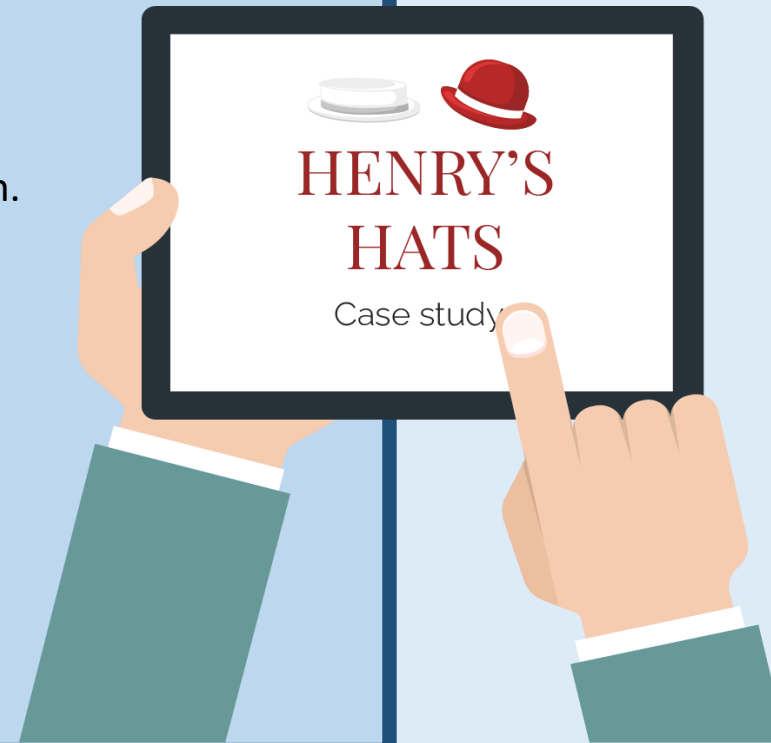


In this project, I have developed a comprehensive business model to forecast and budget the financial performance of a company I created **Henrys Hat**. Utilizing my advanced Excel skills, I created a sophisticated financial model that incorporated sensitivity and scenario analysis. By implementing various scenarios, I assessed the impact of different market conditions on the company's revenue growth. To enhance visibility and facilitate data-driven decision-making, I designed and implemented a dynamic dashboard that visually presented the projected revenue growth trends. This project effectively showcased my proficiency in budgeting, forecasting, and Excel, demonstrating my ability to leverage data analysis to drive informed financial decisions.



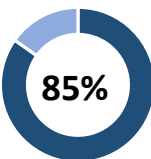
***All the numbers I incorporated are random and is for study purpose only*

Sales Dashboard South America 2022

Figures in million USD

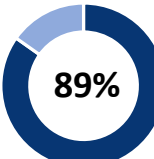
Sales

\$2,544



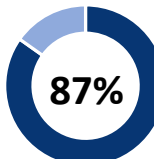
Profit

\$890

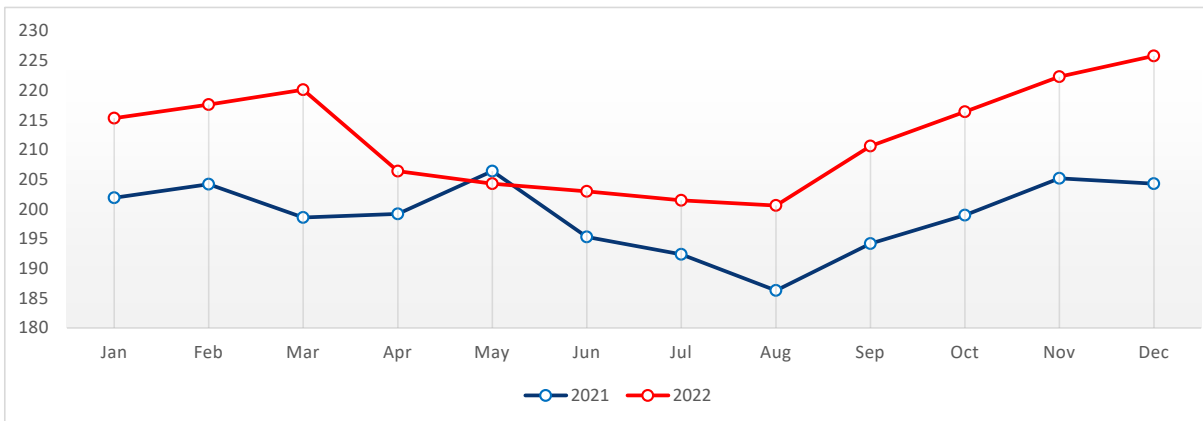


of Customers

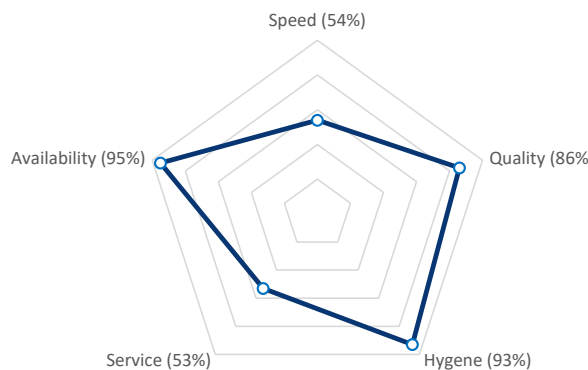
87.0



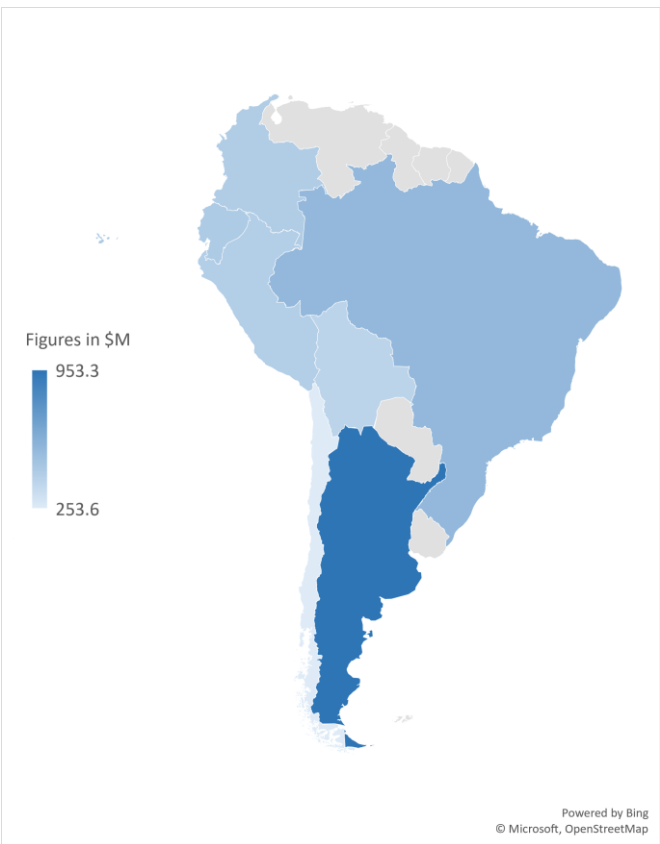
2021-2022 Sales Trend (in millions)



Customer Satisfaction



Sales by Country 2022





KPIs

Sales (M)	Amount	Profit	Amount	Customers	Amount
Actual	\$ 2,544	Actual	\$ 890	Actual	87.0
Target	\$ 3,000	Target	\$ 1,000	Target	100.0
% Complete	85%	% Complete	89%	% Complete	87%
Remainder	15%	Remainder	11%	Remainder	13%

Sales

Figures in \$M	2021	2022
Jan	201.9	215.3
Feb	204.2	217.6
Mar	198.6	220.1
Apr	199.2	206.4
May	206.4	204.3
Jun	195.3	203
Jul	192.4	201.5
Aug	186.3	200.6
Sep	194.2	210.6
Oct	199	216.4
Nov	205.2	222.3
Dec	204.3	225.8

Sales by countr	Figures in \$M
Argentina	953.3
Colombia	432.4
Brazil	553.2
Ecuador	445.1
Peru	425.1
Chile	253.6
Bolivia	387.5

Customer Satisfaction

Customer Satisfaction	Score
Speed (54%)	54%
Quality (86%)	86%
Hygene (93%)	93%
Service (53%)	53%
Availability (95%)	95%

Sensitivity Analysis

Assumptions		Income Statement	
Units sold	25,000	Revenue	2,05,332
Price per u	8.21	COGS	(68,750)
Cost per u	2.75	Gross Pro	1,36,582
SG&A	10,000	SG&A	(10,000)
Tax rate	21%	Earnings I	1,26,582
		Taxes	(26,582)
		Net Incon	1,00,000

Price & Quantity Sensitivity

		Quantity Sold					
		1,00,000	15,000	20,000	25,000	30,000	35,000
Price per Unit	6		33,140	46,820	60,500	74,180	87,860
	7		44,990	62,620	80,250	97,880	1,15,510
	8		56,840	78,420	1,00,000	1,21,580	1,43,160
	9		68,690	94,220	1,19,750	1,45,280	1,70,810
	10		80,540	1,10,020	1,39,500	1,68,980	1,98,460

Scenario Analysis			
\$ in actua	2022E	2023E	2024E
Revenues	50,000	1,25,000	2,50,000
Costs	(5,000)	(12,500)	(25,000)
Net Incon	45,000	1,12,500	2,25,000

Choose Senario->

1

Revenue Scenarios			
1. Best C	50,000	1,25,000	2,50,000
2. Base C	25,000	37,500	50,000
3. Worst	12,500	13,000	13,250
Cost Scenarios			
1. Best C	(5,000)	(12,500)	(25,000)
2. Base C	(16,000)	(25,000)	(37,500)
3. Worst	(22,500)	(30,000)	(45,000)

P&L Budgeting -->

Revenue Budget

Bottom-Up Approach

Sales Volume in '000	Last Year Actual Volume					Bottom-Up Volume Budget					
	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY	Growth %
Distributor A	100	250	280	98	728	107	268	300	105	779	7.0%
Distributor B	50	86	92	65	293	53	91	97	69	309	5.5%
Distributor C	45	120	120	70	355	50	134	134	78	398	12.0%
Total	195	456	492	233	1,376	210	493	531	252	1,486	8.0%

>> Volume planning

Revenue in '000	Last Year Actual Revenue					Bottom-Up Revenue Budget					
	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY	Growth %
Sales Volume	195	456	492	233	1,376	210	493	531	252	1,486	8.0%
White Hats	130	304	328	155	917	140	328	354	168	990	>> Mix planning
Red Hats	65	152	164	78	459	70	164	177	84	495	
White Hats	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	>> Pricing
Red Hats	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	
Price White Hats	10	10	10	10	10	10	10	10	10	10	0%
Price Red Hats	10	10	10	10	10	11	11	11	11	11	10%
Revenue White Hats	1,300	3,040	3,280	1,553	9,173	1,401	3,284	3,540	1,679	9,905	
Revenue Red Hats	650	1,520	1,640	777	4,587	771	1,806	1,947	923	5,447	
Total Revenue	1,950	4,560	4,920	2,330	13,760	2,172	5,091	5,488	2,602	15,352	11.6%

Sales Budget -->

Revenue Budget

Top-Down Approach

	Last Year Actual Revenue					Top-Down Revenue Budget					Growth
in '000	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY	%
Total Industry	18,525	43,320	46,740	22,135	1,30,720	21,044	49,212	53,097	25,145	1,48,498	13.6%
Henry's Hats Market Share	10.5%	10.5%	10.5%	10.5%	10.5%	12.0%	12.0%	12.0%	12.0%	12.0%	
Total	1,950	4,560	4,920	2,330	13,760	2,525	5,905	6,372	3,017	17,820	29.5%

Revenue Budget

Triangulation of results

Bottom-up approach	11.6%
Top-down approach	29.5%
Average Revenue Growth	20.5%

in '000	Last Year Actuals					Revenue Budget					Growth %
	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY	
Sales Volume	195	456	492	233	1,376	220	515	556	263	1,554	13.0%
White Hats	130	304	328	155	917	147	344	371	175	1,036	
Red Hats	65	152	164	78	459	73	172	185	88	518	
White Hats	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	
Red Hats	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	
Price White Hats	10	10	10	10	10	10	10	10	10	10	0%
Price Red Hats	10	10	10	10	10	12	12	12	12	12	20%
Revenue White Hats	1,300	3,040	3,280	1,553	9,173	1,467	3,435	3,707	1,753	10,362	
Revenue Red Hats	650	1,520	1,640	777	4,587	880	2,061	2,224	1,052	6,217	
Total Revenue	1,950	4,560	4,920	2,330	13,760	2,347	5,497	5,931	2,805	16,579	20.5%

>> plus 70k hats to be sold >>

>> additional 10% price increase

>> Average Revenue Growth

Sales Department Projection:

Q1	Q2	Q3	Q4	FY
220	515	556	263	1,554

Production Budget -->

Production Volume

Number of units, in '000	Last Year Actual Volume					Budgeted Volume					
	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY	Growth %
Sales Volume	195	456	492	233	1,376	220	515	556	263	1,554	13%
Product Mix:											
White Hats	130	304	328	155	917	147	344	371	175	1,036	
Red Hats	65	152	164	78	459	73	172	185	88	518	
Target Warehouse Level:											
White Hats	25%	25%	25%	25%		25%	25%	25%	25%		
Red Hats	30%	30%	30%	30%		30%	30%	30%	30%		
Beginning Inventory:											
White Hats	32	33	76	82		39	37	86	93		
Red Hats	16	20	46	49		23	22	52	56		
Ending Inventory:											
White Hats	33	76	82	39		37	86	93	44		
Red Hats	20	46	49	23		22	52	56	26		
Production Volume:											
White Hats	131	348	334	112	924	145	393	377	127	1,041	
Red Hats	69	178	168	52	466	72	201	189	58	521	
Total Production Volume	199	526	502	164	1,390	217	594	567	185	1,562	12%

Direct Materials

in '000	Last Year Actuals (Volume/Cost)					Budgeted Direct Materials (Volume/Cost)					Growth %
	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY	
Production Volume:											
White Hats	131	348	334	112	924	145	393	377	127	1,041	
Red Hats	69	178	168	52	466	72	201	189	58	521	
Fabric Usage per Hat (m²):											
White Hats	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
Red Hats	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
Price of 1 m² fabric:											
White Hats	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	
Red Hats	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	
Fabric Purchases											
White Hats	-157	-417	-401	-135	-1,109	-173	-471	-453	-152	-1,249	
Red Hats	-103	-267	-251	-78	-699	-108	-302	-284	-88	-782	
Total Cost (Direct Materials)	-259	-684	-652	-212	-1,808	-281	-773	-737	-239	-2,031	12%

Direct Labor

in '000	Last Year Actuals (Volume/Cost)					Budgeted Direct Labor (Volume/Cost)					Growth %
	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY	
Sales Volume	195	456	492	233	1,376	210	493	531	252	1,486	8.0%
Product Mix:											
White Hats	130	304	328	155	917	140	328	354	168	990	
Red Hats	65	152	164	78	459	70	164	177	84	495	
Production Volume:											
White Hats	131	348	334	112	924	145	393	377	127	1,041	
Red Hats	69	178	168	52	466	72	201	189	58	521	
Number of Direct Labor Hours per Hat:											
White Hats	0.25	0.25	0.25	0.25		0.25	0.25	0.25	0.25		
Red Hats	0.25	0.25	0.25	0.25		0.25	0.25	0.25	0.25		
Hours of Direct Labor Needed:											
White Hats (000s)	33	87	84	28		36	98	94	32		
Red Hats (000s)	17	45	42	13		18	50	47	15		
Average Cost of Direct Labor:											
White Hats	-10	-10	-10	-10		-10	-10	-10	-10		
Red Hats	-10	-10	-10	-10		-10	-10	-10	-10		
Direct Labor Expense:											
White Hats	-326	-869	-835	-280	-2,310	-361	-982	-944	-316	-2,603	
Red Hats	-171	-445	-419	-129	-1,165	-180	-503	-474	-146	-1,303	
Total Cost (Direct Labor)	-498	-1,314	-1,254	-410	-3,475	-541	-1,485	-1,417	-462	-3,906	12%

Overheads

in '000	Last Year Actual Expenses					Budgeted Expenses					Growth %
	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY	
Production Volume:											
White Hats	131	348	334	112	924	145	393	377	127	1,041	
Red Hats	69	178	168	52	466	72	201	189	58	521	
Indirect Personnel (number of people)	6	6	6	6		8	8	8	8		
Indirect Personnel Average Salary (000s)	-20	-20	-20	-20		-20	-20	-20	-20		
Indirect Labor Expense:	-120	-120	-120	-120	-480	-160	-160	-160	-160	-640	
Number of Hats to be Produced	199	526	502	164		217	594	567	185		
Average Utility Expense per Hat	-0.1	-0.1	-0.1	-0.1		-0.1	-0.1	-0.1	-0.1		
Utility Expense:	-20	-53	-50	-16	-139	-22	-59	-57	-18	-156	
Rent Expense:	-400	-400	-400	-400	-1,600	-400	-400	-400	-400	-1,600	
Depreciation:	-50	-52	-61	-70	-234	-73	-75	-85	-96	-328	>> show it as a separate line item in the Income Statement

Cost of Goods Sold (COGS)

in '000	Last Year Actual Cost					Budgeted Cost					Growth %
	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY	
Direct Costs											
Direct Material	-259	-684	-652	-212	-1,808	-281	-773	-737	-239	-2,031	12%
Direct Labour	-498	-1,314	-1,254	-410	-3,475	-541	-1,485	-1,417	-462	-3,906	12%
Indirect Costs											
Indirect Labour	-120	-120	-120	-120	-480	-160	-160	-160	-160	-640	33%
Utility Expense (production)	-20	-53	-50	-16	-139	-22	-59	-57	-18	-156	12%
Rent Expense (factory)	-400	-400	-400	-400	-1,600	-400	-400	-400	-400	-1,600	0%
Cost of Goods Sold	-1,297	-2,571	-2,476	-1,158	-7,502	-1,404	-2,878	-2,771	-1,280	-8,333	11.1%

SG&A Budget -->

Payroll Expense

	Last Year Actuals					Payroll Budget						
	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY	Growth %	
Average Salary (in USD)												
Production Department - Direct Labor (USD, per hour)	10	10	10	10	10	10	10	10	10	10	0.0%	
Production Department - Indirect Labor ('000, per quarter)	20	20	20	20	20	20	20	20	20	20	0.0%	
Administrative Department ('000, per quarter)	6	6	6	6	6	6.3	6.3	6.3	6.3	6.3	5.0%	
Payroll expense (in '000)												
Production Department - Direct Labor	-498	-1,314	-1,254	-410	-3,475	-541	-1,485	-1,417	-462	-3,906	12.4%	>> included in COGS (Direct Labor)
Production Department - Indirect Labor	-120	-120	-120	-120	-480	-160	-160	-160	-160	-640	33.3%	>> included in COGS
Administrative Department	-276	-288	-288	-282	-1,134	-296	-296	-296	-296	-1,184	4.4%	(Indirect Labor - Overheads)
Total Payroll expense (in '000)	-894	-1,722	-1,662	-812	-5,089	-997	-1,941	-1,873	-918	-5,730	13%	>> included in SG&A

SG&A Expense

in '000	Last Year Actuals					Budget					Growth %
	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY	
Sales Volume	195	456	492	233	1,376	220	515	556	263	1,554	13.0%
Revenue	1,950	4,560	4,920	2,330	13,760	2,347	5,497	5,931	2,805	16,579	20.5%

in '000 USD	Last Year Actual SG&A					Budgeted SG&A					Driver
	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY	
Sales Commissions	-75	-180	-201	-103	-559	-95	-223	-241	-114	-674	fixed % of Revenue
as a % of Revenue	-4%	-4%	-4%	-4%	-4%	-4%	-4%	-4%	-4%	-4%	
Transportation	-27	-123	-156	-50	-356	-32	-148	-188	-60	-429	% of Revenue
as a % of Revenue	-1%	-3%	-3%	-2%	-3%	-1%	-3%	-3%	-2%	-3%	
External Services	-43	-181	-197	-81	-502	-52	-218	-237	-98	-605	% of Revenue
as a % of Revenue	-2%	-4%	-4%	-3%	-4%	-2%	-4%	-4%	-3%	-4%	
Payroll (administrative personnel)	-276	-288	-288	-282	-1,134	-296	-296	-296	-296	-1,184	based on headcount
as a % of Revenue	-14%	-6%	-6%	-12%	-8%	-13%	-5%	-5%	-11%	-7%	
Office Rent	-40	-40	-40	-40	-160	-40	-40	-40	-40	-160	fixed cost
as a % of Revenue	-2%	-1%	-1%	-2%	-1%	-2%	-1%	-1%	-1%	-1%	
SG&A Expense	-461	-812	-882	-556	-2,711	-516	-926	-1,003	-608	-3,052	

Balance Sheet Budgeting -->

Working Capital

in '000	Last Year Actuals					Budget					Growth %
	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY	
Revenue	1,950	4,560	4,920	2,330	13,760	2,347	5,497	5,931	2,805	16,579	20.5%
Cost of Goods Sold	-1,297	-2,571	-2,476	-1,158	-7,502	-1,404	-2,878	-2,771	-1,280	-8,333	11.1%
Accounts Receivable	650	1,520	1,640	777		782	1,832	1,977	935		
Days of Sales Outstanding (DSO)	30	30	30	30		30	30	30	30		
Accounts Payable	288	571	550	257		312	640	616	284		
Days of Payables Outstanding (DPO)	20	20	20	20		20	20	20	20		
Inventory	52	122	131	62		59	137	148	70		
Days of Inventory Outstanding (DIO)	4	4	5	5		4	4	5	5		
Working Capital	414	1,070	1,221	581	3,286	529	1,330	1,509	721	4,089	24%
Cash Conversion Cycle	14	14	15	15		14	14	15	15		

Fixed Assets

in '000	Last Year Actuals					Budget					
	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY	Growth %
Revenue	1,950	4,560	4,920	2,330	13,760	2,347	5,497	5,931	2,805	16,579	20.5%
PP&E (Opening Balance)	1,000	1,048	1,223	1,408		1,454	1,499	1,699	1,910		
PP&E Purchases (CAPEX)	98	228	246	117	688	117	275	297	140	829	
as a % of Revenue	5%	5%	5%	5%		5%	5%	5%	5%		
Depreciation and amortization (D&A)	-50	-52	-61	-70	-234	-73	-75	-85	-96	-328	
as a % of Beginning Value	5%	5%	5%	5%		5%	5%	5%	5%		
Property, Plant & Equipment (Closing Balance)	1,048	1,223	1,408	1,454		1,499	1,699	1,910	1,955		

Loan Repayment Schedule

Loan amount (in '000)	200
Interest rate	6.154%
Quarterly payments (in '000)	20
Maturity (in years)	4

in '000	Last Year Actuals (Y1)				Budgeted Liability (Y2)				Long-term Liability as at Y3 & Y4							
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Opening Balance	200.0	192.3	184.1	175.5	166.3	156.5	146.1	135.1	123.4	111.0	97.9	83.9	69.1	53.3	36.6	18.8
Interest expense	12.3	11.8	11.3	10.8	10.2	9.6	9.0	8.3	7.6	6.8	6.0	5.2	4.3	3.3	2.3	1.2
Repayment	(20.0)	(20.0)	(20.0)	(20.0)	(20.0)	(20.0)	(20.0)	(20.0)	(20.0)	(20.0)	(20.0)	(20.0)	(20.0)	(20.0)	(20.0)	(20.0)
Closing Balance	192.3	184.1	175.5	166.3	156.5	146.1	135.1	123.4	111.0	97.9	83.9	69.1	53.3	36.6	18.8	0.0

>> should be zero

Financial Statements -->

The Master Budget

Income Statement

	Last Year Actuals					Budget					
in '000	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY	Growth %
Revenue	1,950	4,560	4,920	2,330	13,760	2,347	5,497	5,931	2,805	16,579	20.5%
Cost of Goods Sold	-1,297	-2,571	-2,476	-1,158	-7,502	-1,404	-2,878	-2,771	-1,280	-8,333	11.1%
Gross Profit	653	1,989	2,444	1,172	6,258	942	2,619	3,160	1,525	8,246	31.8%
SG&A Expenses	-461	-812	-882	-556	-2,711	-516	-926	-1,003	-608	-3,052	12.6%
EBITDA	192	1,177	1,562	616	3,547	427	1,693	2,157	918	5,194	46.5%
D&A	-50	-52	-61	-70	-234	-73	-75	-85	-96	-328	40.2%
EBIT	142	1,125	1,500	545	3,313	354	1,618	2,072	822	4,866	46.9%
Interest expense	-12	-12	-11	-11	-46	-10	-10	-9	-8	-37	-19.7%
EBT	130	1,113	1,489	534	3,267	344	1,608	2,063	814	4,829	47.8%
Taxes	-19	-167	-223	-80	-490	-52	-241	-310	-122	-724	47.8%
as a % of EBT	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	0.0%
Net Income	110	946	1,266	454	2,777	292	1,367	1,754	692	4,105	48%

Balance Sheet

in '000	Last Year Actuals				Budget				Growth %
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Current assets									
Cash	866	972	1,894	2,932	3,222	3,578	4,930	6,354	217%
Accounts Receivable	650	1,520	1,640	777	782	1,832	1,977	935	120%
Inventory	52	122	131	62	59	137	148	70	113%
Non-current assets									
Property, Plant & Equipment	1,048	1,223	1,408	1,454	1,499	1,699	1,910	1,955	134%
Total Assets	2,616	3,837	5,073	5,225	5,562	7,246	8,965	9,314	178%
Current liabilities									
Accounts Payable	288	571	550	257	312	640	616	284	110%
Tax Liabilities	0	0	0	0	0	0	0	0	0%
Non-current liabilities									
Loan obligation	192	184	175	166	157	146	135	123	74%
Equity	2,135	3,081	4,347	4,801	5,093	6,461	8,214	8,906	185%
Total Liabilities & Equity	2,616	3,837	5,073	5,225	5,562	7,246	8,965	9,314	178%

Cash Flow Statement

in '000	Last Year Actuals					Budget					Growth %
	Q1	Q2	Q3	Q4	FY	Q1	Q2	Q3	Q4	FY	
Net Income	110	946	1,266	454	2,777	292	1,367	1,754	692	4,105	
Add: D&A	50	52	61	70	234	73	75	85	96	328	
Add: Interest expense	12	12	11	11	46	10	10	9	8	37	
Add: Tax expense	19	167	223	80	490	52	241	310	122	724	
EBITDA	192	1,177	1,562	616	3,547	427	1,693	2,157	918	5,194	
Changes in Accounts Receivable	320	-870	-120	863	193	-6	-1,050	-145	1,042	-158	
Changes in Inventory	42	-70	-10	69	32	3	-79	-11	78	-8	
Changes in Accounts Payables	-186	283	-21	-293	-217	55	327	-24	-331	27	
Taxes paid	-19	-167	-223	-80	-490	-52	-241	-310	-122	-724	
Net cash generated from operating activities	349	354	1,188	1,175	3,065	428	650	1,668	1,584	4,330	41%
PP&E Purchases	-98	-228	-246	-117	-688	-117	-275	-297	-140	-829	
Net cash used in investing activities	-98	-228	-246	-117	-688	-117	-275	-297	-140	-829	20%
Loan repayment	-20	-20	-20	-20	-80	-20	-20	-20	-20	-80	
Net cash used in financing activities	-20	-20	-20	-20	-80	-20	-20	-20	-20	-80	0%
Net Cash Flow	231	106	922	1,038	2,297	290	356	1,352	1,424	3,422	49%
Cash and cash equivalents at the beginning of the period	635	866	972	1,894	635	2,932	3,222	3,578	4,930	2,932	
Cash and cash equivalents at the end of the period	866	972	1,894	2,932	2,932	3,222	3,578	4,930	6,354	6,354	117%
Net increase/decrease in cash	231	106	922	1,038	2,297	290	356	1,352	1,424	3,422	>> goes in the Balance Sheet