

# ARTHUR STRIL

Co-founder of Zinc VC

## Patrick NICOLET

We stay in the healthcare industry and we move to Arthur, who has an ambition that he will share with us.

## Arthur STRIL

Thank you Patrick. Firstly, allow me to join my fellow panellists in thanking Thierry for giving us the opportunity to express ourselves at the World Policy Conference, and thanking Patrick for facilitating this discussion. I have a very ambitious title, I am aware, the future of healthcare and how to get there, in eight minutes, so please bear with me.

I think the most fascinating thing about healthcare is that it impacts all of us, from the day we are born until our last day. It is a crucial part of the interaction with our loved ones, yet its basic principles have not changed for centuries. In the Middle Ages, a knowledgeable doctor, possibly assisted by a nurse, would try to solve one narrow issue of a helpless patient. Of course, the tools and remedies have changed, but the basic principles and the way we approach healthcare today are still the same. What I am trying to convey to you today is that we are on the cusp of a healthcare revolution and that there is truly a time, which is now, where healthcare is going to profoundly change, especially in the way it is delivered. I am going to give you four main items for which I think healthcare is going to change. Healthcare is going to be highly personalised, healthcare is going to be unified, it is going to be preventive, and it is going to be embedded. Of course, this is an optimistic scenario and it carries many risks, but I am going to go into those topics and provide you with examples of startups and companies that did not exist five or ten years ago, and that are trying to go in this direction.

Thinking about personalisation: today, drugs and treatments are rarely differentiated, yet we know every single human being is unique. There is the development of autologous therapies, which is a very fancy word to say 'from the self' and you have companies like Novartis and Kite Pharma that just received FDA approval for therapies that reprogram your own immune system to find cancer cells. We are talking about your own immune system, and using its power so that you can treat the tumours in your body yourself. Of course, many of you have heard about genomics, and companies like 23andMe are trying to democratise genomics. The way it works is they send you a little tube, you spit in it, you send it in the post, and a week later, they give you a full detailed genomic analysis of your ancestry and what healthcare condition you may have, and this is only for a couple of hundred dollars. This is extremely impressive. Looking at the Quantified Self and all the wearables you have, like Fitbit and all the things that measure anything from your heart rate to the number of steps you take, this is truly happening now and allowing each of us to start measuring what we do in order to better act on it.

Looking at how healthcare will be unified, today healthcare is still very fragmented; you have cardiologists, orthopaedic surgeons, you have people trying to treat each and every single organ, yet we know many diseases, such as diabetes or cancer, are whole, and you need a truly holistic approach. This goes beyond the body, it also goes to physical and mental. Body and mind are truly integrated, and a number of startups are starting to tackle mental health, examples of which include Headspace, which is a meditation app that, from your smartphone, allows you to meditate 5-10 minutes a day, which has been scientifically proven to improve both your mental, obviously, but also your physical health. Interoperability is going to be crucial and companies like Flatiron are developing electronic health records for cancer patients that allow tracking of all individual healthcare steps that a cancer patient is undergoing, all the interaction it has with the different doctors, in order to provide the next doctor a truly unified vision of the patient's state. Of course, there is interdisciplinarity, and we have already talked a lot about it on this panel, if you think, for instance, about this amazing lens that Google and Novartis have developed, which has a blood glucose monitor on the cusp of the lens, so just by wearing this contact lens, you get your blood sugar measured in real time

through your teardrops, and this is something that has been done by sharing the expertise of tech people, designers and doctors.

Thinking about how healthcare is going to be more preventive. In order to have true prevention, which is an oft-quoted word but still not very effective now, you need three elements; you need awareness, so you need to know which diseases exist and what you can do about it. Social media are playing an increasing role in addressing millions of people about serious health issues and you can see, for example, a couple of weeks ago, there was an Instagram campaign about the risks and dangers of mental health, and it reached many people, especially young people by talking their language. Once you have awareness, you need access, so what if you do not have an amazing hospital or doctor next door? Again, digital companies like Babylon are trying to bring the doctor to your house and they offer a service that allows you to connect with a GP within minutes. Once you have access, you also need behaviour change, and this is probably the toughest. We all know we need to exercise, we all know we need to eat better, yet we fail at doing it most of the time. Some companies are looking at gamification and fun ways to introduce behavioural changes, so I encourage you to try “Zombies, Run!”, which allows you to run every day in the park, by making you believe that you are followed by zombies and you have to run as fast as possible. This has been proven very helpful in making some people exercise, far more than gyms or other things.

Finally, healthcare is going to be embedded. Healthcare is going to be embedded within your home and there are already home hubs like Amazon Echo, which is built on its AI platform, Alexa, and provides basic healthcare insights within the comfort of your home. In the workplace, companies like Limeade are helping companies engage with the wellbeing of their employees in a fun and social way. In your environment, thinking about physical exercise, you know if you want to bike or walk to work, for instance, for your physical health, then it may do much more harm than good if you are in a very polluted area. Companies like Plume Labs are trying to have small sensors measuring air quality so they can provide you with the best way to walk or to bike to work, so that you do not harm yourself by doing this physical exercise in your daily commute.

How to get there, and I am just going to give some brief lessons from Zinc, the incubator I have just joined. It is an incubator based in London, which aims at building new tech companies to solve the developed world's toughest social issues. Our first mission is to improve women and girls' emotional and mental health, which is a very crucial topic, for which awareness has been raised but for which, still, many solutions are lacking. What makes it efficient in terms of innovation? We have a very diverse crowd, we have 50 people from extremely diverse backgrounds: doctors, tech people, designers, business people, and policy makers, and we are put in a bag and we are trying to shake this bag, hoping that innovative solutions are going to come from this cross-fertilisation of different people. It is mission-led, so we are not just innovating for fun or because entrepreneurship is fancy, we are innovating to actually solve social issues, and looking at ones that have been massively underserved, like mental health. It is time-bound, we have six months to find ideas of businesses, otherwise we are going to be kicked out, which puts a bit of pressure, but it is also efficient. It is supportive but not prescriptive, so we are supported by the incubator, but they do not tell us anything about what we should do, where we should look, or the solutions we should get at, so we may end up building the next “Zombies, Run!”. Finally, it is user-centric and we have talked about the importance of the patient, and I just want to end on this final note, which for me is the most crucial, it is extremely important to live and breathe like your user, or like the patient whose issue you are trying to solve. You need to make sure that what you are building is truly adding value to them by ideally being as close as possible to them and living their life. It is the only solution to make sure that what you do is going to have a truly profound impact. Thank you.

### **Patrick NICOLET**

Arthur, thank you for the very passionate speech and funny examples. I think we start to see a convergence because you are telling us, you think big but you execute in small, rapid, iterative steps and initiatives and we also see another pattern that we have not seen before, which is that a lot of these solutions are available through micro-ecosystems. This brings us back to Natalie's earlier point, it is very easy to build today, I think it is very important for developing countries to build micro-ecosystems that can serve a purpose, as such, because the technology is available and then you aggregate this component, it is interlinked, and it works. That was your point about being relevant and user-centric.



In terms of policy, I think it is a challenge because we tend to look at an horizon that is more mid to long-term, establish institutions and, from a governance standpoint, it becomes difficult to cope with this tried and tested approach, although we heard at lunch that COP 21, 2, 3, 4, 5 is accelerating the cycle and possibly embarking on this type of approach on a very large scale. I think here that the time horizon is a challenge.