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ÚSTAV PRÁVA A TECHNOLOGIÍ

Alternative **Software** Licensing

FREE & OPEN SOURCE SOFTWARE

MVV59K Software Law

Mgr. Matěj Myška

Tento projekt je spolufinancován Evropským sociálním fondem a státním rozpočtem České republiky.

EVROPSKÁ UNIE esf MINISTERSTVO ŠKOLSTVÍ, MLÁDEŽE A TĚLOVÝCHOVY OP Vzdělávání pro konkurenceschopnost UNIVERSITAS MASARYKIANA BRUNENSIS

INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

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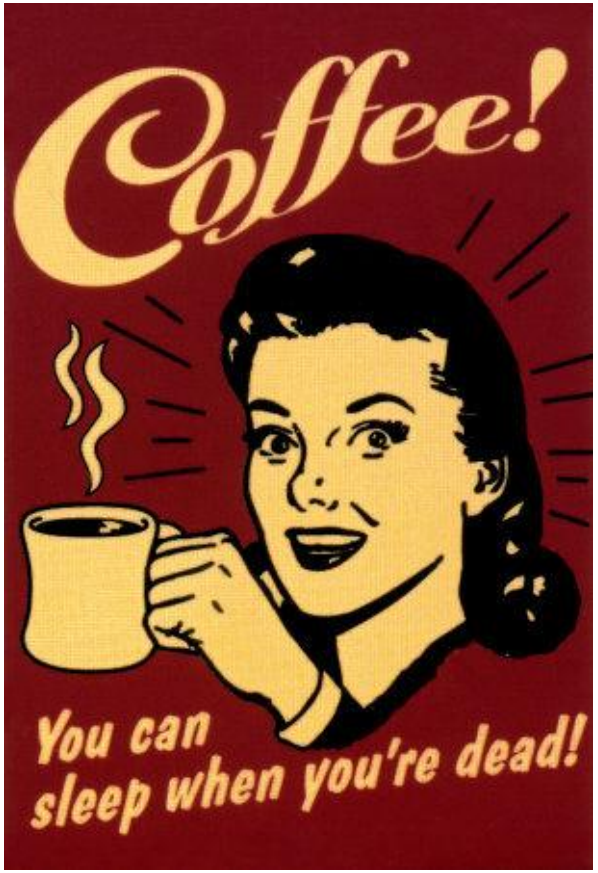
- Institute of Law and Technology
- Assistant
- Office hours:
  Mon 1.30 – 3:00 p.m.
- Contact:
  - Room no. s61,
  - Tel. 54949 4751
- **matej.myska@law.muni.cz**



MOTTO

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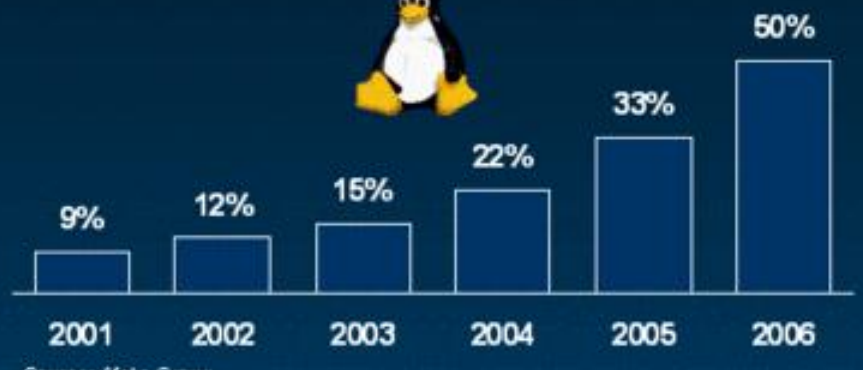
"…open source licensing has become a widely used method of creative collaboration that serves to advance the arts and sciences in a manner and at a pace that few could have imagined just a few decades ago."

Jacobsen v. Katzer, 535 F.3d 1373, 1378 (Fed. Cir. 2008).

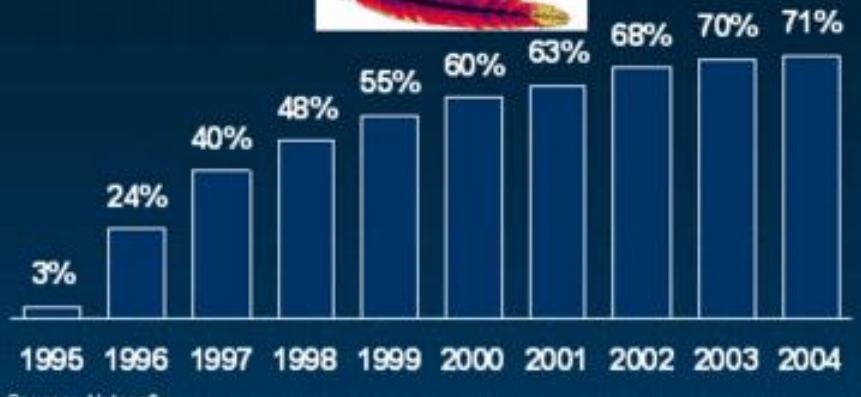
Adoption of Open Source Software

LINUX Share of Intel Server Shipments (%)



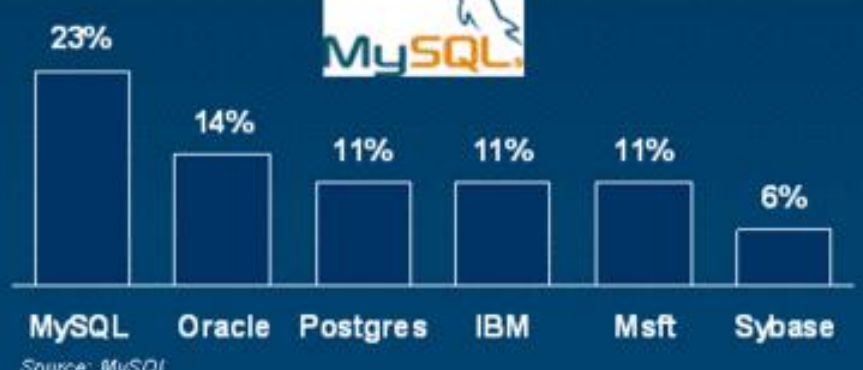
Source: Meta Group

APACHE Web Server Market Share %



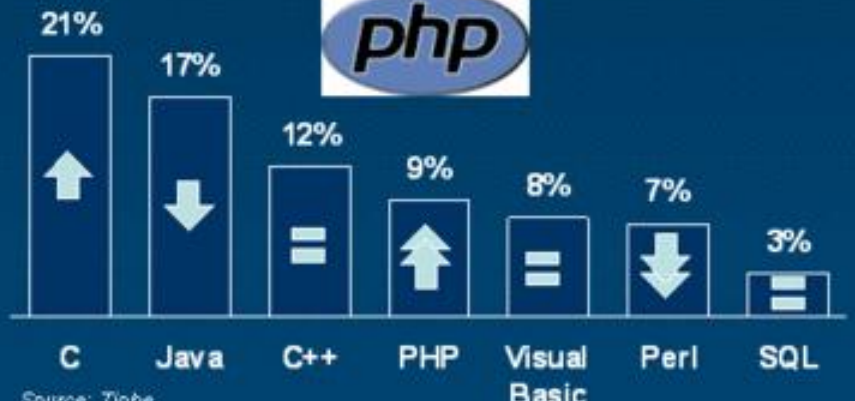
Source: Netcraft

Share of Relational Database Market (Units)



Source: MySQL

Popularity of Programming Languages



Source: Tiobe

Index VENTURES

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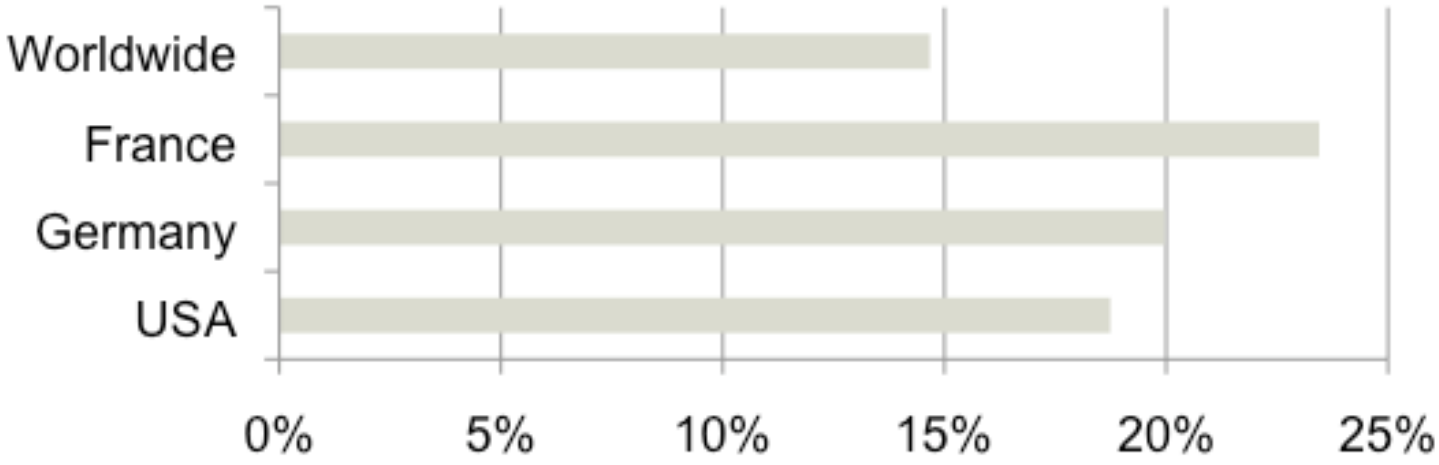
- Market share
- Nov 08 to Mar 09



Data: OneStat.com

mozilla Firefox

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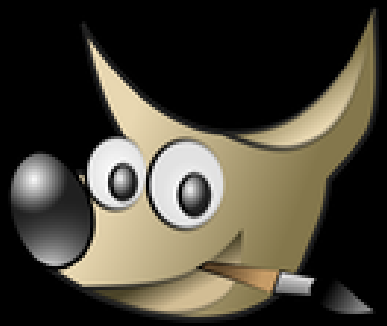

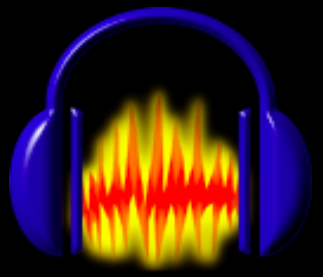

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- What is NOT F/OSS?
- What is F/OSS?
  - Historical development
  - Idea of F/OSS
  - Key
- Legal Aspects of F/OSS

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- Proprietary Software
- Shareware
- Freeware
- Abandonware
- Public Domain Software

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- “Traditional”
- Non-free
- Closed source code
  - Only binaries distributed
  - Source code – how could it be protected?
- Licensing

10 | Shareware

- Proprietary software
- Business model
- Trialware, demoware, added functionality (levels)

11 | Wolfy again!:)

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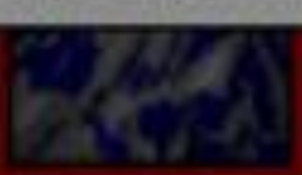
Which episode to play?

Episode 1
Escape from Wolfenstein

Episode 2
Operation: Eisenfaust

Please select "Read This!" from the Options menu to find out how to order this episode from Apogee.



Episode 5
Trail of the Madman

Episode 6
Confrontation

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- "Fully" copyrighted
  - i.e. no modification, redistribution possible
- Available for use at no cost or for an optional fee
- No disclosure of source code

14 | Public Domain Soft

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- Disclaimed copyright
- Not possible under Berne Convention
- Quasi public domain Software
  - After 70y – Free work

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- Copyrighted software
- Copyright infringement (!)
- No enforcement
- www.abandonia.com
- *"When we become aware of these instances of piracy, we go to these sites and pursue our IP (intellectual property) rights," "It's not something we go after on a day-to-day basis, but if it's our IP, then it's our IP."*

  Nancy Bushkin, (former) Infogrames vice president of corporate communications

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What and Why and When F/OSS?

In 1976…

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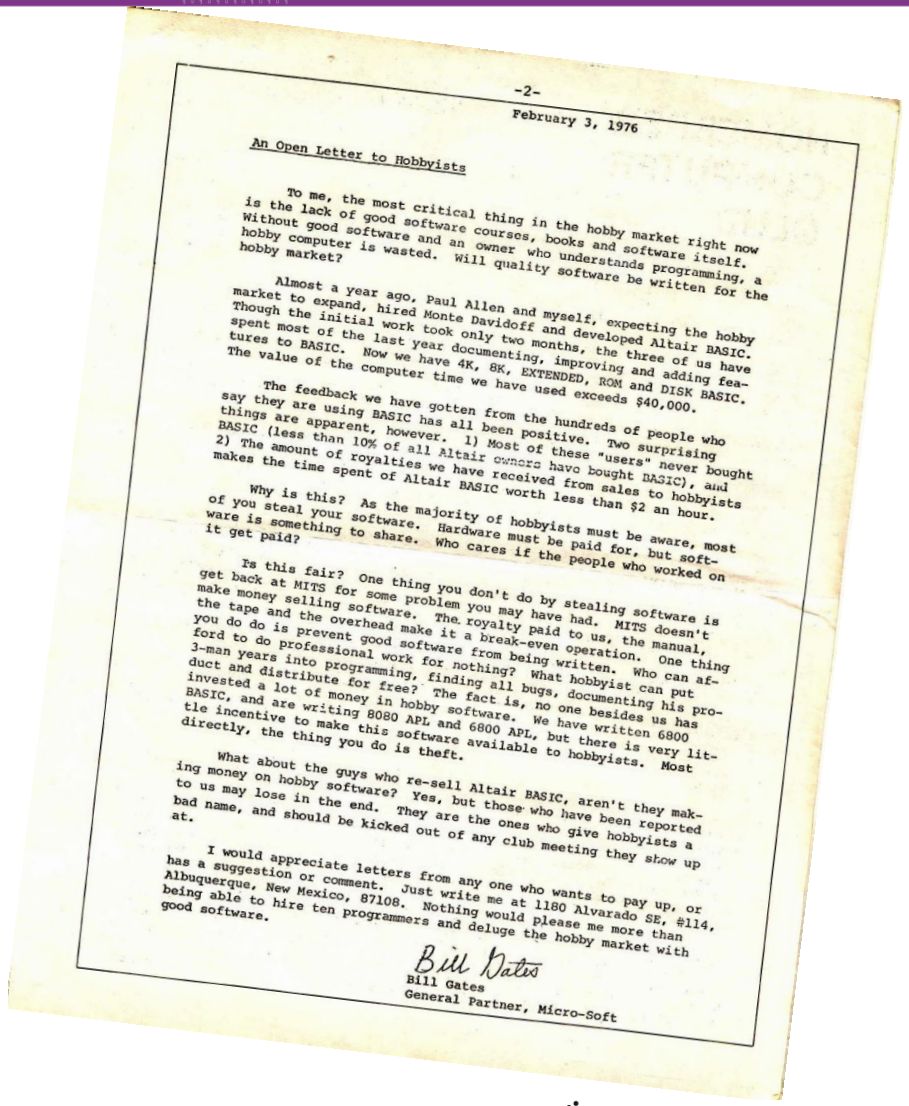
"…As the majority of hobbyists must be aware, most of you ***steal your software.*** *Hardware must be paid for, but software is something to share. Who cares if the people who worked on it get paid?*

Is this fair?"

Bill Gates's Open Letter to Hobbyists
February 3, 1976



-2-

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
General Partner, Micro-Soft

ALTAIR 8800 COMPUTER

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Apple Introduces the First Low Cost Microcomputer System with a Video Terminal and 8K Bytes of RAM on a Single PC Card.

The Apple Computer. A truly complete microcomputer system on a single PC board. Based on the MOS Technology 6502 microprocessor, the Apple also has a built-in video terminal and sockets for 8K bytes of on-board RAM memory. With the addition of a keyboard and video monitor, you'll have an extremely powerful computer system that can be used for anything from developing programs to playing games or running BASIC.

Combining the computer, video terminal and dynamic memory on a single board has resulted in a large reduction in chip count, which means more reliability and lowered cost. Since the Apple comes fully assembled, tested & burned-in and has a complete power supply on-board, initial set-up is essentially "hassle free" and you can be running within minutes. At $666.66 (including 4K bytes RAM!) it opens many new possibilities for users and systems manufacturers.

You Don't Need an Expensive Teletype.

Using the built-in video terminal and keyboard interface, you avoid all the expense, noise and maintenance associated with a teletype. And the Apple video terminal is six times faster than a teletype, which means more throughput and less waiting. The Apple connects directly to a video monitor (or home TV with an inexpensive RF modulator) and displays 960 easy to read characters in 24 rows of 40 characters per line with automatic scrolling. The video display section contains its own 1K bytes of memory, so all the RAM memory is available for user programs. And the Keyboard Interface lets you use almost any ASCII-encoded keyboard.

The Apple Computer makes it possible for many people with limited budgets to step up to a video terminal as an I/O device for their computer.

No More Switches, No More Lights.

Compared to switches and LED's, a video terminal can display vast amounts of information simultaneously. The Apple video terminal can display the contents of 192 memory locations at once on the screen. And the firmware in PROMS enables you to enter, display and debug programs (all in hex) from the keyboard, rendering a front panel unnecessary. The firmware also allows your programs to print characters on the display, and since you'll be looking at letters and numbers instead of just LED's, the door is open to all kinds of alphanumeric software (i.e., Games and BASIC).

8K Bytes RAM in 16 Chips!

The Apple Computer uses the new 16-pin 4K dynamic memory chips. They are faster and take ¼ the space and power of even the low power 2102's (the memory chip that everyone else uses). That means 8K bytes in sixteen chips. It also means no more 28 amp power supplies.

The system is fully expandable to 65K via an edge connector which carries both the address and data busses, power supplies and all timing signals. All dynamic memory refreshing for both on and off-board memory is done automatically. Also, the Apple Computer can be upgraded to use the 16K chips when they become available. That's 32K bytes on-board RAM in 16 IC's—the equivalent of 256 2102's!

A Little Cassette Board That Works!

Unlike many other cassette boards on the marketplace, ours works every time. It plugs directly into the upright connector on the main board and stands only 2" tall. And since it is very fast (1500 bits per second) it can read or write 4K bytes in 20 seconds. All timing is done by software, which requires crystal-controlled accuracy and uniformity from unit to unit.

Unlike other cassette interfaces which require an expensive tape recorder, the Apple Cassette Interface is compatible with almost any audio-grade cassette recorder.

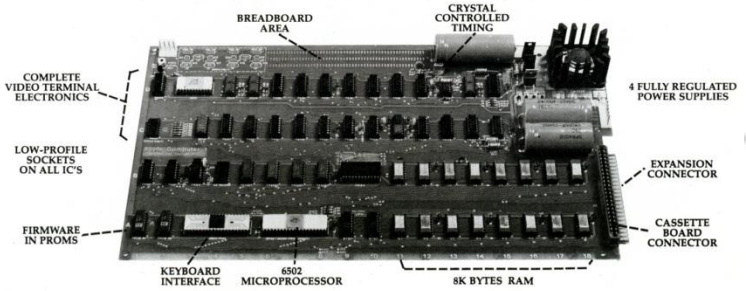
Software:

A tape of **APPLE BASIC** is included free with the Cassette Interface. Apple Basic features immediate error messages and fast execution, and lets you program in a higher level language immediately and without added cost. Also available **now** are a dis-assembler and many games, with many software packages, (including a macro assembler) in the works. And since our philosophy is to provide software for our machines free or at minimal cost, you won't be continually paying for access to this growing software library.

The Apple Computer is in stock at almost all major computer stores. (If your local computer store doesn't carry our products, encourage them or write us direct). **Dealer inquiries invited.**

Byte into an Apple $666.66*

* includes 4K bytes RAM



APPLE Computer Company • 770 Welch Rd., Palo Alto, CA 94304 • (415) 326-4248

OCTOBER 1976 CIRCLE NO. 7 ON INQUIRY CARD INTERFACE AGE 11

Software:

A tape of **APPLE BASIC** is included free with the Cassette Interface. Apple Basic features immediate error messages and fast execution, and lets you program in a higher level language immediately and without added cost. Also available **now** are a dis-assembler and many games, with many software packages, (including a macro assembler) in the works. And since our philosophy is to provide software for our machines free or at minimal cost, you won't be continually paying for access to this growing software library.

The Apple Computer is in stock at

It all started with the BIG BANG…wait a broken printer.

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- 1983: AT&T develops proprietary version of Unix
- 1983: Richard Stallman – GNU Project
- 1985: Free Software Foundation
- GNU Manifesto

"GNU's Not Unix!"

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- 1985: founding of the Free Software Foundation (FSF) www.fsf.org

- 1989: first version of GNU General Public License (GPL)

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› *'Free software is a matter of liberty, not price. To understand the concept, you should think of free as in free speech, not as in free beer.'*

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4 essential freedoms: youtube.com/watch?v=uJi2rkHiNqg

- run the program, for any purpose,
- study how the program works (through access to the source code) and change it at will,
- copy and share the program with others
- share modifications with others

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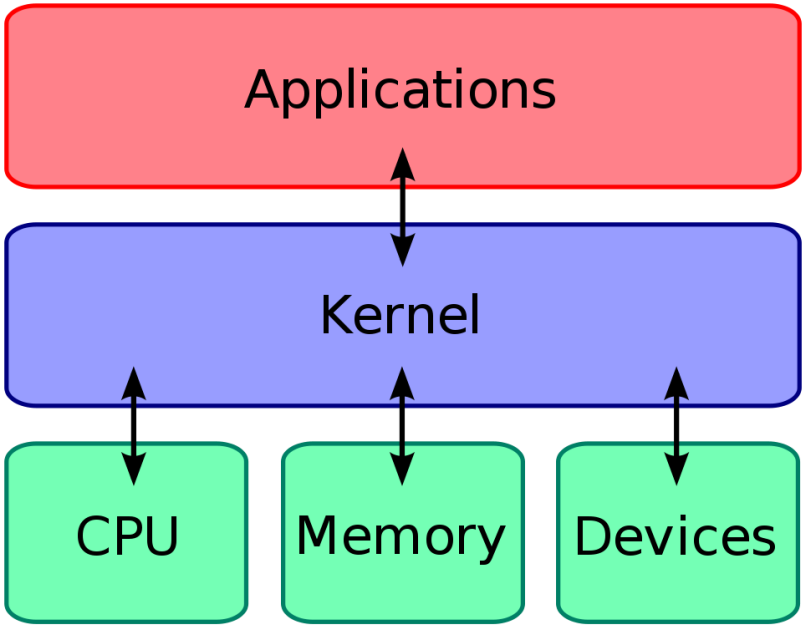
- 1993: Linus Torvalds
  - Linux kernel > GPL



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- 1997/1998: Eric S. Raymond: „*The Cathedral and the Bazaar*“

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› *"given enough eyeballs, all bugs are shallow“*

› 1998 Netscape Communications Corporation released Netscape Communicator > Mozilla project.

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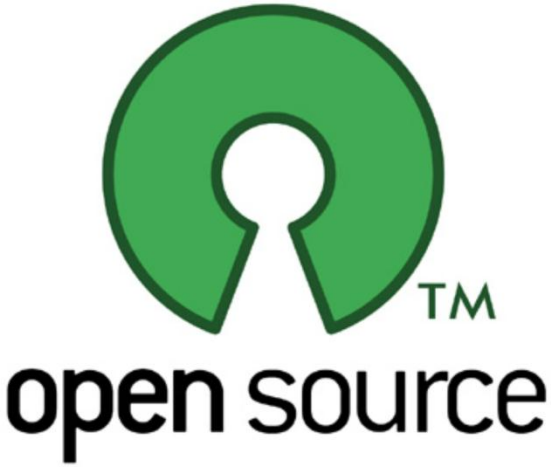
- Open Source Initiative
- www.opensource.org



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- Business oriented
- No ethical call
- System of software development
  - Cathedral
    - "carefully crafted by individual wizards or small bands of mages working in splendid isolation"
  - Bazaar
    - "a great babbling bazaar of differing agendas and approaches."

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1. Free Redistribution
2. Source Code
3. Derived Works
4. Integrity of The Author's Source Code
5. No Discrimination Against Persons or Groups
6. No Discrimination Against Fields of Endeavor
7. Distribution of License
8. License Must Not Be Specific to a Product
9. License Must Not Restrict Other Software
10. License Must Be Technology-Neutral

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- *"The fundamental difference between the two movements is in their values, their ways of looking at the world. For the Open Source movement, the issue of whether software should be open source is a practical question, not an ethical one."*
- http://www.gnu.org/philosophy/free-software-for-freedom.html

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How to make money with F/OSS?

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› Sell ANYTHING but the software

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- Packaging and distribution
- Offering a commercial alternative
  - Multi-licensing
- Services and support

redhat®

http://www.oss-watch.ac.uk/resources/businessofopensource

Legal aspects of FOSS

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- Copyright
- Licences
  - Copyleft effect / Share-alike
- Various types of licences
  - opensource.org/licenses/alphabetical

37 | Copyleft Effect

- *GNU GPL v2.0*
- *"Art. 2 b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof,* ***to be licensed*** *as a whole at no charge to all third parties* ***under the terms of this License.***"

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- Strongly protective licences
  - "viral licences"
  - GNU General Public License
- Weakly protective licences
  - Lesser General Public License (LGPL)
- Permissive licences
  - Author's crediting
  - BSD License, MIT License

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- GNU GPL (14. 12.)
- LGPL
- GNU Free Documentation Licence

40 | BSD License

- Copyright (c) <year>, <copyright holder> All rights reserved.
- Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:
- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of the <organization> nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

- DISCLAIMER

41 | Mozilla Public License

- Weak copyleft

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- http://www.gnu.org/licenses/license-list.html

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- Enforceability
- Technical Protection Measures (DRM)
- Multi-licensing
  - Mozilla Suite / tri-license
- Liability and Warranty Disclaimers
- Copyright / Droit d'auteur
- Dynamic linking
  - GNU GPL no
  - LGPL yes

Just because you pay for it, Doesn't mean it's better

Secure

Fast

Free

Welcome to Open Source, The future of computer software

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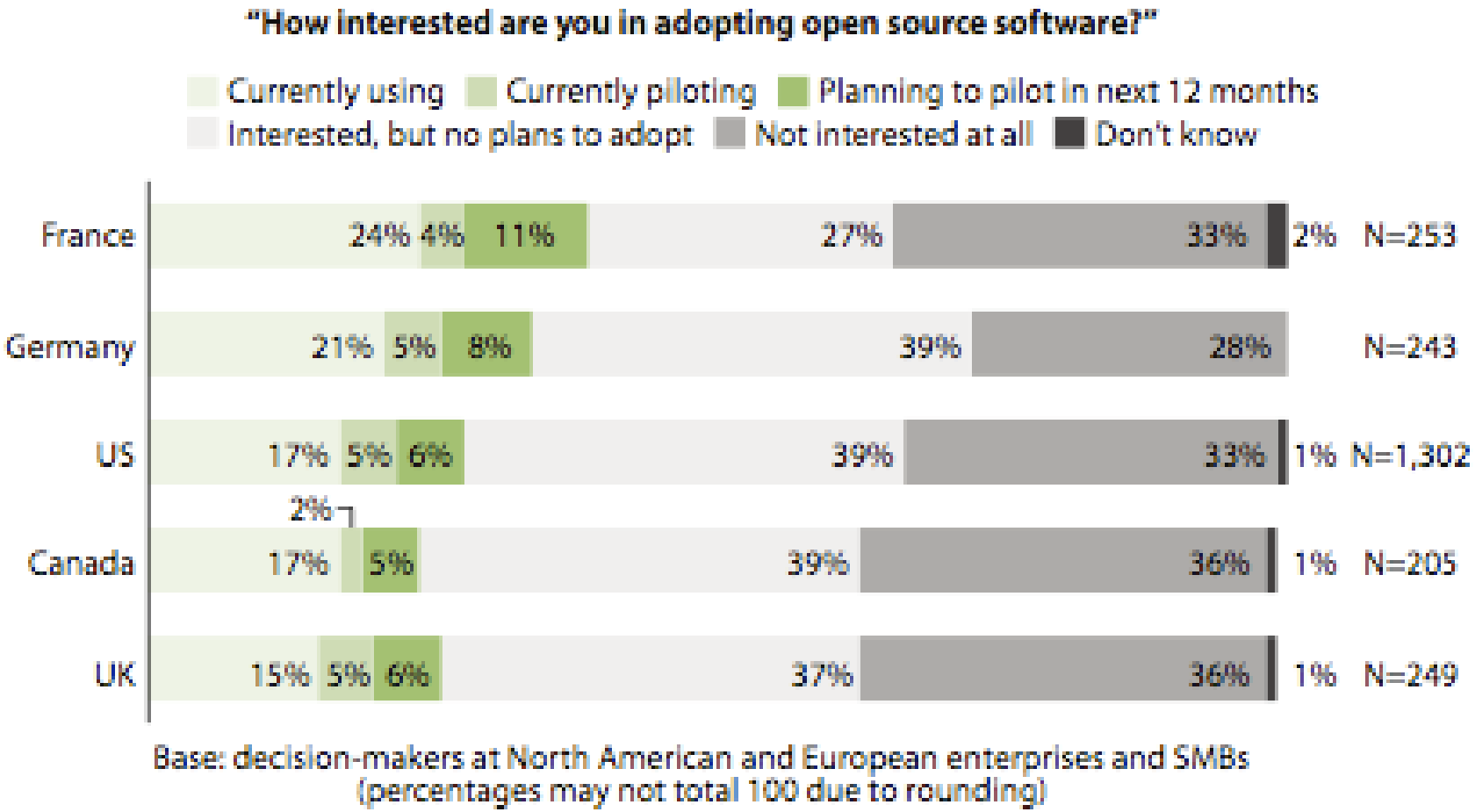

Base: decision-makers at North American and European enterprises and SMBs
(percentages may not total 100 due to rounding)

Source: Forrester's Enterprise And SMB Software Survey, North America And Europe, Q3 2007

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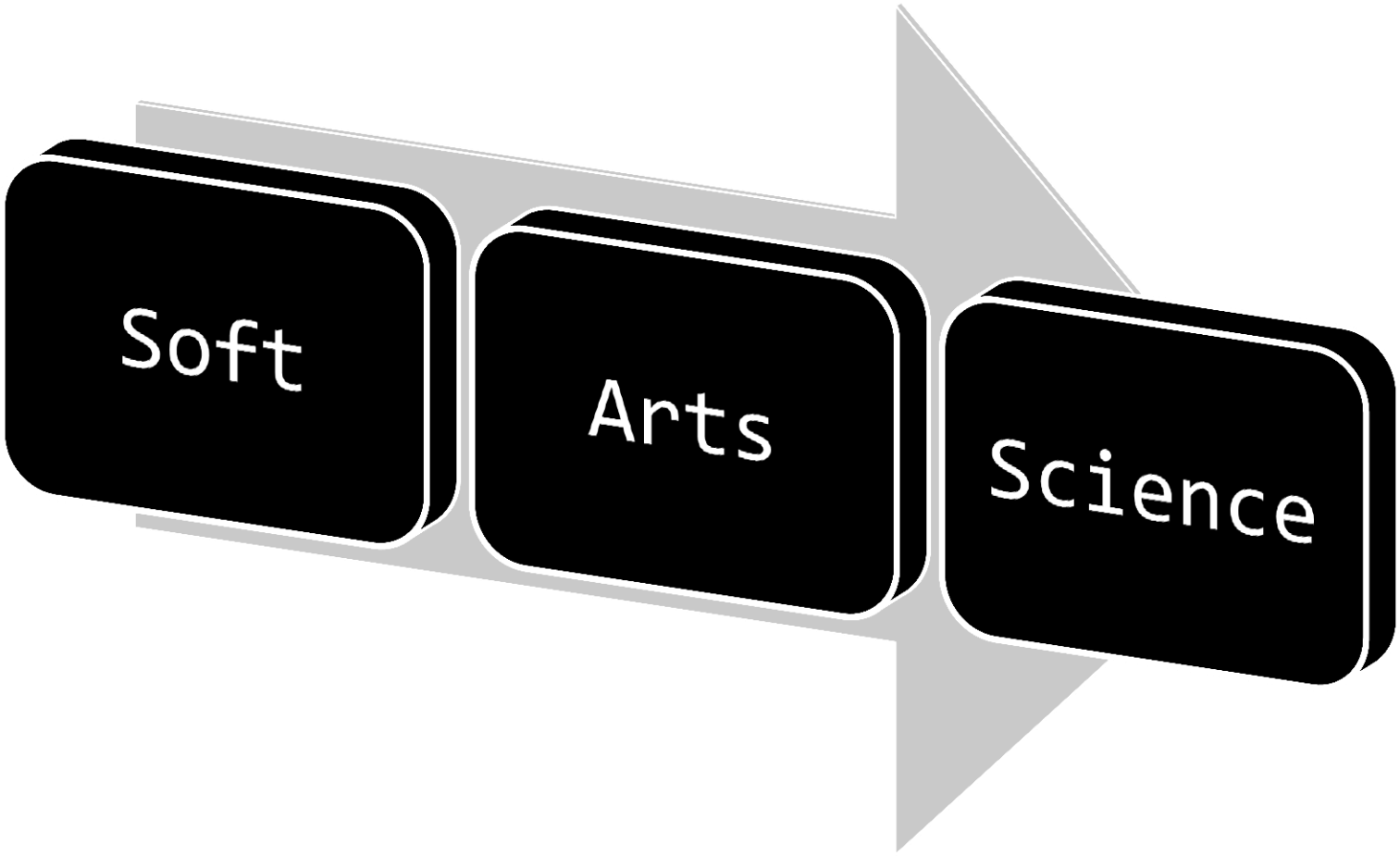

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- Arts – Creative Commons
- Science – Open Access

Thank you for your attention!

matej.myska@law.muni.cz

Tento projekt je spolufinancován Evropským sociálním fondem a státním rozpočtem České republiky.

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MINISTERSTVO ŠKOLSTVÍ, MLÁDEŽE A TĚLOVÝCHOVY

OP Vzdělávání pro konkurenceschopnost

INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ