

Introduction to Financial Forecasting

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Why Develop a Financial Forecast?

“The financial section of a business plan is one of the most essential components of the plan, as you will need it if you have any hope of winning over investors or obtaining a bank loan. Even if you don't need financing, you should compile a financial forecast in order to simply be successful in steering your business.”

Elizabeth Wasserman, Inc. Magazine

Financial Projection – Purposes

- Provide a realistic vision of the finances of your business
- Estimate the financial state of your business at various points in time
- Identify how much financing you will need
- Provide benchmarks to measure your progress against as you get up and running
- Provide a tool: as things change, change the projection

Three Key Financial Statements

- Income Statement (also called the Profit & Loss Statement)
- Balance Sheet
- Cash Flow Statement

Financial Forecast – Three Key Statements

Income Statement

- Shows profit or loss in a time period (e.g., month, quarter, year)
- Developed on an accrual basis (e.g., when liabilities come into existence)
- Gives a “true” picture of whether you are making money (as opposed to the Cash Flow Statement)
- Starting point for the Balance Sheet and Cash Flow Statement

Financial Forecast – Three Key Statements

Balance Sheet

- Accumulates the results from the periodic Income Statements
- Accrual Basis
- Key categories
 - Assets (what you own)
 - Liabilities (what you owe)
 - Owner's Equity (difference between assets and liabilities)

Financial Forecast – Three Key Statements

Cash Flow Statement

- Developed on a cash basis (e.g., when cash is expended or collected)
- Based on the Income Statement and assumptions regarding the timing of cash collection and payment
- Projected Cash Flow over time will tell you how much financing you will need

Forecasting is not the Same as Accounting

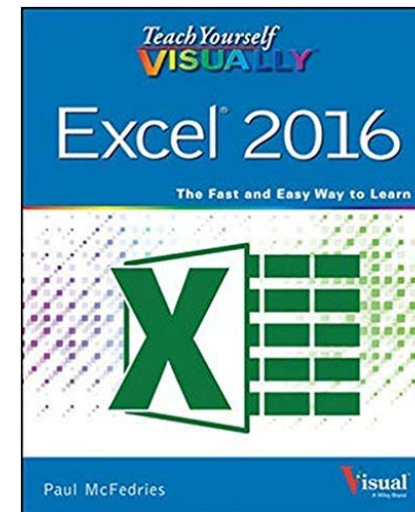
- Need Income Statement, Balance Sheet, Cash Flow Statement, but ...
- Less concern about detail
- Can make reasonable educated guesses and use approximations

Good article: www.inc.com/guides/business-plan-financial-section.html

Financial Projection – Suggested Approach



Training available in books, on YouTube or on sites like Lynda.com



Financial Projection – Suggested Approach

- Use Microsoft Excel or another spreadsheet program
- Keep the projection as simple as possible. Don't get lost in the numbers
- First page or pages of the worksheet contain assumptions
- Subsequent pages contain the financial statements – Income Statement, Balance Sheet, Cash Flow Statement
- Project monthly, accumulate quarterly and annually for 3 years

Assumptions

- Sales, components of the cost of goods sold, cash flow assumptions, etc.
- Place these on a page or pages at the front of your spreadsheet and reference them in other sheets
- Why?
 - To control the inputs to the model
 - To not miss anything important
 - To not overwrite any of the formulas in your projection

Assumptions

- Assumptions need to be reasonable – explain how you arrived at the most significant assumptions
- Your assumptions will determine the credibility of your projection
- Use three scenarios:
 pessimistic best estimate optimistic
- Regarding sales forecasts, Guy Kawasaki notes that “History has shown that your actual results will be 10% of your most conservative forecast.”

Income Statement (with example)

- Revenue (sales)
- Cost of Goods Sold
- Gross Margin = Revenue – Cost of Goods Sold
- Operating Expenses
- Income from Operations = Gross Margin – Operating Expenses
- Net Income = Income from Operations – Income Taxes

MathGuy.us Startup	Pre-Start	Year 1-Monthly					Year 1-Quarterly				Year 1 Total
		1	2	3	...	12	Q1	Q2	Q3	Q4	
Income											
Sales											
Handbook Sales											
Number of Handbooks Sold		10	12	14	...	20					36
Average Unit Price		\$20.00	\$20.00	\$20.00	...	\$20.00					\$20.00
Revenue		\$200	\$240	\$280	...	\$400					\$720
Tutoring											
Number of Hours		4	8	12	...	12					24
Unit Rate		\$45.00	\$45.00	\$45.00	...	\$45.00					\$45.00
Revenue		\$180	\$360	\$540	...	\$540					\$1,080
Total Sales Revenue		\$380	\$600	\$820	...	\$940					\$1,800
Cost of Goods Sold											
Handbook Sales											
Number of Handbooks Sold		10	12	14	...	20					36
Average Unit Cost		\$15.00	\$15.00	\$15.00	...	\$15.00					\$15.00
Cost		\$150	\$180	\$210	...	\$300					\$540
Tutoring											
Number of Hours		4	8	12	...	12					24
Unit Cost of Using Car		\$10.00	\$10.00	\$10.00	...	\$10.00					\$10.00
Cost		\$40	\$80	\$120	...	\$120					\$240
Total Cost of Goods Sold		\$190	\$260	\$330	...	\$420					\$780
Gross Margin		\$190	\$340	\$490	...	\$520					\$1,020
Expenses											
Operating Expenses											
Accounting		\$25	\$25	\$25	...	\$25					\$75
Bank Services and Charges		20	20	20	...	20					60
Business Licenses		17	17	17	...	17					51
Insurance		10	10	10	...	10					30
Legal	\$2,500										
Office Supplies		10	10	10	...	10					30
Rent		0	0	0	...	0					0
Utilities		10	10	10	...	10					30
Web Hosting and Domains		25	25	25	...	25					75
Other		25	25	25	...	25					75
Total		\$142	\$142	\$142	...	\$142					\$426
Income from Operations		\$48	\$198	\$348	...	\$378					\$594
Income Tax (assume 20%)		\$10	\$40	\$70	...	\$76					\$119
Net Income		\$38	\$158	\$278	...	\$302					\$475
Cumulative Gain/Loss	(\$2,500)	(\$2,462)	(\$2,303)	(\$2,025)	...	\$589				\$589	\$589

Revenue (sales)

- Segments that make sense for your business
- Estimate unit sales, unit prices, product of the two
- Revenue by product or service
- Revenue by target market
- Revenue by sales channel (e.g., retailers, distributors, website)
- **Key:** project revenue by categories that are measurable and allow you to see how well your projections bear out after you go live

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Total Sales Revenue		\$380	\$600	\$820	...	\$940	\$1,800				

Cost of Goods Sold

- Same segments that you use for Revenue
- Cost associated with the production of the goods or services that generate revenue, including the wages of those creating the goods
- Show unit sales (same as Revenue unit sales); estimate unit costs, product of the two
- **Key:** project cost by categories that are measurable and allow you to see how well your projections bear out after you go live

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Operating Expenses (Overhead)

- There may be significant expenditures before you make your first sale. Reflect this in start-up expenses
- Numerous categories. Be thorough, and assume some miscellaneous expenses to cover things you did not think of
- Exclude income tax at this point (it is a separate line item)
- Consider whether each expense is fixed or variable
- Allocation between Cost of Goods Sold and Expenses may be tricky – make sure you include every anticipated expenditure somewhere in the projection

Operating Expenses – Potential Categories

- Accounting
- Advertising and marketing
- Bank services
- Business licenses
- Business Tax
- Consultants
- Depreciation
- Dues and subscriptions
- Furniture and Equipment
- Insurance
- Interest on Loan
- Legal
- Maintenance and repairs
- Office Supplies
- Opening Inventory
- Postage
- Rent
- Research and development
- Salaries and Wages
- Payroll expenses (e.g., FICA tax)
- Security
- Taxes – other
- Telephone
- Training
- Travel
- Utilities
- Web hosting
- Worker's Compensation
- Miscellaneous or "Other" expenses

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Utilities		10	10	10	...	10	30				
Web Hosting and Domains		25	25	25	...	25	75				
Other		25	25	25	...	25	75				
Total		\$142	\$142	\$142	...	\$142	\$426				
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The Rest of the Income Statement

- $\text{Income from operations} = \text{Gross margin} - \text{Operating expenses}$
- Miscellaneous income and expense items, like interest and rental income, gifts, etc. Unless these are expected to be significant, they can be omitted from the projection
- Income Taxes
- $\text{Net Income} = \text{Income from operations} - \text{Income taxes}$

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Other Financial Statements

- After Income Statement is Complete ...
- Balance Sheet
- Cash Flow Statement
- Generate these from the Income Statement with appropriate assumptions
- Question for you: Where do these assumptions go?

Questions?