

Interview 11

Interviewee	11-Prov-B
Interviewer	Ashraf Shaharudin
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Interviewer

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

Interviewee

OK, well, <redacted>. I think it is the <redacted> in the European Union in population. So in terms of population, <redacted>, and we have a very big <redacted>.

So we have an approach to dividing our tasks. First of all, we have a territorial division as we think that this kind of administration is closer to citizens. So, the first approach is that we have <redacted> boroughs inside <redacted>. And the second division is those that came from different businesses that we have inside our <organization> like environment, town planning, mobility and so on, IT of course, and human resources, and this kind of stuff.

So we have a two different approaches when delivering data to citizen. I am in one of the areas specialized in town planning, so we deliver every town planning, document or rules that apply to get the permits for buildings. So we are running the spatial data infrastructure of <redacted>. We serve it through the portal geoportal <redacted>.

So I think it's what you are looking for. As I told you, and I told the person who put -- who was the intermediary between you and me, <redacted> is very big and we have an open data unit that is specifically designed to deliver open data. We have another unit, administrative unit, in charge of statistics with data related to population, voting, and so on. The third branch is ourselves, who run the geoportal and the spatial data infrastructure, everything related to geographical systems information, within the IT colleagues, of course.

So we have ... is it enough for you?

Interviewer

You can add more information if you want, yeah.

Interviewee

And we started looking -- we are harvesting every kind of information of cartographic information of buildings and environment and so. We collect it and then we serve, we create the web map services to have it in our geoportal. But we are in a town planning area, so town planning is very important for us and for our chiefs of course. So we build many web map services relating to this kind of stuff, like town planning or what can be the permits and so.

And as we made, we thought that the spatial approach to data was very bad known inside the organization. So we started to teach our colleagues in other areas and boroughs to use this kind of information and to share our point of view and how the best way to approach data when you don't have data available. It is just pointing in a map and you get what's available.

Interviewee

So we are trying to involve the whole organization in this kind -- in this idea -- to provide and -- we are trying so that they became producers of data that they can serve throughout geoportal.

Interviewee

So we are we are like an orchestra director that we keep the infrastructure, and every division can play the part he's specialized in.

Interviewer

OK, so meaning that your business unit is also helping other business units to release spatial data.

Interviewee

Yes. And we are much concerned nowadays that -- probably you ask me later. But we have been running this geoportal only four years. And in four years we became the main information system within the <redacted> because the point of view that everything is everything happens somewhere, as we used to say, is the main idea that we deliver to our colleagues. So we want to spread it through the <redacted>. I think it's a very big idea and a good one because of what we are -- sorry I didn't find the word -- our colleagues have been giving feedback to us. So they say that running their own businesses have changed since they started to use geographical information system because they had numbers, they had a total amount, they have distributions in boroughs. For example, it's very clear when you see an image of what you are spending money in and how it's related to some boroughs, and some other boroughs are not given the same amount of money, maybe they are suffering from worse city conditions. So you have to put more money in them instead of the other ones. So it's another way to keep vulnerability away and to equal the efforts in the different boroughs of the city.

Interviewer

Meaning that by doing open data, they themselves actually benefit from this data?

Interviewee

Yes, but not only open data, but geo open data. Once you get the position of every data, you get more information of data itself. Maybe data by itself are some kind of abstract and with geo position, this data in a map, you see what's happening in the city. And there are problems that data are related to data, but you can make a classical join like in a database, with this field is joined with this. But now the joint is spatial. You see things are happening in the same point of the city, and that's what we are thinking about.

Interviewer

Is it because when they have to make data as open data so they themselves have to manage the data internally before they can publish it? So that's why the data becomes clearer to them?

Interviewee

Yes. And because -- we work with our colleagues in many ways. At the <inaudible> they need. If they are GIS -- they know how to deal with ArcGIS or so, they do everything. If they don't know nothing, they give us the data, we find the -- if it's structured or not -- we talk to them and we clean them and position them in a map. And between these two positions, whichever the point you are, we give you the tools to deliver data to citizens and of course to our own <redacted>.

Interviewer

And you mentioned that it's only four years that geodata portal has exist but has the implementation of open data has started even before that, or it's indeed just 4 years ago.

Interviewee

No. We have open data since 10 years ago at least as a portal. But we have data many years ago. The statistics one was, I think they have almost 25 years. So we've growing and we've done the sharing our information.

Interviewer

Yeah, but the geodata portal started four years ago?

Interviewee

Yes.

Interviewer

And before that, how was the geodata disseminated or published?

Interviewee

We had... Well, first of all, we had an ArcGIS infrastructure for serving data and we have it since 1998 or so, I think. But with this kind of software, we started to deliver information over the Internet at the early years of this century. And we built separate viewers for each business. I mean, we had cartography, so we had a cartographic viewer, and we had later town planning information, we developed the town planning viewer. But then we noticed that we didn't have enough. We wanted more and more and more, and then we started thinking about what we wanted. There was the European directive INSPIRE -- do you know?

Interviewer

Yes, yes.

Interviewee

So when the INSPIRE in 2007 came out, then we <country B> as a country member of the European Union had to translate this directive to our own legal system. So we wrote a law in 2010. And then we thought, this is the moment -- we have to develop a spatial data infrastructure, so we can comply with this law and directive. But because of political affairs, we had almost five years delay. So we started thinking seriously on how to build it in 2015 and finally it was developed in 2017, 2018 and we started delivering services in the <redacted> 2019.

Interviewer

Alright, that's quite recent. And would you say <redacted> is one of the more advanced municipal or <redacted> in <country B> in terms of providing geospatial data?

Interviewee

I think that -- Well, main cities, the bigger cities, we have a similar approaches to the problem. But maybe we are more advanced in town planning and maybe <redacted> is delivering cartography products in a better way -- well, I don't know really. We share information with many <redacted>s and the main cities. But we don't -- there is no contest.

Interviewer

Yeah, for sure. But there is a conversation among <redacted>s on how to

Interviewee

Yes. We have several groups in that we share information and share ideas and what we think. One of the forums is the Esri conference that take place here in <redacted> every year. And we share information with many, not only Esri, but his partners and other administrations. We have another event that is intended for a local and state administrations and we share information with our fellows

also from <redacted>. And there are cartographic events that take place every four years in a different city in <country B>. Well, yeah, as soon as there is an event to share information there we go.

Interviewer

And how does the implementation of open data cost <redacted> in terms of financial, in terms of human resources -- like do you have to actually come up with a lot more budget for the implementation of open data, especially geodata?

Interviewee

No. And I think I can tell you this term as well. We are a very, very short team. We are no more than 10 people. And data producers have their own resources, so we don't take care of that. When we have to upgrade the infrastructure, we don't mind as we have IT team, that have his own budget. And so it's very difficult for me to tell you how much it costs.

Interviewer

Because you mainly play the role of like facilitating other producers. So, providing consultancy if they need help and stuff?

Interviewee

OK, we produce cartographic products. The rest of information, we work with other colleagues or we have our own information. In town planning, we have our own information, but we don't spend much money or budget in it.

Interviewer

OK. Now, I want to talk about the open data ecosystem, which is a network of interdependent actors that are self-interested. What is your perception of the health or sustainability of the current open data ecosystem?

Interviewee

Well, what we have seen in the last four years is that the speed in open data distribution inside our organization has been much increased with the insertion -- by using geographical information systems. Maybe my colleagues were concerned about the importance of using open data, but they see much more information when they get data georeferenced and put on an app.

So we've seen that, for example, three years ago, we called another unit and we talked to them: Well, we have the portal, why don't you use it to position this kind of stuff you're running and so. And they said no, maybe later [because] now, data is not very accurate and so we have to wait and maybe later. This year, they come to our door and knock on the door and say: please, can you publish my data? Because they have found the main benefits of this kind of information. So things are changing, but not in terms of infrastructure, but in people's minds. They are thinking other way and they are realizing that things can be done in in other way.

Interviewer

And so what do you think can be improved further in the ecosystem?

Interviewee

Well with I think that -- first we are dealing with that -- people see that when you are talking with this kind of stuff, the georeferencing, they understand that there's another task that you are putting into the management of the data. And what we understand is that data since the very first start must be georeferenced. So when you manage it in your app, you are given an added value, but the

position is from birth. So you don't have to do anything that you aren't doing now. But the benefits you get after is greater because data is georeferenced from the start.

So we are trying to involve our areas in understanding that the since the very first moment they start a task, instead of writing a next row in a database, they think in a position in the map. And they start to grow the business with that position, because with that position, they can access much more information than just a row on a database.

Interviewer

Excellent. Now I want to talk about Esri as an open data intermediary. How are Esri products or technology used by the <redacted> in the implementation of open data?

Interviewee

Well, as I told you before, we are just part of the <redacted>, we are just the geographical information system. So the one that has been using <redacted>'s [data] since the very first beginning was Esri. So Esri is critical for our organization.

Once I have said this, I must point out that, as we are growing, maybe, I can't tell you exactly, but maybe a third part of time of processing inside the <redacted> comes from geoportal, a third part. So we are growing and we are dealing with too many servers inside our organization. And when you have to make a deployment of some upgrade, you have to do it many times. So we are trying to find a something more -- I didn't know the word -- when things are in the same -- like more equal in terms of machines we need it and the population that access that kind of information. So we are planning to go to the cloud, and we are using Esri cloud, but also we are wondering if we can use another software that doesn't have the problem we have with Esri software, that is the licensing. When you are licensing, you have a lot of products, but once you get to the top you can't go further. Nowadays, we are seeing that maybe we reach the limit sooner than expected.

So what can we do? We can't say, well, we close the <redacted> because we don't have much money for six months or till 2024. So we are dealing with this kind of planning to [make] some the most used information to serving from the cloud, so we don't need to have it on premises -- another way to serve the information on premises. And so we are now wondering what we need to do next year with this information [i.e. geodata].

Interviewer

So you mentioned that with Esri there is a limit in terms of the storage and it's very expensive?

Interviewee

Because of the budget. You have to make a contract and you have to fix the amount you are going to spend on that contract. So once you reach the limit, you have to make another contract, and it's very slow when you have a system growing like we have. So we are trying to find another way to deal with this kind of problem.

Interviewer

OK, so in the contract they would specify the limit of the data storage, is it?

Interviewee

Yes. We [i.e., my department] don't pay the money, so I don't know the contract. But I know there are some limits. [For example,] you are a big a city of this population, so with this amount you can

have X servers and services, you have the license to do [some things]. So, I don't know exactly the terms of the contract but I know it's a problem for the IT team. They have to deal with on one side, with us, every day we want more, and on the other side with Esri that if you want more, you have to pay. Of course, they're working for that.

Interviewer

And apart from that, how do you find the services by Esri? Is it easy to use? Do you find it useful in you providing open data?

Interviewee

If you have the whole Esri environment, everything talks to everything, so you don't have any problem. Maybe you find problems with third party software or so, but I have to say that support, especially for a <redacted>, we have a big installation, so whenever we make a call with any problem, Esri is there to try to solve our problem. Or if they don't know how to solve it, they are talking to the software manufacturer in the USA and they give us an answer to the problem we are experiencing.

Interviewer

And so you use Esri environment to also collect data and process data and also publish data? Just publish data or for the whole supply chain?

Interviewee

We use ArcGIS desktop software. We have some apps developed with ArcGIS desktop, so that's another tool box -- we have ArcGIS standard, but we also have customized tool box with tools that we have developed and we use it to collect data from our fellows [e.g.,] from town planning or heritage protection or so. And then we use it to deliver data to citizens and inside the organization. We have the whole stuff.

Interviewer

So the whole value supply chain, the whole data life cycle is with Esri?

Interviewee

Yes, yes.

Interviewer

And how do you find the trying to comply, for example, with OGC standards because Esri has its own data format? Do you find it a bit tricky or is it not a consideration that you have now?

Interviewee

Well, OGC services are the standard, so we try to serve OGC services. But when we are dealing with our own viewers, we prefer to use the Esri REST services because they are faster and they have more possibilities of developing software. For example, for identifying or for crossing or for downloading data, it's more valuable if you get it from a REST service than from WMS, for example.

Interviewer

OK, so in that case, users can still download with open standards through Esri platform?

Interviewee

Yes. We serve the standard -- every dataset have at least WMS standard. Some services, as there are there are some organizations, people, citizens asked us to serve another format, we serve WFS. So they can use it as a feature services and it's more usable. But this is only when someone ask us to serve this kind of information.

For every dataset, we have always the REST services.

The raster information like satellite views or so, we don't use Esri software because we started using Hexagon Apollo many years ago and we serve images through that server and that server serves both WMS and ECW -- do you know the ECW format? It's a compressed format for images.

Interviewer

So that is not through the geoportal? That is through different portal?

Interviewee

No, no. Geoportal. Every service, every geographical service is served through geoportal.<redacted>.es.

Interviewer

So just one portal to access any data format?

Interviewee

It doesn't mind [i.e., matter] the server that's behind the infrastructure. So we have several servers, some in ArcGIS servers, some in Apollo servers, we have some information on ArcGIS Online, but we serve all this kind of information through geoportal.<redacted>.es.

Interviewer

OK, makes sense.

Do you have any grievances with using Esri products?

Interviewee

No.

Interviewer

Anything you don't like? No?

Interviewee

No. I think... Let me explain. We use Esri software and we have support and we are fine with them in this kind. But we are being a big organization, and sometimes parts another unit of our organization need to do something with geographical information system, so they ask who's working with us to develop [GIS services]. Esri. So they call directly Esri and sometimes there are some services developed [by] Esri [for] our organization that does not comply with what we are thinking about the geoportal. So when Esri get paid for it, the unit gets the data, but when we try to cross data with our infrastructure, we find problems. Maybe if we have talked previously, we should have done things in another way.

But I think this is a problem that we are a big organization and it's very difficult to get everybody to think [in the same way]. Call me and I'll try to give you the tools you need.

Interviewer

OK. Do you think Esri plays a role in enhancing access, supply, or flow of open data in general?

Interviewee

Yes. If we think in terms of a small city, maybe those below 100,000 population, you make a contract, you have Esri software, and you have the key and everything is done by Esri. So, it's very easy.

For us, it's very different as we have been dealing with geographical information data long ago. So we have management apps, we have too many data, we have too many apps, our ecosystem is very, very, very huge. So we can't buy a product out of the box -- you use it out of the box and you get everything. No. We want some integration. I think we are a special client for Esri.

Interviewer

Yeah, it's a bit more sophisticated?

Interviewee

Yes. We have problems that cannot be solved with out-of-the-box software.

Interviewer

Do you think Esri plays a role in connecting other actors in the ecosystem?

Interviewee

Yes, I think that they have in their DNA, that they are there to make people do networking connect other people's data. So they have the conference in USA, they have it in other countries. And whenever you have a problem, you make a call and you get a the person dealing with that data in other organizations, so these kind of things they do them well.

Interviewer

And do you see any negative or less than ideal impacts of Esri to other actors in the open data ecosystem?

Interviewee

I can't say you about this. I don't know much about other actors, so it's hard for me to say. I think the main difficulties, the one I've told you before, that maybe sometimes they are doing things and they are -- You ask me, are they joining groups and persons? Maybe inside the organization they don't do that. They know that we are [responsible for] geographical information system and maybe they do some kind of work for another administrative unit, maybe if they make a call, we will be there. Well, it's the only [negative] thing I can tell.

Interviewer

On that note, <Esri distributor in country B> especially, the mode of engagement, is it a dedicated personal assistance, meaning that they have like an account manager with the <redacted> or anybody can answer questions from <redacted>?

Interviewee

We have an account manager and our account manager is only for <redacted>. It deals with <redacted> and maybe some other administration, but in the whole <country B>, they only focus on

<redacted>. And the technical staff, depending on the problem you have, you are directed to one and another person. We have good relationship with every one of them. I don't know how many people do they have in <Esri distributor in country B>, but I think we know everybody there.

Interviewer

That's very good.

So my last question to you, do you have any suggestions of how Esri can improve the way that they do things or their business models. Perhaps in an ideal world, how would Esri business model or way of doing things could be?

Interviewee

That's a hard question, I'm not gonna answer your question. But the main feeling with Esri is that we are running after them. As they are developing new versions of software and we never can get to reach them.

Interviewer

So those are my questions.