

# How Can Financial Modeling Transform Your Business Decision-Making?

By: Iman Aly





A high-angle, slightly blurred photograph of an office environment. Several people are seated at white desks, working on laptops. The desks are equipped with various office supplies like pens, paper, and water bottles. The office has a modern, open-plan feel with white cubicle walls. The lighting is bright and even.

# Introduction

Financial modelling is the process of creating a mathematical model to represent the financial performance of a business, project, or any other investment. In simpler terms, it's a tool used to forecast a company's financial numbers and analyze its operations under various conditions.



# Purpose Of Financial Modelling

01

## Forecasting and Budgeting:

Financial forecasting models predict the future financial performance of a company based on historical data and various assumptions. This helps in preparing budgets and setting expectations for future revenue, expenses, and cash flows.

02

## Valuation:

Financial models are widely used for valuing businesses and assets. Discounted cash flow (DCF) models, for example, estimate the present value of a company based on its projected future cash flows. These models are essential in mergers and acquisitions, investment analysis, and for assessing the financial health of companies.

03

## Investment Analysis:

Models help investors and companies evaluate potential investments, comparing the expected returns against the risks. They are used to assess different scenarios, optimize the allocation of capital, and determine the financial feasibility of projects.

04

## Risk Management:

Financial modeling allows businesses to analyze and simulate different financial and operational risks. This can include sensitivity analysis, scenario planning, and stress testing, helping companies understand potential impacts on their finances under various conditions.



# Purpose Of Financial Modelling

05

## Decision Support:

Financial models provide quantitative analysis that supports strategic decision-making across the company. They help leaders make informed decisions about expansions, acquisitions, new projects, and other strategic initiatives.

06

## Business Planning and Strategy:

Models are instrumental in strategic planning, helping companies to map out their future operations. They can test different business strategies and forecast their long-term effects, providing insight into how strategic decisions might alter the company's trajectory.

07

## Capital Raising:

When businesses need to raise capital through debt or equity, financial models are used to present to potential investors or lenders. These models demonstrate the company's potential for growth and returns, showcasing its viability and the soundness of its business plan.

08

## Operational Planning:

Financial models help in operational planning by linking financial outcomes with operational metrics. They can forecast the impact of operational decisions, like changes in production capacity or operational efficiencies, on the financial health of the business.



# Components of Financial Modelling

01

Input Gathering: The first step in financial modeling is gathering historical data and making assumptions about the future. This can include past financial statements, industry data, market analysis, and forecasts.

02

Model Construction: Using the gathered inputs, a financial model is constructed typically in spreadsheet software like Microsoft Excel. The model translates assumptions and historical data into financial forecasts. It usually includes:

- Profit and Loss Statement: Estimates revenues, costs, and expenses to predict net income.
- Balance Sheet: Models assets, liabilities, and equity to assess the financial position at a given point in time.
- Cash Flow Statement: Projects how cash is expected to flow in and out of the business, highlighting the company's liquidity.



# Components of Financial Modelling

03

Analysis and Forecasting: The model can forecast future financial performance based on different scenarios and assumptions. This helps in making predictions about the company's health and its capacity to generate profit and cash flow.

04

Decision Making: The outcomes of a financial model facilitate decision-making in areas like investment appraisal, risk assessment, funding needs, and more. It can help determine the value of a business, the feasibility of projects, or the returns of potential investments.



# Uses of Financial Modelling

01

Business Valuation: Often used in mergers and acquisitions, financial modeling helps determine the value of a business.

02

Risk Analysis: Models various scenarios to see how changes in market conditions or business operations affect the company's performance

03

Capital Budgeting: Assists in evaluating investment projects, helping managers decide where to allocate capital to maximize returns.

# Uses of Financial Modelling

04

Strategic Planning: Helps companies in strategic planning by forecasting future scenarios and assessing the financial impact of different strategic choices.

05

Fundraising: Useful in presentations to potential investors, providing a detailed view of past performance and future prospects.



# Skills Required for Financial Modelling

01

## Accounting Knowledge:

A solid understanding of accounting principles is crucial. You need to know how different financial statements (income statement, balance sheet, cash flow statement) interact and how transactions affect each statement.

02

## Finance Expertise:

Familiarity with corporate finance concepts such as discounted cash flow (DCF), internal rate of return (IRR), net present value (NPV), and financial metrics is essential. Understanding these concepts allows you to interpret the outputs of a financial model and to build models that are financially robust.

03

## Excel Proficiency:

Expertise in Microsoft Excel is non-negotiable for financial modeling. This includes a strong grasp of formulas, functions (like LOOKUPS, INDEX/MATCH, SUMIF, etc.), pivot tables, data tables, and chart creation. Advanced skills may also include macros and VBA for automating repetitive tasks and handling larger datasets.

04

## Analytical Thinking:

Ability to think critically and analytically is key to dissecting financial data, making reasonable assumptions, and interpreting model outputs. Analytical skills help in understanding and forecasting financial performance and in conducting sensitivity analyses.

# Skills Required for Financial Modelling

05

## Attention to Detail:

Financial modeling requires a high level of precision. Small errors can significantly impact the outcome of a model, so meticulous attention to detail is crucial to ensure accuracy and reliability of the models.

06

## Problem-Solving Skills:

The ability to identify problems, think through potential solutions, and decide on the best course of action is vital, especially when models do not behave as expected or when confronted with complex financial scenarios.

07

## Business Understanding:

Knowledge of the business environment, industry factors, and how businesses operate within a specific sector helps in creating more realistic and relevant financial models. Understanding business operations, revenue streams, cost structures, and market dynamics is crucial.

08

## Communication Skills:

While often overlooked, the ability to communicate the findings of a financial model clearly and effectively to stakeholders (who may not have a financial background) is important. This includes writing clear reports and creating presentations that succinctly summarize the model's outcomes.



# Skills Required for Financial Modelling

09

Project Management:

Being able to manage a modeling project from conception through completion, including setting milestones, managing time efficiently, and coordinating with other team members, is valuable, especially for complex models that require input from various sources.

10

Ethics and Professionalism:

Financial modelers must adhere to high ethical standards, especially when handling sensitive financial data, making projections, and making recommendations based on model outputs.





## CONCLUSION

Financial modelling is an essential skill in business and finance, combining accounting knowledge, Excel expertise, and analytical thinking to predict financial outcomes and guide strategic decisions. This skillset enables professionals to create accurate models that provide deep insights into financial performance, aiding in investment evaluation and business planning. Effective financial modeling also demands strong communication abilities to clearly present complex data, supporting better decision-making and strategic alignment in competitive environments.





# **FINANCIAL MODELS**



# ABC MANUFACTURING, INC. - PROJECTED CONSOLIDATED FINANCIAL STATEMENTS 2024-2033

MANUFACTURING COMPANY - ABC										
Amounts in USD										
UNITS PRODUCED (numbers)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Revenue	2,700,000	2,985,000	3,308,750	3,660,563	4,060,329	4,508,602	5,011,685	5,576,730	6,211,000	6,926,423
Costs of Good Sold	915,000,000	1,019,250,000	1,136,587,500	1,268,758,125	1,417,740,469	1,585,825,495	1,775,565,986	1,989,911,271	2,232,214,547	2,506,300,299
Gross Profit	(639,750,000)	(669,264,000)	(742,692,188)	(825,060,421)	(917,533,843)	(1,021,436,395)	(1,138,273,119)	(1,269,755,664)	(1,417,831,453)	(1,584,717,049)
Gross Profit	311,250,000	349,986,000	393,885,313	443,597,704	500,215,625	564,389,100	637,292,797	720,155,607	814,383,095	921,583,250
OPERATING EXPENSES										
Employment Expenses	(2,029,000)	(2,162,100)	(2,305,350)	(2,458,414)	(2,621,958)	(2,796,726)	(2,983,501)	(3,183,149)	(3,396,557)	(3,624,704)
Rental Expenses	(26,400,000)	(27,466,000)	(28,554,240)	(29,666,410)	(30,804,266)	(32,069,637)	(33,464,421)	(34,990,599)	(36,650,229)	(38,457,432)
Admin Expenses	(6,000,000)	(6,120,000)	(6,242,400)	(6,367,248)	(6,494,593)	(6,624,485)	(6,756,975)	(6,892,114)	(7,030,958)	(7,172,559)
Utility Expenses	(9,000,000)	(9,180,000)	(9,363,600)	(9,550,872)	(9,741,889)	(9,936,727)	(10,135,462)	(10,338,170)	(10,544,934)	(10,755,833)
Promotional Expenses	(14,400,000)	(15,120,000)	(15,846,000)	(16,580,800)	(17,324,200)	(18,076,455)	(18,836,677)	(19,604,866)	(20,381,030)	(21,165,180)
Professional Expenses	(3,000,000)	(3,120,000)	(3,244,800)	(3,374,502)	(3,509,576)	(3,649,959)	(3,795,657)	(3,947,795)	(4,106,507)	(4,271,935)
Others	(6,000,000)	(6,240,000)	(6,480,600)	(6,720,384)	(7,060,351)	(7,400,917)	(7,852,994)	(8,317,690)	(8,796,144)	(9,288,471)
TOTAL OPERATING EXPENSES	(66,828,000)	(69,398,100)	(72,075,980)	(74,866,520)	(77,774,724)	(80,805,935)	(83,966,614)	(87,259,669)	(90,694,150)	(94,275,457)
EBITDA	244,422,000	280,567,900	321,819,313	368,831,184	422,440,902	483,583,165	553,327,183	632,895,943	723,688,944	827,307,793
Depreciation Expense	(3,962,500)	(3,131,875)	(3,079,906)	(2,927,580)	(2,992,512)	(2,792,488)	(4,228,360)	(3,826,468)	(3,435,076)	(3,379,872)
EBIT	240,459,500	277,436,025	318,739,409	365,903,604	419,448,389	480,790,776	549,098,823	629,069,474	720,270,869	823,927,921
Interest Expense	(2,100,000)	(1,971,360)	(1,829,212)	(1,672,139)	(1,498,573)	(1,306,760)	(1,094,855)	(860,674)	(601,903)	(315,964)
EBT	238,359,500	275,464,665	316,910,197	364,231,466	417,949,816	479,484,016	548,003,969	628,208,799	719,668,964	823,611,957
Taxes	(35,753,925)	(41,322,700)	(47,536,530)	(54,634,720)	(62,602,472)	(71,922,598)	(82,200,595)	(94,231,320)	(107,950,345)	(123,541,798)
Net Income	202,605,575	234,141,966	269,373,667	309,596,746	355,257,344	407,561,395	465,803,373	533,977,480	611,718,620	700,070,163
EPS	1.19	1.38	1.58	1.82	2.09	2.40	2.74	3.14	3.60	4.12
APPROPRIATION ACCOUNTS										
Retained Earning	-	127,641,512	256,430,593	337,242,693	414,641,880	450,167,614	470,545,684	470,545,684	443,846,810	382,674,948
Net Income	202,605,575	234,141,966	269,373,667	309,596,746	355,257,344	407,561,395	465,803,373	533,977,480	611,718,620	700,070,163
Available for Distribution	202,605,575	361,803,478	525,804,261	646,809,439	769,899,224	857,729,009	936,349,057	1,004,523,164	1,055,565,430	1,092,745,111
Transfer to General Reserves	60,781,673	70,248,590	134,686,834	154,798,373	213,154,406	244,536,837	279,482,034	320,386,488	367,031,172	420,042,098
Dividend	14,182,390	35,124,295	53,874,733	77,399,186	106,577,203	142,646,488	186,321,349	240,289,866	305,859,310	385,038,590
Total Appropriation	74,964,063	105,372,885	188,561,567	232,197,559	319,731,609	387,183,325	465,803,373	560,676,354	672,890,482	805,080,688
RETAINED EARNINGS (RE) - (CI)	127,641,512	256,430,593	337,242,693	414,641,880	450,167,614	470,545,684	470,545,684	443,846,810	382,674,948	277,664,424

MANUFACTURING COMPANY - ABC										
Amounts in USD										
FIXEDASSETS	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Cost	20,250,000	23,250,000	25,650,000	29,080,000	30,880,000	42,730,000	44,730,000	46,960,000	50,160,000	54,210,000
Accumulated Depreciation	(3,962,500)	(7,094,375)	(10,174,281)	(13,101,861)	(16,094,373)	(18,886,792)	(23,115,151)	(26,941,620)	(30,359,686)	(33,739,568)
Written Down Value	16,287,500	16,155,625	15,475,719	15,978,139	14,785,627	23,843,208	21,614,849	20,018,380	19,800,304	20,470,432
CURRENT ASSETS										
Accounts Receivable	76,250,000	127,406,250	189,431,230	158,984,766	118,145,789	132,152,125	147,963,826	165,825,939	186,017,879	208,858,358
Cash and Bank	148,630,929	317,157,592	488,809,649	774,366,412	1,093,222,051	1,369,539,584	1,677,326,812	2,006,727,140	2,355,965,569	2,724,198,159
	224,880,929	444,563,842	678,240,879	933,961,178	1,211,367,840	1,501,691,709	1,825,290,638	2,172,553,079	2,541,983,448	2,993,056,518
TOTALASSETS	241,168,429	460,719,467	693,716,618	948,889,317	1,226,153,467	1,525,534,917	1,846,905,487	2,192,571,459	2,561,788,752	2,963,526,950
EQUITY										
Capital	17,000,000	17,000,000	17,000,000	17,000,000	17,000,000	17,000,000	17,000,000	17,000,000	17,000,000	17,000,000
Retained Earnings	127,641,512	256,430,593	337,242,693	414,641,880	450,167,614	470,545,684	470,545,684	443,846,810	382,674,948	277,664,424
General Reserves	60,781,673	131,030,262	265,717,096	420,515,469	683,669,875	878,206,712	1,157,688,736	1,478,075,223	1,845,106,395	2,265,148,493
Total Equity	205,423,185	404,460,855	619,959,789	852,157,349	1,100,837,489	1,365,752,396	1,645,234,420	1,938,922,034	2,244,781,343	2,559,812,917
LIABILITY										
Long Term Loan	17,421,067	15,925,132	14,272,125	12,445,552	10,427,188	8,196,896	5,732,424	3,009,182	-	-
Current Liability										
Employment Payables	1,394,000	1,485,300	1,582,785	1,686,886	1,798,064	1,916,803	2,043,663	2,179,182	2,323,976	2,478,698
Dividend Payable	14,182,390	35,124,295	53,874,733	77,399,186	106,577,203	142,646,488	186,321,349	240,289,866	305,859,310	385,038,590
Principal (from Long term Loan)	1,353,787	1,495,934	1,653,008	1,826,573	2,018,363	2,230,292	2,464,472	2,723,242	3,009,182	-
Expenses payable s	1,394,000	2,227,950	2,374,178	3,373,772	4,495,159	4,792,082	5,109,158	5,447,954	5,809,941	6,196,745
	18,324,177	40,333,479	59,484,703	84,286,417	114,888,789	151,585,625	195,988,643	250,640,244	317,002,409	393,714,033
TOTALEQUITY & LIABILITY	241,168,429	460,719,467	693,716,618	948,889,317	1,226,153,467	1,525,534,917	1,846,905,487	2,192,571,459	2,561,788,752	2,963,526,950
CHECK POINT	-	-	-	-	-	-	-	-	-	-

MANUFACTURING COMPANY - ABC										
Amounts in USD										
OPERATING CASH FLOW	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Net Income	202,605,575	234,141,966	269,373,667	309,596,746	355,257,344	407,561,395	465,803,373	533,977,480	611,718,620	700,070,163
Add: Depreciation Expense	3,962,500	3,131,875	3,079,906	2,927,580	2,992,512	2,792,488	4,228,360	3,826,468	3,435,076	3,379,872
Changes in AR	(76,250,000)	(51,156,250)	(62,025,000)	30,836,484	40,448,977	(14,006,336)	(15,811,702)	(17,862,113)	(20,191,940)	(22,840,479)
Changes in Exp / Payable	1,394,000	83,950	146,228	999,594	1,121,388	296,873	317,126	338,796	361,986	386,805
Changes in Principal Payment	1,353,787	142,148	157,073	173,566	191,790	211,928	234,181	258,770	285,940	(3,009,182)
Changes in Employment Payable	1,394,000	91,300	97,485	104,101	111,178	118,749	126,850	135,518	144,795	154,722
CF from Operating Activity	134,459,862	187,204,988	210,829,359	344,638,070	400,123,188	396,975,028	454,898,188	520,674,920	595,737,477	678,141,900
INVESTING CASH FLOW										
Changes in Fixed Assets	(20,250,000)	(3,000,000)	(2,400,000)	(3,380,000)	(1,850,000)	(11,850,000)	(2,000,000)	(2,230,000)	(3,200,000)	(4,050,000)
FINANCING CASH FLOW										
Capital	17,000,000	-	-	-	-	-	-	-	-	-
Long Term Loans	0	17,421,067	(1,495,934)	(1,653,008)	(1,826,573)	(2,018,363)	(2,230,292)	(2,464,472)	(2,723,242)	(3,009,182)
Dividend Payment		(14,182,390)	(35,124,295)	(53,874,733)	(77,399,186)	(106,577,203)	(142,646,488)	(186,321,349)	(240,289,866)	(305,859,310)
NET CASH FLOW	148,630,929	168,526,664	171,652,057	285,556,764	318,855,639	276,317,533	307,787,227	329,400,329	349,238,429	368,232,590
Opening Cash Flow	0	-	148,630,929	317,157,592	488,809,649	774,366,412	1,093,222,051	1,369,539,584	1,677,326,812	2,006,727,140
Closing Cash Flow - CI		148,630,929	317,157,592	488,809,649	774,366,412	1,093,222,051	1,369,539,584	1,677,326,812	2,006,727,140	2,355,965,569
	-	-	-	-	-	-	-	-	-	-



## LEVERAGE BUYOUTS (LBO) MODEL

Assumptions					
(Millions)			Financials		
Last Year EBITDA	1,350		Last Year Financials		
EBITDA Multiple	12.0x		Revenue	4500	
Enterprise Value - EV	16,200		EBITDA	1350	
Existing Net Debt	400		D&A	150	
Equity Value	15,800		Capex	400	
			NWC	300	
Fees & Expenses	75				
Sales (\$Millions)			Operating Assumptions		
EBITDA Multiple	12.0x		Revenue Growth	12.0%	
			YoY margin expansion	2.0%	
			Tax Rate	25.0%	
Sources and Uses of Capital					
Sources of Capital			Uses of Capital		
	Amount	xEBITDA % Capital		Amount	xEBITDA % Capital
Bank Debt	2,700	2.0x 15.6%	Debt amortization	400	0.3x 2.5%
Senior Debt	4,050	3.0x 24.9%	Equity Payment	15,800	11.7x 97.1%
Total Debt	6,750	5.0x 41.5%			
Investment Equity	9,525	7.1x 58.5%	Fees and Expenses	75	0.1x 0.5%
Total Sources of Capital	16,275	12.1x 100.0%	Total Uses of Capital	16,275	12.1x 100.0%

Debt Schedule						
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Bank Debt</b>						
Balance b/f		2,700	2,580	2,277	1,747	941
Interest		216	206	182	140	75
Principal payment		120	304	530	806	941
Balance c/f	2,700	2,580	2,277	1,747	941	0
<b>Senior Debts</b>						
Balance b/f		4,050	4,050	4,050	4,050	4,050
Interest		648	648	648	648	648
Principal payment		0	0	0	0	201
Balance c/f	4,050	4,050	4,050	4,050	4,050	3,849
<b>Total Debt</b>						
Balance b/f		6,750	6,630	6,327	5,797	4,991
Interest		864	854	830	788	723
Principal payment		120	304	530	806	1,141
Balance c/f	6,750	6,630	6,327	5,797	4,991	3,849
<b>Internal Rate of Return (IRR)</b>						
Last Year EBITDA Sales						3,172
Sales Multiple						12.0x
Enterprise Value - EV						38,067
Net Debt						3,849
Investment Equity Value						34,217
Initial Equity Investment						9,525
Multiple of Invested Capital (MOIC)						3.6x
IRR						29.1%



Financials						
Operating Model						
	Year0	Year 1	Year 2	Year 3	Year 4	Year 5
Revenue	4,500	5,040	5,645	6,322	7,081	7,931
% growth		12.0%	12.0%	12.0%	12.0%	12.0%
EBITDA	1,350	1,613	1,919	2,276	2,691	3,172
% sales	30.0%	32.0%	34.0%	36.0%	38.0%	40.0%
EBIT	1,200	1,445	1,731	2,065	2,455	2,908
% sales	26.7%	28.7%	30.7%	32.7%	34.7%	36.7%
Interest		864	854	830	788	723
EBT	1,200	581	877	1,235	1,667	2,185
% sales	26.7%	11.5%	15.5%	19.5%	23.5%	27.5%
Taxes	300	145	219	309	417	546
% tax rate	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Net Income	900	436	657	926	1,250	1,638
% sales	20.0%	8.6%	11.6%	14.7%	17.7%	20.7%
Cash flow Items						
	Year0	Year 1	Year 2	Year 3	Year 4	Year 5
D&A	150	168	188	211	236	264
% sales	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%
Net Working Capital	300	336	376	421	472	529
% sales	6.7%	6.7%	6.7%	6.7%	6.7%	6.7%
Change in Net Working Capital		36	40	45	51	57
CapEx	400	448	502	562	629	705
% sales	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%
Levered Cash Flow						
	Year0	Year 1	Year 2	Year 3	Year 4	Year 5
Net Income		436	657	926	1,250	1,638
D&A		168	188	211	236	264
CapEx		448	502	562	629	705
Change in NWC		36	40	45	51	57
Levered Cash Flow		120	304	530	806	1,141

IMAN ALY



# STRATEGIC FINANCIAL FORECASTING: NAVIGATING UNCERTAINTY WITH BEST/WORST CASE SCENARIO PLANNING

Best/Worst Case Scenario Model							
	2023 Actuals	2024 Worst	% Chg	2024 Base Case	% Chg	2024 Best	% Chg
The amount is in USD							
Revenue per unit	500,000	300,000	-40%	450,000	-10%	600,000	20%
total units	200	100	-50%	250	25%	300	50%
Total Revenue	100,000,000	30,000,000	-70%	112,500,000	13%	180,000,000	80%
Cost of Goods Sold	40,000,000	20,000,000	-50%	47,000,000	18%	65,000,000	63%
Gross Margin	60,000,000	10,000,000	-83%	65,500,000	9%	115,000,000	92%
Gross Profit Margin (GPM)	60%	33%		58%		64%	



## COMPREHENSIVE SCENARIO PLANNING FOR NEW PRODUCT LAUNCHES

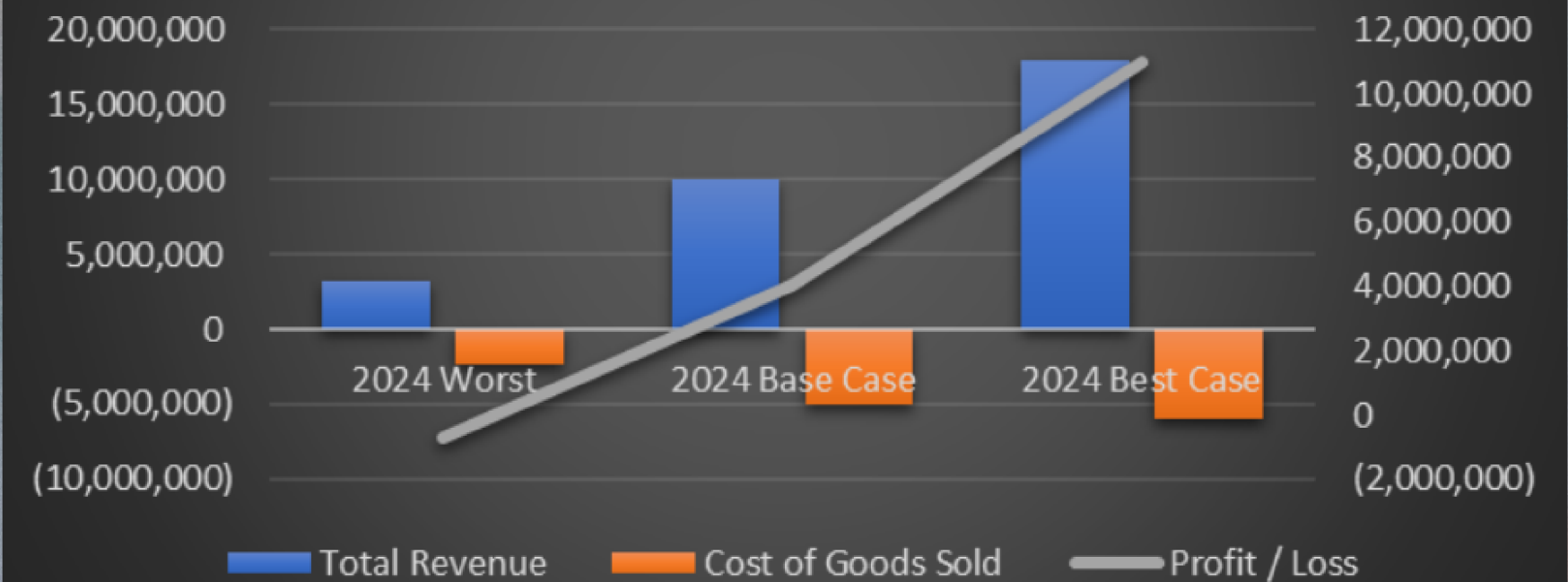
### Best/Worst Case Scenario Model

	2024 Worst Case	2024 Base Case	2024 Best Case
The amount is in USD			
Revenue per unit	400	500	600
total units	8,000	20,000	30,000
<b>Total Revenue</b>	<b>3,200,000</b>	<b>10,000,000</b>	<b>18,000,000</b>
Cost of Goods Sold	2,400,000	5,000,000	6,000,000
<b>Gross Profit</b>	<b>800,000</b>	<b>5,000,000</b>	<b>12,000,000</b>
<b>Gross Profit Margin (GPM)</b>	<b>25%</b>	<b>50%</b>	<b>67%</b>
<u>Operating Expenses</u>			
Marketing & Launch Cost	1,500,000	1,000,000	1,000,000
<b>Total OPEX</b>	<b>1,500,000</b>	<b>1,000,000</b>	<b>1,000,000</b>
<b>Profit / Loss</b>	<b>(700,000)</b>	<b>4,000,000</b>	<b>11,000,000</b>
<b>Profit Margin/loss</b>	<b>-22%</b>	<b>40%</b>	<b>61%</b>

GLOBAL  
STRATEGY  
FINANCE  
CONSULTANTS



## COMPREHENSIVE SCENARIO PLANNING FOR NEW PRODUCT LAUNCHES



IMAN ALY



# SENSITIVITY ANALYSIS AND WHAT-IF ANALYSIS

DCF ANALYSIS						
FREE CASH FLOW - USD MM						
YEARS	2023A	2024E	2025E	2026E	2027E	2028E
FREE CASH FLOW	6,000	7,800	10,140	13,182	17,137	22,278
PROJECTED YEARS		1	2	3	4	5
PRESENT VALLUE OF FREE CASH FLOW		7,290	8,857	10,760	13,073	15,884
SHARE PRICE CALCULATION		SENSITIVITY ANALYSIS				
Sum of PV of FCF	55,864					
GROWTH RATE	4.00%					
WACC	7.00%					
TERMINAL VALUE	772,289					
PV OF TERMINAL VALUE	550,632					
ENTERPRISE VALUE	606,496					
(+) CASH	15,000					
(-) DEBT	7,500					
(-) Minority Interest	600					
EQUITY VALUE	613,396					
OUTSTANDING SHARE (MM)	500.00					
SHARE PRICE	1,226.79					
		SHARE PRICE		GROWTH RATE		
		1,226.79	3.00%	3.50%	4.00%	4.50%
WACC	6.00%	1,272.24	1,507.52	1,860.44	2,448.64	3,625.04
	6.50%	1,084.33	1,249.25	1,480.14	1,826.48	2,403.71
	7.00%	943.53	1,064.93	1,226.79	1,453.40	1,793.31
	7.50%	834.14	926.82	1,045.97	1,204.84	1,427.26
	8.00%	746.74	819.52	910.49	1,027.45	1,183.40
		TERMINAL VALUE		GROWTH RATE		
		772,289	3.00%	3.50%	4.00%	4.50%
WACC	6.00%	764,864	922,292	1,158,434	1,552,005	2,339,146
	6.50%	655,597	768,577	926,747	1,164,004	1,559,431
	7.00%	573,648	658,780	772,289	931,203	1,169,573
	7.50%	509,909	576,432	661,962	776,002	935,658
	8.00%	458,918	512,384	579,217	665,145	779,715


Effect of Price Discounts by Volume Increase				
Sales	\$ 10,000,000	\$ 500,000	\$ 750,000	\$ 750,000
Profit	15%	30%	45%	35%
Discount	-5%	-10%	-20%	-15%
Average price before discount	\$ 5,000	\$ 2,000	\$ 5,000	\$ 5,000
Volume before	2000	250	150	150
Profit per unit	\$ 750	\$ 600	\$ 2,250	\$ 1,750
Cost	\$ 4,250	\$ 1,400	\$ 2,750	\$ 3,250
New profit per unit after discount	\$ 500	\$ 400	\$ 1,250	\$ 1,000
Volume after	3000	375	270	262.5
Change volume needed	50%	50%	80%	75%

Volume increase in % necessary to maintain the same amount of profit in \$ after giving a discount								
Profit (in % of sales) before change	Price discount (price reduction in %)							
	-1%	-2%	-3%	-4%	-5%	-10%	-15%	-20%
5%	25%	67%	150%	400%	-	-	-	-
10%	11%	25%	43%	67%	100%	-	-	-
15%	7%	15%	25%	36%	50%	200%	-	-
20%	5%	11%	18%	25%	33%	100%	300%	-
25%	4%	9%	14%	19%	25%	67%	150%	400%
30%	3%	7%	11%	15%	20%	50%	100%	200%
35%	3%	6%	9%	13%	17%	40%	75%	133%
40%	3%	5%	8%	11%	14%	33%	60%	100%
45%	2%	5%	7%	10%	13%	29%	50%	80%
50%	2%	4%	6%	9%	11%	25%	43%	67%

Best/Worst Case Scenario Model							
The amount is in USD	2023	2024	% Chg	2024	% Chg	2024	% Chg
	Actuals	Worst		Base Case		Best	
Revenue per unit	500,000	300,000	-40%	450,000	-10%	600,000	20%
total units	200	100	-50%	250	25%	300	50%
Total Revenue	100,000,000	30,000,000	-70%	112,500,000	13%	180,000,000	80%
Cost of Goods Sold	40,000,000	20,000,000	-50%	47,000,000	18%	65,000,000	63%
Gross Margin	60,000,000	10,000,000	-83%	65,500,000	9%	115,000,000	92%
Gross Profit Margin (GPM)	60%	33%		58%		64%	





**Should you require further insights into  
Financial Analysis or wish to discuss the  
content in more detail, please feel free to reach  
out directly via LinkedIn or email me at  
[imanhabsy@hotmail.com](mailto:imanhabsy@hotmail.com).**



**THANK YOU!**