

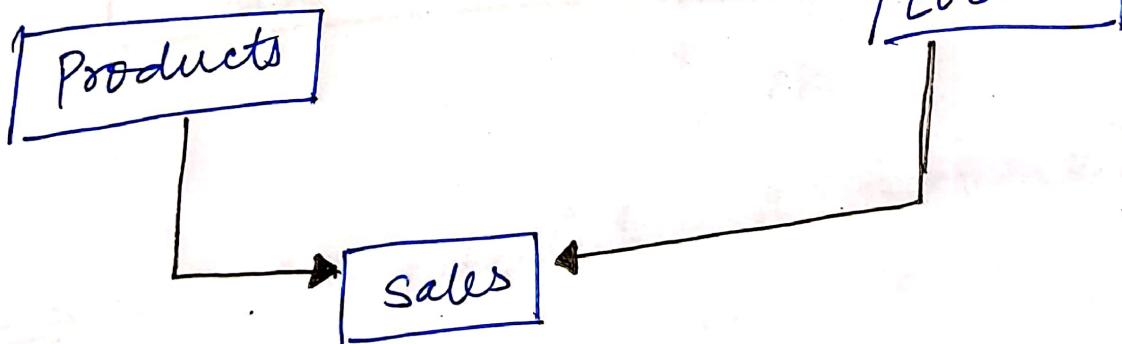
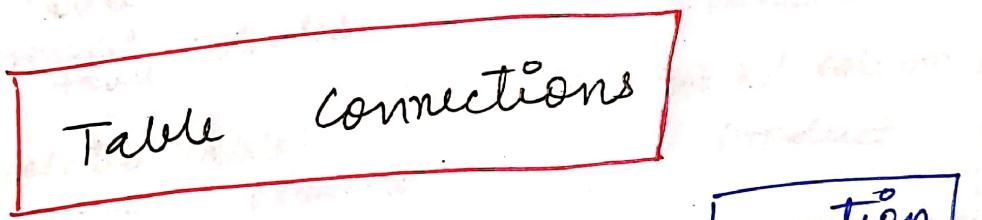
# Using Excel Workbook - 5

copy the data to new  
Excel sheet

↓  
Convert raw data into  
Table

↓  
name the table as:

- (i) sales
- (ii) products
- (iii) location

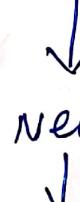


## # Building Table Connections #

select any cell of the Table



Relationship



A dialogue BOX Appears

Table :  
worksheet table : Sales

column :  
product

Related Table :  
worksheet table : products

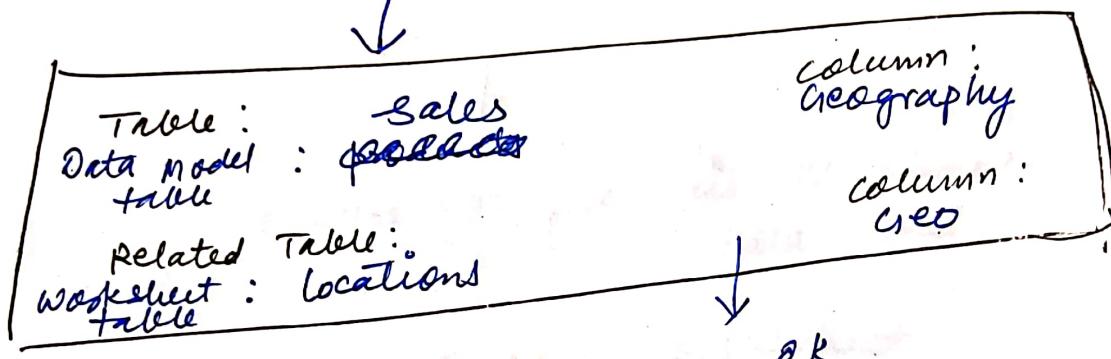
Related column :  
product

OK

⇒ it will establish a relationship  
b/w 2 table and paralely  
build a data model (mental  
model) to deal with power  
first -

Now,  
Add Another Relationship

↓  
Click : New on this dialogue  
box (relationship wala)



# Now, we have 2 active relationship  
↓  
close

# # Creating Power-Pivot #

Insert Ribbon



click : Pivot Table



enable & use this Workbook's  
Data Model

or New Worksheet



OK

use those 3 tables & connection  
between them

# Right

corner : use column name

pivot Table Fields

- locations
- products
- sales

Name,

Put  $\Rightarrow$  Product :- Rows  
Amount :-  $\Sigma$  values



A Pivot table will appear on  
your sheet

Row Labels	Sum of Amount
-	—
-	—
-	—
-	—

→ double click here



Type: Products

(This way, the column name  
will get renamed)

# # Adding Measures #

## # How to add Measures #

Go to Pivot Table Field



Right click : Sales Table



click : Add Measure



Measure dialogue Box Appears

Table Name :	
Measure Name :	
Value Description :	<p>check DAX Formula</p> <p>= measure area  </p> <p>category</p> <p>OK   Cancel</p>

we can click here to check whether our formula is correct or not.

to increase its text size

↓

put cursor here

[ Hold ctrl key + scroll mouse wheel ]

1.) Measure 1 = Total Amount



Table Name: Sales

Measure Name: Total Amount

= sum(sales[Amount]) (formula)

Now,

set Category



currency format, 1000 separator

Now,

You'll see in the sales table



we have  Total Amount added



exactly same as our Amount column

section of pivot

we don't have to repeat the  
formatting once we have made the  
formatting while creating measures.



drop Original Amount.

(Q) Measure - 2 = Total Customers

Table Name : Sales

Measure Name : Total customers

Formula : = sum(sales[customers])

now, formatting



just have 1000 separator



OR

Note:-

\* when we add these measure in our pivot table ; it will show the same name as column name as that of measure name.

\* Keep adding your measure in values section of pivot.

Rows

• Product

Values

- Total Amount
- Total Customers

:  
:  
:  
: keep adding more

(3.) Measure - 3 : = Average Sales

Table Name: Sales

Measure Name: Average Sales

Formula: = average(sales[Amount])

Now, formatting;

currency, decimal place = 1

↓  
OK

(4.) Measure - 4 : = Amount per Customers

Table Name : Sales

Measure Name : Amount per customer

Formula : = [Total Amount] / [Total customers]

Now formatting;

currency, decimal = 1 place

↓  
OK

Now

\* Remove all the measure from pivot table  
just drop (select + drop)  
from "values" section

keep :

Products	Amount Per Customer
40	100

we can select it or apply conditional formatting as per our wish / requirement

Now,

Add a "slicer as Geography"

(5°) Measure 5 =  $\frac{\text{Total Cost}}{\text{Sales}}$

Go to main table (excel workbook)  
where we made relation b/w

3 tables

↓  
Select any cell of table

↓  
Data : Ribbon

↓  
**Manage Data Model**

← -- --

It will open a new tab  
(tab like Power Query)

↓  
Add column in Sales - Table

↓  
double click : Type  $\Rightarrow$  Cost per Box

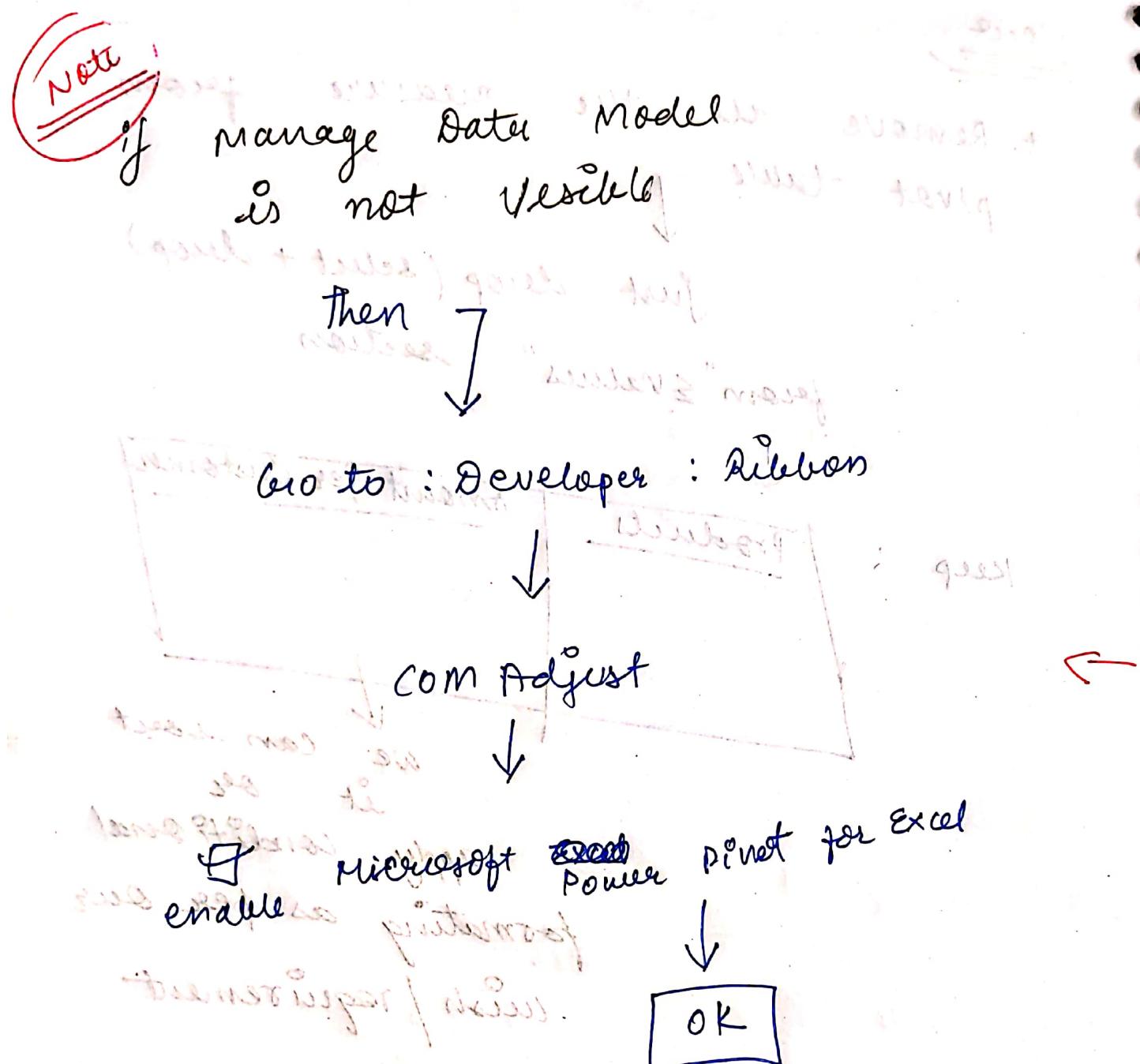
↓  
select a cell under heading

↓  
write at top formula

$f(x) = \text{RELATED}$

or

$\text{related}(\text{products}[\text{Cost per Box}])$



Note,

Again: insert a new column in the sales-table



rename: cost



$$= \text{sales} [\text{cost per boxes}] * \text{sales} [\text{boxes}]$$



after making changes  
:- close the window



Now, go to pivot sheet



You'll see cost & cost per Box  
are part of data model

Note ⇒ it doesn't matter where you add your measure, you can put them on any table & excel will still calculate the answer (power pivot)

## Add Measure

Total Cost

Table Name : Sales

Measure Name : Total Cost

Formula : = sum(sales [cost])

Formatting ;

Currency, 1000 separator



OK

---

(6) Measure - 6 = Profit

Table Name : Sales

Measure Name : Profit

Formula : = [Total Amount] - [Total Cost]

Formatting ;

Currency, 1000 separator



OK

Switch to new sheet  
in your Excel

Insert Pivot Table



Use this workbook's Data Model



OK

Add:

Sales Person : Rows

Profit : Values

More DAX - Measures

(70) Measure - 7 = Profit %

Table Name: Sales

Measure Name: Profit %

Formula: = divide([Profit], [Total Amount])

formatting,

Category: Numbers

& Percentage

→ 1 decimal



OK

# Select profit % to see who is making more profit to your company.

---

(8.) Measure - 8 : Profit Target Met ?

Table Name : Sales

Measure Name : Profit Target Met ?

Formula :

$$= ij([Profit\%] > 0.5, "Yes", "No")$$

Formatting

↓  
Keep as general

Now,

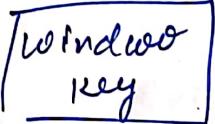
Add : Category as "slicer"

## Note :-

we can Replace :-

Yes → "✅"

NO → "🚫"

\* Bring emoji :-  + 

↓  
select : numbers up & down

open measure & edit

i.e.,

click on the measure

+ right click : Edit Measure

↓

Replace : → Yes & NO with emoji

↓

OK.

⊕ we can also add some conditional  
formatting to emoji

## To Edit & Review Our Measure

click on Pivot table



Pivot Table fields opens up



right click on measure



edit measure

## To delete Any measure

click on Pivot Table



Pivot Table field opens



right click on measure



delete measure

To Edit Multiple Measures at  
One - go

click on Pivot table

↓  
Data : ribbon

↓  
Data Tools : Manage data model

↓  
A Power Query like window  
opens up

↓  
scroll down : you'll see  
all the measures listed down

so, just click on any measure  
at the top , if will show its  
formula (you can edit them  
as per your requirements)

↓  
we can also create new measures here

(9.) Measure - 9 = Profit All

Table Name : Sales

Measure Name : profit All

Formula : = CALCULATE([profit], all(sales  
[salesperson]))

⇒ it will just show total profit from  
grand total of profit in Pivot Table.

set formatting → currency, . . .

(10.) Measure - 10 = Profit % of All Profit

Table Name : Sales

Measure Name : profit % of All profit

Formula : = divide([Profit], [Profit All])

Formatting :> Percentage

1 decimal place

Add Another Pivot Table in  
a New Excel Sheet

Insert a Pivot Table



Products : Rows

Total Amount : Values

Add Measure for APAC Region data  
only

(11.)

Table Name : Sales

Measure Name : Total Amount APAC - Region

formula : = CALCULATE([Total Amount],  
location[Region] = "APAC")

only going to get Total Amount in APAC Region

Do Formating ↓  
OK

(12.) Measure-12 = APAC Sales %

Table Name : Sales

Measure Name : APAC Sales %.

Formula : = DIVIDE ([Total Amount - APAC region],  
[Total Amount])

Formatting

↓  
Numbers → Percentage

↓  
DK

we don't have to copy raw data  
in our excel file just import them  
and make connection b/w them with  
the help of Power Query

Open new blank Excel file



Data : Ribbon



Get Data ↑ click here



From file



From Excel Workbook



Select file in your PC



Open



Transform Data



Power Query window opens up



↓  
make changes in data and  
set it

↓  
Load to

↓  
Import Data dialogue Box:  
 Table  
 Add this to Data Model

↓  
now, in right side, your  
data will be shown under

Queries & Connection

↓  
For each table : right click : Load to

↓  
only create connection  
↓  
OK

↓  
 Add to Data Model

So, we don't have data anywhere in our excel file, but the data model would already have

None,

Go to Data : Ribbon



Relationship



A dialogue Box opens up

Table: Sales	column: Geography
Related Table: Location	Related Column: Geo



OK



Close

Now,

Insert a pivot Table



→ Use the workbook's data Model



OK

Now,

in Pivot Table field



it will show 2 tables  
: "location" & "sales"

Now,

Add measure for Total Amount

$$\text{Total Amount} = \text{sum}(\text{sales[Amount]})$$

Now,

Add: products : Rows

Total Amount : values