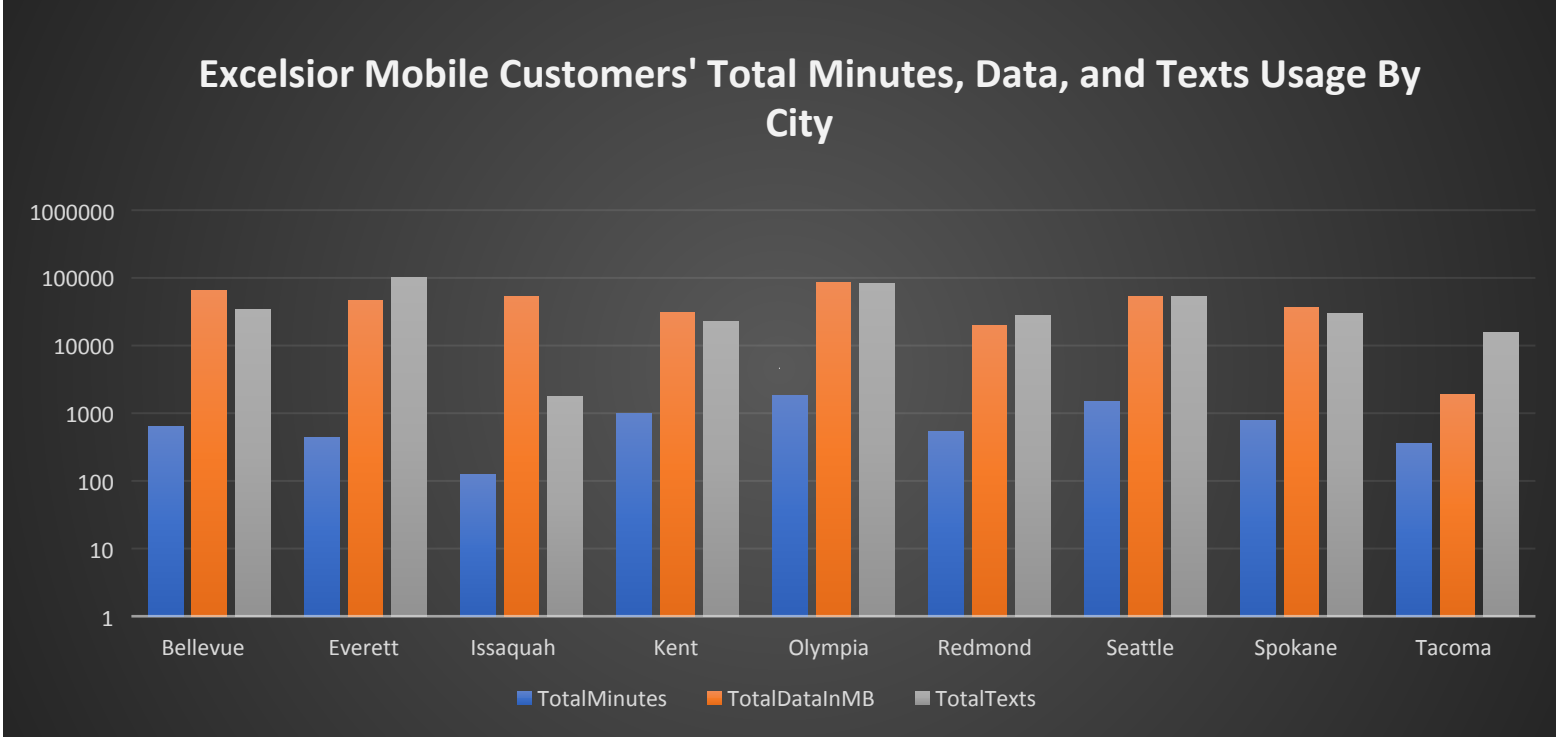
The table above shows us how much in total every customer of Excelsior Mobile pays. This helps Excelsior Mobile to know their loyal customers. Tony Stark and Frank Castle are the top two customers with the highest bill. As we can see from the detailed graph of minutes, data and texts usage neither Tony or Frank have any of the highest, but when suming up all the bills that they pay in total we can see that they have the highest bill. This tells Excelsior Mobile, the customers that have a balance of all their services.

City	AVGMinutes	AVGDataInMB	AVGTexts	AVGTotal
Bellevue	322	32347	16892	103.105
Everett	218	23447	50753	150.25
Issaquah	125	52669	1752	204
Kent	988	31022	22368	194.26
Olympia	455	21056	20495	131.08
Redmond	272	9913	13802	189.205
Seattle	298	10742	10491	149.348
Spokane	396	18304	14911	120
Tacoma	359	1912	15332	87



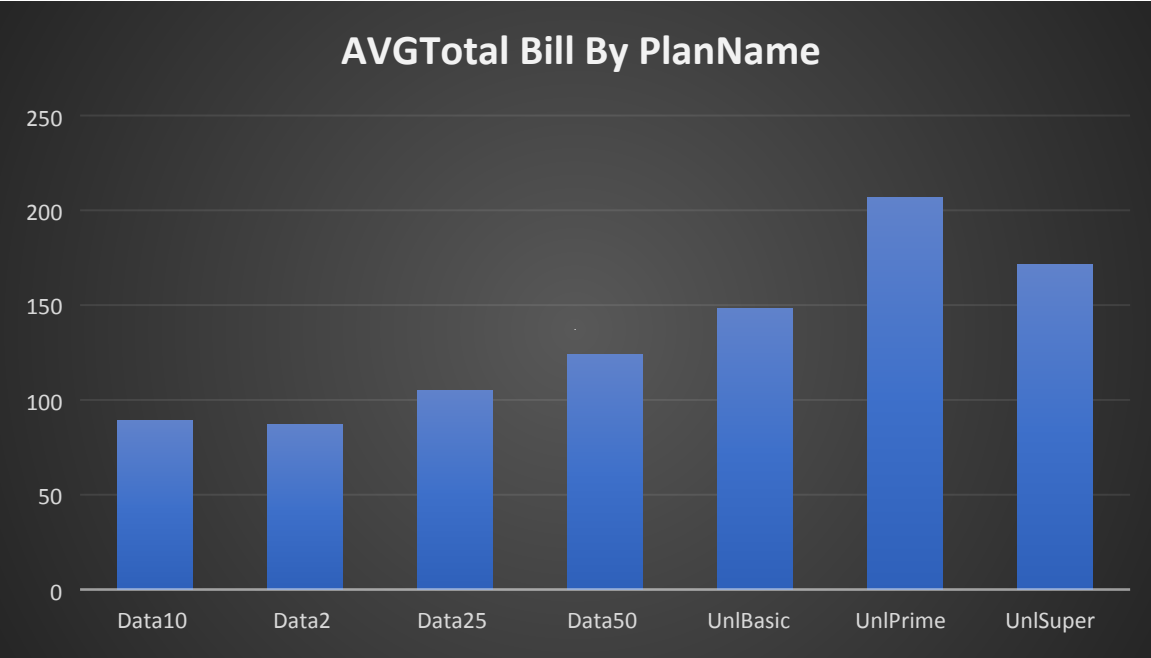
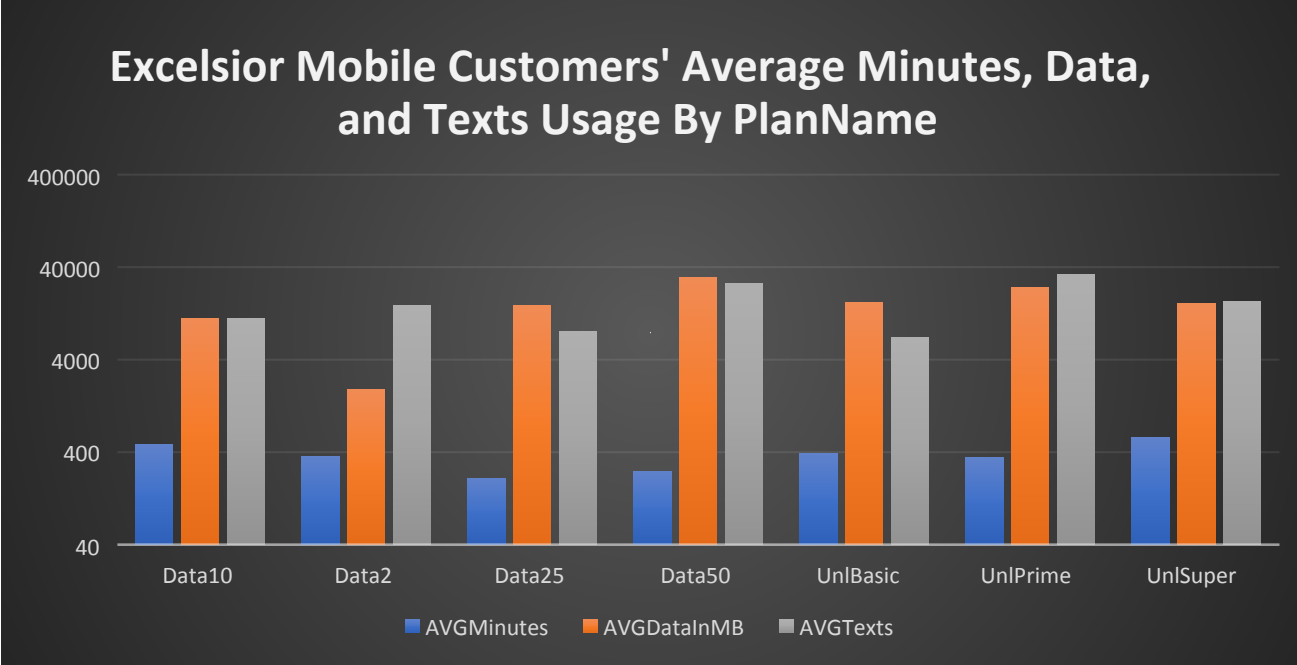
These two charts above show us the distribution according to every city, the average of texts, data and texts each customer uses. According to the graph on the left we can see most of our customers that use a lot of data stay in Issaquah, the customers with the highest average usage in texts stay in Everett, and the customers with the highest average usage of minutes stay in Kent. Looking on the table on the right, the city with the highest average total bill is Issaquah, however when looking on the left table we get to see that Issaquah has the lowest usage in Minutes, the reason being is because some of Issaquah places don't have networks to make phone calls, so therefore they use minutes less. Again from the table from the right Tacoma has the lowest average use of Excelsior services which might infer that they need to market their services in Tacoma.

City	TotalMinutes	TotalDataInMB	TotalTexts	Total
Bellevue	645	64695	33784	206.21
Everett	436	46895	101506	300.5
Issaquah	125	52669	1752	204
Kent	988	31022	22368	194.26
Olympia	1822	84226	81982	524.32
Redmond	545	19827	27605	378.41
Seattle	1490	53714	52455	746.74
Spokane	793	36608	29822	240
Tacoma	359	1912	15332	87



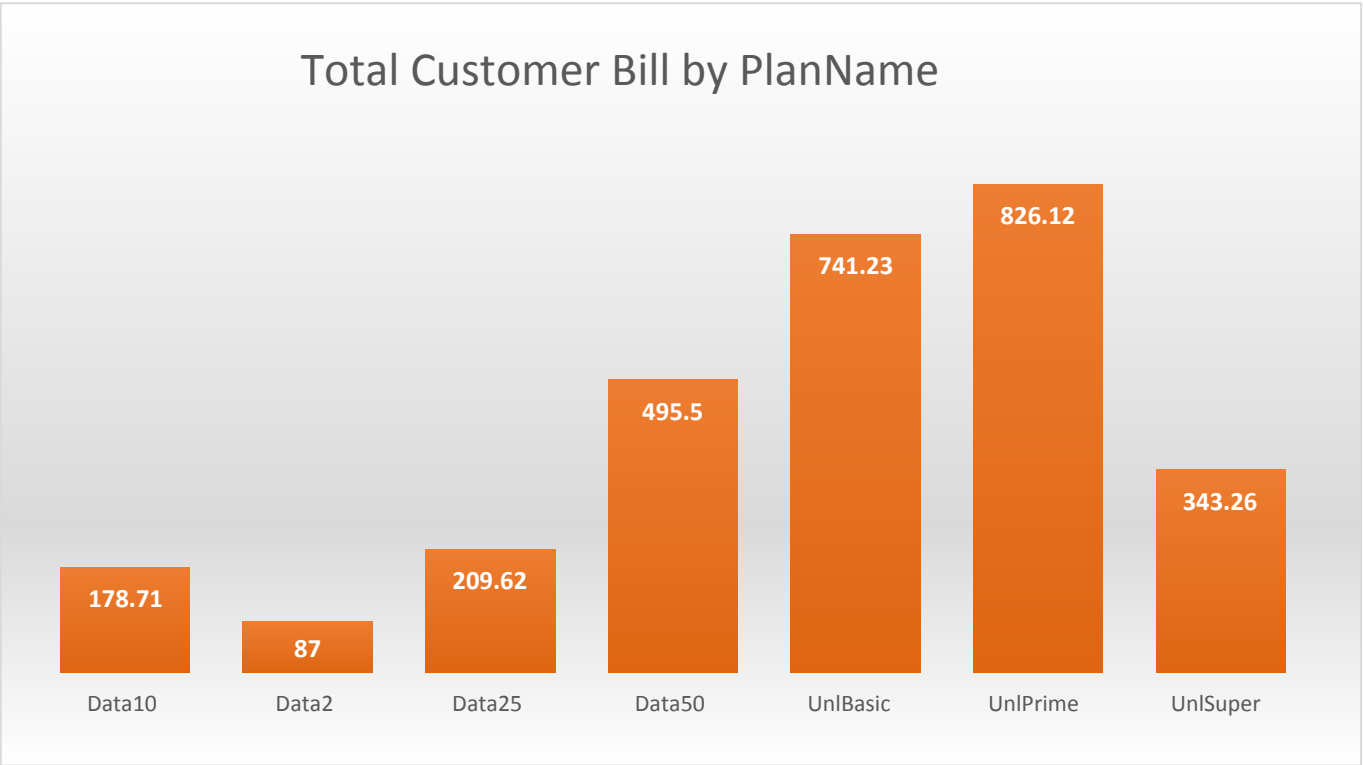
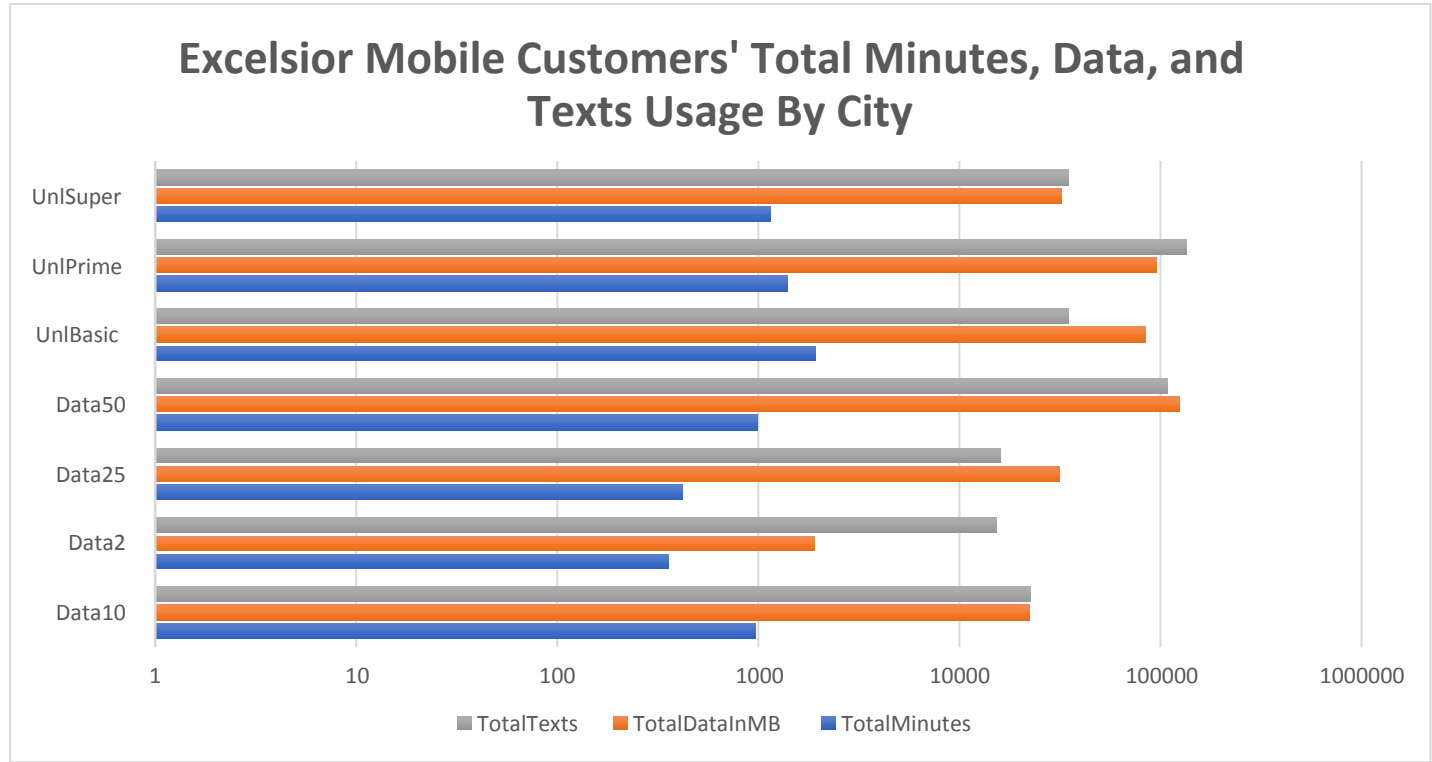
In the both visualisation graphs above we get to see the sum of the total minutes, data, and texts used by customers from each individual city. Over all we can see from the graph on the left that total data and total texts are the one that are used more. Minutes usage isn't really high, and it could be that customers prefer connecting through the internet or texts rather than utilising the minutes. From the pie chart on the right we can see that Bellevue has the highest total bill among all the other cities. Excelsior Mobile can use this kind of informaton to know how much profit or how much income they have made in Total every individual city. Excelsior generated the least income from the customers they have in Tacoma and that could mean that they should start advertising mre their services there or even the Tacoma people bring in less income because Excelsior doesn't have an office near Tacoma so if they could open one there, it could bring Exelsior more profit.

PlanName	AVGMinutes	AVGDataInMB	AVGTexts	AVGTotal
Data10	483	11178	11286	89.355
Data2	359	1912	15332	87
Data25	210	15654	8022	104.81
Data50	246	31064	27023	123.875
UnlBasic	386	16799	6988	148.246
UnlPrime	348	23873	33729	206.53
UnlSuper	571	16121	17351	171.63



The two charts above shows us the average usage of minutes, data and texts in relation to the plan name. While looking on the chart on the left Excelsior Mobile might get a good attitude towards it because all of their plans, the customers are using them almost at the same level. However, if we take a look at the chart on the right, we can see that UnlPrime has the highest average total bill flowwed by the UnlSuper and the lowest we have is Data2. Excelsior Mobile might want to check the reason why Data2 has less average total bill, there could be a lot of factors, such as maybe the Data2 is the slowewst among the others, hence a lot of customers don't spend a lot of money on it. Over all what we can conclude from the two graphs above is that customers prefer using Unlimited data plans becuae the UnlBasic, UnlPrime, and UnlSuper have the highest average total bill.

PlanName	TotalMinutes	TotalDataInMB	TotalTexts	Total
Data10	967	22356	22573	178.71
Data2	359	1912	15332	87
Data25	421	31308	16045	209.62
Data50	986	124257	108095	495.5
UnlBasic	1932	83997	34941	741.23
UnlPrime	1395	95495	134917	826.12
UnlSuper	1143	32243	34703	343.26



The two charts above show us the sum of the total minutes, data and texts usage. From the graph on the right we can that the Unlimited Prime plan is the one that has the highest bill total which means that the Unlimited Prime plan is the plan that Excelsior Mobile gets most of their profit. They get less profit from the Data 2 GB plan mostly probably because it gets exhausted quickly therefore most customers prefer not to use it. Apart from the unlimited basic an prime plan we can that Data 50 GB has also a high total bill and must be becuae most people think that 50 GB should be enoughfor themselves if they are sharingit with anyone. This over all shows us the income and profit Excelsior gets from all the plans they offer. This information might help Excelsior Mobile to know which plan they should make sure that its always flawless because it is used by a lot of customers and Excelsior wants to make usre that their clients are satisfied and happy about the services they receive.

City	NumCustomers
Seattle	5
Olympia	4
Redmond	2
Spokane	2
Bellevue	2
Everett	2
Issaquah	1
Kent	1
Tacoma	1

According to the table it tells us the number of customers Excelsior Mobile has depending on every city. There is different variations we can see in the customers usage according to every city, and there could be different reasons for the variation in number of the customers in every city. That being Seattle and Olympia are the cities we have most customers in.

1B)

city	NumCustomers
Issaquah	1
Kent	1
Tacoma	1

As we can see from this table and in comparison to the table above. Issaquah, Kent, and Tacoma are the places with a low number of customers that use Excelsior Mobile. So therefore, we increase our marketing more in these three cities so that Excelsior Mobile can get more customers there and hence maximising its profit.

1C)

PlanName	NumCustomers
UnlBasic	5
UnlPrime	4
Data50	4
Data25	2
Data10	2
UnlSuper	2
Data2	1

This table on the left shows us the number of customers that use every given plan that Excelsior Mobile offers. We can see that the Unlimited Basic plan has the most customers and Data 2 GB has the least customers. That being said we should market the Unlimited Basic plan more because it is the one used by most customers, so therefore there is potential that if we market it even more we might get even new customers who didn't use Excelsior Mobile start using it and join the Unlimited Basic plan.

Part A

Type	NumOfCuctomers
Android	14
Apple	6



The table on the left tells us the phone type that is used by Excelsior Mobile customers. As we can from the table, most customers use Android devices and few customers use Apple devices. 14 use Android and 6 use Apple.

PARTB

FirstName	LastName	Type
Reed	Richards	Apple
Steve	Rogers	Apple
Clint	Barton	Apple
Jane	Foster	Apple
Bucky	Barnes	Apple
Nathan	Summers	Apple



As we had seen from the table from part A they were six people who use Apple devices which is the least phone type used by most of the Excelsior Mobile customers. So these six customers are the ones we can send promotoins emails for the friends and family.

part c

FirstName	LastName	YearReleased
Ben	Grimm	2014
Jane	Foster	2017
Bruce	Banner	2016
Matt	Murdock	2017
Natasha	Romanova	2015
Bucky	Barnes	2017
Jessica	Jones	2017
Wade	Wilson	2017
Nathan	Summers	2017



This table on the left show us cutomers that have phones that were realeased before the year of 2018. This kind of information could help Excelsior Mobile know, that if maybe they bring an updated software or let's an updated plan, the kind of phones that won't be able to utilise their new update, and it will help them over view their invest in the new software that they will want to pu on the market to determine their profit.

City	DataUsage
Bellevue	64695
Olympia	35003
Seattle	31308

From the above table we can see that Bellevue is the city that uses high data and doesn't have unlimited plan. Other than that these three are the cities with high data usage customers but with no unlimited plans. Excelsior data might want to know this information so as to know the kind of income they get from the cities that don't rely mostly on unlimited plans, and get to know which city they should marketize more their unlimited data plans, or their limited data plans.

FirstName	LastName	Total
Frank	Castle	224.12
Tony	Stark	219
Nathan	Summers	204
Johnny	Storm	194.26
Wade	Wilson	179
Steve	Rogers	164
Matt	Murdock	159.41
Charles	Xavier	149
Eddie	Brock	141.5
Susan	Richards	139.41
Reed	Richards	139.41
Jessica	Jones	139
Ben	Grimm	131.5
Bruce	Banner	121.5
Peter	Parker	112
Natasha	Romanova	104
Clint	Barton	101
Jane	Foster	97.62
Carol	Danvers	87
Bucky	Barnes	74.71

This table on the left has information of the first and last name of the customers and their total bills. Excelsior Mobile might want this kind of information in order to know which customer they would like to award with discounts and promotions. In this case we can see that Frank Catle has the highest total bill which means that he is mostly probably likely to receive a discount from Excelsior Mobile.

4 B)

PlanName	TotalBill
UnlPrime	826.12
UnlBasic	741.23
Data50	495.5
UnlSuper	343.26
Data25	209.62
Data10	178.71
Data2	87

This table on the left shows us the mobile plan that delivered the highest total bill last month. As we can the UnlPrime delivered the highest total bill and the Data 2 GB delivered the lowest total bill. The Finance department will use this kind of information to know how much money Excelsior made and determine the budget for the coming months, and advise the excutive team if they have made enough money to start their expansion process.

5 A)

AreaCode	Minutes
253	988
360	855
509	715
206	702
425	533
360	365
253	359
360	352
206	320
425	311
425	288
425	257
360	250
206	212
206	155
425	125
425	125
425	112
206	101
509	78

This table on the left displays the area codes and the minutes the customers there use. As we can see the area code "253" has the most minutes used of 988 and the area code "509" has the most minutes used of 78. The area code could help Excelsior determine know more of their customers preferences and know how to serve them quality services depending on whether they enjoy using the minutes more or not.

5 B)

City	MinMinutes	MaxMinutes
Seattle	101	702
Spokane	78	715

This table on the left shows us the minimum minutes and maximum minutes used by different customers in these two cities which Seattle and Spokane. I could say that this could be because maybe the Maximum Minutes are coming from big organisations that use the Excelsior Mobile plan and they are to be calling and receiving calls 24/7., and the small minutes are coming from individuals that are using the minutes hence causing the big gap difference.