

# Open Source Business Models

Ken Martin, PhD

Kitware, Inc.

[ken.martin@kitware.com](mailto:ken.martin@kitware.com)



# What to Know to Make Money!

- Overview of business models
- Basic finance
  - Income Statement
  - Balance Sheet
  - Cash Flow
- Case studies (throughout)

# Business Models

- Making money is useful (for food, shelter)
- Probably the most common approach is to not make money (work 9-5 do OS off hours)
  - Watch for IP issues with your employer even if the fields do not seem to be related, check
  - You are your own OS boss, no customer or income pressure, allows for more freedom
  - Can transition to other business models easily

# Don't Make Money!

- Apache Software Foundation
  - 2003 revenue \$2,875, expenses \$5,793
  - Assets \$112,187
- Microsoft made that amount of revenue in three seconds
- Key players all have other jobs
- A huge success

# Business Models

- Work for a OS company part time
  - Part time can be hourly or incident based (flat \$100 per incident for example)
  - Typically not an employee, you are responsible for self employment taxes etc, do not sell yourself short or inflate
    - You will have payroll taxes to deal with and down time
    - You probably do not have office/marketing etc
  - Typically allows you to keep your regular job/studies

# OS Business Models

- Donations
- Dual License
- Consulting
- Subscription
- Optimization – Oracle DB on top of Linux  
Solution for EA
- Hosted – ebay google (not OS?)
- Research – software is marketing

# Donations

- Firefox 1.0 (\$250,000 drive in 10 days)
- Stated goal of buying NYTimes advertisement

# Donations – journler.com

- On the other hand, Journler works whether an individual makes a contribution or not.
- A few numbers to put things into perspective. A non-personal use license is \$24.95. I make no recommendation for a personal use donation. There are ~580 registered users. Of that number 60 have made a donation of \$9.99 or less. That's 10%. 52 users have made a donation of \$5.00 or less, about 9%. The average donation is \$17.00.
- Many users do purchase licenses or make donations, and I am extremely thankful for it. Nevertheless, only a small percentage of downloads actually leads to a financial contribution, and the average donation is significantly less than the non-personal use price.
- I am a frugal individual. I need little and want less. I like living simply, and I would stand on a soap box and encourage everyone else to do the same. It's good for the planet and it's good for your soul. However, in less than two months my cost of living will double with a move to San Francisco. At the current rate I am only just barely able to meet my projected expenses.

# Dual License

- Create an open source license with restrictions that customers pay to get around
- GPL style restriction and non commercial use restriction are the most common
- Examples include Trolltech (IPO, ~35 million in revenue for 07), sleepycat (founded 97, ~10 million in revenue in 2005, bought), mySQL (\$50 million revenue, planning IPO)
- Hardcore OS advocates are not happy with it

# Consulting

- Extensions, Customization, Training
- Many companies in this space, mainly IT/Web related technologies
- Very customer focused
- Can be mixed OS / proprietary
- Two main methodologies
  - make the developers employees
  - leverage the developers

# Subscription

- Sell support subscriptions, typically yearly
- Can be mixed OS and proprietary
- Very customer focused
- Redhat is the prime example of this, many other companies in this space, JBoss
- Typically leveraging LAMP
  - Linux, Apache, mySQL, PHP

# Optimization/Hosted

- Oracle – DataBase on top of Linux for EA
- Ebay/google
- Not really OS, leveraging OS

# Research

- Go after research dollars
- SBIR/STTR/Grants from government agencies, universities, companies
- OS is attractive to many of them
- Automatic collaboration platform
- Moderate customer focus
- Many Technical OS projects fall here
- Selling expertise and platform

# Business Models

- You can mix the models
  - Research, consulting, subscription
- Almost all of them rely on business skills, HR, sales, marketing, finance, etc

# Finance Basics

- There are standards in finance to make it so that anyone can look at key documents and understand the financial performance of a company (GAAP)
- The reality is that it mostly works! Although even with GAAP/IRS rules there is some wiggle room
- Three main tools:
  - Income Statement
  - Balance Sheet
  - Cash Flow
- Many dot coms from 1997-2001 are bankrupt or worth 1% of their prior value

# Income Statement

Covers a period of time (say January 1<sup>st</sup>, to June 30<sup>th</sup> 2007)

Revenue – money you brought in the door through sales/licenses/services

Costs of Good Sold – what did it directly cost to produce the items you sold

Gross Profit

Expenses – labor, rent, utilities

Net Ordinary Income

Other Income/Expenses – interest for example

Net Income (bottom line)

# Income Statement

Revenue

- Cost of Goods Sold

= Gross Profit

- Expenses

= Net Ordinary Income

+ Other Income/Expense

= Net Income

# Income Statement - Sourceforge

	Q4 7/31/07	Q3 4/31/07
Total Revenue	10.079	10.252
Cost of Goods Sold	5.128	5.366
Selling, General and Administrative Expenses	4.945	3.79
Operating Income After Depreciation	0.006	1.096
Nonoperating Income (Expense)	N/A	0.719
Pretax Income	0.467	1.815
Income Taxes	-0.239	0.054
Income Before Extraordinary Items	0.706	1.761
Discontinued Operations	-0.105	4.73
Net Income (Loss)	0.601	6.491



# Income Statement - Redhat

	Q1 07	Q4 06	Q3 06	Q2 06	Q1 06
Revenue	118.873	111.122	105.826	99.674	84.002
Cost of Goods Sold	11.03	11.268	10.847	9.667	9.101
Selling, General and Administrative Expenses	85.657	77.053	74.8	73.801	57.945
Operating Income Before Depreciation	22.186	22.801	20.179	16.206	16.956
Depreciation & Amortization	7.234	6.162	6.593	6.754	4.344
Operating Income After Depreciation	14.952	16.639	13.586	9.452	12.612
Interest and Related Expense	1.495	1.549	1.493	1.49	1.484
Nonoperating Income (Expense)	13.578	11.902	11.113	9.573	10.702
Pretax Income	27.035	26.992	23.206	17.535	21.83
Income Taxes	10.814	6.505	8.586	6.488	8.077
Net Income (Loss)	16.221	20.487	14.62	11.047	13.753

# Balance Sheet

Represents a point in time

- Assets – Cash, AR, Fixed Assets
- Liabilities – AP, Loans
- Equity – Net Book Value of the company

# Balance Sheet - LNUX

	Q4 2007	Q3 2007	Q2 2007	Q1 2007	Q4 2006
	7/31/2007	4/30/2007	1/31/2007	10/31/2006	7/31/2006
<b>Assets</b>					
Cash and Short-Term Investments	42.77	44.22	51.12	47.18	51.89
Receivables	5.31	5.36	5.81	5.57	5.40
Inventories	2.05	1.79	2.46	3.57	1.09
Other Current Assests	1.62	2.59	1.58	1.73	1.03
Current Assets - Total	51.75	53.95	60.97	58.05	59.41
Property Plant and Equipment - Net	2.64	2.02	1.23	0.88	0.63
Other Assets Total	22.47	20.13	6.98	6.63	3.18
Assets - Total	76.86	76.09	69.18	65.56	63.21
<b>Liabilities and Shareholders' Equity</b>					
Accounts Payable	2.35	2.22	2.22	2.71	1.17
Current Liabilities - Other	5.30	6.20	7.05	6.91	6.97
Liabilities - Other	4.12	4.79	4.82	5.28	5.69
Liabilities - Total	11.77	13.21	14.08	14.90	13.83
<b>Shareholders' Equity</b>					
Common Equity - Total	65.09	62.89	55.09	50.67	49.38
Common Capital	0.07	0.07	0.07	0.07	0.07
Capital Surplus	797.42	795.80	794.51	791.86	790.44
Retained Earnings	-732.39	-732.98	-739.48	-741.25	-741.12
Treasury Stock	--	0.00	0.00	0.00	0.00
Shareholders' Equity - Total	65.09	62.89	55.09	50.67	49.38
Liabilities and Shareholders' Equity	76.86	76.09	69.18	65.56	63.21



# Balance Sheet - Redhat

Assets	Q1 07	Q4 06	Q3 06	Q2 06	Q1 06
Cash and Short-Term Investments	837.5	878.1	976.9	838.0	932.3
Receivables	92.4	88.0	81.3	70.3	65.4
Other Current Assests	53.3	41.0	34.1	27.9	18.3
Property Plant and Equipment - Net	47.7	45.3	42.3	40.1	36.7
Other Assets Total	826.7	733.5	578.4	664.4	327.3
Goodwill	344.8	328.8	327.3	343.1	73.8
Assets - Total	1857.6	1785.9	1712.9	1640.6	1380.0
Current Liabilities					
Accounts Payable	8.0	26.9	25.7	19.0	19.6
Current Liabilities - Other	303.4	271.2	246.2	227.3	197.3
Long-Term Debt	570.0	570.0	570.0	570.0	570.0
Liabilities - Other	127.3	94.3	89.2	78.2	76.3
Liabilities - Total	1008.7	964.6	938.5	900.6	867.7
Common Capital					
Common Capital	0.0	0.0	0.0	0.0	0.0
Capital Surplus/Share Premium Reserve	1066.1	1040.9	1015.4	997.7	781.9
Retained Earnings	-91.4	-93.9	-115.3	-132.1	-145.8
Treasury Stock	125.8	125.8	125.7	125.7	124.3
Shareholders' Equity - Total	848.9	821.2	774.4	740.0	511.8
Liabilities and Shareholders' Equity - Total	1857.6	1785.9	1712.9	1640.6	1380.0

# Cash Flow

- Net effect on cash for a period of time
- You can be profitable, but run out of money
  - \$30 profits, \$40 loan payment, -\$10 cash
  - \$30 profits, purchase \$50 in furniture, -\$20 cash
- You can show a loss, but get more cash
  - \$30 loss, but sell off furniture for \$40, \$10 cash

# Closing

- Probably the most critical factor in OS business is good business management
- Rapidly changing field, lots of options right now on how to work in OS
- Very low cost of entry (computer and time)
- Very competitive as a result