FINANCIAL MODELING

PRESENTED BY

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FINANCIAL MODEL

Financial Model – what should it consist?

Financial model are projections of predictable revenue streams and costs with key focus on cash flows

Key components of a Financial Model

- Capacity mapping
- Profit and Loss Account
- Working Capital
- Cash Flows
- Balance Sheet
- Fund Requirement

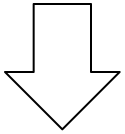
Capacity mapping – the most missed aspect in financial model

- Capacity mapping – refers to ascertaining bottlenecks to scale !
- Infinite growth without debottlenecking – an unrealistic scenario

	MANUFACTURING COMPANY			
	Y1	Y2	Y3	Y4
Installed capacity	50'000	100'000	150'000	150'000
Capacity utilisation	20'000	60'000	120'000	130'000
% of utilisation	40%	60%	80%	87%

	SERVICE / IT PRODUCT COMPANY			
	Y1	Y2	Y3	Y4
Total manpower hours				
- programming hours				
- development hours				
Output / man hours				
Server capacity				
Seat capacity				

How will you grow beyond
130,000 units * INR 100 = INR 13 mm ?



Debottlenecking comes at a cost and takes time !

Building revenue assumptions

- Listing down revenue drivers – factors that will earn revenues for the company
- Building parameters to capture it in numerical terms in the financial model

By Product/service

By customers **By Geography**

- Thinking through growth rates
- Factoring in change in pricing - key variable
  - Will prices fall over a period of time?
  - Will you be able to increase the prices going forward?
  - What factors do you foresee that can influence the price?

	MANUFACTURING COMPANY			
	Y1	**Y2**	**Y3**	**Y4**
Product 1				
Units sold	12000	36000	72000	78000
Price per unit	100	110	121	133.1
Total revenues	1'200'000	3'960'000	8'712'000	10'381'800
Product 2				
Units sold	8000	24000	48000	52000
Price per unit	50.0	47.5	45.1	42.9
Total revenues	400'000	1'140'000	2'166'000	2'229'175

	SERVICE / IT PRODUCT COMPANY			
	Y1	**Y2**	**Y3**	**Y4**
USA & UK Sales				
Financial services firms				
New Assignments	3	4	5	6
Cummulative Lisences	3	7	12	18
License fee/user/month	1'000	1'000	950	950
Total revenues	36'000	84'000	136'800	205'200
India Sales				
Banks				
New Assignments				
Cummulative Lisences				
BPOs				
New Assignments				
Cummulative Lisences				

Costing – danger of underestimation

- Factor in as many costs as possible
- Cost escalation is bound to happen
- Factor for unforeseen costs - contingencies

	MANUFACTURING COMPANY			
	Y1	Y2	Y3	Y4
Purchases				
Labour				
Factory Electricity				
Other overheads				
Selling and marketing expenses				
Employee costs				
Administrative costs				
Professional fees				
License fees				
Commissions and Discounts				
Travel				
Office Rentals				

	SERVICE / IT PRODUCT COMPANY			
	Y1	Y2	Y3	Y4
Manpower costs				
Licensing costs				
Travel				
Office Rentals				
Selling and marketing expenses				
Administrative costs				
Professional fees				
Server costs				
AMC				

Estimating EBITDA

EBITDA – Earnings before Interest Tax and Depreciation / Amortisation

It represents operating profit. Also known as cash profits

It is very important profitability measure and also highlights operational efficiency and ability of core business to generate cash

PARTICULARS - INR MILLIONS	2013-14	2014-15	2015-16	2016-17	2017-18
INCOME STATEMENT					
Income From Operations					
- Subscriptions	7.0	39.9	85.5	145.7	194.0
- Transactions	0.1	0.7	3.4	9.0	17.1
- Uploads	0.5	1.9	4.8	9.2	15.1
TOTAL REVENUES	**7.6**	**42.6**	**93.6**	**163.9**	**226.2**
Expenses					
Manpower expenses	13.4	28.5	46.3	60.4	78.0
Logistics expenses	0.1	0.7	2.4	4.5	8.5
Admin expenses	3.6	4.4	6.2	8.3	10.5
Advt. & Marketing expenses	3.3	11.1	24.8	43.7	63.5
Miscellaneous expenses & refunds	0.2	0.9	1.9	3.3	4.5
TOTAL EXPENSES	20.6	45.6	81.5	120.3	165.0
EBIDTA	**-13.1**	**-3.0**	**12.1**	**43.7**	**61.2**
EBIDTA margins	*-172.8%*	*-7.1%*	*12.9%*	*26.6%*	*27.1%*

Why is the EBITDA negative in the first two years?

Arriving at PAT from EBITDA

PAT – Profit After Tax

PAT gets added to Net Worth in the balance sheet

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INCOME STATEMENT					
EBIDTA	**-13.1**	**-3.0**	**12.1**	**43.7**	**61.2**
EBIDTA margins	*-172.8%*	*-7.1%*	*12.9%*	*26.6%*	*27.1%*
Interest					
Depreciation	0.6	0.5	0.6	0.6	0.6
	0.6	0.5	0.6	0.6	0.6
Profit before tax (PBT)	**-13.6**	**-3.5**	**11.5**	**43.1**	**60.6**
PBT margins	*-180.5%*	*-8.3%*	*12.3%*	*26.3%*	*26.8%*
Tax	-	-	3.8	14.2	20.0
Profit after tax (PAT)	**-13.6**	**-3.5**	**7.7**	**28.9**	**40.6**
PAT margins	*-180.5%*	*-8.3%*	*8.2%*	*17.6%*	*18.0%*

Interest to include all kinds of interest – working capital and term loan

Preparing Cash Flow Statement

- Start the cash flow statement with EBITDA
- Add all the cash inflows
- Deduct all the cash outflows
- Arrive at the closing balance of cash flow
- Link the closing balance as per cash flow statement into the Balance Sheet

AVOID DOUBLE COUNTING – HENCE ALL EXPENSES ABOVE EBITDA NOT TO BE CONSIDERED AGAIN IN CASH FLOW STATEMENT

ALL CASH EXPENSES BELOW EBITDA TO BE CONSIDERED IN THE CASH FLOW STATEMENT

AVOID DEPRECIATION AT ALL TIMES SINCE IT'S A NON CASH EXPENSE

Cash Flow Statement

INR million

CASH FLOW STATEMENT	FY12A	FY13E	FY14P	FY15P	FY16P	FY17P
EBITDA		79.0	219.6	612.7	1'749.1	5'086.0
ADD:						
Equity infusion		1'500.0	1'000.0	1'000.0	600.0	
Term Loan/supplier credit			460.1	532.8	1'365.0	1'784.4
Working capital loan		47.6	58.6	51.6		
TOTAL CASH INFLOW	**0**	**1'626.6**	**1'738.2**	**2'197.1**	**3'714.1**	**6'870.4**
Less:						
Capital Expenditure - A		43.5	575.1	666.0	1'706.3	2'230.5
Capital Expenditure - B		50.0	47.5	135.4	214.3	407.3
Capital Expenditure - C		52.2	628.3	712.8	1'805.0	2'340.8
Capital Expenditure - Technology			100.0		50.0	
Capital Expenditure - D				160.6	24.9	50.4
Payment of Deposits		8.8	108.8	204.7	375.4	593.7
Interest Payment		6.2	-3.4	53.6	263.5	464.4
Repayment of Term loan/Supplier credit			-	72.4	165.0	399.6
Change in working capital		68.1	83.7	73.7	-49.6	-153.5
Payment of Taxes		13.0	3.6	56.2	216.4	1'094.6
TOTAL CASH OUTFLOW	**-**	**241.8**	**1'543.4**	**2'135.4**	**4'771.1**	**7'427.7**
OPENING CASH BALANCE		3.4	1'388.2	1'583.0	1'644.7	587.7
CHANGE IN CASH		1'384.8	194.8	61.7	-1'057.0	-557.3
CLOSING CASH BALANCE	**3.4**	**1'388**	**1'583**	**1'645**	**588**	**30**

Projecting working capital

Research shows that most of the companies face financial crises due to bad working capital management

- Working capital represents on going cash requirement due to mismatch of cash inflow and cash outflow
- Working capital has the following key components
  - Debtors
  - Inventory (Raw Material, WIP, Finished Goods)
  - Creditors

Other items that may affect working capital are deposits, Advance Tax, TDS, Service Tax

STEPS

- **Estimate number of days of cash blockage and credit period**

Debtors and inventory are cash blockages and creditor payment is a credit period

Calculate these number of days on projected parameters

Debtors days = 60

Projected sales for FY15 = 150 million

Debtors = 150 / 365 * 60 = 24.7 million

Projecting working capital

	FY13
Debtors	123'000
Inventory	41'000
Creditors	28'000
Revenues	450'000
Cost of Production	200'000
Expenses	120'000
Debtors days	100
Inventory Days	75
Creditor days	85
Cash Conversion cycle	**90**

		FY14	FY15	FY16
	Revenues	600'000	840'000	1'680'000
	days			
Debtors	100	164'000	229'600	459'200
	COP	300000	420000	840000
Inventory	75	61'500	86'100	172'200
Current Assets		**225'500**	**315'700**	**631'400**
	Expenses	150'000	210'000	420'000
Creditors	85	35'000	49'000	98'000
Current Liabilities		**35'000**	**49'000**	**98'000**
NET CURRENT ASSETS		190'500	266'700	533'400
CHANGE IN WORKING CAPITAL			**76'200**	**266'700**

Increase in change in working capital is cash outflow while fall in change in working capital is cash inflow

If you have adequate security to provide, banks on an average may provide 70% of the Net Current Assets

Tech companies fund this by raising equity multiple times

How to build a balance sheet

- First complete the projections with respect to Profit and Loss Account and Cash Flow statement
- Fill in the last audited or provision accounts
- PAT from every year gets added to Net worth
- All items from cash flow statement and profit and loss statement flow into respective heads
- The base for any subsequent year is always the earlier year expect for working capital items

How to build a balance sheet

BALANCE SHEET	FY12	FY13E	FY14P	FY15P	FY16P	FY17P
SOURCES OF FUNDS						
Shareholder's funds						
- Share capital	8.3	1'522.3	2'522.3	3'522.3	3'522.3	3'522.3
- Share application money	14.0					
- Reserves and surplus	38.4	64.8	71.7	181.3	603.2	2'737.4
Net Worth	**60.7**	**1'587.1**	**2'594.0**	**3'703.6**	**4'125.5**	**6'259.7**
Loan funds						
- Secured loans		47.6	566.3	1'078.2	2'278.2	3'663.0
Long term employee provisions	0.8		-	-	-	-
TOTAL SOURCES OF FUNDS	**61.5**	**1'634.7**	**3'160.3**	**4'781.8**	**6'403.7**	**9'922.7**
APPLICATION OF FUNDS						
Fixed assets						
- Gross block	56.5	204.7	1'555.6	3'230.3	7'030.8	12'059.7
- Less: Depreciation	10.3	35.4	218.3	572.5	1'327.3	2'623.3
- Net block	46.1	169.3	1'337.3	2'657.8	5'703.5	9'436.4
Capital WIP	2.5					
Current assets						
- Sundry debtors	13.4	66.8	142.5	246.7	248.7	257.0
- Cash and bank balance	3.4	1'388.2	1'583.0	1'644.7	-12.3	-569.6
- Deposits & Loans and advances	5.2	14.0	122.8	327.5	702.9	1'296.6
- Other Current Assets	7.4	7.4	7.4	7.4	7.4	7.4
Current Assets	**29.3**	**1'476.3**	**1'855.6**	**2'226.3**	**946.7**	**991.3**
Current Liabilities						
- Creditors	14.9	9.4	31.2	100.8	244.9	503.5
- Other Current liabilities and provisions	1.5	1.5	1.5	1.5	1.5	1.5
Net current asets	**12.9**	**1'465.4**	**1'822.9**	**2'124.0**	**700.2**	**486.3**
TOTAL APPLICATION OF FUNDS	**61.5**	**1'634.7**	**3'160**	**4'782**	**6'404**	**9'923**
Diff	0	0.0	0	0	0	0

THANK YOU

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