

# How do open source companies make money?

*By Alessio Fanelli*



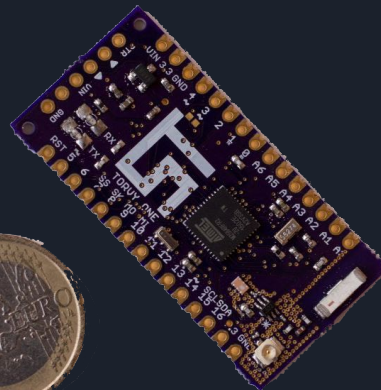
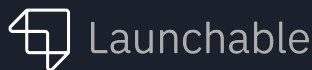
*Thank you Fat for the great drawing!*

## **What we'll chat about**

- ❑ How software became copyrightable**
- ❑ Free Software → Open Source → Open Core**
- ❑ The “DBDS” framework & monetization helix**
- ❑ Red Hat and MongoDB examples**

# About Me

**645**  
VENTURES



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February 3, 1976

An Open Letter to Hobbyists

To me, the most critical thing in the hobby market right now is the lack of good software courses, books and software itself. Without good software and an owner who understands programming, a hobby computer is wasted. Will quality software be written for the hobby market?

Almost a year ago, Paul Allen and myself, expecting the hobby market to expand, hired Monte Davidoff and developed Altair BASIC. Though the initial work took only two months, the three of us have spent most of the last year documenting, improving and adding features to BASIC. Now we have 4K, 8K, EXTENDED, ROM and DISK BASIC. The value of the computer time we have used exceeds \$40,000.

The feedback we have gotten from the hundreds of people who say they are using BASIC has all been positive. Two surprising things are apparent, however. 1) Most of these "users" never bought BASIC (less than 10% of all Altair owners have bought BASIC), and 2) The amount of royalties we have received from sales to hobbyists makes the time spent of Altair BASIC worth less than \$2 an hour.

Why is this? As the majority of hobbyists must be aware, most of you steal your software. Hardware must be paid for, but software is something to share. Who cares if the people who worked on it get paid?

Is this fair? One thing you don't do by stealing software is get back at MITS for some problem you may have had. MITS doesn't make money selling software. The royalty paid to us, the manual, the tape and the overhead make it a break-even operation. One thing you do do is prevent good software from being written. Who can afford to do professional work for nothing? What hobbyist can put 3-man years into programming, finding all bugs, documenting his product and distribute for free? The fact is, no one besides us has invested a lot of money in hobby software. We have written 6800 BASIC, and are writing 8080 APL and 6800 APL, but there is very little incentive to make this software available to hobbyists. Most directly, the thing you do is theft.

What about the guys who re-sell Altair BASIC, aren't they making money on hobby software? Yes, but those who have been reported to us may lose in the end. They are the ones who give hobbyists a bad name, and should be kicked out of any club meeting they show up at.

I would appreciate letters from any one who wants to pay up, or has a suggestion or comment. Just write me at 1180 Alvarado SE, #114, Albuquerque, New Mexico, 87108. Nothing would please me more than being able to hire ten programmers and deluge the hobby market with good software.

*Bill Gates*

Bill Gates  
General Partner, Micro-Soft

"Who can afford to do professional work for nothing?"

- Bill Gates in "An Open Letter to Hobbyists" (1976)



# WHAT IS SWEETER THAN AN APPLE?

## THE FRANKLIN **ACE**100

The Franklin ACE 100 is hardware and software compatible with the Apple® II. It is sweeter because it is more versatile. It includes 64K of RAM memory and—it costs less.

Any program that runs on the Apple II will run on the Franklin ACE 100. Any peripheral that works with Apple will work with ACE. The Franklin ACE 100 incorporates upper and lower case characters and includes a numeric pad, an alpha lock key and VisiCalc® keys.

The Franklin ACE 100—a professional personal computer with the quality and reliability for the most demanding business applications. It is sweeter than an Apple. Call or write today for the name of your local authorized Franklin dealer.



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COMPUTER CORPORATION  
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Pompano Beach, FL 33064  
(305) 480-7100

Apple II is a registered trademark of Apple Computer, Inc.  
VisiCalc is a registered trademark of Visi Corp.  
© 1983 Franklin Computer Corporation

**Apple Computer v. Franklin Computer (1983)**





**St IGNUcius**

# Richard Stallman creates the GNU Project (1983)

*"In the Church of Emacs we have put an end to the priesthood of technology:  
everyone is free to read our sacred scriptures." - Richard Stallman*



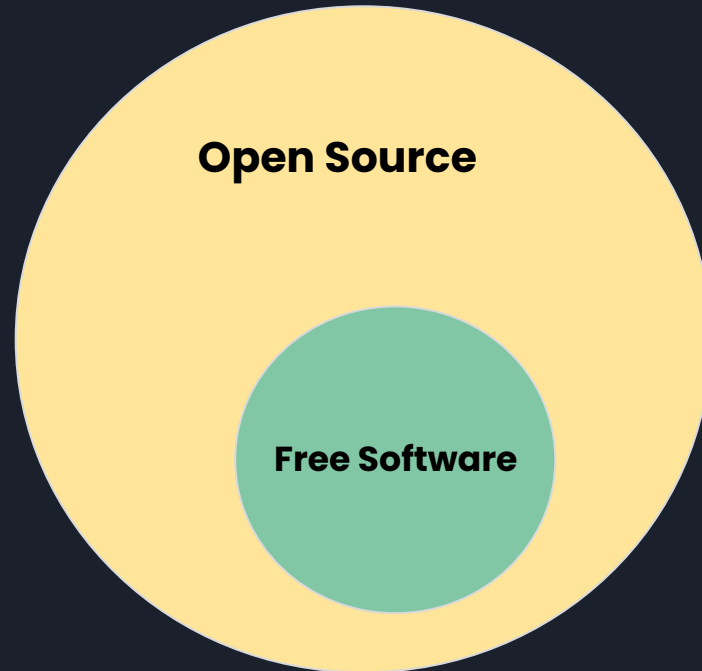
I am a  
Saint



In the Church Of Emacs

**“Free software means software that respects users' **freedom and community**. Roughly, it means that the users have the freedom to run, copy, distribute, study, change and improve the software. Thus, “free software” is a **matter of liberty, not price**.”**

**– GNU Project**



## General Public License (GPL)

- ❑ Created in 1989 by GNU Project
- ❑ Leverages “Copyleft”
- ❑ Derivative work must be under GPL, and therefore open sourced
- ❑ Prohibits companies from repackaging GPL licensed code and selling it as closed source





# Free Software Movement

- ❑ **Community driven**
- ❑ **Decentralized (mailing lists, IRC)**
- ❑ **High barrier to entry**
- ❑ **Homebrew/hobbyist scene**

# Netscape goes open source

“Mozilla.org is, simply put, Netscape’s last-ditch effort to keep Microsoft from owning the Web [...] Ullman and Raymond agree that, with the added boost from Netscape, the open-source zeitgeist is afoot.”

*July / August 1998 - IEEE Software*



# Licenses shift towards permissive

- ❑ MIT License (1983) - Permissive
- ❑ BSD (1988) - Permissive
- ❑ Netscape / Mozilla Public License (1998) - Permissive
- ❑ Apache License (2004) - Permissive
- ❑ CDDL (2005) - Permissive

# Permissive vs. Copyleft Open Source Licenses Over Time

● Copy-Left ● Permissive



## Free Software -> Open Source Ethos Change

- ❑ ~~Community-driven~~ "Stadium" model
- ❑ ~~Decentralized (mailing lists, IRC)~~ Centralized (GitHub, etc)
- ❑ ~~High barrier to entry~~ Low barrier to entry
- ❑ ~~Homebrew/hobbyist scene~~ Corporate involvement

## Open Source

- ❑ 100% publicly available
- ❑ You can fully run it yourself
- ❑ Monetized through services



Red Hat

ACQUID

## Open Core

- ❑ The OSS project is just a piece of the product
- ❑ If the company shuts down, you lose the full product



CONFLUENT



**How do you convert  
your open source users  
into paying users?**



# The “DBDS” Framework

- ❑ **Discover:** the developer is looking for a tool to solve a certain need. They will check out projects posted on GitHub, Hacker News, etc.
- ❑ **Build:** once they find a tool, they want to start playing around with it as quickly as possible. It then starts expanding to the broader team and work towards a production-ready product starts.
- ❑ **Deploy:** once the product is built, it's going to production, which will require CI/CD support, observability, etc.
- ❑ **Scale:** the product is in production, and needs to be maintained.

# Monetization Helix

VALUE OF BEING OPEN SOURCE

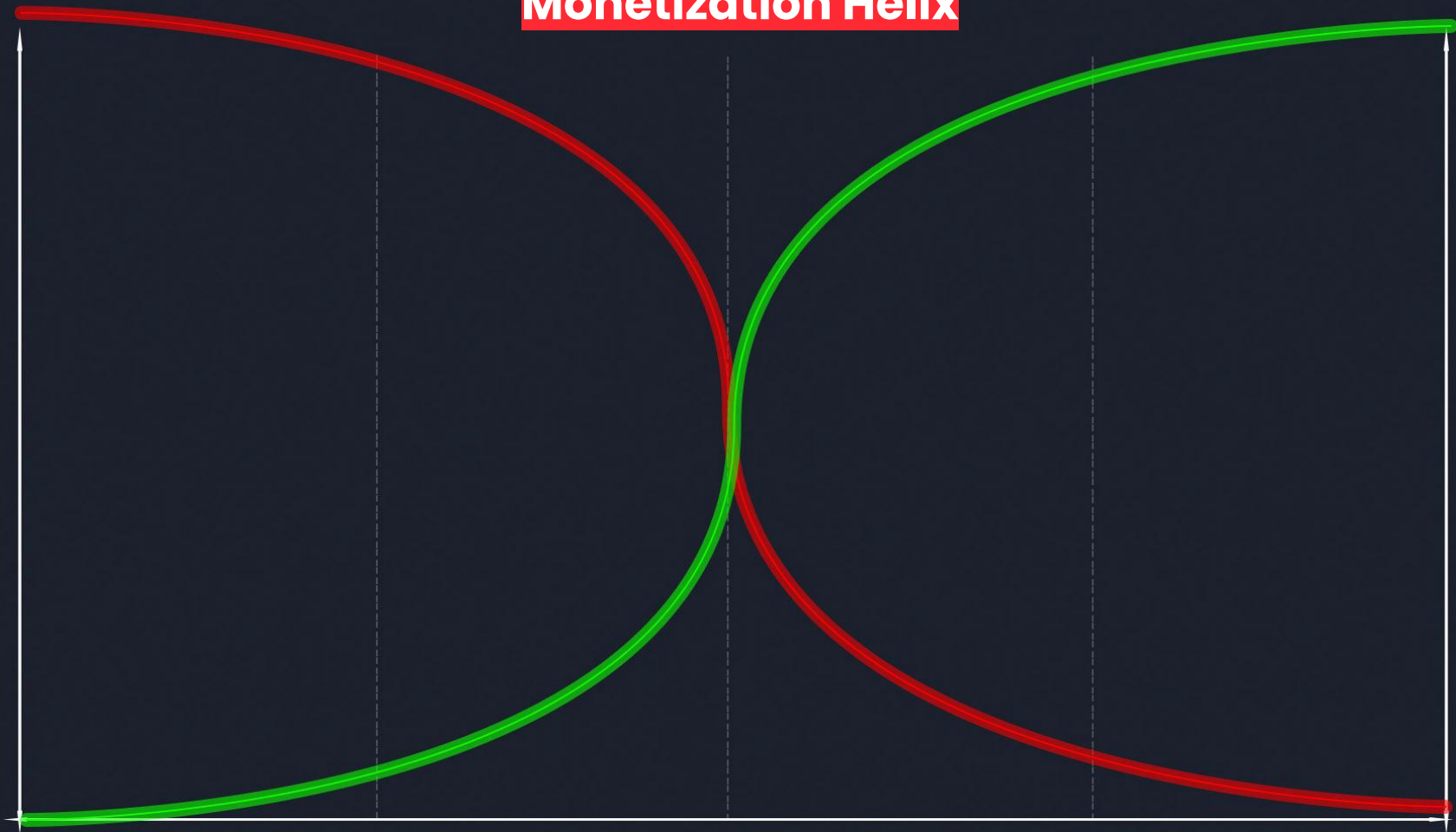
VALUE OF RELIABILITY

Discover

Build

Deploy

Scale





## Developer Need

## Monetization Trigger

### Discover

Looking for a Linux distro to run their applications and workloads

Content & Community

### Build

Making sure Red Hat supports all their requirements, and understanding best practices

Create certifications and training courses that can be sold to companies and agencies to be “certified” Red Hat developers

### Deploy

Needs to get Red Hat deployed to a cloud, VPC, or on-prem environment

Sell Red Hat OpenStack to manage your cloud infrastructure, as well as dedicated support

### Scale

Making sure the deployment is able to scale with traffic, is secure, and can be easily maintained

Sell Red Hat Enterprise, an enterprise version of the distro with proprietary enterprise features



## Developer Need

## Monetization Trigger

### Discover

Looking for a NoSQL database

Content & Community

### Build

Searching ORM adapters for their language, sketching out data models, understanding pros/cons

Run paid workshops for developers to learn, as well as offering ad-hoc development for specific use cases

### Deploy

Getting the database running in a cloud/on-prem environment, and allowing secure connections to it

Sell MongoDB Atlas as a service, removing the hosting complexity from the developer

### Scale

Make sure infrastructure can scale, support advanced features like audit logs, backups, etc.

Sell MongoDB Cloud as a wider platform on top of MongoDB Atlas.

# Monetization Helix

VALUE OF BEING OPEN SOURCE

VALUE OF RELIABILITY

Content & Community

Training & Development  
\$

Managed Services  
\$\$

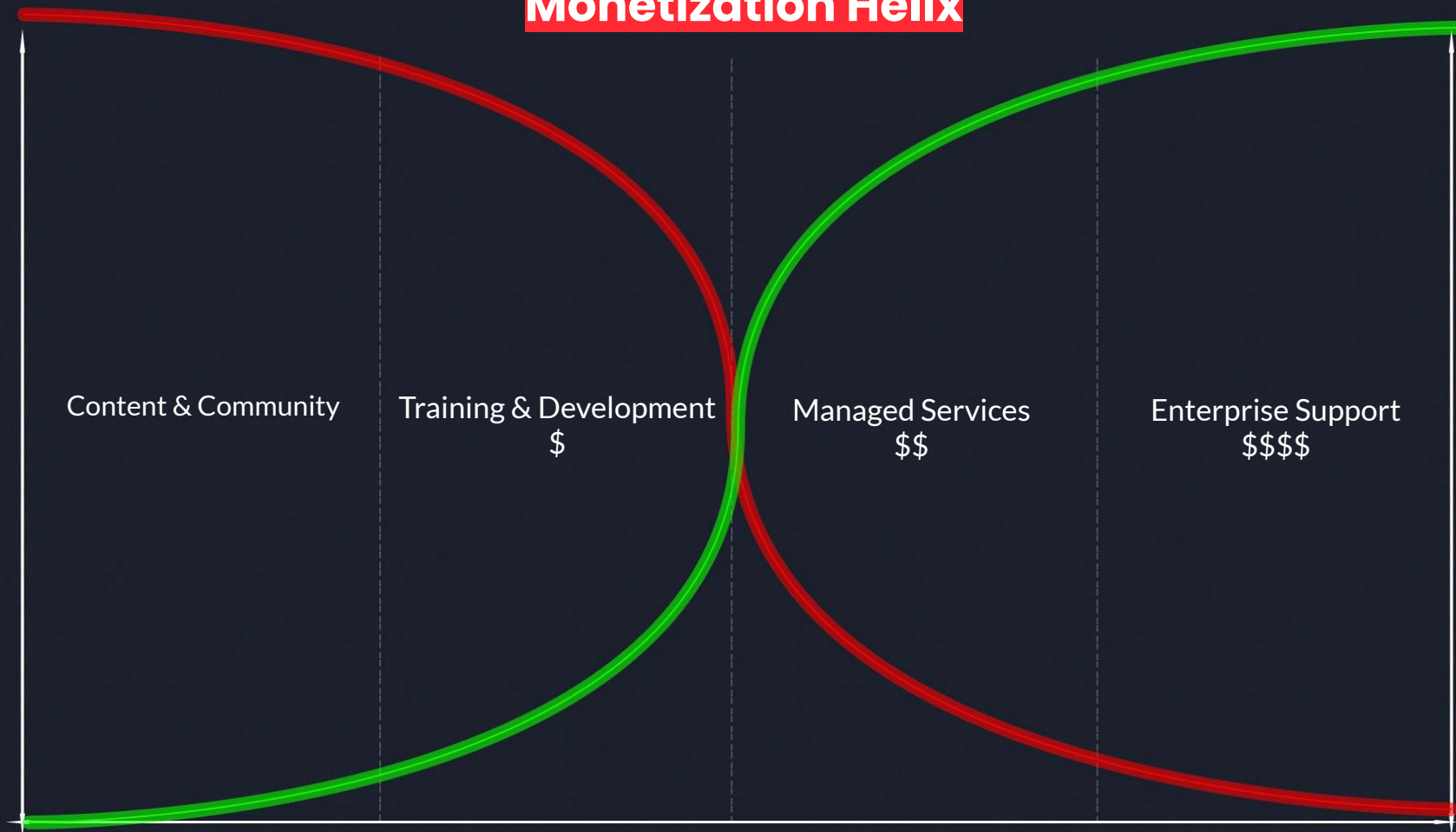
Enterprise Support  
\$\$\$\$

Discover

Build

Deploy

Scale

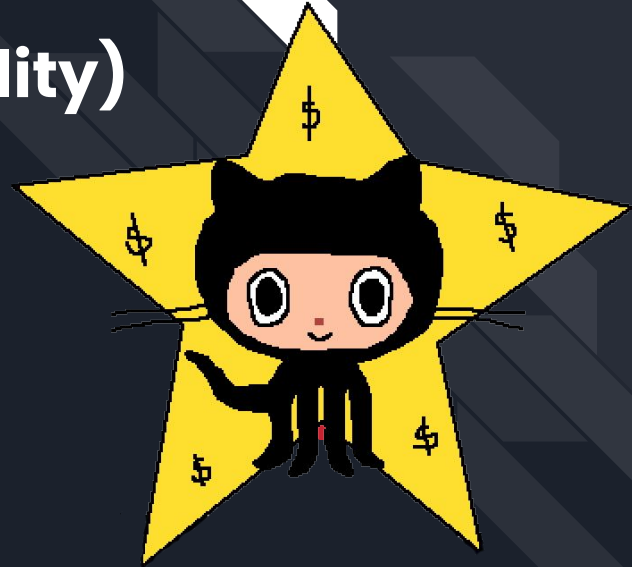


# How do open source companies make money?

- ❑ Open Source != Open Core
- ❑ “DBDS”: Discover, Build, Deploy, Scale
- ❑ Monetization Helix (OSS vs Reliability)

Get in touch!

- ❑ [afanelli@645ventures.com](mailto:afanelli@645ventures.com)
- ❑ @FanaHOVA



**Keeping the big  
bad wolf at bay  
as an open  
source project**





## Re-Hosting unfriendly licenses pop up

- ❑ Server Side Public License (MongoDB, 2018)
- ❑ Elastic License v2 (Elastic, 2021)

TL;DR: Commercial use is allowed, as long as it's not simply re-hosting my product. Slippery slope...