



Lisbon School  
of Economics  
& Management  
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# Free and Open Source Software

*& Much More!*

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# The Code Source

```
if (top !== self)
function calcWidth() {
  var wW = 0;
  if (typeof window.innerWidth == 'number') {
    wW = window.innerWidth;
  } else if (document.documentElement.clientWidth) {
    wW = document.documentElement.clientWidth;
  } else if (document.body.clientWidth) {
    wW = document.body.clientWidth;
  }
  if (sH = document.documentElement.scrollHeight)
  var wH = window.innerHeight || document.documentElement.clientHeight || document.body.clientHeight;
  wW = (document.all && (sH > wH)) ? document.body.clientWidth : wW;
}
```



# Intellectual Property

- Industrial property: Patents



# Intellectual Property

- Industrial property: Trade Marks



# Intellectual Property

- Copyright



# Copyleft

- Copyleft is a general method of making software free and enforcing that all its modified and extended versions are also free.
- Copyleft says that anyone who distributes the software, with or without modifications, must give third parties the freedom to copy and modify the software again.



# Free Software

- The **freedom to run** the program as you wish, for any purpose (freedom 0).
- The **freedom to study** how the program works, and change it so it does your computing as you wish (freedom 1). Access to the source code is a precondition for this.
- The **freedom to redistribute** copies so you can help others (freedom 2).
- The freedom to distribute copies of **your modified** versions to others (freedom 3). By doing this you can give the whole community a chance to benefit from your changes. Access to the source code is a precondition for this.





# Free Software Foundation

- The Free Software Foundation (FSF) is a non-profit with a worldwide mission to promote computer user freedom.
- Richard Stallman
- Founded: 1985
- <https://www.fsf.org>

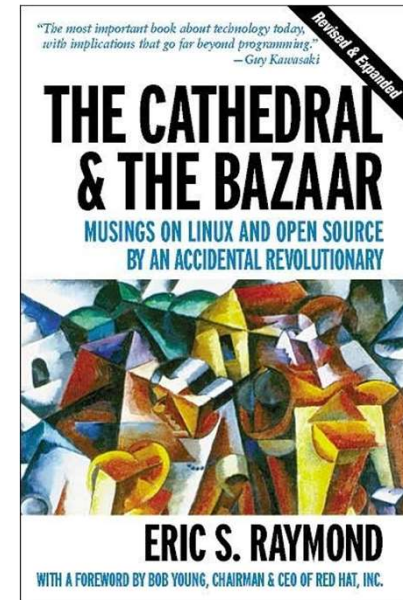


# Free Software



# Open Source

- More “realistic” approach
- open source software is better than proprietary software.
- Collaborative development:
  - Software engineering tools
  - Business model

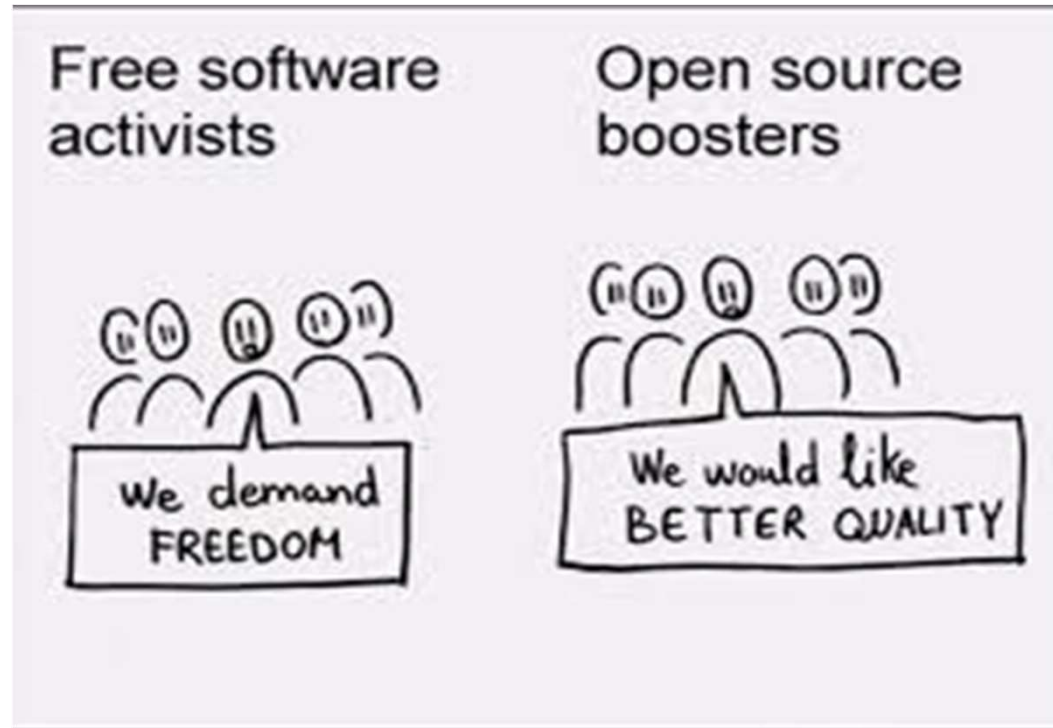


# Open Source Initiative

- Non-profit
- Founded 1998
- <https://opensource.org/>
- OSI was jointly founded by Eric Raymond and Bruce Perens in late February 1998, with Raymond as its first president, Perens as vice-president, and an initial Board of Directors including Brian Behlendorf, Ian Murdock, Russ Nelson, and Chip Salzenberg.



# Open Source vs. Free Software



- Stallman, 2016

# Free and Open Source Software

- Law - Licences



# Free and Open Source Software Law - Licences

	GPL	LGPL	MPL	Apache	BSD-3	MIT
Use	X	X	X	X	X	X
Modification	X	X	X	X	X	X
Distribution	X	X	X	X	X	X
Provide source code in distribution	X	X	X			
Show license on distribution	X	X	X	X	X	X
Identify changes in distribution	X	X	X	X		
Modifications in the same work with the same license (weak copyleft) in the distribution	X	X	X			
Derivatives must have the same license (strong copyleft) in the distribution	X	X				
Prohibited to disclose trademark of the original entity without prior authorization				X	X	

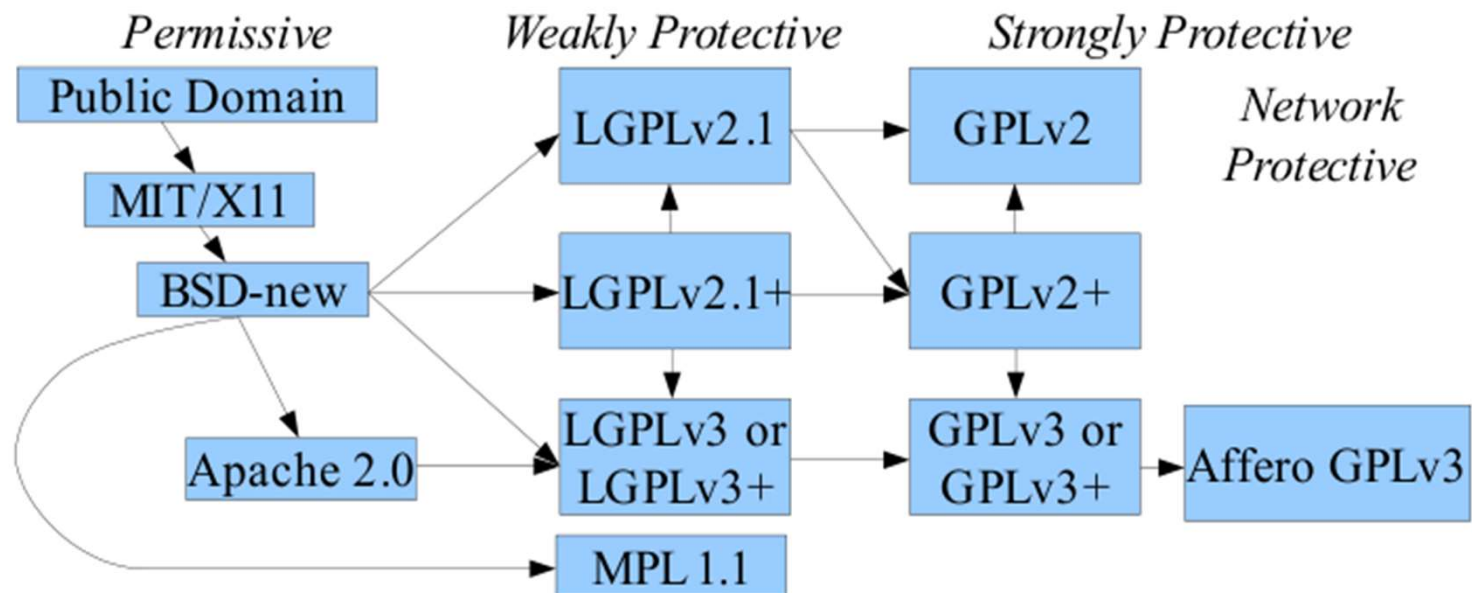
# Free and Open Source Software

- Law – Licences
  - <http://choosealicense.com/>
  - <https://www.gnu.org/licenses/license-list.html>
  - <https://tldrlegal.com/>
  - <https://opensource.org/licenses/>



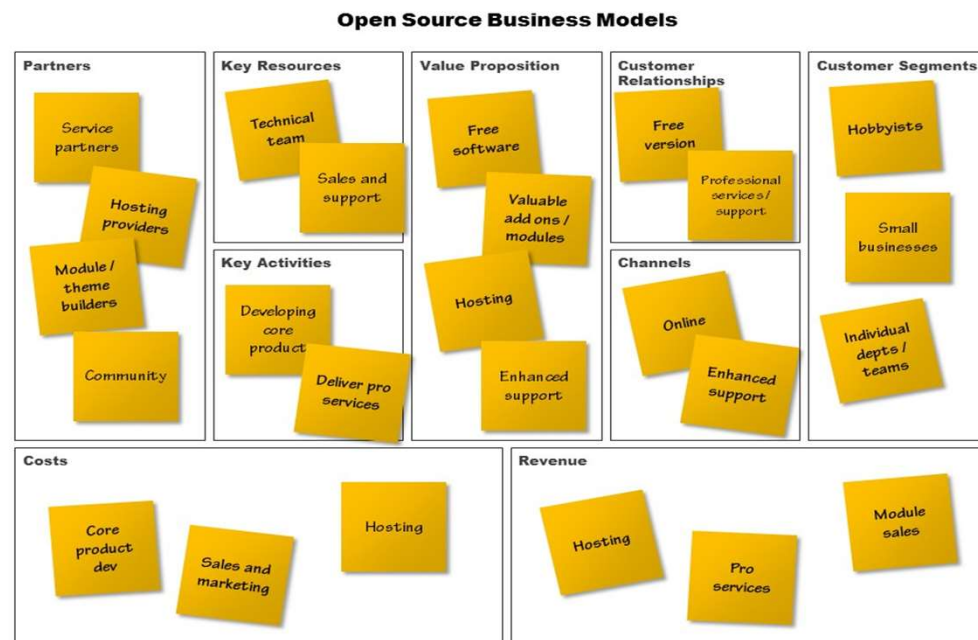
# Free and Open Source Software

## Law – Licences



# Free and Open Source Software

- Management: New Business Models



# Free and Open Source Software

- Software Engineering



# Free and Open Source Software

- Informatics and End Using



# Free and Open Source Software

- Economics and Social Approaches



# Free and Open Source Software

- Motivations

Love



Money

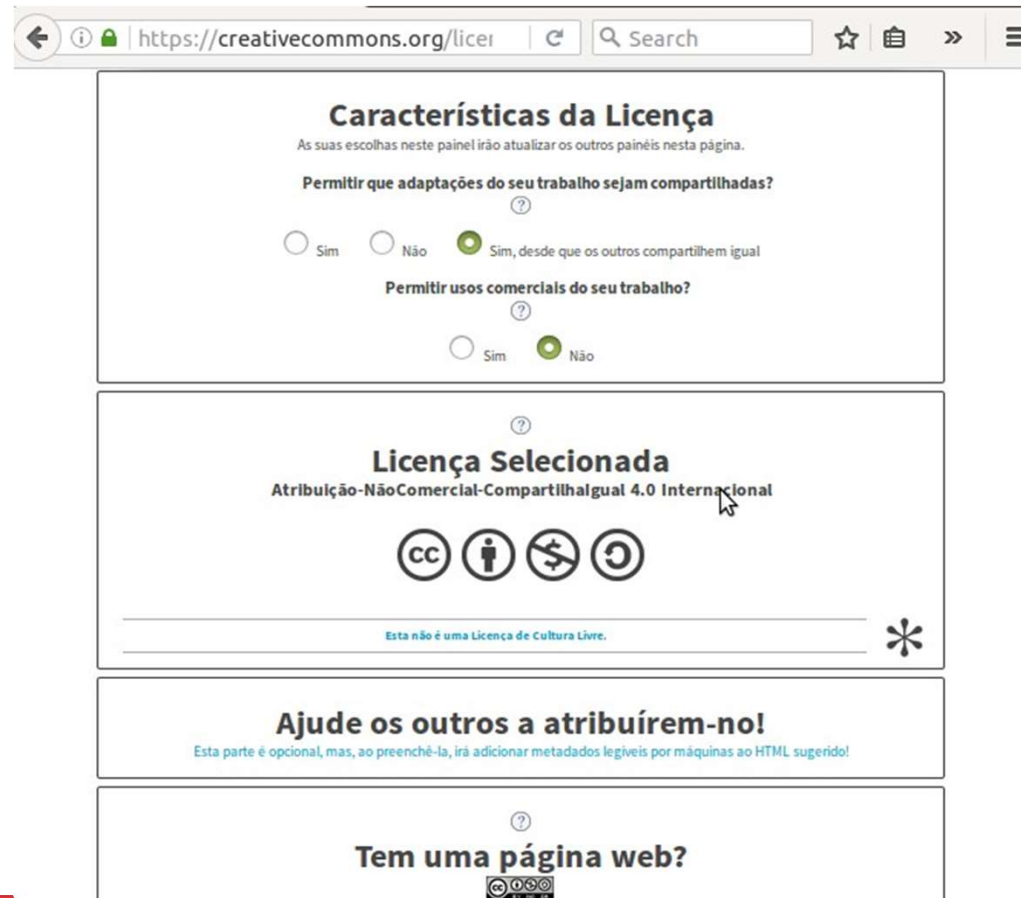


Glory



# Creative Commons

<https://creativecommons.org/license/>



The screenshot shows a web browser window with the URL <https://creativecommons.org/licer>. The page is titled "Características da Licença" (License Characteristics) and contains several sections:

- Características da Licença**: A section with the instruction "As suas escolhas neste painel irão atualizar os outros painéis nesta página." (Your choices in this panel will update the other panels on this page). It contains two questions:
  - "Permitir que adaptações do seu trabalho sejam compartilhadas?" (Allow adaptations of your work to be shared?). The "Sim, desde que os outros compartilhem igual" (Yes, as long as others share equally) option is selected.
  - "Permitir usos comerciais do seu trabalho?" (Allow commercial use of your work?). The "Não" (No) option is selected.
- Licença Seleccionada**: A section showing the selected license: "Atribuição-NãoComercial-Compartilhual 4.0 Internacional" (Attribution-NonCommercial-ShareAlike 4.0 International). It features the Creative Commons icons: CC, BY (person), NC (no dollar sign), and SA (circular arrow). Below the icons, it states "Esta não é uma Licença de Cultura Livre." (This is not a Free Culture License.) with a star icon.
- Ajude os outros a atribuírem-no!**: A section with the instruction "Esta parte é opcional, mas, ao preenchê-la, irá adicionar metadados legíveis por máquinas ao HTML sugerido!" (This part is optional, but, by filling it out, it will add machine-readable metadata to the suggested HTML!).
- Tem uma página web?**: A section with a question mark icon and the text "Tem uma página web?" (Do you have a website?).

# Open Access

Open  
Access





# Open Access

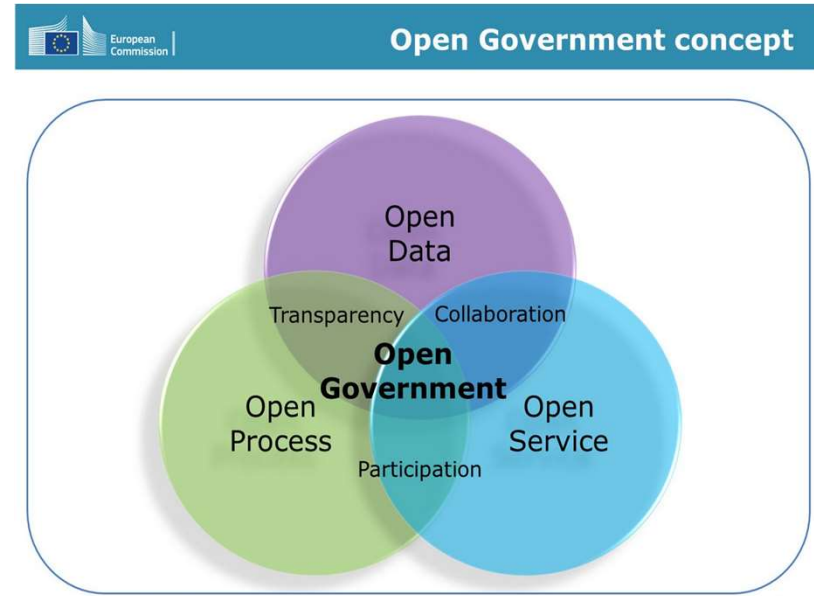


# Open Data



- <https://www.pordata.pt/>
- <https://dados.gov.pt/pt/>
- <https://data.europa.eu/euodp/en/home>
- <https://data.europa.eu/euodp/en/data/group>
- <https://www.europeandataportal.eu/>
- <http://lisboaaberta.cm-lisboa.pt/index.php/pt/>

# Open



Vision Paper: <http://ec.europa.eu/digital-agenda/en/news/vision-public-services>

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## Webgraphy

- <http://www.oreilly.com/openbook/opensources/book/>
- <http://choosealicense.com/>
- <https://www.gnu.org/licenses/license-list.html>
- <https://tldrlegal.com/>
- <https://opensource.org/licenses/>
- <http://dcti.iscte.pt>