

Interview 6

Interviewee	06-Esri-D
Interviewer	Ashraf Shaharudin (TU Delft)
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Interviewer

Let me first start with the background questions. Could you please describe your role in [Esri distributor in country D]?

Interviewee

Yes. First of all, <redacted>. I'm <redacted>. My team and I, we are responsible for the <redacted>, so to speak, for providing data for [country D] through the ArcGIS Living Atlas. That's one part. And on the other hand we sell and we resell data from commercial providers, but that's a very, very small part of our business because we understand ourselves as a software provider. So we focus mainly on ArcGIS, selling ArcGIS and not so much on the data side. But the data comes as a USB, I would say, with our software. So my role is <redacted> and in certain amount of time I do <redacted> as well.

Interviewer

And how long have you been working in this or a similar role?

Interviewee

I have to think, because there have been some reorganizations. I would say <redacted> years, not as <redacted>, in the first place. But in the first place, I <redacted>. So I come from a technical background.

Interviewer

Could you please describe the open data services offered by [Esri distributor in country D], including who are the services for?

Interviewee

The services are for all our customers, so we focus on certain topics, but I have to admit we have like a hen and egg problem in [country D] regarding our data offerings. So, we select data that's open and that's not that many in [country D] for the whole country. And then we take it and bring it into our environment and offer it as a service for our customers for everyone. I would like to offer a lot more of open data, but I'm dependent on what there is on offer as open data in [country D].

Interviewer

And so this data that you mentioned is offered in ArcGIS Online and also in Living Atlas as well?

Interviewee

Absolutely yes. And we also have an open data portal, [Esri distributor in country D] open data portal where we provide public domain open data as well. So it's two, two different sides. So the ArcGIS Living Atlas is something you can use mainly in ArcGIS, it's very easy to use in ArcGIS. And we also have an open data portal where people can download the data in other formats as well. It's not all -- not everything we have in the living Atlas is also in the open data portal, but a certain amount of this data is also open.

Interviewer

And so in this <redacted>, meaning that even those who do not use ArcGIS can access this data.

Interviewee

Yes, exactly.

Interviewer

And since when has [Esri distributor in country D] been offering open data services?

Interviewee

Around about 2015, I would say. I'm not absolutely sure because it was process that started slowly and it was more like an invention topic at our sites. So started slowly.

Interviewer

And how do you think open data services provided by Esri benefit users?

Interviewee

The main point they benefit from is that they don't have to search for this kind of data, because in [country D] we have a very heterogeneous open data landscape, so <redacted> decides on its own whether or not they go open data and what they provide, and in what form they do provide the data. You have some national authorities who provide land open data or layers for the whole country but this is not mainly the case, in general the case. So what we do for our customers is to connect to <redacted>, different agencies, search for the data and bring it together in our environment, sometimes in one layer and sometimes in <redacted>, <redacted> wide layers.

So this is the first point and the second point, of course, we're a software provider and it's easy to use these services in our software. So it's kind of shaped to use in ArcGIS. And it's not only ArcGIS Online, if you use the desktop tool and then you can use these online services. But there's also a certain amount of data that comes on for the offline, for those customers of ours who prefer to have data offline.

We also do some project work. I didn't mention this maybe. So OpenStreetMap data is open data as well and sometimes our customers do want to have this data on their premises as a background map, for example, and that's something we do in project work. So if they ask us, we provide this kind of data for a certain extent, for example.

Interviewer

OK, so these are mostly consultancy kind of engagement. And the customers mostly are they government officers or are they private sectors as well?

Interviewee

And for the offline data, it's mainly public sector. Insurance, they prefer to have offline data as well, but that's not the main point or not the main part. It's mainly public authorities, military sector, for example. Speaking of the online services, there's broad usage all over the place. It's a lot of usage in the education sector, so schools or universities, but also commercial companies, retailers, insurers and utility companies. It's very, very different because we have a very -- we address different topics with our data. So it's utility data, it's infrastructural data, boundaries, elevation data. As we say in [country D] it's like <redacted>.

Interviewer

What are the benefits of offering this open data services to Esri itself?

Interviewee

Our software becomes more attractive. That's the main part. And second part for our company,

especially, we work with our own software to provide this data. So we learn to use our own software, eat your own dog food.

Interviewer

Did you actually see that there are a lot more customers subscribing to ArcGIS because of open data services?

Interviewee

I don't have specific numbers, but my feeling is yes, they are customers or prospects coming to us because they have found the data first and they say OK, I want to use this data and how can I use it and then ArcGIS comes into the picture as well.

Interviewer

What are the main technical and non-technical activities that Esri has to carry out to offer this open data services?

Interviewee

Start with the nontechnical ones. So the main part are licensing questions. So we really have a look into are we allowed to use this data? How can we use this data. We really check this. And the second part is to ask ourselves customer sales colleagues: what do your customers want? What are they looking for? So searching for the right data, looking for the licensing, these are the main non-technical points I would say.

And the second one is yes, to get the data and that's not always easy because it comes in different formats. Sometimes you have an API, sometimes you don't have an API, sometimes you can download just a tiny bit of huge dataset, then you have to contact somebody to ask if it's possible to get the data on a device or something. And if we have the data in house, then we start processing it. Sometimes we clean it because sometimes the data is provided in a certain form and maybe we want to use it in another form and then we have to do some data processing or cleaning and then publishing the data and hosting it. We use a lot of FME tools, ETL tools to bring different -- for example, if you got a certain data topic that comes from different <redacted> and they provide it in different formats or different data models, then we need to bring this together as well and to be a kind of -- <redacted> -- but to make it homogeneous, can you say this?

Interviewer

OK and how many staff are involved in this open data services in [Esri distributor in country D]?

Interviewee

I would say we have four people, but not full time. So bringing it to full time level or equivalent, I would say it's two full time equivalents working solely for the open data.

Interviewer

Yeah. OK. Within the same department or in different departments?

Interviewee

It's the same department and the same team except for the consulting part. So the consulting part is in a different department.

Interviewer

What are their skills mostly?

Interviewee

Yeah, knowing a little bit about open data licenses and understanding metadata, and, of course, ETL

tools, FME and then to have a broad knowledge or deep knowledge of our own tools, so ArcGIS Pro and ArcGIS online.

Interviewer

What are the cost components of offering open data services financially or otherwise?

Interviewee

The human resources we just talked about, that's the one part and the other part is hosting the data. And that's not easily done, I would say, because sometimes layers with a lot of features, for example, you need a lot of performance to provide these in a smooth way and that's quite some money we invested in.

Interviewer

Do you get support from Esri in the US in terms of hosting, whether you get a discount or financial support in terms of the hosting?

Interviewee

No, there is no. I mean there are two different ways. Maybe my colleagues from <redacted> already described it. But Esri Inc provides the base maps, the worldwide base maps and the data is integrated in there as well. So we take some or we take open data that's suitable for this direction and bring it to Esri Inc in a certain data model and so forth and they integrate it in the base maps and these are hosted and done and processed by Esri Inc. That's just a tiny bit of work we do for them. And on the other hand, we provide services, I think around about <redacted> services at the moment through the Living Atlas just for [country D] and I think <redacted>. And these are the ones we host ourselves.

Interviewer

And so do you see the cost of hosting gonna be an issue in the near future?

Interviewee

I should ask my boss. And from my perspective now, I think it's absolutely worth doing it. I think of course it would be beautiful if all the public authorities provide machine readable APIs where everyone could connect to very easily and then consume the data. At the moment we do this for our customers because we think it's worth it. I think as long as the landscape is as it is in [country D], it's worth for us.

Interviewer

And what are the challenges encountered by [Esri distributor in country D] in providing open data services? You mentioned a bit about having different <redacted> and different data formats and stuff, are there any challenges?

Interviewee

That's the biggest hurdle, I would say, because the open data landscape in [country D] is very [...] and different and it's a long issue in [country D] from my perspective. It's getting better. It's really good now, I would say, compared to five years or 10 years back. But we are very very late in [country D] compared to <redacted> for example, or <redacted> or <redacted> for example has a very good law in place now I think for around about a year now. So the open data landscape is difficult in [country D] still and it's difficult to find the right authority, to find the right contact, to get the data, to get it in one piece and not in tiny pieces, and to have maybe an API where you connect to not only a shapefile or something, you can download somewhere. And that's the biggest one, I would say.

Interviewer

And those <redacted> that are quite stable in terms of implementing open data, do we still face challenges in terms of like maybe it's not timely, it's not regularly updated?

Interviewee

I would say it's changing technically. For example, <redacted> from time to time they changed the data model, so you can't really program against something because it's changing. You have to always check is it the same as before. So it's not that stable as I would wish it would be. And then it depends, I don't want to blame someone specifically.

Interviewer

Yeah. Yeah, absolutely. Yeah, yeah.

Interviewee

There are some really good ones and there are some not good ones. And another hurdle is in [country D], those authorities who are starting providing open data, they sometimes have a problem or they lack the knowledge to put the right metadata on top of it and to provide a really good open data license that's clear for those who want to use it. So that's another aspect of it.

Interviewer

Can you probably name the good ones, the good data providers in [country D] as an example?

Interviewee

Yeah, some <redacted> are really good. <redacted> is really good. <redacted> is good. <redacted>. The good ones are more than the bad ones. So, for example, <redacted> just started with open data, it's the year 2023 and they're just starting and they're starting with the tiniest portion.

Interviewer

Yeah. Good progress. Who are the key open data actors that [Esri distributor in country D] engaged with? Apart from data providers, are there any data actors that you have to engage with in order to provide these services?

Interviewee

Have to, I would say no. I mean, of course we contact the authorities where we have questions. If things aren't clear through the license, for example. But there aren't any authorities we have to contact.

I don't know -- do you know the open data license -- the open data landscape in [country D] rather well. Have you ever heard of the, <redacted>, but that's the <redacted>?

Interviewer

<redacted>?

Interviewee

<redacted>. And so if I would like to buy -- and I have to say buy -- the cadastral data for all of [country D], I could do this. Some of those <redacted> within this datasets would be open data, but some not. So I have to go to the <redacted> and could buy this data. But then I really have to be in contact with them. That's something we don't do because we don't want to invest that much money. And because it's also complicated, they have a very complicated licensing model. And on the other hand, open data is on the silver lining, so to speak so there are a lot of <redacted> already have open data so we focus on this. So there is no organization we have to be in contact with, but there are a lot of organizations we want to have an exchange about open data and where we really want to bring

those players together and to talk about open data and to bring <redacted> like <redacted> to the point where they finally publish open data.

Interviewer

Do you sometimes also talk to open data users to understand their needs as well? Is it something that you do as well?

Interviewee

No, we don't, but simply because we don't have the time, I have to admit. I would love to. We talk with open data users through events like FOSSGIS or smaller events, but we don't have a connection, for example to the OpenStreetMap community directly here in [country D]. It's more that -- I mean I'm a user of OpenStreetMap and I'm a provider as well, but I'm not engaged as an Esri employee there.

Interviewer

Do you have any example of projects or cases where Esri's open data services demonstrated impacts? So impacts it can be in terms of like a traction, you made in the news or services that people a lot of people use.

Interviewee

We have this very one great example. The corona dashboard for [country D] was created initially by Esri. It was through the interest of certain colleagues who said, OK, we have this problem, we have this pandemic, we want to do something and they start at the dashboard and developed very, very quickly and was taken care of by public authorities in the health sector. But it started all with one layer -- the boundaries for -- the administrative boundaries. This is a layer we provide as open data for years through our ArcGIS Living Atlas and it has always been there, so our colleagues and then the authorities just could get this layer, use it and put the numbers, the corona numbers behind it and then create the dashboard. It sounds very, very easy, but it was a technically difficult task, but nonetheless this this tiny layer, this boundaries layer, administrative boundaries in [country D] has gotten <redacted>. Yeah, it was such big usage numbers that Esri Inc couldn't save the number because the digits were too many. So it was really big thing for us. And it started with the very, very basic layer, but you could just grab it, take it or create a dashboard with ArcGIS on top of it and then it was done already. And that's what I think is the advantage of providing this data so our customers can start easily very, very easily.

Interviewer

And so this dashboard initially was hosted by Esri?

Interviewee

It was created by us, it was hosted in ArcGIS. But soon it was taken care of by the <redacted>.

Interviewer

From the business point of view, how do you think [Esri distributor in country D] can leverage open data even more to support the business of Esri? What do you think can be done further or better?

Interviewee

So the first point I would say is nationwide, so [country D] wide data, this must be my biggest wish because currently we have kind of a patchwork everywhere with our data topics; this would be the biggest thing from my perspective. And I would like to shape the data more -- the data topics we address more into the directions of the -- I'm searching for the name, sorry -- there's political initiative in [country D] and in Europe regarding the open datasets with the highest interest.

Interviewer

Is it high value datasets?

Interviewee

Umm, yeah, yeah. Thanks. That's the name I was searching for it. And so there are certain topics in in this regard. So I would love to get more data for these topics. And I would love to see companies providing open data as well, not only authorities, and then to use this. Maybe one step back regarding the data topics, especially in the energy and infrastructure sector, that's data, I would say that's of very, very high interest in [country D] given the current political situations.

Interviewer

Do you think [Esri distributor in country D] plays a role in enhancing access supply or flow of open data?

Interviewee

Yes and no. I would say umm, so we aren't -- as I said in the beginning, we understand ourselves as [Esri distributor in country D] as a software provider, that's our main focus. Open data is a very, very good thing to bring it together with the software and get our people or our users to use this data. So from this perspective, I would say no, we aren't. We're not a big role in this. But on the other hand, our users use our software to provide open data themselves. So yes, we play a role in there because we want to implement and address open standards so that our users can really use the software to create their own open data portals, for example, and then they are the ones who publish the data and describe it and give examples for how to use this data.

Interviewer

Yeah, but for example the [Esri distributor in country D] open data portal is also accessible for people outside ArcGIS, correct? So in in a sense then Esri does play a role in in that sense.

Interviewee

It's a difficult question, I would say because our offering is not that -- as I said, it's not [country D] wide. But on the other hand it's what you get. So I've heard from some people who were just Googling for data and found our open data portal first because it's the easiest way to find it. And then they thought, OK, who's Esri, who's ArcGIS. They weren't not really interested in this, but they found this one point where they could download and use the data. But it's not our main focus, that's why I would say we aren't a key player in this landscape.

Interviewer

OK. Do you think [Esri distributor in country D] plays a role in connecting other actors in the open data ecosystem?

Interviewee

We try to, as I try to describe, we talked with our customers, especially in the administrative authorities. If they want to have an open data portal then they can use our software to do so and so forth. And of course, customers speak to customers and there are certain events where they meet each other and where open data plays a role and where we bring our customers together to discuss about open data, about metadata, about open standards and so forth. So this is one point. And on the other hand, we are a member of the <redacted>. <redacted> is an association in [country D] dealing with digital topics. It's a big association in [country D] and it has working groups dedicated solely to open data, for example. And that's where we talked together with other companies about open data or where we talked with politicians about open data as well.

Interviewer

OK, so this association is initiated by the government?

Interviewee

I don't know actually whether or not – I don't know where they're coming from actually, but it's a huge association.

Interviewer

OK. Can I get the name again? It's <redacted>?

Interviewee

Bitkom.

Interviewer

Do you have -- I think you mentioned a bit that you wish for more data and also for high value data sets, but do you have other wish lists for the open data ecosystem from the point of view of Esri?

Interviewee

As I said already, the [country D] wide data would be great. And yes, also companies providing open data. This is my very personal point of view, a lot of companies are asking for open data and that the authorities have to provide open data and that everything has to be open but themselves they don't provide anything and I think it's necessary to have an open data landscape where not only authorities provide such data, but also companies as far as they can and as the company rules allow it, but I think there are possibilities.

Interviewer

Yeah. And so do you think that that the customers of Esri would also value data from private companies, right?

Interviewee

They would, yeah, if there would be some data.

Interviewer

Yeah. What do you think about the emergence of open source software like QGIS and also open database like OpenStreetMap? Does it or should it change the way Esri does things?

Interviewee

OpenStreetMap certainly already does but more in the direction of Esri Inc because they are the ones who have a very strong connection to OpenStreetMap and also to the Overture Maps Foundation. There are a lot of data products already in the Esri universe, provided by Esri Inc based on OpenStreetMap. So it's really a valuable, very valuable data source because it's very -- it can be very -- once again searching for a word -- up to date. It can be easily changed, crowdsourced changed. OpenStreetMap are really great thing, especially in countries like [country D] or in the African world where you have a good -- have a lot of members.

QGIS I have to admit, we are changing more how they think about certain things, but they clearly are competitor of ours. But yes, we have a look what they are doing. For example, I'm involved in some standard things from the OGC, called OGC API and there we have a look what is already possible in QGIS and what should we do so that our customers can work with our software and certain data as well very easily.

Interviewer

My last question. With the development of SDIs in Europe, especially since INSPIRE, what would you say are key lessons learned? What should have been done differently?

Interviewee

I have to admit I don't know a lot about INSPIRE. So maybe it's not the most qualified answer I can give you. But from my point of view, INSPIRE was a very, very good idea, but it was too complicated, it was too superficial and for us as a company, it was not really relevant when coming to how we use INSPIRE data or INSPIRE base data. It just didn't play a role for us. It played a role for our customers because they wanted to provide open data for INSPIRE, but for us it was not that important.

Interviewer

OK. So those are my questions but before I end the recording, do I have anything that you would like to share that you think are important for my research?

Interviewee

And I think these are really, really good questions and my main point hopefully comes through was to say, OK, we as a company do want to use open data, but the landscape in [country D] still is not as I wished it should be. So if your work does something that [country D] authorities go more for data and do it easily -- more easier and provided in machine readable format or something I'm absolutely happy.

Interviewer

Thank you. I will stop the recording now.