

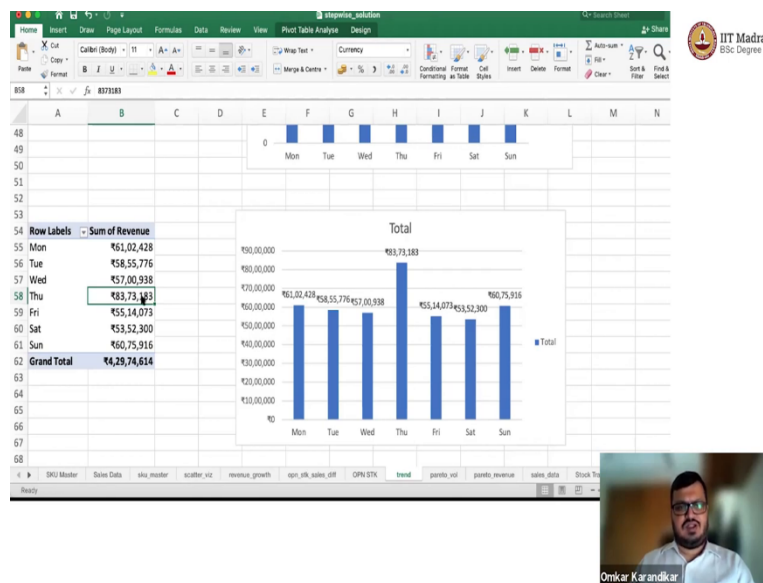
**Business Data Management**  
**Professor G. Venkatesh**  
**Professor Doctor Milind Gandhe**  
**Professor Omkar Vinayak Karandikar**  
**Indian Institute of Technology, Madras**  
**Sales trend Presentation**

Professor Omkar Karandikar: So, can we look at any trend in the data from a growth perspective, is there any trend that day of the week or in general work 15 days, do you have something around that?

Professor Doctor Milind Gandhe: Well, we did look at some of the data based on day of the week.

And let me share my screen. Yes. So, this is a volume chart by day of the week.

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Professor Omkar Karandikar: Interesting, I do not believe Thursday should be that high. Normally, unless there is something fishy about it.

Professor Doctor Milind Gandhe: We are seeing that spike on Thursday, Omkar even in terms of revenue.

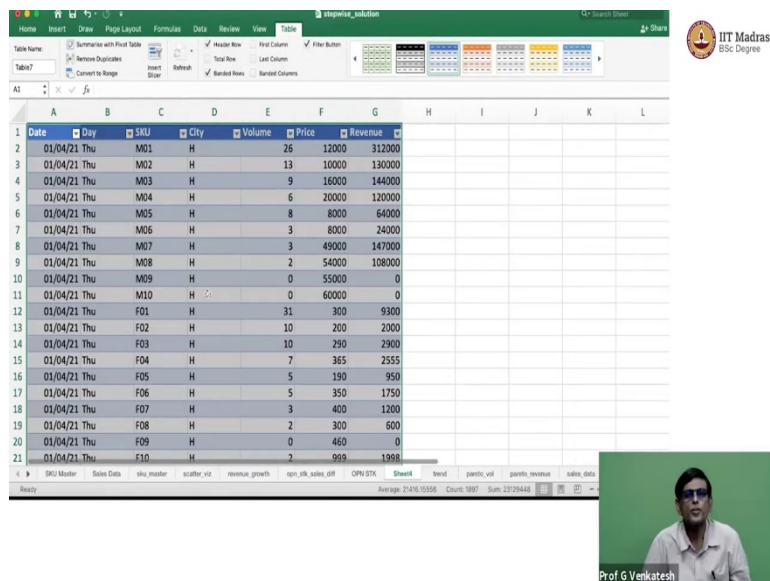
Professor Omkar Karandikar: I do not think, is like any other day. There is something we can do to get limited detail. What is happening on Thursday? Can we see that?

Professor Doctor Milind Gandhe: How do you think we can check that?

Professor Omkar Karandikar: You just double click, it will open above.

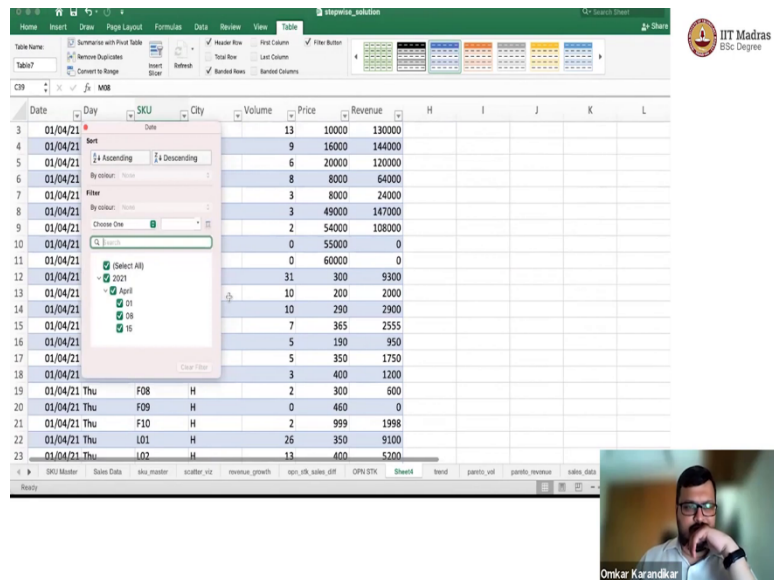
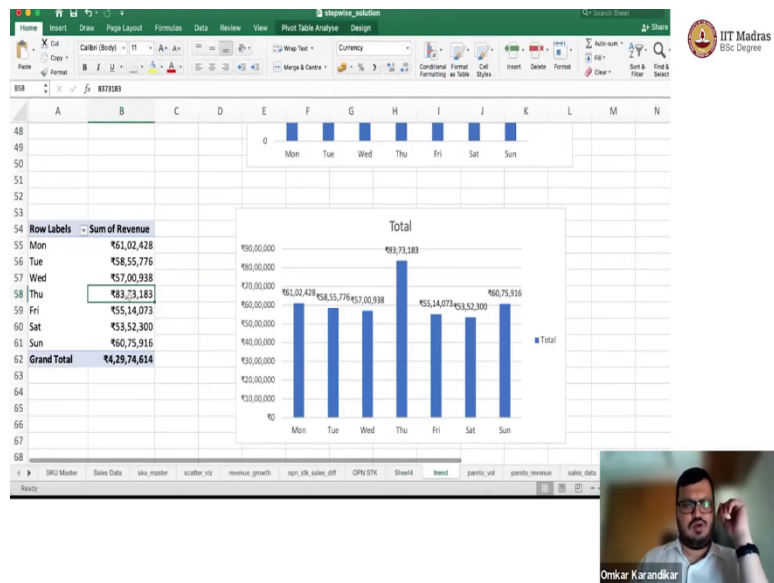
Professor Doctor Milind Gandhe: Okay so double click on Pivot tables

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The screenshot displays an Excel spreadsheet with a table of sales data. The table has the following columns: Date, Day, SKU, City, Volume, Price, and Revenue. The data is filtered for Thursday (Thu) and sorted by Volume. The Revenue column shows values ranging from 0 to 312,000. The bottom right corner shows a video feed of Prof G Venkatesh.

Date	Day	SKU	City	Volume	Price	Revenue
01/04/21	Thu	M01	H	26	12000	312000
01/04/21	Thu	M02	H	13	10000	130000
01/04/21	Thu	M03	H	9	16000	144000
01/04/21	Thu	M04	H	6	20000	120000
01/04/21	Thu	M05	H	8	8000	64000
01/04/21	Thu	M06	H	3	8000	24000
01/04/21	Thu	M07	H	3	49000	147000
01/04/21	Thu	M08	H	2	54000	108000
01/04/21	Thu	M09	H	0	55000	0
01/04/21	Thu	M10	H	0	60000	0
01/04/21	Thu	F01	H	31	300	9300
01/04/21	Thu	F02	H	10	200	2000
01/04/21	Thu	F03	H	10	290	2900
01/04/21	Thu	F04	H	7	365	2555
01/04/21	Thu	F05	H	5	190	950
01/04/21	Thu	F06	H	5	350	1750
01/04/21	Thu	F07	H	3	400	1200
01/04/21	Thu	F08	H	2	300	600
01/04/21	Thu	F09	H	0	460	0
01/04/21	Thu	F10	H	2	989	1998



Professor Omkar Karandikar: Yeah, one pivot tables. If you open up, I think that should open up with details. Let us see which SKU's packing, this is something else. Okay. These are all [Non audible]

Professor G. Venkatesh: Go down this list.

Professor Omkar Karandikar: Can you just filter for the dates?

Professor Doctor Milind Gandhe: So, this is only the Thursdays I think, so that I clicked on what I did.

Professor Omkar Karandikar: Can just go to the original table and see if there is data for everything, I can see only four data there. Just filter for the date there, on the header.

Professor Doctor Milind Gandhe: Filter for the?

Professor Omkar Karandikar: First column, just click the first column drop down.

Professor Doctor Milind Gandhe: Okay.

Professor Omkar Karandikar: Yeah, I think that is a story, right?

Professor Doctor Milind Gandhe: So, there are three Thursdays.

Professor Omkar Karandikar: Yeah, so that is something which is affecting the data. So, Thursday.

Professor G. Venkatesh: We should do 14, we should not do 15 days, we should do 14 days.

Professor Doctor Milind Gandhe: Yeah, may be.

Professor Omkar Karandikar: Yes.

Professor G. Venkatesh: Two weeks, is 14 days we have got 15 days. Oh, I see Thursday, So, Thursday, has come three times.

Professor Doctor Milind Gandhe: Yeah. If I account for let us say, two third of that it should be equal, I think, more or less the number should be equal.

Professor G. Venkatesh: Yeah.

Professor Doctor Milind Gandhe : Yes.

Professor Omkar Karandikar : We do see a level of spike when it comes to Sundays, Saturdays and Sundays because of weekends, but not Thursday. For sure. That is for sure.

Professor G. Venkatesh: So this is a interesting thing here Omkar that you had the knowledge that Thursday is not any special day. I mean, we could have been like data scientists without knowledge of anything. We could have looked at this and come up with some fantastic interpretation or some great thing that happened.

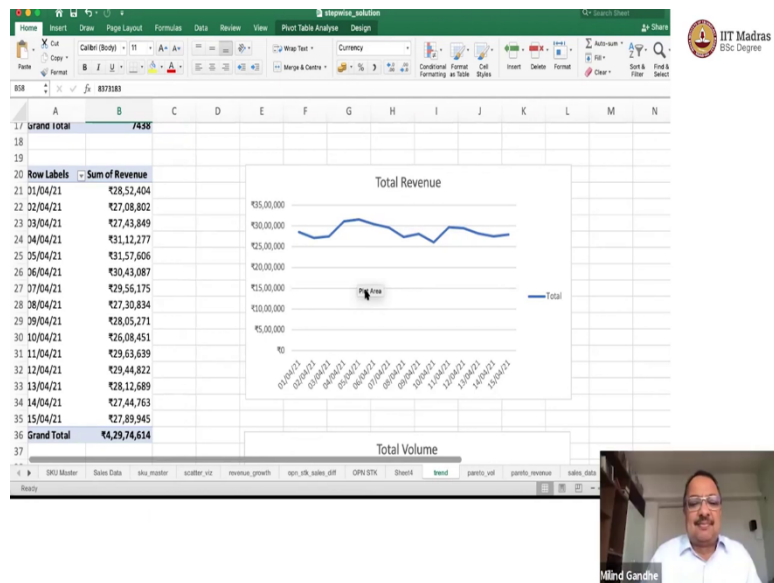
Professor Omkar Karandikar: Exactly, that is why of course I have to work together.

Professor G. Venkatesh: Misinterpretation, actually..

Professor Omkar Karandikar: Yeah.

Professor G. Venkatesh: Interesting. All right.

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Professor Omkar Karandikar: Yeah.

Professor G. Venkatesh: Interesting. All right.

Professor Omkar Karandikar: Can we look at the daily trend I think it is, let us see, I honestly 15 days is not good enough. But let us see if there is a daily trend.

Professor Doctor Milind Gandhe: We did plot that. we plotted the,daily revenue.

Professor Omkar Karandikar: Yeah.

Professor Doctor Milind Gandhe: And roughly seems to be oscillating somewhere between 25 and 30 lakhs but no trend is visible.

Professor Omkar Karandikar: That is good, I think the trend is not visible, I agree with you. But I think this is too short period to look at trend fine I think and I am okay with you in that.

Professor G. Venkatesh: This is also interesting, right? The fact that we have studied revenues daily revenues also must be interesting, right?

Professor Omkar Karandikar: Yes, so if you look at it, there are a couple of days where we are shot up about 30, we do special interventions. We have weekend sales and all, 4th April, I suppose was a weekend Thursday, sorry, Saturday or Sunday. So, then there was a sale around that and hence it has spiked so that that is a BU business as usual for us. Yeah. So, it will be within let us say 25 to 30 lakhs it is some spikes coming because of sale which are other.

Professor Doctor Milind Gandhe: So, one thing I have noticed Omkar, when you go into a mall, of course, none of us have been in the mall in a very long time. But when we used to go to the malls, malls used to be empty from Monday to Thursday.

Professor Omkar Karandikar: Absolutely.

Professor Doctor Milind Gandhe: And they used to be packed from Friday afternoon to Saturday, Sunday.

Professor Omkar Karandikar: Yes.

Professor Doctor Milind Gandhe: So, e-commerce also do you see something like that?

Professor Omkar Karandikar: A bit of it. Good part of e-commerce is a lot of sale happens either from home or from office. if you really looking into the data. I see a spike in orders after 9 o'clock in the night.

Professor G. Venkatesh: Oh, 9 o'clock.

Professor Omkar Karandikar: That is a prime time, when people have had their dinner, they have spare time. So probably they will scroll and buy something. Interestingly the other spike happens at 4 o'clock in the morning. Yeah.

Professor Doctor Milind Gandhe: 4 o'clock in the morning?

Professor Omkar Karandikar: Yes, these are typically the early risers or typically let us not brand but typically the folks who work on multiple shifts and stuff like that. If I had to just give an example typical example will be BPO employees who are well and who are typically good on e-commerce, right?

Professor Doctor Milind Gandhe: Right.

Professor Omkar Karandikar: So it is not a big spike as it happens on 9 o'clock but these are normally the two spikes within a day.

Professor Doctor Milind Gandhe: Very interesting.



Professor Omkar Karandikar: Apart from that weekly there is spike, there is little bit of uptake which happens on Saturday and Sunday. Even people have time people will keep on buying so that is what we look at, so we will have some offers, special offers running on Saturday and Sunday, which will have a little bit of more off-take. But we do not do that every Saturday, Sunday, there will be some select opinions where we have to respond to that.

Professor Doctor Milind Gandhe: I see. So, and the other thing I have noticed is when I go into a mall just before Diwali.

Professor Omkar Karandikar: Yeah.

Professor Doctor Milind Gandhe: Then there is a big crowd there.

Professor Omkar Karandikar: Yes.

Professor Doctor Milind Gandhe: So how does that happen in e-commerce?

Professor Omkar Karandikar: For ecommerce, Diwali is even bigger for Flipkart you would have heard about it.

Professor Doctor Milind Gandhe: I see.

Professor Omkar Karandikar: You would have heard about big billion day.

Professor Doctor Milind Gandhe: Yes.

Professor Omkar Karandikar: So big billion days by far the biggest day in the year perspective we have started preparation of big billion day as early as from let us say May and June.

Professor Doctor Milind Gandhe: Wow. So, when it will be in October, this year?

Professor Omkar Karandikar: Yes, around Diwali, so sometime in October around Diwali time. So that is a big affair for us it is like the highlight of e-commerce. Platform has their special days for let us say my sister concern which has Myntra there will be something called EORS, end of season sale they call it end of reason sale. So, there are special days for each platform but Diwali is big for everyone.

Diwali is a big event, there are special launches which happen on Diwali. There are special offers which are launched in terms of credit card offers. Credit card offers is a big driver of e-commerce. So, there are special credit card offers which are launched.

There are some special contests which are held. So, 2 years back, we offered some 10 limited edition bats signed by MS Dhoni as a move toward customers, it becomes a very interesting proposition.

So, there are specific to BBD SKUs which are planned and launched by brands, which are available only for that particular duration of 5 to 6 days. So, it is a very crazy offer. It is a very interesting time, a lot of good offers a lot of customers come to the platform and they stay with us. So, it gives the opportunity of having a customer wise growth year on year growth.

It is a big driver for us from customer. And it is also a way for us to say whatever scale we can offer at all India level; how do we best leverage it to give the best possible prices to customer. So, replacing it is definitely the highlight of the Year for e-commerce platform and we start preparing for that 6 month earlier as early as 6 months earlier.

Professor Doctor Milind Gandhe: Yeah, so two things stuck me as very interesting in what you just told me, Omkar. One is this thing that you are actually preparing at least 5 to 6 months before a big sale.

So, that that definitely was not something that I realized. But the second thing GV is more, it is maybe we look at the at least one company that does credit cards or something like that because Omkar said that credit card offer seems to be a big driver of e-commerce.

Professor G. Venkatesh: Yes, you have a case coming later on, which is related to cards, I think that should be interesting, yeah.

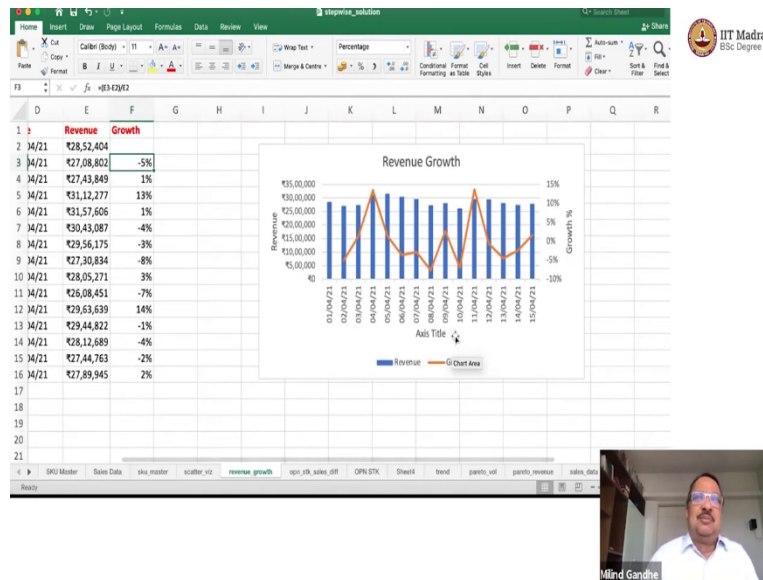
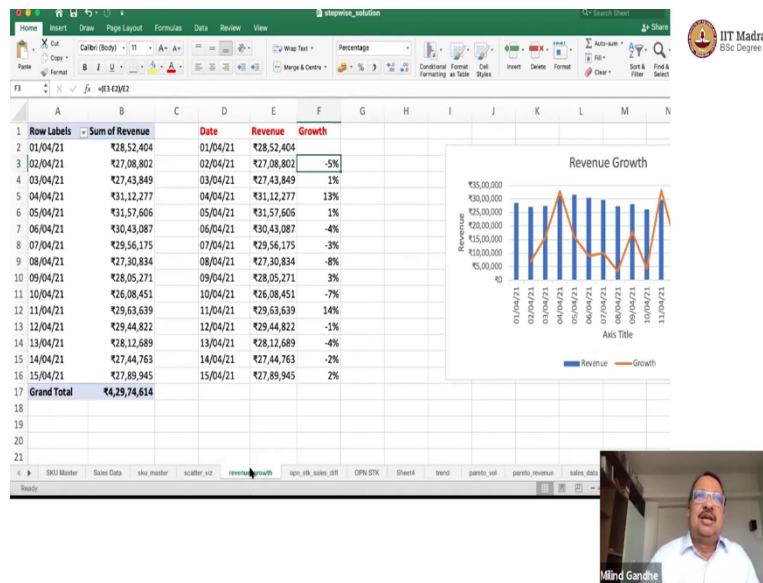
Professor Doctor Milind Gandhe: This I would not again Omkar, not realize that credit card offers was a big driver. So that also very interesting.

Professor Omkar Karandikar: Yeah, it is a cloud cooler basically.

Professor Doctor Milind Gandhe: Right.

Professor G. Venkatesh: Okay.

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Professor Doctor Milind Gandhe: Other thing that we also did Omkar, was we tried to look at, how did the revenue fluctuate day on day. So, we tried to see from one day to the next day did revenue grow, did it fall, so we created a graph like this. And then at least I could not see any trend, but you know, maybe there is something here that.

Professor Omkar Karandikar: I did it looks like 4th of April sale that I talked about, that is packing the fuelling.

Professor Doctor Milind Gandhe: Correct.

Professor G. Venkatesh: Yeah, it is a very narrow band some 10 % - 5% to 10% , growth rate.

Professor Omkar Karandikar: Yeah, but over long term, I think this will be, this will be much wider. This is just a sample snapshot of 1st of April to end of April. So, if I look at overall, the bigger picture, it will show the trend in growth actually.