

Interview 22

Interviewee	24-User-C
Interviewer	Ashraf Shaharudin (TU Delft)
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Interviewer

So my first question to you, could you please describe your role at <redacted>?

Interviewee

Yes, I certainly can. At <redacted>, I'm a <redacted> expert. Most of my assignments are consultancy at various companies, so I go to various companies all over [country C]. I've been a consultant for, I think about <redacted> years now. For the last <redacted> years at <redacted>, before that, at other companies. Most assignments I've done at governments and specifically the <redacted>. So I've been to, I think about <redacted> of the <redacted> in [country C] now. Right now I'm at an assignment at <redacted>, especially the soil side of things. So, the [country C] soil is being mapped by <redacted>. And I do all kinds of assignments with Esri and FME, mainly with FME, the automation of data management processes. In that [i.e., FME], there's also open data being used from services, so we can get on that later. And yeah, I think that's about it.

Interviewer

And you use open data in your work?

Interviewee

Yes, not right now, in my current assignment, but I have used it in the past.

Interviewer

For what purposes and how do you use open data in your work?

Interviewee

Mainly we've used it for two things. A lot of the <redacted> they use open data from various sources and they use it for two things: to update files in their own databases that are based on that open data, usually it's enriched with own data and put in their own database. That's what I did with FME to automate those processes. And the second part is for analysis, so they could use all kinds of open data and combine it with own data over open data to create new data from it, usually, to make policy about it. I think the third one is a minor one, some <redacted> use open data directly from the source in their own viewers. So, like the province boundaries and the municipality boundaries there, those are usually taken from open source because it's a waste of space to store them in your own system and then use them in your maps.

Interviewer

And in your experience working with open data, especially the second part where you use open data for analysis, do you have any grievances or challenges or unmet needs with open data?

Interviewee

I think the biggest grievance I've seen over the years is changes being made in data models without informing the outside world beforehand in some way. One of the <redacted> I was working with, we used a lot of data from other companies. We had a lot of automatic processes running on a weekly,

monthly, depending on how often it's got refreshed. We had one certain provider that would constantly change the data model, which would cause our automatic processes to stop working because the expected data model wasn't arriving.

And I think the second one is the technical failures with open data [that is] usually, [referring to] somewhere on the server side of the provider, there were some issues that data wasn't coming through correctly that would cause our processes to stop running. So that's the biggest grievances.

What was the second part of your question again?

Interviewer

Challenges or unmet needs.

Interviewee

I think yeah, unmet needs, sometimes the stability of services that are being provided by data providers. The biggest challenges, sometimes we encounter, especially with Esri services, they didn't always fully comply to open standards, which causes certain difficulties in processes that require data to be conforming to those open standards. That was usually only Esri that's had those problems. Especially the web feature services from Esri, for a very long time, they had a certain change in it from the OGC standard and that caused a lot of issues with combining it with data that did comply with the open standard. The biggest challenges there were usually concerning like the European projects like INSPIRE that had very strict standards that you needed to comply to that couldn't be met with Esri services. So that's I think the biggest challenges I've seen over the last years.

Interviewer

And so if I remember correctly, you also mentioned that one of you working with open data, is also helping public organizations to publish their data. So do you also have

Interviewee

Yeah. Most <redacted> I've worked at, most governments in [country C], they have an obligation to publicly make available their data, and for most general datasets, there's usually not big challenges or issues. The big challenges, again, come when you have to comply to the open standards. A lot of the <redacted> are using Esri with ArcGIS server and such and as I said, the especially ArcGIS server and web feature service, it doesn't completely comply to the OGC standards. So I know, the <redacted> I work, but I think it goes for almost every <redacted> in [country C], there are big problems complying to those INSPIRE standards because they were all using ArcGIS server, and web feature service made with ArcGIS server couldn't be taken through the INSPIRE processes in the Europeans database. And I know for one of the <redacted> I worked for, they made the decision there to switch to GeoServer because of these issues. They only use the ArcGIS server for the services that are being used in like ArcGIS Online and portal for ArcGIS, Esri specific portals. But they used the GeoServer for everything open data related.

Interviewer

OK, now we're gonna talk a bit more about Esri. You've mentioned a little bit how you use Esri products, but if you could briefly describe generally how you use products in your work and for what purposes.

Interviewee

Very widely. It depends on the assignments. Most of the time we use it for visualization or like reviewing the data before an analysis. FME also has some options for previewing the data but Esri software has more options to visualize it and analyze it than FME. So most, I think, of the work I do with Esri is concerning visualization, so making maps or interactive maps, map apps, stuff for ArcGIS Online. In the past, I also use it a lot for data management, before the FME era. A lot of processes are built with like model builder or scripts in ArcGIS.

Interviewer

OK, but you do not use Esri product for data analysis?

Interviewee

Only usually in the first stages to look at the data, and usually the data analysis is being done by FME. Because it's usually a lot quicker and has more options than Esri itself.

Interviewer

And then after that, if you need to publish this data, then you bring it back to the Esri environment?

Interviewee

Yeah, yeah. It's almost always a combination of the two, because FME has the strength for the ETL processing going between formats and Esri has the strength in visualization and making the final information projects. So almost every assignment I'm on is a combination of Esri and FME.

Interviewer

OK. And are you familiar with open data related services like Living Atlas, ArcGIS Hub?

Interviewee

Yes, yes. I've used Living Atlas data a few times, mostly in ArcGIS Online products and then again things like the boundaries of municipalities, provinces, the more basic administrative data that you can also get from directly from source.

But if we use it in ArcGIS Online, it was a lot easier to take it from the Living Atlas because it's a lot closer than finding it somewhere online on the [country C] open data portals and importing it into ArcGIS Online from there.

Interviewer

OK sounds good, but do you have anything negative about using open data services by Esri?

Interviewee

Not directly, but I think that's mostly because I only used it within ArcGIS products and because it's the same system, it's pretty compatible with each other. I haven't used it like in FME for analysis or anything, because usually when we did something with analysis we wanted to get the data as close from the source as possible. With Esri between them, especially with the experience with the noncompliant of OGC standards, we were always a bit hesitant to use the data from the Living Atlas for analysis. So it was mostly used for visualization in Esri product itself.

Interviewer

And the hesitant is because you think that perhaps the data in the Living Atlas is not reliable or low quality or what?

Interviewee

No, I don't think it's about the data itself, it's more the experience with Esri platform and the limitations we've seen in the past. I trust Esri to supply the correct data and have the right actuality but because I know from past experiences with Esri data that as soon as you use it outside of the Esri platform or for things that require standards, you usually run into some kind of trouble somewhere. And then it's usually easier to go directly to the source that might supply it in OGC standard and not have those problems while you're running your analysis.

Interviewer

Yeah, but then if you run the analysis outside Esri platform and then if you want to do visualization, then you would bring it back to the Esri platform?

Interviewee

Yes.

Interviewer

So in that stage then you do have to do data transformation as well?

Interviewee

Yes.

Interviewer

Do you have any experience of using QGIS?

Interviewee

A little bit, and that's mostly because most of the clients I've been working at are fully working with Esri. I've used it a few times in my own free time to make a try out with maps and stuff like that. I've used a few times if I ran into problems with Esri product, to try it in QGIS and to see if QGIS has the similar problems or not. But I haven't used it like mainstream or anything. More on the side.

Interviewer

But do you know if -- because you mentioned that with Esri platform then there's a problem with using data with OGC format? So do you think like with QGIS then this issue is not an issue?

Interviewee

Yeah, I know with QGIS, it's not an issue. Similar experience with -- goes back to INSPIRE again, when we were providing data for INSPIRE, we tried it with Esri, couldn't get it working. An error with a GL and web feature service. Then we tried making a GML with QGIS and that got accepted immediately by the INSPIRE service. So that's a proof for us that QGIS at least complies to the OGC standards. But in the end, we used FME anyway to generate the data because that was a lot easier because it had to be automated to update every month. With QGIS, we didn't know if it was possible to have something running every month there, so we mainly used it as a trial and error to see if we could get it working there.

Interviewer

In general, do you think Esri plays a role in enhancing the access, supply and flow of open data?

Interviewee

Yeah, I definitely think it does. Esri is very widely used product, not only in [country C], but I think

worldwide. I think it's a very good way for people to get to know open data and also to get them inspired to go looking for more data outside of the Esri products. I think it's a very good inspiration for people to start thinking about open data, use it and maybe also try to get their own organization to also start sharing open data.

Interviewer

Do you also think that they play a role in connecting different actors in the open data ecosystem?

Interviewee

Umm, yes and no. I think, again, because they are so big they certainly play a role. But for the future of open data, you need those open standards, and as long as they don't comply to those open standards, they're gonna be running into issues. And I know they are changing their perspective on it, because I think about 10 years ago we already ran into these problems with open standards and Esri not complying. Back then, they literally once said -- I think it was when GML started to get used more and, me and some other <redacted>, we are talking with Esri about the support for GML and back then they literally said to us, no, you shouldn't use GML, you should use our standards. These days they start to comply more to the open standards.

I think it took them a lot of time to start seeing that those open standards are very widely used and starting to know that they had to comply to them in the future. And I know in the last years, they have been working on complying more with those open standards.

Interviewer

Do you have any idea why perhaps Esri is a bit slow in adapting OGC standard? Of course, this is speculative.

Interviewee

Yeah, it is speculative. Well, I have an idea why it is and I think that's completely my own opinion and only slightly based on facts. Esri is, of course a very big company and originally from the United States. And I think in some way, especially in the beginning, they had, at least what I saw in [country C], this kind of arrogance like we're a big company, you should listen and do what we say. This is mainly based on what they said back then, there's GML and they said no, don't use that open standard, use our stuff. I think over the years they've seen that people don't accept that anymore, that they have their own opinion and say, hey, you should do something with these open standards.

And I think because it's a big company, it took them some time to get used to that feedback and they are still the biggest in the world. They might see those open standards as a risk to their own company instead of embracing them and using them for future. That would be my idea, purely based on how the company is set up from the past.

Interviewer

Related to that, do you see any other negative impacts of Esri towards the open data ecosystem?

Interviewee

No. Especially with the changes I'm seeing in how they are working to do more with those open standards, I think there are mostly a chance for open data.

Interviewer

So in a way, do you think the way that Esri does things now, it is contributing to the sustainability of open data ecosystem?

Interviewee

Yeah, I think so. Because they supply a lot of open data for free for everyone to use, mostly compatible with Esri products but can also be used outside of those products, as long as you know the limitations there are. Of course they can always do more and comply more to those open standards. But I see that the movement is there, so usually big companies, they take time to change things. I compare it to like, if you've got this very big ship and you wanna make a change course, you can't just turn it around. It takes a lot of time for a big ship to change course. Same with Esri, it takes time for them to fully integrate with those open standards.

Interviewer

Apart from its open data related services, do you see any other limitations of Esri products that perhaps detrimental to even the sustainability of Esri itself?

Interviewee

The thing I see most from <redacted> I worked with, the big limitation in the past was a lot of the data that was being stored on their server was stored in the United States. But that's something they changed in the past. They also provide server in Europe, for companies that wanted to have their data specifically in Europe and not in the United States.

And the other one I hear a lot is some people they want the freedom of open source and as Esri is of course not open source, it has a price ticket. But they deliver a very good software in general, so I don't see it as a big risk. I think it's something that can coexist next to each other. You've got the nice product from Esri, that's available for a price, and that's usually very easy for people to get into. And the open source mapping programs and software like QGIS is also very nice, but it takes a bit more getting used to because you've got more freedom and you need to do more of yourself. So no, I don't really see a big risk for Esri in general.

Interviewer

So my last question to you, like in ideal world, how would you suggest Esri way of doing things could be or should be?

Interviewee

First one would be full compliance with the open standards. That would also be in their own best interest because then companies wouldn't switch to GeoServer or stuff like that because they can't get from ArcGIS server what they need.

And I think maybe like more integration with national open data platforms like you've got in [country C], you've got the <redacted> and that's like an open data platform for the whole of [country C]. Any company can hook up their data to that. There are literally thousands of datasets from provinces, any company you can think of. It would be very nice to have like the Living Atlas layers available through there also, so, like sharing the platform. It would also be good for them because the Living Atlas would be wider available, just not from their own Living Atlas platform. So I think that would be a good win for open data to have more connectivity between the various open data platforms.

Interviewer

Is this <redacted> you're talking about or different?

Interviewee

<redacted> is also one. I think it's mainly government data that's on there. I can find the link for you if you have a moment or if I can do it after the interview, that's probably easier.

Interviewer

What's the name in [country C]? Perhaps I can take it.

Interviewee

<redacted>.

Interviewer

OK, I'll look it up as well.

Interviewee

And this is also the one -- usually when I go for open data, the first place I look at is the <redacted> or the <redacted> as we call it, in between colleagues.

Interviewer

So those are my questions. Before I end, do you have anything that you would like to share with me that you haven't shared that you think would be useful for my research?

Interviewee

I don't know if you've already spoken to GIS specialist from <redacted>. They do a lot with open data, so that would probably be very interesting for you to talk to them.