Thank you for the invitation to join you in this remarkable initiative. I regret that I cannot be there in person and I send you sincerest regard.

I would start with some brief remarks on the concept of Big Data and its inevitable connection with the activities of the independent authority that I represent. Big Data concept, itself, is honestly hard to be fully grasp. There is no universal definition of Big Data. It is well known, in fact, that the topic we are discussing about involves different aspects of our live.

First, it is a technological concept, essentially concerning an indefinite storing of information, and the largest scale of data processing we have ever deal with. Nowadays, data can be stored, searched and combined with an impressive speed, that scientists were forced to create new terms to portray the flood of the data (yottabyte, zettabyte, etc.).

Secondly, the concept of Big Data is strictly connected with the Digital Market. Not surprisingly Big Data has become central to the EU’s competitiveness and a “catalyst for economic growth, innovation and digitisation across all economic sectors [...] and for society as a whole”¹.

Several of biggest web-based companies in the world, owe their success to the quantity and quality of the data under their control. The extraction of value from these data constitutes a business model and a factor of competition.

In fact, it is now common knowledge that some data, even personal data, are currency, with all the serious consequences that this entails: consumers’ imbalance in the digital economy; lack of consumers’ ability to make informed choice; lack of consumers’ ability to report discriminatory practices occurring in digital markets, and so on.

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¹ The EU’s 2015 Digital Single Market Strategy.
Moreover, Big Data has become a way to define us. Someone said that we are nothing more than a data assemblage. Governments and businesses believe that Big Data, independently on its qualification as personal, is an effective way to understand, predict and determine human behaviour.

Then, Big Data concerns also Ethics and Fundamental Rights. A huge number of rights in the Charter of Fundamental Rights of the EU is affected by Big Data, not only the Article 8 right to data protection.

For these reasons and others that I avoid listing in order to not cause drowsiness, Big Data constitute one of the biggest challenge for data protection regulators. All the core concepts of data protection regulation (consent, choice, notice, etc.) turn out to be blurred in front of the impressive data flows that arise every day. Blurred because people, and some operators as well, believe that these principles are not still able to exercise a meaningful oversight of hundreds of trillions data flowing every day.

Therefore, even if privacy remains an universal value, privacy’s principles are being shaken from this inexorable technological progress. But fortunately, as you well know, we have now an innovative law that looks to the future: the GDPR.

Under the Regulation, stringent rules will govern the collection and the use of personal data. And the same will happen for Big Data, with some obvious specifications. In fact, Big Data analytics are often a threat to privacy and data protection. But, differently from others, it is a “shadow threat”. And this because of two reasons: first, because Big Data analysis affect us in unexpected and baffling ways, because of their attitude to be unknown for the most people; secondly because Big Data analytics does not always involve personal data, but, when it does, it should comply with the rules and principles of data protection.

Hence, through a series of Opinions and other initiatives, the EDPS has been developing the concept of Big Data Protection. It is a great challenge, because Big Data Regulation has to balance different and equally important interests. On one hand, Big Data is a crucial subject for the EU’s economic competitiveness; on the other hand, while many benefits flow from these types of processing operations, Big Data might affect legal interests and other significant interests of the data subject.

One of the most relevant application of Big Data, in terms of Privacy and data protection, is the automated processing of the data aimed to the automated decision-making and profiling. In particular, the concept of profiling is a very clear example because it fully evokes the possible threats to individual positions that the generalized and widespread data aggregation can create.
Profiling, in fact, consists of any form of automated processing of personal data evaluating the personal aspects relating to a natural person, used then in many different businesses’ activities.

As it is evident, it may cause several risks, such as informational imbalance, discriminatory outcomes and lack of transparency.

This is the reason why, according to the GDPR, decision-making based on such processing, including profiling, should be allowed only where expressly authorized by Union or Member State law to which the controller is subject or when the data subject has given his or her explicit consent.

In any case, such processing should be subject to suitable safeguards: specific information to the data subject and the right to obtain human intervention; express his or her point of view; obtain an explanation of the decision reached after such assessment and to challenge the decision.

In two words, the process must be transparent and fair.

However, I believe that the fairness and transparency of these kind of proceedings is not enough to protect effectively citizens from threats such as automated profiling.

We need a cultural shift.

In fact, in order to achieve a fair balance between benefits coming from Big Data and the protection of the fundamental rights involved in it, everyone has to be more diligent in doing his homework... accountable, if you want to quote the GDPR.

Us, as independent regulators, because we have to interpret laws so that they are flexible enough to translate technological changes into standards in the future, and so that they are fairly rigid to be effectively applied in the present.

Businesses, because they will have to comply with stricter and more stringent provisions.

And finally, all the citizens, because they have to raise the level of awareness over the current technological revolution and its relations with their fundamental rights.

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Coming into conclusions...

As I said at the beginning of this intervention, Big Data is a very broad and opaque concept.

It has no territory and it embraces many different disciplines.

In particular, connections between Big Data, data protection, privacy law, competition law and consumer law are increasingly characterising the global policy making scenario.

Hence, there is an increasing need to cooperate, both at international and European level, in order to ensure individuals from the threats they will face.

That is why last year the EDPS have launched the Digital Clearing House, including willing enforcement agencies from the competition, consumer and data protection sectors worldwide.

Through cooperation and discussion, we want to build a safe space on the web in which you can benefit from the progress of technologies without undermining your right to privacy and freedom of expression.

We think that now, more than ever, it is time to take an ethical approach to technological progress, and therefore to Big Data.

We think that now, more than ever, it is time to stand up for our fundamental rights.

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Thank you for listening.

I hope it was useful.