

Data, algorithms, and EU competition law

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DG COMP

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These are personal views. The views expressed here are not necessarily the views of the European Commission or of the Directorate-General for Competition

3 perspectives on data

- Data as an output
- Data as an input/asset
- Data protection as quality; data as a currency

3 perspectives on data

- Data as an output → as any other product
- Data as an input/asset → big data accumulation
- Data protection as quality; data as a currency
→ data protection concerns

Addressing data protection, as an element of quality, through competition law

- Article 101
- Article 102
- Mergers
- Efficiencies?

Addressing data accumulation concerns through competition law

- Article 101
 - Horizontal (e.g. data pooling)
 - Vertical (e.g. data exclusivity)
- Article 102
- Mergers
- Efficiencies?

Data accumulation concerns under Article 102 & merger control

When is there a "data advantage"?

1. Is data a key element of the success of the product?
2. Is it about the data or the ability to draw insights from data?
3. Is the data replicable or available from other sources?
4. Does it experience decreasing returns?
5. How quickly does the data become outdated?

Data accumulation concerns:
a very polarised debate. Some
selected overly broad statements

- "Data is everywhere"
- "Data-driven market power is only transitory"
- "It's not about the data, it's about the algorithm"

Data versus algorithms

- Andrew Ng: "Data is the defensible barrier, not algorithms", in NYT, 8 January 2017
- Manuel Ebert, "AI's Big Trade Secret", Medium, 2016
- Boris Wertz, "Data, not algorithms, is key to machine learning success", Medium, 2016
- Alexander Wissner-Gross, "Datasets Over Algorithms", edge.org, 2016
- Matt Turck, "The Power of Data Network Effects", 2016
- Avigdor Gal, "It's a feature, not a bug: on learning algorithms and what they teach us", 2017

Forced data sharing under competition law

- Legal framework
 - *Magill* (1995)
 - *Bronner* (1998)
 - *IMS* (2004)
 - *Microsoft* (2007)
- Some recent national competition cases
 - *Engie* (France, 2014 (interim measures), 2017)
 - *Loterie Nationale* (Belgium, 2015)
 - UK CMA Energy Market Investigation (2016)

Forced data sharing in EU legislation

- For competitors
 - Trading data (MIFID2 Directive)
 - Web banking login data (PSD2 Directive)
 - Car maintenance data (Reg 715/2007 etc)
 - Interoperability information (Software Directive)
 - Chemical safety testing data (REACH Regulation)
 - Pharmaceutical testing data (medicines approval regulation)
- For consumers
 - Right to "data portability" (Article 20 GDPR)
 - Right of data "retrieval" (Article 13 of Draft Digital Content Directive)
 - Smart meter data (Energy Efficiency Directive)
 - Energy consumption data for industrial customers (Gas and Electricity Directives)
- For both competitors and consumers
 - Public Sector Information (PSI) directive (under revision)

EU competition law v. EU regulation

- Issue can be defined in workable & concise way
- Recurring issue
- Always or almost always bad

Algorithms in a horizontal context

- Engaging in **explicit collusion**
 - Colluding on pricing parameters
 - Hub and spoke
 - Outsourcing pricing to common agent
 - Signalling (e.g. through coded messages)
 - Autonomous explicit collusion?
- Engaging in **tacit collusion**
 - Relevant to merger control
 - Offence under Article 101?

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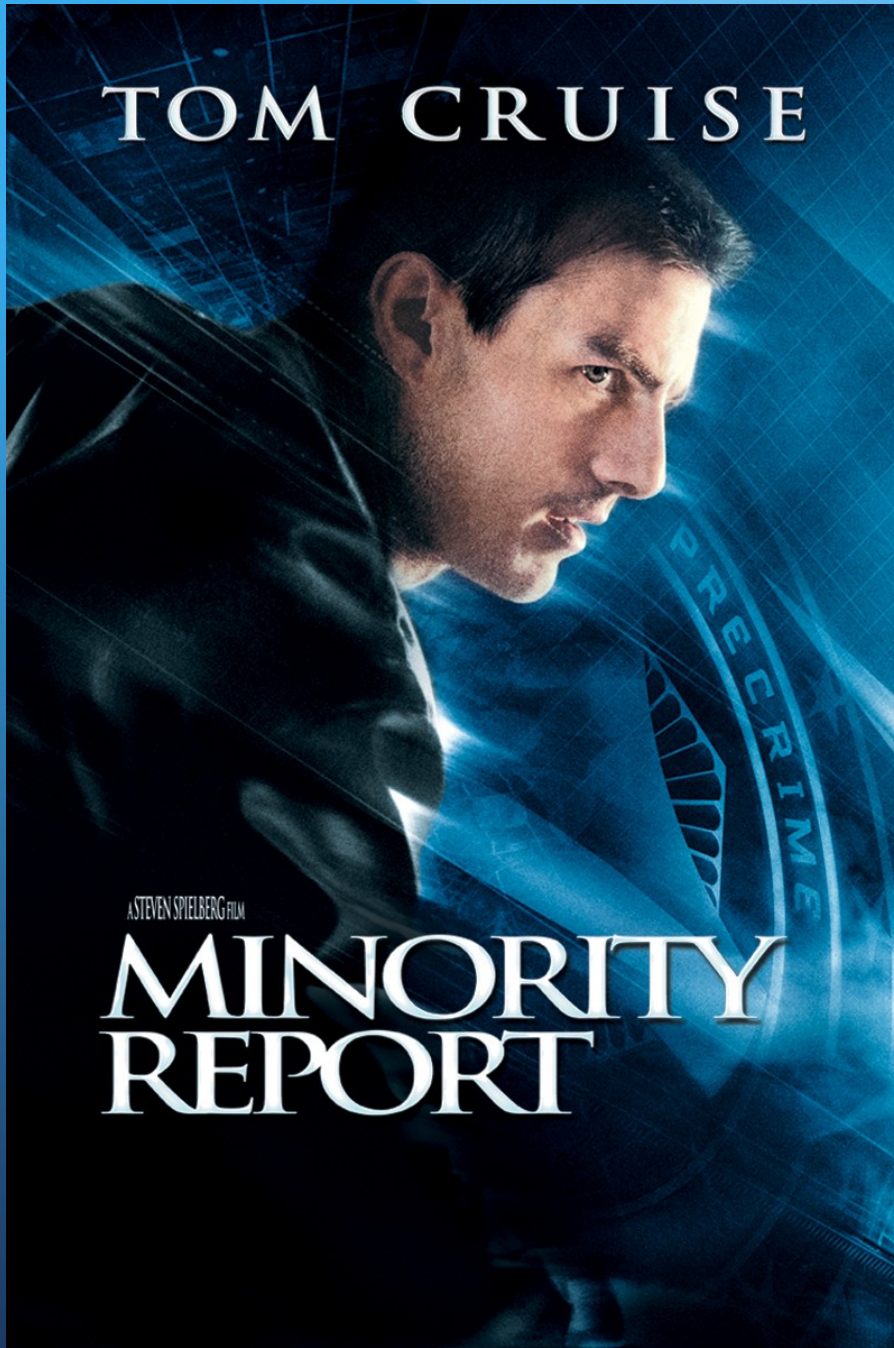
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STARRING HARRISON FORD

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EDWARD JAMES OLMOSS SCREENPLAY BY HAMPTON FANCHER AND DAVID PEOPLES

EXECUTIVE PRODUCERS BRIAN KELLY AND HAMPTON FANCHER VISUAL EFFECTS BY DOUGLAS TRUMBULL

ORIGINAL MUSIC COMPOSED BY VANGELIS PRODUCED BY MICHAEL DEELEY DIRECTED BY RIDLEY SCOTT

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He weighs 60 pounds.
He is 4 feet, 6 inches tall.
He has brown hair.

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But he is not.



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Music By JOHN WILLIAMS Film Editor MICHAEL KAHN, A.C.E. Production Designer RICK CARTER Director of Photography JANUSZ KAMINSKI, A.S.C.
Executive Producers JAN HARLAN WALTER F. PARKES Screenplay By STEVEN SPIELBERG Based on a Screen Story By IAN WATSON
Based on the Short Story By BRIAN ALDISS Produced By KATHLEEN KENNEDY STEVEN SPIELBERG BONNIE CURTIS

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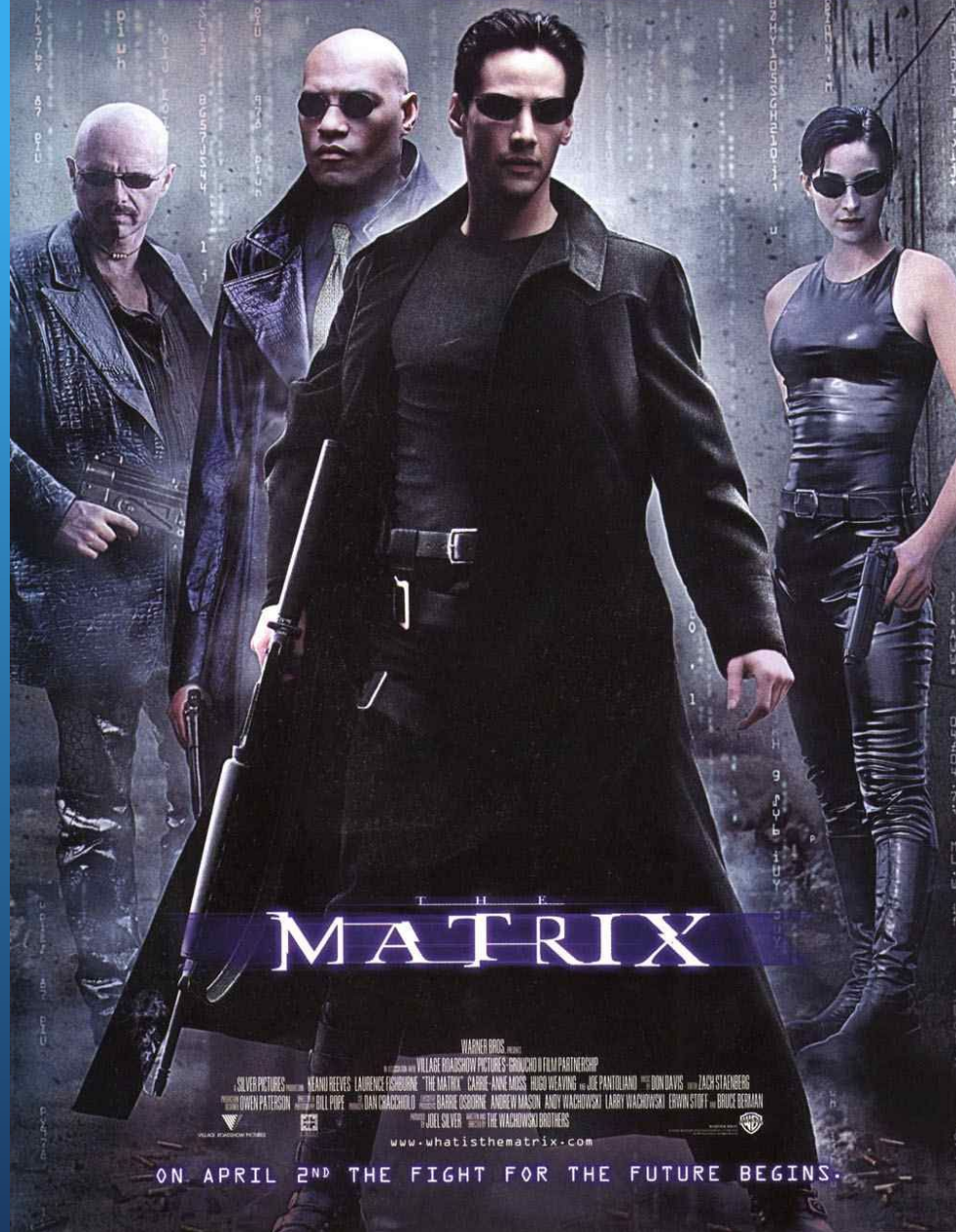
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Directed By STEVEN SPIELBERG
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Bibliographies

- On data: ssrn.com/paper=2845590
- On algorithms: ssrn.com/paper=2982397

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