

## PANELISTS DEBATE 2

### **Patrick NICOLET, Capgemini's Group Chief Technology Officer**

Thank you, Arthur, for your presentation grounded on very practical examples and what you or we have been confronted with in history, which was a good balance with Daniel's introduction which was more about the framework. To open the discussion, I heard three levels of intervention that I will try to put into some kind of hierarchy. Listening to you Daniel, I think there is an element that is missing, as we heard from Jacques and Alexandra before, which is what is the future that we want? You may react to this but probably for me I would define technology as what helps you identify the design of principle. For example, the smart city project in Japan, which starts with what happiness is in this mega-concentrated environment. Here it would be the same: what is the future that we want? The answer will be different from region to region and community to community. I would like to hear about this.

On ethics on the fly, we already have this concept and you mentioned it for regulation. The problem you have is how you bring all the participants at the same speed. The regulator frequently uses the tools of the past to assess a new situation because the legal process makes it complex for everyone to be on the fly at the same time. What is your view on this?

The last point is about the global governance but that relates to what we heard before on the need for debate, to educate and have some form of transparency so that society itself can really appropriate a topic and define the future. Maybe, Daniel you can say something about ethics on the fly and everybody onboard.

### **Daniel ANDLER, Emeritus Professor at Sorbonne University**

Would you like me to try to respond? These are both very difficult questions, but I can very quickly comment. I think the first question is very interesting, 'What is the future that we want?' That is definitely a question that has to be kept in mind by communities that are in the process of trying to make decisions and setup systems, etc. You gave a very interesting response yourself in asking the question and saying that it will depend on the community and the society. What we really want is what mathematicians call an axiom scheme and have an axiom. You can have an axiom scheme that is a way of thinking and a conceptual framework in which you can go from a certain specific, more or less specific answer to what is the future that we want. Maybe it is going to be more collective in Asian societies and more individualistic in Western societies, just schematics. You go from one view on the future you want to a way of reflecting on what place you are going to leave to innovation and technology. That is going to change from community to community, but we can make progress on the conceptual structure of the discussion and democratic consultation.

I think when it comes to ethics on the fly, you said it. Again, I just do not know how to do it. We clearly need to put much more thought and much more time into trying to think ahead of time how that would work. In fact, Arthur said that towards his conclusion. We need to take the time, energy, and intelligence to think of consulting/reflection structures at the various levels and various timescales. I know what I am saying is extremely generic and not a recipe at all.

### **Patrick NICOLET**

No, there is no recipe. Are there any other comments on this?

### **Arthur STRIL, Chief Business Officer of Collectis**

If I can just add, I think you have raised a very important question which is how we ensure that people are brought up to speed and that there is not a lag between regulators and policymakers and the speed of technology. That is something you highlighted with pharmaceutical regulation in particular. I think we will increasingly need more translators, that is people with one foot in innovation and technology, but also one foot in policymaking and regulation. They are needed to dredge the raw data, the raw information coming from this flurry of scientific innovation, for actionable recommendations and thought processes for policymakers. You will need people to play this role, but you will also need fora and again, I think that the WPC-Health is a fantastic example of this, where you can have debates with all the key decisionmakers being put on a common ground before moving on to any kind of [inaudible].

**Patrick NICOLET**

I think, definitely and it is interesting to relate this to a point made in the previous debate about the problem of trust. Are there trustworthy translators in today's society, or at least that would be recognized as such. I think it is part of the debate.