

CAYENNECONSULTING

Budgeting & Forecasting for Startups

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Agenda

- **Why Do You Need to Know/Do This?**
- **Financial Statements 101**
- **Quick & Dirty Forecasts**
- **Key Concepts & Issues**
- **Implementation**
- **Resources**

What are Budgets & Forecasts?

- **Future Expenses**

- ◆ **Budget**

- **Complete Picture of Future Performance:**

- ◆ **Financial Forecast**
 - ◆ **Financial Projections**
 - ◆ **Financial Model**
 - ◆ **Pro Forma Financials**

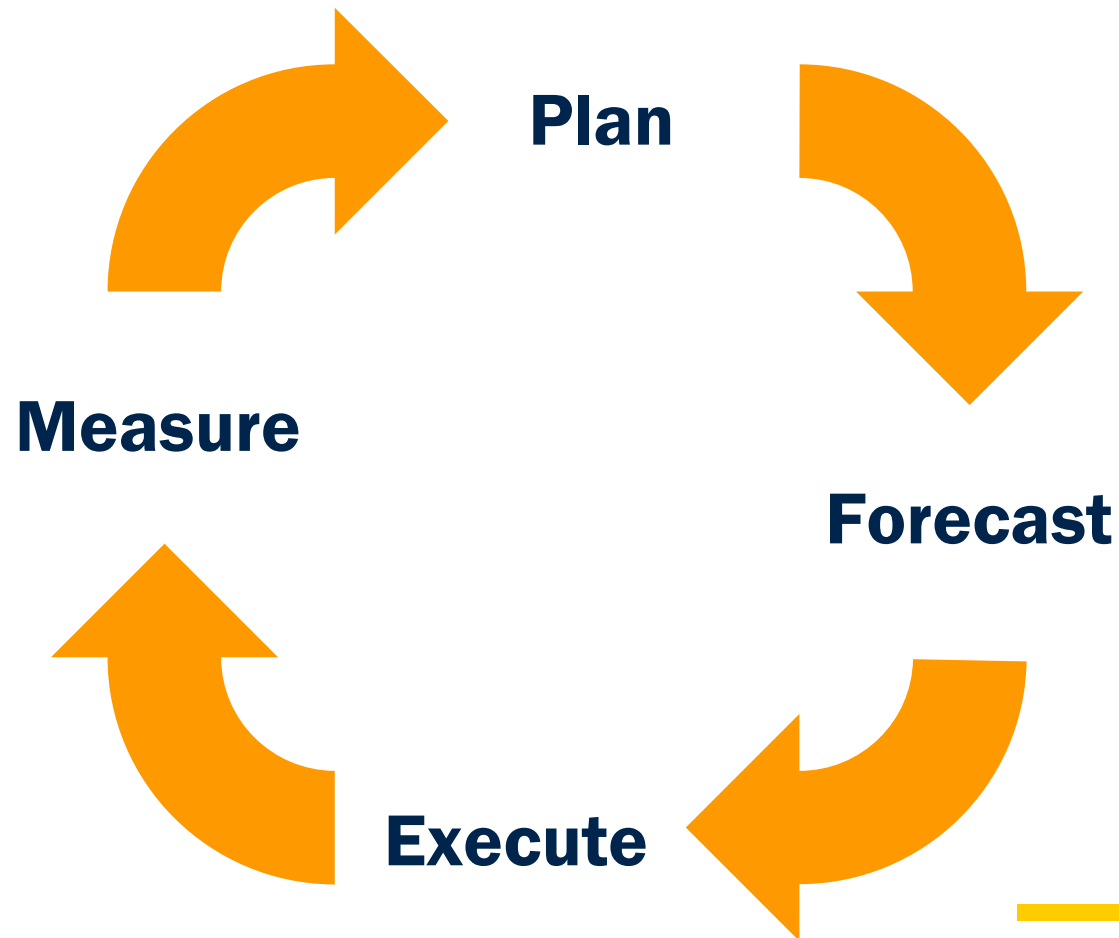
**Roughly
the same**

Why Budget & Forecast?

- **Feasibility Analysis**
 - ◆ **Develop Business (Revenue) Model**
 - ◆ **Think Through Assumptions**
 - ◆ **Identify Resource / Capital Needs**
- **Fund Raising Tool**
 - ◆ **Demonstrate Potential to Investors & Lenders**
- **Management Tool**
 - ◆ **Report Card: Milestones & Accountability**
 - ◆ **Identify Risks**
 - ◆ **Measure & Benchmark Drivers / Metrics**

Forecasting as Process

“You can’t manage what you can’t measure.”



What VCs Want to See

- **You know what you're talking about**
- **A potential home run**
- **You'll invest their money wisely**
- **4-5 year forecast**
- **\$50-100 million revenues by Year 5**
- **\$5-20 million investment spread out over several rounds**
- **Significant revenues SOON if not NOW**
- **Neither conservative nor aggressive**

What Bankers Want to See

- **You know what you're talking about**
- **Forecast for the period of the loan**
- **You'll be able to repay the loan**
 - ◆ **Risks are mitigated**
 - ◆ **Financial ratios are conservative**
 - ◆ **Hard assets are available as collateral**
 - ◆ **Personal credit (you'll probably need to guarantee the loan)**
- **Revenues SOON if not NOW**

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When?

- **Actual: What really happened**
- **Forecast: What you hope will happen**
- **Forecast vs. Actual: How well you did compared to what you thought might happen**

Core Financial Statements

- **Three related statements:**
 - ◆ **Income Statement (Profit & Loss)**
 - ◆ **Balance Sheet**
 - ◆ **Cash Flow Statement**

- **Details depend on:**
 - ◆ **Market / Industry**
 - ◆ **Business model**
 - ◆ **Intended audience**

Income Statement

- **Measures profitability over a period of time (month, quarter, year)**
- **Don't confuse profit (or loss) with cash**

Income Statement Example

Acme Widgets – Income Statement October 2004 – All figures in \$000

1. Gross Revenues	1,000	100.0%	
2. Less: Cost of Goods Sold	<u>600</u>	<u>60.0%</u>	
3. Gross Margin	<u>400</u>	<u>40.0%</u>	
4. Operating Expenses			
5. Salaries & Benefits	200	20.0%	
6. Rent & Utilities	20	2.0%	
7. Other Expenses	40	4.0%	
8. Depreciation	<u>28</u>	<u>2.8%</u>	
9. Total Operating Expenses	<u>288</u>	<u>28.8%</u>	
10. Net Income Before Interest & Tax	<u>112</u>	<u>11.2%</u>	
11. Net Interest Income (Expense)	<u>(5)</u>	<u>(0.5%)</u>	
12. Tax Expense	<u>30</u>	<u>3.0%</u>	
13. Net Income (Loss)	<u>77</u>	<u>7.7%</u>	12

Balance Sheet

- **Measures general financial health at a point in time**
- **Assets: What you got**
- **Liabilities: What you owe**
- **Equity: What's left over (for owners)**
- **Basic Accounting Equation:**

$$\text{Equity} = \text{Assets} - \text{Liabilities}$$

$$\text{Assets} = \text{Liabilities} + \text{Equity}$$

Balance Sheet Example

Acme Widgets – Balance Sheet

All figures in \$000

	<u>9/30</u>	<u>10/31</u>	<u>Change</u>
1. Assets			
2. Cash & Equivalents	500	335	(165)
3. Inventory	1,000	400	(600)
4. Accounts Receivable	500	1,000	500
5. Property, Plant, Equipment	1,000	1,000	0
6. Less: Accumulated Depreciation	<u>(500)</u>	<u>(528)</u>	<u>(28)</u>
7. Total Assets	<u>2,500</u>	<u>2,207</u>	<u>(293)</u>
8. Liabilities			
9. Accounts Payable	400	0	(400)
10. Debt	1,000	1,000	0
11. Deferred Taxes	<u>0</u>	<u>30</u>	<u>30</u>
12. Total Liabilities	<u>1,400</u>	<u>1,030</u>	<u>(370)</u>
13. Equity	<u>1,100</u>	<u>1,177</u>	<u>77</u>
14. Total Liabilities & Equity	<u>2,500</u>	<u>2,207</u>	<u>(293)</u>

Cash Flow Statements

- **Changes in cash over a period of time:**
 - ◆ **Where cash comes from**
 - ◆ **Where cash goes to**

- **Three types of cash flow statements:**
 - ◆ **Statement of Cash Flows (GAAP)**
 - ◆ **Statement of Sources & Uses**
 - ◆ **Statement of Receipts & Disbursements**

Receipts & Disbursements Example

Acme Widgets – Cash Receipts & Disbursements October 2004 - All figures in \$000

1. Starting Cash	500
2. Receipts	
3. Collections	500
4. Financings	<u>0</u>
5. Total Receipts	<u>500</u>
6. Disbursements	
7. Payments to Suppliers	400
8. Salaries & Benefits	200
9. Rent & Utilities	20
10. Other Expenses	40
11. Interest Expense	5
12. Tax Payments	<u>0</u>
13. Total Disbursements	<u>665</u>
14. Net Increase (Decrease) in Cash	<u>(165)</u>
15. Ending Cash	<u>335</u>

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Revenues & Sales Headcount

- **Start with Year 5 Revenues investors want to see**
- **Each prior year is 40% of following year**
- **Estimate reasonable revenue per salesperson for each year, depending on your industry**
- **Calculate number of salespeople required**

	Year 1	Year 2	Year 3	Year 4	Year 5
Gross Revenues (\$000)	1,280	3,200	8,000	20,000	50,000
Revenue Per Salesperson	427	640	750	1,000	1,250
Salespeople Required	3	5	10	20	40

Total Headcount Forecast

- How many of everybody else will be needed to support this level of sales?

	Year 1	Year 2	Year 3	Year 4	Year 5
Headcount					
Sales & Marketing	3	5	10	20	40
General & Admin	1	2	3	5	10
R&D	2	2	3	5	10
Operations	1	3	5	10	20
Total Headcount	7	12	21	40	80

Other Assumptions

- **Gross Margin Assumptions**
 - ◆ **\$2,500 average sale price per widget**
 - ◆ **\$1,500 average COGS per widget**

- **Operating Expense Assumptions**
 - ◆ **\$125,000 average operating expense per employee (salaries, rent, travel, etc.)**
 - ◆ **\$2,500,000 in non-salary startup expenses**

Quick & Dirty P&L Forecast

	Year 1	Year 2	Year 3	Year 4	Year 5
Widgets Sold	512	1,280	3,200	8,000	20,000
Total Headcount	7	12	21	40	80
Gross Revenues (\$000)	1,280	3,200	8,000	20,000	50,000
Less: COGS	768	1,920	4,800	12,000	30,000
Gross Margin	512	1,280	3,200	8,000	20,000
Operating Expenses					
Startup Expenses	2,500				
Other (\$125K x Headcount)	875	1,500	2,625	5,000	10,000
Net Income Before Tax	-2,863	-220	575	3,000	10,000

Sanity Check

	Year 1	Year 2	Year 3	Year 4	Year 5
Widgets Sold	512	1,280	3,200	8,000	20,000
Total Employees	7	12	21	40	80
Total Salespeople	3	5	10	20	40
Gross Revenues (\$000)	1,280	3,200	8,000	20,000	50,000
Per Employee	183	267	381	500	625
Per Salesperson	427	640	750	1,000	1,250

Depending on the industry, revenue per employee in Years 4 and 5 might be a bit high

What If...

- Revenue per salesperson tops out at \$1 million (or whatever the average is in your industry)?
- Average opex is \$150,000 per employee?
- Startup expenses are \$5 million?
- Product isn't ready to ship until Year 2?
- Gross margin shrinks over time?
- More operations personnel are needed?
- You add advertising to the mix?
- You introduce a new product in Year 3?

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Assumptions

- **Foundation on which all else is built**
- **Not all assumptions are created equal**
- **How do you justify the material assumptions?**
- **How will material assumptions change over time?**
- **What happens if you are wrong?**

Startup Laws

First Law of Startups:

**Everything takes longer to do
than you think it will**

Second Law of Startups:

**Everything costs more
than you think it will**

Third Law of Startups:

No entrepreneur thinks of everything

What are startup costs?

- **Everything you need to spend:**
 - A. **In the first year**
 - B. **Until you are profitable**
 - C. **Until you are cash flow positive**
 - D. **All of the above**

- **Answer: D.**
Make sure you and your audience are on the same page

Forecasting Sales

- **What drives sales in your market?**
 - ◆ **Salespeople?**
 - ◆ **Distributors?**
 - ◆ **Advertising?**
 - ◆ **Search engines?**
 - ◆ **Referrals?**
 - ◆ **Location?**
 - ◆ **Price?**
 - ◆ **Coupons?**

If you have a sales force...

- **Sales force productivity**
 - ◆ **Learning curve (and impact of turnover)**
 - ◆ **Market acceptance**
- **Sales cycle for your target customer**
- **Impact of discounts and competition**

Cost of Goods

- **Marginal cost of most goods are inversely proportional to quantity**
- **Marginal cost of most technology goods go down over time**
- **Includes total cost of getting a product ready for sale (packaging, shipping, etc.)**
- **Every industry is different**

Operating Expenses

- **Most operating expenses are roughly proportional to headcount:**
 - ◆ **Salaries, benefits, employment taxes, furniture, computers, rent, supplies, utilities, training, travel, meals, telecommunications, training, dues & subscriptions, etc.**
- **Others may or may not be:**
 - ◆ **Professional services, subcontractors, advertising, trade shows, etc.**
 - ◆ **Market-specific: Clinical trials, patents, etc.**

Cash vs. Accrual Accounting

- **Cash accounting: record income and expense at the time cash trades hands**
- **Accrual accounting: record income and expense over the period of the transactions (cash may or may not change hands at the same time)**

Matching Principle

- **Record expenses over the period they generate revenues**

- **Example: depreciation**
 - ◆ **Machine with an expected life of 10 years**
 - ◆ **Depreciate cost over 10 years**

Cash Cycles

- **Your forecast assumes customers pay in 30 days...**
- **In reality, they pay in 90 days...**
- **Meanwhile, your suppliers send Guido to collect in 30 days...**
- **You're profitable, but bankrupt!**

Benchmarking

- **Compare yourself to others in your industry:**
 - ◆ **Revenue per employee**
 - ◆ **Revenue per salesperson**
 - ◆ **Employees per customer**
 - ◆ **Gross margin**
 - ◆ **Expense categories as % of revenues**
 - ◆ **Financial ratios**
 - ◆ **Industry-specific metrics**

Sensitivity Analysis

- **Adjust each major assumption by 10% and examine impact on:**
 - ◆ **Revenues**
 - ◆ **Profit**
 - ◆ **Cash needs**

- **Focus on validating the assumptions that have the greatest impact**

Make it right

- **Assets = Liabilities + Equity**
- **Reconcile P&L, balance sheet, & cash flow**
- **Consistent (and correct) use of cash or accrual accounting**
- **Consolidate correctly**

Hallmarks of a good model

- **Easy to understand**
- **Simple (80/20 rule)**
- **Free of basic errors**
- **Well documented assumptions**
- **Easy to update**

Be Prepared

- **Startup expenses will be scrutinized**
- **Know your industry's metrics and benchmarks**

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Implementation

- **From scratch with a spreadsheet**
- **Starting with a spreadsheet you find via Google**
- **Software like Business Plan Pro**
- **Outside accountant or consultant**

Reality

- **Unless you have a very strong finance and accounting background, you will have a difficult time creating financials that are acceptable to VCs**
- **Focus your efforts on validating assumptions, and use an accountant or other consultant to develop the model**

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Financial How-To

- **Google**
- **Brode.net**
- **StudyFinance.com**
- **SBA.gov/training/courses.html**

Public Company Information

- **Annual (10-K) and quarterly (10-Q) SEC reports; Registration Statements (S-1):**
 - ◆ **FreeEdgar.com; finance.yahoo.com**
- **General corporate information**
 - ◆ **Company websites**
 - ◆ **finance.yahoo.com**
 - ◆ **hoovers.com**
- **Investment bank research reports**
- **Credit rating agencies (Moody's, S&P)**

Industry Information

- **Investment bank research reports**
- **Market research firm reports**
- **Google**
- **BizStats.com**
- **Fuld.com (Intelligence Index & CI Tools)**
- **Economy.com**
- **Census.gov**

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