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UNBUNDLING HOSTING AND CONTENT CURATION ON SOCIAL MEDIA PLATFORMS: BETWEEN OPPORTUNITIES AND CHALLENGES

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ABSTRACT

Social media markets present a number of market failures. Some lead to users' underexposure to diversity of content. There may be a variety of ways to address this challenge. One solution could be to require large platforms to unbundle hosting and content curation activities, while also obliging them to grant fair and non-discriminatory access to third-party players that offer content curation activities to the platforms' users. This paper explores the pros and cons of such a remedy, basing its analysis on a series of semi-structured interviews with the various stakeholders that would be directly impacted should the remedy be put in place. The paper summarizes the principal input and feedback received from the interviews and makes suggestions for decision makers and for further research.

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INTRODUCTION

Social media markets present a number of market failures. Scholars, experts, and regulators have identified these market failures and developed various suggestions about how to solve them.[1] My previous work focuses on market failures that lead to social media users' underexposure to diversity of content and describes two regulatory solutions that could overcome the problem.[2] One is to regulate content curation in a way that guarantees a certain degree of diversity. The second is to require large platforms to unbundle hosting and content curation activities, while also mandating that they provide users fair and nondiscriminatory access to third-party players that offer content curation activities (i.e., someone who organizes the user's newsfeed). In my research, I have tried to shed some light on a number of challenges in the design and implementation of both remedies.

This paper is a follow-up to that research, focusing on the second proposal, which for brevity I call the unbundling proposal. In Part 1, I briefly recall the main features of the proposed remedy, surveying the current debate in different areas of the world, including recent regulatory proposals that appear to go in the same or a similar direction. In Part 2, I describe the methodology used for this follow-up research. Part 3 presents an analysis of the research results. Building on this analysis, the Conclusion summarizes the principal input and feedback received during the research process and makes suggestions for decision makers and for further research.

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[1] *See, e.g.*, *Online Market Failures and Harms: An Economic Perspective on the Challenges & Opportunities in Regulating Online Services*, OFCOM (Oct. 28, 2019), https://www.ofcom.org.uk/__data/assets/pdf_file/0025/174634/online-market-failures-and-harms.pdf; *Online Platforms and Digital Advertising Market Study, Final Report*, COMPETITION AND MKTS AUTH. (2020); *Competition Policy for the Digital Era*, (2019), https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf; *Stigler Committee on Digital Platforms, Final Report*, STIGLER CENTER NEWS (2019), https://www.chicagobooth.edu/-/media/research/stigler/pdfs/digital-platforms---committee-report---stigler-center.pdf; *Digital Platform Inquiry, Final Report, Part I*, AUSTL. COMPETITION & CONSUMER COMM'N (2019).

[2] *See, e.g.*, Maria Luisa Stasi, *Diversity of Exposure in Social Media Markets: Regulating or Unbundling Content Curation*, 2 MEDIALAWS 113(2021).

I. BACKGROUND: THE UNBUNDLING OF HOSTING AND CONTENT CURATION

A. The Proposal

My previous work investigated a number of market failures that lead to the underexposure to diversity of content in social media markets.[3] The main cause of the problem appears to be the automated systems of content curation used by social media platforms, with other contributory factors—such as the high market concentration in social media markets, the bottleneck role played by large players in the distribution of content, information asymmetries between platforms and users, and the absence of viable alternatives for users—also playing a role in the underexposure.[4] To contribute to the debate, I suggest two regulatory interventions to solve the underexposure problem: (1) the imposition of a certain level of regulated diversity; and (2) the imposition of unbundling between hosting and content curation activities (intended as the variety of measures taken by social media platforms that affect the availability, visibility and accessibility of content, such as ranking, promotion, demotion) and the obligation to give fair and nondiscriminatory access to third-party players in order to open the market and reintroduce competitive dynamics.

The first intervention regulates content curation in a way that promotes diversity. It is grounded on the premise that users' underexposure to a diversity of content in social media markets is linked to the way the content is distributed, not to a decrease in the availability of content: Social media platforms distribute content to their users via content curation activities, which act as bottlenecks for diversity. From the user's perspective, the decrease in diversity does not concern the content they actively access, but rather the content they are passively exposed to on a daily basis. One possible response to this distribution inadequacy is to impose some form of "must view" obligation on the platforms to expose individual users to some degree of content diversity.

The second solution is to separate hosting activities from content curation activities, obliging large platforms to allow third parties to offer their users content curation services. For example, a Facebook user should be asked by the platform whether she or he wants the content curation service to be provided by Facebook itself or by other players who will be freely selected. I argue that the option to stay with the large platform should be presented as opt-in, rather than

[3] *See id.*
[4] *See id.*

opt-out. An opt-in default would help defend against users' unwillingness to stray from the status quo and would prevent platforms from seeking to undermine the effects of the unbundling by making the switch hard for users and nudging them towards a lock-in.

There are various reasons that both proposals should be designed as asymmetric regulation. First, the market failure meant to be addressed is an externality of large platforms' business models and content curation systems. These platforms account for the vast majority of the market; therefore, addressing the market failure generally could be sufficient to address the platforms. Second, additional regulatory burdens, if applied symmetrically, will likely weigh more on small platforms than on large platforms, and thus could risk further strengthening the latter's competitive advantage. Third, asymmetric regulation would be a less invasive regulatory intervention than a sector-wide obligation and would require less capacity for monitoring.

Still, there are a number of challenges and possible shortfalls to the unbundling solution. One is the sustainability of alternative business models for content curators, which depends, to a large extent, on users' willingness to pay, which in turn depends on how much users value exposure to a diversity of content. Indeed, diversity is a "merit good," meaning it is very possible that individuals do not attribute the same value to diversity that it actually has for society as a whole. Scholars have noted that users may have different approaches to diversity,[5] and the trend toward increased personalization across a variety of digital services might be interpreted as a signal that people appreciate personalized services and are ready to make trade-offs to obtain them. However, there are strong arguments that it is the role of the state to regulate in order to protect exposure to diversity as a collective good and value, not as an individual good.[6] Another challenge is the technical implementation of unbundling. Unbundled access requires large platforms to

[5] *See, e.g.*, B. Bodó et al., *Interested in Diversity*, 7(2) DIGITAL JOURNALISM, no. 2, 2019, at 206; *see also* F. Zuiderveen Borgesius et al., *Should We Worry About Filter Bubbles? An Interdisciplinary Inquiry into Self-Selected and Pre-Selected Personalized Communication*, 5 INTERNET POL'Y REV. 1 (Mar. 31, 2016).

[6] For a discussion of the concept and theory of merit goods, and on the state approach to them, see the work of R. Musgrave, according to whom the government resorts to paternalistic intervention in order to promote the consumption of certain private goods and services, irrespective of the existing market demand for them, because such consumption serves the long-term public interest. R. Musgrave, *Merit Goods*, THE NEW PALGRAVE: A DICTIONARY OF ECON., VOL. 3, 452–453 (Steven N. Durlauf and Lawrence E. Blume eds., 2nd ed. 2008).

open their application programming interfaces (APIs) or to put in place similar solutions for competitors to plug in and run their algorithms on the platform. Moreover, all this has to happen while adequately protecting users' data and maintaining high standards of security. Therefore, the exact design of the remedy may have a substantial impact on its effectiveness and commercial viability.

In my previous work I have put forward a number of preliminary suggestions for overcoming these challenges, many of which involve state intervention, in various forms.[7] However, the solution still presents a number of open questions, hence the attempt, in this follow-up research, to go deeper into those topics in search of adequate answers.

B. The Current Debate

The unbundling remedy is meant to address concerns that have been at the center of a lively discussion among a variety of stakeholders. Without seeking to be comprehensive, in this Part I briefly review the major voices in the debate. Experts on intermediary liability and platform governance have approached the unbundling remedy as a way to regulate amplification and limit the distribution of harmful or illegal content, such as disinformation, hate speech, and similar phenomena. From this perspective, unbundling is seen as a content-neutral remedy, and thus becomes capable of overcoming the concern of giving yet more power to a handful of companies to decide on the legality or trustworthiness of content. The debate is particularly intense in the United States[8] at the moment, while in Europe it remains more of a niche issue.[9]

Competition, consumer protection, and data protection experts are interested in the ability of unbundling and to open the market for content curators and create a pluralistic environment that provides real alternatives to users.[10] This

[7] Stasi, *supra* note 2, at 129–30, 132–35.

[8] *See* Daphne Keller, *Amplification and Its Discontents*, KNIGHT FIRST AMEND. INST. AT COLUM. UNIV. (June 8, 2021); Francis Fukuyama et al., *Middleware for Dominant Digital Platforms: A Technological Solution to a Threat to Democracy*, STAN. CYBER POL'Y CTR. (2021).

[9] *See* Natali Helberger et al., *Regulation of News Recommenders in the Digital Services Act: Empowering David Against the Very Large Online Goliath*, INTERNET POL'Y REV. (Feb. 26, 2021), https://policyreview.info/articles/news/regulation-news-recommenders-digital-services-act-empowering-david-against-very-large; Nathalie Maréchal, *The Future of Platform Power: Fixing the Business Model*, 32 JOURNAL OF DEMOCRACY 157 (July 2021) .

[10] *See* Ian Brown, *From 'Walled Gardens' to Open Meadows. How Interoperability Could be the Key to Address Platform Power*, ADA LOVELACE

assumes that lowering barriers to entry and creating the conditions for healthy competition in the market will deliver innovative and better-quality services, where quality includes parameters such as how privacy-friendly or free-expression-friendly the service might be. Part of civil society also appears supportive of the unbundling proposal due to its capacity to dilute the massive power over the flow of information in society—and thus over public discourse—which is currently concentrated in the hands of a limited number of large platforms. [11] Media experts are also interested in the diversification-of-players angle, because of its potential to deliver more diversity of content without the need for more direct state intervention.

In the United States, there are First Amendment problems concerning the speech rights of platforms and their users in the realm of regulating content curation and especially amplification. [12]As such, regulatory options based on competition or consumer rights that empower users and increase the diversity of platform curation offerings are seen as less problematic from a constitutional point of view, and are believed to be capable of alleviating other policy concerns relating to online content. [13] However, scholars have wondered to what extent more user autonomy would actually lead to a decrease in the circulation of illegal or legal-but-harmful content and whether it would increase user exposure to a diversity of content. If users' revealed preferences favor distasteful but legal content or echo-chambers, the question is

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INST. (Nov. 8, 2021), https://www.adalovelaceinstitute.org/blog/walled-gardens-open-meadows/; Vittorio Bertola, *A Primer on Interoperable Social Media*, OPEN-XCHANGE (Nov. 10 2021), https://bertola.eu/file/ig/A%20Primer%20on%20Interoperable%20Social%20Media%20-%20V2.pdf; Phillip Marsden & Ruppercht Podszun, *Restoring Balance in Digital Competition - Sensible Rules, Effective Enforcement*, KONRAD ADENAUER STIFTUNG (2020), https://www.kas.de/documents/252038/7995358/Restoring+Balance+to+Digital+Competition+%E2%80%93+Sensible+Rules%2C+Effective+Enforcement.pdf/7cb5ab1a-a5c2-54f0-3dcd-db6ef7fd9c78?version=1.0&t=1601365173489; *The EU Digital Markets Act: A Report from a Panel of Economic Experts*, EUR. COMM'N (2021).

[11] *See, e.g., Taming Big Tech: Protecting Freedom of Expression Through the Unbundling of Services, Open Markets, Competition, and Users' Empowerment*, ARTICLE 19 (2021), https://www.article19.org/wp-content/uploads/2021/12/Taming-big-tech_FINAL_8-Dec-1.pdf; *Open Letter to Members of the European Parliament*, ARTICLE 19 (2021), https://www.article19.org/wp-content/uploads/2021/11/joint-statement-on-recommender-systems-access-now-article-19-european-partnership-for-democracy-epd-and-panoptykon-foundation.pdf.

[12] *See, e.g.*, Keller, *supra* note 7 ("Quality here is intended in a typical competition / economic regulation perspective.")

[13] *See id.*

whether these preferences would change in a diversified landscape.[14] As I have previously argued, one solution is to accompany increased user empowerment with digital literacy policies that could help empower users to make informed choices.[15] Some scholars have argued that, as well as general digital literacy, there would also be a need for algorithmic literacy—understood as a user's basic knowledge of how filtering mechanisms and design choices function and what their impact on one's life might be.[16]

Another approach could be to incentivize alternative content curation providers to adopt different criteria for ranking and recommending content from those typically used by large platforms. Rather than being optimized for engagement, algorithms could be set to achieve other goals, such as a certain level of diversity. Scholars have dedicated considerable attention to this issue, flagging a number of challenges including the difficulties of operationalizing values like exposure diversity that depend on both technical elements and a human factor, reflecting the difference in approach typically shown by policymakers who deal with values and programmers who deal with code.[17]

Various scholars have investigated the potential of addressing the diversity concerns by acting in the middleware layer, that is, the layer of the software that glues together applications in a network. From a technical perspective, scholars have floated a number of proposals for unbundling, including "magic APIs," "protocols not platforms," and using middleware.[18] These proposals have

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[14] *See id.*

[15] Stasi, *supra* note 2, at 128–29. *See also* Camilla Bustani, *The Choice Challenge*, 48 INTERMEDIA, Oct. 2020, at 34-35.

[16] Urbano Reviglio & Claudio Agosti, *Thinking Outside the Black Box: the Case for Algorithmic Sovereignty in Social Media*, 1–12 SOCIAL MEDIA + SOC'Y, Apr. – June 2020, at 1, 7.

[17] For a framework discussion of the operationalization of values in design *see* Ibo Van der Poel, *Translating Values Into Design Requirements*, *in* PHILOSOPHY AND ENGINEERING: REFLECTIONS ON PRACTICE, PRINCIPLES AND PROCESS (Diane P. Mitchfelder, Natasha McCarty & David E. Goldberg eds., 2013), 253–266. For a discussion of the operationalization of diversity in ranking algorithms *see* Natali Helberger et al., *Exposure Diversity as a Design Principle for Recommender Systems*, 21 INF., COMMC'N AND SOC'Y, no.2 (2018), at 191; *see also* Natali Helberger, et al., *Diversity by Design*, https://www.canada.ca/en/canadian-heritage/services/diversity-content-digital-age/diversity-design.html (Feb. 2020).

[18] *See*, *e.g.*, Daphne Keller, *Platform Content Regulation - Some Models and Their Problems*, CENT. FOR INTERNET AND SOC'Y (May 6, 2019, 9:41 AM), https://cyberlaw.stanford.edu/blog/2019/05/platform-content-regulation-%E2%80%93-some-models-and-their-problems; Mike Masnick, *Protocols, Not Platforms: A Technological Approach to Free Speech*, KNIGHT

been assessed under a variety of lenses, including their likely impact on users' data protection, on security, and on innovation. In response to these (valid) concerns, experts have raised a number of arguments and suggested various safeguards.[19] A central role in the operationalization of the unbundling remedy is played by interoperability mandates, that is, obligations to make the obligation to make the social media platform services interoperable with the content curation services provided by competitors. interoperable with those of competitors. On this topic too, scholars and experts are engaged in a lively debate which is not necessarily focused on content curation but expands to a number of digital services. Their proposals span from partial and unidirectional interoperability to full protocol interoperability.[20] To define

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FIRST AMEND. INST. AT COLUM. UNIV., (Aug. 19, 2020), https://knightcolumbia.org/content/protocols-not-platforms-a-technological-approach-to-free-speech; *Testimony of Jack Dorsey, Chief Executive Officer, Twitter Inc. before the U.S. S. Judiciary Comm.*, 116th Cong. , Nov. 17, 2020; Francis Fukuyama et al., *How to Save Democracy from Technology. Ending Big Tech Information Monopoly*, FOREIGN AFFS., (Jan.-Feb. 2021), https://www.foreignaffairs.com/articles/united-states/2020-11-24/fukuyama-how-save-democracy-technology; *Testimony of Stephen Wolfram, Founder and Chief Executive Officer Wolfram Research, Inc, before the U.S. S. Subcomm. on Communications, Technology, Innovation and the Internet Hearing on: Optimizing for Engagement: Understanding the Use of Pervasive Technology on Internet Platforms*, 116th Cong., June 25, 2019.

[19] With regard to the privacy challenge, *see*, e.g., Bennet Cyphers & Cory Doctorow, *Privacy Without Monopoly: Data Protection and Interoperability*, ELEC. FRONTIER FOUND. (Feb. 12, 2021), https://www.eff.org/wp/interoperability-and-privacy. In addition, the European Data Protection Supervisor, in its opinion regarding the proposal of the Digital Services Act, has taken a position in favor of interoperability obligations for very large online platforms, arguing that they can be well implemented in a privacy and data protection compliant way: *see Opinion 1/2021 on the Proposal for a Digital Services Act*, EUR. DATA PROT. SUPERVISOR (Feb. 10, 2021), https://edps.europa.eu/system/files/2021-02/21-02-10-opinion_on_digital_services_act_en.pdf. As regards security concerns, see, for instance: Vittorio Bertola, *Can Interoperable Apps Ever Be Secure?*, INTEROPERABILITY NEWS (May 17, 2021), https://interoperability.news/2021/05/can-interoperable-apps-ever-be-secure/. More generally, for a collection of recent materials about interoperability *see generally* INTEROPERABILITY NEWS https://interoperability.news/ (last visited Feb 10, 2023).

[20] *See*, *e.g.*, Ian Brown, *The Technical Components of Interoperability as a Tool for Competition Regulation*, OPEN F. ACAD. PAPER (Nov. 2020), https://osf.io/6er3p/; Vittorio Bertola, *A Primer on Interoperable Social Media*, (Nov. 10, 2021), https://bertola.eu/file/ig/A%20Primer%20on%20Interoperable%20Social%20Media%20-%20V2.pdf; *White Paper: Considerations for Mandating Open Interfaces*, INTERNET SOC'Y, (Dec. 4, 2020), https://www.internetsociety.org/wp-content/uploads/2020/12/ConsiderationsMandatingOpenInterfaces-

the adequate degree of interoperability to be imposed on major platforms may remain a regulator's task, or it could be left to the industry, with the provision of some form of independent oversight and minimum parameters to be respected.[21]

C. Legislative and Regulatory Moves

Legislators, policymakers, and enforcers have also dedicated considerable attention to content curation systems. In the European Union, for example, the European Parliament discussed the possibility of including an unbundling obligation similar to the one discussed in this paper in the Digital Services Act (DSA) Regulation.[22] However, the proposal did not make it to the final text, notwithstanding the support of the Greens Party and the rapporteur of the Committee on Civil Liberties, Justice and Home Affairs when the plenary vote was taken in January 2022. Unbundling and interoperability provisions were also part of the debate over the Digital Markets Act (DMA).[23] In the text initially proposed by the European Commission,[24] interoperability was to be granted for "ancillary services," and only for those provided by the gatekeeper (that is a large company providing core platform services as listed in the DMA, and holding considerable economic power based on the criteria identified by the new rules) as well.[25] The European Parliament signaled strong support for pro-competition interoperability obligations at its Plenary vote in December 2021.[26] In the final

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03122020-EN.pdf; Marsden & Podszun, supra note 9; Amandine Le Pape, *Open APIs are a Start, Open Standard is Better*, (Feb. 28, 2022), https://interoperability.news/2022/02/open-apis-are-a-start-open-standard-is-better/.

[21] *See* P. Alexiadis & A. de Streel, *Designing an EU Intervention Standard for Digital Gatekeepers* 17-19, (Eur. Univ. Inst. Robert Schuman Ctr. for Advanced Studs. Working Paper No. 14, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3544694.

[22] Council Regulation 2022/2065 of Oct. 19, 2022 on a Single Market for Digital Services (Digital Services Act) and amending Directive 2000/31/EC, 2022, O.J. (L 277) [hereinafter Digital Services Act].

[23] Council Regulation 2022/1925 of Sept. 14, 2022 on Contestable and Fair Markets in the Digital Sector and Amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act), 2022, O.J. (L 265/1) [hereinafter Digital Markets Act].

[24] Eur. Comm'n, *Proposal for a Regulation of the European Parliament and of the Council on Contestable and Fair Markets in the Digital Sector (Digital Markets Act)*, COM (2020) 842 final (Dec. 15, 2020).

[25] *Id.* at 40. For the definition of "ancillary services", *see id.* at 35. It should be noted that the definition was deleted from the final text.

[26] Press Release, European Parliament, Digital Markets Act: Parliament Ready to Start Negotiations with Council (Dec. 15, 2021),

text of the DMA, and in particular in its Article 7, interoperability has been granted to instant messaging (in EU jargon: number independent interpersonal communication services[27]) using an incremental approach where there will be immediate effect for what are defined as "basic functionalities" of the service, effects in two years' time for some additional functionalities, and effects in four years' time for others.[28] The reasons behind this approach are not clear, and it may be questioned whether, given the rapid developments in the technologies used for the provision of these services, a four-year time clause is adequate.

A closer look at the DMA's final text reveals another provision that could be relevant for the implementation of the unbundling proposal: Article 6(12).[29] Rather than looking at the technical layer, and thus imposing interoperability, this article focuses on the obligation to give access on fair, reasonable, and nondiscriminatory (FRAND) terms to business users with regard to, among other things, the gatekeeper's online social networking services.[30] Article 6(12) establishes that it is up to the European Commission to assess whether the concrete terms applied by the gatekeeper to business users comply with the obligation imposed by the rule; however, it is easy to guess that in order to enable FRAND access, the terms will need to be accompanied by adequate interoperability conditions. It is also worth noting that the same article includes the obligation, for the gatekeeper, to set an alternative dispute settlement mechanism.[31] This requirement of a fast-tracked process for dispute settlement signals that legislators are aware that FRAND terms are a complex matter, and that the information asymmetries plaguing the relevant markets do not help. It remains to be seen how the Article 7 and Article 6(12) provisions will be enforced; according to the current timescale, this will not happen before the second half of 2023,[32] and will occur even later with regard to Article 7.[33] Finally, the provision under Article 6(12) may be relevant because it

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https://www.europarl.europa.eu/news/en/press-room/20211210IPR19211/digital-markets-act-parliament-ready-to-start-negotiations-with-council.

[27] This is how the services are defined in the relevant telecom rules. *See* Directive 2018/1972 of the European Parliament and of the Council of 11 December 2018 Establishing the European Electronic Communications Code, 2018 O.J. (L 321) 36, 99.

[28] See Digital Markets Act, *supra* note 22, art. 7, at 37.

[29] *Id.* art. 6(12).

[30] *Id.*

[31] *Id.*

[32] *Id.* art. 54.

[33] *Id.* art 7(2).

appears to have a broader scope of application than Article 7. Article 6(12) is neither limited to instant messaging, nor to the services already provided by the gatekeeper, a nuance that might prove key with regard to innovative services not yet offered by the gatekeepers.

At the EU member states' level, states are able to enact legislation that could be used to implement the unbundling remedy. One such enactment was made by Germany. With the ARC Digitization Act,[34] which came into effect in January 2021, the German legislature revised the national competition law and imposed ex-ante measures on certain entities, determined by the Federal Cartel Office (FCO) to be of "paramount significance for competition across markets" based on the criteria of the newly introduced Article 19a. According to the new rules, these super dominant social media platforms are prohibited from engaging in certain conduct, including: refusing data access to competitors where it is necessary to compete; favoring their own offers over competitors' offers when mediating access to supply and sales markets; and taking measures that result in the exclusive pre-installation or integration of their offers, among others. The prohibition which could be used to implement the unbundling remedy might be the one under paragraph 5 of the article, which prevents social media platforms from refusing "the interoperability of products or services […], or making it more difficult, and in this way impeding competition." [35] Third parties could rely on this rule to demand from large social media platforms the interoperability they need to offer content curation services to social media users. Yet, it remains to be seen how the FCO will interpret this provision in concrete cases. The FCO has already initiated proceedings against Big Tech based on Article 19a, but none of the proceedings at the time of writing concerns interoperability issues.[36]

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[34] Gesetz gegen Wettbewerbsbeschränkungen [GWB] [Competition Act], June 26. 2013, BGBL I at 1750, 3245, last amended by Gesetz [G], July 19, 2022, BGBL I at 1214, art. 2 (Ger.). An English translation is available at https://www.gesetze-iminternet.de/englisch_gwb/englisch_gwb.pdf.

[35] *See id.* Article 19a(5).

[36] *See, e.g.*, Press Release, Bundeskartellamt, Proceedings Against Amazon Based on New Rules for Large Digital Companies (Section 19a GWB) (May 18, 2021), https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2021/18_05_2021_Amazon_19a.html?nn=3591568; Press Release, Bundeskartellamt, Proceeding Against Google Based on New Rules for Large Digital Players (Section 19a GWB) – Bundeskartellamt Examines Google's Significance for Competition Across Markets and Its Data Processing Terms (May 25, 2021),

As argued by some, with the ARC Digitization Act, the German legislature has opened a testing ground for digital platform regulation, and it can be expected that other member states' legislatures will closely monitor developments and use the FCO's actions under Article 19a as a learning experience, to better assess pros and cons of similar interventions.[37] Indeed, the changes introduced by the ARC Digitization Act land outside the scope of the DMA, leaving EU member states free to impose further obligations regarding unilateral conducts without the constraints of the harmonization exercise required by Recital 10 of the DMA. This leaves EU member states free to impose further prohibitions regarding unilateral conducts;[38] as specified by Recital 10 of the DMA, such additional prohibitions would have to be based on an individualized assessment of market positions and behaviour, including their actual or potential effects and the precise scope of the prohibited behaviour, and would have to provide for the possibility of undertakings to make efficiency and objective justification arguments for the behaviour in question.

The intention to adopt interoperability solutions to make digital markets, including social media markets, more competitive has also been signalled in a variety of other jurisdictions outside the EU. In the United States, two proposed bills might be relevant for this discussion, although at the time of writing it remains unclear whether either of the two will ever be adopted. The first is the Augmenting Compatibility and Competition by Enabling Service Switching Act of 2019,[39] or the ACCESS Act, which would impose interoperability obligations on digital actors as a means of promoting competition, lowering entry barriers, and reducing switching costs for consumers and businesses online. In the Senate version of the bill,[40] the most relevant provision is Section 5 on delegatability. The proposed bill establishes that "[a] large communications platform provider shall maintain a set of transparent third-party-accessible

https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2021/25_05_2021_Google_19a.html?nn=3591568.

[37] German Bundestag, Document No. 19/25868, 13.01.2021, Recommendation of a Resolution and Report of the Committee on Economic Affairs and Energy (Ninth Committee) ("However, the federal structure of the European Union can be used to gather experience with slightly different regulatory structures at national level with the aim of finding the best possible form of regulation."); *see also* Jens-Uwe Frank & Martin Peitz, *Digital Platforms and the New 19a Tool in the German Competition Act*, 12 J. EUR. COMPETITION L. & PRAC. 513 (2021).

[38] *See* Digital Markets Act, *supra* note 22, art. 1(6)(b).

[39] ACCESS Act, H.R. 3849, 117th Cong. (2021).

[40] ACCESS Act, S.2658, 116th Cong. § 5 (2019).

interfaces by which a user may delegate a custodial third-party agent to manage the user's online interactions, content, and account settings on a large communications platform on the same terms as a user."[41] It seems that under this suggested rule a custodial third-party agent could be a provider of content curation. On the one hand, this provision would impose the interoperability needed for third parties to provide content curation on large social media platforms. On the other hand, such content curation could only be provided based on the parameters and settings that are accessible to users themselves. In other words, the third party could only act as a substitute for the user, but could not offer to the latter any content curation services that are different from the ones provided by the large communications platform it interoperates with.

Section 4 of the ACCESS Act contains additional interoperability obligations, but it refers to horizontal interoperability—interoperability across social media platforms—rather than to vertical interoperability, which is necessary to facilitate the offering of content curation services within large social media platforms.[42] Therefore, this section might not constitute an adequate legal basis for the unbundling remedy discussed here. Finally, I note that the ACCESS Act suggests that the National Institute for Standards and Technology should develop "model technical standards by which to make interoperable popular classes of communications or information services, including. . . social networking."[43] As I elaborate in Part 4 of the analysis part of this paper, to recur to standards developed by public bodies rather than industry-led initiatives is an approach that does not have full consensus across stakeholders.

The second U.S. bill of interest is the American Innovation and Choice Online Act, whose goal is to "[p]rovide that certain discriminatory conduct by covered platforms shall be unlawful…"[44] In the version proposed by Senator Amy Klobuchar, Section 3(a)(4) of this bill considers as unlawful conduct to "materially restrict, impede, or unreasonably delay the capacity of a business user to access or interoperate with the same platform, operating system, or hardware or software features that are available to the products, services, or lines of business"[45] of the large social media platform which would compete with its own service. If this bill were to be passed in such form, it would oblige

[41] *Id.* § 5(a).
[42] *Id.* § 4.
[43] *See id.* § 6(c).
[44] American Innovation and Choice Online Act, S. 2992, 117th Cong. (2022).
[45] *Id.* § 3(a)(4).

large social media platforms to interoperate and give reasonable and arguably fair access to third-party content curators. According to the proposed bill, a large social media platform would only escape this obligation if it establishes by a preponderance of the evidence that the restriction or impediment was narrowly tailored, could not be achieved through less discriminatory means, was non-pretextual, and was reasonably necessary to achieve one of the aims listed in Section 3(b)(2)(B)[46]. I note that this safeguards clause appears to be substantially more detailed than the similar exception contained in Article 7(9) of the DMA.

Another relevant development concerns Brazil. A legislative proposal presented by Congressman Rodrigo Maia in 2022[47] calls for incentivizing interoperability through open technical standards that allow communication between applications as one of the goals of digital platform regulation to be imposed by The National Telecommunications Agency (ANATEL).[48] Article 10 of this proposal gives ANATEL the power to impose on social media platforms functional separation and measures to mitigate abuse of economic power, including interoperability obligations.[49] As such, Article 10 appears to be suitable to impose the unbundling of hosting and content curation and the relevant access obligations on large social media platforms. Moreover, the attribution of such power to ANATEL might be viewed as a signal that the objective of the remedy is different, or wider, than simply the enhancement of competition in the market, as in this case the power would have been attributed to the competition authority instead. Yet, at the timing of writing there appears to be no specific indication to foresee whether the proposal will be approved by Brazilian legislators.

In addition to legislative developments, a number of regulators around the globe are discussing interoperability as a possible instrument for intervention. In Australia, the Australian Competition and Consumer Commission has strongly emphasized the potential of interoperability as a measure to reduce the barriers to competition in existing markets and assist competitive innovation in future markets.[50] However, no specific intervention addresses interoperable content curation services. In the United Kingdom, the Competition and Markets Authority (CMA) has mentioned interoperability measures in both its report about online

[46] *Id.* § 3(b)(2)(B).
[47] Projeto de Lei n. 2768/2022, 56th Leg., 4th Sess. (2022, Brazil).
[48] *Id.* art. 5.
[49] *Id.* art 10.
[50] AUSTL. COMPETITION AND CONSUMER COMM'N, *supra* note 1.

advertising markets and its report on mobile ecosystems.[51] In particular, in the report on online advertising markets the CMA considered that there is a strong case for imposing greater interoperability on Facebook "in relation to finding contacts and cross posting functionalities, but that the evidence does not currently favour more ambitious forms of interoperability such as full content interoperability."[52] It has also recognized, though, that "[t]he balance of considerations is likely to change over time given the fast-evolving nature of social platforms and the DMU [Digital Markets Unit] will be well-placed to judge the right forms of interoperability to deliver consumer benefits on an ongoing basis."[53] It appears reasonable to argue that for the unbundling remedy to be imposed by the DMU we will need to wait for further assessment. Also, in terms of timing, I note that while the UK government welcomed the report and indicated its willingness to proceed in that direction, the Queen's Speech in May 2022 announced a further delay in the legislative process that will lead to the attribution to the DMU of the powers necessary to properly implement a new competitive regime, and thus to impose interoperability.[54] In Germany, the Competition Authority, in its sector inquiry into messenger and video services, is investigating the possibility of interoperability mandates for these services as well as likely technical standards to be adopted for this purpose.[55] In France, the Conseil National du Numérique, a French independent advisory commission set up by the government in 2011, has recently commissioned an experts' study on the attention economy, which has identified interoperability mandates as one of the possible means of preserving users' freedom of choice and right to attention.[56]

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[51] COMPETITION & MKTS. AUTH., *supra* note 1; COMPETITION & MKTS. AUTH., MOBILE ECOSYSTEMS MARKET STUDY FINAL REPORT (2022), https://www.gov.uk/government/publications/mobile-ecosystems-market-study-final-report.

[52] COMPETITION & MKTS. AUTH., *supra* note 1.

[53] *Id*.

[54] Prime Minister's Office & Charles George, Prince of Wales, Queen's Speech 2022 (May 10, 2022).

[55] Press Release, Bunderskartellamt, Bundeskartellamt Publishes Interim Rep. on its Sector Inquiry into Messenger and Video Services, 47-48 (Nov. 4, (2021), https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2021/04_11_2021_SU_Messengerdienste_Zwischenbericht.html;jsessionid=D94F1DB41F367B1AEA78C82B720483F1.2_cid362?nn=3591568.

[56] CONSEIL NATIONAL DU NUMÉRIQUE, VOTRE ATTENTION, S'IL VOUS PLAÎT! QUELS LEVIERS FACE À L'ÉCONOMIE DE L'ATTENTION, [YOUR ATTENTION PLEASE! WHAT LEVERS TO USE AGAINST THE ATTENTION ECONOMY?] (2022), https://cnnumerique.fr/files/uploads/2022/Dossier%20Attention/CNNum_Votre_attention_s_il_vous_plait_!_Dossier_VF.pdf.

The list of governments and independent authorities considering interoperability mandates is growing, though most of these proposals are aimed principally at competition goals. Nevertheless, the unbundling of hosting and content curation activities could arguably have the additional advantage of delivering, through competition, the media policy objective of guaranteeing a higher degree of exposure diversity on social media markets. In other words, if well designed and implemented, the remedy could help achieve a variety of public objectives at once.

II. METHODOLOGY

This follow-up research is a qualitative study based on semi-structured interviews. I interviewed fourteen stakeholders and covered the pros and cons of the unbundling proposal, the impact it could have on their respective spheres of action, the trade-offs or likely unintended consequences it could trigger, and the possible ways to improve it. Interviewees were selected based on two main criteria: the stakeholder group they belong to and their geographical location.

Stakeholders have differing biases, incentives, and interests. As such, it is extremely useful to speak with a variety of them to determine what impact the remedy will have on the market, and what challenges, resistance, or support it will encounter. The first stakeholder group is developers of content curation systems, referred to within this paper as "third-party players". These are the people who would benefit from the regulatory remedy. The assumption underlying the research is that these interlocutors are best placed to comment on the technicalities of the regulatory proposals, describe the impacts the proposals could have on their business models and business opportunities, and identify weaknesses or limits. The second stakeholder category is large social media platforms. Since they are the targets of the unbundling, they would have to play an active role in implementing the changes and setting the conditions necessary for third-party players to provide their services to the platform users. They have the knowledge and information to assess the pros and cons of each model from a business and technical perspective, as well as to predict the impact each model might have on users' empowerment and rights. Social media platforms are currently underrepresented in this research, due to their lack of interest

or willingness to participate in such research.[57] The third category is regulators who would be tasked with designing and enforcing the remedy.

To widen the perspective and enable the identification of additional challenges, as well as possible solutions, I also interviewed a range of other relevant stakeholders with a variety of interests and expertise on the topic. Content curation systems constitute a gateway for content producers to reach viewers. Indeed, content curation is key for the findability and discoverability of content. As such, substantial changes in the content curation market would inevitably impact content producers too. To better explore this impact, I interviewed representatives from one of the major categories of content producers: media outlets and journalist associations.

The design of an effective unbundling remedy would also entail dealing with its technical components, including the degree of interoperability required to allow third-party players to operate. Thus, I interviewed a number of experts—including interoperability experts, app developers, and software engineers—specialized in trust and safety issues. I jointly refer to this group as "technical experts". Finally, the unbundling remedy would impact users' fundamental rights, and also play a role in the level of media diversity online. To better explore this angle, I included civil society organizations in the list.

I took a broad geographical perspective because the effectiveness of unbundling is strongly dependent on, among other things, the maturity of the market where it is implemented, the level of independence and accountability of the regulator, and the digital literacy of users. Therefore, the remedy is likely to produce different effects in different markets and in different countries. To take stock of some of those differences I interviewed stakeholders operating in the Global North and the Global South, in small and large markets (in terms of both revenue and number of users), and in states with a variety of different frameworks in place concerning digital platform regulation and media policies. More specifically, I interviewed stakeholders from: Canada, the United States, Mexico, Argentina, Brazil, the United Kingdom, Ireland, France, Belgium, Italy, Myanmar, and Australia. In the table 1 below, I have listed the interviewees, indicating where each comes from and attributing each a

[57] Please note I have repeatedly tried to interview these individuals and they have been very dismissive, or they didn't respond to my emails. In a single case, they responded that they were not interested in this research and that their algorithm was already optimised for diversity.

number, which I use in the analysis to make references and citations.

Stakeholder	Geographical Area
Large social media platforms	Global (n1)
Third-party players	Canada (n2), Europe (n3), Myanmar (n4)
Regulators	Australia (n5), Ireland (n6), Italy (n7), Mexico (n8), United Kingdom (n9)
Content producers	Canada (n10), Global (n11)
Technical experts	United Kingdom (n12), United States (n13)
Civil society	Argentina (n14)

Table 1. Source: author's elaboration.

The interviews took place between December 2021 and February 2022. Ahead of each interview, the interviewee received my previous research article[58] and a 2-page document explaining the main features of the unbundling proposal. The semi-structured interviews were based on open-ended questions and provided the flexibility to modulate the follow-up queries based on the answers and specific expertise of each interviewee. I opted for this method because it allowed the conversation to meander around the topics on my research agenda, rather than adhering slavishly to verbatim questions as in a standardized survey. In addition, semi-structured interviews can expose unforeseen issues or underestimated challenges, which was one of the main aims of my follow-up research. Each interview lasted about an hour and both parties had the possibility to follow up with further information or clarification in writing when the need arose.

In the analysis in the Part III of the paper, I have anonymized conversations, grouped the feedback and comments received around six topics, and identified the main messages provided by stakeholders. The following section presents those messages, signaling where a consensus emerged and where it did not. In the latter case, the analysis presents the various approaches and arguments as they were raised. Building on this, I elaborate some conclusions, make recommendations to improve the proposal, and signal areas for further research.

[58] *See* Stasi, *supra* note 2.

III. ANALYSIS

In this section, I present the results of the interviews grouped around six main topics. As preliminary observations, regulators have generally appreciated the pro-competitive focus and signaled interest in the proposal because it lands in a domain they are more familiar with than the direct regulation of content. Civil society has been attracted especially by the diversification angle, and by the potential to dilute the concentration of power in the hands of large platforms and empower users. Third-party players have concentrated on the enabling effects from a business perspective. Finally, content creators have appeared conflicted, caught between the benefits of becoming less dependent on a handful of giant players for the distribution of their content, and the difficulties of achieving scale in a diversified environment. All stakeholders have overall shown interest in my pro-competitive proposal, and appreciated its potential, demonstrating willingness to go deeper in discussing the various components, the likely pros and cons, as well as possible ways to fix the latter. An exception has been the majority of large platforms, which have been reluctant to discuss unbundling and have stuck to vague positions about its elements.

A. The Goal(s) and the Framing

To start with, different stakeholders approach unbundling with different framing, which highlights that the remedy could be used to achieve a variety of goals or more than one at once. As for the regulators, media competition authorities see unbundling as a possible way to achieve **exposure diversity** on social media markets (n5, n6). Meanwhile, telecoms authority or media authorities with capacity to impose pro-competitive remedies focus on the potential to **open the market by lowering barriers to entry** (n7, n8, n9). The issue is not only theoretical, but also has concrete consequences in terms of competence. Indeed, a competition authority usually has no competence to pursue media-related objective and could only implement unbundling if it were framed as a measure to create (more) competition in the relevant market. The media authority, meanwhile, might be competent to impose unbundling if it were framed as a measure for achieving exposure diversity, but not if it were framed as a purely competition-enhancing measure. It is also important to note that in certain countries, if unbundling is framed as having a media diversity goal, it might be imposed by the government, or by a government agency with no or little independence. Regulators flag that a

competition framing might therefore provide a stronger safeguard from unwanted state intervention in a key layer of the flow of information in society (n8). Regulators also note that an additional challenge comes from their (lack of) territorial competence with regard to large platforms, which have no legal establishment in their country (n5, n7, n8). As the two objectives, diversity and competition should both be pursued rather than being alternatives. Regulators argue that an efficient solution could be to consider inter-agency cooperation for the design and enforcement of this measure (n8, n9). Certainly, clarity on which specific market failures the measure is supposed to address will be beneficial and will impact both the design and the enforcement stages. Significantly, regulators seem to agree on the fact that the unbundling remedy might be a useful way to solve some, but not all, market failures on social media markets, and therefore has to be considered just a component of a broader intervention package (n5, n6, n7, n8, n9).

Business actors see unbundling as an opportunity to offer **discovery/rating as a service**. Indeed, the unbundling remedy would allow for both hosting and content curation to be provided separately as a service rather than together as a single product (n3, n4, n11). They also note that in social media markets hosting and content curation are not the only relevant bundle, and that there are additional levels of separation and openness to be explored. For example, hosting could be separated from social media services, and be provided by, for instance, a cloud provider. Additionally, advertising and content curation currently come as a bundle, and the same is true, in several cases, for payment services and content curation (n11). Business actors note that all these bundles create limits to their capacity to offer services without using those offered by the platform and to directly access end users (n3, n4, n11).

Content creators, media actors in particular, see the unbundling remedy as a **further step in the disintermediation between content production and distribution**, which in the past decade has become the widespread reality of media markets (n11). Depending on whether they are small or large players and their level of integration (that is, the extent to which their own distribution systems are developed), content creators might react to the opening of the content curation market in different ways. On the one hand, dealing with a variety of recommender systems might help to decrease their economic dependency on the big social media platforms, Google and Meta (n11). On the other hand, the need to juggle a variety of distributors might be an unsustainable burden for small players, and cause trade-offs in terms of visibility and discoverability of their content (n10).

While this might be a trade-off in any competitive scenario, when it comes to specific categories of content, such as those that are most important for the development and guarantee of a democratic society, some safeguards should be put in place. Two measures have been suggested to address, or at least to mitigate, this trade-off. The first is to create a system of quality certificates or something similar that could help to identify and guarantee a degree of visibility to specific categories of content, such as content of general interest, or trustworthy content. The second is to rely on a sort of 'public interest algorithm' to do so (n11). Both suggestions are further discussed in later parts of this section.

For users, unbundling is perceived as an **instrument of choice and empowerment**. The reasons why users want to be empowered might differ from context to context. The main motivations are to achieve better protection of their data and to regain some control of what content they are exposed to and why. Two elements seem to play a key role, and they are strongly interlinked. First, in order to make effective choices, users need to trust the providers (n3, n11, n14). Second, some users might feel disoriented by the availability of a variety of choices and prefer a frictionless experience (n1, n13). As further elaborated below, to foster trust in the remedy, it might need to be accompanied by measures to address transparency and quality of the services provided (n11). Moreover, to help ensure users do not perceive choice as a burden or an obstacle, stakeholders tend to agree that the remedy might require digital literacy programs and interface design requirements that allows users to make their choices (n2, n5, n6, n7, n9, n13).

Overall, different stakeholders' approaches to the problem signal that there is **no alignment of interests** among them with regard to the unbundling remedy, and that unbundling might create different trade-offs for each category. While certain conflicts of interests could be addressed by designing the measure in a certain way or by accompanying it with other relevant measures, in other cases there might be no compromise capable of making all relevant actors better off. For example, it might not be possible to find a solution that equally balances the interests of influencers to gain visibility and scale for better monetization and the interests of users to have a variety of algorithms at their disposal in order to better control what content they see. In this situation, it is necessary to decide which interest to prioritize and to what extent. This is a policy exercise that would benefit from the greatest degree of transparency, inclusion, and evidence-based discussions, and which must give the utmost consideration to the economic, social, and political impacts of each choice.

B. Business Models and Sustainability

My original proposal is to use the unbundling remedy to open the market for content curation and create a diversified environment for the benefit of business actors and users alike. Stakeholders have noted that this diversification needs not only a **quantitative component**, that is, a variety of providers, but also a **qualitative one**, that is, a variety of business models. In other words, they argue that a multiplicity of actors does not necessarily lead to a multiplicity of content curation models. Stakeholders have raised concerns about each.

Regarding the **diversity of actors**, stakeholders seem to have different perceptions of what the market's saturation point might be. Large platforms, regulators, and a number of third-party players agree that scale is an essential factor in enabling the provision of an efficient and attractive service. As the infrastructure to do so is costly, they consider that only a few players (and not dozens or hundreds) might be the limit (n1, n4, n9, n13). Furthermore, due to the current structure of the value chain, only a few players might be able to monetize the provision of content curation services to an extent that is profitable in the short and long term (n1, n4, n9, n13).
However, some third-party players have a different approach: they believe that to compete in the content curation market it is not necessary to provide a service with the wide array of functionalities that large platforms offer. They instead believe that users might be interested in services that are optimized for simpler but clearer goals. For example, they may want recommendations that give priority to a specific type of content, from specific sources, or to the content that attracts the most attention among friends. This diversification might cater to users better than the one-size-fits-all solution that large platforms offer (n3). In this scenario, the saturation point appears higher.

It should be noted, however, that when unpacking this scenario, large platforms and a number of third-party players seem to have contrasting views on certain key elements. Large platforms stress that their content curation is not one-size-fits-all but rather a service that is increasingly personalized for each user. In other words, their automated system for content curation adjusts over time for each user and that each user enjoys a service that is increasingly differentiated from that offered to any other user. Large platforms also add that this hyper-personalization requires extensive machine learning capability and is a continuous and expensive process that only a few players have the capacity to perform (n1). Some third-party players disagree that this

hyper-personalization is a better fit for users, and instead argue for a different approach towards the use of social media services. The model offered by large platforms assumes a very passive approach by users, who make no choices and no reflections about the motives behind their use of the social media platform. According to those third-party players this *status quo* is sub-optimal not only because of its likely negative effects on individuals' autonomy, but also from a business perspective. They believe that prompting users to reflect upon why they are using the social media services is an efficient way to gather information necessary to offer services that match users' real motives, needs, and expectations, and is a good way to create demand for a wider array of services (n3). I further elaborate on this point later, when I discuss users' empowerment.

With regard to the **diversity of business models**, there seems to be consensus that diverse business models might be more difficult, though not impossible, to monetize. The perspectives of stakeholders vary. Regulators emphasize the need to break the cycle between engagement, curation, and monetization. They seem to agree that in order to do that a regulatory intervention is needed (n5, n6, n8, n9). Uncertainty remains, though, about the appropriate kind of intervention. Some look to regulatory intervention in the online advertising market, pointing to the fact that the largest content curators are currently also the largest providers of online advertising, which creates a conflict of interest that calls for a remedy (n6, n9, n11). Others suggest the need to create the conditions for competition on quality metrics other than engagement (n6, n9). To this end, regulators suggest that they could intervene to impose minimum quality rules on content curation services (n6, n7, n9). However, they wonder whether this would be sufficient, while also recognizing that going further might be hard to justify in terms of proportionality. Another option is the introduction of systems based on quality stars or certificates for certain categories of content, such as the Journalism Trust Initiative's system.[59] A quality system could facilitate and protect the attractiveness of the content for users and therefore protect its monetization (n6, n9).

Third-party players tend to agree that intervening in the online advertising market would help to support the sustainability of their business models. In this regard, some ask for more clarity about the definition of advertising,

[59] *See About Us*, JOURNALISM TRUST INITIATIVE, https://www.journalismtrustinitiative.org/about (last visited Feb. 10, 2023) ("[The Journalism Trust Initiative] is developing and implementing indicators for trustworthiness of journalism and thus, promotes and rewards compliance with professional norms and ethics.").

especially with regard to sponsored content, as such definitions have a substantial impact on their monetization model (n3, n4). Concerning alternative business models, third-party players seem to agree that optimization based on engagement is not the best service for users. While they recognize that some users might be satisfied by the content curation services currently offered by large platforms, they also argue that this might not be true for the majority of users, who would rather benefit from and enjoy the choice among alternative services designed to optimize other elements. In other words, third-party players seem to believe that the demand for those alternatives already exists, and that what is missing is a sufficient degree of supply (n2, n3, n4).

Among other things, third-party players believe that demand exists for business models that collect less personal data, even if it comes with trade-offs in personalization. Arguably, these trade-offs concern passive personalization, i.e. the one shaped by the platform without users' active involvement, but could be at least partially compensated for by relying on voluntary and active choices by users about the optimization criteria they prefer. Moreover, while there seems to be agreement that less availability of data could come at the expense of efficiency in personalization, third-party players emphasize that in fact the scenario contains a spectrum of possibilities, and that it is possible to offer good recommendations without the need to collect massive amounts of users' data; this is considered to be needed only when the aim is to sell as much advertising as possible (n2, n3). Furthermore, the collection and use of data can be done in ways that are more respectful of users' privacy and leave them in control. For instance, a third-party player describes a possible model that implies no need to store data in a way that is re-aggregable: data are not collected with reference to a user ID, but rather are linked to a random token generated by the user's private key. As such, the user retains total control over her data: indeed, only the user, with her key, can regenerate all tokens and use them, delete them, or send them to another third-party player (n3).

When asked about the likely monetization channel for these alternative services, third-party players note that it might not be necessary to keep the status quo of content curation offered by only a few players and generating the skyrocketing profits it currently does (n3, n4). Their suggestion appears to be that with the diversification of the environment, profit might also need to be re-distributed, and the focus might shift from a value-extraction to a value-sharing and redistribution approach (n2). However, they also confirm that in the current market context, and therefore at least in the short term, it would be difficult for alternative

services to only rely on online advertising. Therefore, there seems to be consensus on the possibility of resorting to subscriptions or premium offers (n2, n3, n4). It should be noted that the premium model is currently also being considered by one of the large platforms interviewed (n1), and thus not only by third-party players. A third-party player adds that in the medium or long term, one possible scenario could be to have intermediaries managing libraries of algorithms and asking fees for their use (n2).

However, two elements would come into play. On the one hand, the success of these models depends to a great extent on users' willingness to pay. Stakeholders recognize that users' willingness to pay is strongly context-related, and that it depends on a variety of factors, economic, social, and other. Regulators add that the willingness of users to pay might vary depending on the specific content. For instance, parents might be more inclined to pay for a premium service that offers better guarantees for a safer space for their kids or people looking for specialized content might accept paying to be exposed to more of it (n6, n9). Regulators then conclude that in these cases competition might be easier to stimulate and third-party provider business models might better serve those niches. Either way, all stakeholders tend to agree that enhancing the digital literacy of users could be important for increasing their willingness to pay and stimulating the demand for premium services (n5, n6, n7, n9).

Having said that, a major obstacle remains because, even with improved digital literacy, certain categories of users might not be able to afford to pay for subscription or premium services. Stakeholders agree that this problem could exclude part of society, and regulators seem particularly concerned about the impact this could have on public discourse, citizens' engagement, and inclusion (n6, n9, n11, n14). To avoid this negative trade-off, stakeholders mention looking to public support. Some suggest support for demand through, for instance, subsidized subscriptions. Others suggest support for suppliers to make certain services available to users for free.

C. A "Public Interest" Algorithm

When asked to elaborate on the supply-side support option, a variety of stakeholders discussed the idea of public funding for the development of content curation algorithms that are set to optimize criteria that could directly deliver public objectives, and in particular exposure diversity. In the course of this paper, I will use the term 'public interest algorithm' to refer to this kind of algorithm.

One third-party player signaled that public funds might be one of the few available options because, at the moment, philanthropists do not seem to support this line of activity. In addition, philanthropists tend to speak with data scientists, but not (yet) sufficiently with application developers or programmers, creating a blind spot in the types of projects they fund (n4).

Regulators seemed to agree that the use of public funds for this objective would be in line with the state's traditional role in media markets, where public funds are used to achieve a variety of public objectives linked to media pluralism. They noted that states have long supported the production of certain categories of content, which have value for society and democracy. Due to the substantial changes in the relationship between production and distribution and to the strong impact that content curation algorithms have on distribution, regulators noted it would seem consistent that public funds are spent to support the distribution segment too (n6, n10).

While there is a high-level consensus around the idea of a public interest algorithm, stakeholders identify a variety of **challenges linked to its operationalization**. The first concern is about who decides the parameters to be used for the optimization. As mentioned in my previous research, operationalizing diversity in content curation algorithms is no easy task. [60] It requires, among other things, the communities of policymakers and programmers to find a common language and can reveal technical limits to delivering against public policy objectives. [61] Civil society encouraged care before providing a *carte blanche* to the state in setting the optimization parameters and expressed a preference for a more open discussion and process (n14). One technical expert and a variety of third-party players signaled that civil society could play an active role in this process, first because they have the necessary expertise in media diversity and freedom of expression issues and, second, because their intervention would both add greater legitimacy and keep in check any disproportionate, paternalistic interventions by decision-makers (n12, n2, n4).

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[60] *See* Stasi, *supra* note 2.

[61] *See* Urbano Reviglio & Claudio Agosti *supra* note 15. Furthermore, for the debate in question precious insights can be inferred from the previous work of scholars who discuss public service media, diversity and algorithmic recommendation, and explore the tension between individual interests around recommendation and selection of content, and the public objectives that constitute the aim of public service media. *See, e.g.*, Jannick Kirk Sørensen, *Public Service Media, Diversity and Algorithmic Recommendations*, 2554 CEUR WORKSHOP PROC. 6 (2019), http://ceur-ws.org/Vol-2554/paper_01.pdf.

The second layer of flagged challenges concerns the **data needed to train such algorithms**. Stakeholders agree that an adequate training dataset is the key component of a well-performing content curation algorithm. When asked to elaborate on possible ways forward, stakeholders identified a few. One third-party player suggested that a variety of public service media could work together to create a shared database of content metadata, and that this database could then be used to train the public interest algorithms. For this solution to work, a crucial step would be to develop metadata industry standards for the labelling of content; the third-party players noted that while a similar standard exists for newspapers,[62] nothing of this sort has yet been developed for video content. The other necessary component is data about users' preferences. To avoid online surveillance, this data could be retrieved through channels that are external to the social media platform, such as newsletters that directly ask users their interests and preferences (n2). Another third-party player suggested that users could voluntarily share data (including their search history) and provide information specifically for this purpose, and that civil society could do the same (n4). Finally, one technical expert noted that a more radical proposal would be to ask large platforms to grant a certain degree of access to their API for creators to train their own algorithms (n13). Apart from possible data protection concerns, it seems unlikely that large platforms would agree to grant API access unless regulators obligated them to do so, and it seems equally unlikely that such an obligation could meet the necessity and proportionality requirements.

The third layer of challenges focuses on **take-up**. The availability of the public interest algorithm does not necessarily imply its adoption, though stakeholders have different views on whether this would provide sufficient grounds for intervention. Large platforms do not see the need to force take-up and tend to support the *laissez-faire* approach (n1). Third-party players' and civil society's positions range from recommending public policies aimed at increasing take-up (such as digital literacy programs) to the suggestion that the public interest algorithm could be used by public service media, public universities, other providers of public services, or big civil society organizations that host a certain volume of content (n2, n3, n4, n14). The latter solution could be a way to get the average user acquainted with this kind of algorithm and stimulate its take-up and simultaneously put competitive pressure on existing content curation providers.

[62] Reference is made to the publishing standard IPTC; *see* IPTC, https://iptc.org/.

Finally, stakeholders, and in particular regulators, note that how far the state can go with support for public interest algorithms depends largely on how the media ecosystem in that country is defined, the regulatory frameworks that govern it, and the extent to which the social media markets, and thus content curation services, are considered to form part of this landscape (n5, n6, n9). One representative of the media noted that consensus might also be needed on the role that content curation plays in the shaping of the information diet of users, and the extent to which this role is comparable to the editorial responsibility of traditional media (n6). The same stakeholder recommended that regulatory interventions should define these terms to guarantee legal certainty (n6).[63]

D. The Technical Component

All stakeholders interviewed agreed that the technical component of the unbundling remedy, and in particular the need for a certain degree of interoperability, plays a major role in the effectiveness of the measure. However, they take different positions on the key technical challenges.

Regarding **interoperability standards**, one large platform and some technical experts signaled that there might be the need for not one, but many standards, and that this should be a continuous process that develops over time (n1, n12, n13). Furthermore, there seemed to be no consensus among stakeholders on whether it would be more convenient to have one standard that applies to all social media platforms, or to have a different standard for each platform. However, a major problem with having different standards are the additional costs to third-party developers, who would need to adjust their algorithm to a variety of standards, rather than a single one (n3, n4).

The design of a technical standard always implies trade-offs, so the first step in developing a standard would be to identify priorities. Technical experts, third-party players, regulators, and civil society agree that it is important to prevent these tradeoffs from being borne by third-party players or by users. With this in mind, the question of **who should set the standard(s)** becomes vital. Platforms, third-party players, and technical experts point to three possible models. The first is to have each large platform set the standard. The advantage of this solution is that it would be

[63] The stakeholder mentioned the EU's latest instrument on political advertising, which, however, does not contain a definition of political advertising.

developed faster than an industry-wide initiative. However, third-party players flagged that the risk that these platforms could exclude or discriminate against them based on technical grounds by changing elements of the standard *ad nutum* (n2, n3).

The second model is to have industry set the relevant standard(s). Industry-led standards development organizations (SDOs) have performed this task for decades, and have contributed to numerous advances in technology that have been reflected in benefits for industry, consumers, and society. The logic behind the SDOs is that they can set standards based on the best knowledge and expertise available in the industry at any given moment in time.

One technical expert flagged that, at the time the interview took place, the industry was already moving in this direction (n12). More specifically, the expert mentioned that the World Wide Web Consortium (W3C), an international standard body responsible for the Web,[64] has established a discussion group for evaluating the technical merits of interoperability remedies, suggesting that internet and web standards experts, but also regulators, civil society, and academics, should contribute to "help legal regulators understand and apply Internet and Web architectural principles – like privacy, security, internationalization, and accessibility – when requiring 'big tech' companies to implement technical specifications."[65] At the time of writing a few proposals had already been presented. One proposal, which is relevant for the unbundling remedy, directly addresses policy makers by calling upon them to refrain from specifying which protocol a gatekeeper should implement, and instead to specify the requirements of the protocol and let the company choose.[66]

Another technical expert suggested an incremental approach. During a first phase, standards should be set by each platform. In a second phase, when the standards ought to have been tested in practice, SDOs could build on what exists to develop better solutions (n13).

The third model discussed by stakeholders includes a role for policymakers or regulators. In this model, neither the platforms individually nor the industry collectively would be free to develop standards in a vacuum. Rather, they would

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[64] *See W3C Mission*, W3C (2021), https://www.w3.org/Consortium/mission#principles.

[65] *See Interoperability Remedies Community Group*, https://interop-remedies-cg.github.io/.

[66] *See* Sørensen, *supra* note 61. *See also public-interop-remedies@w3.org from February 2022 by Date*, W3C, https://lists.w3.org/Archives/Public/public-interop-remedies/2022Feb/, for an update on the proposals and discussions.

need to do so following requirements set by the policymaker or regulator, which would have been set with a view to guaranteeing that the standards achieve certain policy or regulatory objectives. Stakeholders operating in the European Union context show more familiarity with this model, which is to some extent the backbone of the EU system for standard-setting organizations. Technical experts considered that, on the one hand, the public intervention could slow the standardization process, but, on the other hand, explicitly referring to interoperability standards in the text of the digital markets and services' regulatory frameworks currently being discussed by the EU institutions[67] could incentivize standardization, and thus avoid further litigation among platforms and third-party players on this matter (n12). Large platforms do not have a single view on this issue. Third-party players mentioned that public intervention would help to avoid a capture of SDOs by the big industry players, although there is no consensus on the true extent of this risk (n3, n4).

One technical expert referred to the open banking initiative in the United Kingdom and the role played by the relevant authority in that case. In a nutshell, in order to enable an open banking system where users were free to switch from one provider to another, easily transferring all their data, the regulatory authority asked the banks to develop a standard for this purpose, which new entrants have since adopted. The technical expert noted that the exercise was expensive for existing banks, which were forced to invest in this standard, but it has been convenient for new entrants (n12).

The question of who should set the standard(s) is linked to the question of the **role to be attributed to the standard(s)**. There seems to be a certain degree of consensus across platforms, technical experts, third-party players and regulators that the adoption of the standard(s) should provide a safe harbor and imply compliance with the remedy. However, some regulators go further and consider it more efficient not to leave open the possibility for large platforms to adopt other solutions, as this would imply additional effort for the regulator to check and monitor compliance with the remedy requirements (n9). The challenge is that not all regulators have the required expertise to perform this task properly (n8, n9). Furthermore, some third-party players express fears that if a standard is not mandated, large platforms could still find ways to effectively exclude them (n4).

[67] Reference is made to the Digital Markets Act, *supra* note 22, and Digital Services Act, *supra* note 21.

E. User Empowerment

As mentioned above, one possible framing for the imposition of an unbundling remedy is to open the market to competition and create greater choice for users. Thus, when discussing unbundling with stakeholders, one of the questions has been how best to ensure that users are empowered and remain at the center of the intervention. Though I already mentioned users' interests and perspectives above, in the following paragraphs I elaborate further on two areas where it seems that stakeholders have different perceptions and ideas.

Stakeholders disagreed on the **degree of service sophistication** users demanded or could appreciate. The disagreement appears both among and within categories. At one end of the spectrum, some argued that users prefer frictionless experiences, including when it comes at the expense of control, and that it would be extremely difficult and inefficient to educate users to a higher degree of sophistication. In this approach, the unbundled environment would benefit the niche user. The supporters of this approach warned that an additional trade-off to what is perceived to be an "excessive" empowerment of users is that online safety could be compromised as users' online experience would remain, at least to a certain extent, under their control rather than the platform's (n1). In this scenario illegal content might be shared and accessed more easily, or harmful situations might be more difficult to identify (n1). More generally, these stakeholders flagged that users tend to make sub-optimal choices and believe there is a risk to empowering them in relation to an activity or content curation, which can have a substantial impact not only on the individual's rights, but also on society and democracy (n1, n13).

At the other end of the spectrum, stakeholders believed that users have been forced into passivity by the absence of alternatives. If allowed, they would exercise their choice and benefit from more freedom and autonomy. These stakeholders noted that in many areas affected by rapid technological developments, users' skills and sophistication have increased over time. They suggested that digital literacy policies as well as additional transparency obligations have a significant role to play (n2, n3, n4, n11, n14). They also noted that the current status quo of only a few large platforms making decisions for users lacks any legitimacy, and that to give users some control back could be a way of addressing this (n3, n4, n11, n14).

Another element on which stakeholders disagreed concerns **default settings.** In my proposal, I argued that large platforms should remain capable of offering content curation

service to their users, but that this option should be presented as an opt-in, rather than an opt-out, to overcome users' bias towards the status quo and to prevent platforms from nullifying the impact of the unbundling obligation through their default settings.[68] Stakeholders discussed default settings not only in terms of the choice of provider, but also in terms of the criteria for content curation. One third-party player and a civil society representative argued that having no default setting is the best option, because this would force users to express intentionality and reflect upon why they are using the service and what they want to achieve (n3, n14). It would also safeguard users' autonomy to choose their information diet. These stakeholders recognized this approach would be bad for endless engagement because once they have achieved what they want, users would leave the platform. Nonetheless, they argue it could be effective for a useful and worthwhile experience (n3, n14). Opponents of this approach relied once again on the need to avoid excessive complexity for users and suggested that no default setting would leave users exposed to too much choice, fragmenting the online experience and creating confusion (n1).

F. Additional Challenges

During the interviews, stakeholders mentioned a few additional challenges that the unbundling remedy would raise. In this section, I present those that I consider to be the most relevant for this research. I hope to attract additional attention to this idea and stimulate further debate in the pursuit of suitable solutions.

There is no single view among stakeholders on whether the unbundling remedy should be limited to **content curation** or should also include **content moderation**. While there seems to be agreement that the two activities can be separated, it is less clear whether doing so might be efficient. Third-party players expressed no interest in performing content moderation and flagged that the infrastructure needed to do it effectively is costly (n3, n4). Therefore, they argued that the provision of this service should remain the platform's responsibility (n3, n4). Nevertheless, one third-party player and two technical experts noted that content moderation could also be offered as a service and that it would be possible to open that market (n4, n12, n13). In this scenario, though, the business model would be significantly different, with large platforms becoming a possible business user of the service. Regulators did not take a strong position on the topic, but flag that the provision of content moderation

[68] *See* Stasi, *supra* note 2.

services might require different kinds of rules, as well as monitoring and evaluation, which might fall outside the scope of the activities of many regulators and competition authorities *in primis* (n8, n9). Large platforms juggled two arguments. On the one hand, they reckoned that to properly perform content moderation requires substantial investments and a costly infrastructure. Therefore, they considered it difficult for smaller players to perform content moderation adequately and signaled that this would negatively impact users' experience and online safety. On the other hand, they seemed unconvinced by the idea that content curation and content moderation should be separated at all, because one is extremely monetizable, but the other is currently not. They noted that to support increasing competition in curation while leaving large platforms with the burden of moderation might disproportionately impact their business (n1). However, I note that large platforms show varying degrees of inclination towards this solution, and more generally towards the opening of the markets they operate in.

When discussing the separation of content moderation and content curation from a technical perspective, technical experts described the following picture. If large platforms continue hosting, they can track the kind of content that each third-party player recommends or promotes to its users. Indeed, the third-party algorithm, plugged into the platform's interface, is supposed to take a load of posts and content waiting for a user and instruct the platform on how to prioritize it. As such, the large platform remains technically capable of spotting the type of content a third-party player promotes, including, for instance, hate speech, disinformation, and so on. This being the case, it might be difficult to imagine a scenario in which the large platform does not play any role in content moderation. Technical experts considered that for this to happen, the third-party players would have to host the content (or create caches of it) and display it directly to users, which could create disjointed experiences for users. They noted that a better way to proceed would be to establish conditions for interoperability across social media platforms, and not only at the level of content curation. They considered that the two – interoperability for content curation and interoperability for full social media networking – could happen incrementally (n4, n13).

Some stakeholders questioned whether content curation deserves the same attention irrespective of the type of content. In other words, they questioned whether there **are specific categories of content** that would be desirable or necessary, from a societal perspective, to treat differently, and whether this should be reflected in the way the unbundling remedy is designed and enforced. One regulator suggested

that news and current affairs deserve priority and there could be different rules for this type of content (n6). More concretely, the regulator pointed to some form of prioritization system, and to the fact that in circumstances where there is a conflict of interest, promotion of this type of content should prevail (one example can be found in the previously discussed conflict of interest between content curators and users, discussed in the previous parts of this analysis) (n6).

Over the course of the interviews, stakeholders identified two aspects that require further consideration. One concerns the challenge of identifying and defining the categories of content that should be accorded this special attention. Stakeholders resorted to concepts like news and current affairs, quality content, public interest content, trustworthy content, and so on (n2, n6, n7, n11, n14). However, the definitional exercise remains complex, and stakeholders tended to agree that regulatory frameworks do not adequately address this challenge (n2, n6, n14). Regulators and media representatives flagged that initiatives focused on the production process (source) rather than on the content itself might be more reliable and useful, pointing to the Journalism Trust Initiative as an example (n6, n7). The second aspect concerns the extent to which a remedy, such as the one discussed in the interviews, could be stretched to include prioritization or promotion requirements. Regulators noted that, once again, clarity about the framing and the objective to be achieved by the measure would help. For instance, if the focus is on the competition objective, it would be difficult to include that sort of requirement in the measure. However, stakeholders tended to agree that the boundaries might be set differently when it comes to the public interest algorithm (n5, n6, n8, n9).

IV. CONCLUSIONS

The discussions with the 15 stakeholders revealed and confirmed a number of advantages and challenges linked to the mandatory unbundling of hosting and content curation activities by large social media platforms.

As expected, stakeholders took different positions on the various elements of the remedy, due to the differences in their interests and in the roles they would be called upon to play should this remedy be designed and applied. A few general trends can be identified. First, there seems to be a framing and definitional challenge in relation to essential concepts. Stakeholders desire more clarity about the specific objectives the remedy is intended to achieve, the boundaries of content curation, the degree of interoperability that is

needed, and the extent to which users' empowerment is desirable.

With regard specifically to the goals of the remedy, it is worth noting two elements. On the one hand, the fact that the unbundling could be used to achieve more than one goal may be seen as a resource rather than a limit. Multi-purpose remedies might be a good option for shared regulatory spaces, where the same behaviors are at the origin of more than one market failure or cause more than one kind of harm (and this might prove particularly true for online markets, which are characterized by algorithmic-driven services). On the other hand, the possibility of framing the remedy in a different way might also be an advantage when it comes to ensuring that the regulator has the competence to impose it. Across countries, the level of independence, accountability, and expertise of regulators vary. If more than one regulator dealing with social media markets was able to impose the remedy, such as the competition authority, the media regulator, or the electronic communications regulator, there are more chances that the unbundling could be implemented when needed.

Second, there continues to be some debate over the role to be attributed to the state in supporting the sustainability of the new market scenario that would be opened by the unbundling. While there is a certain degree of consensus on the desirability of digital literacy policies, stakeholders have divergent views about the possibility of public funding being used to subsidize a diversified environment for content curation.

Third, the overall impression is that the unbundling remedy is seen more as a core component of a broader package of measures than as a one-stop-shop solution to the relevant market failures.

Fourth, when it comes to users' empowerment, positions seem to reflect two opposite normative choices: some embrace a more paternalistic approach and others prefer a more liberal one. At least three preliminary conclusions can be drawn from the above. The first is that when it comes to remedies that, like this one, have the potential to establish a different scenario for the provision of a service that has a substantial impact on individual users and on society alike, the perspectives of a variety of stakeholders as well as the benefits and trade-offs that each would bear have to be explored in depth. The second is that there might be no regulatory solution to the kind of market failures at stake that could make all stakeholders better off. This being the case, the decision about which set of interests and public objectives to prioritize is a political one, which should take into account all voices in society and align as much as possible

with democratic values. Finally, there is still a high level of opacity and lack of information around the functioning of automated systems for content curation; certainly, further research would be needed to better inform policy making and to help create or support optimal alternatives.