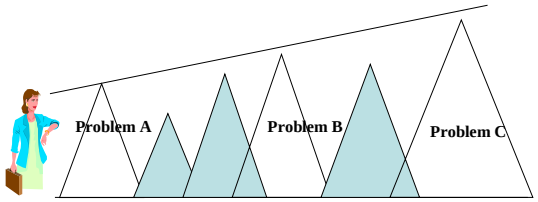
Finance for Entrepreneurs

Entrepreneurial Finance for dummies
Written by a dummy for dummies
Saturday, January 7, 2006

Venturing into the Unknown



What to Include in a Financial Analysis and Plan

When does the business have to buy resources, such as supplies, raw materials, and people?

When does the business have to pay for them?

How long does it take to acquire a customer?

How long before the customer sends the business a check?

How much capital equipment is required to support a dollar of sales?

Watch out for stupid business specific taxes

Miscarry or Mutated Birth?

- Birth
  - Cash flow to launch
  - Assumptions about how to grow your business
- Life
- Death
- Tombstones

The Essential Heartbeat

- Birth
- Life
  - Success yourself to death
  - Scalability isn't just a technology concept
- Death
- Tombstones

Endings are Important!

- Birth
- Life
- Death
  - Strategic Alternatives
  - End Valuation
- Tombstones

From Womb to Tomb

- Birth
- Life
- Death
- Tombstones
  - She came, she saw, she conquered
  - He came and went

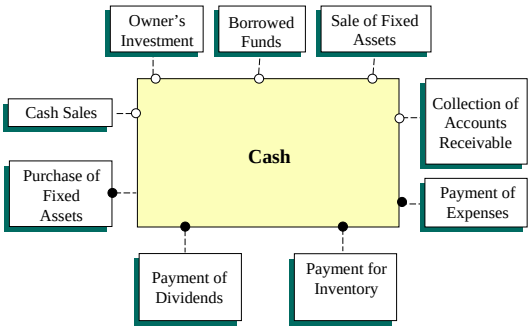
Why *Entrepreneurial* Finance?

- What Is My Cash Flow?
- What Is My Profitability?
- What is My ROI?

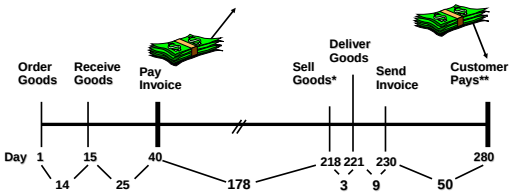
Profitable Facts

- Sales ≠ Profit
- Profit is Seductively Essential
- Customer Demand can kill
- Cash Flow is the Executioner
- Profit ≠ Cash Flow

Flow of Cash Through a Business



The Cash Flow Cycle



Cash Flow Cycle = 240 days

* Based on Average Inventory Turnover:

$\frac{365 \text{ days}}{2.05 \text{ times/year}} = 178 \text{ days}$

** Based on Average Collection Period:

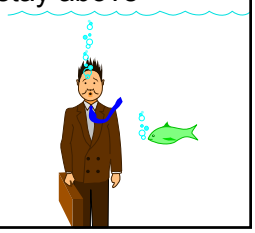
$\frac{365 \text{ days}}{7.31 \text{ times/year}} = 50 \text{ days}$

Operating Money

- To meet payroll
- To pay taxes
- To pay operating expenses
- To make upcoming debt-reduction payments

Cash Flow (Survival)

- Can I Pay My Bills?
- Will I live to fight another day?
- Will my bank balance stay above water?



Profitability (Sustainability)

- Regardless of How Much Cash…
- Am I On Borrowed Time?
- Do I Have a Viable Business Model?
- Sales – Expenses = Profit

Profitable Facts

- Sales ≠ Profit
- Profit is Seductively Essential
- Customer Demand can kill
- Cash Flow is the Executioner
- Profit ≠ Cash Flow
- Cash Flow ≠ Profit
- Profits are sexy

Essential Concepts I

- Cash Flow
- Profit
- Fixed Costs
- Variable Costs

Birthing a Business

It's in the Model

Question #1

What rewards will my investors get?

That includes you!

Question 2:
Will we miscarry?

Do we have enough cash flow to get to breakeven?

Critical Questions

- Monthly Breakdowns until Breakeven?
- What is your burn rate?

Question 3:
What's the bottom line?

Do I have a profitable model that also profits my customers?

We'll Answer Question #3 First!

What's the bottom line?

What Do my Customers Want?

- Rent vs. Own
- Purchase vs. Monthly Payments vs. whatever
- On-time payment discounts
- Delayed payment schedules

Plan your Profit

- Sales Forecasts
- Fixed Expenses
- Growth & Size Matters
- Displaying Profits & Losses

Plan your Profit

- Sales Forecasts
  - The Classic three scenarios

Scenario	Sales Revs
Optimistic	$1.8M
Most Likely	1.2M
Pessimistic	0.6M

Plan your Profit

- Sales Forecasts
  - The Classic three scenarios
  - The unorthodox scenarios (for internal use)

Scenario	Sales Revs
Blizzard	$2.5M
Light Snow	0.8M
Wet	0.2M

Plan your Profit

- Sales Forecasts
- Fixed Expenses
  - *Same* even if revenues are big or small
  - Put into buckets
    - *Building Rent*
    - *General & Administrative Expenses*
    - *Herman Miller Chairs*
    - *Software*
    - *Computer Equipment*
    - *Salary*

Plan your Profit

- Sales Forecasts
- Variables Expenses: Getting Bigger with Revs
  - *Sales commissions*
  - *Sales bonuses*
  - *Discounts*
  - *etc*

Plan your Profit

- Sales Forecasts
- Fixed Expenses
- If all expenses were variable

Scenario	*Sales Revenue*	*Variable Expenses @ 90%*	*Profit @ 10%*
Optimistic	$1,800,000	$1,620,000	$180,000
Most Likely	1,200,000	1,080,000	120,000
Pessmistic	600,000	540,000	60,000

Plan your Profit

- Sales Forecasts
- Fixed Expenses
- If all expenses are fixed:

Scenario	*Sales Revenue*	*Fixed Expenses*	*Profit*
Optimistic	$1,800,000	$1,080,000	$720,000
Most Likely	1,200,000	1,080,000	120,000
Pessmistic	600,000	1,080,000	(480,000)

Plan your Profit

- Sales Forecasts
- Fixed Expenses
- Size matters and so does scalability

Scenario	*Sales Revenue*	*All-Variable Expenses Case*	*All-Fixed Expenses Case*	*Profit Difference*
Optimistic	$1,800,000	$180,000	$720,000	$540,000
Most Likely	1,200,000	120,000	120,000	0
Pessmistic	600,000	60,000	(480,000)	(540,000)

Plan your Profit

- Sales Forecasts
- Male Vasectomies: Fixed Expenses
- Growth & Size Matters
- Displaying Profits & Losses
  - Transparent
  - Important
  - Obsessive

External Income Statement

Sales Revenue	$10,000,000
Cost of Goods Sold Expense	(6,000,000)
Gross Profit	**4,000,000**
Selling, General & Admin Expenses	(2,920,000)
Earnings b4 Interest & Income Tax	**1,080,000**
Interest Expense	(160,000)
Earnings before Income Tax	**920,000**
Income Tax	(312,800)
Net Income	$ **607,000**

internal Income Statement

	Notes	
Sales Revenue	100,000 Units	$10,000,000
Revenue Driven Expenses	8.5% of revenue	(850,000)
Cost of Goods Sold Expense	60% of revenue	(6,000,000)
Sales volume driven expenses	$5.00 per unit avg	(500,000)
Contribution Profit Margin	26.5% of sales	**2,650,000**
Fixed Operating Expenses:		
Occupancy	$(215,000)	
Mgt, General & Admin	(585,000)	
Marketing & Advertising	(685,000)	
Employee Benefits	(85,000)	(1,570,000)
Operating Earnings	**13.8% of sales**	**1,080,000**
Interest Expense		(160,000)
Earnings before Income Tax	**Taxable income**	**920,000**
Income Tax	At 34% basic rate	(312,800)
Net Income	6.07% of sales	$ **607,000**

Question 2: Will we miscarry?

Do we have enough cash flow to get to breakeven?

Important Notes about the Income Statement

- The income statement includes only revenues and expenses
- Depreciation is a non-cash expense: *I may have more cash than I think*
- People invested in me: *I may have more cash than I think*
- I put money into a company car: *I may have less cash than I think*
- Tells me nothing about the cash I collected from customers: *I may be going to jail!*

Income vs. Cash Flows

	P&L	Cash Flows	Difference
Sales Revenue	**$1,200,000**	**$1,100,000**	**$(100,000)**
Cost of Goods Sold	(600,000)	(680,000)	(80,000)
Gross Margin	**600,000**		
Variable Operating Expenses	(120,000)	(100,000)	20,000
Margin	**480,000**		
Fixed Depreciation Expense	(50,000)	0	50,000
Other Fixed Operating Expenses	(310,000)	(330,000)	(20,000)
Profit	**$120,000**		
Cash Flow (Negative)		$ (10,000)	

The Statement of Cash Flows

Definition

Financial statement that shows the firm's cash receipts and cash payments over a period of time.

The Statement of Cash Flows

Pepsico Statement of Cash Flows
(excerpt - year end 2001)

Net Income	2,662	
Non-cash expenses		
Depreciation	1,082	
Other	373	
Changes in working capital		
A/R=7 A/P=(236) Inv=(75) other=388	1,539	
Cash Flow from operations	4,201	
Cash Flow from investments	(2,637)	
Cash provided by financing		(1,919)
Net Change in Cash Position	**(355)**	

The Statement of Cash Flows

- This statement shows where a firm's funds came from and how they were used
- Three parts:
  - Funds from Operations
  - Funds from Investing
  - Funds from Financing

Elvis Products International
Statement of Cash Flows
For the Year Ended Dec. 31, 1997 (000's)

Cash Flows from Operations		
Net Income	74.22	
Depreciation Expense	20.00	
Change in Accounts Receivable	-50.80	
Change in Inventories	-122.80	
Change in Accounts Payable	29.60	
Change in Short-term Notes Payable	25.00	
Change in Other Current Liabilities	4.00	
Total Cash Flows from Operations		**-20.78**
Cash Flows from Investing		
Change in Plant & Equipment	-36.00	
Total Cash Flows from Investing		**-36.00**
Cash Flows from Financing		
Change in Long-term Debt	101.18	
Cash Dividends Paid to Shareholders	-52.00	
Total Cash Flows from Financing		**49.18**
Net Change in Cash Balance		**-7.60**

Statement of Cash Flows

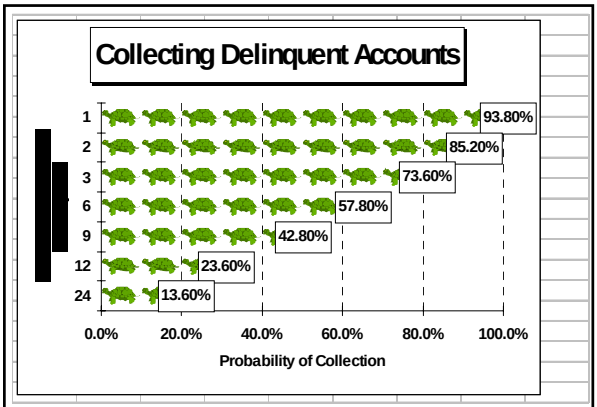
OPERATING ACTIVITIES	
Net income	(160,176)
Add (Sources of cash):	
Depreciation	116,960
Increase in A/P	378,560
Increase in accruals	353,600
Subtract (Uses of cash):	
Increase in A/R	(280,960)
Increase in inventories	(572,160)
Net cash provided by ops.	(164,176)

Statement of Cash Flows

L-T INVESTING ACTIVITIES	
Investment in fixed assets	(711,950)
FINANCING ACTIVITIES	
Increase in notes payable	436,808
Increase in long-term debt	400,000
Payment of cash dividend	(11,000)
Net cash from financing	825,808
NET CHANGE IN CASH	(50,318)
Plus: Cash at beginning of year	57,600
Cash at end of year	7,282

Five Ways to Improve Cash Flow

- Bill it sooner
- Collect it sooner
- Pay it later
- Negotiate volume and early-pay discounts
- Encourage large orders



Question #1

What rewards will my investors get?

That includes you!

ROI (Growth)

- Can We Offer an Attractive Return to Investors?
- If Not, We Cannot Attract Capital!

Other Items

Bootstrapping is...

The process of creating a business from scratch without any investment

The Old Way to start a business

Why is Bootstrapping Important?

- Start-up Investment is difficult to obtain
  - Easier to get for established businesses
- It keeps you *very* close to your customers
- It forces you to work closely with your vendors
- You minimize financial risk
- You keep more, or all, of your company
- It keeps you focused on what is important
- You company will be much more resilient and resourceful in the long run

Bootstrapping takes...

- Creativity
- Vision
- Excellent Selling Skills
- Excellent Cash-Flow Management

Be Innovative

What are some creative ways that you can use to reduce the investment necessary for your business?

Key Bootstrapping Techniques

- Prepaid deposits from customers
  - Use customer's money to make/buy goods
- Vendor Credit Terms
  - Most start-ups pay C.O.D.
  - You could even negotiate extended terms
- Make *ALL* costs variable
- Strategic Alliance with another firm

How it helps

- If you plan your business as a bootstrap, it will usually be a much better investment
- You may find you need less money to start
  - Or at least do it on a credit card
- You minimize most operating and financial risks in the business

Some Numbers Are Essential

- Numbers should show the key drivers of the venture's success or failure
- The model should address the break-even issues

Some Numbers Are Essential

- Numbers should show the key drivers of the venture's success or failure
  - In manufacturing: production yield
  - magazine publishing: the anticipated renewal rate
  - Software: impact of using various distribution models

Some Numbers Are Essential

- Numbers should show the key drivers of the venture's success or failure

	2000	2001	2002
Subscribers	20,073	144,167	287,500
Revenues	1,917,180	22,663,000	52,957,500
per subscriber	**$95.51**	**$157.20**	**$184.20**
Ad Expense	3,750,000	18,000,000	30,000,000
per subscriber	**$186.82**	**$124.86**	**$104.35**
Operating Expenses	557,395	2,864,220	5,741,220
per subscriber	**$27.77**	**$19.87**	**$19.97**
EBITDA	(2,943,465)	145,780	14,701,280
per subscriber	**($146.64)**	**$1.01**	**$51.13**

Some Numbers Are Essential

- Numbers should show the key drivers of the venture's success or failure
- The model should address the break-even issues:
  - At what level of sales does the business begin to make a profit? *Breakeven*
  - When does cash flow turn positive? *Cash Flow Breakeven*

Checklist For The Financial Plan

Prepare the following plans for the first year budgets:

- Sales
- Production
- Operating Expenses
- Number & salaries of needed staff members
  - Head Count Plan
- Capital Expenditures
  - Start-up costs, fixtures, equipment, etc.

Questions We Ask

More Questions

When does the business have to buy resources, such as supplies, raw materials, and people?

When does the business have to pay for them?

How long does it take to acquire a customer?

How long before the customer sends the business a check?

How much capital equipment is required to support a dollar of sales?

Tips

- Break out your cash flow by month2month until you safely achieve break-even
- Talk to your customer, understand your model and then run the numbers

Definitions

Depreciation and Cash Flow

- Depreciation is a *non-cash expense* that is subtracted from revenues when calculating net income
- Because of depreciation, net income does not represent the funds that a firm has available for expansion or paying dividends
- Instead of net income, financial analysts are generally concerned with cash flow:
  - **Cash Flow** = Net Income + Non-Cash Expenses
  - **Operating Cash Flow** = EBIT + Non-Cash Exp - Taxes

Survival Breakeven Analysis: Some Basics

- Basic Equation:
  EBTDA = Revenues (R) - Variable Costs (VC) – Cash Fixed Costs (CFC)
- Where: CFC includes both fixed operating (e.g., general & administrative, & possibly marketing expenses) & fixed financing (interest) costs
- When: EBTDA is zero, R = VC + CFC

Solving for the Breakeven Level of Survival Revenues

- Starting Point:
  Assume Ratio of variable costs (VC) to revenues (R) is a constant (VC/R) & is called the Variable Cost Revenue Ratio (VCRR)
- Survival Revenues (SR) = VC + CFC
- Rewriting, CFC = SR – VC
- By substitution, CFC = SR[1 – (VCRR)]
- Solving for SR, SR = [CFC/(1 – VCRR)]

Survival Revenues Breakeven: An Example

The SS Steward venture has:
Revenues = $1,000,000
Cost of Goods Sold = $650,000
Administrative Expenses = $200,000
Marketing Expenses = $180,000
Depreciation Expenses = $100,000
Interest Expenses = $20,000
Income Taxes = Tax Rate is 33%

Survival Revenues Breakeven: An Example (continued)

Note: only Cost of Goods Sold is expected
to vary directly with Sales

- VCRR = $650,000/$1,000,000 = .65
- CFC = Admin $200,000 + Mktg $180,000 + interest $20,000 = $400,000
- SR = $400,000/(1 - .65) = $1,143,000 rounded

Survival Revenues Breakeven: An Example (continued)

Check or proof this is BE point:

Survival Revenues	$1,143,000
Cost of Goods Sold (65%)	-743,000
Gross Profit	400,000
Administrative Expenses	-200,000
Marketing Expenses	-180,000
Interest Expenses	-20,000
EBTDA	$0