



Cooperative Cost-Sharing for Sustainable, Libre Software

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Agaric Show and Tell

BuyLibre Cooperative

A Vision for Free-Market Software

BuyLibre is a market for *changes* to **user-owned** software.



Cage Free

As users pay for improvements to their software, they will control its evolution.

Fair Trade

As developers produce changes to user-owned software, they may earn market compensation.

Copyright: Exclusive Derivatives & Distribution

“To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”

17 U.S. Code §106

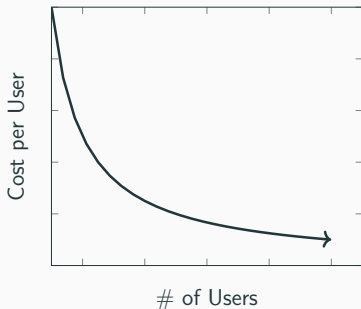
“The owner of copyright under this title has the exclusive rights to do and to authorize any of the following:

- (1) to reproduce the copyrighted work in copies;
- (2) to **prepare derivative works** based upon the copyrighted work;
- (3) to **distribute copies** of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending; ...”

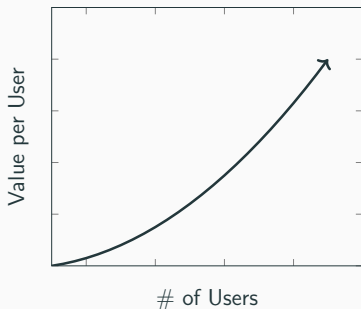
Software Economics & Network Effects

As the number of users increases...

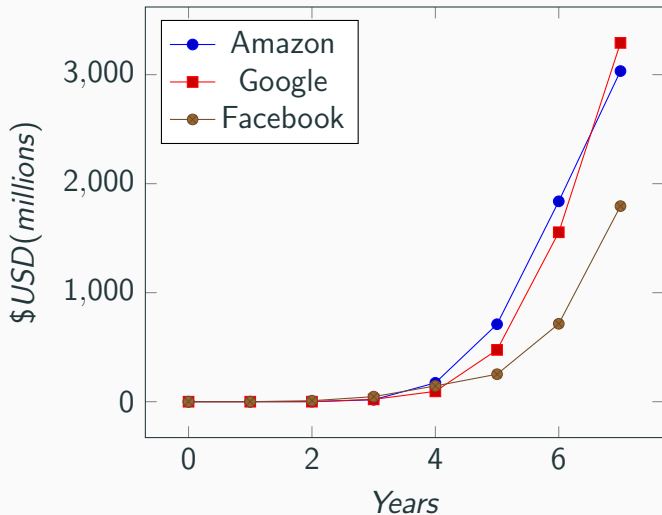
cost per unit
approaches zero



extrinsic network effect
value goes up and up



Unicorns! Software Platform Revenue Growth



Source: *The Hockey Stick Principles*, Bobby Martin (2015)

The Free Software Movement (1986)

Software Should Not Have Owners

“The Free Software Foundation is dedicated to eliminating restrictions on copying, redistribution, understanding and modification of software. The word “free” in our name does not refer to price; it refers to freedom. First, the freedom to copy a program and redistribute it to your neighbors, so that they can use it as well as you. Second, the freedom to change a program, so that you can control it instead of it controlling you; for this, the source code must be made available to you.”

– Richard M. Stallman, February 1986

Stallman later added freedom to distribute your changes and use the software for any purpose.

Free Software: What is the Revenue Model Again?

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Common suggestions for free software revenue models include distribution, support, indemnification, grants, training, hosting, consulting, swag, and donations.

Open Source: Pragmatic Rebranding (1998)

“Practical for non-differentiating software” – Bruce Perens

- Neutralize competition (Google funds Firefox)
- Lower recruitment costs (Facebook’s React)
- Enable sales of proprietary features (Nginx)
- Reduce expense of cost centers (Apache Web Server)

Open Source is a strategic, pragmatic professional courtesy among developers.

Open Source is Fantastic for Developers

Open Source licensing provides *developers* a diverse ecosystem of excellent, free software.

- Developers can **use** these works in any way.
- Developers can **study** the source code.
- Developers can **modify** these works as they wish.
- Developers can **compose** new works from others.

Open source encourages vigorous *competition for change*.¹

[1] With exception of critical infrastructure and security. See the Ford Foundation's report entitled, "Roads and Bridges: The Unseen Labor Behind Our Digital Infrastructure".

Unrealized: User Freedom from Vendor Control

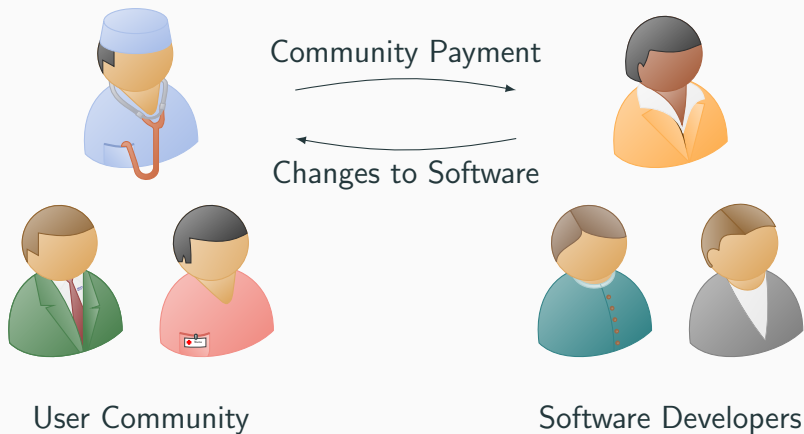
With a few exceptions, the Open Source movement has failed to provide software freedom to users.

- Users are often locked in to a single vendor.
- Users lack control over their software's evolution.

User freedom is urgent.

- With prevalence of software-as-a-service, users have even *less* control than 1986.
- With increasing automation, users have even more dependence on the software systems they use.

Towards a Free Market where Cash Signals Value



Free Markets Are Essential For User Freedom

Users need competition for the *change* in the software they have adopted and become dependent upon.

<i>Licensing Model</i>	<i>Challenge</i>
Proprietary	Vendor controls software evolution
Open Source	Cash doesn't signal user value

Can We Design a Free Market Licensing Model?

Copyright law provides the exclusive right to **prepare derivative works** and **distribute copies**.

	<i>Vendor Controls Product Direction</i>	<i>Competition for Software Change</i>
<i>Paid</i>	Proprietary (Commercial)	
<i>Free of Charge</i>	Proprietary (Freeware)	Open Source

We Can Design a Free Market Licensing Model

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<i>Paid</i>	Proprietary (Commercial)	BuyLibre Cost Sharing
<i>Free of Charge</i>	Proprietary (Freeware)	Open Source

Competition for Software Evolution



Competition for the *change* in the software a user has adopted and integrated.

1. Open market sets prices
2. Choice of upgrades & product evolution
3. Stability via redundant vendors
4. Vendors accountable to user needs

Collective Ownership needed Cost Sharing



<i>Licensing Model</i>	<i>Controlled By</i>
Proprietary	Vendor
Open Source	"Software Has No Owner"
BuyLibre	Consumer Cooperative

A Consumer Cooperative for Cost-Sharing



Online Store for User-Owned Software

1. Operates a marketplace
2. Voluntary and open membership
3. Democratic member control
4. Member economic participation
5. Doesn't participate in marketplace
it administers

Profits are rebates, distributed to members proportional to their purchases (via 1099-DIV).

User Freedom and Developer Compensation



Cage Free

Users may have their software changed to meet their needs by anyone they wish.

Users' costs are shared across those who adopt the software with them.

Fair Trade

Developers may improve works made by others, regardless of who wrote it.

Developers can recover market compensation reflecting the value of their contributions.

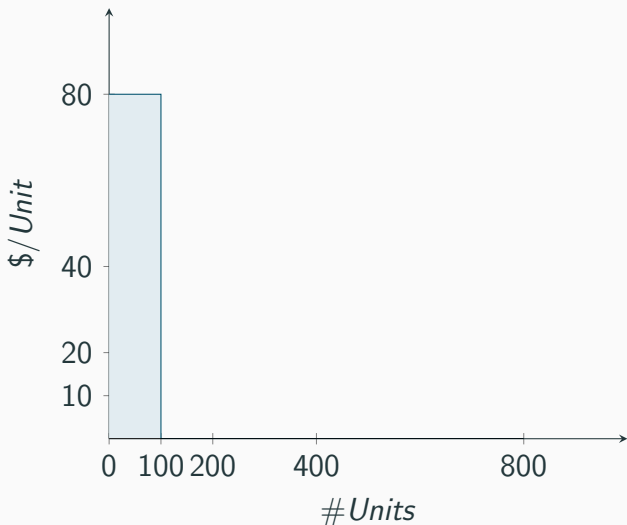
Users purchase *changes* to the software they collectively own.
Developers incrementally sell works to the *community* as a whole.

Software Consignment Cost Sharing

1. Developer assigns joint copyright of their software to BuyLibre in exchange for a revenue sharing contract that names a *per-unit price* and a *total community cost*.
2. Users license the work from BuyLibre, at the per-unit price plus a transaction surcharge.
3. For each unit sale, BuyLibre pays the developer at the agreed upon per-unit price until the total community cost has been reached; the developer is fully compensated.
4. BuyLibre then continually lowers the price, rewarding early adopters from additional sales.
5. Once the average price paid by users reached 12.5% of the initial price or 7 years have past, it becomes free software.

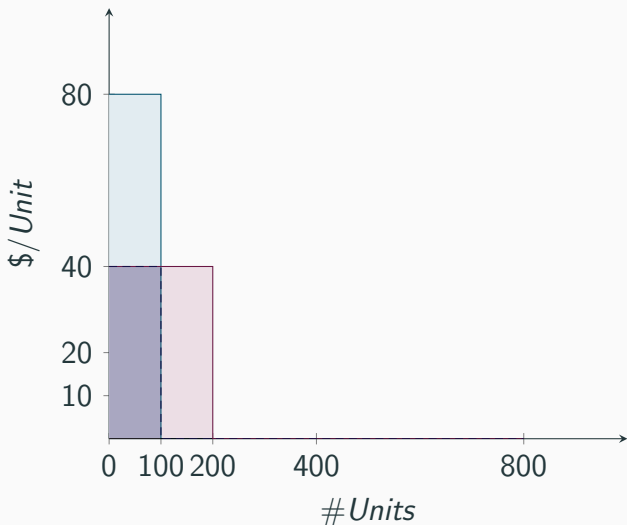
Cost Model: Single Product, Single Version

Acme Rocket Sled 1.0; \$80 per unit up to \$8K.



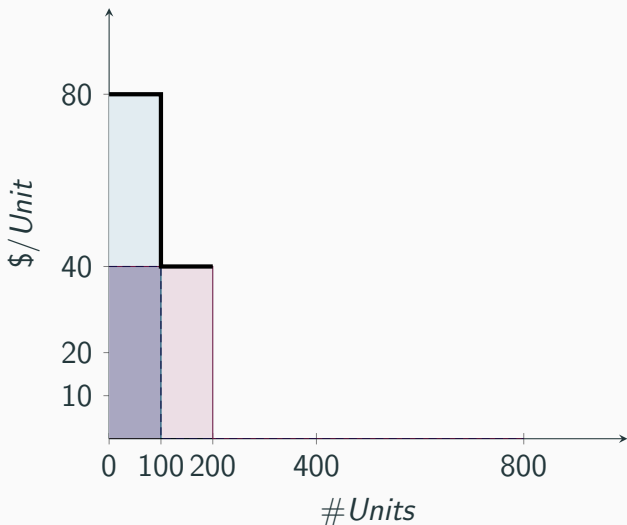
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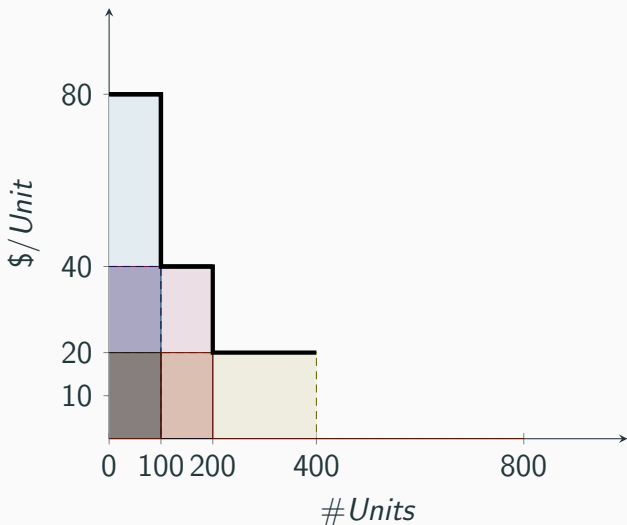
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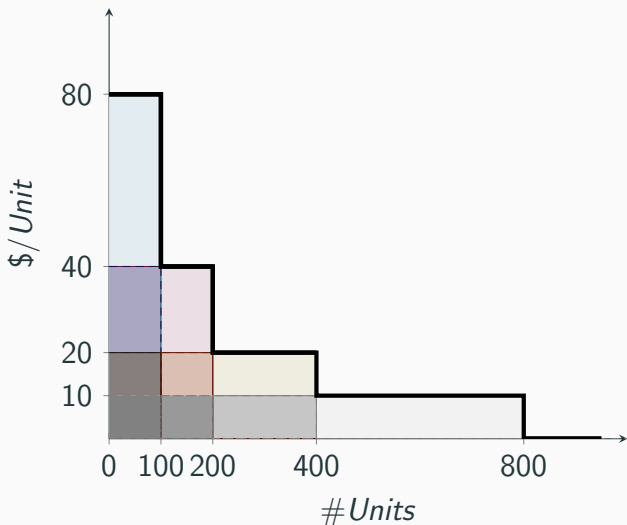
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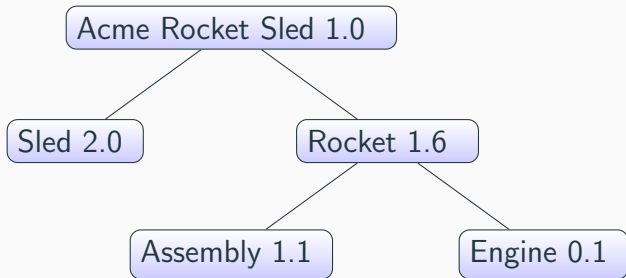
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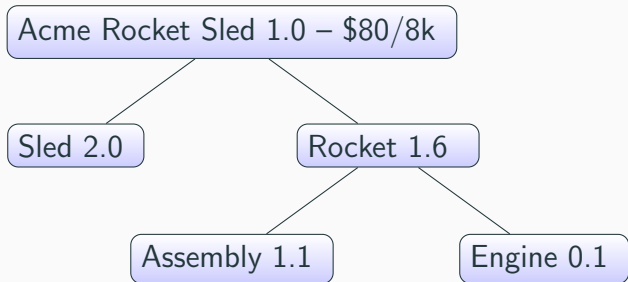
Software Is Compositional

Software is a composition in time and space.



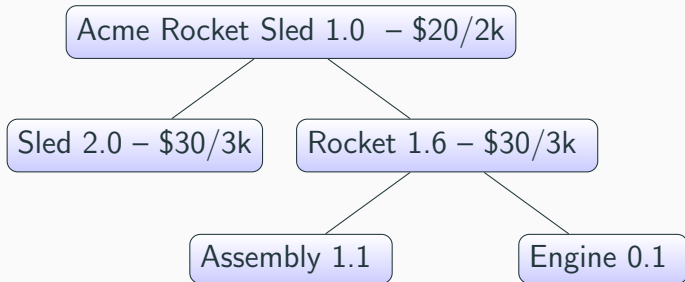
Software Pricing Is Compositional

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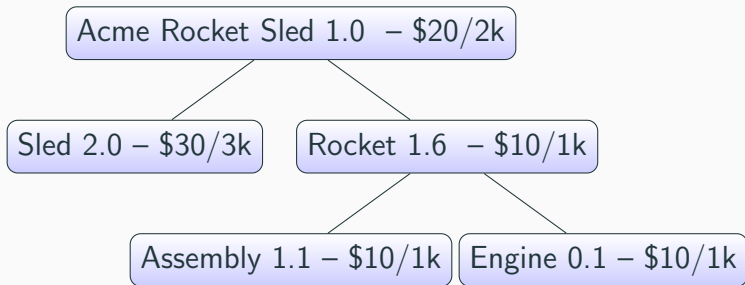
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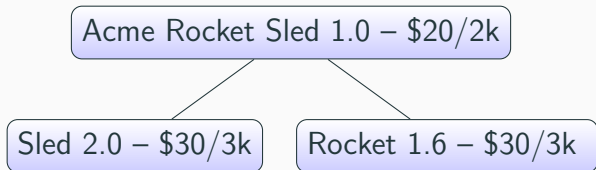
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User Pricing Is Incremental

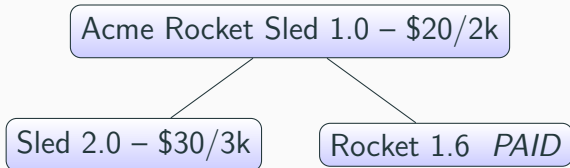
Users don't pay for previously licensed works.



Rocket Sled is \$80/8k .

User Pricing Is Incremental

Users don't pay for previously licensed works.



Rocket Sled is discounted to \$50/8k if a user has already paid for Rocket 1.6.

Competition for Upgrades Is Possible

Acme Rocket Sled 1.0 – *PAID*

Competition for Upgrades Is Possible

Acme Rocket Sled 2.0 – \$100/10k

Acme Rocket Sled 1.0 *PAID*

Competition for Upgrades Is Possible

Super Sled 2.0 – \$20/2k

Acme Rocket Sled 1.0 *PAID*

Competition for Upgrades Is Possible

Acme Rocket Sled NG – \$20/2k

Super Sled 2.0 – \$20/2k

Acme Rocket Sled 1.0 *PAID*

Community Vision for Free-Market Software

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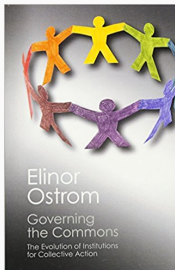
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Fair Trade

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<https://buylibre.org> – Will you join us?

Common Pool Resources



Common Pool Resources

- Lush and dense ecosystems
- Cooperative Governance > Public or Private Ownership

Developers retain their Trademarks

Just as in open source software, trusted trade names keep forks from being a problem for users.

BuyLibre would only have limited license to use a product's trademark, for the sale of the work.

Competing works, even if they shared substantial code, would have to build their own trust.

What is a Unit?

A *unit* would be some form of usage normalization that reflects different sorts of buyers and economics.

- Each unit could be a per-seat or user.
- A unit could be based upon net earnings.
- A unit could have an “alternative minimum”.
- A unit could have good-faith exceptions.

Decisions like this are why a cooperative with democratic control by the user community is absolutely essential.