1903685 Shellya Nur Atqiya – Case Study Data Visualization Assignment

Visualisation #1: The Head of Consumer Banking is interested in which region has had the highest growth in customers in last 12 months, and for that region, which centres have had the highest growth in customers. Please consider and mockup a simple visualisation to answer her query.

Answer:

In this case, we want to compare the growth in customers for every region. For comparison, we could use line chart.

For example, if we have some data:

|	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
DKI Jakarta	480	470	530	580	630	600	620	560	580	630	610	700
Jawa Tengah	400	430	470	490	420	400	390	450	410	470	510	480
Jawa Timur	250	240	260	270	240	330	280	260	270	300	290	320
Bali	220	200	210	250	270	280	240	220	210	230	220	290
Jawa Barat	530	520	490	540	480	520	550	570	550	570	590	620

If we turn the data into line chart like this:
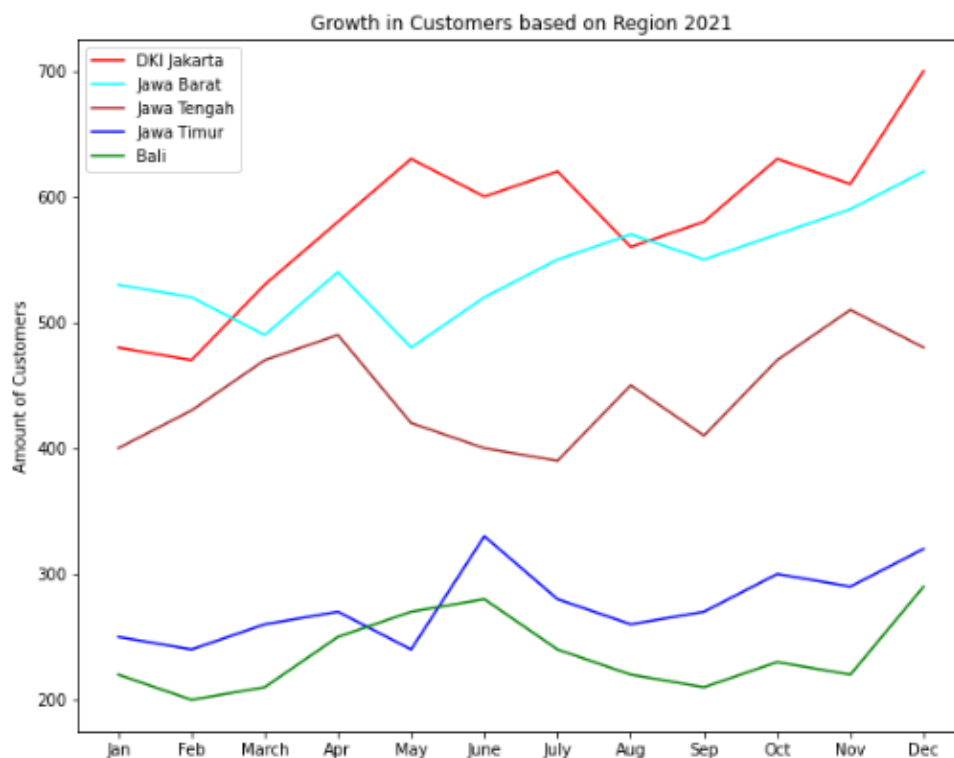
We could easily say DKI Jakarta had the highest growth in customers December 2021.

For example we have another data, The Amount of Customers on DKI Jakarta's Centres 2021.

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Centres A	120	127	138	167	184	178	183	148	159	180	178	246
Centres B	95	82	106	110	119	112	115	106	107	117	110	118
Centres C	98	95	102	105	115	109	113	107	107	115	109	115
Centres D	88	83	94	102	107	101	107	101	103	110	108	113
Centres E	79	83	90	96	105	100	102	98	104	108	105	108

We can turn the table into line chart again.
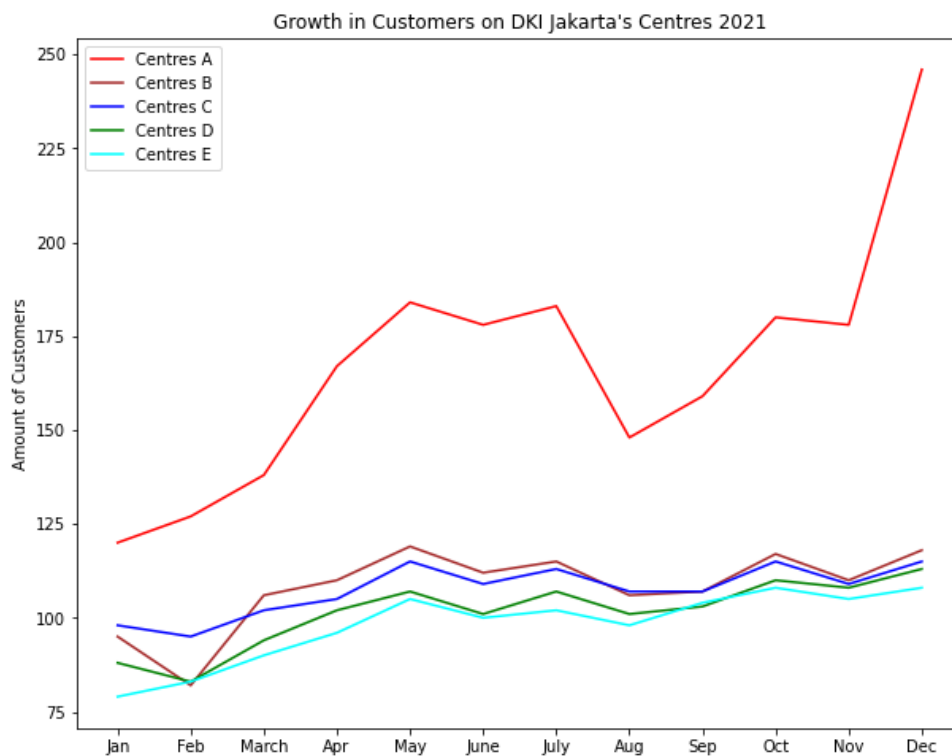
Obviously it's clear that Centres A had the highest growth in customers.

Region that had the highest growth in customers is DKI Jakarta and centres that had the highest growth in customers is Centres A.

Visualisation #2: The Head of Operations is curious as to whether the number of visits is drive exclusively by number of customers, or whether instead there are some centres with many customers and few visits or vice versa. Please consider and mockup a simple visualisation that will make this answer clear.

Answer:

In this case, we want to see the relationship between the values, we could use scatterplot.

For example, if we have:

	Customers	Visits
Centres A	30	60
Centres B	35	72
Centres C	40	86
Centres D	45	90
Centres E	50	99
Centres F	55	110
Centres G	60	115
Centres H	65	125
Centres I	70	140
Centres J	75	145

We could see the relationship between the variables with scatterplot:

Correlation between Number of Customers and Visits in 10 Centres
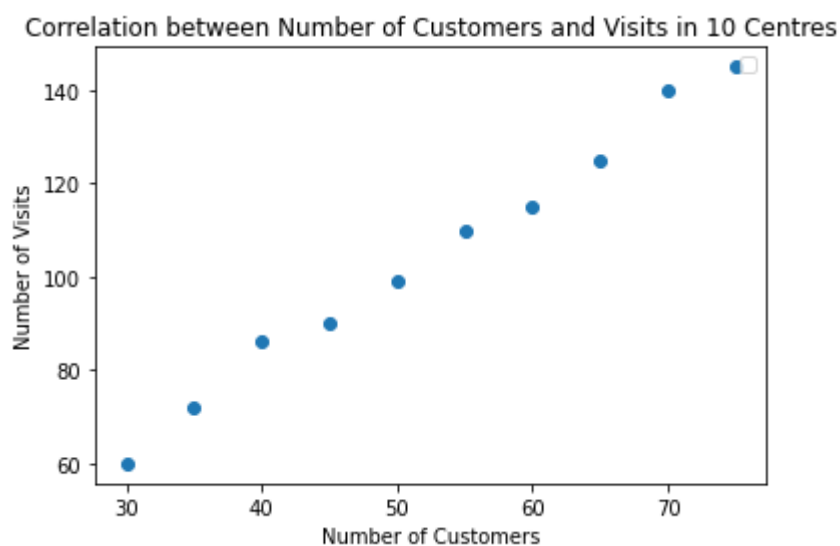
This means that the number of visits is drive exclusively by number of customers, if there are many customers, then there are also many visitors.