HEALTHCARE DATA GOVERNANCE

Lucia Sinapi-Thomas, Executive Director of Capgemini Ventures

So data is central. However, not all innovation is only about data. With Mehdi, we have a very good example of a breakthrough solution that can save lives. Please tell us more about EchOpen.

Mehndi Benchoufi, Co-Founder and Chief Executive Officer of EchOpen

I would just like to spend a minute on what my colleagues have just said, which is really interesting. I totally agree and I believe the view is shared here about the extent to which data is about sovereignty and from a health space, how much civil society has to be engaged in these topics. Last year we had a huge initiative, which was really good to get a future health data hub, which is a way to centralize health data. We were very close to hosting the data on a Microsoft Cloud, which meant that civil society protested and thankfully the government has stepped back, which is a good thing. Sovereignty is a very sensitive subject and civil society can be amazing when it is engaged and part of our history.

What we are doing is EchOpen, which is basically a handheld ultrasound device that can be connected to any kind of smartphone. The idea is to make what we call orientation diagnoses, which can be used by any medical doctor to answer basic questions for any kind of patient, anywhere in the world. The two questions are: What organs are imaged? Is the condition serious or not? It brings doctors the ability to see inside the body, which is really critical for answering those two questions.

It started out from my personal experience as a young resident when I had to deal with two patients who were dying, and their condition was such that it was very difficult to get them to a device. At that time, I had had a random idea of a connected handheld device that could take advantage of the computing power of smartphone. I am not a manufacturer so I had the idea and then went into the open-source space to get comments, and maybe I will elaborate on this. A few of us started to say we should do it and make it accessible, that is really cheap so that it can be widely distributed. What is at stake with this kind of technology is very important and there is an intense competitive landscape mainly led by the US and China. This kind of technology is really the stethoscope of the 21st century, so it is really critical.

We started with a community five years ago and the community kept growing to around 1,000 people supporting or contributing to the project. With the help of the community, we have made and industrialized the device and we are now at the final step waiting for the CE mark. I think it is interesting how open innovation can flow, like Wikipedia adapted to the hardware space.

Lucia Sinapi-Thomas

Especially in the health space, which we cannot say is the most advanced adopter of open innovation. I must say that Capgemini has supported the industrialization step because moving from concept to industrializing is a critical journey. You are about to launch your product soon. What importance does data collection have for your device?

Mehdi Benchoufi

The data is critical because it brings in AI which brings a more powerful tool to make diagnoses and empower people and maybe one day everybody will be using ultrasound because it is non-invasive and safe. I know that there are some startups in Israel going in this direction. Definitely data is very important. When it comes to our situation, I think that the health space has giants of data, which are the hospitals. The GAFAs are the giants of overall data but for the health space hospitals really have something to say. We also have something special with this community and we brought a startup out of it and in the startup we have the APHP, which is the *Assistance Public des Hopitaux de Paris*, which is actually the largest hospital group in Europe and one of the largest in the world. They had a lot of data flowing and we are about to build up an ecosystem where the data entering the hospital can be brought to the ultrasound space and we can use it to build powerful algorithms. I think this is a good example of how public and private sectors can work together.

Lucia Sinapi-Thomas

Absolutely. It seems that there is now a convergence on the fact that health data is sensitive data across the globe. Clément, you just published a position paper with Ifri on healthcare data governance. Would you tell us some more about that?

Clément Tonon, Member of the French Council of State

One of the main takeaways of the study is that the pandemic has revealed the strategic importance for states of understanding and controlling health data in facing a major public health crisis. The fact is, we were not ready to face this crisis and the main lesson is that we have to move towards a data driven model to manage public health crises. There was no interoperability between European states and even within European countries, Germany and France included, and that is a critical point. It was true in Europe and also in China and the US, so no one was actually ready.

The other key takeaway from the study is security. During the Covid-19 crisis, cyberattacks on healthcare facilities and hospitals have intensified and became massive. With the digitization of healthcare, we may face a real digital Pearl Harbor in the years to come and that means with casualties in the real world. I think it happened with a hospital in Hamburg, Germany, last year, where a woman died after a cyberattack, so it is not science fiction, it is happening. The International Committee of the Red Cross launched a call to governments to regulate and prevent cyberattacks on healthcare facilities, so it is a critical issue.

The last key takeaway from the study, even though it may be too early to say, is that the Covid-19 crisis could have been a catalyst for a convergence between global data regulation models toward the EU's GDPR standards. For example, China enacted a comprehensive data

protection law a couple of weeks ago, which is a major step forward. In the US, you have specific regulations for health, financial, and other data. Joe Biden is very interested in the subject of heath data because he gave a big speech about it three years ago and he knows the topic very well. He may face pressure from the Democratic party and the left of the party to enact a comprehensive data protection law. There may also be pressure from his European allies because, you may remember, the Privacy Shield was the framework for the data exchange between the US and Europe and it was cancelled by the EU Court of Justice. Data protection and health data protection have become a topic for transatlantic relations.

Lucia Sinapi-Thomas

That is definitely the core of many hot topics. At the start I mentioned that innovation and startups in particular were catching the attention of governments. As startuppers, what would you say are the challenges and opportunities you see, particularly in GovTech?

Mehdi Benchoufi

I am not a regular startupper since when I started the project it was not about building a startup; I wanted to build a device and take advantage of the ecosystem. What I can advocate is how interesting it is that you can create an innovative space where parts of the system can interact. You have public institutions, academic labs with in-depth knowledge of technologies, and obviously you have companies like Capgemini and the Sanofi Group who helped us, and other big industries that helped mature the product. There is this really fertile and engaged civil society where people are very dedicated to what they do and have amazing energy. I think that this is the third space where you can bring an amazing value that can be converted into a company and in the end, it becomes a startup. However, I think we should be really aware of how people want to contribute and, beyond our special case, it is about the comments. We release a lot of technology on open-source and the idea is not to make that technology the property of a company, government, etc. The idea is to make these technology bricks available to anybody and they can build lectures for universities or startups out of it. Maybe from a more political standpoint, I think a lot of countries are experiencing the same thing, where they have all these micro communities advocating for themselves. When you think about the common ground for everyone, in this kind of innovative space you can have an idea that we are all engaged as citizens on special topics, but we can also bring together comments. For me, that is a key for the future.

Lucia Sinapi-Thomas

A collective approach to knowledge and knowledge sharing.

Faruk Tuncer, Co-Founder and Chief Executive Officer of Polyteia

Maybe I can give a core governance perspective on that point. Looking at the tech markets, and comparing it to fintech and maybe e-commerce, which was the beginning of all of this, we lost almost all the battles. The monopolies are somewhere else, they are in China or the US. I think that government technology is somewhere the battle is not yet over and Europe's governments are very rich and very extensive, and they provide a lot of services. If you manage to provide good solutions there and also scale them across Europe, the bottom line there is that it is a chance to save our sovereignty. You talked about Azure and the German

government postponed the decision to update that from legislative period to period because no one wants to face that decision, but it will have to be made and it is becoming urgent. The bottom line say for digital sovereignty in the best case is to export this to other countries with privacy by design that we can include in our products. To make that happen, first we have to stop saying French cities, French products, German cities, German products, Spanish cities, etc., because we need this large European market. For that we need data sharing standards, VCs that understand this and governments that actually see the benefit for us of European products, but also in startups in general. Of course, there is good use of big companies such as security and you can blame them if something fails. With startups you do not know if they will exist in three years and you cannot rely on the contract, but we need to be a bit bolder with the challenge we are facing and embrace it and then maybe we can win this challenge.

Lucia Sinapi-Thomas

You are raising the idea of scale and we can see that American startups benefit from the scale of the continent, from the depth of their industry and the sophistication of the network starting with business angels all the way to private equity. Our experience with our large clients when it comes to B2B solutions addressing the Tier 1 corporate market, is that they have embraced innovation for years now. They are now looking forward to adoption at scale and that means not only the plug-and-play SaaS solutions but often the downside effect in terms of how to interface that and rationalize their legacy systems, the impact on their processors and their organization, which also covers aspects of governance. That is the entire value chain of the way they work. Capgemini and its peers have a role to play in helping their large clients to select and adopt startup solutions at-scale. If we want our champions of tomorrow to also emerge from European and from Asia, we need this to be rooted in the economic environment and corporates absolutely have a role to play. Thank you for your insight because this is interesting.