Organisation for Economic Co-operation and Development

DAF/COMP/WP3/WD(2023)50

Unclassified English - Or. English

27 November 2023

DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS
COMPETITION COMMITTEE

Working Party No. 3 on Co-operation and Enforcement

Optimal Design, Organisation and Powers of Competition Authorities – Note by the European Union

4 December 2023

This document reproduces a written contribution from the European Union submitted for Item 2 of the 138th meeting of Working Party 3 on 4 December 2023.

More documents related to this discussion can be found at https://www.oecd.org/competition/optimal-design-organisation-and-powers-of-competition-authorities.htm.

Antonio CAPOBIANCO
Antonio.Capobianco@oecd.org, +(33-1) 45 24 98 08.

JT03532687

European Union

1. Introduction

1. The rapid pace of technological development requires competition enforcers to rethink and redesign their enforcement capabilities. This contribution outlines the steps undertaken by DG Competition to embrace **augmented investigations** methodologies to enhance its enforcement activities, both in terms of detection and ability to prosecute competition infringements.

2. Moving towards augmented investigations

2. Augmented investigations refer to the use of AI solutions to enhance the capabilities of human investigators. It involves leveraging advanced technologies and data analytics to strengthen traditional investigative methods.

3. However, the digital transformation of the competition enforcement extends beyond mere technological solutions and it results in a strategy-driven approach that necessitates: *i)* constantly aligning the digital tools with the investigative goals; *ii)* ensuring that the right mix of skills, technology and financial support is allocated and *iii)* continuously adapting investigative methods to emerging challenges and evolving opportunities.

4. One of the most striking benefits of augmented investigations lies in its ability to enhance the efficiency and efficacy of enforcement activities. In particular, detection and prosecution activities can significantly benefit from a range of techniques including data/text mining, web scraping/crawling, generative AI, pattern recognition, predictive analytics, cluster analysis and advanced data visualization.

5. Some of the notable area where augmented investigation methodologies demonstrate significant advantage include:

- investigative analysis;
- open source intelligence;
- market and technology monitoring;
- algorithmic/AI solutions auditing;
- digital forensic.

6. As the business models, digitalisation and move to the cloud computing evolve, competition Authorities need to adapt to the way investigated companies do business. Overall, this means exploring new ways to identify, preserve and extract the relevant evidence where it actually is (e.g. on the cloud), to make the most of the information collected (e.g. being able to deal with large volume submissions, or with massive datasets), to better understand and anticipate technological developments and to improve market monitoring capabilities for better detection. Competition Authorities should also make better use of AI tools to automate certain procedural investigation steps and to better structure and process the information they themselves produce.

7. In this context having the right mix of digital skills within Competition Authorities is crucial as it allows to effectively leverage these technological advancements.

8. Some of the key profiles that possess the relevant digital skills to perform augmented investigations include: data analysts, data engineers, AI Architects, intelligence analysts, digital investigator, IT security specialists and IT forensic experts.

9. Recruitment and retention represent critical aspects, as for many of these profiles enforcement agencies compete with the private sector. The European Commission can either organise specialised competitions to hire permanent staff with the right skills or it can resort to temporary recruitments. Retention can be facilitated by the ethical dimension associated with working for an enforcement agency (i.e. working for the public good). With work at competition agencies, experts get to upgrade their knowledge of public policy and the opportunity to work on many projects across sectors, companies or different types of competition concerns (e.g. abuse of dominant position, cartels, mergers or regulatory compliance with the Digital Markets Act).

10. At the same time the evolving technological landscape demands a recalibration of the skill sets of traditional investigators to properly navigate this paradigm shift. One of the challenges for competition authorities is to incorporate these new profiles into their organisation and ensure the most effective output for competition investigations. This is best achieved by also investing in professionals with hybrid skill sets encompassing expertise in intelligence and investigative activities, competition enforcement and a deep understanding of technological developments. By bringing together specialists and professionals with hybrid profiles, the integration of advance analytical techniques in the enforcement actions will substantially increase the likelihood of a successful outcome.

11. Finally, it should not be underestimated that moving towards augmented investigations requires cooperation and collaboration between technology offices in competition agencies, links with Academia as well as specific investments on IT infrastructure and software solutions.

3. DG Competition's digital investigation strategy

12. To make the most of technological advancements DG Competition has recently created the Chief Technology Officer (CTO) post. [1]

13. The CTO advises the Commissioner responsible for Competition and the Director-General on DG Competition's digital strategy. The CTO also guides and oversees all data-related and other digital projects, initiatives and work streams for DG Competition.

14. The integration of digital skills in DG Competition's organisational structure is encompassing both a centralisation and a decentralisations approach.

15. The current Data Analysis and Technology Unit (that reports to the CTO) has already a history dating back to 2016 when its precursor was created within the Cartel Directorate, bringing together data scientists, digital investigators, intelligence analysts, IT security and forensic IT experts. At that time, the focus was on ex-officio cartel detection but the vision was already clear: leveraging the power of technology by pooling together these specialised skills in a multidisciplinary environment.

16. Nowadays the Unit is a fully horizontal Unit, supporting the whole DG Competition across all instruments and at every stage of investigations. The Unit fosters a collaborative environment with interdisciplinary knowledge sharing and teamwork. The Unit supports investigations across instruments (antitrust, cartels, mergers, etc.).

[1] The process for recruiting the CTO is still ongoing.

17. At the moment, the mission of the Unit is to gather intelligence from publicly available web-sources, perform advanced digital investigation activities to detect and prosecute anticompetitive conduct and provide technology advice. The Unit also provides Forensic IT support to the Directorate General. The CTO unit works in close collaboration with many other departments in DG Competition, as well as other Directorates-General in the European Commission, other European Institutions and National Competition Authorities of Member States.

18. Over the past years, DG Competition has been – and still is – modernising its working methods to fit current and future enforcement needs. This included efforts to make its investigatory processes and other activities more efficient, by using digital tools in line with its Digital Strategy.

19. Finally, other Units including the DMA Units and the Chief Economist Team are benefitting from data scientist skills to perform their enforcement tasks.

20. The combination of these skills and methodologies has allowed DG COMP to enhance the overall effectiveness of enforcement actions.

4. Conclusion

21. Augmented investigations represent a promising frontier in enhancing competition enforcers' detection and prosecution capabilities. For example, Large Language Models and, more in general, generative AI models are already showing their potential in boosting streamline data analysis and crafting informative scenarios.

22. However, even if the integration of advance technology is already transforming our working methods, our organisational structure, our staff needs and our toolkit, it is key to acknowledge that this field is still a work in progress. Additional research, development and refinement is needed before setting on a consolidated approach. Additionally, it is crucial to continue following the technological advancements to ensure that our enforcement strategy in this area will remain adaptive and responsive.