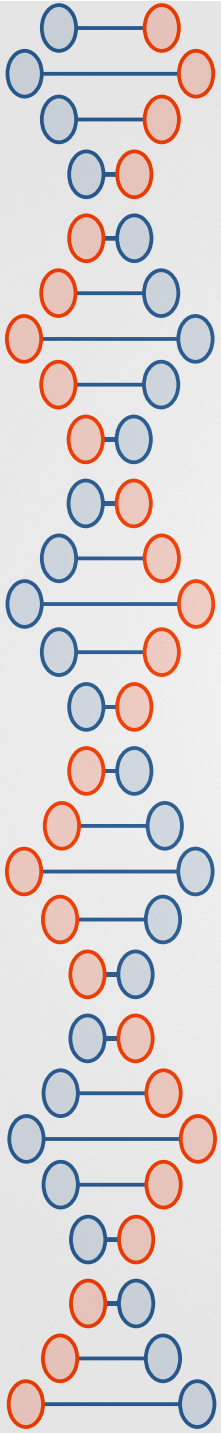
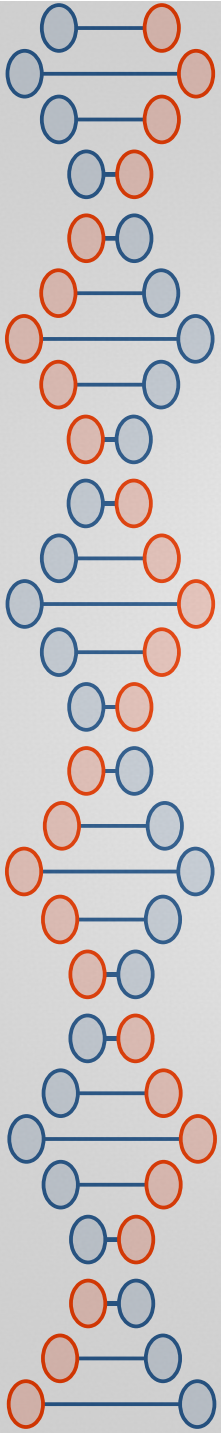
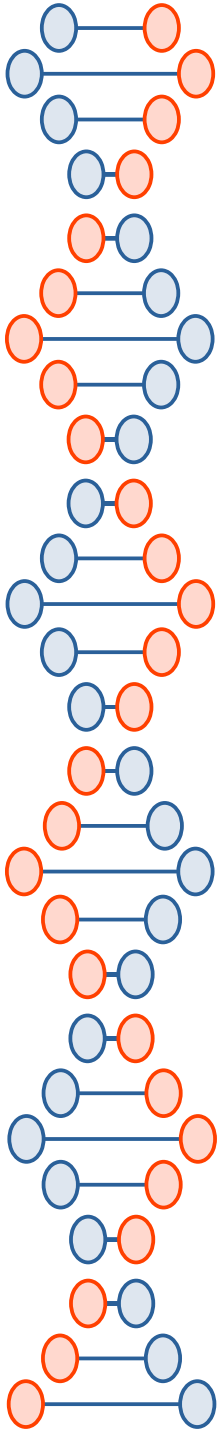


Freedom
in the Age of Digital Slavery

Ajith Kumar B P
https://scischool.in
bpajith@gmail.com



- Do you like to be a Puppet ?
- Are you using Computers ?
- Who needs anti-virus software ?

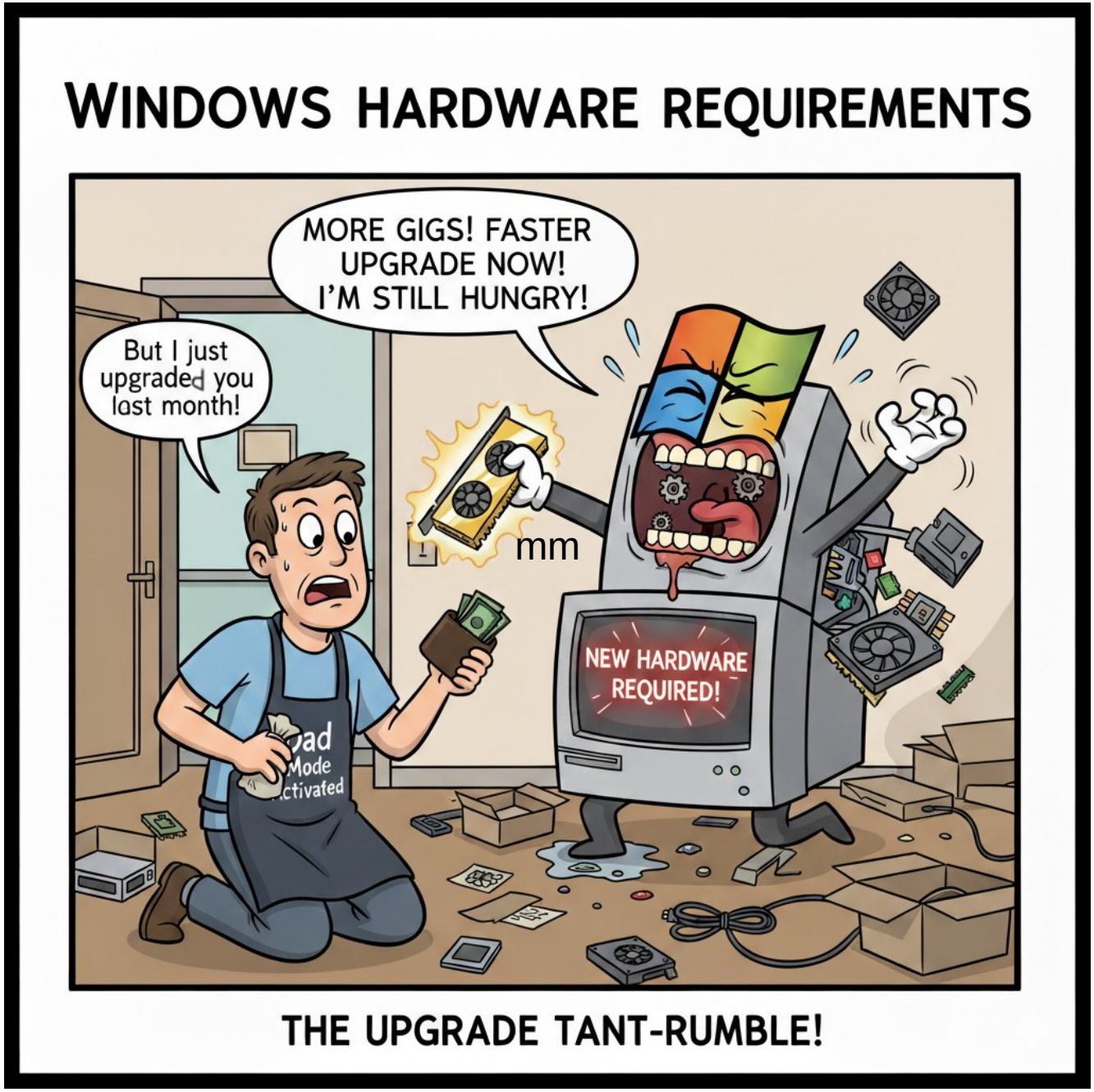


My Experience with MS-Windows

- In 1995, I was running Windows-3 on an 80386 PC, for writing letters. Once I received a .doc file from someone
- Opening it asked for the latest version of MSWord.
- Bought MSWord and it asked for Windows 95.
- Installing Windows 95 asked for an 80486 computer.

Total expense to the institute was around 1.2 lakhs.
Millions of people faced this exploitation and
it continues even today.

Windows 3.1 - 1993
Windows 95 – 1995
Windows 98 – 1998
Windows ME – 2000
Windows XP – 2001
Windows Vista – 2007
Windows 7 – 2009
Windows 8 – 2012
Windows 8.1– 2013
Windows 10 – 2015
Windows 11 – 2021

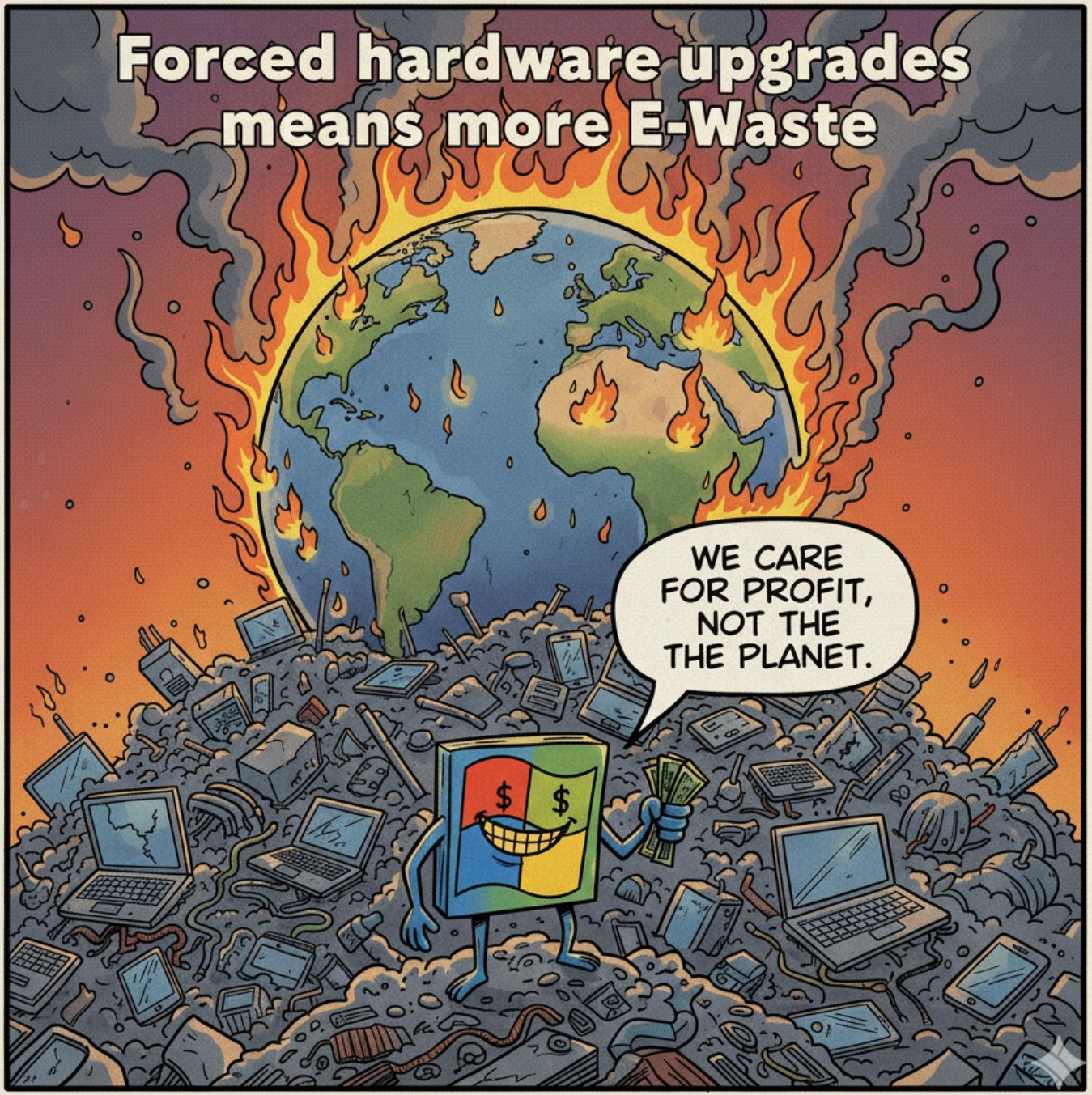


These slides are made using an HP laptop bought in 2020.

- AMD Rizen 3 CPU
- 3+1 GB RAM
- 256 GB SSD
- Linux Mint 22

For Windows11 it is an obsolete PC
With Windows10 it is almost unusable.

Forced Hardware Obsolescence, polluting the planet.

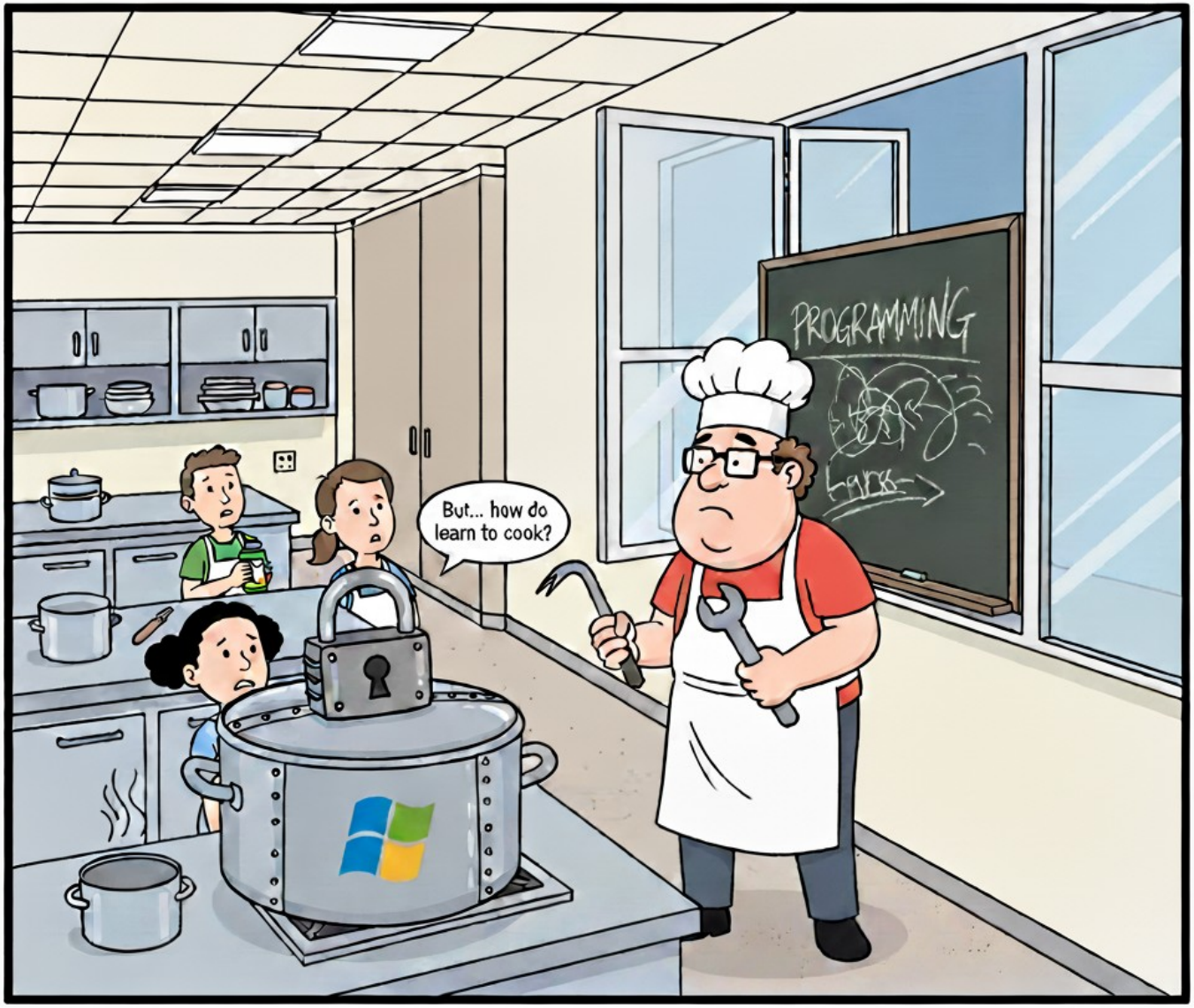

Forced hardware upgrades means more E-Waste
WE CARE FOR PROFIT, NOT THE THE PLANET.
$
$

I need ALL the resources for "system stability"!
CLASS MONITOR: WINDOWS
TODAY'S LESSON: SHARING (NOT)
WINDOWS OS MONITOR
RAM
CPU
DISK SPACE
POWER
LUNCH
USER APP
BROWSER
BOWEE
GAME
OFFICE

Non-Standard File Formats

YOUR DATA? NOT REALLY YOURS!

CLOSED SOURCE COMPUTER SCIENCE CLASS



WINDOWS: THE UN-OPEN-SOURCE POT. YOU CAN LOOK, BUT YOU I CAN'T COOK!

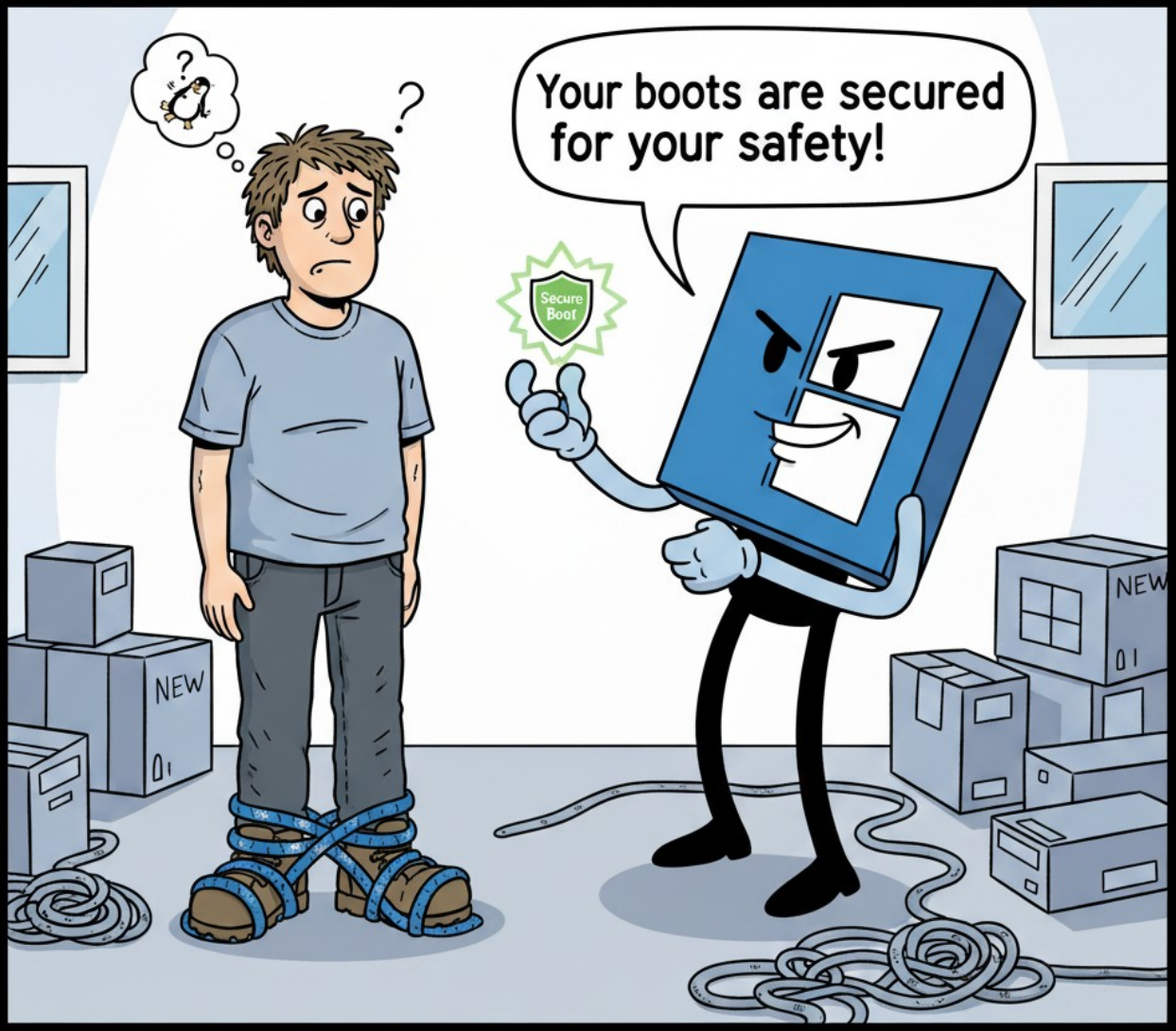
THE WINDOWS TAX: NO MEDIA INCLUDED!

PAYING FOR SOFTWARE YOU CAN'T HOLD!

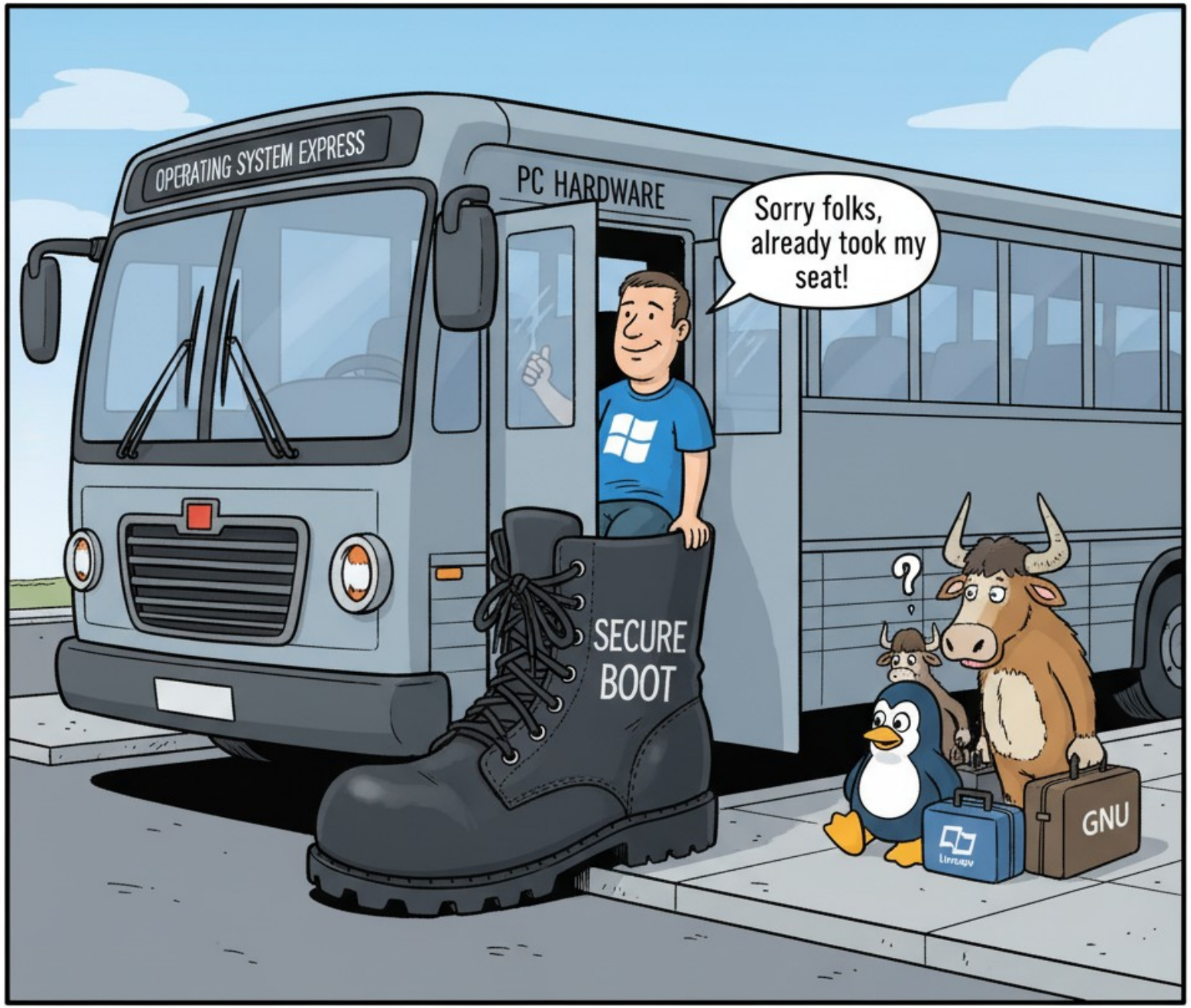
Install media NOT provided to prevent the users from exploring other options.

RECOVERY IS NEEDED OFTEN

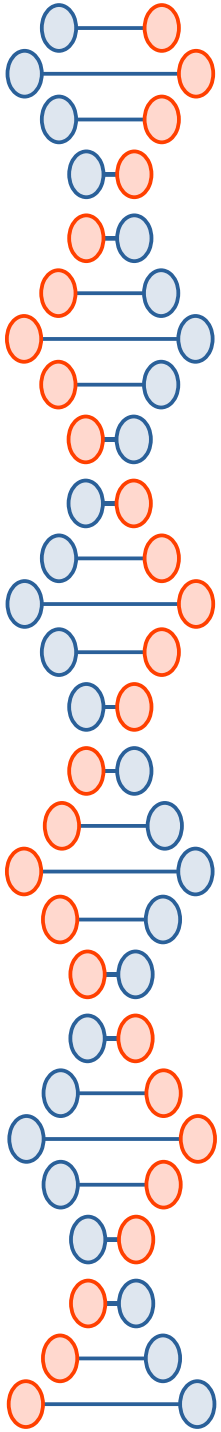
MICROSFT & SECURE BOOT: "HELPFUL" RESTRICTIONS



BOOTS SECURED FOR YOUR SAFETY!



Microsoft Selfish Boot Technology



Beginning of an era of Surveillance ?

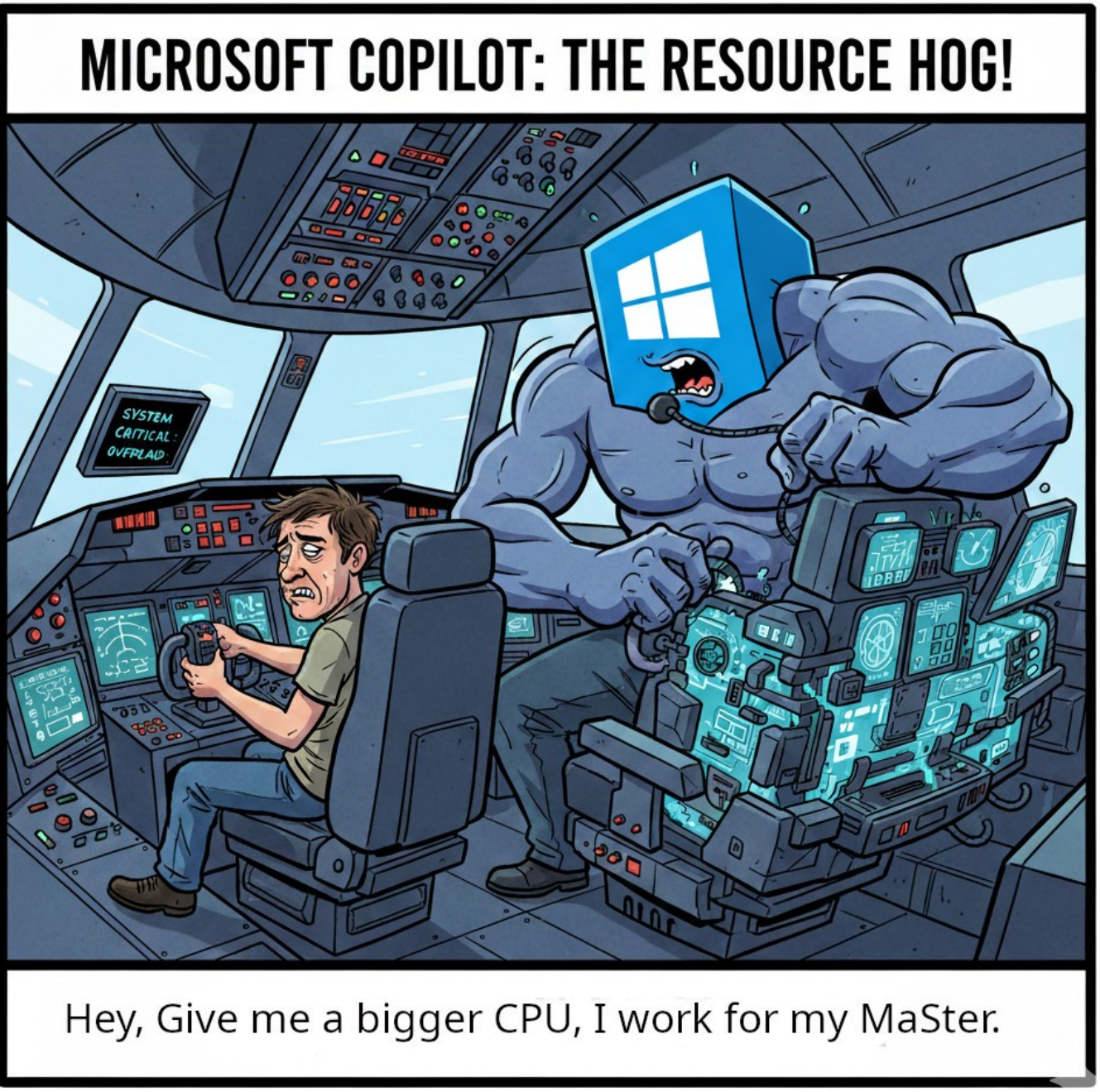
- Windows-11 insists on a Microsoft Account.
- Your computer becomes Microsoft's surveillance device.
- Bundling features that create new data flows (Copilot AI + tracking).
- Designed to allow data collection (enabled by default, deeply buried settings).

Windows 11 Installation

You MUST Join to Tie the Knot!

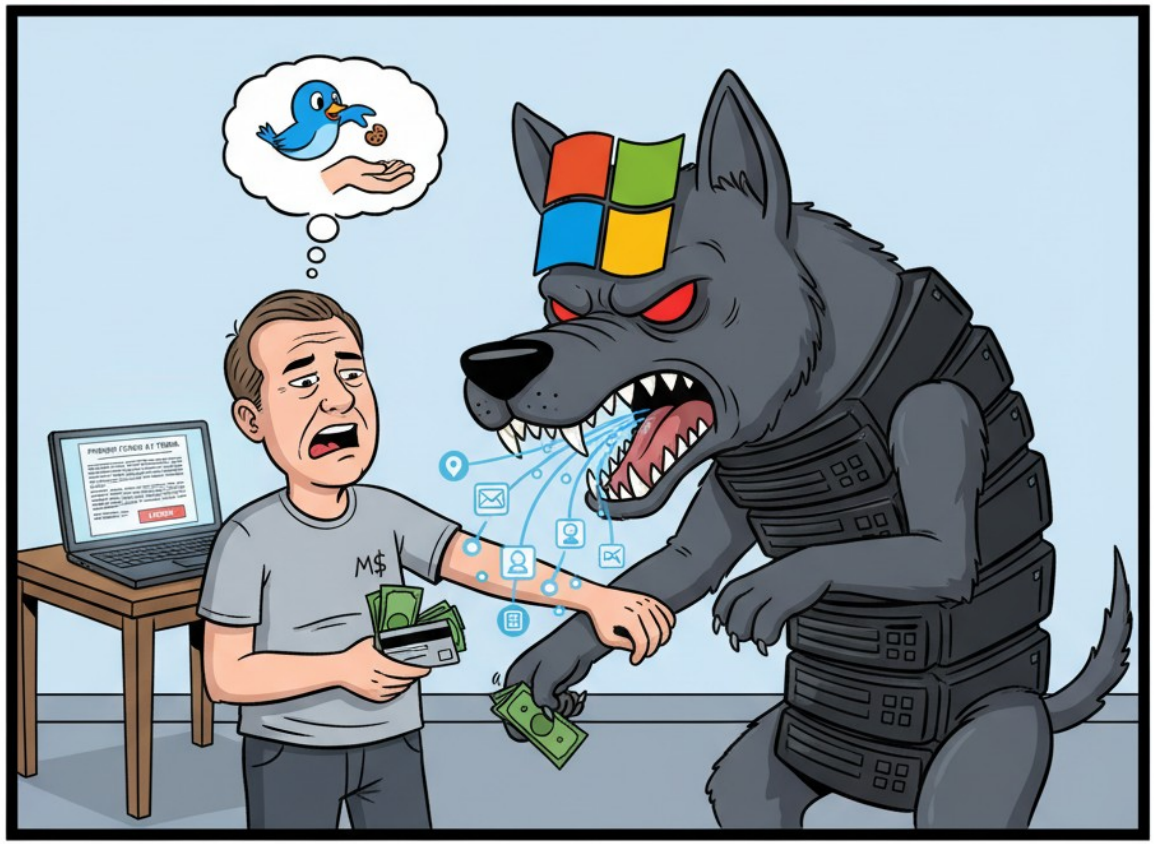
WINDOWS 11 SURVEILLANCE!

PRIVACY? WE'LL INSTALL IT LATER...



Windows 11 users pay for the copilot AI development, without any benefits for them.

THE MICROSOFT BARAGIN

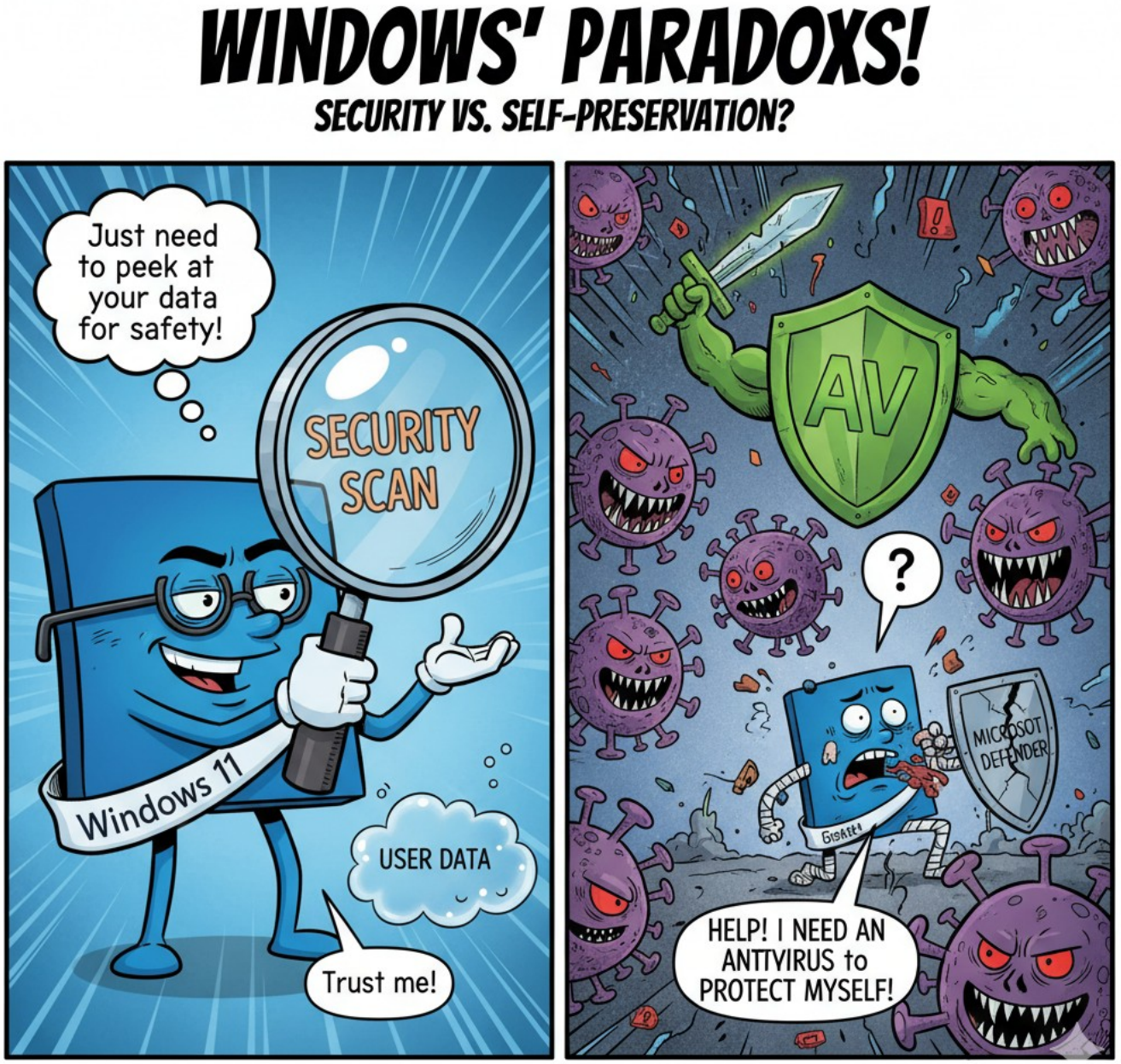


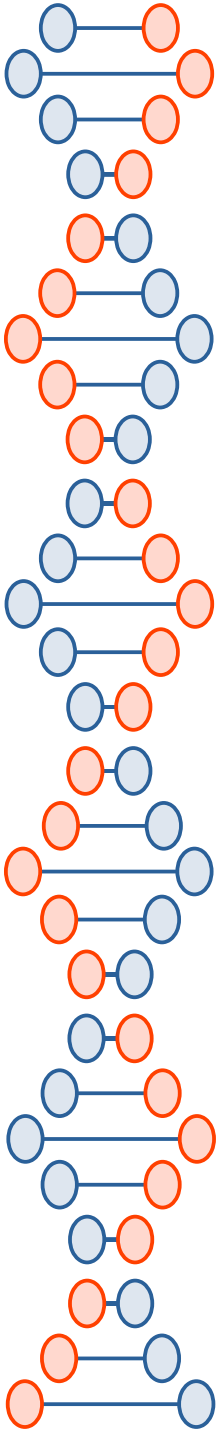
YOU PAY TO BE THE PREY!

The Paradox of Windows Security

- Windows says it needs your data to keep you safe.
- But it needs an antivirus program to keep itself safe.
- Who's protecting whom?

Only OS on the planet that insists on anti-virus programs

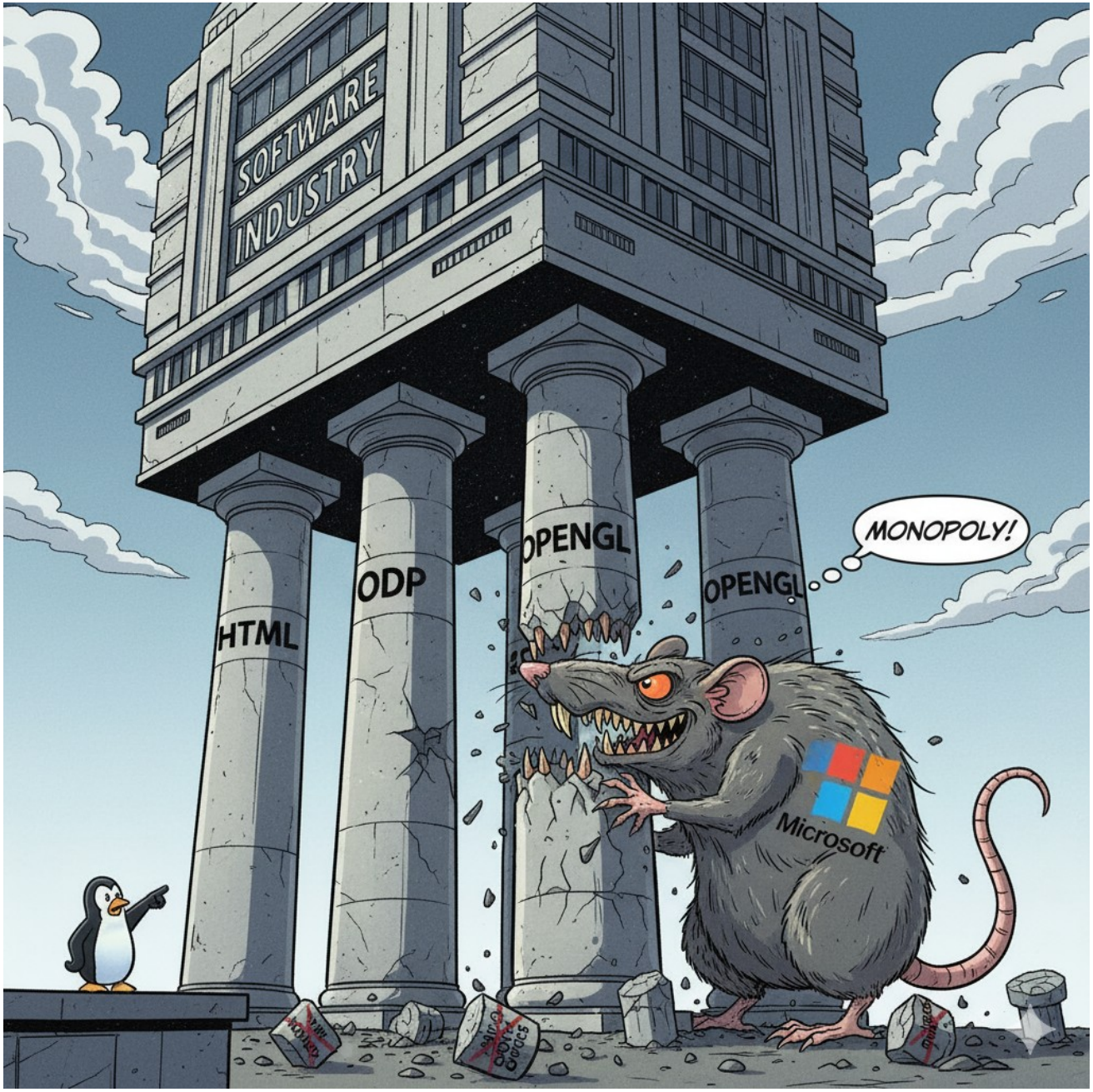




Open Standards, and it's Enemy

- IBM: PC architecture (ISA, BIOS), SQL,
- AT&T : UNIX, C language, foundation of open OS design
- Sun Microsystems : Java, NFS, ODF (OpenDocument), open networking
- Intel: x86 architecture, USB, PCI/PCIe hardware standards
- Netscape: JavaScript (ECMAScript), SSL/HTTPS, open web
- Google: Android (Linux-based), Chromium, TensorFlow

- Microsoft: (follows the Embrace, Extend, Extinguish policy)
  - Twisted HTML fragmenting the Web for nearly 10years
  - Tried to sabotage Open Document Format (ODF)
  - Distorted Java (stopped by court)



Enemy of Open Standards

The solution

GNU/Linux ecosystem created by

Richard Stallman, Linus Torvalds and many others.

Richard Stallman: The Programmer - Idealist

- Harvard University (1970–74) BA Physics
- MIT AI Lab as a Programmer (1971–1980s)
- 27-Sep-1983, Announces the GNU project (a free OS).
- Established the Free Software Foundation (FSF) in 1985
- Wrote GCC, GNU Emacs and many other tools
- GPL (GNU General Public License)

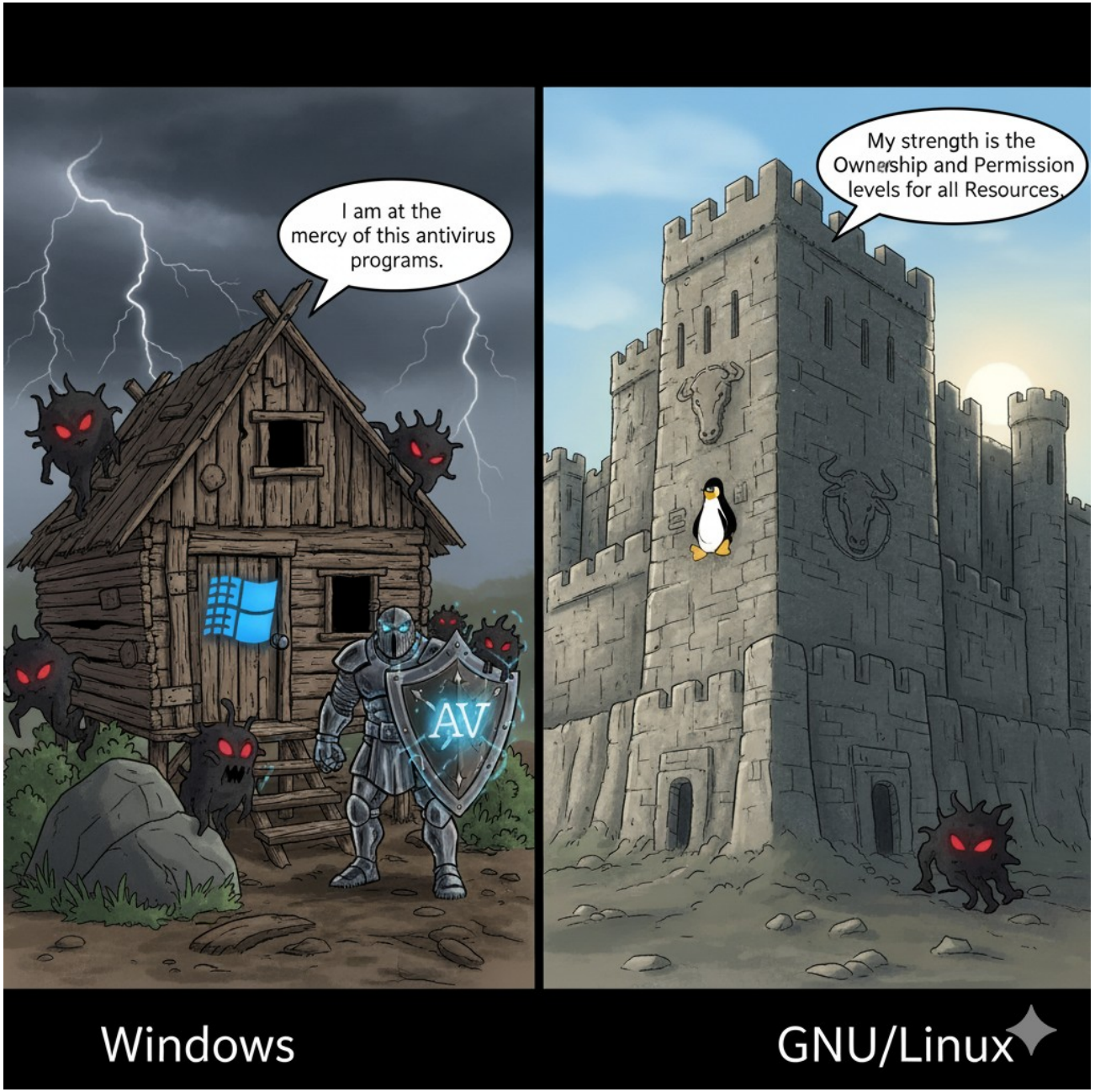
Inspired a movement, not just tools

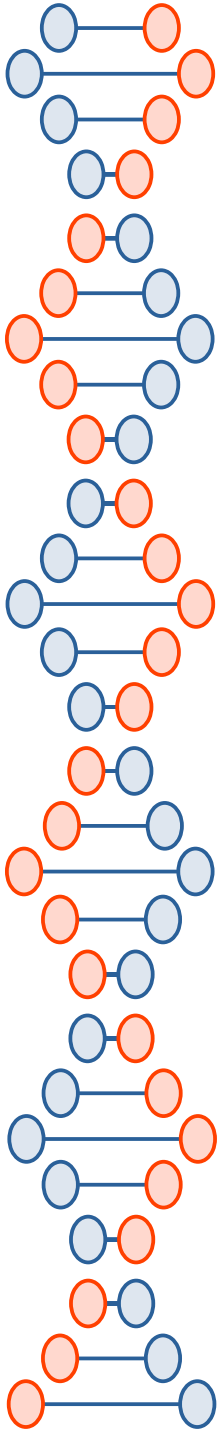
Biography: Free as in Freedom

Linus Torvalds
Linux kernel for the GNU/Linux OS

Biography: Just for Fun

- Started coding in BASIC on a VIC-20 , at the age of 10
- Joins MS computer science at Helsinki University, Finland
- 1991, Bought a 386 computer, partly on credit.
- Started writing an OS Kernel (Used GNU tools like GCC)
- Named it Linux (Unix from Linus), Shared it freely.
- Switched to GNU GPL, after listening to a talk by Stallman
- Version 1.0 of Linux kernel released in March 1994
- With GNU tools, resulted in a free OS, GNU/Linux.


I am at the mercy of this antivirus programs.
AV
My strength is the Ownership and Permission levels for all Resources.
Windows
GNU/Linux

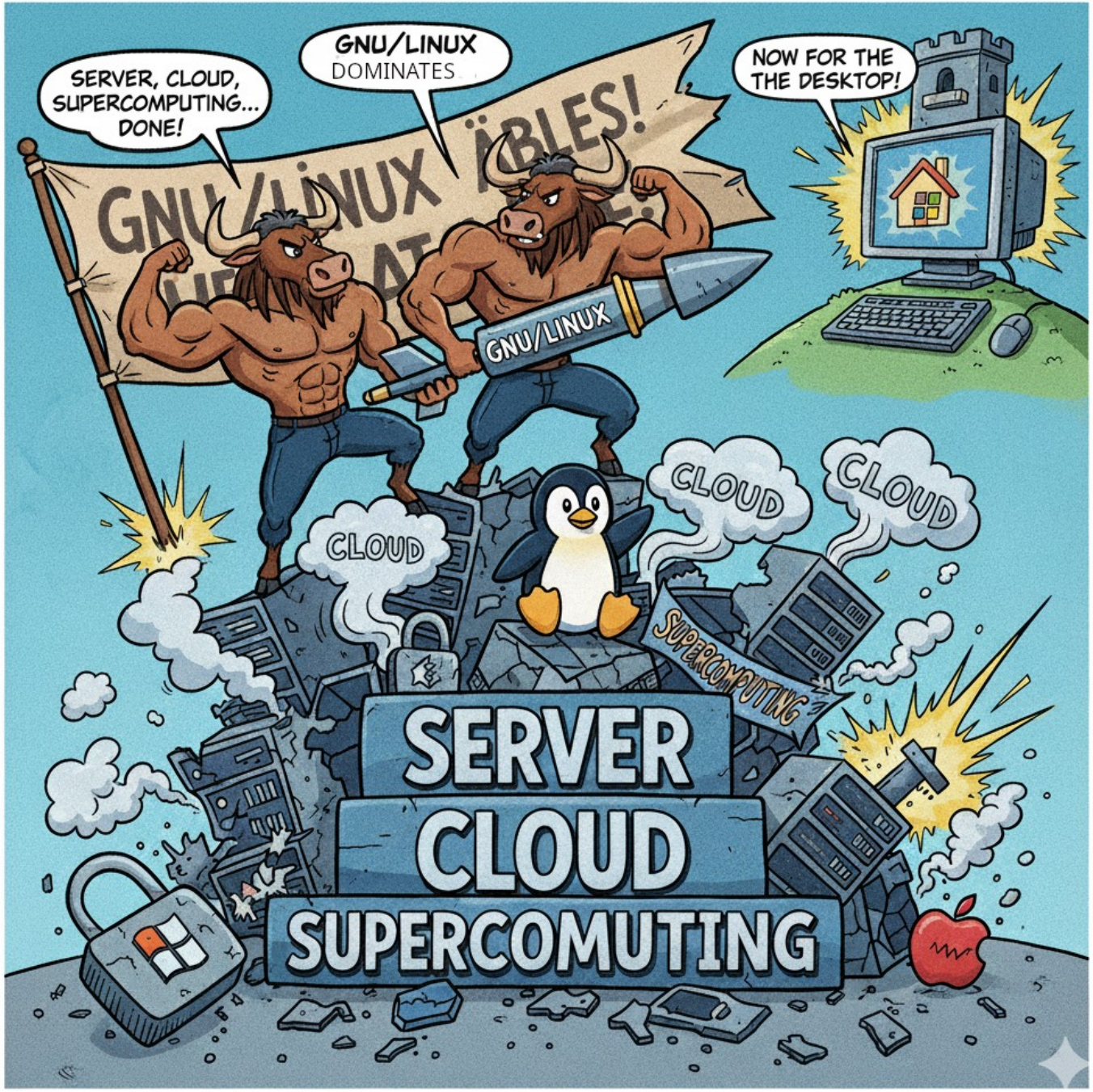


Current Status of GNU/Linux

- Supercomputers: All of the top 500
- Web Servers: Approximately 70% of all websites
- Cloud Infrastructure: Around 90%.
- Software Development: About 53% of software
- Machine Learning: 87%

Desktop: Around 4% only, mainly because of the OEM vendors (like Dell, HP, Lenovo etc.) influenced by Microsoft.

I used GNU/Linux for Particle Accelerator Control Systems, running on a network having Servers and Clients. System runs 24 hrs x 365 days, Operational since 1996, demonstrating the high reliability of GNU/Linux.



- SC: Top 500
- Web Servers: ~ 70 %
- Cloud : ~ 90%.
- Software Dev. ~ 53%
- Machine Learning: 87%

Desktop: Around 4%

GNU/Linux Distributions

Slackware

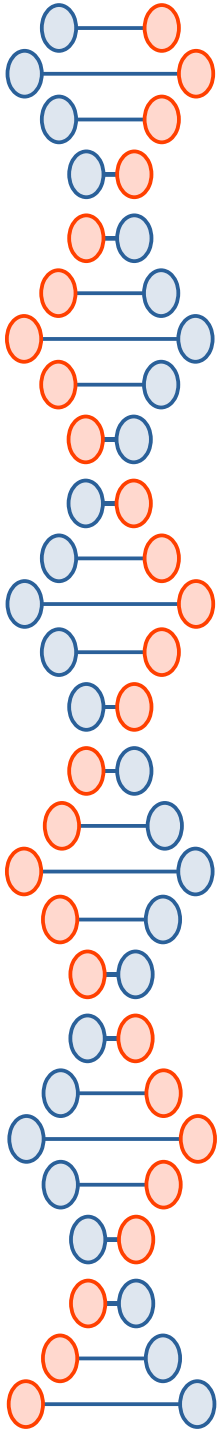
- Fedora
- Debian
- Ubuntu
- Mint

You can make modified versions

GNU/LINUX: ANGELS OF FREE SOFTWARE!

If you are NOT here

Then You are here



Implications of Free Software

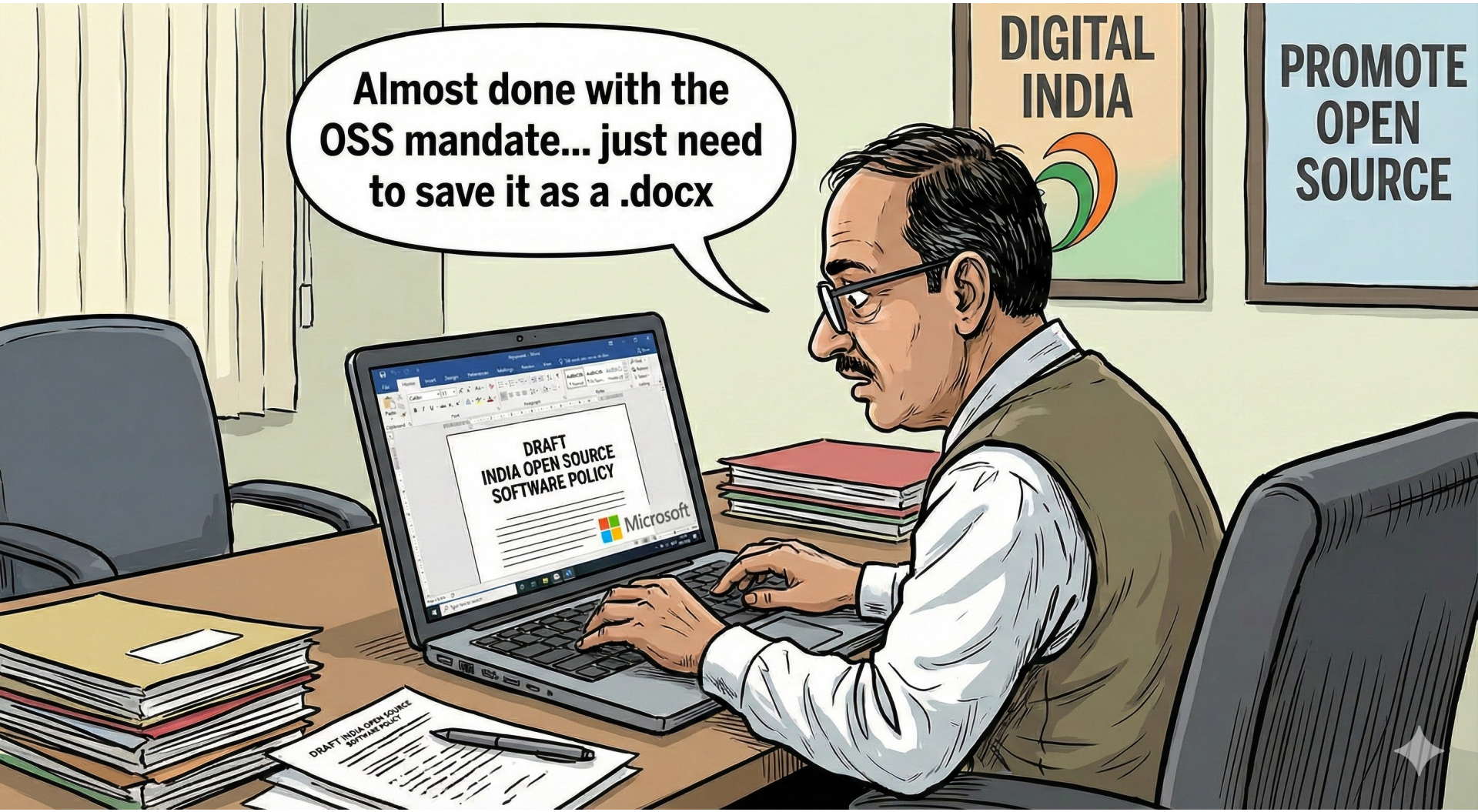
- Prevents wasteful expenditure
  - Save the ~Rs 3000 crores annually on Windows OS
  - No Forced Hardware upgrades
- Avoids dependence on foreign or proprietary software vendors (e.g., Microsoft, Oracle)
- Freedom from proprietary file formats.
- Ideal for teaching and learning, since students can study how the software works.
- Freedom isn’t just technical — it’s social and political.

The most unfortunate thing is that India still seems to believe in proprietary solutions, Further spread of IT which is influencing the daily life of individuals would have a devastating effect on the lives of society due to any small shift in the business practice involving these proprietary solutions. It is precisely for these reasons open-source software needs to be built which would be cost effective for the entire society. In India open source software will have to come and stay in a big way for the benefit of our billion people.

Dr A P J Abdul Kalam

“Our discussion became difficult since our views were different”

Kalam later on told about the meeting



About the Political parties:

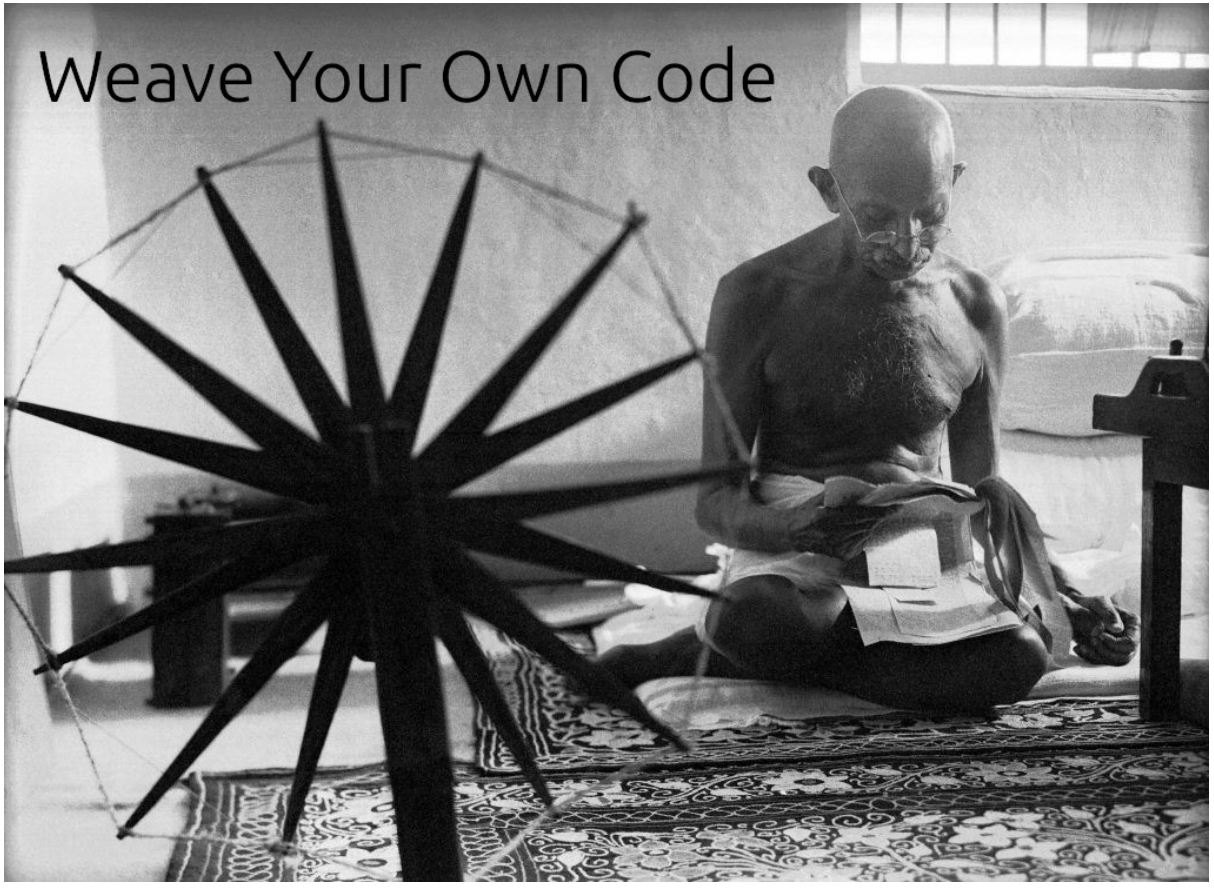
- Some are vocal about fighting Capitalist Monopolies.
- Some are busy making India Great.

None are bothered about the dangerous monopoly creeping in.

School to College Transition in Kerala

How can you help ?

- Start using a Free OS and software tools.
- Learn how to install GNU/Linux.
- Help others to convert to Free Software



Don't dance to strings unseen,

Stand tall, think clean,

Be your own being

A free human being.

Thank You

Relevance in the area of AI

Software scenario (1980s)

- Entire industry was controlled by few corporations and software was very expensive.
- Arrival of GNU/Linux democratized software. Made it much cheaper.
- Resulted in the emergence of many new firms like Google, AWS, RedHat etc.

AI systems (today)

- Closed and owned by few firms, openAI, Meta, Grok, Gemini etc..
- Free & Open Software is the only option to make AI more democratic, essential due to many reasons.
- Available Open Source AI tools
  - TensorFlow
  - PyTorch, Scikit-learn, OpenCV
  - Hugging Face Transformers