



Managing OSS as an Integrated Part of Business

Open Source Business Models

Mikko Puhakka



Short Bio

- Venture Capitalist (investment into MySQL in 2001) 1993-
- Researcher at Helsinki University of Technology 2004-
- COSS 2005-
- Open Tuesday 2006-
- McGill University's (Canada) and Helsinki School of Economics 'Management of High Growth and Continuous Change' research project Steering Committee 2006-2010
- Advisor to Fujian University (China) on Mobile City research project



Agenda

1. Me
2. What is Open Source?
3. Why OS Matters?
4. Business Evolution
5. Models and Examples of Building OS Business
6. Case MySQL, will it be a Billion Dollar Business?
7. The Future & Q&A



“There is one thing that is stronger than all the armies in the world, and that is an idea whose time has come”

Victor Hugo



What is Open Source?

1. Open Source
2. Open Content
3. Open Standards
4. Open Innovation
5. Open Access
6. Open Collaboration
7. Open Technologies
8. Open Hardware
9. Open Services
10. Open XXX

Free and Open Source Software



Source code for the software is always available, and the user of the software is licensed (always) to change and redistribute the software without fee, penalty or asking permission



Why OS matters: Joe Kraus, Excite & Jotspot

Excite.com took \$3,000,000 to get from idea to launch. JotSpot took \$100,000. Why on earth is there a 30X difference?

Hardware is 100X cheaper In the 10 years between Excite and JotSpot, hardware has literally become 100X cheaper. It's two factors 'Moore's law and the rise of Linux as an operating system designed to run on generic hardware. Back in the Excite days, we had to buy proprietary Sun hardware and Sun hard drive arrays. Believe me, none of it was cheap. Today, we buy generic Intel boxes provided by one of a million different suppliers.

Infrastructure software is free Back in 1993 we had to buy and continue to pay for maintenance on everything we needed just to build our service -- operating systems, compilers, web servers, application servers, databases. You name it. If it was infrastructure, we paid for it. And, not only was it costly, the need to negotiate licenses took time and energy. I remember having a deadline at Excite that required me to buy a Sun compiler through their Japanese office because it was the only office open at the time (probably midnight) and we needed that compiler NOW. Compare that to today. Free, open source infrastructure is the norm. Get it anytime and anywhere. At JotSpot, and startups everywhere you see Linux, Tomcat, Apache, MySQL, etc. No license cost, no maintenance.



Cases

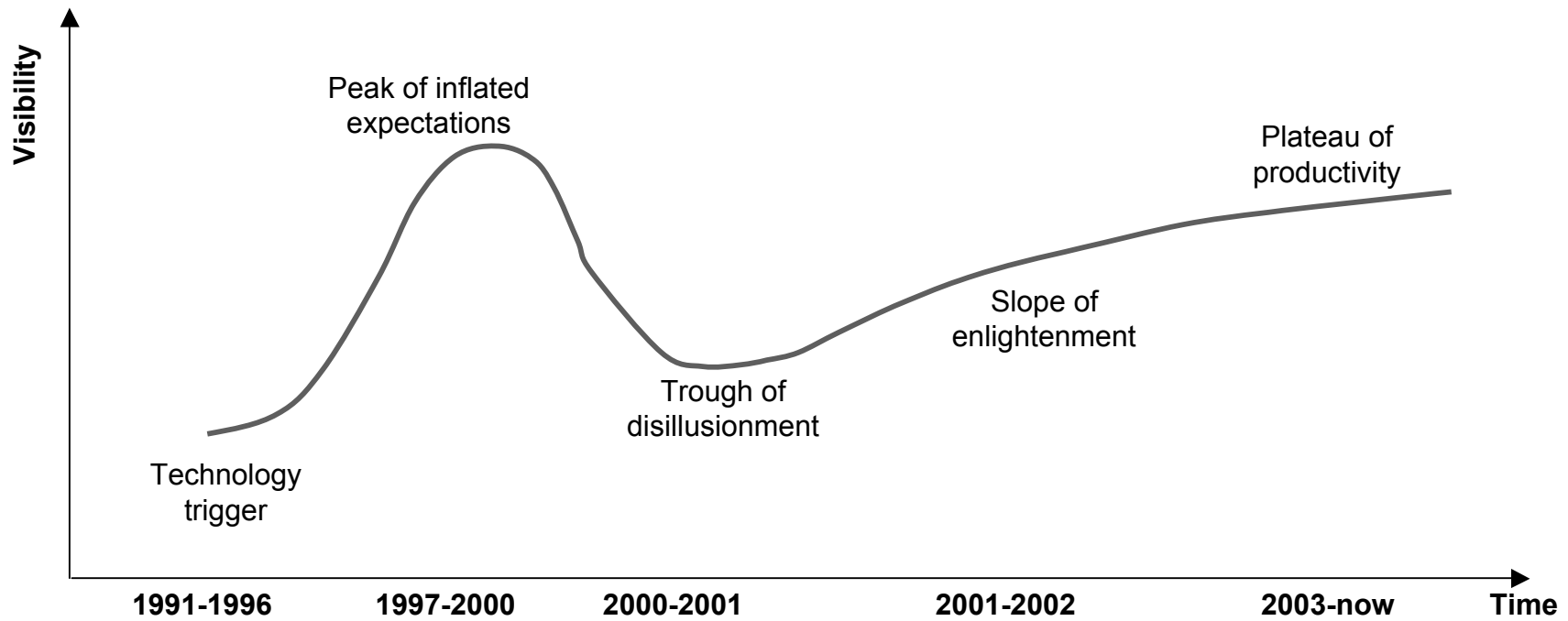
- FIREFOX
- STARWRECK

OSS + Business By Accident business model

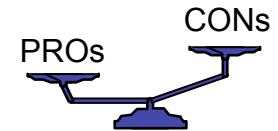
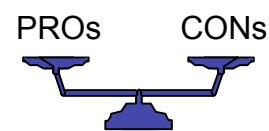
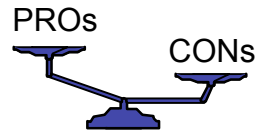
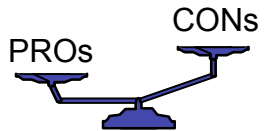
-> Now approaching Gary Player model
“The More I practice, the luckier I seem to get”



LINUX HYPE CYCLE HAS BEEN GUIDED, AMONG OTHERS, BY PERCEPTION OF PROs AND CONs

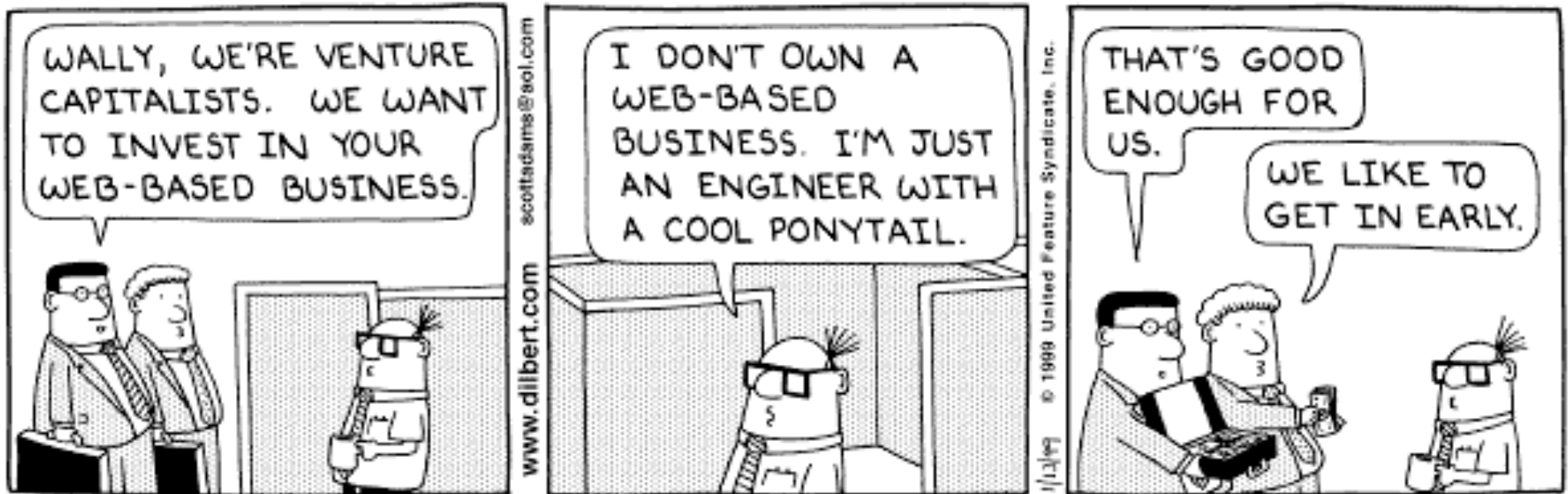


PROs & CONs in the press





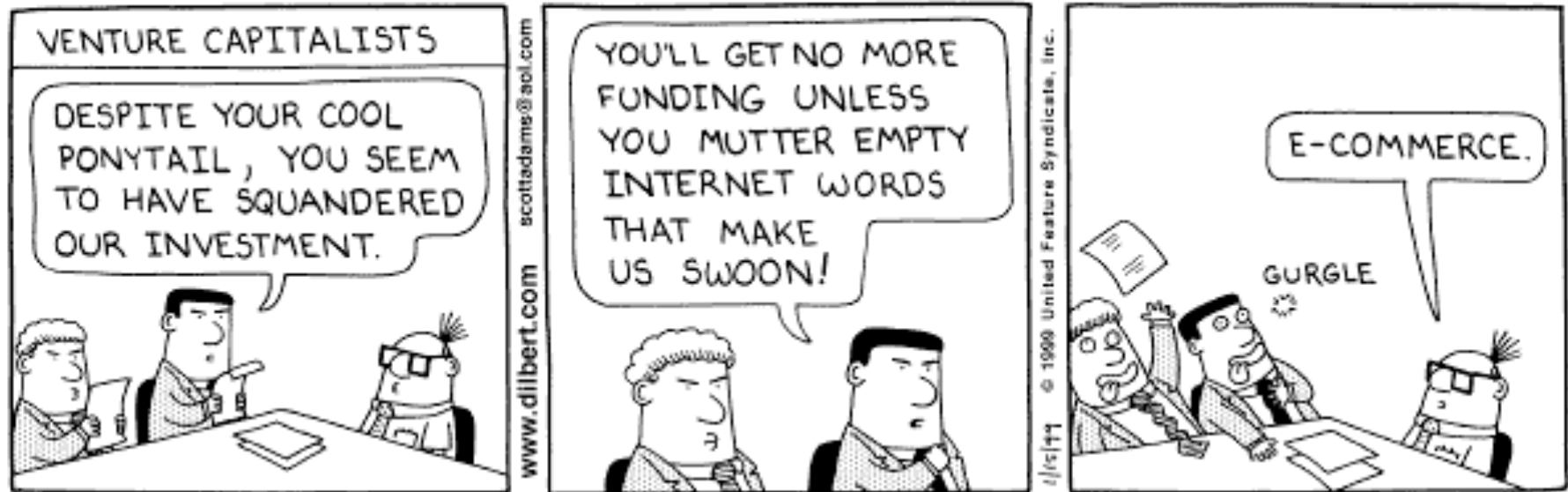
Web-Based-> Open Source



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E-Commerce-> SaaS

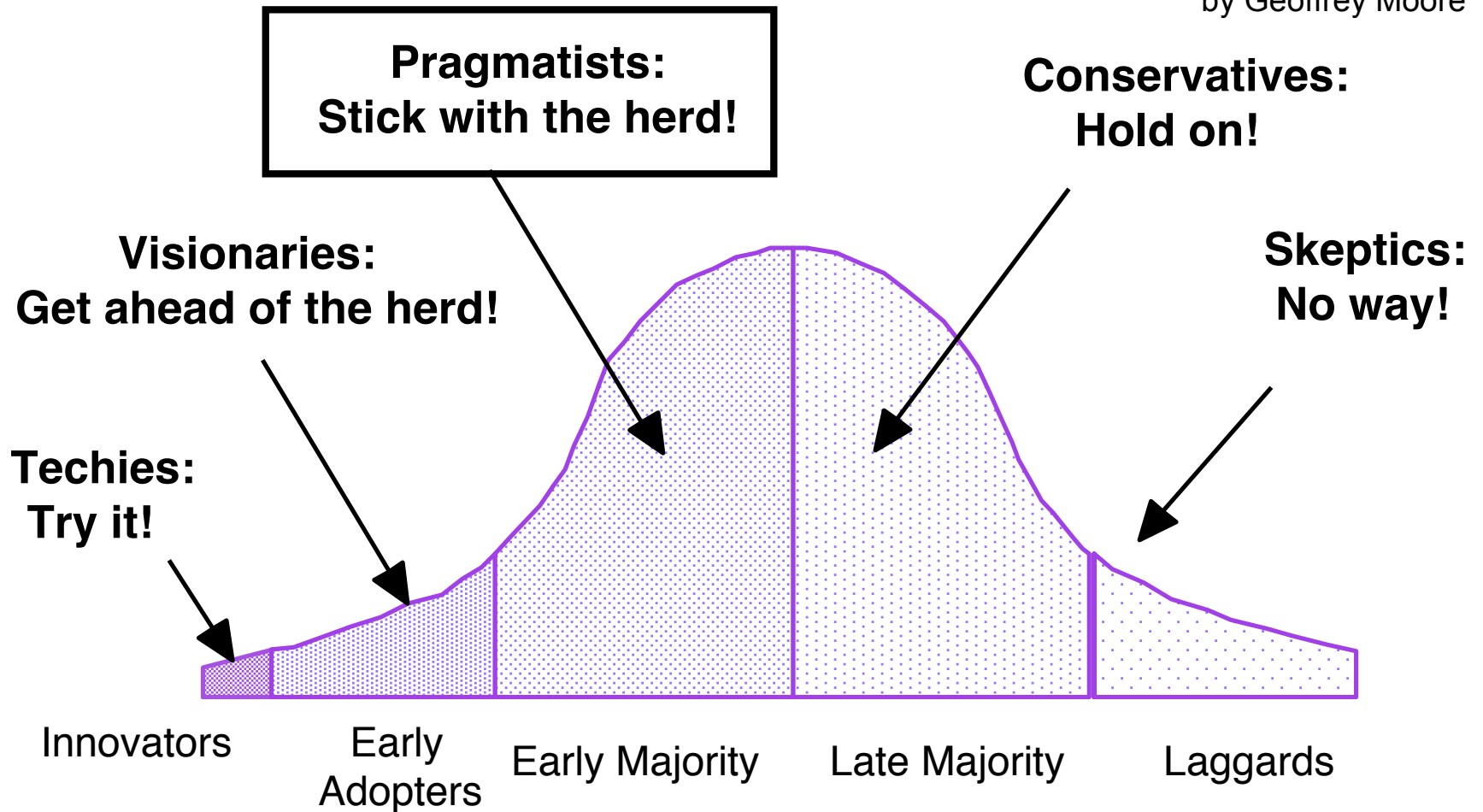


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Technology Adoption Life Cycle

by Geoffrey Moore



Pragmatists create the dynamics of high-tech market development!!



IT Stack (Guy Smith)

The entire IT stack can now be commoditized. With little effort a commodity stack can be deployed for 95 percent of all IT buyers. If you think this is an absurd view, ponder for a moment what has already happened to most of the stack:

Servers: Giants like e*Trade, Amazon, Yahoo, Google, and others are using x86 and x64 servers on everything except database hubs, and even those are targets for eventual replacement with massive multi-core x64 boxes. Little guys are using x86 servers universally.

Operating systems: For new deployments, it is either Windows or Linux, and Linux - along with Microsoft's tardiness on Vista - has caused Microsoft server sales to stagnate. Linux was born a commodity, and remains such.

Application servers: When Apache instantly dominated the Web server market, and started chipping away at the Java server market, once-mighty competitors started reeling.



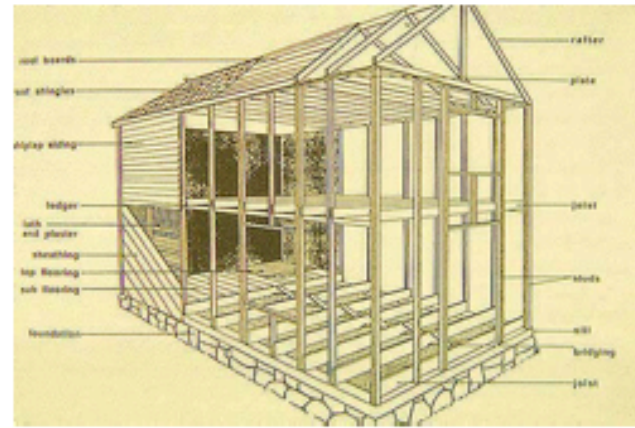
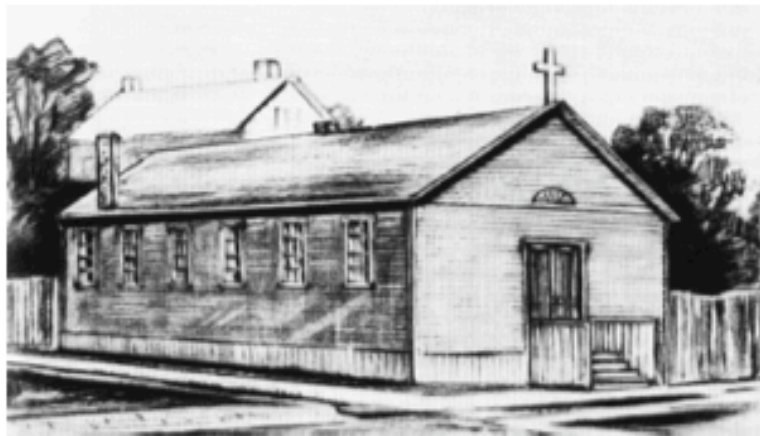
IT Stack (Guy Smith)

Application development: With IT shops highly favoring Web-based application development for new projects, we see PHP, Perl and other Open Source systems replacing proprietary tool sets (what was the last 4th GL you sold?)

Databases: Oracle and IBM have retreated to the high ground, and gone as far as offering free versions of their DBMSs to low-end users, in an attempt to forestall adoption of commodity database systems like MySQL, PostgreSQL, and others.

Applications: The last refuge of high margin software is coming under attack in segments like CRM (SugarCRM, Compiere, OpenSourceCRM), ERP (Compiere, ERP5, OpenMFG), messaging and collaboration (SendMail, PostFix, Open-Xchange, Astrisk), verticals (MedSphere, OpenEMed, OpenClovis) and horizontals (Open Office, Plone, Zope).

The construction industry we know today was born in 1833.



Augustine Taylor built the first standard wood frame structure: St. Mary's Church in Fort Dearborn (now Chicago), Illinois.

He used the first 2 x 4s, 2 x 6s, 1 x 10s, studs, joists & rafters.

The total cost was \$400.

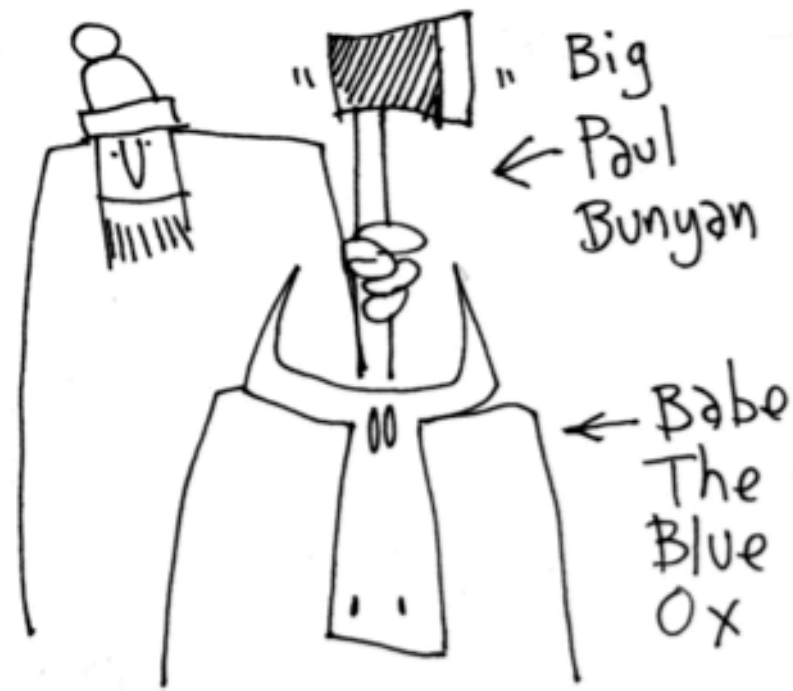
Traditional builders called it "balloon" construction.

They said it would "blow away." It didn't.

Instead, it blew away all the older building methods.

And caused a building boom that hasn't ended.

Balloon framing took off because the commodities it used were cheap and abundant



Suddenly, it was possible to construct any kind of building, in any style, cheaply and quickly.

Soon, there was far more money being made *because of* lumber than *with* lumber.

Now it's a \$3.5+ trillion industry. Largest in the world.

There's a lot for IT folks to like about the construction industry model.



It's filled with companies and customers of every size.

It loves commodities. The more, the better.

Open source is standard — and it's not an issue.

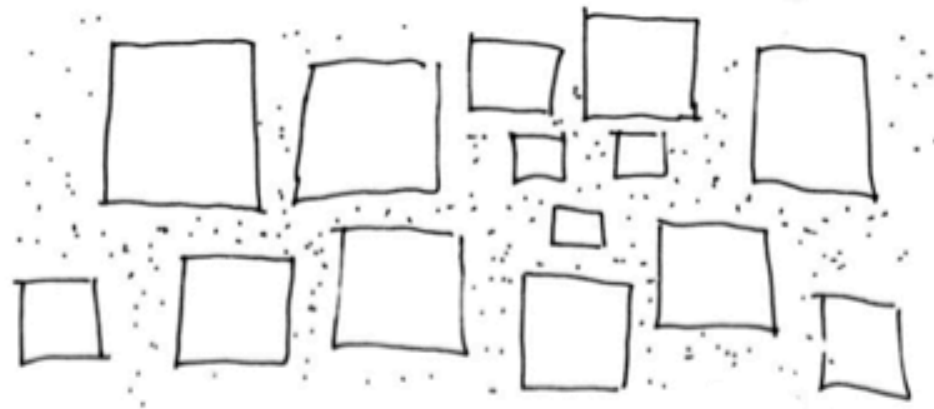
It's full of intellectual property — and it's not an issue.

It has no dominating vendor.

We call this kind of market “mature.”

Let's look at how it works.

It helps to remember that construction is about building structures. Not just about selling materials.



This is important, because we're used to equating "the software industry" with selling software.

It's also important to note that our new construction industry has a vast new world wide environment: The Net.



Business Evolution (Puhakka)

1. Free Software 1985-
2. Open Source 1998-
3. Commercial (Professional) Open Source 2005-



Business Success - Historical vs Now (Puhakka)

Initially very little compared to investments, remember 99-00!

Now some success among the true OS Start-ups, very little compared to competition (MySQL, JBOSS etc)

Real benefactors so far have been utilizers of Open Source such as Google, using Joe Kraus' formula would it have required 30x the used venture capital (26 million USD) to build Google, and would they have been able to raise that 780 million USD??? Maybe we would not have Google without Open Source??!!

Established & Emerging Companies Rely on MySQL (LAMP) - Which is Powering the Net and Google and the Next Googles'

• High Volume Websites

- Web 2.0
- Dynamic content
- eCommerce
- "Look to Book"
- Session Management
- Gaming & entertainment
- Scale Out

• Enterprise

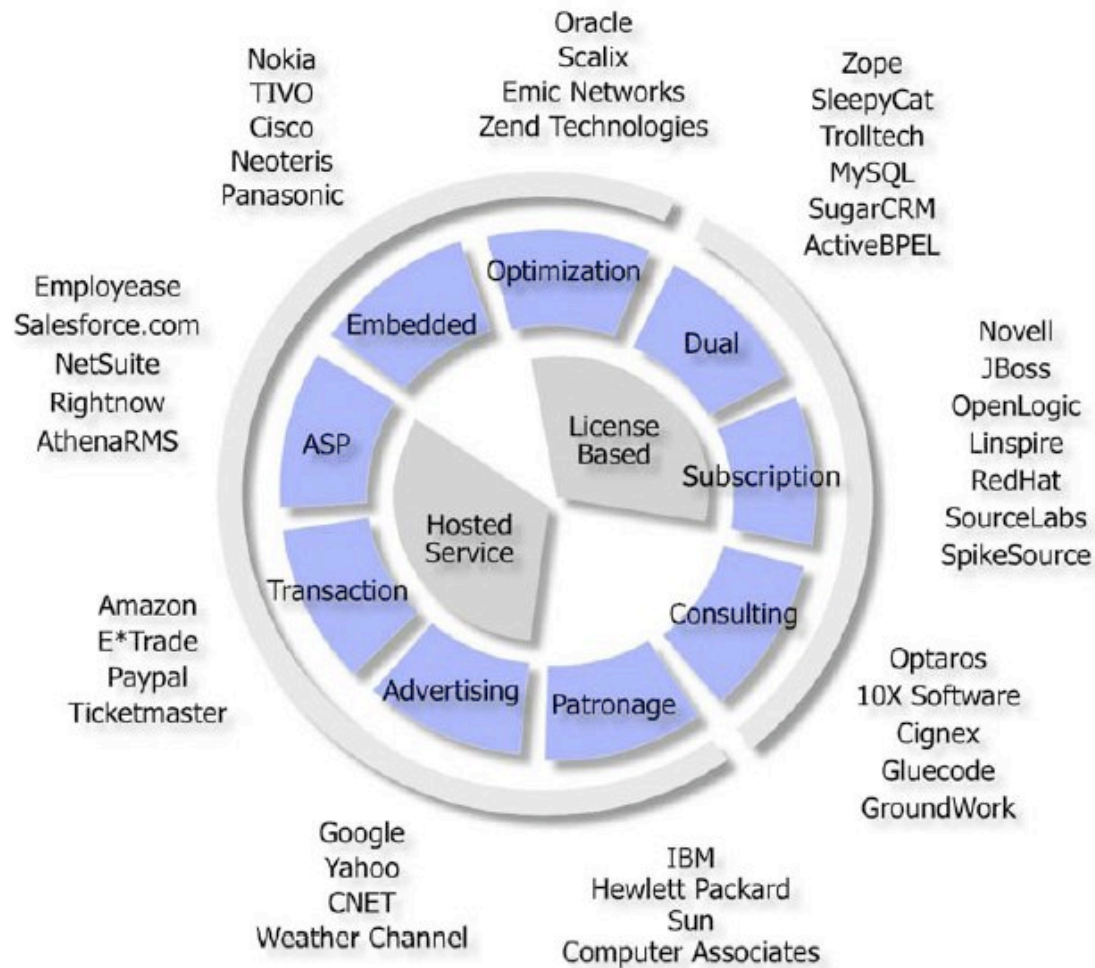
- Data Warehousing
- High-Volume OLTP
- Scale Out

• Embedded

- Bundled in software applications & hardware components



Businessmodels



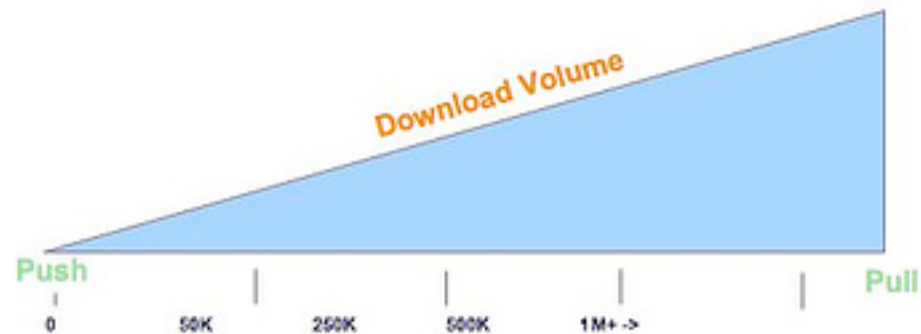
These companies illustrate some of the OSS strategies being used to create product value. (Riseforth)

Building OS Business

Lesson #2:

Friends are nice. Cash is critical. Make both

- Downloads = “friends”; customers = cash
- You need friends. You die without cash.
 - The more friends, the more cash? Not necessarily
 - ~ However, friends are important (You need qualified prospects)
 - ~ The number of “friends” defines the sales process you’ll need

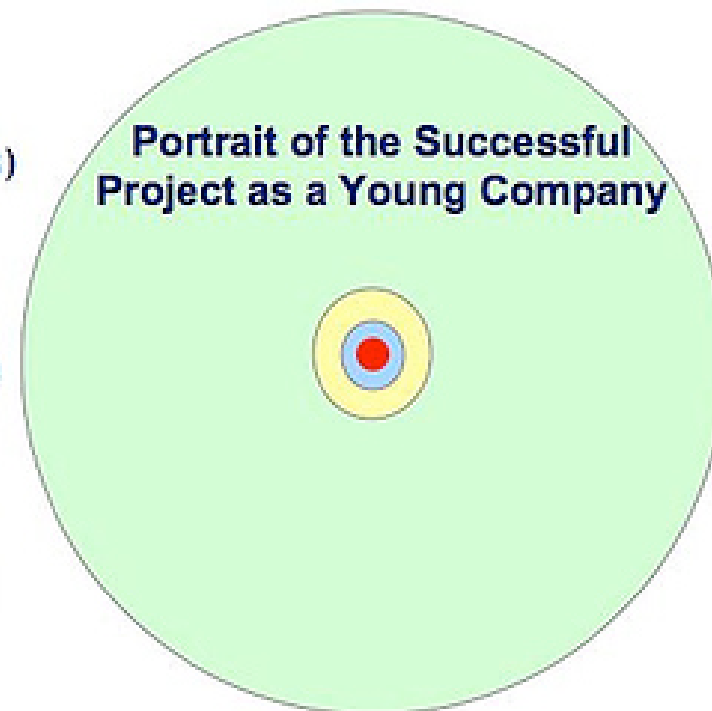


Building OS Business

Lesson #4:

Think "user community," not "developer community"

- You will do 85-100% of core development work
 - 1000/10/1 (Users/ Bug Reporters/ Patch Submitters)
 - ≤ 15 core developers will always do 85% of dev
- Community developers probably aren't interested in your project
 - 72% of "open source developers" write code for others like themselves
 - Commercial projects don't offer same incentives
- Most projects (55%) get no outside involvement *at all*, and 72% have fewer than 2



Sources: Marten Mickos (MySQLUC 2005); O'Mahony & West, 2005; Mockus et al., 2005)



”Blueprint to a billion”

- All the US companies that have gone Public since 1980
 - altogether 7 454
- Out of these a Billion dollar revenue mark has been reached by 387 (5%)
- **Do these companies have common features?**



The Seven Essentials

1. Find or create a great value proposition.
2. Find a quickly growing market.
3. Get some marquee customers.
4. Leverage a "Big Brother" Partner.
5. Be capital efficient.
6. Get paired management teams.
7. Have at least one board member on your board, outside of your investor or management team that has grown a company to a billion.



Time-to-something

- Time-to-product?
- Time-to-market?
- Time-to-revenue?
- Time-to-profitability?



Managing OSS as an
Integrated Part of Business

How MySQL as a developer and a supplier of
OSS fits into the models presented?



Case MySQL and the 7 essentials

- 1. Find or create a great value proposition.** The price vs. quality ratio of MySQL is in place or even superior as MySQL has this with its database offering costing a fraction of competing incumbents.
- 2. Find a quickly growing market.** Rapidly growing markets tend to be much more forgiving of mistakes than slower growing ones. While addressing a big market, the database market is not growing that quickly in revenue. For instance, both PostGre and MySQL are slowing down the market growth although user amount is increasing. According to IDC (2006), about 20% of size of the software market is disappearing because of open source software.
- 3. Get some marquee customers.** Having big customers helps you to figure out that your business model is a smart move. MySQL has many big name reference customers, but so far we have failed to identify any single customer that could be called a marquee customer providing significant revenue.



Case MySQL and the 7 essentials

- 4. Leverage a "Big Brother" Partner.** Many this type partners can be identified. For instance, SAP has stopped developing its own open source database and moved its developers and product as part of MySQL as an example how a 'Big Brother' can assist an ally. So far it has seemed that MySQL has been willing to partner with anyone, even though that has meant compromising some of open source movements ideals (partnership with SCO earlier this year).
- 5. Be capital efficient.** It's a myth that you need to spend lots and lots of money to build a billion dollar business. Most companies are self-funding after a certain point, and they have high margins early on that are sustainable, and they do not consume that much cash to get there. MySQL has raised quite a bit of money with the last VC round taking place early 2006 which makes us to wonder if the money-making machine exist in MySQL? Almost in every case fast-growing companies have been able to create "the money-machine" that ensures profitability in early stages (e.g. Google, Ebay, Cisco).



Case MySQL and the 7 essentials

- 6. Management team.** You will need the both sides: external and internal persons in the management. Oftentimes, it is the CEO who focuses on e.g. vision, product, marketing, and sales, and respectively, the internal CEO (perhaps the COO) focuses on e.g. delivering on that vision profitably. MySQL has, indeed, a CEO that fills the first position, but the latter one is harder to identify. Certainly, MySQL has covered also the technological perspective, but the question of internal business perspective still remains.
- 7. Have at least one board member on your board,** outside of your investor or management team that has grown a company to a billion. With the addition of Verisign's CFO to its board this fall, this essential was met. What this basically states is that the board has to have an objective, strong member that looks after the interests of the company, not only investors or owners.

Case MySQL and time-to-somethings

1. **Time-to-product:** Unarguably MySQL has been able to develop very cost-efficiently a world-class database, in one sense to time to world class product took a while, but on the other hand, it was accomplished with relatively small resources compared to those of e.g. Oracle. The main benefit being that the nature of open source development model allowed early users to detect and comment accurately as to where bugs in the software were and even suggest fixes to them.
2. **Time-to-market:** With around 100 million downloads and recognition as one of the top 500 websites, MySQL has certainly managed to get to market. This is mainly about positioning, since the company gains a large install base as the product is easy to acquire for testing.
3. **Time-to-revenue:** With around USD 40 million in revenue in 2005 after being on the market only for ten years, MySQL has outpaced many companies, growing from zero to about 40 MUSD in ten years.
4. **Time-to-profitability:** With a lot of VC money needed, this also has not been that efficient, compare to e.g. Google, Ebay and Cisco (Cf. Thomson's book, p. 136).



Lessons learnt 2006

- 1) Microsoft & Novell and Oracle & RedHat: these big companies moves in the industry has obliged small firm's to change their elevator pitches. For instance, because of RedHat's business model has changed, it is no longer a valid example for them. Respectively, Microsoft's claim that other than SUSE Linux users are debt to Microsoft has created tensions within different communities (As an example, see Ubuntu case and M. Shuttleworth's statements).
- 2) This indeed did happen: The year 2006 was a year of successful IPOs. For instance, Trolltech made its IPO in July 5, 2006, also there exists other forms than regular IPOs, e.g. JBOSS was acquired by RedHat as well as Sleepycat was acquired by Oracle.



Things to follow in 2007

- 1) Vast amounts of investment money is available: even Open Source dedicated Venture Capital funds like Benchmark's new 550 MEUR fund for Europe exist
- 2) More successful exits (IPOs and trade sales), but also failures as companies fail to attract new funding and also fail in turning users into paying customers.
- 3) China and other emerging markets' OS efforts under way. The "Chinese paradox": The market is huge with 1.3 billion people, and billions invested 'everywhere', but the market is tiny in revenue sense as e.g. database markets total 200 million euros (with every major vendor present). Linux is everywhere, and the government's recommended choice, but the total market is still 10 million euros.

The Future -Analysts View 1/2 (IDC)

IDC Reveals the Real Impact of Open Source: Sustaining Innovations and Extending the Useful Life of Software Assets

FRAMINGHAM, Mass.--(BUSINESS WIRE)--Aug. 14, 2006--According to a newly released IDC study, the open source software phenomenon has spread far beyond Linux and is gaining enormous momentum. The study, which analyzed IDC surveys from over 5,000 developers in 116 countries, finds that developers worldwide are increasing their use of open source. The study declares that open source software represents the most significant all-encompassing and long-term trend that the software industry has seen since the early 1980s. IDC believes that open source will eventually play a role in the life-cycle of every major software category, and will fundamentally change the value proposition of packaged software for customers.

The Future -Analysts View 2/2 (IDC)

"The use of open source beyond Linux is pervasive, used by almost three-quarters of organizations and spanning hundreds of thousands of projects," said Dr. Anthony Picardi, senior vice president of Global Software Research at IDC. "Although open source will significantly reduce the industry opportunity over the next ten years, the real impact of open source is to sustain innovations in mature software markets, thus extending the useful life of software assets and saving customers money."

The study finds that of the 5,000 survey respondents, open source software is being used by 71% of the developers in the world and is in production at 54% of their organizations. In addition, half of the global developers claim that the use of open source is increasing in their organizations.



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Victor Hugo



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