

Cash Flow:

- Jb data “Financial_data.xlsx” ko excel me open krna tou table show ho rhny 2 more, “Cashflow_St, SoCE_St”. agr nhi shiw hti tou COA prr right click kr k Click on unhide write.
- Save this file to make sure that I can get this data into my Power BI
- This cash flow statement was actually broken down into five levels broadly, and all of the other values were actually sub-levels. These levels are cash and cash equivalents at the start, cash flow from operating activities, then cash flow from investing, and cash flow from financing. And finally, cash and cash equivalents at the end of the year.
- I had two accounts for cash and cash equivalents. One was for cash and bank, and the other was for cash in hand
- We have two more columns here, and that is labeled as sort on type and sort On Subtype
- Power bi aesy nhi smjhy ga k kis value ko top p rkhna kisko second and kisko third. So isliye hmny sorting define kr di on type and subtype.

Understanding the ValueType column:

- For Cash flow statement if you look at this, cash and cash_equivalents at the start of the year, we have to actually present the opening balance. So, that should be a TTD balance, but only up to the opening, you know, the starting date of the year.
- And if we talk about the cash and cash equivalents at the end of the year, that will be closing balance, which means that that should be a TTD value that should be considered in this year as well.
- The difference is that the opening balances should not be considered in this year's value. So, for example, if we are working for the year 2020, my value should be 2018 plus 2019, but 2020 should not be considered. But if I am talking about the closing value my calculation should be TTD, but that should also include 2018, plus 2019 and 2020
- The **interest expense**, interest and expense in the P&L it must have been presented as a negative value. There is no problem. But in the cash flow statement, I'm supposed to reverse the interest expense and it should actually be, even though it is an expense, it will appear on my **cash flow statement as a positive sign**. It will be added back
- I will also need to change the sign. If it were minus, I would have to make it Plus, I mean, if it was deducted in the P&L, I have to add back.
- We have non-operating that is **interest income**. So again, we have the same thing. These income and expenses, we have to reverse them, and to reverse, we have to change the sign. SO

if they were income, they were going to P&L as a positive value. Now we have to reverse that; we have to reject **that. So I will be changing sign here as well**

→ And finally, if you look at **depreciation**, we have deducted it in P&L, and we have to now add back So since it was an expense, it must be negative there. We have to add back. So **I will be applying the change sign here.**

→ Let us talk about **interest paid**, the way it was working, it must be working when we record the interest expense. The entry must be, **interest expense debit and your interest payable credit.**

→ Now, the credits were a positive entry date, but eventually, when you pay your interest Your entry would be a cash credit (Assets decrease recorded in credit), and your liability debit.

→ The payable account debit, and the debit for me was the negative value.

So what I need to do is, though I need to tell my BI to please go to this ledger, which is the interest payable ledger, But in that payable ledger, please do not pick up the positive values because those positive values are actually the expenses and we are only supposed to pick the payments and the payments whenever we make that interest payment, We make the entry as cash negative or bank negative. And you know, the liability is also, reduced and the reduction in liability is negative, And I want to make sure that my system only picks up the negative interest that we're going into this particular ledger. So I have taken this value here, and I don't change the sign. This value will be coming as a negative value, and since **this is a payment that should also be appearing on my cash flow statement as negative**

→ We are talking about the past years of **non-current assets**, And whenever we make the purchases, you know, my entry would be cash is going out or bank is going out, that is going to be negative, And since the asset, property, plant, and equipment is coming in, that would be a positive value. Now the point is in the same ledger of the property, plant, equipment, land and buildings, the same ledger, There must also be disposals

→ And whenever there are disposal(removal of a non current asset), those entries must be the negative entries, right

→ So what I need to do is, since I am talking about the purchase, I need to see my BI that please only bring in the positive values, because only those are the purchases And now those positive values, We are showing the impact of that on cash, So the purchase was coming in that property, plant equipment was coming in. But now, here in this cash flow statement, I am supposed to show the impact on cash, And for that, I will have to change the sign

I will have to make it negative to represent that the cash is going out

→ Think about the sale of non-current assets, let me explain you right from scratch, whenever we sell the asset, the entry must be cash or bank is coming in That is going to be debit.

→ And, you know, the non-current assets are going out, and they should be credited. And for us, when that property, plant, and equipment is going out, that ledger is going to be negative.

So what we need to do is that we only need to pick those negative entries so that we are only talking about the disposals. And on that disposal, you know, now we are talking about the cash impact and the cash flow on that disposal. The cash must be coming in So I will have to change the sign, and I will make those negative values as positive.

Importing data into Power bi and Modeling:

→ Excel file ko save krna bht zoroori. Power bi me Data tab -> Home tab -> Load Excel -> Select tbl_CF_ST, and tbl_SoCE_St.

→ Ye already connected ho gy both wth COA. But Direction single ha. Aur hm COA ki base pr Sirf CF ko analyze kr skty.

→ Direction p right click-> Properties -> direction ->Both. Aesy hm CF ki base p COA ko b analyze kr skty.

→ Sort_Type k columns p Aggregation sign a rha tou uspr click kr k properties -> Advance-> None.

→ And with that account key, the GL also recognizes the data. So, What I'm trying to say is that we will not be connecting any tables directly, but the good thing is that Power BI will do the job, and we can analyze the data from the GL using any of the parameters from CF.

Structure:

→ Drag matrix, column me date, Rows me Ftp (Just for the structure, ow hm values nhi drag kr skty gy.)

→ Values me type. For sorting -> go to sheet -> Select type -> sort by column -> select Sort_type

→ Drag Sub-type, and did the same steps of sorting for this.

→ Drag account.

Calculations:

```
Cashflow_Values = CALCULATE([Total_FTP],tbl_CF_St[ValueType] = "All_FTP")  
+ (CALCULATE([Total_FTP],tbl_CF_St[ValueType] = "All_FTP_CS") * -1)  
+ CALCULATE([Total_FTP],tbl_CF_St[ValueType] = "All_FTP_Negative",tbl_GL[Amount] < 0)  
+ (CALCULATE([Total_FTP],tbl_CF_St[ValueType] = "All_FTP_Positive_CS",tbl_GL[Amount] > 0) * -1)
```

```

+ (CALCULATE([Total_FTP], tbl_CF_St[ValueType] = "All_FTP_Negative_CS", tbl_GL[Amount] < 0 )
* -1)

+ CALCULATE([Total_FTP], tbl_CF_St[ValueType] = "All_FTP_Positive", tbl_GL[Amount] > 0)

+ CALCULATE([Total_TTD], tbl_CF_St[ValueType] = "Closing_balance" )

+ CALCULATE([Total_FTP], tbl_CF_St[ValueType] = "Opening_balance",
DATESBETWEEN(tbl_Calendar[Date], [MinDateAccross], [MinDate]-1)

-> Calculate Total_FTP, where value type is "ALL_FTP",
-> Calculate Total_FTP, where value type is "ALL_FTP_CS",
-> Calculate Total_FTP, where value type is "ALL_FTP_Negative", and Amount<0
-> Calculate Total_FTP, where value type is "ALL_FTP_Positive_CS", and Amount>0 and * -1
-> Calculate Total_FTP, where value type is "ALL_FTP_Negative_CS", and Amount<0 and * -1
-> Calculate Total_FTP, where value type is "ALL_FTP_Positive", and Amount>0
-> Calculate Total_FTP, where value type is "Opening_balance", and DatesBetween MinDate
across, and MinDate -1
→ MinDateAcross overall data ka minimum value deta, aur Min date period ka minimum value.
2020 kalye min date 1st January hai, but hamare 31st Dec tak karna to -1 karna.

```

Cash Flow Statement			
Type	2018	2019	2020
 □ Cash and Cash equivalents at the start of the year			
⊕ Cash and Bank at start		2,107,691	5,111,014
 □ Cash flows from Operating Activities			
⊕ Profit before tax	761,438	1,501,250	1,569,027
⊕ Interest Expense	15,840	21,600	25,404
⊕ Non-Cash items	407,004	532,056	714,840
⊕ Non-Operating	-34,263	-43,457	-67,249
⊕ Working Capital Changes	-373,071	-465,511	-1,197,007
⊕ Interest Paid	-14,520	-21,000	-24,979
⊕ Tax paid	0	-137,572	-198,108
 □ Cash flows from Investing Activities			
⊕ Purchase of Non-Current Assets	-2,035,000	-2,675,250	-3,463,680
⊕ Sale of Non-Current Assets	780,850	818,685	1,022,415
⊕ Investments	-258,667	-384,000	-672,000
⊕ Interest received	13,496	16,621	30,868
⊕ Dividends received	15,917	21,751	30,030
 □ Cashflows from Financing Activities			
⊕ Proceeds from the issuance of Share Capital	2,666,667	3,796,000	1,643,200
⊕ Proceeds from long term borrowings	260,000	307,500	363,697
⊕ Dividends paid	-98,000	-285,350	-376,740
 □ Cash and Cash equivalents at the end of the year			
⊕ Cash and Bank at end	2,107,691	5,111,014	4,510,732