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Open Source: an opportunity for Europe

Open Source projects offer a compelling model for sharing software and fostering collaboration. Europe has both the opportunity and the necessity to invest Open Source development. **Such investments can enhance European software ecosystem, drive innovation, and lead to technological sovereignty.**

What is Open Source?

Open Source means that the source code of a library or application is freely available for use, modification, and distribution. While users can utilize the software as they see fit, there are different licenses that preserve the author's rights and outline specific obligations. These licenses help maintain a balance between freedom of use and intellectual property protection.

Benefits of Open Source

Open Source projects allow companies to share common libraries, fostering collaboration and reducing redundancy. Instead of multiple companies independently developing libraries that solve the same problem, they can contribute to a single Open Source project. This collaborative approach:

- **Saves Resources:** by reducing decoupled development effort.
- **Accelerates Innovation:** ready to use and accessible software boosts startups.
- **Enhance AI:** building great amount of top quality software to train AIs on.

European Repositories Platform

1. We need a **European platform to host Open Source software**. We cannot rely on platforms like GitHub or Mercury to publish national software.
2. We need to follow Switzerland's initiative¹: **all government software that has no security risk has to be disclosed and published openly**.
3. We need to invest on Open Source software to foster the European software environment. Thus, **we need to invest on software that cuts the greatest amount of expenses for European companies**.

Maintainers

While Open Source projects are often shared among many contributors, managing their development can be challenging. To address this, **I propose that Europe funds deserving Open Source projects**. The maintainers' responsibilities includes:

- **Ensuring safety:** Dependencies have to be risk-free and up-to-date.
- **Maintaining the Library:** Develop and improve the libraries following the issues².
- **Updating Documentation:** All documentation must be reliable and accessible.

¹https://www.bk.admin.ch/bk/en/home/digitale-transformation-ikt-lenkung/bundesarchitektur/open_source_software.html#

²In computing, the term "issue" is a unit of work to accomplish an improvement in a system. An issue could be a bug, a requested feature, task, missing documentation, and so forth.

Funding Mechanism

Inspired by Spotify's method of compensating creators, Open Source projects should receive funds based on the level of engagement from European companies. Two possible approaches are:

1. **Issue-Based Funding:** Projects receive funds proportional to the number of issues opened by European companies.
2. **Voting System:** Companies have votes proportional to their number of employees or other metrics. They can vote for the projects or issues they want to be solved.

Why Is This a Good Idea?

- **Alignment with Demand:** Funding is directed toward projects and issues that are most relevant to the needs of European companies.
- **Fair Resource Allocation:** Companies with greater usage and reliance on Open Source projects have a proportionate influence on funding decisions.
- **Incentivizes Quality and Responsiveness:** Maintainers are motivated to address the most pressing issues, improving overall software quality.

Why shall we develop an European platform?

Developing a European platform to manage these projects offer benefits:

- **Intellectual Property Protection:** Ensures that software is available for research while preserving the intellectual property rights of European contributors.
- **Independence:** Reduces reliance on a private company that may have conflicting interests (Open Source is fundamentally hosted on GitHub a platform owned by Microsoft).
- **AI Research:** Great amount of top quality software is available to European companies to investigate and develop AI.

How can the funds be used?

Since Europe would be investing in these projects, it has the right to establish clear and definitive license agreements. For example, we can impose for the software to be fully disclosed, when there is not any security concern. Furthermore, we can adapt research and development processes to the new need very expensive need: software maintenance.

Conclusion

Investing in Open Source is in Europe's best interest. This benefits public entities, foundations, private citizens, and most importantly European companies. By strengthening the European software ecosystem, Europe can:

- **Optimize Resource Allocation:** Incrementing products' value rather than developing redundant libraries.
- **Foster Tech Culture:** Encourage innovation and collaboration across the continent.
- **Conquer European Sovereignty:** Building high quality software to train AIs, instead of relying on foreign technologies.

In summary, a strategic investment in Open Source projects can drive significant advancements in Europe's technological capabilities, benefiting the entire society.

Kindly,
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