Business Data Management
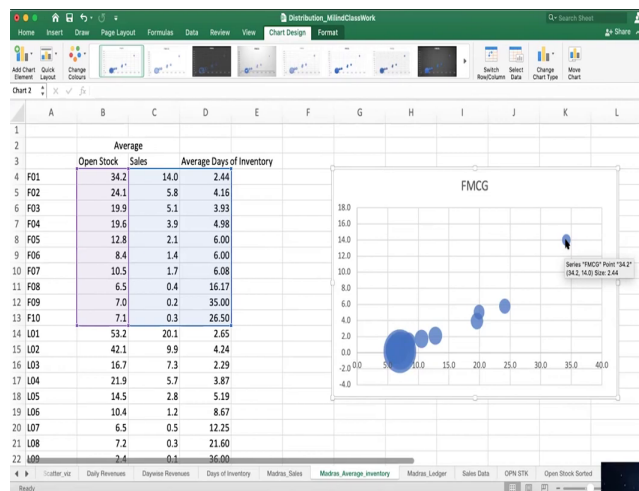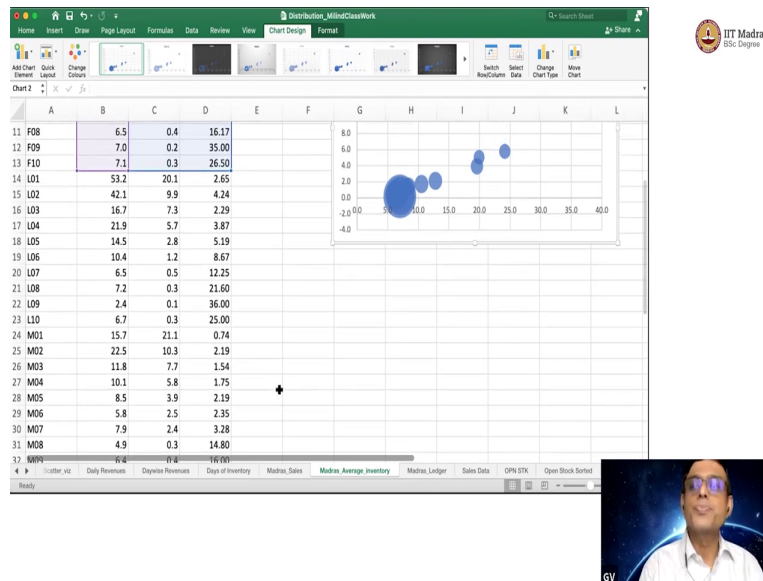## Professor. G Venkatesh
Professor. Doctor Milind Gandhe
Indian Institute of Technology, Madras
Average days of inventory

(Refer Slide Time: 00:14)

Professor Doctor Milind Gandhe: Now, we will let us look at the basic question that you had asked? I think your question was you wanted to know average opening stock.

Professor G Venkatesh: Average opening stock.

Professor Doctor Milind Gandhe: Average sales.

Professor Doctor Milind Gandhe: So, we will look at let us now create a new sheet and let us look at averages. I will just call it average inventory.

Professor G Venkatesh: Okay.

Professor Doctor Milind Gandhe: And let me make it 175? So, we will call this average. And what did we want, we wanted average open stock and average sales, correct?

Professor G Venkatesh: Yeah.

Professor Doctor Milind Gandhe: This is what we want and let me use cut and paste.

Professor G Venkatesh: Yeah.

Professor Doctor Milind Gandhe: We can actually just look up you know GV we can even that we can look up so.

Professor G Venkatesh: Not look up you can say equal to that [Non audible]

Professor Doctor Milind Gandhe: [Non audible] link it, we can link it.

Professor G Venkatesh: Link it.

Professor Doctor Milind Gandhe: Madras_ledger exclamation 84.

Professor G Venkatesh: Yeah.

Professor Doctor Milind Gandhe: And this I will just drag it.

Professor Doctor Milind Gandhe: I need to drag it to till M10?

Professor G Venkatesh: Yeah.

Professor Doctor Milind Gandhe: We want average open stock. So, how do we do that? We have to look at this entire row.

Professor G Venkatesh: Only some, only some cells in that row not all elements.

Professor Doctor Milind Gandhe: So, there is an interesting function that is available to us.

Professor Doctor Milind Gandhe: Average.

Professor Doctor Milind Gandhe: If.

Professor Doctor Milind Gandhe: we use that averageif. Now, averageif first we have to look at what condition we are looking at.

Professor G Venkatesh: Okay.

Professor Doctor Milind Gandhe: So, we have this condition we are looking at.

Professor G Venkatesh: Open stock, yeah.

Professor Doctor Milind Gandhe: So, we are looking at it from B3 to BI3. Criteria is , it has to be equal to open stock. And then what is the range we want to take the average of?

Professor G Venkatesh: Yeah. The thing is that I think that what we are looking for open stock. I mean, that is a single word I think, you just write open stock, BÖ

Professor Doctor Milind Gandhe: It does not matte

Professor G Venkatesh: See, Madras ledger, average is Madras ledger B3 to BI3 is okay. I guess you put dollar there, you put dollar there.

Professor Doctor Milind Gandhe: I will put dollar so let me do that.

Professor G Venkatesh: And the next one, that is the one criterion we are looking for should be from this page, not from Madras ledger.

Professor Doctor Milind Gandhe: that is what I have done. I am saying Madras average inventory.

Professor G Venkatesh: Average inventory

Professor Doctor Milind Gandhe: And that also I should make dollar.

Professor Doctor Milind Gandhe: Not, I should make it B dollar 3.

Professor G Venkatesh: Yeah.

Professor Doctor Milind Gandhe: Okay?

Professor G Venkatesh: Yeah.

Professor Doctor Milind Gandhe: And then I am looking at, let it be dollar B, okay?

Professor G Venkatesh: Yes, correct it is right.

Professor Doctor Milind Gandhe: Now, you know what is the most beautiful thing GV? If I just cut and paste this, I will automatically get the average sales.

Professor G Venkatesh: How will it get sales?

Professor Doctor Milind Gandhe: Because I am doing exactly the same thing. I am now looking in this range.

Professor G Venkatesh: [Non audible] That is why you, that is why you cleverly did instead of doing dollar, dollar B, instead of doing dollar B dollar. You did B only just B dollar 3. That B dollar 3 basically ensured that it will become C dollar 3 when you go there?

Professor G Venkatesh: Now, I can just drag both of these down.

Professor Doctor Milind Gandhe: I can just drag both of these together, and this is truly decimals, so let us just, maybe one decimal is okay.

Professor G Venkatesh: Yeah.

Professor Doctor Milind Gandhe: Okay? And now let us look at days of inventory, average days of inventory, you know, in some sense, this is.

Professor G Venkatesh: It is average days of inventory.

Professor Doctor Milind Gandhe: What do I do? I should say, open stock divided by sales.

Professor G Venkatesh: Yeah.

Professor Doctor Milind Gandhe: And again, let me reduce. [Non audible] a half days of sales work

Professor G Venkatesh: This is low, no? Very low.

Professor Doctor Milind Gandhe: [Non audible]

Professor G Venkatesh: FMCG it is very low.

Professor Doctor Milind Gandhe: Correct, correct. Actually, what is more concerning is if I look at F10, or F9 even, I have 35 days.

Professor G Venkatesh: Too much.

Professor Doctor Milind Gandhe: Work, too much.

Professor G Venkatesh: Far too much, yeah. Far too much inventory.

Professor Doctor Milind Gandhe: Yes. So, [Non audible] okay? And, so let me start off 20 per chart. And what a bubble chart does is it allows us the ability to show 3-dimensional data, okay? Here, if you see we have 3-dimensions, we have open stock, we have sales, we have average days of inventory.

Professor G Venkatesh: Right.

Professor Doctor Milind Gandhe: So, we can plot open stock on one axis, we can plot sales on another axis.

Professor G Venkatesh: Right.

Professor Doctor Milind Gandhe: And then we have to figure out how to show average days of inventory.

Professor G Venkatesh: I see, say the size of the bubble, size of the bubble.

Professor Doctor Milind Gandhe: And that will be the size of the bubble.

Professor G Venkatesh: Right.

Professor Doctor Milind Gandhe: Okay?

Professor G Venkatesh: Nice.

Professor Doctor Milind Gandhe: So, let us just do for FMCG, we will add a new cell, it will be a new series which we will call them Z and the X values so that will come from here, open stock of F01 to F10. The Y axis will be sales.

Professor G Venkatesh: Okay.

Professor Doctor Milind Gandhe: And the sizes will be days of inventory, okay?

Professor G Venkatesh: Alright, let us see what we get. Nice. but if put your finger on that it will say what it is.

Professor G Venkatesh: Overlapping, somewhat overlapping on some other things, I think. One is [Non audible]

Professor Doctor Milind Gandhe: Correct. Maybe it is a little difficult to read, but at least gives you a sense of what those,

Professor G Venkatesh: Gives you a sense. In fact, actually, we know there is one item that 35 14, what is 14, what is sales, right?

Professor G Venkatesh: High sales,

Professor Doctor Milind Gandhe: And, okay. Yes, and high open stock. And yet the days, average days of inventory is low.

Professor G Venkatesh: It is 2.4, it is very low actually.

Professor G Venkatesh: Even though they had 35 opening units is not enough.

Professor Doctor Milind Gandhe: Correct.

Professor G Venkatesh: I see, this might be a way of showing it. I agree.

Professor Doctor Milind Gandhe: So, it maybe worthwhile for the students perhaps to also create similar charts for lifestyle and mobiles.

Professor G Venkatesh: Yeah.

Professor Doctor Milind Gandhe: Okay. I think now we have to go to Omkar, is not it?

Professor G Venkatesh: I think so, yes. I think we have enough data to show charts. Let us go back to him and see what he has to say. Yeah.

Professor Doctor Milind Gandhe: Let us go back. Let us talk to him. And let us see what he says.

Professor G Venkatesh: Okay. Sounds good.

Professor Doctor Milind Gandhe: Okay?