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Free/Libre Open Source Software and Sustainable Development Cooperation

Open Source in Development Cooperation

Strategic Level

Major institutions in development cooperation endorse[1] the *Principles for Digital Development*[2], one of which favours the use of Free/Libre and Open Source Software (F/LOSS)[3]. Among the endorsers there are many UN-organisations, development agencies, and the "Deutsche Gesellschaft für internationale Zusammenarbeit"[4] (GIZ). The German Federal Ministry for Economic Cooperation and Development (BMZ) has published an ICT strategy paper in 2013[5] that mentions F/LOSS, the *Digital Agenda*[6] (2017) states that BMZ is promoting the open source approach. And even BMZ's discussion format *Digital Kontrovers!* started with F/LOSS[7]. GIZ's Toolkit Digitalisation[8] embraces an open source chapter.

There is nothing comparable from the European Union, although a great deal of the current framework contract (EuropeAid/138778/DH/SER/Multi) contain digitalisation. There is no doubt that digitalisation remains a developing cross cutting issue also in development[9]. Regarding public procurement in general, the EU has made serious efforts to promote F/LOSS[10].

Practical Experience

As development cooperation consultants we encounter situations where digitisation is part of a project[11], and where the responsible persons do not even know about their institution's general preference for open source. As the officers do not use open source products, they don't know them, and don't trust them, and may be prejudiced. But if development cooperation agents do not use[12] F/LOSS, how can they act as a role model? Aren't we in danger then to paint a picture of F/LOSS as a less-than-ideal, inferior, and cheap solution, suitable for poor countries only?

We often write justification chapters to inform and convince team leaders and project coordinators. We must explain our recommendation for F/LOSS frequently. That is alright. The advantages and disadvantages of a solution must be carefully discussed with the project partners. The IT team of the institution concerned must support the chosen solution. We frequently preach to the converted by making recommendations and arguments for F/LOSS when discussing it with the partner's IT staff.

1 https://digitalprinciples.org/endorse/endorsers/
2 https://digitalprinciples.org/principles/
3 Principle 6: Use Open Standards, Open Data, Open Source, and Open Innovation
4 German Corporation for International Cooperation GmbH
5 https://www.bmz.de/en/publications/archiv/type_of_publication/strategies/Strategiepapier331_02_2013.pdf
6 http://www.bmz.de/en/publications/type_of_publication/information_flyer/information_brochures/Materialie276_digitale_agenda.pdf
7 http://www.digital-kontrovers.de/digital-kontrovers-vom-28-maerz-2018/
8 https://www.giz.de/expertise/html/22719.html
9 see "Concept Note, Towards an Improved Delivery of Development Aid through Digitalisation", June 2016 https://europa.eu/capacity4dev/file/30743/download?token=QbnaMsbf
10 See http://ec.europa.eu/idabc/en/document/2627/5644.html; European Commission (2017): The Sharing and Reuse Framework for IT Solutions
11 For example: Social security and pension funds; TVET certification; labour market data and statistics; chamber of commerce member management; etc.
12 Reports are demanded in Microsoft Word format, templates are provided in Microsoft Office formats only (containing macros that make it impossible to even open in an open source office suite).

We wonder: **Why is there no onus of proof regarding the appropriateness of proprietary software?**

Wouldn't it be much more logical to explain why public money should be spent on proprietary software procurement that forces the partner into financial and functional long-term dependency?

The F/LOSS preference often is not part of Terms of Reference (ToR) and tender procedures because writers do not know about it.

Development cooperation actors support the use of open source in theory, but there is a gap between theory and practice.

In Future – Open Source as a Normal Case

There are open source developers all over the world. Open source development environments are free of charge and thus low-threshold. Taking this into account, software development can be tendered locally or regionally, especially when procurement is backed by precise technical requirements. Local tenders support the partner country's economy. And they prevent projects from a premature death caused by a development or adaption freeze. The dilemma is obvious when using proprietary software: the original developers are often far away in the Global North and therefore too expensive if no donor organisation finances the deployment to make extensions. Closed sources do not allow any intervention or further development. The partner country is often unable to raise the funds for license fees and thus secure continued operation.

Bridging the Gap

- When public funds from development cooperation are spent on digitisation, the use of open source should be the normal case. Deviations, i.e. the use of proprietary software, shall be justified (de facto, the use of open source must currently be justified, but not the use of proprietary, often cost-intensive software[13]).
- The social and economic aspects of open source approaches, that are congruent with many targets of the Sustainable Development Goals of the 2030 Agenda and promote their achievement, must be elaborated more deeply in development policy theory, and shall be applied in practice.
- Decision-makers and politicians should address the issue. If digitisation is seen as a key technology for development, priority must be given to local and free solutions in order to avoid path dependency with obvious consequential costs and risks for partners.
- Evaluations of (partly) digitisation projects should assess the Total Cost of Ownership (TCO) in a holistic way and consider the Total Benefits of Ownership (including gain of knowledge and independence).

13 See for example:
German Federal Ministry for Economic Cooperation and Developmentg (BMZ) (2016): Toolkit – Digitalisation in Development Cooperation and International Cooperation in Education, Culture and Media;
Chapter 3.5, pages 107 – 109
http://www.bmz.de/en/zentrales_downloadarchiv/ikt/Toolkit-Digitalisation-Development-Education-Culture-Media.pdf

- Digitisation projects and those with a digitisation component should report on the type (proprietary or F/LOSS) and location (local or international tender) of the software employed / developed.
- A well indexed database with descriptions of the already existing open source software solutions should be created on a broad basis (at least German development cooperation, but also EU, OECD/DAC or worldwide) and made freely accessible in order to avoid duplication of work.
- Development cooperation institutions should set a good example by using open source solutions themselves; these are financed with public money.

CONTACT for more discussion, exchange and information

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