Marketing Analytics
Professor Doctor Swagato Chatterjee
Vinod Gupta School of Management
Indian Institute of Technology, Kharagpur
Social Network Analysis and Excel Dashboards (Contd.)
Lecture 66

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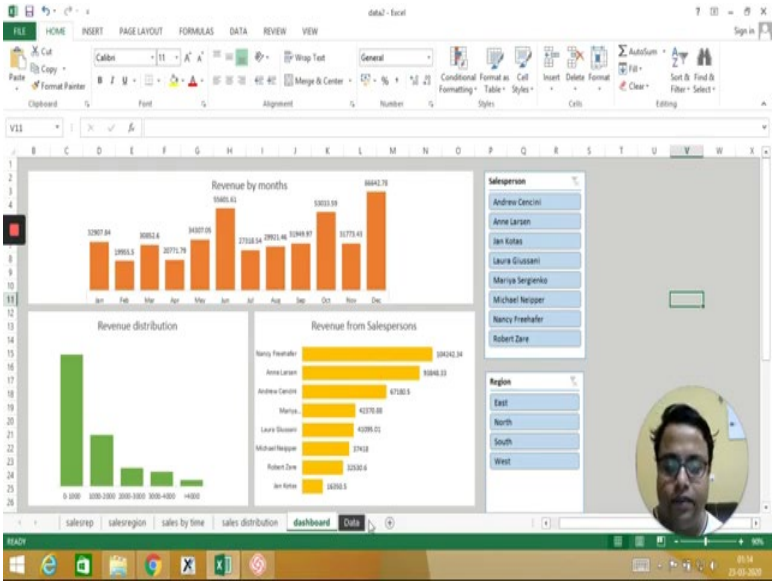

Welcome to Marketing Analytics course. This is Doctor Swagato Chatterjee from VGSOM IIT Kharagpur who is taking this course for you and this is probably the last video of this particular course, and we will in this particular video I will be showing how to create this dashboard from a dataset like this which is a scratch dataset, absolutely scratch.

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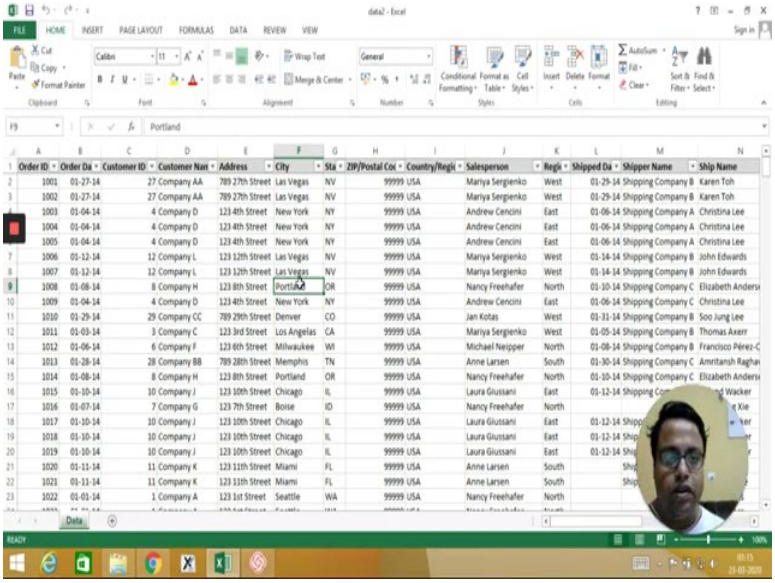

So first thing I will do is I will delete all these things. So I will delete this particular dashboard and then all that individual, all the individual pages I will just delete them so that I can create a fresh one. So the first job when you create a dashboard is to just visualize what will be there in the dashboard.

So if you remember that we will have sales per month at the top, and then sales per region and sales per salesperson in somewhere and I will also have the invoice size distribution. So let us create one by one, these charts. So to do that we will use something called a pivot chart. What is a pivot chart?

Pivot chart is something where you can put some values in the row, some values in the columns and this wherever you put rows and columns, it is better to be something which is categorical and there is values in the numeric and those values can be numeric sum or numeric average, we will see. So to start with let us say, what I have to do is I have to go insert and then insert pivot table.

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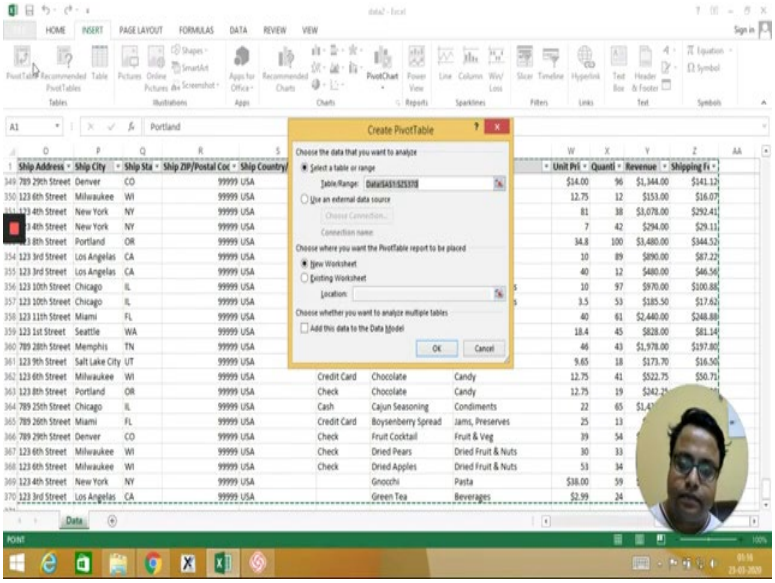

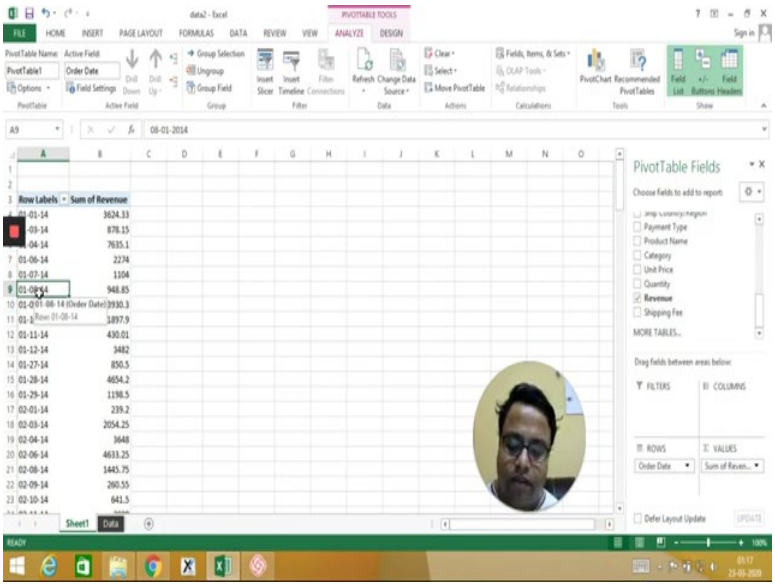

While doing this pivot table at least, means before you go ahead here, you have to select any cell which is not blank in the table, and then you go to pivot table. It will automatically capture the table. If you want to, if you do not know how to capture then you have to get this table range manually and then press okay.

So then it comes up with a new page which is basically the, so I will shift this one probably here that is what will help to see that. You see that there is something called, there is something called the Revenue and then I want the year-wise revenue or month wise. So where would I get month from? This order date, so let us put it this here. I will put this revenue here.

So then what I have here is for every date, there is how much revenue? Now I do not want it date-wise, I want it month-wise.

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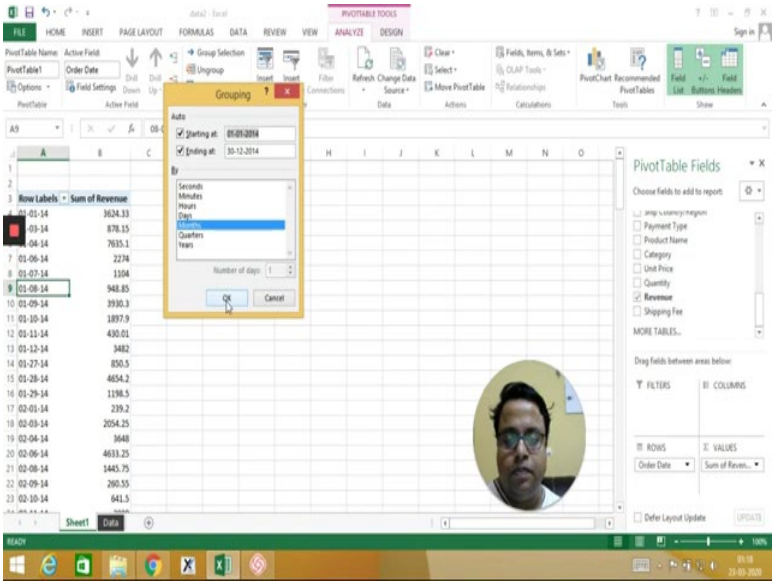

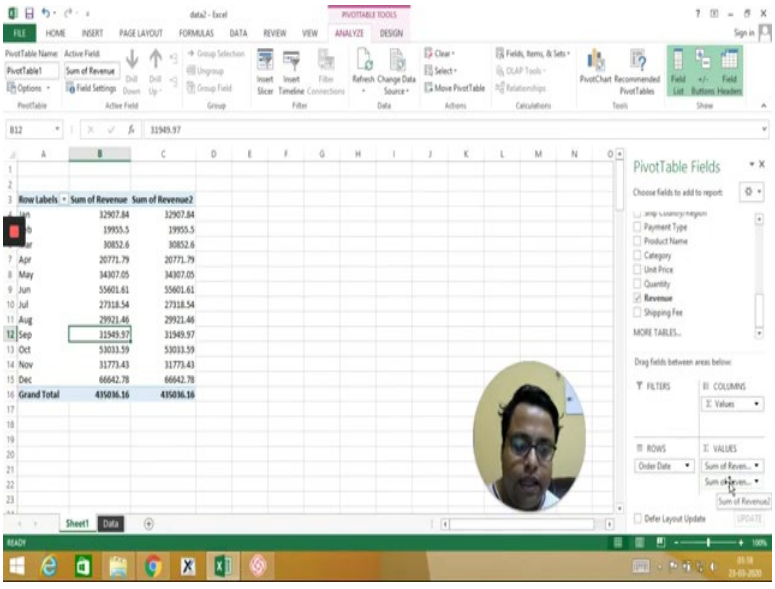

So select any date and then right click on it, you have to group. And once I go to group, it is saying that these dates are starting at first of January 2014 and goes, the last date is 30th of January 2014. So it is the 2014 data and how do you want to group? Do you want to group it based on seconds or minutes or hours or days or month or quarter or year?

So let us say I want in months. So press okay, so now I have for various months various sum of revenue. I can also make it average of revenue or something but I want sum of revenue itself. If you want, let us say along with this, you want the number of invoices that is getting generated.

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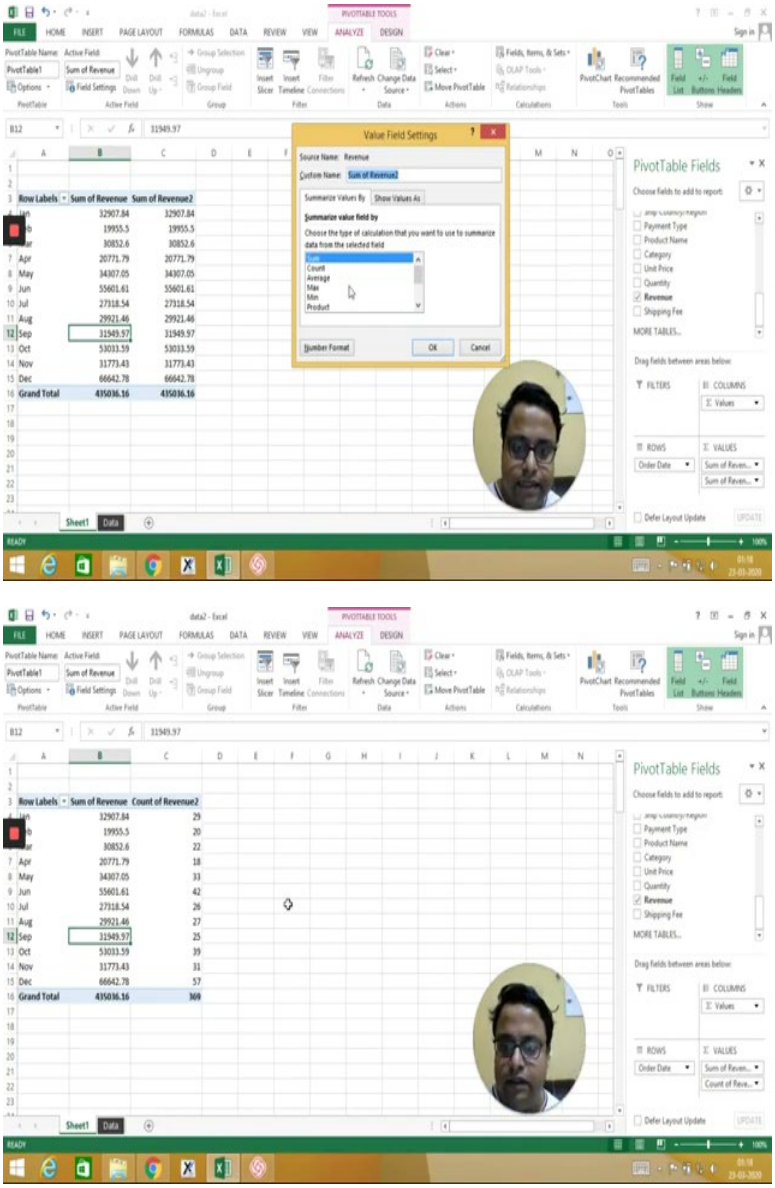

So you can bring in revenue and then change it to count of revenue. What did I do? I dragged revenue once more and then I clicked here, value field set settings and make it count. So count of revenue is basically how many invoices we have. Okay now if I try to plot these two values in a chart.

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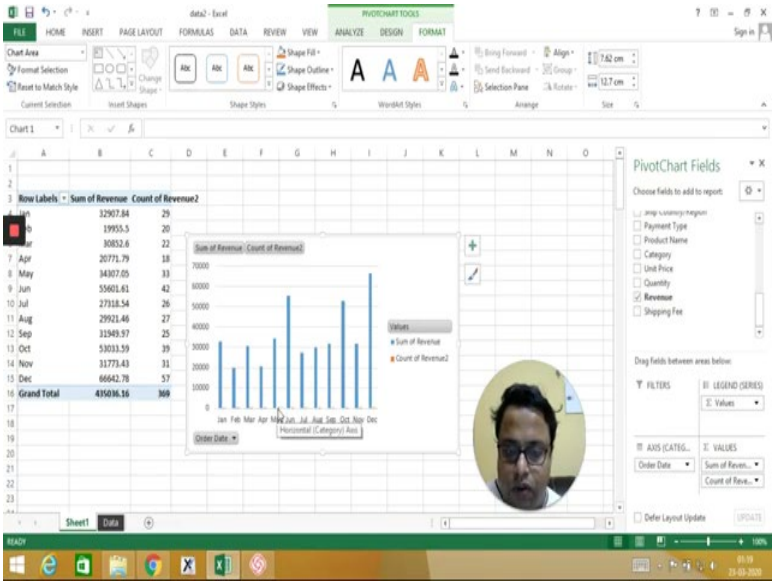

Let us say insert a pivot chart and, so let us say this is one pivot chart that I want to make. If I press okay, the pivot chart will be made. But see this count of revenue is coming very small, that is because the scales are different. So I will include probably a different scale, so let us see whether that can be done or not.

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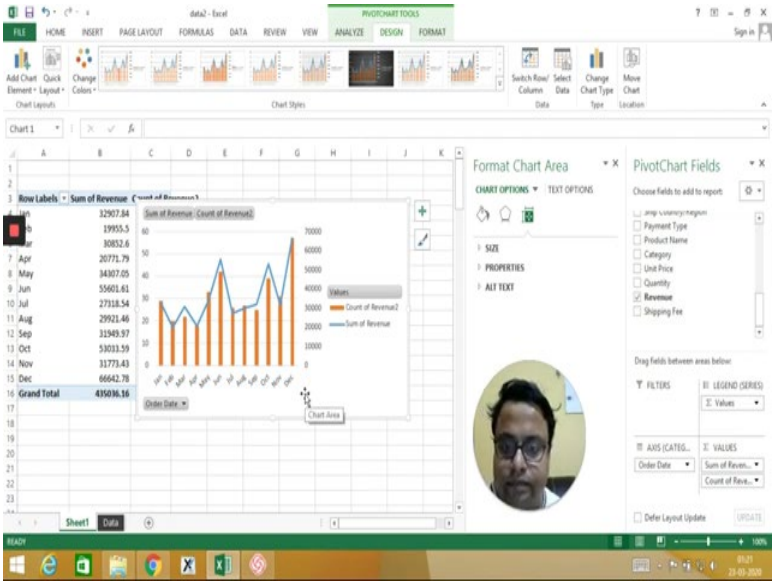

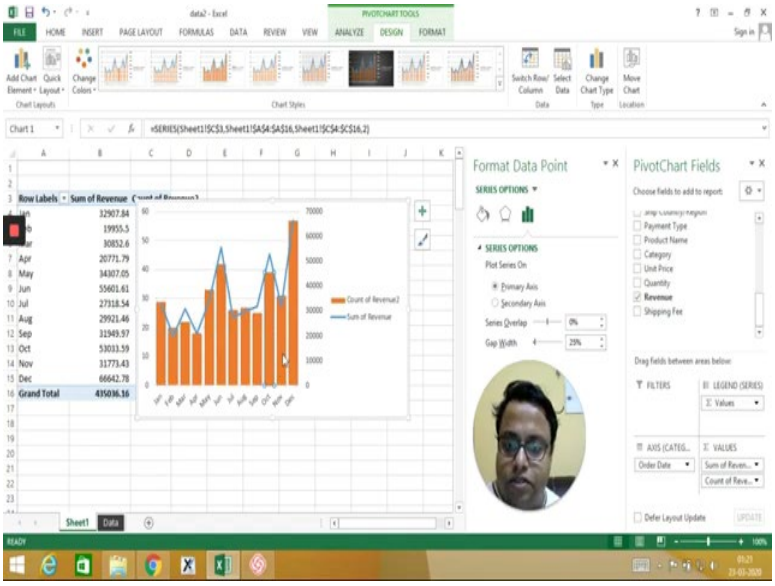

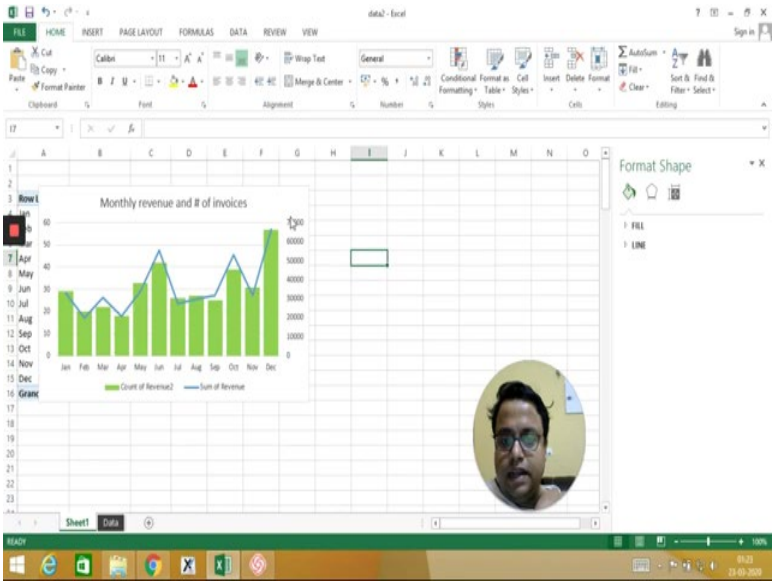

How to include the second one, okay or let us say this one itself, can I shift the, for my data series? And here I make it secondary axis. So if I now make this one as secondary axis, so I now have values which are, okay so instead of standard bar chart let us, why do not I change the bar chart type and make it, let us say, the combo chart.

Where the first chart and the second chart is, this one is secondary axis and instead of clustered column, yeah this is clustered column and this one is also clustered column, okay, and what can we do? Let us make it, instead of clustered column, let us make it a bar chart. Can it be done? Yes. Now this is something which looks good.

Or the opposite, make this line and make this bar. So this looks good in my eyes. So this is up to you how you will do, so sum of the revenue and this thing. And then I can probably, to make it look better, I can probably hide all the field buttons and then I can select this and reduce the gap width by, let us say 25 percent and make this 25 percent which is a little bit fatter and then I can change probably the colors also.

So I can make it some other color, the fill might be let us say green or yeah, this green, so little bit better in my eyes. And then this should, this may come down. So let us say the legend should come at the bottom. So let we just find out how to put it, legend, and move their position to bottom.

So there should be a chart title also. Okay data labels do you want? It becomes clumsier, we will not want. Chart title and title will be the Monthly Revenue and, let us say Number of Invoices that is one chart that we have created till now, fair enough.

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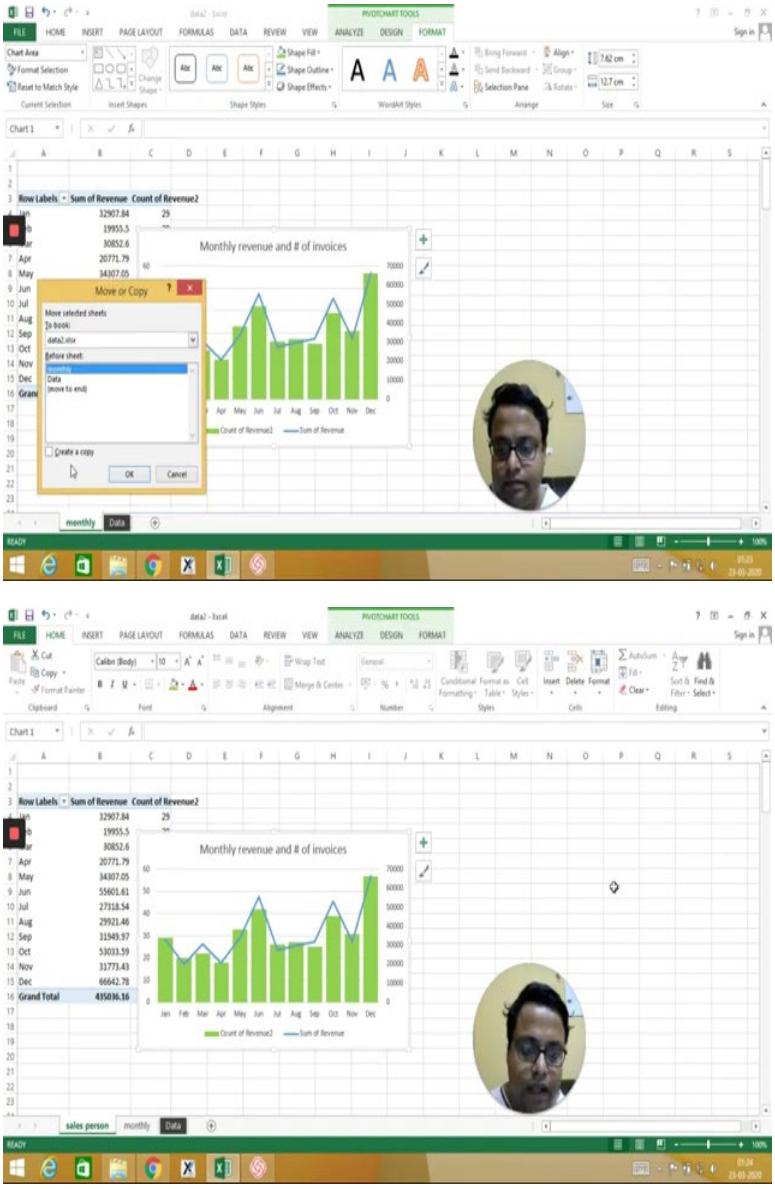

So similar thing I will be doing, instead of monthly, exactly same, I will just probably rename this one also, okay this is monthly. I might want to see the same thing for different regions and then different salespersons. So what I will do is I will create a copy and rename it as salesperson.

Now if you are using older version of Excel you should not create a copy. You should create another dashboard from here, like from inside the Pivot chart and etc, so another pivot chart. But if you are using 2010 then this is okay. So anything which is, let us say Windows 2010 or 13 this thing can be done.

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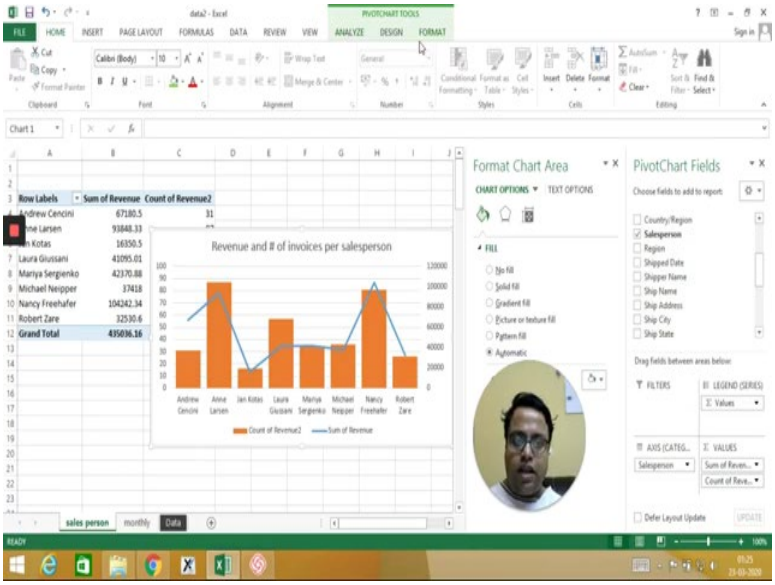

So now instead of month, okay in the field it does not come, we have to select like this. Instead of order date I want, let us say the salesperson. So I have the same values for the salespersons. I can change these things, the color I can change, the field I am changing to a different color.

Let us say here I will put orange, and this is revenue and number of in-charge per salesperson. So that gives me another chart. And if I do not want this kind of a chart, I can change the chart type also. So let us change the, or can I do this? No that makes it look very bad, okay, Crtl+Z, Crtl+Z I will change chart type.

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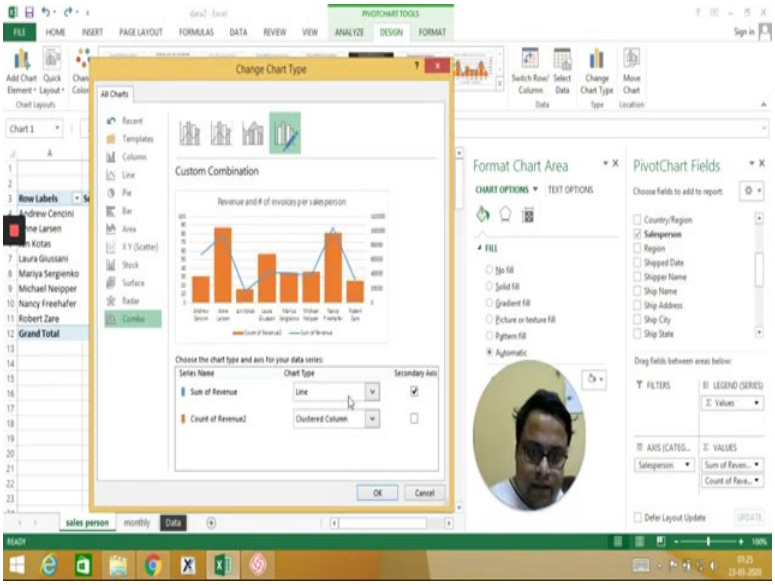

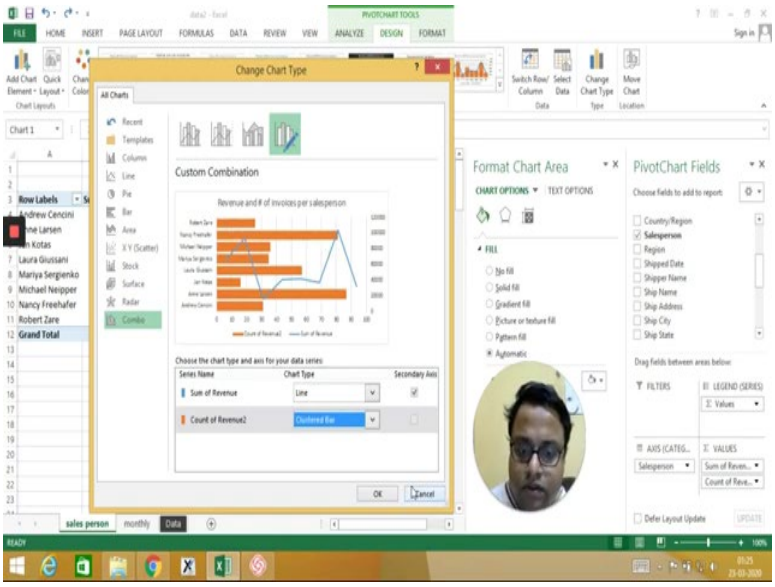

So here this one, can I make a bar chart? No, because bar chart and line chart will not work together so cancel, so let it be. Fair enough so the next one is nothing but another thing which is move or copy.

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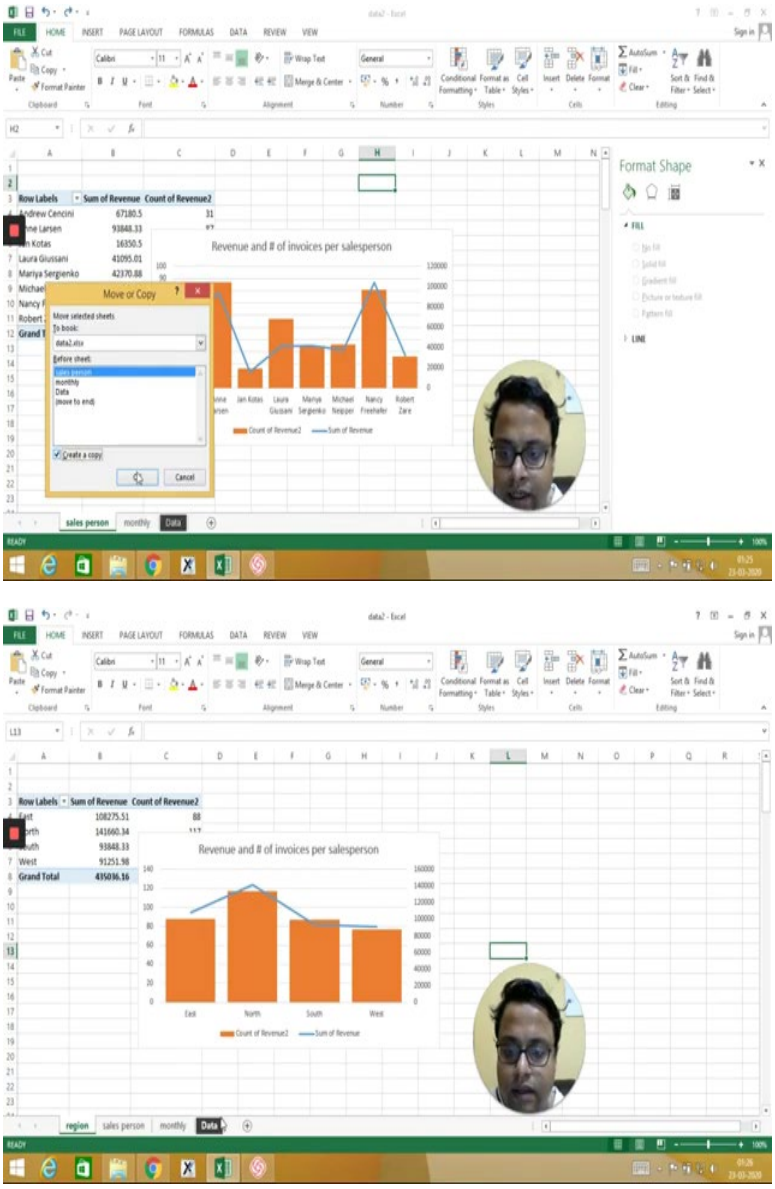

And create a copy and now instead of salesperson this should be region and instead of salesperson here also it should be region. This one is straightforward. So I have count of another total revenue per region as well.

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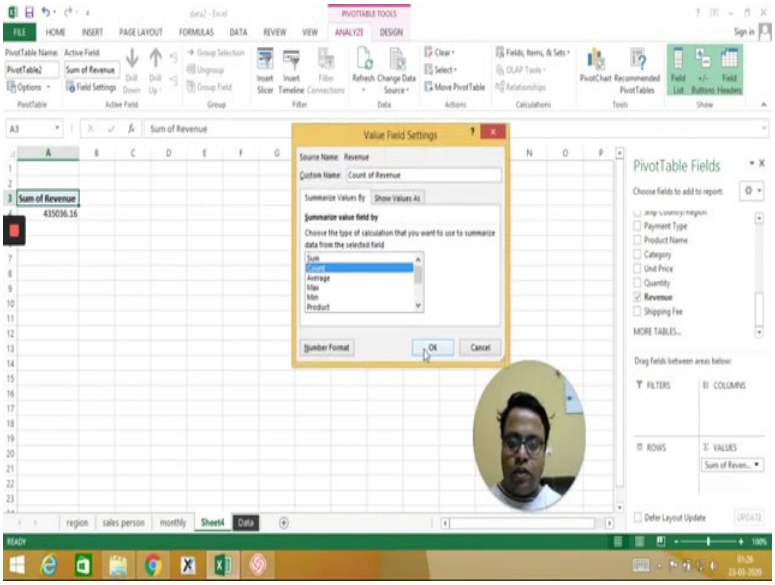

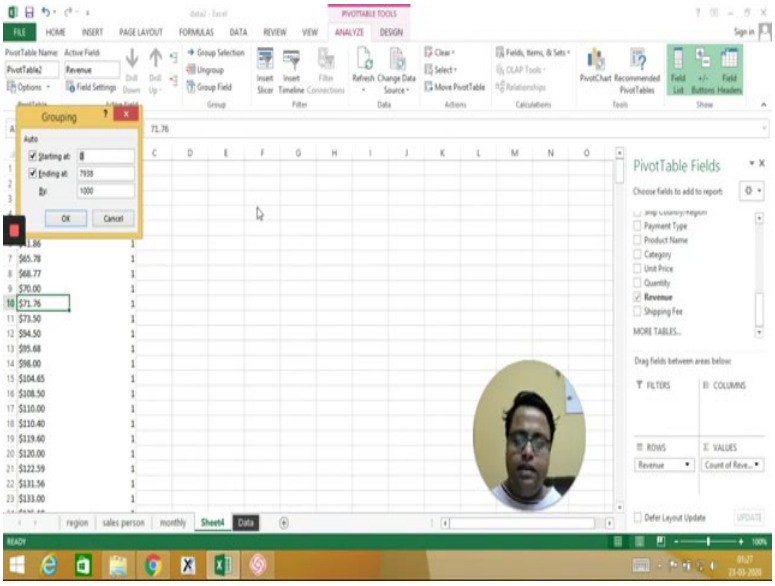

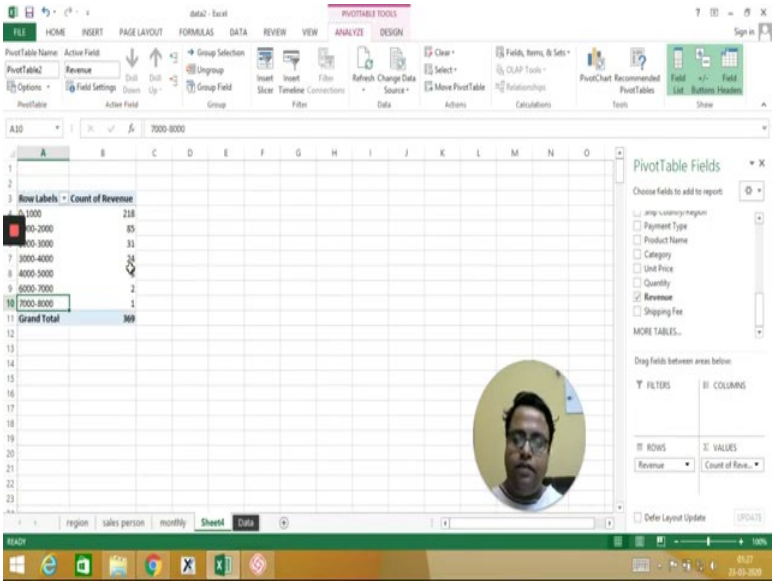

So once I have this I want the another pivot table, which is based on the count of revenue, so which is based on that? Invoice size. So what is invoice size if you understand? So invoice size is like I want to know between 0 to 100, 100 to 2000, sorry 0 to 1000, 1000 to 2000, 2000 to 3000, and so on how many these things are there?

So the count is important. So instead of sum I will put here count. So total these many revenues are there and these are the values. So 0 dollars there are 3, 38.5 dollars there are 2, 71.76 dollars there are 1 and so on.

Now I have to group these guys up. So I will select any one and then group, right click and group. It is saying that it starts from 0, goes up to 7938 by a jump of 1000, would you like to go for that? So let us say okay, so it gives me this kind of a graph and if I try to plot them in pivot chart.

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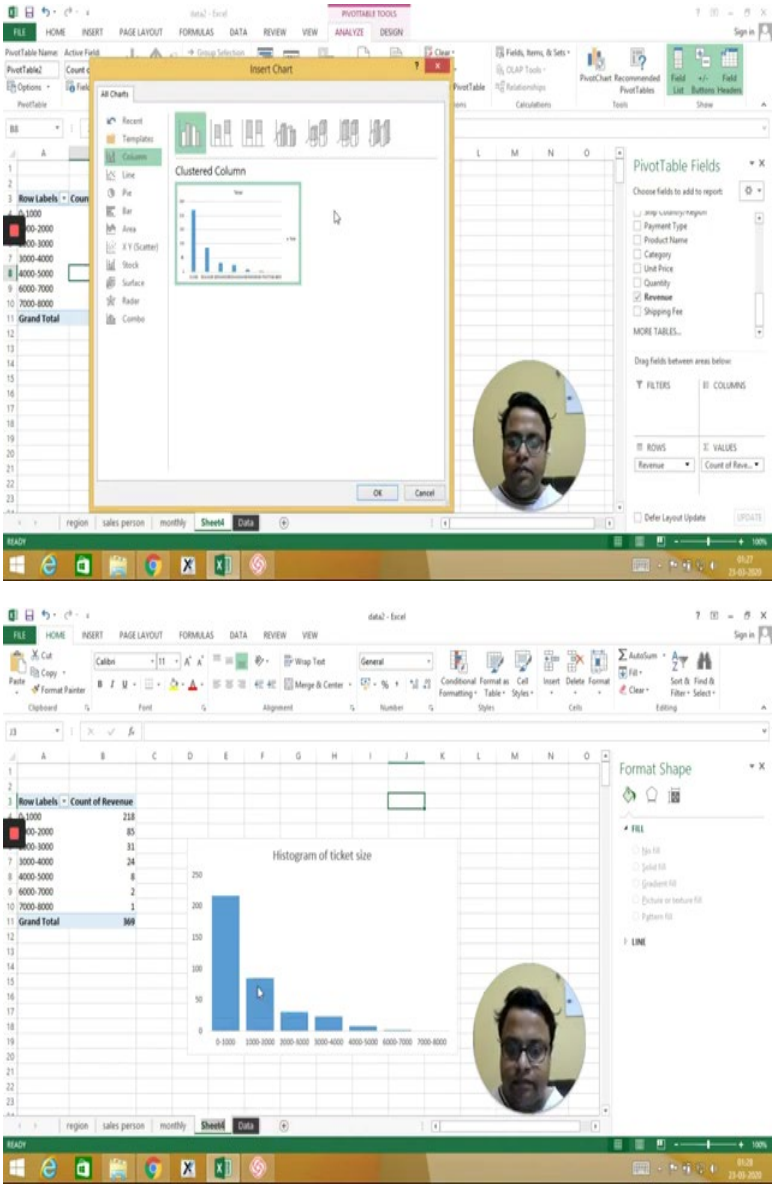

I get something like this. So again I will remove this, so remove all, hide out field settings, I will delete this one, I might remove this one. I might have, from my data series I might reduce the percentage to let us say, 25 percent again and I can say this is the histogram of ticket size, fair enough and I can name it histogram. So I have made all these graphs.

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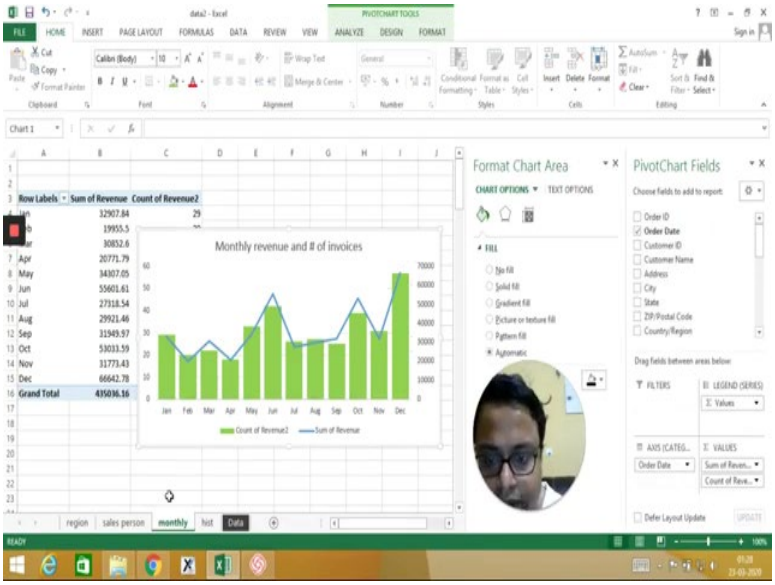

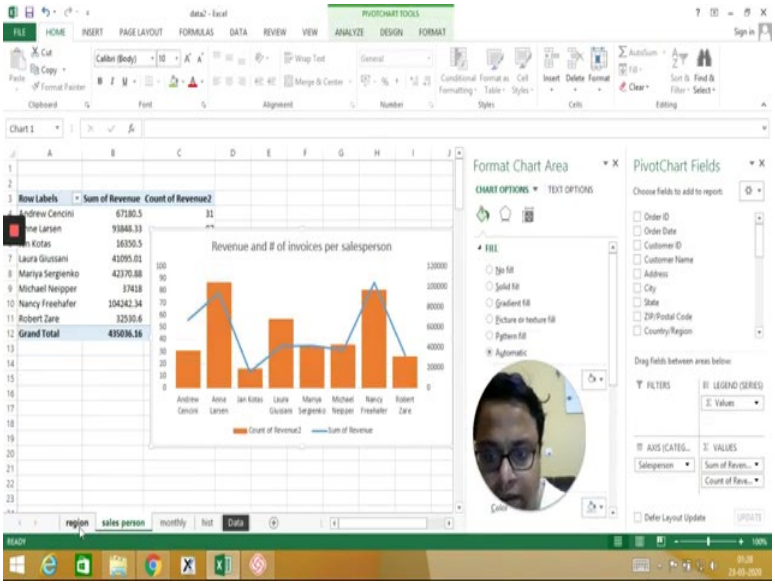

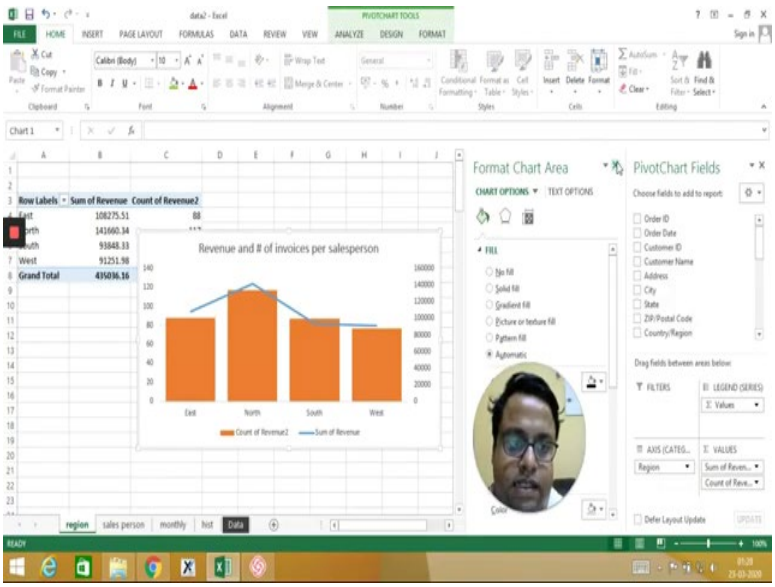

One is monthly and then there is Salesperson-wise, this Region-wise, now my job is to put all of these things in a dashboard.

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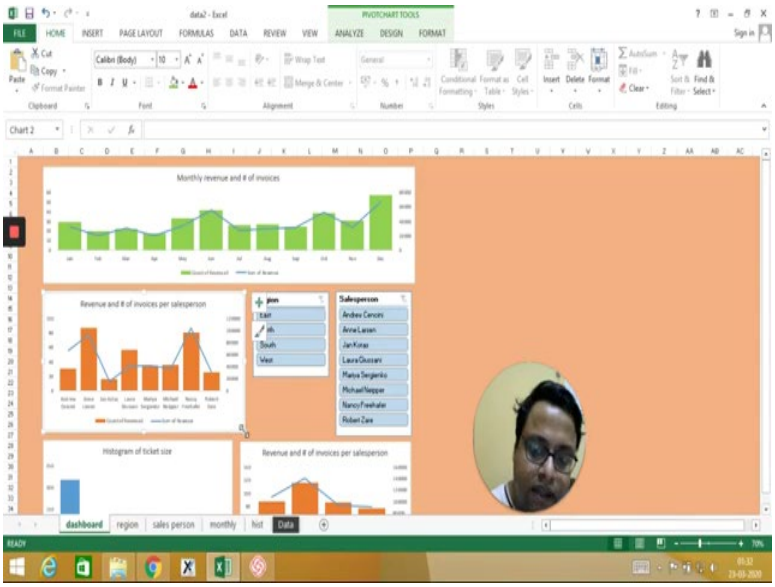
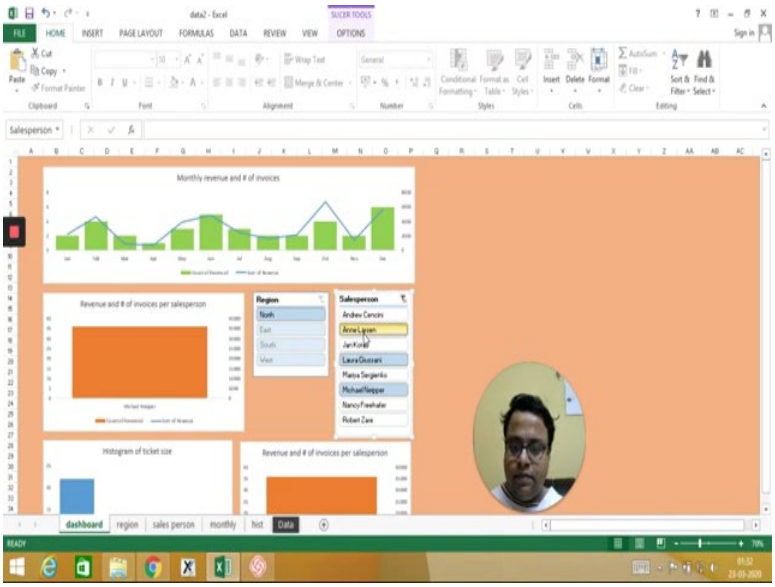
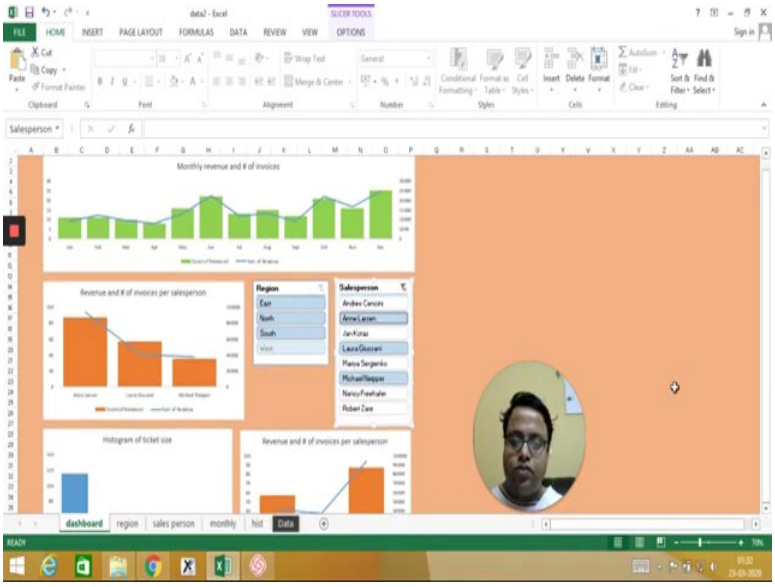



data2 - Excel
Monthly revenue and # of invoices
Revenue and # of invoices per salesperson
Region
North
East
South
West
Salesperson
Andrew Cencini
Anne Larsen
Jan Kotas
Laura Giussani
Marya Sergienko
Michael Neipper
Nancy Freehafer
Robert Zare
Histogram of ticket size
Revenue and # of invoices per salesperson
dashboard
region
sales person
monthly
hist
Data
READY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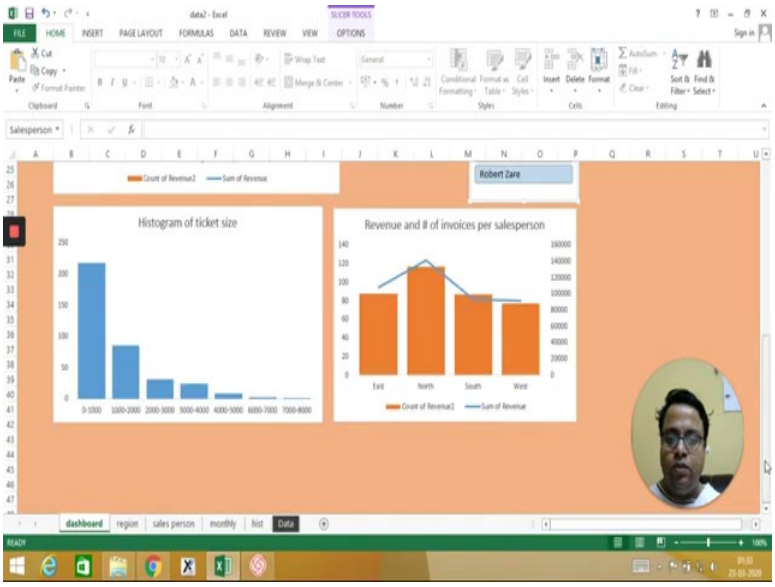
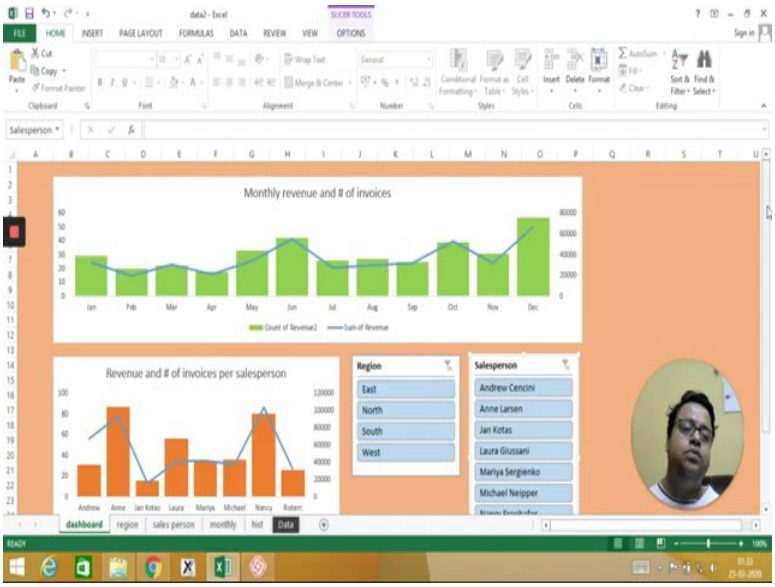

data2 - Excel
Count of Revenue2
Sum of Revenue
Robert Zare
Histogram of ticket size
0-1000
1000-2000
2000-3000
3000-4000
4000-5000
6000-7000
7000-8000
Revenue and # of invoices per salesperson
East
North
South
West
dashboard
region
sales person
monthly
hist
Data
READY



So I create a new sheet which is called dashboard. It is a blank sheet. Select all the cells and give a fill. So I say this is my fill of backend. Now my job is to just copy and paste. So copy this thing and paste it here. Depending on my size, requirement and etc I will size it and then salesperson I copy it and there, then resize it based on your size requirement, I am just making it a little bit smaller, does not matter.

So yes, done it, I will make it bigger a little bit, fair enough and then I do the same thing with the region one. In the dashboard I have copied the Region and then I paste it and then resize it as per my requirement and probably I also bring in this Histogram, okay. So this is my Histogram.

I will bring this one here, okay fair enough. This is my Histogram. Let us resize this one little bit. Now I need the filters. So what are the filters that I had, if you remember? I had the salesperson name. You can have whatever filter you want.

So Analyze, select any one of these charts and go to analyze and there is something called Insert Slicer available from Excel 2007 onwards. Before that it is not there. So insert slicer, it is not insert filter, it is insert slicer. And let us say I need this Salesperson and Region. So when I just press okay, these two slicers comes up. This is slicer number 1 and this one is slicer number 2. So let me show you what it do.

Now if I select let us say Region and the graph changing, if I select the Salesperson name, the graph is again changing. But you see that only one graph is changing. This graph, this graph and this graph is not changing. And why is that? Because these 3 graphs are not connected with this slicer.

When I inserted this slicer I selected this particular graph not the other 3 graphs. So there is some way I have to connect this 2 slicer with the other 3 graphs. Easy, right click on it. There is something called Report Connections. Check all these things, again right click on it. There is something called Report Connections. Check all the three.

Once you do that, now it gets connected with all the slicers. So if I select this everything gets selected. If I select multiple, again all the charts are getting selected. So now I have created a true interactive dashboard. I can make it bigger in size and you can share this kind of a dashboard with your boss or whoever to demonstrate the result, to diagnose the result further.

So this kind of a dashboard is very easy to make in Excel, similar thing you do it in, when the data size is much bigger and more complex you can do it with BI Tools but that is out of scope. Here it is a simple, easy, everyday kind of a Excel-based dashboard is what I have shown.

So thank you very much. Thank you for being with me in this particular course. You have came a long path. Be safe, be happy and try to use whatever you have learnt in this Marketing Analytics course in your daily life. Keep practicing that also. Thank you very much. I will see you in a different course probably in some different set of videos and let us have a very happy learning life. Thank you.