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The use of expert knowledge in Commission's merger decisions concerning digital markets: Empirical insight and elaboration of a regulatory model

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Abstract

The goal of the proposed analysis is to identify the characteristics of the model of using expert knowledge when enforcing competition law in merger cases concerning digital markets by the European Commission (Commission). To achieve this goal, I examine the sources referenced in merger decisions, which types of sources of expert knowledge are used, how often, and the functions served by the identified types of sources of expert knowledge. These issues are scrutinised based on an analysis of references collected from 14 merger decisions.

The analysis of the decisions indicates that by far the most often used source of knowledge is the industry, followed by providers of commercial knowledge, and media. These sources are used mostly when describing the characteristics of the markets, particular elements of competition assessment or analysis of the relevant markets. Commercial knowledge providers are most often invoked for the purpose of presenting data concerning the analysed market. However, it must be noted that the importance of the analysed sources for the decisions grows also from the use of qualitative elements of the provided knowledge, e.g., explanation of certain phenomena, typologies or definitions.

On the basis of the analysis, I propose a model describing the characteristics of the use of expert knowledge in merger proceedings by the Commission. I argue that while in the domain of economics and competition law the Commission possesses internal meta-expertise, in the domain of digital markets the Commission is dependent on the specialist tacit knowledge provided by the industry and commercial knowledge providers.

Keywords:

Enforcement, competition law, Commission's decisions, digital markets, expertise

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I. Introduction

The goal of the proposed analysis is to identify the characteristics of the model of using expert knowledge when enforcing competition law in merger cases concerning digital markets by the European Commission (Commission). To achieve this goal, I examine sources referenced in merger decisions, what types of sources of expert knowledge are used, how often, and the functions served by the identified types of sources of expert knowledge. These issues are scrutinised based on an analysis of the references collected from 14 merger decisions.

On the basis of the collected material, I propose a model describing how expert knowledge is used in merger proceedings concerning digital markets. In Chapter 1, I introduce the theoretical framework used for this purpose. In Chapter 2, I characterise the sources and methods used for the empirical part of the analysis. Chapter 3 presents the results of this empirical analysis and Chapter 4 provides an elaboration of the model of using expert knowledge when enforcing competition law in merger cases developed on the basis of the analysed material. The final section concludes.

II. Chapter 1 Theoretical framework

II.1. Literature review

The role of experts in policy-making and the adoption of law has been subjected to a handful of studies.¹ For the EU, the examples include exploring who are the experts represented in expert groups,² and how they are selected.³ Some of the studies focus on particular types of experts, mostly economists and lawyers, e.g., the economists in European political integration⁴ or trans-national legal and economic experts for shaping the EU's competition policy.⁵

The approach adopted in this paper is not focused on an analysis of who are the individuals providing knowledge (e.g., whether they have completed economic or legal degrees). Instead, I focus on the sources used in the process of the enforcement of law, i.e. on expert knowledge (also referred to as 'expertise') in general, not on the individual experts themselves. In contrast to the approaches that focus on the use of expert knowledge by particular institutions, e.g., the Commission, or the flow of expert knowledge between various institutions, ⁶ my analysis adopts a broader perspective, demonstrating the involvement of diverse stakeholders and the expertise they contribute to the enforcement of law.

¹ On an attempt to summarise the literature on this topic, see Tannelie Blom, *Conceptualising the Role of Expertise in EU Policy-Making*, in Vigjilenca Abazi, Johan Adriaensen, Thomas Christiansen (eds), *The Contestation of Expertise in the European Union* (2021 London: Palgrave Macmillan) 21, 22, and Sandra Eckert, *Corporate Power and Regulation. Consumers and the Environment in the European Union* (2019 London: Palgrave Macmillan) 33–35.

² On expert groups in the EU, see Åse Gornitzka and Ulf Sverdrup (2008) Who Consults? The Configuration of Expert Groups in the European Union, *West European Politics* 31(4), 725; Åse Gornitzka and Ulf Sverdrup (2010) Access of Experts: Information and EU Decision-Making, *West European Politics* 34(1), 48; Julia Metz (2013) Expert groups in the European Union: A sui generis phenomenon?, *Policy and Society* 32(2), 267; Adam William Chalmers (2013) Getting a Seat at the Table: Capital, Capture and Expert Groups in the European Union, *West European Politics* 37(5), 976; John R Moodie, (2016) Resistant to Change? The European Commission and Expert Group Reform, *West European Politics* 39(2), 229; Eva Krick and Åse Gornitzka. (2020) Tracing Scientisation in the EU Commission's Expert Group System, *Innovation: The European Journal of Social Science Research* 1; Elissaveta Radulova, Johanna Breuer and Aneta Spendzharova, *The European Commission's Expert Groups: Adapting to the Contestation of Expertise*, in: Vigjilenca Abazi, Johan Adriaensen and Thomas Christiansen (eds.), *The Contestation of Expertise in the European Union* (2021 Palgrave Macmillan) 91.

³ E.g., Mark Field (2013) The anatomy of EU policy-making: Appointing the experts, *European Integration online Papers* (*EIoP*) 17, https://ideas.repec.org/a/erp/eiopxx/p0241.html accessed 23 July 2024.

⁴ See Christian Schmidt-Wellenburg (2017) Europeanisation, Stateness, and Professions: What Role Do Economic Expertise and Economic Experts Play in European Political Integration?, *European Journal of Cultural and Political Sociology* 4(4), 430.

⁵ See Angela Wigger (2009) The Political Role of Transnational Experts in Shaping EU Competition Policy: Towards A Pan-European System of Private Enforcement, *Legisprudence* 3(3), 251.

⁶ Guri Rosén and Silje H Tørnblad (2018) How Does Expert Knowledge Travel between EU Institutions? The Case of the Transatlantic Trade and Investment Partnership, *European Politics and Society* 20(1), 32.

Thus, the adopted perspective is aligned with the constructivist approach of science and technology studies (STS),⁷ which posits that expert knowledge is not an objective reality, but rather a socially constructed phenomenon through the means of the recognition by others as an expert.⁸ Such an approach takes into account the participation of various stakeholders in the use of expertise for the purpose of policy-making or the enforcement of these policies:

the core argument is that experts are mediators or brokers between the production of knowledge and its application to policy. This activity is not neutral or value-free but rather socially and politically embedded: experts provide advice to decision-makers based not only on scientific evidence but also on social and political judgement.⁹

The use of expertise generated by the industry (e.g., the parties and third parties participating in the proceedings), the institution enforcing law (e.g., the Commission and national competition authorities – NCAs), think-tanks (e.g., in the form of reports invoked by the parties or the Commission), media (e.g., as a source of knowledge on how technologies work) or various associations (e.g., focused on consumer protection), leads to the presence of different 'social and political judgements' linked to various 'social and political embedding' of these entities. It is crucial to acknowledge that when examining sources such as administrative decisions or case law, it is not the individuals who are referenced, but rather the institutions, for example, companies or research agencies, that are cited as the source of the expertise.¹⁰

Furthermore, the expertise provided by these diverse entities varies in terms of the type of knowledge it is intended to convey. De Bruycker identifies four distinct categories of information utilized in the policy-making process: technical, economic, legal, and political.¹¹ Given the nature of my analysis, I am focusing on knowledge that can be classified as technical, economic, and legal. I exclude political knowledge, as defined by De Bruycker (referring to political and societal support for a policy¹²), as it pertains to the policy adoption stage, not necessarily its legal enforcement.

However, this does not imply that the political dimension is absent from the framework I utilise. On the contrary, I adhere to the assertion that:

In the political domain, expert knowledge is not "out there", ready to be absorbed but is constructed to fit particular ends [...] The distinction between the Commission's activities which aim at knowledge gathering (including policy feedback and causal beliefs to generate innovative ideas) and efforts to use expert knowledge as a political asset to oppose competing interests and broker deals is often blurred in practice [...]¹³

The political character of the knowledge used for the enforcement of the law permeates various types of knowledge used for this purpose. Economic and technical knowledge can also have a political character, as 'the political use of expertise implies the procurement and creation of such information cannot be separated from its political uses.'¹⁴

⁷ For a classic work on this issue, see Sheila Jasanoff, *The Fifth Branch. Science Advisers as Policy Makers* (1990 Cambridge, Massachusetts: Harvard University Press). For an overview of various theoretical approaches to the question of expert knowledge, see Johan Christensen (2021) Expert knowledge and policymaking: a multi-disciplinary research agenda, *Policy & Politics* 49(3) 455, 458.

⁸ See Blom (n 1) 25.

⁹ Christensen (n 7) 459–460.

¹⁰ Which is in line with the process of 'institutionalisation' of knowledge mentioned in Claudio M Radaelli (1995) The role of knowledge in the policy process, *Journal of European Public Policy* 2(2), 159.

¹¹ See Iskander De Bruycker (2016) Pressure and Expertise: Explaining the Information Supply of Interest Groups in EU Legislative Lobbying, *JCMS: Journal of Common Market Studies*, 54, 599, 601.

¹² See ibid 601.

¹³ Kathrin Böhling (2009) *Symbolic knowledge at work: Comitology and learning from experts in European technology policy*, WZB Discussion Paper, No. SP IV 2009-301, Wissenschaftszentrum Berlin für Sozialforschung (WZB), Berlin, 4 https://www.econstor.eu/bitstream/10419/49747/1/614254671.pdf accessed 24 July 2024.

¹⁴ Vigjilenca Abazi, Johan Adriaensen, Thomas Christiansen, *Introduction: The Role of Scientific Expertise in EU Policy-Making: Ever Greater Contestation?*, in Vigjilenca Abazi, Johan Adriaensen, Thomas Christiansen (eds), *The Contestation of Expertise in the European Union* (2021 London, Palgrave Macmillan Ltd.) 1, 8. For a study illustrating

To sum up, the approach that I adopt – based on STS's, constructivist approach to this issue – focuses on broadly understood expert knowledge (or: expertise). For example, even though journalists may not explicitly be recognised as experts (e.g., they are not members of expert groups), in fact their articles are used as a source of expert knowledge. Such a constructivist approach allows for identification of who provides expertise, not only who is officially recognised as expert due to being a member of certain body. Next, I acknowledge that in the processes of enforcement of law various domains of expertise are present, namely technical (concerning particular field, e.g., digital markets), economic, and legal. In reality, these domains can be intertwined, e.g., data concerning digital markets are used for the purpose of economic analysis. As the political character of expertise – according to the adopted approach – permeates domains such as economic or technical expertise, it is not distinguished as a separate kind of expertise.

II.2. Various types of expertises: specialist expertises and meta-expertises

Another dimension in which the approach to expertise should be more nuanced – especially in the context of the enforcement of law – is the division between specialist expertise and meta-expertise, which describes the ability of assessing the expertise of others. Such a division was developed by Collins and Evans in their book *Rethinking Expertise*. ¹⁶ Their framework provides the foundation for the theoretical approach adopted in this paper.

The approach to expertise put forth by Collins and Evans identifies two distinct levels of expertise: specialist expertise and meta-expertise. The Each layer is comprised of five distinct types of expertise. Specialist expertise is further subdivided into two categories: ubiquitous tacit knowledge and specialist tacit knowledge. The category of ubiquitous tacit knowledge encompasses three sub-categories: beer-mat knowledge, which refers to the most fundamental understanding of a subject; popular understanding, which 'can be gained by gathering information about a scientific field from the mass media and popular books;' and primary source knowledge, which involves reading scientific articles on a specific topic.

For the purposes of the analysis below, however, the most important are contributory expertise and interactional expertise, comprising specialist tacit knowledge. Contributory expertise is the 'ability to perform a skilled practice' which 'enables those who have acquired it to *contribute* to the domain to which the expertise pertains: contributory experts have the ability to *do* things within the domain of expertise.' Interactional expertise, on the other hand, is 'is expertise in the *language* of a specialism in the absence of expertise in its *practice*.' It should be noted that while every case of possessing contributory expertise necessarily entails possession of interactional expertise, conversely, not every person who has interactional expertise has also contributory expertise in the given domain. To illustrate this point, one might consider a journalist writing on topics related to new technologies. While this individual may possess interactional expertise in this domain,

such a political use of technical expertise, see Christina Boswell (2008) The political functions of expert knowledge: knowledge and legitimation in European Union immigration policy, *Journal of European Public Policy* 15(4), 471.

¹⁵ For a similar catalogue of the types of expertise that are important in the EU's structures: 'In the case of European political integration, law, economics, and, to a lesser extent, political science have played a particular role.' – Schmidt-Wellenburg (n 4) 451. For a literature on legal experts and expertise in the EU law, see, e.g., Päivi Leino-Sandberg (2022) Enchantment and Critical Distance in EU Legal Scholarship: What Role for Institutional Lawyers?, *European Law Open* 1(2), 231; Emilia Korkea-aho and Päivi Leino-Sandberg (eds), *Law, Legal Expertise and EU Policy-Making* (2022) Cambridge: Cambridge University Press). For a study showing an eclectic character of expertise within the Commission, see Johan Christensen (2015) The Organization of Professional Expertise in the European Commission, *Politics and Governance* 3(1), 13.

¹⁶ Harry Collins and Robert Evans, *Rethinking Expertise* (2009 Chicago and London: The University of Chicago Press).

¹⁷ For another proposal of dividing expertise, which includes subject matter expertise, political expertise, procedural expertise, policy expertise, and expertise on experts, see Blom (n 1) 36.

¹⁸ Collins and Evans (n 16) 19.

¹⁹ Ibid 24. Contributory expertise may refer to the situations in which high level of automatism is present because social context is not crucial for performing a given action (mimeomorphic actions) and actions in which social context is crucial (polymorphic actions). As legal proceedings should be classified as polymorphic actions, I do not delve into this division, assuming that it is the category of the 'polymorphic' actions which is relevant for the purposes of this analysis (for more on this division, see ibid 27).

²⁰ Ibid 28.

they would not be considered to have contributory expertise, for example, in the capacity of being able to write softwar themselves.

The level of meta-expertises concerns 'expertises used to judge other expertises.' It is divided into two groups: external and internal. The external meta-expertises describes situations in which somebody is not an expert themselves, however, on the basis of, e.g., the credentials of the experts, they assess the reliability of the expertise provided by them. This assessment stems from ubiquitous discrimination, understood as the assessment of credibility based on social judgement, or from local discrimination, which grows from the ability to judge the experts and is 'a matter of choosing who to believe rather than what to believe.' Local discrimination, as noted by the authors, 'is [...] a way of reaching technical conclusions via nontechnical means. In general it is very unreliable because of the temptation to read too much into stereotypical appearances and stereotyped behavior.' 23

The other three types of meta-expertises, which 'do not depend on transmutation, as they are based on possessing one level or another of the expertise being judged,'²⁴ include technical connoisseurship, downward discrimination, and referred expertise. Technical connoisseurship taken place when the expert does not possess the skills to perform something themselves, they are however able to judge the works of others (e.g., art critic). In this case the judgement is performed on the basis of the experience. Downward discrimination is understood as, e.g., peer review process, when a person possessing contributory expertise judges another person with the same kind of expertise in the same field. Last but not least, referred expertise describes 'the use of an expertise learned in one domain within another domain,'²⁵ the example of which would be managers who switch from project to project, using their management expertise, independent on the topic of the project they manage. Here, the meta-criteria used for the assessment are based on the track record of the experts.

The utility of the model developed by Collins and Evans for examining the use of expert knowledge in legal proceedings can be exemplified by considering the extent to which courts should be permitted to evaluate evidence and the criteria they should employ when conducting such evaluations. ²⁶ In essence, this question concerns the meta-expertise held by courts. In this paper, I adopt the perspective that these kinds of issues should be scrutinised not only in regard to judicial review, but also in regard to the institutions responsible for issuing the decisions which are subsequently subjected to such a review.

However, in order to adapt this framework to the specificities of the use of expertise in legal proceedings, certain modifications must be made. The primary distinction is that I introduce the concept of domains in which expertise is provided (in the case under analysis: digital markets, economics, and law). Such an adjustment is necessary to capture the various topics on which expertise is required in the process of enforcing the law. These domains may differ between various areas of regulation. They always include legal knowledge. However, the necessity of other forms of expertise, such as technical or economic knowledge, depends on the specific area of regulation in question. While such expertise is necessary for the enforcement of competition law, it may not be crucial for other areas of regulation.

III. Chapter 2 Methods and sources

For the purpose of the analysis, it was necessary to select cases on which I would focus in order to capture the mechanisms concerning the use of expert knowledge when enforcing competition law in the cases concerning digital markets. I decided to focus on cases concerning GAFAM (*Google/Alphabet*, *Amazon*, *Facebook/Meta*, *Apple*, *Microsoft*) — often referred to also as big tech — due to two reasons. Firstly, the high level of concentration in the digital markets makes these companies the most significant players, and, secondly, due to their size there are often subjected to the scrutiny on the level of the EU in regard to the planned mergers. The

²¹ Ibid 11.

²² Ibid 139.

²³ Ibid 51.

²⁴ Ibid 15.

²⁵ Ibidem.

²⁶ For the article referring to Collins's and Evans's framework in regard to the judicial review, see Michał Krajewski (2023) On Crosswords and Jigsaw Puzzles: The Epistemic Limits of the EU Courts and a Board of Appeal in Handling Empirical Uncertainty, *European Law Open* 2(4), 784.

decisions which I was taking into consideration could not have been issued in the simplified procedure, as such decisions do not include elaborate reasoning.

Out of the cases concerning these companies, I chose the cases based on the coding of the economic activities which they concern, namely, *Information service activities* (J.63) and *Computer programming, consultancy and related activities* (J.62). Next, I was making individual choices concerning other decisions on GAFAM's mergers. As I wanted to focus on digital markets, I decided not to include cases which were largely focused on manufacturing equipment.²⁷ From the analysed set I excluded decisions concerning publishing computer games or audio-visual content. Finally, I included *Google/DoubleClick* decision, due to its close links with digital markets, despite of its classification under the code *Advertising* (J.73.1). As the result of this selection, I collected a set of 14 decisions which were issued between 2008 (*Google/DoubleClick*) and 2023 (*Google/Photomath*). I performed the searches and the collection of decisions in November 2023, which is the cut-off date for the decisions covered by this analysis.

Decision	Date	Decision: number	Code
Google/DoubleClick	3/11/2008	M.4731	J.73.1
Microsoft/Yahoo! Search Business (Yahoo)	2/18/2010	M.5727	J.63
Microsoft/Skype	10/7/2011	M.6281	J.63
Google/Motorola Mobility (Motorola)	13/2/2012	M.6381	J.61.20
Microsoft/Nokia	12/4/2013	M.7047	C.26.3
Facebook/WhatsApp	10/3/2014	M.7217	J.62
Sanofi/Google/JV	2/23/2016	M.7813	Q.86.9
Microsoft/LinkedIn	12/6/2016	M.8124	J.63
Shazam/Apple	9/6/2018	M.8788	J.63
Microsoft/GitHub	10/19/2018	M.8994	J.63 J.62
Google/Fitbit	12/17/2020	M.9660	J.63 J.62
Microsoft/Nuance	12/21/2021	M.10290	J.62
Meta (formerly Facebook) (Meta)/Kustomer	1/27/2022	M.10262	J.63
Google/Photomath	3/28/2023	M.10796	J.62

Table 1: Decisions selected for the analysis. With italics I highlighted the name of the company which I use as an abbreviated version for the references made to the decision.

For the selected cases I performed, firstly, an exercise of collecting the references made in these decisions in Excel sheets. I was using three sheets for each of the decisions: one for all the references to the knowledge provided by the third parties (e.g., the industry, commercial knowledge providers, media), one for references to knowledge provided by the notifying parties, and one for references made to Commission's decisions and other documents issued by the Commission. The function of these tables was to develop an overview of the sources used in the decisions and to provide basis for making – cautious and conservative – quantitative arguments.

²⁷ Thus, I do not include *Apple/Beats* and *FIH Mobile/Feature Phone Business of Microsoft Mobile*. However, I decided to include *Microsoft/Nokia* (C.26.3 – *Manufacture of communication equipment*), *Google/Motorola Mobility* (J.61.20 – *Wireless telecommunications activities*), and *Sanofi/Google/DMI JV* (various codes concerning health, e.g., Q.86.9 – *Other human health activities*), because of the fact that they include an analysis of the digital markets such as, e.g., operating systems.

The limitations concerning quantitative data result from, firstly, the redaction of the published versions of the decisions. Some of the references are replaced with, e.g., [...], thus, it is impossible to claim with certainty that the identified references are all of the references to expert knowledge that were made in the decisions. However, the frequency of the appearance of the references which were redacted is not very high. What is more problematic is the lack of information on the entities that provided answer to questionnaires, described only with broad categories (e.g., competitors or customers, advertisers). This constitutes a serious limitation for the exploration of the role played by the third parties in these proceedings. The second problem is the translation of the qualitative material to quantifiable categories, which necessitates making generalisations and simplifications. Thus, while the quantitative considerations below provide a general overview of the analysed material, the qualitative description of the selected examples follows, in order to ensure a complex understanding of the analysed phenomena.

IV. Chapter 3 Results

Overall, I collected 1494 references to expert knowledge. The vast majority of these references are references to knowledge collected by the Commission on the basis of questionnaires addressed to market participants, which I describe as 'industry' (1275 references). The second most often invoked type of sources are coming from 'commercial knowledge providers:' private companies such as International Data Corporation (IDC) or StatCounter, as well as business associations (Interactive Advertising Bureau – IAB) (155 references). Their reports, data, datasets, visualisations, definitions, or typologies appear in all but one of the analysed decisions. The third most frequently referenced source of knowledge were the media – mostly press articles (21 references). Finally, among the types of sources which appeared at least 10 times were also documents and decisions coming from competition authorities (15 references).

This shows that the industry is – by far – the most commonly used source of knowledge invoked in the decisions. Table 2 shows that it often serves as a source providing explanation and data on characteristics of the markets, competition assessment, and relevant markets. If 'industry' is excluded from the calculations, other types of sources are the most often used for the provision of data, often on market shares and market power, and other characteristics of the markets.

What does the source provide?	all references	without the industry
characteristics of the markets	1177	76
competition assessment	299	10
data	217	149
definition	6	5
future projections	42	12
market shares and power	48	40
news	14	6
relevant market	247	19
trends	4	2
typology	9	3

Table 2: Ten most often appearing types of knowledge that the identified sources provide: in the left column, for all of the sources, in the right one, taking into consideration references excluding industry sources. One reference was often marked as belonging to more than one category (e.g., data and market shares and power or characteristics of the markets). Bolded, in the right column, are the categories in which sources other than industry have a significant share (understood as over 1/3 of the identified references which provide this type of knowledge).

To illustrate what hides between these numbers, below I provide some examples of the use of expert knowledge by the Commission.²⁸ I focus on the knowledge of digital markets understood as, e.g., expertise on how particular technologies work, the popularity of certain services, or types of services or products operating in

²⁸ I do not analyse here the use of expert knowledge which is provided by the parties which the Commission invokes in the decisions.

digital markets. Additionally, I show the examples of the interplay between the expertise in the domain of economics and in the domain of digital markets.

Important source of knowledge used by the Commission is the expert knowledge generated by the Commission's activities from the third parties, mostly the industry's replies to questionnaires. They constitute a vast majority of the references identified in the decisions out of these that do not lead to the documents of the notifying parties or of the Commission. The knowledge coming from the industry is most often used to describe certain characteristics of the markets, provide arguments concerning competition assessment (e.g., used as indication on the possible behaviour of the notifying parties regarding the incentives for uncompetitive behaviour²⁹) or relevant markets, e.g., to identify or confirm how the relevant market should be defined or split. For example, in *Google/Fitbit* the answers are used to support arguments concerning the indication of the relevant market and its division in regard to digital health. Firstly, they are used to support the split of the market proposed by the Commission,³⁰ and, secondly, as a source indicating that 'while the proposed segmentation may be relevant today it is not clear to what extent it will remain the case in the future, '³¹ and that it may include more types of services and products, which not covered by the segmentation proposed by the Commission. It shows how the participatory knowledge of the parties (being also the representatives of the industry) is used as a specialist tacit knowledge by the Commission (and thus becomes interactional expertise).

The most often used type of secondary sources – understood as sources not generated by the industry due to the Commission's activities – is expertise of commercial knowledge providers. Using third-party data is of special importance for Commission's reasoning in regard to, e.g., the quantitative dimension of the characteristics of the analysed market³² or industry overview,³³ or for making arguments about market shares.³⁴ Out of the 86 identified situations in which the Commission uses this type of sources, in 56 the reference was made to data. Next to the reports by, e.g., Goldman Sachs, IDC, or IAB, invoked data is often based on online portals specializing in such services, e.g., Statista, datanyze.com to calculate markets shares of Google in ad tech services,³⁵ or data on the number of users who downloaded alternative apps providing communication solutions when Facebook and WhatsApp's merger was announced based on thenextweb.com's articles.³⁶

Third-party sources are also used for the purposes of providing qualitative explanations, e.g., of the characteristics of the markets. Commercial reports, e.g., by Gartner, are used to indicate the important functionalities of the analysed Customer Relationship Management (CRM) software solutions in *Meta/Kustomer*³⁷ and *Microsoft/LinkedIn*.³⁸ In the latter case, the Commission notes that other companies – e.g., Salesforce and the respondents to the Commission's questionnaires – propose different segmentation of the market and declares that it is also to be taken into account in the conducted competitive assessment. However, the text of the decision strongly suggests that the initial segmentation on which the opinions of the respondents were collected was based on Gartner's approach.³⁹ This exemplifies the influence that typologies derived from reports and analyses provided by private companies and industry representatives exert on the framework utilized by the Commission when issuing decisions.

Third-party sources are also used for supporting the qualitative claims concerning the assessment of market shares. In *Apple/Shazam*, the established position of Shazam is illustrated by, firstly, the responses to questionnaire to providers of music recognition software solutions and minutes of the conference call with one

²⁹ See Commission, *Google/Fitbit*, rec. 565.

³⁰ See Commission, *Google/Fitbit*, rec. 267.

³¹ Commission, *Google/Fitbit*, rec. 268.

³² See Commission, *Microsoft/Nokia*, rec. 151.

³³ See Commission, *Google/Fitbit*, Figure 1 (p. 15).

³⁴ See Commission, *Microsoft/GitHub*, rec. 83. See also Commission, *Google/Fitbit*, Table 28 (p. 122) or Commission, *Apple/Shazam*, footnote 111 (p. 32): https://www.marketsandmarkets.com/Market-Reports/automatic-content-recognition-market-148131627.html and https://www.businesswire.com/news/home/20160718005570/en/Automatic-Content-Recognition-Market---Global-Forecast.

³⁵ See Commission, *Google/Fitbit*, Table 14 (p. 74-76).

³⁶ See Commission, Facebook/WhatsApp, rec. 125.

³⁷ See Commission, *Meta/Kustomer*, footnote 12 (p. 11) and rec. 70.

³⁸ See Commission, *Microsoft/LinkedIn*, footnote 20 (p. 6).

³⁹ See Commission, *Microsoft/LinkedIn*, rec. 39.

of Shazam's competitors, and, secondly, by a reference to 'different publicly available rankings' according to which 'Shazam is consistently the number one free app for the provision of music recognition services on both Android and iOS in all Member States.'⁴⁰ Among these 'publicly available ranking' are websites such as apptopia.com, applyzer.com and appannie.com. The combination of these various qualitative evidence is used by the Commission as an argument for stating that the market shares provided by the parties 'are likely to underestimate Shazam's position in the EEA.'⁴¹

The qualitative claims also concern characteristics of the companies and of the companies' behaviour. In terms of the characteristics of companies, again, Gartner's report can serve as an example of a source used to establish the specific characteristics of small CRM players. The report was submitted by Zendesk as a reply to a request for information (RFI),⁴² but the Commission decided to invoke Gartner's typology which underscores the necessity of these small CRM companies to remain innovative, as an important factor to take into consideration when analysing the competition in the market. Furthermore, in this decision, the references to third-party sources, specifically the website beststartup.eu, were employed as evidence for a characteristic of the market, namely the existence of a long tail of smaller competitors.⁴³

The aforementioned examples illustrate that commercial knowledge providers can be regarded as a source of interactional expertise in the context of digital markets. A comparable role is played by the second most frequently cited source type, namely the media. Furthermore, the Commission employs materials from the media to provide a description of the behaviours exhibited by certain companies. In the case of *Google/DoubleClick*, the articles from *The Wall Street Journal*⁴⁴ are used to characterise the function that data collection has for technological companies. Furthermore, media articles are employed as a source of information regarding recent events, such as the response to the announcement of the planned acquisition of WhatsApp by Facebook.⁴⁶

The third most often invoked type of third-party expertise are decisions or documents of other competition authorities, e.g., the internal documents collected by Federal Trade Commission (FTC) are one of the sources invoked to describe the characteristics of analysed market and services in *Google/DoubleClick*,⁴⁷ and report of Competition and Markets Authority (CMA) is invoked to support quantitative dimension of the discussed results of market investigation in *Google/Fitbit*,⁴⁸ as well as for illustrating the value chain structure in ad tech market.⁴⁹ The reports of NCAs serve also as a source of, e.g., definition of characteristics of big data.⁵⁰

The aforementioned examples illustrate that parties and industry possess and provide specialist tacit knowledge. As these entities are responsible for the development of products and services operating on digital markets, as well as for providing expertise on how digital markets function, it can be argued that they possess contributory and interactional expertise. In the case of references to commercial knowledge providers, media outlets, and other competition authorities, the type of expertise utilized can be classified as interactional expertise. The role of the Commission in the domain of digital markets is circumscribed to ubiquitous tacit knowledge, either based on popular understanding (e.g. when the Commission utilises media as a source of expertise) or primary source knowledge (e.g. when it refers to data provided by the parties or the industry).

⁴⁰ Commission, *Apple/Shazam*, rec. 163.

⁴¹ Commission, *Apple/Shazam*, rec. 163.

⁴² See Commission, *Meta/Kustomer*, rec. 447 and the respective footnotes.

⁴³ See Commission, *Meta/Kustomer*, rec. 453 (and rec. 461 for another example).

⁴⁴ Namely: Bobby White, *Watching What You See on the Web. New Gear Lets ISPs Track Users and Sell Targeted Ads; More Players, Privacy Fears*, The Wall Street Journal, 6 December 2007, p. B1, Robert A. Guth, Vauhini Vara and Kevin J. Delaney, *Microsoft Bets On Facebook Stake And Web Ad Boom*, The Wall Street Journal Online, 25 October 2007.

⁴⁵ See Commission, *Google/DoubleClick*, recs. 271-272.

⁴⁶ See Commission, Facebook/WhatsApp, footnote 2 (p. 2).

⁴⁷ See Commission, *Google/DoubleClick*, footnotes 83 (p. 39) and 85-86 (p. 42). FTC's decision is also invoked in *Meta/Kustomer*, footnote 446 (p. 86) to illustrate how access to Application Programming Interface – API – was limited by the company.

⁴⁸ See Commission, *Google/Fitbit*, rec. 472.

⁴⁹ See Commission, *Google/Fitbit*, Figure 3 (p. 20) and Figure 4 (p. 21).

⁵⁰ See Commission, *Apple/Shazam*, footnote 254 (p. 66). The definition is also used in *Meta/Kustomer* (rec. 338), and *Google/Fitbit* (rec. 418) where no source is provided.

Nevertheless, it is possible to discern a process of accumulation of such expertise. The evidence of this process can be observed in the use of certain definitions, which initially appear with a reference to a specific source and subsequently are used without such a reference. This suggests that the definitions have been internalised by the Commission.⁵¹

In the domain of economics and competition law, it is the parties, the industry, the commercial knowledge providers, and the Commission, whose expertise is taken into account for the purposes of establishing facts important for enforcing competition law. The Commission, on the one hand, performs economic and legal analysis on its own (hence, it usually uses its contributory expertise), but, on the other hand, is dependent on the other three types of entities in regard to, e.g., access to data necessary for performing these analyses. This interdependence is exemplified by the fact that some of the economic analyses conducted by the Commission are the result of a request made by the Commission itself, as was the case in *Microsoft/Yahoo*.⁵² In this case, the Commission seems to use primary source knowledge (and not its own, contributory expertise). In other cases, e.g., in the *Apple/Shazam* case, the Commission collects data from market participants and performs its own calculations.⁵³ In this case, the Commission is dependent on market participants who provide the relevant data. The limitations of this approach may be illustrated with the decision *Apple/Shazam*, in which five out of the nine (for digital music streaming apps⁵⁴) and four out of fourteen (for automatic content recognition software solutions⁵⁵) competitors identified by the parties provided the relevant data.⁵⁶

V. Chapter 4 Model of the use of expertise in EU competition law

In order to construct a model of the use of expert knowledge in legal proceedings, it is essential to acknowledge that each legal proceeding comprises a number of domains in which expertise is required in order to make an informed decision. In the context of competition law proceedings, it can be argued that expertise is required in three domains in order to issue an appropriate decision. These domains are: knowledge of the market (in order to understand the facts), economic analysis (in order to conduct the competition assessment) and competition law (in order to apply the relevant legal rules). The distinction between specialist and meta-expertises can be conceptualised as a delineation between the arguments presented in the decision (based on the input of specialists) and the Commission's conclusions derived from these arguments (which represents the exercise of meta-expertise). While it is at this stage that meta-expertise is deployed, the utilisation of specialist expertise provides the requisite knowledge for the issuance of decisions.

SPECIALISTS	Ubiquitous tacit knowledge			Specialist tacit knowledge	
EXPERTISES EXPERTISES	Beer-mat	Popular	Primary source	Interactional	Contributory
	knowledge	understanding	knowledge	expertise	expertise
Digital markets		– Commission	– Commission	- parties - industry - commercial knowledge providers - media - other competition authorties	– parties – industry
Economics			- Commission		partiesindustry

⁵¹ See ibid.

⁵² See Commission, *Microsoft/Yahoo*, rec. 165: 'Following the Commission's request, Microsoft and Yahoo have submitted studies examining the importance of scale with respect to the ROI for advertisers and benchmarking studies on the relevance of the main search engine for users.'

⁵³ See Commission, *Apple/Shazam*, recs. 155-158, 164-165.

⁵⁴ See Commission, *Apple/Shazam*, footnote 108.

⁵⁵ See Commission, *Apple/Shazam*, footnote 120.

⁵⁶ Similarly, data from market players were used for the computations in *Meta/Kustomer* decision – see Commission, *Meta/Kustomer*, section 7.2.3. *Online Display Advertising*.

Competition law					- commercial knowledge providers - Commission - parties - industry - commercial knowledge providers - Commission
META-	External (transmuted expertises)		Internal (non-transmuted expertises)		
EXPERTISES	Ubiquitous discrimination	Local discrimination	Technical connoisseurship	Downward discrimination	Referred expertise
Digital markets		Commission	•		
Economics					- Commission
Competition law				– Commission	

Table 3: A model of expert knowledge use in merger proceedings (author's elaboration on the basis of *The periodic table of expertises*, Collins and Evans (n 16) 14).

Table 3 presents a model describing who possesses what kind of expertise in the three identified domains, using the framework of Collins and Evans. In regard to digital markets, it is the industry and the parties that possess contributory expertise and, next to them, the commercial knowledge providers and the media that provide interactional expertise to which the Commission makes references in its decisions. It is important to note that contributory expertise translates into interactional expertise, thus, the parties and industry provide interactional expertise, however, the role of commercial knowledge providers and the media, while some of their employees may have contributory expertise, is limited to providing the 'translation' of technical information in more comprehensible language. The Commission in this case holds the ubiquitous tacit knowledge which sometimes shows the characteristics of popular understanding (e.g., using media articles or summaries of the reports), and sometimes the use of primary source knowledge (e.g., when analysis data on the markets provided by the parties or the industry).

However, as it is the Commission that issues decisions involving the analysis of data and characteristics of digital markets, it commands meta-expertise. Its external meta-expertise is based on local discrimination: on the basis of the assessment and selection of the provided knowledge the Commission makes judgements on the characteristics of the analysed market. As the Commission does not have by itself sufficient specialist tacit knowledge in this domain, it bases its assessments on the knowledge of the sources of expertise. The fact that this selection is based on an answer to the question of 'whose expertise to trust' is related to the high dependence on the sources provided by the industry. The Commission, using its discretion on to whom address RFIs, selects the sources of contributory and interactional expertise which it considers trustworthy. Using expertise coming from commercial knowledge providers and media may be perceived as diversification of the sources of knowledge on which the Commission relies. However, the quality and independence of these types of sources may be questioned.

The situation is very different in the domains of economics and competition law, where the Commission has contributory expertise. The Commission often uses this expertise to carry out the relevant analyses and to match the knowledge provided by the parties and the industry – sometimes based on input from commercial knowledge providers – with the internal knowledge of the Commission in these domains. In the case of economic analysis, the analysed material suggest that the Commission is using referred expertise: while it might not be able to conduct the economic analyses of the digital markets by itself (e.g., due to the lack of available data), it uses the knowledge of the relevant models gained in other domains to assess the calculations provided by the parties. In the domain of competition law, it is the Commission that has the upper hand in terms of the use of meta-expertise. However, the expertise in this regard uses the results of the analysis performed in the domain of digital markets. There, the Commission's expertise is dependent on specialist tacit knowledge provided by other entities. Thus, it can be expected that the decisions might to a certain extent replicate the perspectives present in the sources from which the Commission gathers expert knowledge.

On the basis of the analysis, I proposed a model describing the characteristics of the use of expert knowledge in merger proceedings by the Commission based on *Rethinking Expertise* by Harry Collins and Robert Evans and their division of expert knowledge into expertise and meta-expertise understood as an ability to assess the expertise of others. I show that this model is useful for providing insight into the use of expertise when enforcing law. However, it has to be adjusted to such a purpose, firstly, by introducing various domains in which this expertise is possessed and which are of importance for enforcing law, and secondly, by treating the institutions responsible for the enforcement of law as the ones that possess and exercise – when enforcing law – meta-expertise.

I argue that in the case of competition law and its enforcement in digital markets these domains include knowledge of digital markets, economics, and competition law. The results of my study suggest that while in the domain of economics and competition law the Commission possesses internal meta-expertise (due to the fact that it has specialist tacit knowledge in these domains), in the domain of digital markets the Commission is dependent on the specialist tacit knowledge provided by the parties, the industry, and coming from commercial knowledge providers.

These results have two important corollaries for the possible improvement of the enforcement of competition law in regard to digital markets. Firstly, due to the accumulation of knowledge within the Commission specialist tacit knowledge may be developed within an institution (the traces of which are present in the analysed decisions). Alternatively, the dependence on the industry and commercial knowledge providers can be limited by the involement of public research institutions in the process of providing specialist tacit knowledge or by the development of the programmes concerning collection of data by statistical offices. Secondly, the balance between the types of knowledge which are important for the proceedings may be shifted. As I argue elsewhere,⁵⁷ the adoption of the *Digital Markets Act* (DMA) and the type of enforcement implemented in this regulation may be perceived as constituting such a shift. The fact that the gatekeepers are obliged to comply with the obligations foreseen in the DMA (the *ex ante* regulatory strategy) causes the knowledge in the domain of law to become more important that the knowledge of digital markets.⁵⁸ Thus, the enforcing institution should encounter fewer challenges in regard to the collection of specialist expertise in this domain, as the specialist knowledge of law should allow it to more easily pursue the enforcement efforts.

⁵⁷ Joanna Mazur (2024) The use of expert knowledge in the enforcement of EU law concerning digital markets: Is the enforcement model of the Digital Markets Act a revolution?, Insight

https://www.linkedin.com/posts/comipindigimarkts_comip-insights-ed-2024-no17-activity-7229218868378898432-dEUB?utm_source=share&utm_medium=member_desktop> accessed 28 August 2024.

⁵⁸ As well as the possibility of using the referred meta-expertise: knowledge collected in the proceedings based on competition law can be used for the purposes of the enforcement of the DMA, as many of the obligations based on the DMA grow from the experience collected within the area of competition law. See see Jacques Crémer, David Dinielli, Paul Heidhues, Gene Kimmelman, Giorgio Monti, Rupprecht Podszun, Monika Schnitzer, Fiona Scott Morton and Alexandre de Streel (2023) Enforcing the Digital Markets Act: Institutional choices, compliance, and antitrust, *Journal of Antitrust Enforcement* 11(3) 315.

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