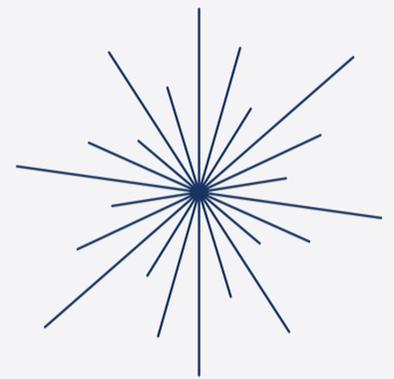


Newsletter

By [Bojan Radojicic](#)

No. 17
Week # 01

Finance Like Piece of Cake



1. BMW vs Mercedes
financial analysis

4. Finance modeling
handbook

2. Valuation ratios

3. Financial due diligence
steps

5. Project evaluation
mega cheat sheet





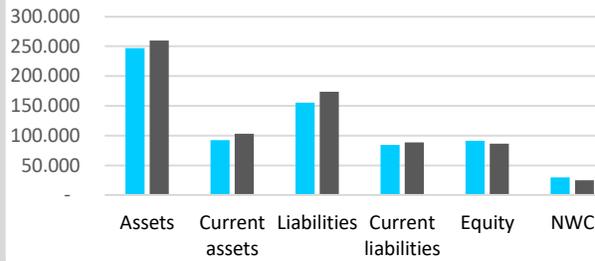
VS



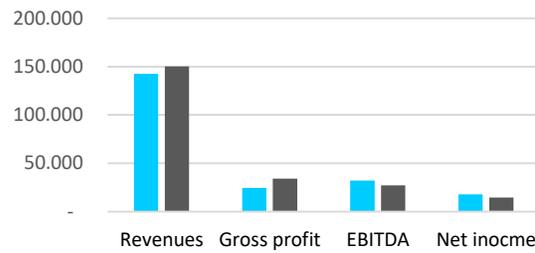
FINANCIAL ANALYSIS

Mercedes-Benz

BALANCE SHEET



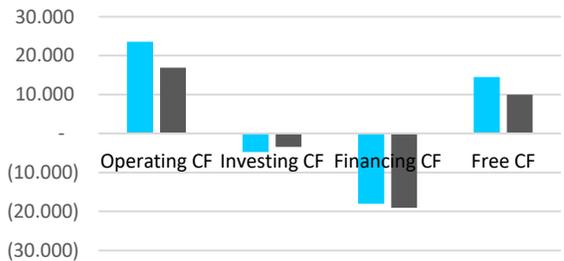
INCOME STATEMENT



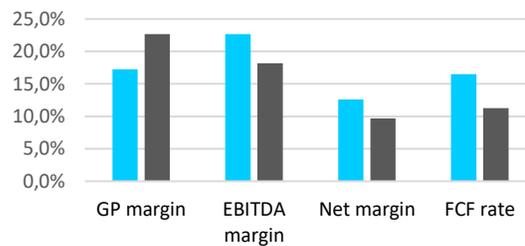
ANALYSIS

Even though Mercedes hit higher sales, BMW is more profitable. Both firms excel in cash management. The FCF rate is quite high and stable. However, holding over 20 billion in cash could lose its value over time if not properly invested.

CASH FLOWS



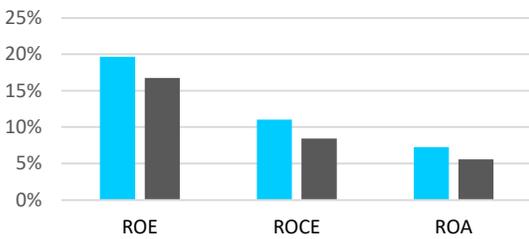
PROFITABILITY



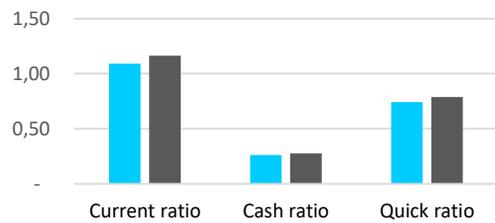
ANALYSIS

EBITDA is higher than GP at BMW which is strange. Should have a look to EBITDA adjustments. Mercedes hit better gross profitability which means better utilization of direct costs, while BMW is better in net margin which means better utilization of general, sales and admin resources.

RETURNS



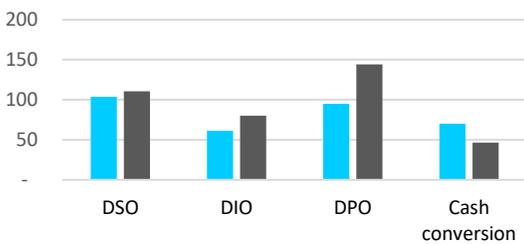
LIQUIDITY



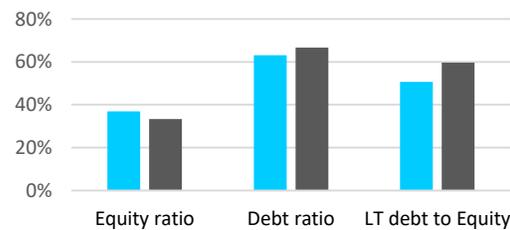
ANALYSIS

The ROA is not too high, as both companies have valuable intangibles. However, both firms achieve good ROE, with BMW performing better in returns on investments. Mercedes is slightly better in liquidity.

EFFICIENCY



SOLVENCY



ANALYSIS

Mercedes has achieved a high Days Payable Outstanding (DPO), which indicates better payment terms with suppliers without impacting gross profit, compared to BMW's figures. Overall, cash conversion is better at Mercedes. In terms of solvency, the two firms are equal.

MARKET DATA



MARKET DATA



VALUATION RATIOS

RATIO	WHAT DOES IT MEASURE	WHEN TO APPLY	FORMULA
Price-to-Earnings (P/E)	Measures the relationship between a company's stock price and its earnings per share (EPS)	The P/E ratio is most useful in the valuation process for companies with stable earnings and a predictable growth rate. In industries with consistent cash flows and earnings, such as utilities or consumer staples, the P/E ratio can be a reliable indicator of a company's valuation.	$\text{P/E ratio} = \frac{\text{Market price per share}}{\text{Earnings per share}}$
Price-to-Sales (P/S) Ratio	Measure the relationship between a company's value and its revenues	The P/S ratio is most useful in valuations for companies that are not yet profitable or have inconsistent earnings but have high growth potential. In these cases, the P/S ratio can be a more useful valuation metric than the P/E ratio. Startups and early-stage companies, particularly in the technology sector, are often valued using the P/S ratio.	$\text{P/S ratio} = \frac{\text{Market capitalization or Valuation}}{\text{Total revenue}}$
Price-to-Book (P/B) Ratio	Measure the relationship between a company's stock price and its book value per share	The P/B ratio is often used to evaluate companies in industries with a lot of tangible assets, such as manufacturing or real estate. This is because the book value per share is more closely related to the company's actual asset value, rather than its earnings or revenue potential.	$\text{P/B ratio} = \frac{\text{Market capitalization}}{\text{Book value}}$
Enterprise Value-to-EBITDA (EV/EBITDA)	Measure the relationship between a company's enterprise value and its EBITDA	The EV/EBITDA ratio is most useful in valuations when evaluating companies that have high levels of CapEx and/or companies with significant debt levels. This ratio can provide a more accurate picture of a financial health than other valuation metrics because it takes into account a total enterprise value, including both its equity and debt.	$\text{EV/EBITDA ratio} = \frac{\text{Enterprise value}}{\text{EBITDA}}$
Price-to-Cash Flow (P/CF) Ratio	It is a measure of how much investors are willing to pay for each dollar of cash flow generated by the company.	The P/CF ratio is often used as a valuation metric for companies that have stable cash flows and predictable earnings, such as utilities and real estate investment trusts (REITs). These types of companies typically generate consistent cash flows from their operations, which can be used to pay dividends and fund growth opportunities.	$\text{P/CF ratio} = \frac{\text{Market capitalization}}{\text{Cash flow from operations}}$
Dividend Yield	Dividend yield is a financial ratio that represents the percentage of a company's stock price that is paid out in the form of dividends.	Investors who are seeking a regular stream of income from their investments may be attracted to stocks with higher dividend yields.	$\text{Dividend yield} = \frac{\text{Annual dividend per share}}{\text{Stock price}}$



FINANCIAL DUE DILIGENCE PROCESS



1 PREPARATION AND PLANNING



Engagement setup

Define the scope and specific areas and depth of the investigation.

Assemble a team of professionals with expertise in financial analysis, accounting, tax, etc.

Make timeline framework and duties of team members.

Data Collection

Make a list of requested documents and track status of delivery

Setup open questions on cloud and track status of delivery

Organize data room, and collect and review relevant financial documents, including financial statements, tax returns, budgets, etc.

General business review

Meet with key personnel of the target company to understand the business processes, financial practices, and any unusual items.

Understand business processes like sales, purchase, payroll etc.

Review business plan, business model, budgets etc.

2 ASSESMENT OF FINANCIAL FUNCTION AND TEAM

3 EXAMINING CONTRACT AND AGREEMENTS

4 INTERNAL CONTROLS REVIEW

Segregation of duties, Authorizations and approvals process,

Automatic controls in system in the process of revenue and cost recognition, reconciliation of accounts

Closing procedures and checks and others

5 ANALYTICAL PROCEDURES

Analyze financial performance, Analyze trends in KPIS and ratio numbers, Analyze actual vs historical vs budgeted figures

Review monthly movement in sold quantities, revenues and margins and other analysis

6 FINANCIAL STATEMENTS REVIEW



Income statement review

Revenues structure analyzed (per product, categories, business units etc.)

Gross margin analysis - movement in GM, GM per products etc..

OPEX analysis – movements, variance, contract matches etc..

Accruals recognition and cut off test

Salaries analysis, industry benchmarks, taxes, employee benefits, owner compensation, stock based compensation etc..

Other analysis

Balance sheet review

Assets ownership documentation reviewed

PPE and IP registers reconciled with GL accounts

Inventory structure review (materials, WIP, FG)

Assets impairment testing

Balance reconciliations with debtors and creditors

Related parties relationships

Commitments and contingencies

AP / AR ledger reconciled with GL accounts

7 FINALIZE REPORTING SET RESULTED FROM DUE DILIGENCE PROCESS



Quality of earnings

Present normal and sustainable level of operational earning to make sure that multiple-based price we pay for transaction is fair. Usual subjects of adjustments : Revenues, Costs, Net Working capital

Net working capital

Present a movement in NWC and its main components, review of DSO, DIO and DPO. Fair value of receivables: overdue, bad debt, payment terms, litigation, balance structure. Compare NWC/Revenue ration with industry benchmark and peers.

Proof of cash

Present a reconciliation procedure results that's used to prove the accuracy of the general ledger cash account. Present any unusual or suspicious transactions, cash inflows and outflows analysis etc..

Net debt

Present target's net financial position and how target use dept. to create an earnings. Estimate how much additional debt company can bear, and approach financial leverage.

FINANCE MODELING HANDBOOK



DATA COLLECTION

REVENUES

- Review historical prices and factors impacting prices; historical records on sold quantities, per products, customers, lines
- Analyze customer contracts, retention rate and customer churn
- Review sales and marketing plans and find anomalies and risks
- Utilize industry reports, market research, and external data sources

EXPENSES

- Make sure you identified recurring costs and predict them in projections
- Gather historical data to analyze the patterns and trends of fixed costs
- Collect detailed expense information from various departments
- Professional fees aligned with planned transactions

ASSETS AND LIABILITIES

- Align Capex forecasts with the company's strategic objectives and long-term goals
- New investment plan discussed with CEO/CFD
- Check potential changes in lease agreements and how it reflects in budget
- Evaluate the condition, maintenance costs, and remaining useful life of current assets

HEADCOUNT

- Determine level of workforce and make sure that level is aligned with company objectives
- Gather information about salaries industry benchmarks – for all positions
- Based on new comers expected, examine recruitment and other costs
- Consider one-time costs, bonus accruals, prizes, stimulations, overtime pay

CELLS FORMAT

- 100** Input cell
- 100** Cell under formula
- 100** SUM formula applied
- 0** Accuracy check, should be 0 always

MODELING TIPS

- Structured Layout:** Organize your model in a logical sequence, such as Inputs, Assumptions, Calculations, Outputs. This flow aids understanding and navigation.
- Segment Different Scenarios:** Incorporate toggles or dropdown menus to switch between various scenarios (e.g., best case, base case, worst case) for easy comparison.
- Use Charts and Graphs:** Visual representations can help simplify complex data and make your model's conclusions more accessible.
- Avoid Volatile Functions:** In Excel, functions like OFFSET, INDIRECT, and NOW can slow down your model, especially as it grows. Use them sparingly.
- Use Consistent Time Intervals:** If you're working on a multi-year projection, it's easier to use consistent intervals, like monthly or annually, for clarity.
- Back Up with Real-World Data:** Whenever possible, base your assumptions on historical data or industry benchmarks rather than gut feelings.
- Test Extreme Values:** This can be helpful to ensure the model doesn't break and behaves logically under extreme conditions.

10 EXCEL FORMULAS

- =SUMIF ()**
- =IFERROR ()**
- =XIRR ()**
- =XNPV ()**
- =PMT ()**
- =INDEX ()**
- =XLOOKUP ()**
- =EOMONTH ()**
- =MATCH ()**
- =SEQUENCE ()**

ASSUMPTIONS

MACRO-ECONOMY

- GDP growth rate
- Inflation rate
- Interest rates (short-term and long-term)

INDUSTRY

- Market growth rate
- Market share changes
- Competitive landscape evolution

REVENUE

- Sales volume (units sold)
- Sales growth rate
- Pricing strategy and price changes

COST

- Fixed versus variable costs
- Cost escalation rates (due to inflation or other factors)
- Economies of scale benefits

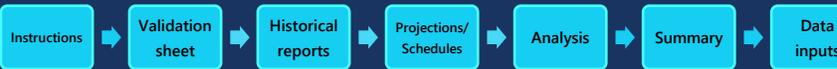
CAPITAL

- Target debt-to-equity ratio
- Dividend payout ratio
- Interest rates on borrowings
- Cost of capital
- Cost of debt
- WACC

OTHER

- Capital Expenditure
- Useful life
- DPO, DSO, DIO
- Headcount growth
- Salaries growth
- Long term CF growth rate

MODEL LAYOUT



MODEL ACCURACY VALIDATION

Total Assets = Total Equity and liabilities in last year	0
Total Assets = Total Equity and liabilities in current year	0
Net income from current year P&L = Equity increase in BS	0
Cash at the end of period in Cash flow statement = Cash and equivalents in BS	0
Starting revenue in revenue projection table = historical revenue	0
Starting headcount number in projection table = historical headcount number	0
Total Assets = Total Equity and liabilities in projected years	0
Starting figures of variable overhead costs in projection table = historical variable overhead costs	0
Starting figures of fixed overhead costs in projection table = historical fixed overhead costs	0

CONSISTENCY CHECKS

Revenue assumed growth rate vs. revenue CAGR in projections	10%	vs	10%
Revenue projected growth rate vs. headcount projected growth rate	10%	vs	7%
Revenue growth rate vs. Labor cost growth rate	10%	vs	17%
Revenue projected growth rate vs. variable overhead costs projection rate	10%	vs	16%
Revenue projected growth rate vs. fixed overhead costs projection rate	10%	vs	11%
Revenue projected growth rate vs. gross profit projection rate	10%	vs	8%
Interest expenses share in debt: historical vs. projected average	11%	vs	11%
Total fixed costs in revenue: historical vs. projected	12%	vs	12%

DO AND DONT'S IN MODELING

- Keep It Simple:** Start simple and add complexity only when necessary. A more complex model isn't necessarily a better one.
- Use Consistent Formatting:** This makes the model easier to read and follow. For example, you might color-code inputs, outputs, and calculations differently.
- Document Assumptions:** Clearly state and justify any assumptions you're making, as they form the foundation of your model.
- Be Transparent:** Avoid "black box" calculations. Anyone looking at your model should be able to understand the logic behind every formula.
- Perform Sensitivity Analysis:** This helps understand the potential variability in your outcomes based on changes in assumptions.
- Build in Error Checks:** These can highlight if something is going wrong within the model, such as a balance sheet that doesn't balance.
- Regularly Review and Update:** Especially for ongoing business models, periodically check and adjust your assumptions as real-world data comes in.
- Protect the Model:** Lock cells that shouldn't be changed to avoid accidental overwriting or tampering.
- Avoid Hardcoding:** Don't input numbers directly into formulas. Instead, place them in separate cells and reference those cells in the formula. This makes the model more transparent and flexible.
- Don't Overcomplicate:** Adding unnecessary details or overly intricate formulas can make the model prone to errors and difficult to understand.
- Avoid Circular References:** They can cause calculation errors and can be difficult to trace.
- Don't Neglect Data Validation:** Ensure that the data you input into the model is accurate, as the output is only as good as the input.
- Avoid Excessive Use of External Links:** These can break easily, especially if the external file's location changes or if the file gets deleted.
- Don't Ignore Outliers:** If real-world data contains outliers, consider them carefully before incorporating them into the model.
- Don't Over-rely on the Model:** Remember that all models are based on assumptions and predictions. No model can capture every real-world nuance or foresee all possible future events.
- Don't Skip Peer Review:** Having someone else review your model can catch errors and provide valuable feedback.

PROJECTED ASSETS AND LIABILITIES STRUCTURE



REVENUES AND EBITDA MONTHLY PLAN



EXAMPLE OF CASH FLOW MODEL

Cash flow statement	2024	2025	2026	2027	2028
Net income	853	848	901	1,092	1,233
Depreciation and amortization	195	375	415	465	495
(Increase) or decrease in account receivables	(23)	(29)	(33)	(36)	(40)
(Increase) or decrease in inventories	8	(64)	(74)	(85)	(98)
Increase (decrease) in trade payables	(107)	26	29	32	36
CF from operating activities	1,007	1,179	1,457	1,452	1,586
(Purchase) or sales of capital assets	(750)	(1,050)	(450)	(150)	(150)
Changes in Other investments	(50)	(70)	20	(50)	(10)
CF from investing activities	(800)	(1,120)	(430)	(200)	(160)
Increase of share capital	150	250	350	450	550
Increase (decrease) in financial and other long term liabilities	100	110	110	110	110
Dividends paid	(500)	(500)	(300)	(750)	(900)
CF from financing activities	(250)	(140)	160	(190)	(240)
Total cash flow	(43)	(81)	1,187	1,062	1,186
Cash at the beginning of period	1,310	1,267	1,186	2,373	3,434
Cash at the end of period	1,267	1,186	2,373	3,434	4,620

MODELS

3 STATEMENTS MODEL

Used to integrate a projections of the income statement, balance sheet, and cash flow statement for financial analysis and valuation purposes.

PROJECT EVALUATION MODEL

Assesses the feasibility and potential return on investment of a specific project or initiative. Calculate NPV, EVA, IRR and other project performance.

BUDGETING MODEL

Helps in planning and allocating financial resources for a specific period, usually to control and guide spending.

DCF MODEL

Estimates the value of an investment based on the present value of the expected future cash flows, discounted at an appropriate discount rate that reflect appropriate level of risks.

VALUATION MODEL MODELS

Used to determine the value of an asset, company, or investment, often incorporating various techniques like multiples, DCF, and comparable transactions and companies, Berkus method, net book value method etc.

HEADCOUNT & SALARIES

Forecasts the number of employees and associated salary costs for an organization over a specific period based on various assumptions and factors incorporated in the model.

CAPEX MODEL

Plans and forecasts the company's spending on long-term assets like machinery, property, or equipment. Calculate purchase value, depreciation, accumulated depreciation and carrying value of assets in projected period.

NET WORKING CAPITAL

Predicts a changes in receivables, inventories and trade payables in based on sales and purchases assumed in order to predict cash flows. Also, in boarder line evaluates a company's short-term liquidity by analyzing its current assets versus current liabilities.

CASH FLOW FORECASTING

Predicts future financial or operational cash flows on historical data and assumptions. It is often prepared for 13 weeks (one quarter) or annually, per months.

LEVERAGE BUYOUT MODEL

Assesses the financial feasibility and returns of acquiring a company primarily using borrowed funds.

EBITDA ADJUSTMENT MODEL

Adjusts the Earnings Before Interest, Taxes, Depreciation, and Amortization for non-recurring items to get a clearer picture of a company's operational performance.



PROJECT INDICATORS

MEGA CHEAT SHEET

NPV NET PRESENT VALUE EXPLAINED

Net Present Value (NPV) is a financial metric that calculates the value of a series of cash flows by discounting them to the present using a specific rate of return, reflecting the time value of money and investment risk.

Calculation of net inflow as difference between total expected inflows and outflows in project

Calculation present value for each year based on discounted factor

Calculation Terminal Value by Gordon formula

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Economic flow (€)												
2													
3	Assumptions												
4	Discount rate			9.86%									
5	LT CF growth rate			1.5%									
6													
7	Economic flow	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal	
8	Sales	300,000	300,000	330,000	363,000	399,300	4,920	483,153	531,468	584,615	643,077	2,450,303	
9	Terminal flow											$\frac{584,615 \times (1+1.5\%)}{9.86\% - 1.5\%}$	
10	Total inflow	100,000	300,000	330,000	363,000	399,300	4,920	483,153	531,468	584,615	643,077	2,450,303	
11	CAPEX	(600,000)	(200,000)	0	0	0	0	0	0	0	0	0	
12	NWC	(6,000)	(6,000)	(7,250)	(7,986)	(8,785)	(9,633)	(10,529)	(11,480)	(12,482)	(13,540)	(14,658)	
13	COGS - variable	(45,000)	(135,000)	(148,500)	(163,350)	(179,685)	(1,754)	(217,419)	(239,161)	(263,077)	(289,384)		
14	Operating expenses	(651,000)	(341,600)	(155,750)	(171,336)	(188,470)	(2,717)	(228,408)	(250,853)	(275,938)	(303,532)	0	
15	Total outflow	(657,000)	(347,600)	(155,750)	(171,336)	(188,470)	(2,717)	(228,408)	(250,853)	(275,938)	(303,532)	0	
16	Net inflow	(357,000)	(47,600)	174,250	191,664	210,830	2,203	254,745	280,615	308,677	339,544	412,330	
17													
18	Discounting												
19	NPV	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Terminal	
20													
21	Present value of total inflow	91,023	248,556	248,867	249,179	249,492	21,912	250,118	250,431	250,745	251,059	1,464,543	
22	Present value of total outflow	(580,560)	(283,022)	(117,465)	(117,613)	(117,760)	(117,908)	(118,056)	(118,204)	(118,352)	(118,500)		
23	Present value net inflow (outflow)	(501,537)	(34,466)	131,402	131,567	131,732	131,897	132,062	132,228	132,393	132,559	1,464,543	
24													
25	Sensitivity analysis												
26	NPV - Sensitivity analysis	Discount rate	Long term CF growth rate										
27		8.00%	1.00%	1.00%	1.00%	2.00%	2.50%	3.00%	3.50%				
28		4.65%	3,014,807	5,514,379	6,141,497	6,994,948	8,051,945	9,313,747	12,014,194	16,176,706			
29		5.61%	3,886,360	4,191,977	4,560,229	5,013,020	5,583,045	6,322,605	7,320,545	8,740,931			
30		6.6%	3,099,038	3,299,072	3,533,663	3,811,705	4,147,063	4,599,223	5,078,097	5,791,293			
31		7.6%	2,522,742	2,660,339	2,817,987	3,000,413	3,213,948	3,467,326	3,772,804	4,148,308			
32		8.6%	2,085,124	2,180,323	2,293,546	2,424,054	2,582,804	2,779,149	2,923,869	3,154,902			
33		9.6%	1,743,279	1,815,361	1,894,514	1,981,663	2,087,999	2,224,602	2,392,682	2,599,349			
34		10.6%	1,470,176	1,523,960	1,585,151	1,654,767	1,742,724	1,850,412	1,989,489	2,160,073			
35		11.6%	1,247,965	1,289,322	1,333,865	1,381,024	1,441,574	1,516,208	1,605,804	1,720,476			
36		12.6%	1,064,931	1,096,332	1,130,755	1,168,319	1,209,334	1,254,314	1,303,853	1,358,683			
37		13.6%	910,784	935,308	962,777	993,028	1,023,536	1,057,926	1,095,482	1,136,663			

Calculation discounting factors for all years based on assumed discounting rate from C5

Calculation NPV as total present value per years and for terminal (residual) period

Building sensitivity analysis to estimate sensitivity of NPV on discounted rate and long term cash flow growth rate

IRR INTERNAL RATE OF RETURN EXPLAINED

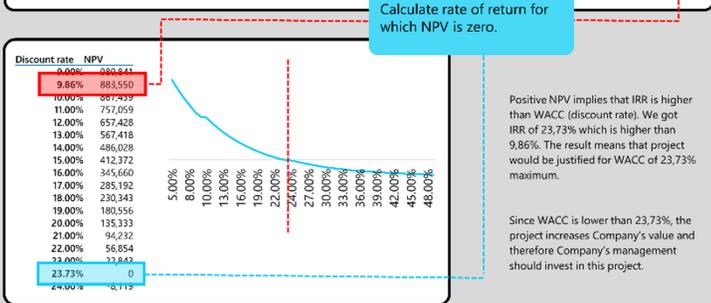
1 Internal rate of return is the discount rate that makes the net present value of all cash flows from the project equal to zero.

2 IRR is the estimated rate of growth an investment is expected to generate.

3 When the IRR is higher than the discount rate, also known as the required rate of return, it indicates a favorable investment opportunity.

2 POSSIBLE WAYS TO CALCULATE IRR

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033 <th>Terminal </th>	Terminal	
NET PRESENT VALUE												
Total inflow	100,000	300,000	330,000	363,000	399,300	439,230	483,153	531,468	584,615	643,077	2,450,303	
Discount factor	1.0986	1.2070	1.3260	1.4568	1.6005	1.7583	1.9317	2.1222	2.3315	2.5615	2.8141	
Present value of total inflow	91,023	248,556	248,867	249,179	249,492	249,704	250,016	250,328	250,640	250,952	1,464,543	
Total outflow	(657,000)	(347,600)	(155,750)	(171,336)	(188,470)	(2,717)	(228,408)	(250,853)	(275,938)	(303,532)	0	
Discount factor	1.0986	1.2070	1.3260	1.4568	1.6005	1.7583	1.9317	2.1222	2.3315	2.5615	2.8141	
Present value of total outflow	(613,609)	(337,394)	(171,707)	(187,742)	(197,793)	(171,860)	(171,939)	(172,031)	(172,136)	(172,247)	0	
Present value of Period net inflow (outflow)	(22,586)	(88,838)	77,160	71,437	71,698	77,945	78,178	78,400	78,611	78,822	1,464,543	
Cumulative	(22,586)	(511,424)	(234,264)	(46)	46	46	46	46	46	46	46	1,464,543



OR

Internal Rate of Return (IRR) - calculation 2

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033 <th>Terminal</th>	Terminal	
Total outflow - present value: Total inflow - undiscounted	(2,326,450)	100,000	300,000	330,000	363,000	399,300	439,230	483,153	531,468	584,615	643,077	2,450,303
Project IRR - calculation 2												23.73%

APPLY FORMULA IN EXCEL = IRR(C11:N11)

C11 = SUM for total present value of outflows (use minus value), C12-N11 = total inflows in row

PAYBACK PERIOD EXPLAINED

The Payback Period is the length of time required for an investment to reach a break-even point, where cumulative cash inflows equal the initial capital and other cash outflows.

PAYBACK PERIOD = NUMBER OF YEARS + NUMBER OF DAYS

Number of years is 7

Number of days in 8th year based on formula below is 118

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033 <th>Terminal</th>	Terminal	
Economic flow												
Sales	300,000	300,000	330,000	363,000	399,300	4,920	483,153	531,468	584,615	643,077	2,450,303	
Terminal flow (TV)												
Total inflow	100,000	300,000	330,000	363,000	399,300	4,920	483,153	531,468	584,615	643,077	2,450,303	
CAPEX	(600,000)	(200,000)	0	0	0	0	0	0	0	0	0	
NWC	(6,000)	(6,000)	(7,250)	(7,986)	(8,785)	(9,633)	(10,529)	(11,480)	(12,482)	(13,540)	(14,658)	
COGS - variable	(45,000)	(135,000)	(148,500)	(163,350)	(179,685)	(1,754)	(217,419)	(239,161)	(263,077)	(289,384)		
COGS - fixed	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	(200)	
Total outflow	(657,000)	(347,600)	(155,750)	(171,336)	(188,470)	(2,717)	(228,408)	(250,853)	(275,938)	(303,532)	0	
Net inflow	(357,000)	(47,600)	174,250	191,664	210,830	2,203	254,745	280,615	308,677	339,544	412,330	
Cumulative Net inflow	(357,000)	(404,600)	(230,350)	(38,686)	112,144	313,947	568,692	849,337	1,158,014	1,507,558	1,919,892	2,450,303

No. of days = $\frac{CNF_{2030} \times 365 \text{ days}}{ANF_{2031}}$

• CNF₂₀₃₀ = Cumulative Net Inflow in 2030 (the last year before cumulative net inflow gets positive)

• ANF₂₀₃₁ = Annual Net Inflow in 2031 (the first year after cumulative net inflow gets positive)

THE PAYBACK PERIOD DISADVANTAGES

Payback period does not cover the whole project period, but only the period needed for paying off the invested funds.

Payback period does not take account the time value of money - inflows and outflows taken into account are not from same time periods

THAT IS WHY WE USE DISCOUNTED PAYBACK PERIOD

When Cumulative present value of net inflow goes from negative to positive, it means in that year all investments in the project are paid back by present value of generated inflows.

Number of years is 7

Number of days based on formula below is 118

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033 <th>Terminal</th>	Terminal	
NPV												
Total inflow	91,023	248,556	248,867	249,179	249,492	249,704	250,016	250,328	250,640	250,952	1,464,543	
Discount factor	1.0986	1.2070	1.3260	1.4568	1.6005	1.7583	1.9317	2.1222	2.3315	2.5615	2.8141	
Present value of total inflow	91,023	248,556	248,867	249,179	249,492	249,704	250,016	250,328	250,640	250,952	1,464,543	
Total outflow	(613,609)	(337,394)	(171,707)	(187,742)	(197,793)	(171,860)	(171,939)	(172,031)	(172,136)	(172,247)	0	
Discount factor	1.0986	1.2070	1.3260	1.4568	1.6005	1.7583	1.9317	2.1222	2.3315	2.5615	2.8141	
Present value of total outflow	(580,560)	(283,022)	(117,465)	(117,613)	(117,760)	(117,908)	(118,056)	(118,204)	(118,352)	(118,500)	0	
Present value of Period net inflow (outflow)	(501,537)	(34,466)	131,402	131,567	131,732	131,897	132,062	132,228	132,393	132,559	1,464,543	
Cumulative present value of net inflow	(501,537)	(536,003)	(361,751)	(230,184)	(98,452)	132,145	264,290	396,435	528,580	660,725	792,870	1,464,543

No. of days = $\frac{CNF_{2030} \times 365 \text{ days}}{ANF_{2031}}$

• CNF₂₀₃₀ = Cumulative Present Value of Net Inflow in 2030

• ANF₂₀₃₁ = Annual Present Value of Net Inflow in 2031

EVA ECONOMIC VALUE ADDED EXPLAINED

A financial performance metric that calculates the value a company or project creates beyond the required return on its capital.

It's essentially a measure of a company's financial performance based on the residual wealth calculated by deducting its cost of capital from its operating profit, adjusted for taxes on a cash basis.

WHY EVA IS IMPORTANT

1. Focus on value creation
2. Incorporates cost of capital
3. Decision-making tool
4. Long-term perspective
5. Alignment with shareholder interests

Net operating profit after tax = Sales - all operating expenses - corporate income tax

Invested capital : Capital expenditures + increase in net working capital

	2024	2025	2026	2027	2028	2029
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Transform Numbers into Narratives

Let your financial data tell compelling stories of opportunities and growth

- ✓ 6 Hours of video course sessions
- ✓ 35 lessons divided in 5 modules
- ✓ 50+ finance modeling sheets, editable in Excel
- ✓ 330 pages of PDF finance modeling instructions
- ✓ 30+ Pieces of actionable content: visuals, handbooks..
- ✓ 10+ Languages video course subtitle
- ✓ Assumptions, accuracy validation and consistency checks
- ✓ 3 statements monthly and annually planning excel model
- ✓ Advanced platform interface, tracking notes and progress



Modeling Files + Guidelines

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Get Access

Select the best type of **functional statement** structure and fill historical data.

Revenues and gross profit are copied from the **Revenue sheet**.

	C	D	E	F
1				
2	Income Statement			
3		Last Period	Current Period	Year 1
4	Revenue			Year 2
5	Gross Profit			Year 3
6	Operating Expense			
7	EBITDA			
8	Net Income			
9				
10	Balance Sheet			
11		Last Period	Current Period	Year 1
12	Current Assests			Year 2
13	Non-current Assets			Year 3
14	Financial Debts			
15				
16	Cash Flow			
17		Last Period	Current Period	Year 1
				Year 2
				Year 3

Link any change in current assets and liabilities from the **balance sheet**. Adjust for non-cash items

Transfer net income to retained earning position. Transfer the cash from the **cash flow statement**.