

Wharton Business Plan
Competition
**Business Plan Financial
Statements**

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Topics

- Generating Financial Statements and Accompanying Notes
- Identifying and Testing Key Assumptions
- Integrating Financial Statements with the other Components of your Business Plan
- Modeling Tips

Critical Questions

- Why develop pro-forma financial statements and notes?
- How should financial statements be researched?
- How should financial statements and notes be projected and presented?

Financial Statements

- **Balance Sheet**
- **Income Statement**
- **Statement of Cash Flows**

Balance Sheet

Balance sheets don't tell you about the ups and downs, only how things were as of a specific date such as December 31.

Current assets are cash and other assets expected to be converted to cash, sold or consumed within one year.

Fixed assets, intangible assets, and other assets are longer term investments and have a long-term use.

Current liabilities are reasonably expected to be liquidated within a year.

GOOGLE INC.			
CONDENSED CONSOLIDATED BALANCE SHEETS			
(in thousands, except par value)			
		As of	
		December 31,	
		2005	
Assets			
Current assets:			
Cash and cash equivalents	\$	3,877,174	
Marketable securities		4,157,073	
Accounts Receivable		687,976	
Deferred income taxes, net		49,341	
Prepaid revenue share, expenses and other assets		223,507	
Total current assets		3,000,071	
Deferred income taxes, net, non-current		—	
Prepaid revenue share, expenses and other assets, non-		16,341	
Non-marketable equity securities		14,369	
Property and equipment, net		961,749	
Intangible assets, net		82,783	
Goodwill		194,900	
Long Term Assets		1,278,742	
Total assets	\$	10,271,813	
Liabilities and Stockholders' Equity			
Current liabilities:			
Accounts payable	\$	115,575	
Accrued compensation and benefits		198,788	
Accrued expenses and other current liabilities		114,377	
Accrued revenue share		215,771	
Deferred revenue		73,099	
Income taxes payable		27,274	
Total current liabilities		745,894	
Deferred revenue, long-term		10,488	
Deferred income taxes, net		35,419	
Other long-term liabilities		61,585	
Total long term liabilities		107,592	
Stockholders' equity:			
Common stock, \$0.001 par value:		293	
Additional paid-in capital		7,477,792	
Deferred stock-based compensation		(119,015)	
Accumulated other comprehensive income		4,019	
Retained earnings		2,055,868	
Total stockholders' equity		3,418,967	
Total liabilities and stockholders' equity	\$	10,271,813	

Three Components

- » **Assets:** Economic resources controlled by an entity, as a result of past transactions and from which future economic benefits may be obtained.
- » **Liabilities:** Is an *obligation* of an entity arising from past transactions or events.
- » **Shareholder's Equity:** Owner's residual interest in the assets of the enterprise after deducting all its liabilities.

$$\text{Shareholder's Equity} = \text{Total Assets} - \text{Total Liabilities}$$

Income Statement

- Sometimes called P & L, Profit and Loss, Earnings
- Defined for a specified period such as a month, quarter, or year

Name Box		A	B	C	D
3	Income Statement				
4			Month 1	Month 2	Month 3
5	Gross Sales (Revenue)		\$10,000.00	\$20,000.00	\$30,000.00
6	Sales Discounts, Returns and Allowances		<u>(\$200.00)</u>	<u>(\$400.00)</u>	<u>(\$600.00)</u>
7	Net Sales		\$9,800.00	\$19,600.00	\$29,400.00
8					
9	Net Sales		\$9,800.00	\$19,600.00	\$29,400.00
10	Cost of Goods Sold (COGS)		<u>(\$2,450.00)</u>	<u>(\$4,900.00)</u>	<u>(\$7,350.00)</u>
11	Gross Profit		\$7,350.00	\$14,700.00	\$22,050.00
12					
13	Gross Profit		\$7,350.00	\$14,700.00	\$22,050.00
14	Salaries & Overtime		<u>(\$2,000.00)</u>	<u>(\$4,000.00)</u>	<u>(\$6,000.00)</u>
15	Sales and Marketing		<u>(\$1,500.00)</u>	<u>(\$3,000.00)</u>	<u>(\$4,500.00)</u>
16	General Administrative Expenses		<u>(\$1,800.00)</u>	<u>(\$3,600.00)</u>	<u>(\$5,400.00)</u>
17	EBITDA		\$2,050.00	\$4,100.00	\$6,150.00
18					
19	EBITDA		\$2,050.00	\$4,100.00	\$6,150.00
20	Taxes		<u>(\$512.50)</u>	<u>(\$1,025.00)</u>	<u>(\$1,537.50)</u>
21	Depreciation/Amortization		<u>(\$200.00)</u>	<u>(\$250.00)</u>	<u>(\$300.00)</u>
22	Net Income (Loss)		\$1,337.50	\$2,825.00	\$4,312.50

Sales (Revenue): Based on number of units sold * price per unit

Sales Commission: Direct costs related to selling of product/services

COGS: Direct costs of producing good or service (i.e., materials)

Operating Expenses: Other costs related to managing the business (e.g., rent, marketing, overhead, etc.)

Revenues – Expenses = Profit or Loss

Statement of Cash Flow

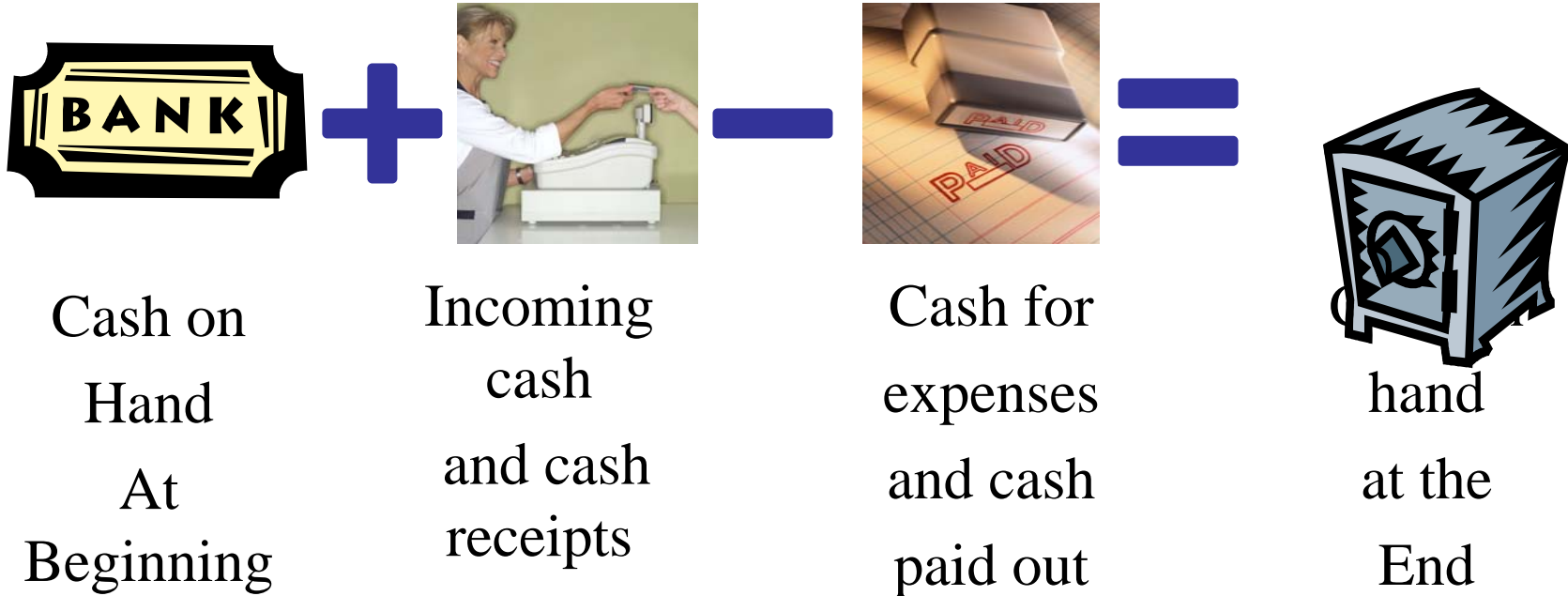
- For a period of time: Month, quarter, year
- Cash Flows in 3 categories:
 - **Operations:** Net Income (profit/loss earnings) from income statement
 - **Investing:** Sale or acquisition of non-current assets (plant, property, equipment)
 - **Financing:** Issuance/Repayment of bonds, common stock and dividends

Statement of Cash Flows

- **Net change in cash** for the period = the sum of cash flow from operations, cash flow from investing, and cash flow from financing
- Each of these three cash flows can be positive or negative

Cash Flow

Put simply, your cash flow projections identify how much cash you have on hand at the end of a given period.



Cash Flow Statement: Simplified Example

Date	Jan.	Feb.	Mar.	Apr.
Cash on Hand	\$500	\$300	\$0	\$20
Incoming cash	+\$50	+\$50	+\$50	+\$50
Expenses paid	-\$200	-\$450	-\$30	-\$50
Asset Purchases	\$50	\$0	\$0	\$0
Cash Remaining	\$300	(\$100)	\$20	\$20
Financing Necessary?	No	Yes	No	No

*Where you have a negative cash balance,
your company will require financing.*

Order to Prepare Statements

1. Prepare detailed Income Statement
2. Then Cash Flow Statement
3. Then Balance Sheet

Pro Forma Financial Statements Definition

- What is a Pro Forma Statement
 - Dictionary Definitions:
 - Done as a formality; perfunctory
 - Provided in advance so as to prescribe form or describe items:
a pro forma copy of a document
 - For business plans, pro forma has come to mean projected for the **future – educated estimates**
- What Pro Formas are not:
 - Not “scientific measurements”, but rather “educated guesses”
 - i.e., don’t waste your time trying to 100% accurate
 - Static
 - as the business changes, your pro formas will need to be adjusted
 - Rosy Future Projections
 - error on conservative side, underestimate revenue growth/timing and overestimate costs

Why develop pro-forma financial statements and notes?

In decades of experience, the vast majority of potential investors review three sections of a business plan first:

- (1) the Executive Summary,
- (2) Management Team, and
- (3) Financial Projections with notes.

Pro forma financial statements

- Conversely:
- Harvard Professor William Sahlman writes in his article Some Thoughts on Business Plans:
- “When I first started to study entrepreneurial ventures, I too turned first to the numbers. Of late, I have gotten to the point where I hardly even look at them. Indeed, if I receive a plan that has five years of monthly projections, I immediately and enthusiastically throw the plan in the circular file next to my desk.”

Benefits of Developing Pro Formas

- **Pen to Paper**. Forces the team to transform abstract, general ideas about the venture into *quantitative forms* which enhances their understanding of the venture and helps them identify key questions and assumptions.
- **Benchmarks**. Provides *measurable benchmarks* for judging performance.
- **Stakeholders**. Develops a shared basis for discussions with relevant stakeholders

How should financial statements be researched?

- Using both primary and secondary research
- **Primary research** – talking directly to relevant individuals including customers, suppliers, distributors, competitors, regulators, industry experts, accountants and other financial professionals
- **Secondary research** – collecting data from third party aggregators of information including US census, bureau of labor statistics, trade associations, marketing firms, academic journals, annual reports and 10Ks of public companies

Good Resource: Other Business Plans

Review
other
business
plans



The screenshot shows the Entrepreneur.com website with the following content:

- Navigation: Entrepreneur Home, Help & How-To, Grow Your Business, Franchises & Opportunities, Video, Tools & Services, Encyclopedia
- Search: powered by Google
- Page Title: Home > Starting a Business > Business Plans > Free Sample Business Plans
- Section: Free Sample Business Plans
- Text: Browse through more than 50 sample business plans to get inspiration for your own plan. The following is a list of 60 free sample business plans out of the 400 plans that are included in Business Plan Pro.
- Links: [Subscribe](#) | [Print](#) | [E-Mail](#) | [Newsletter](#) | [RSS](#)
- Marketplace: Technology delivered on time every time. Don't have a HD TV for the game? Free trials of Internet security software. Customize Your Business. Free trials of Internet security software.
- Business Plan Categories and Examples:
 - A**
 - [Aircraft Rental Instruction Business Plan](#) (Lansing Aviation)
 - [Artificial Flowers Import Business Plan](#) (Fantastic Florals)
 - [Auto Parts Store Business Plan](#) (Southeast Racing)
 - [Auto Repair Service Business Plan](#) (Quick and Dirty Auto Repair)
 - B**
 - [Bed and Breakfast Business Plan](#) (Coach House Bed and Breakfast)
 - [Benefits Administration Business Plan](#) (Employee Benefits Administration)
 - [Beverage Machine Retail Business Plan](#) (Margarita Momma)
 - C**
 - [Car Wash Business Plan](#) (Soapy Rides Car Wash)
 - [Children's Website Business Plan](#) (IntellChild.com)
 - [Coffee Export Business Plan](#)
- Left Sidebar: Starting a Business (How-To Guides, Self-Assessment, Business Ideas, Startup Basics, Business Plans, Getting Financing, Finding Customers, Inventing, Success Stories, View All), Money, Marketing, Sales, Advertising, Franchises, Biz Opportunities, Home Based Biz, E-Business, Management, Human Resources, Technology, Work Life, Automotive, Magazine, Business Center, More Resources
- Right Sidebar: Brother Multi-Function Center advertisement with icons for Print, Fax, Copy, and Scan, and a photo of the machine.

- www.entrepreneur.com/businessplan/a-z/
- <http://www.businessplanarchive.org/>

How should financial statements be projected and presented?

- **Broad and Deep**. The most comprehensive and useful projections are both broad and deep.
- **Easy to Read**. The statements should be structured for simplicity of review for those only interested in an overview at a glance.
- **Detailed**. Concomitantly, the statements should have sufficient detail to satisfy critical scrutiny by financial professionals.

How should financial statements be projected and presented?

- How can you best display both breadth and depth in the income statement? Two common approaches are:
 - List full detail in one statement with sub-totals
 - Show simplified statements and itemize the categories separately

How should financial statements be projected and presented?

- Number of Years to be included?
 - 3 years: Uncertainty
 - 5 years: Start-up profits in years, 3, 4, 5
- Time Periods to present – Monthly, quarterly or annually
 - Annuals are essential
 - Quarterly for at least years 1 and 2
 - Monthly for year 1 at least
 - Have annual numbers on one sheet and show the monthly and/or quarterly breakdowns on a separate sheet

How should financial statements be presented?

- One Set or Three?
 - Pessimistic, Expected, Optimistic (Low, Medium, High, Tall, Grande, Venti)?
 - Develop three sets for yourselves. You can always deliver a single set to an interested third party.
- Hockey Stick characteristics
 - Revenues in years 1 and 2?
 - Venture Capitalists want 10X in 5 years

Testing Your Assumptions

Four Methods

- **Graphical:** Analyze your pro formas by plotting key figures.
- **Market Comparisons:** Understand your pro formas by comparing key indicators with those of the market.
 - Market Ratios (i.e., % of industry)
 - Competitor Analysis (i.e., compared to competitors)
- **Historic Review:** Compare your projections to historic figures.
- **Sensitivity Analysis** (what ifs): Shows the impact of best and worse case results on your business (higher or lower costs, sales, etc.).
 - How small changes can have big impacts
 - Reverse Income Statement

Notes with Financial Statements

- All assumptions should be clearly documented in the notes accompanying the financial statements

Notes with Financial Statements

- When an investor asks “Where did you get that number from?” it is great to answer “as you see in note 6, we surveyed 12 suppliers and calculated the average price from them.” This applies to all revenues and expenses.

Notes with Financial Statements

- Honesty is not the best policy, it is the only policy. If you had to simply guess at some figure because of lack of time or data, state this clearly. This builds trust. It also allows the investor to help you if they have specific knowledge which may help you improve the quality of your projections.

Notes with Financial Statements

- Review accompanying notes in online annual reports and business plans.

Modeling & Accounting Tips

- Enter all assumptions at the top of the spreadsheet
 - Do not embed assumptions into formulas
 - Static Assumptions vs. Dynamic Assumptions
- Highlight assumptions by shading or font color
- Insert notes for yourself along the way
 - Right-click cell (comments)
 - Source of information, comments or reminders
- Specify units of measurement
 - Be specific and detailed
- Spell Check
- Leave “Column B” Blank

Fixed assumptions

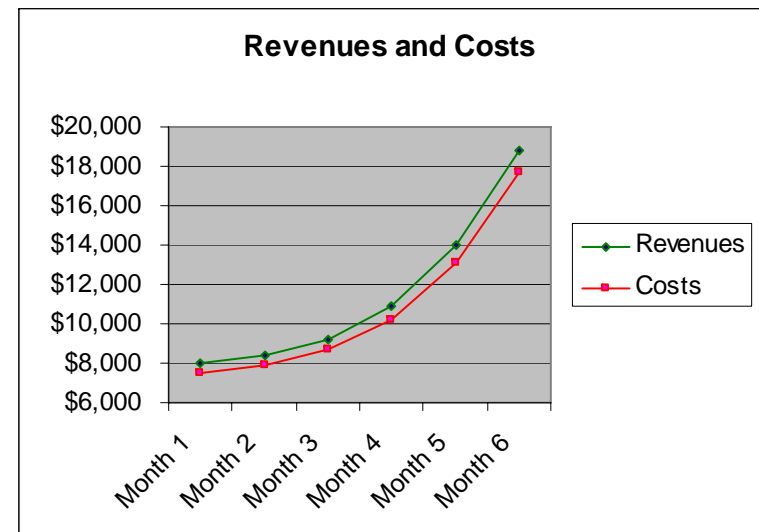
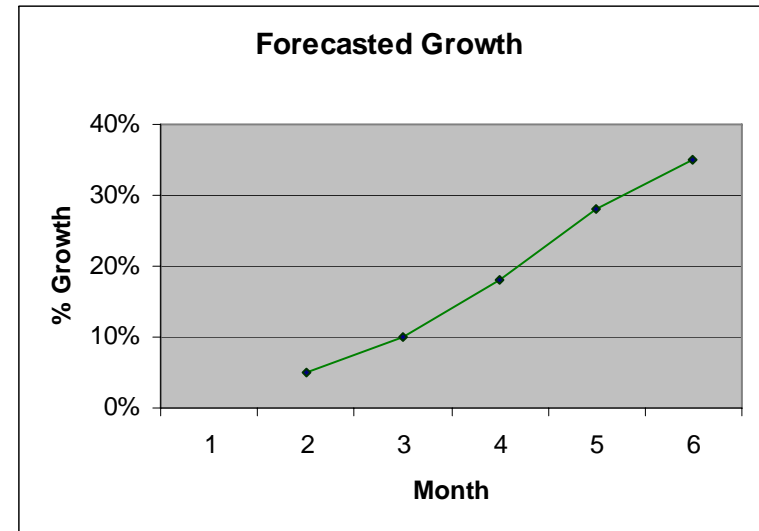
	A	B	C	D
1				
2				
3				
4	Server Equipment (\$/Year)	\$15,000	\$0	\$0
5	Development Machines	\$25,000	\$0	\$0
6	Computer Depreciable Life (# of months)	36		
7				
8	Start-up Costs			
9	Start-up Cost Per Additional Employee	\$4,000		
10	Percent of Start-up Cost Related to Computer	50%		
11	Percent of Start-up Cost Related to Furniture & Other	35%		
12	Percent of Start-up Cost Related to Non-Capital Expend.	15%		
13	Depreciable Life Furniture, Etc. (# of months)	60		
14				
15				
16	CAPEX			
17	Technology- Company-wide			
18			Month 1	Month 2
18	Development Machines	\$25,000	\$0	\$0
19	Server Equipment	\$15,000	\$0	\$0
20	Startup-Related to Employees			

Source: IRS Requirement

Assumes \$2,000 per computer + \$1,000 per desk, chair, phone, etc. + \$1,000 misc.

Modeling Tips – Growth Assumptions

- Most line items are a function of something else
 - Examples:
 - Office Supplies = Number of People * Price per person
 - Office Rent = Number of Sq. Ft per person * Max. # of People
 - Computers = Number of People * Price per computer
 - Furniture
- Rarely is growth truly exponential
 - Be careful of embedding growth which leads to huge increases over time – especially multipliers
 - Example:
 - Sales grow assumption of 10% per month, means that yearly the growth is 185+% ($=1.10^{11}-1 = 1.85$)
- Everything doesn't grow at an increasing rate over time
 - Some months may be slower than others due to seasonal fluctuations
 - For most business, growth eventually slows down



Income Statement – Key Components

- Revenue
 - Main line of Revenue
 - Ancillary Revenue Streams
- **Costs:** Four Key Components
 - Personnel
 - Marketing
 - Capital Expenditures
 - Technology Investments
 - Plant & Equipment
 - General Administrative
 - Utilities
 - Rent
 - Outside Services: Accounting, Legal, Consulting

Personnel: In-depth look

Benefits & Taxes (% of Salary)	35%
Raises (after 1st year)	5%
Commission Rate	8%

Good Rule of Thumb (Average rates)

Key Components

- Base Salary
- Benefits
- Taxes
- Commissions
- Start Date
- Bonuses & Raises

Administrative Staff	Salary	Start Date
President/CEO	\$ 68,000	1
Receptionist	\$ 25,000	3
Marketing & Sales VP	\$ 62,000	1
Sales Director	\$ 35,000	8
Sales Director	\$ 35,000	6
Bookkeeper	\$ 35,000	3
MIS	\$ 36,000	4

Identify each person in the organization
 * Start Date
 * Salary (don't forget commission)

Number of Employees

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
Administrative Staff	2	2	4	5	5	6	6	7	7	7	7	7	7

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
Salary	\$ 10,833	\$ 10,833	\$ 15,833	\$ 18,833	\$ 18,833	\$ 21,750	\$ 21,750	\$ 24,667	\$ 24,667	\$ 24,667	\$ 24,667	\$ 24,667	\$ 24,667
Benefits & Taxes	\$ 3,792	\$ 3,792	\$ 5,542	\$ 6,592	\$ 6,592	\$ 7,613	\$ 7,613	\$ 8,633	\$ 8,633	\$ 8,633	\$ 8,633	\$ 8,633	\$ 8,633
Commissions			\$ 800	\$ 960	\$ 1,120	\$ 1,440	\$ 1,600	\$ 1,680	\$ 1,764	\$ 1,852	\$ 1,945	\$ 2,042	\$ 2,144
Bonuses							\$ 10,000						
Raises													\$ 190
Total Wages & Compensation	\$ 14,625	\$ 14,625	\$ 22,175	\$ 26,385	\$ 26,545	\$ 30,803	\$ 40,963	\$ 34,980	\$ 35,064	\$ 35,152	\$ 35,245	\$ 35,342	\$ 35,634
Revenue	\$ -	\$ 10,000	\$ 12,000	\$ 14,000	\$ 18,000	\$ 20,000	\$ 21,000	\$ 22,050	\$ 23,153	\$ 24,310	\$ 25,526	\$ 26,802	\$ 28,142