

I1 - From your point of view what is sustainability in terms of software?

P - It's several things. So it's sustainability for who? For the user, end user, it would be that the software keeps working no matter if their upgrading the machine, operating system and so on. That the software will keep working with the tools and services that they use, so they keep changing as well. There huh.. As a software, technically as a source code you'd have be able to compile it and run it and be able to get everything you need to install it for instance, while is a give you a download a silverlight application you might start struggling. And there's the sustainability for the project, right. Who is going to keep working on it, who is gonna keep developing it, who is gonna maintain it, who is gonna write support emails, all those kind of things.

I1 - Hum. Which attributes or features the software has that makes you believe that it's sustainable?

P - Well it need to have been, have a reasonable large userbase, database, huh, userbase. Well that could be anything from 50 to 1000 people. That that there is some community around it. You need to have more than one person involved, right? If it's a one man project and that guy is hit by the bus or just decided to do something else, work to google or something, then it just dies. And then by that point even if it's all open source than it's a bit too late to get involved because you don't know the inside workings and anything like that. So it's about having this kind of momentum to the project, so that it keeps moving. That you have further development, even if you have maintenance mode that is not much new buttons being added but at least there is someone holding it alive. That could be out of self interest because there is other organisation depends on it could be because they like having it as a hobby.

I1 - Hum. Regarding the software you've developed, was sustainability a consideration?

P - Well, the work that were doing right now, because we have the project01 software suite which we have been working on for the last 7 years but now where coming to a point where were struggling to find specific funding to help support that. Even in the later year we had to support it through site channels sort of say where in this particular project which is about systems biology we say were going to use project01 for this and that, right. And then now we justified using it sometime or maintaining it, and that includes the boring things that nobody will help you maintain like, oh, we need to make sure it works with Java 7, or apple have screw it up their permission system again. And we need to do a lot of code siding and prop by that, right. But it still has to be done for the software to be sustained for it actually work for the end users. But now were coming to a point where we not sure if we will be able to keep that kind of funding coming in, I mean, we want to be able to or at least other to be able to do their share of that load as well. Cause we've had many volunteers doing their extra bits and bobs but as an open source project where we haven't had the drive and management of the project done then well leave it externally. So we're now looking at moving it to an apache software project, so we're looking at apache foundation and their kind of strict rules of becoming an apache project and so we're in that process right now.

I1 - So in the projects that you've worked was sustainability a consideration since the begging or it kind of went through after it started at some point in time?

P - It comes later, right? Cause in the beginning you are not quite sure what the project is so what is it really verted in a way. Cause many things you start, you don't know if it's gonna be used at all or as were working in university some things are quite experimental, we are just trying out things. The, but then you see the uptake and then you see more and more people getting involved you have to think more about these things. But we've been, in a way, we've been happy just having sustained it ourself in a way because that would mean that we have control of which direction to go and things like that but, I mean, that might have been a one choice to keep doing that cause now we have the main interested being is outside the manchester team, right. It's other people out there in the world, and they are not connected to each other properly.

I1 - Have you worked on any projects that were not sustainable. And if so, were there any consequences of it not being sustainable?

P - Yeah, I mean we have had done things that we've stopped doing anything with, we just let it fall. We saw that there was not really any complaints about people using a particular website anymore and if it has been down for months and then why should we keep running it. But then maybe it felt that maybe months later that you get regained interest from who knows where and then also, oh we let that die in a way and now it's a bit too late to take it up again because those people have left and so on. So it's in a way like you have that chance of, because there are some additional steps that you have to do like you make sure you have documentation you make sure that the source code is in one place and things like that.

I1 - Hum, So is there any consequences of it not being sustainable?

P - Well I suppose that I can tell it's just there is bit of embarrassment really. Cause you get these things listed.. It , I am thinking about the project02, which was quite a popular tool amongst a community for, just for checking that it was valid but now no one is maintaining it anymore and people in Manchester who did maintain it have long fled the nest in a way, they went away to Cambridge and so on.

I1 - All right.

P - And now. .

I1 - Yeah go ahead.

P - By then now I'm getting requests saying oh, why isn't the project02 working and it has nothing to do with me but since I am one of those in the community that seems closest to it and I still feel kind of responsible for not taking it into our nest in a way. But there is only so much you can sustain from a personal perspective as well, so that's why you need that kind of community. Specially now that software development is moving more towards, in a way back to this kind of server client architecture where we have web services and webpages and so on. To be much more fragile in a way because it is all bound to whoever in managing that service who is paying the bill to the server and so on. If it will keep working. Like just today, someone asked me how do I initialise this and this. And I say oh, there was this great initialisation tool someone presented at a conference 2 months ago. Went to the website and off course it's already out. The paper is published who cares anymore, right. So once you find to actually come and use it, it's no longer maintained no longer sustained. And yet the source code is there but someone else would have to take it up and set it up and have it running and that's a boring task nobody wants to do, right.