Focus group 5 - Software workshop 16 Jan 2017

Problem(s) that the group wants to solve:

Finding funding to support software development and maintenance

Facilitator: Stephen Eglen

Note takers: Stephen Eglen, Hannah Haines (with input from entire group)

Rapporteur: Stephen Eglen

Participants: Ali, Lily, Neil, Poonam, Georgina, Hannah, Stephen, Gos

Quick wins:

Long-term solution(s):

We need to lobby to make this a priority

Summary:

Software development and maintenance isn't a priority for most funders. There tends to be a once-annual call. Difficult to be competitive if you miss the deadline then get set back 2 years.

Funding situation in the US is worse, even though they are bigger and therefore have more money!

5% of your research budget is allocated for ongoing data management - should there be a similar amount allocated to software maintenance? What should be cut to fund this? If we can make savings, should this be spent on research rather than software?
GM: Funders want to see institutions doing more for sustainability. They want to know what software does, who will be using it and that they want it, at the grant application stage i.e. there are more hoops to jump through than for a straight research application.

Response (NCH): it is reasonable to ask this when funding is sought for maintenance and further development beyond the original project, but funding for initial development should come from research grants.

Lily Chan works at the University Tech Transfer Office. Some academics lease out their software to industry to further fund their research. Can be a nice revenue stream for those whose software is appropriate. Lily is happy to be contacted for further info: lily.chan@enterprise.cam.ac.uk

NCH: example of service to secure funding from industry that doesn’t come from leasing

List of different models for sustaining research software projects, along with advantages and disadvantages, and case studies: https://github.com/danielskatz/sustaining-research-projects

MODELS OF FUNDING OPPORTUNITIES

Foundations and Trusts
Advice from NCH on finding ‘bridge funding’ between your first grant to produce software, the second to develop it, and then the next step.
For the third grant, try going to private trusts and foundations, who are most likely to fund you before the fourth stage of going for EU funding / Innovate UK grant. They have smaller boards (often one person!)
Examples:
- Sloan Foundation (for 'general, overall community good', wide relevance);
- Moore Foundation (data related things. They have just given out a lot of money to set up data initiatives)
- Wellcome Trust (if you are doing relevant research) - more of a premier funder than a foundation, but good at funding small stuff. Tend to be loyal to projects they have already funded.
- There are several foundations that fund the intersection between the research and software worlds, and a particular interest e.g. Helmsley Foundation (previously), Arnold Foundation, Knight Foundation, Leverhulme Trust.
Potential problems - the board of trustees can suddenly change the Foundation’s remit or scope
ADVICE: Talk to the Programme Officers of these Foundations - success for you is success for them, and they’ll be able to tell you if something is in scope for them.

Kickstarter model
Lots of work - you have to market your research effectively, but if can result in a huge boost in reputation as well as finance. Raises profile, which leads to collaborative grants, more money from industry.

Kaggle model
Outsource your research. Set up an open competition and offer prizes - good approach for getting a solution, if not for getting more money. Example of one researcher with $3k, who got hundreds of submissions

**Stamp-collecting model**
Support creation of a community resource, ie create databases that curate bits of information. This arrangement works on the communal understanding that sometimes you will have funding, sometimes you won’t, but you need to maintain the motivation and the resources to enable progress amongst the community. (Example from SE of an EBI project).

**Create a company**
Any start-up venture is difficult! Success is not guaranteed. Need very hard work and luck to reach the point of sustainability.

PY has experience of commercialising software from her own research - hired legal help to with all the formalities, customised the software for the client (University?), ran workshops for users, but at the final stage, the client said no, due to the fact it would cost 10% of their group budget. Advice: DON’T double up on anything the client already has. A different University was willing to sign up for one year, but the costs for the company to provide one year’s provision were unsustainable. Eventually, this created too much pressure for those involved in the project, and they decided to make the software open source.