

The Economics of the Cloud Market Workshop

Tuesday, June 25, 2024

Brussels

CONFERENCE VENUE

Brussels
Sparks Meeting
Rue Ravenstein 60

ORGANIZING COMMITTEE

Jacques CREMER (Toulouse School of Economics)
Gary BIGLAISER (UNC)
Alexandre DE CORNIERE (Toulouse School of Economics)
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School of
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The whole workshop will take place under Chatham House Rules: "participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed."

9:30 am – 10:00 am **Registration and Welcome**

10:00 am – 12:00 pm **Academic program** with presentations by academics of recent research

10:00 am – 10:40 am **Jonathan TIMMIS** (World Bank), Timothy DeStefano, Nick Johnstone, and Richard Kneller.

“Capital Incentives in the Age of Intangibles”

Discussant: Alessandro Fedele (Faculty of Economics and Management)

10:40 am – 11:20 am **Bruno CARBALLA SMICHOWSKI** (JRC)

“The value of cloud-to-cloud data flows in Europe”

Discussant: Fabrizio Ciotti (Université Catholique de Louvain)

11:20 am – 12:00 am **Sean ENNIS** (University of East Anglia), and Benjamin Evans

“Cloud Portability and Interoperability Under the EU Data Act: Dynamism versus Equivalence”

Discussant: Wynne Lam (University of Edinburgh Business School)

25 minutes for presentation, 5 minutes for discussant

12:00 pm – 1:00 pm **Lunch**

1:00 pm – 1:30 pm **Break**

1:30 pm – 1:50 pm **Introduction on the Economics of the cloud¹** by **Gary BIGLAISER** – (University of North Carolina and Toulouse School of Economics)

1:50 pm – 2:10 pm **Manuel MATEO GOYET** (DG CNECT.E.2, European Commission)
The Data Act and Cloud Computing

2:10 pm – 3:40 pm

ROUNDTABLE 1

Issues in the regulation and analysis of the cloud economy

Chair: Alexandre DE CORNIERE (Toulouse School of Economics)

Benjamin EVANS (University of East Anglia)

Femke NAGELHOUD (Autoriteit Consument & Markt)

Manuel MATEO GOYET (DG CNECT.E.2, European Commission)

Donald MEE (Amazon)

Laura-Lucia RICHTER (Google)

Elodie VANDENHENDE (Autorité de la Concurrence)

We will discuss the following questions, focusing both on the policy issues and on our understanding of the underlying economics:

- Why has the concentration of the cloud industry increased in recent years?
- What are the limits of interoperability in the cloud? Can third party service providers help with interoperability?

¹ A special thanks to Microsoft for its support to TSE's research program on the Economics of the Cloud.



- Switching costs are very high in the cloud. To what extent is that intrinsic to the industry and to what extent is that a consequence of the choices made by users and by cloud service providers?
- What role do egress fees play in the strategies of the cloud service providers?

3:30 pm – 4:10 pm **Break**

4:10 pm – 5:50 pm

ROUNDTABLE 2

The cloud and AI

Chair: Jacques CREMER (Toulouse School of Economics)

Alexandre DE STREEL (Université de Namur)

Scott FITZGERALD (Amazon)

Carel MASKE (Microsoft)

Marion PANFILI (ARCEP)

There is a profound link between AI and the cloud. In particular, the massive computing power needed for the development of the cloud creates both deep analytical and important policy issues, which we feel have not been prevalent enough in the current policy debates. Two examples:

- All the Cloud Service Providers have important investments in some AI models. To foster a healthy competition in the AI market, it is important that all developers of AI models have access to quality computing power. We will discuss the technical and contractual difficulties associated with this objective and what competition and regulatory authorities can do to foster this aim.
- A number of observers have discussed the variety of business models of the most prominent contributors to AI (see for instance <https://stratechery.com/2024/ai-integration-and-modularization/>). We discuss whether this is a fair characterization of the current state of the market; how it may evolve; what this analysis implies for regulators and competition authorities.
- There is limited access to specialized microprocessors, and Nvidia, for instance, distributes chips according to its strategic needs. This can be interpreted as a strategy to foster a diversified and innovative ecosystem of users. It can also be interpreted as an anticompetitive strategy. We will discuss the tools that economics has to analyze these strategies and to distinguish between them.

The round table will focus on the ways in which we understand the challenges of the infrastructure of AI for regulators and academics.

6:00 pm – 7:00 pm **Afterwork**