

THE ROLE OF STRUCTURAL REMEDIES IN DIGITAL ECOSYSTEM MERGERS



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Structural remedies are often preferred by competition authorities because they reshape market structure and avoid ongoing behavioural oversight. In digital ecosystem mergers, however, those same advantages may become limitations. This article identifies three challenges. First, products whose competitive strength depends on integration within an ecosystem may not remain viable as stand-alone divestment businesses. Second, potentially harmful elements, such as data, may be inseparable from benign or efficiency-enhancing ecosystem assets. Third, under ecosystem theories of harm, the source of the alleged competitive concern is also the source of the consumer benefit: removing the former may therefore sacrifice the latter. Drawing on recent EU practice, including *Google/Fitbit*, *Meta/Kustomer*, *Booking/Etraveli*, and *Microsoft/Activision*, we argue that structural remedies are not necessarily the best default response to ecosystem concerns. In some cases, behavioural commitments may better preserve merger-specific efficiencies while addressing the identified harm. The appropriate remedy should therefore depend on a case-by-case assessment of the theory of harm, the source of efficiencies and the practical feasibility of each remedial option.

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I. INTRODUCTION

Mergers involving digital ecosystems are among the most consequential transactions competition authorities address today, as the scale of the companies involved can reach billions of users. They are also among the most contested, as recent prohibitions and in-depth inquiries in Booking/Etraveli, Microsoft/Activision and Amazon/iRobot illustrate.² Indeed, concerns have been raised that digital ecosystems' combinations of interconnected product portfolios can give rise to competitive harm in ways that traditional merger analysis is not fully equipped to capture, let alone remedy.³

It is against this backdrop that we consider the role of structural remedies in digital ecosystem mergers. At the outset, we note that remedies in merger control are a means to an end. They place the merger under conditions that remove the likelihood of the merger harming customers. At the same time, they may preserve some of the benefits of the transaction, including those expected to reach consumers. Any discussion of remedies must therefore start with the issues that they are seeking to resolve, and, at the same time, what they may retain.

Digital ecosystems share specific characteristics that mean that expansion, in terms of both scale and scope, tends to lead to both product enhancements from the consumer perspective and improvements in economies of scale and scope which, ultimately, may benefit consumers. Mergers which generate such expansion, therefore, have the potential to give rise to significant efficiencies capable of leading to consumer benefits.⁴

At the same time, the variety of products and services that ecosystems tend to offer mean that these mergers can give rise to a multitude of theories of harm. These are a mixture of the novel and the familiar. Some, such as horizontal unilateral effects (for example in Nasper/Just Eat) and vertical input foreclosure (for example one set of the theories of harm in Meta/Kustomer), are well established. Others, in particular the “ecosystem theory of harm” investigated in Booking/Etraveli, under which the merger entrenches the merged entity's position in a core product through the addition of a complementary product or service, are newer and have prompted significant and ongoing debate.⁵

To the extent that these theories of harm are found to raise anti-competitive concerns in the context of a particular merger, and these concerns are not outweighed by efficiencies, consumers would benefit from the transaction being prohibited, unless remedies are applied.

Structural remedies, involving the divestment of assets involved in the supply of products or services, are typically the preferred approach of competition authorities. This is because they either create a self-sustaining independent competitor or strengthen an existing one, without requiring ongoing monitoring and enforcement of the merged entity's conduct or any reliance on the merged entity acting against its own incentives.⁶ In the context of digital ecosystem mergers, however, structural remedies face three significant challenges.

2 Booking/Etraveli was prohibited by the European Commission (“EC”) in 2023, which is currently subject to an ongoing appeal to the General Court of the European Union, with judgement still pending at the time of writing. Case M.10615, *Booking Holdings / Etraveli Group*, C(2023) 6376 final (EC, 2023) (“EC Decision in Booking/Etraveli”); appeal pending, Case T-1139/23, *Booking Holdings v Commission*, C/2024/973 (O.J., 2024). Microsoft/Activision was cleared by the EC on 15 May 2023, subject to remedies, but prohibited by the UK Competition and Markets Authority (“CMA”) on 26 April 2023. It was subsequently renotified to the CMA in restructured form (excluding Activision's non-EEA cloud streaming rights, divested to Ubisoft) and cleared on 13 October 2023. Case M.10646 – *Microsoft / Activision Blizzard*, C(2023) 3199 final (EC, 2023) (“EC Decision in Microsoft/Activision”); Competition and Markets Authority, *Microsoft / Activision Blizzard Merger Inquiry*, Final Report (CMA, 2023); Case ME/7068/23, *Microsoft / Activision Blizzard (ex-cloud streaming rights) Merger Inquiry*, (CMA 2024), Decision on Consent under Paragraph 12 of the Microsoft and Activision Merger Inquiry Order 2023 (13 October 2023). Amazon/iRobot was abandoned by the parties following the EC expressing formal concerns during its Phase 2 investigation, in November 2023. Statement by Executive Vice-President Vestager on Announcement by Amazon and iRobot to Abandon Their Transaction, European Commission Statement 24/521 (29 January 2024), https://ec.europa.eu/commission/presscorner/detail/en/STATEMENT_24_521. RBB Economics acted as economic adviser to the parties in the above transactions. The authors were not personally involved in any of these matters. The analysis in this paper is based exclusively on publicly available information, and the views expressed are solely those of the authors, independent of any interest Booking may have in the outcome of the ongoing appeal.

3 See Jason Furman et al., *Unlocking Digital Competition: Report of the Digital Competition Expert Panel*, at 3–14 (HM Treasury, 2019); Jacques Crémer, Yves-Alexandre de Montjoye & Heike Schweitzer, *Competition Policy for the Digital Era*, at 3–12 (EC, 2019).

4 See Ethel Fonseca, George Tucker & Helder Vasconcelos, *Ecosystem Mergers and Unilateral Effects? A Framework for Assessing the Ecosystem Theory of Harm*, *CPI Antitrust Chronicle* (April 28, 2026), <https://www.pymnts.com/cpi-posts/ecosystem-mergers-and-unilateral-effects-a-framework-for-assessing-the-ecosystem-theory-of-harm/>, and the references therein.

5 *Ibid*

6 Commission Notice on Remedies Acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004, 2008 O.J. (C 267) 1, para. 9; Competition and Markets Authority, *Merger Remedies*, CMA87, paras. 3.1–3.4 (Dec. 2018).

- **Viability:** the divested products or services may not be effective competitors once separated from the existing ecosystem in which they were embedded.
- **Inseparability of harmful and benign elements:** it may be structurally impossible to separate the elements that could be found to give rise to harm, such as data, from those which are benign, such as the products that generate that data.
- **Asymmetry of advantage under the ecosystem theory of harm:** where the theory of harm is predicated on the merged entity gaining a competitive advantage that does not extend to rivals, structural remedies face a particular difficulty: a divestment that removes the advantage will typically also remove the consumer benefits associated with it, while a divestment that preserves the benefits would require improving rivals' ecosystems (e.g. by transferring related products to them) to eliminate the merged entity's competitive advantage, an exercise of considerable complexity.

Behavioral remedies may be better suited to resolving competition concerns in light of some of these challenges. For instance, it may be relatively straightforward to resolve concerns around data access through granting access to that data to rivals, as was the case in *Meta/Kustomer* and *Google/Fitbit*.⁷ However, other concerns may be much less suited to such remedies, and so any remedy would need to be tailored to the specific facts of each case. Therefore, a detailed case by case analysis is the appropriate way to determine which remedies are most likely to be successful at addressing the concerns in question.

II. DIGITAL ECOSYSTEM MERGERS: THE LANDSCAPE OF THEORIES OF HARM

A. Key features of Digital Ecosystems

A digital ecosystem can be defined as a network of technically integrated products and services, typically centered around a core service.⁸ Broadly speaking, the defining characteristic of an ecosystem is that broadening the ecosystem, and/or deepening the integration between the components of the ecosystem, improves the competitiveness of that ecosystem, all else equal.

This arises as a result of several economic features that ecosystems may possess. First, the products and services are often complementary in nature, in that customers tend to place greater value on using them together with one another. Technical integration tends to enhance this, for example through bringing together a range of services into a single app (for example WeChat, which brings together social media, chat, payments, and a range of other functionalities). Second, ecosystems often give rise to features such as economies of scope and scale, whereby products and services become more cost-effective to offer as the ecosystem becomes broader and/or larger, for example through greater access to user data. Third, they may also give rise to network effects, where increases in the user base increases the value of the product, for example in a social network.⁹

B. Implications for Merger Analysis

The above features have important implications for merger analysis. Mergers may add products or services that become integrated into an existing ecosystem. By doing so, mergers can enhance the competitiveness of the ecosystem through the dynamics set out above. That means that the analysis of the efficiencies that the merger is likely to bring about is central to a proper analysis of the effects of such mergers. Any theory of harm must be balanced against these efficiencies in order to identify the overall effect on consumers.

In terms of those theories of harm, it is important to distinguish between several types that may arise in the ecosystem context. This is important, because the way in which harm can come about differs materially between different types of mergers. In turn, the evidence base and analysis required are also different. In what follows we give an overview of the different categories.

⁷ Case M. 10262, *Meta (Formerly Facebook) / Kustomer*, C(2022) 409 final (EC, 2022) ("EC Decision in *Meta/Kustomer*"); Case M.9660, *Google / Fitbit*, C(2020) 9105 final, (EC, 2020) ("EC Decision in *Google/Fitbit*").

⁸ OECD, Executive Summary of the Hearing on Competition Economics of Digital Ecosystems, at 2 (2021), https://www.oecd.org/content/dam/oecd/en/publications/reports/2021/10/competition-economics-of-digital-ecosystems_a605bce7/5145fce1-en.pdf.

⁹ See Fonseca et al. (2026), and the references therein, *supra* note 4.

C. A taxonomy of Ecosystem Mergers

The first category is mergers between alternatives (from the customer perspective). These are horizontal mergers.¹⁰ The theory of harm is the standard unilateral effects one: by removing an alternative product, the merger gives the merged entity the ability and incentive to increase prices and/or reduce quality, to the extent that this is not offset by efficiencies or the competitive responses of rivals.

One of the main questions in the digital ecosystem context is the level at which competition occurs. In some situations, individual components of an ecosystem may compete against one another, whereas in others, competition may take place at the level of the ecosystem itself.¹¹ One ecosystem merger assessed on a horizontal basis is Naspers/JustEat, which involved the merger between Naspers' ecosystem including food delivery and fintech and JustEat's takeaway delivery service. The main issue was the overlap between the two merging parties in online food delivery platforms.¹²

Given the nature of ecosystems, they may also give rise to mergers between related products that are not direct alternatives to one another. Some of these relationships could be vertical: the combination of an upstream input with a downstream output.

In the ecosystem context, "upstream" and "downstream" must be interpreted broadly. For instance, data is an important example of an input because it can determine the quality of downstream services. The EC for example has found this in a range of cases, including Meta/Kustomer and Google/Fitbit.¹³ One vertical concern is input foreclosure, which arises where the merged ecosystem uses its control of an input (such as data) to deny or degrade rivals' access to that input, weakening rivals' ability to compete in downstream markets. For example, in Meta/Kustomer, the EC had concerns that Meta would deny access to its messaging APIs, an important input into Customer Relationship Management ("CRM") systems, to the detriment of Kustomer's rivals, and in turn customers, in that market.¹⁴

Customer foreclosure, conversely, arises where the merged ecosystem is an important pre-merger purchaser of an important input, and post-merger switches that purchasing to in-house production. That can harm customers to the extent that it denies an upstream rival access to sales volumes sufficient to remain competitively effective, which in turn increases input costs for the merged ecosystem's rivals over time.

Conglomerate mergers, namely those between related products that are neither alternatives nor in an input-output relationship, can give rise to two broad theories of harm. The first is leveraging, i.e. the use of market power in one product market to strengthen the merged entity's position in an adjacent market. This can be achieved, for example, through bundling, tying or adjusting the interoperability of different products.¹⁵ The leveraging concern in Google/Fitbit, for example, was that Google would degrade the interoperability of Android with rival wearable devices in order to favor Fitbit.¹⁶

The second, more novel, is the ecosystem theory of harm. This posits that the merger increases the competitiveness of the merged entity's offering in a core product where it has market power, which simultaneously makes it harder for rivals to compete against the merged entity in that core product. This concern was assessed by the EC for example in Booking/Etraveli, Amazon/MGM, Google/Photomath, and Meta/Kustomer.¹⁷ For this theory to hold, the negative effects to consumers of the reduction in competition must outweigh the positive effects from the increase in competitiveness.

¹⁰ We note that traditionally, many competition authorities have distinguished between horizontal, vertical and conglomerate mergers. We also note that, at the time of writing, the EC has recently released draft revised merger guidelines which do not use this categorization. European Commission, Draft Guidelines on the Assessment of Concentrations under Regulation (EC) No 139/2004 (30 April 2026), https://competition-policy.ec.europa.eu/mergers/review-merger-guidelines_en. We rely on it here as a useful (albeit not the only) way to categorize theories of harm.

¹¹ For example, see Manu Batra et al., *Ecosystem theories of harm in EU merger control: analysing competitive constraints and entrenchment*, Journal of European Competition Law & Practice 15(6), at 357–367 (2024), <https://doi.org/10.1093/jeclap/lpae061>.

¹² Case M.11936 – *Naspers / Just Eat Takeaway*, C(2025) 5695 final (EC, 2025), https://ec.europa.eu/competition/mergers/cases1/202608/M_11936_10896561_1578_3.pdf.

¹³ For example, see EC Decision in *Meta/Kustomer*, para. 242; EC Decision in *Google/Fitbit*, paras. 503-506.

¹⁴ EC Decision in *Meta/Kustomer*, paras. 512–513.

¹⁵ OECD, *Theories of Harm for Digital Mergers*, OECD Competition Policy Roundtable Background Note (2023), https://www.oecd.org/content/dam/oecd/en/publications/reports/2023/05/theories-of-harm-for-digital-mergers_7bae0553/0099737e-en.pdf.

¹⁶ EC Decision in *Google/Fitbit*, para. 730.

¹⁷ For an explanation of how this theory works, and how it can be assessed in practice, see Fonseca et al. (2026) *supra* note 4.

These distinctions between types of mergers matter not only for the analysis of harm, but also for the design of remedies. Each category raises a different structural challenge. Horizontal concerns, where the merger removes an alternative, lend themselves naturally to the divestment of one of the overlapping products, but raise the question of whether that product remains viable as an effective competitor once extracted from its ecosystem. Vertical concerns (either framed as input or customer foreclosure), particularly those involving inputs such as data, raise the further question of whether the input giving rise to the harm can be structurally separated from the products with which it is intrinsically tied. Conglomerate concerns, and in particular those framed as an ecosystem theory of harm, raise a more fundamental difficulty, in that the very feature that gives rise to the harm, namely the increase in competitiveness of the core product, is also the source of the consumer benefit. The remainder of this paper considers each of these three challenges in turn.

III. STRUCTURAL REMEDIES

A. Purpose of Remedies

To the extent that one or more of the theories of harm laid out above are supported by the evidence, and that efficiencies do not offset that harm, then, logically, if allowed, the merger would harm consumers. Remedies are, in essence, modifications to the merger that prevent this harm from arising while allowing the merger to proceed. They are, in this sense, a third option between unconditional clearance and prohibition, and their availability expands the set of transactions that can be cleared without consumer harm.

In doing so, the remedy may allow some of the benefits stemming from the merger to be retained. Indeed, the ideal remedy would remove the competitive concern while preserving efficiencies to the maximum extent possible. In practice, however, these objectives can pull in different directions, and in the ecosystem context these tensions may be particularly acute. This is because efficiency gains from integration into the ecosystem, as explained above, may be very closely tied to the features that give rise to competitive concern.

Structural remedies are one way to achieve this overall aim, through separating part of the merging businesses into a different entity, which operates as an independent competitive force. It is worth noting at the outset that a structural remedy requiring divestment of the entirety of one of the merging parties is, in substance, equivalent to prohibiting the transaction. The discussion that follows therefore focuses on structural remedies that allow at least some part of the transaction to be structurally preserved.

There are several particular challenges that structural remedies must overcome in order to be effective in the digital ecosystem context, as we explain below. In some cases, these challenges may present insurmountable barriers. As a result, as we discuss below, behavioral remedies, i.e. commitments by the merged entity to behave in a certain way, may be a better alternative that allows greater benefits from the merger to be retained while still preventing the anti-competitive harm from arising.

B. Viability

Viability questions arise principally in horizontal cases, where the natural structural response is to divest the assets associated with the supply of one of the overlapping products or services. In conventional horizontal mergers, this is typically straightforward: the divested business has its own customers, revenues and operational identity, and can be expected to compete effectively under new ownership. Synopsys/Ansys, where competition authorities accepted divestments in specific software segments such as power consumption analysis for chips, is a recent illustration.¹⁸ In the digital ecosystem context, however, viability cannot be taken for granted.

This is because, in ecosystem contexts, the competitive strength of a product is often derived from its integration into the broader ecosystem, rather than from stand-alone characteristics. A divestment that breaks that integration may leave the divested business unable to compete effectively, with the result that the remedy delivers less competition than the no-merger counterfactual.

To illustrate, consider the following merger scenario:

- One party has a relatively strong product, A, which is operating on a stand-alone basis, independently from any ecosystem.

¹⁸ Competition and Markets Authority, *Synopsys / Ansys Merger Inquiry*, Decision on acceptance of undertakings in lieu of reference (March 10, 2025), https://assets.publishing.service.gov.uk/media/67cea940a175f08d198d816a/1_Full_text_decision_-_Synopsys.Ansys.pdf; European Commission, Press Release IP/25/181 (no decision text published as of 2 May 2026), https://ec.europa.eu/commission/presscorner/detail/it/ip_25_181.

- The other party has a broad ecosystem of integrated products, one of which, B, is in the same relevant market as A. B is a relatively weak product, and, while it is an effective competitor in the relevant market, this derives from its role within the ecosystem.
- Suppose that this overlap gives rise to a horizontal concern.
- To resolve that concern, the merged entity may wish to divest the weaker of the two products, B.
- However, suppose that this product B, already weak, would, once extracted from the ecosystem, become an even weaker competitive force and would not be able to operate effectively under new ownership.
- All else equal, the merger with this remedy would therefore lead to a reduction in competition.

One solution to these issues may be to divest more than the increment of the transaction. For example, divesting additional related products may strengthen the divestment business's ecosystem sufficiently that it can act as a viable competitor. At the same time, however, this may reduce the benefits from expanding the merged entity's ecosystem that the merger otherwise would be expected to give rise to.

While by definition those benefits would not outweigh the competitive concerns within the relevant market considered,¹⁹ those benefits could nevertheless be significant across a broad range of markets in which the ecosystem is active. In such cases, unless a holistic view is taken of such efficiencies, mergers which would overall benefit consumers could otherwise be prohibited.²⁰

Another solution may be to ensure that divestments of products which were originally operating within an ecosystem are sold to specific existing ecosystems, that can provide the support required for the divested product to compete effectively against the merged entity. That, however, requires such a purchaser both existing and being willing to take on the divested product.

C. Separating Inputs from Outputs

The second challenge is most acute in vertical cases involving inputs such as data, where it may not be possible structurally to separate the elements of an ecosystem that give rise to theories of harm from those which are benign or pro-competitive. For instance, consider user data that is generated across the use of an ecosystem. That may be an important input into several of the components of the ecosystem. A merger that adds an element to an ecosystem may add data to the ecosystem, and, at the same time, change the incentives that the merged entity has to share its data with rivals and/or purchase third-party data.

That could give rise to a range of theories of harm. In Google/Fitbit, for example, the EC investigated two theories of harm related to Fitbit's fitness data derived from its activities as a wearable fitness device manufacturer.²¹ First, it found that the merger would allow Google to add to its set of data on individuals, which would improve its ability to offer targeted advertising. While this would improve outcomes for consumers in the short term, over the longer term, the EC found this would make it harder for rivals to compete in online advertising, ultimately harming customers.²² Second, the EC found that the merger would give rise to an incentive for Google to deny rival digital healthcare players access to Fitbit's data, which would reduce competition in the nascent market for digital healthcare.²³

To resolve those theories of harm with a structural remedy would require divesting the Fitbit data or the other products which interact with that data to give rise to the harm (i.e. online advertising in the case of the first theory of harm, and digital healthcare in the case of the second). To the extent that it would be difficult, or Google would be unwilling, to divest those other products, the divestment would need to be of Fitbit data. However, that data is inherently tied to the Fitbit devices, such that this structural remedy

¹⁹ This is because if such benefits did outweigh the competitive concerns, such that customers within the same relevant market would on balance benefit from the merger, then the merger should be cleared under a consumer welfare standard.

²⁰ I.e. mergers that benefit customers significantly in one market, while harming customers in other markets even slightly, would be prohibited. The EC has tended to prohibit such mergers where such situations would lead to some customers being harmed while others benefit to a greater extent (i.e. where the customers in the harmed and benefitting markets are different). This is reflected in its current draft revised merger guidelines (see European Commission, Draft Guidelines on the Assessment of Concentrations under Regulation (EC) No 139/2004, paras. 352–357 (30 April 2026)). Other authorities, such as the UK CMA, have scope in their process to allow mergers which harm some customers, while benefitting others, to proceed (Competition and Markets Authority, Merger Assessment Guidelines, CMA129, paras. 8.3, 8.5 (March 2021)).

²¹ Note that the EC also investigated a variety of other theories of harm. EC Decision in *Google/Fitbit*.

²² *Ibid.*, paras. 467–468. Note that this is an early example of the "ecosystem theory of harm" which we discuss at greater length in Fonseca et al. (2026) *supra* note 4.

²³ *Ibid.*, para. 531.

would, in effect, undo the transaction. This is despite the fact that only the data, and not the devices, give rise to these theories of harm.^{24, 25}

In such settings, where products cannot be disentangled, structural remedies risk being disproportionate, in that they remove not only the harm but much or all of the benefit of the transaction.²⁶ In these instances, behavioral remedies could be a better solution. To take the same example, the EC accepted behavioral commitments on the part of Google to resolve these concerns. In the case of the theory of harm relating to advertising, the EC accepted a commitment to keep Fitbit's data separate from the data uses for online advertising.²⁷ In the case of the theory of harm relating to digital healthcare, Google committed to grant access to rivals to that data.²⁸ Thus, the merger could proceed without the likelihood of harm that the EC had identified.

D. Ecosystem Theory of Harm

The ecosystem theory of harm, as explained above, refers to instances where improvements to a core product reduce contestability in the market in which the core product operates. For the theory to be valid, over time, this must reduce competition in that market, which must on balance harm consumers.

Faced with such a theory of harm, the most straightforward structural remedy would be to divest the related product which gives rise to the improvement to the core product. That would remove the prospect for harm, but it would also remove the improvement itself, which, at least in the short term, would have benefited consumers.

That raises the question as to whether there is a better structural remedy that either removes the prospect for harm entirely, or reduces it such that the benefits from the merger would outweigh that harm. To this end, a creative solution could be to ensure that rivals to the core product gain a commensurate advantage, which would be sufficient to ensure that they can continue to compete against the merged entity to the same degree as pre-merger.

A structural remedy might seek to achieve this by divesting another related product to a rival, strengthening that rival's ecosystem to the point where it can compete more effectively against the merged entity. The aim would be to close the gap in relative competitiveness that the merger creates, and which is the source of the theory of harm.

In practice, however, that would be likely to face considerable difficulties. First, it would only improve the competitiveness of the competitor to whom the product was divested. Careful case by case analysis would need to be undertaken to ensure that improving the competitiveness of a single rival could alleviate the concern.

Second, it would require identifying a combination of a product to divest and a specific rival that could use that product to improve its own competitive advantage sufficiently to offset that of the merged entity. Such situations are perhaps likely to be difficult to find, and, once identified, would again require careful case by case analysis to ensure that they are likely to deliver as intended.²⁹

On that basis, it would appear to be relatively challenging to use structural remedies to resolve ecosystem theories of harm. In certain circumstances, behavioral remedies may present a more appropriate alternative. For instance, in Amazon/MGM and Meta/Kustomer, ecosystem theories of harm have been investigated concerning improvements to core products derived from adding libraries of content, or data, to ecosystems.³⁰ While such concerns were ultimately dismissed in those cases, in others, those types of products may lend themselves well to remedies

24 Similarly, in *Meta/Kustomer*, the EC found that access to Meta's messaging APIs was an important input into the Customer Relationship Management ("CRM") software, in which Kustomer was active, and that this was likely to give rise to anticompetitive input foreclosure. EC Decision in *Meta/Kustomer*, para. 512. The EC accepted a behavioral remedy to ensure public access to the relevant APIs (*ibid.*, Section B).

25 We note that a hypothetical customer foreclosure theory of harm might be able to be addressed in a similar way. For example, if the concern is that a third-party data source will be foreclosed through lack of demand post-merger, then a remedy ensuring access to the merged entity's data is available to third party customers would mitigate any harm to end customers that that foreclosure might cause.

26 Not only to customers, but also to the merging parties.

27 EC Decision in *Google/Fitbit*, para. 965.

28 *Ibid.*, paras. 974–975.

29 We are not aware of any cases where such a remedy has been accepted by a competition authority.

30 See Case M.10349, *Amazon / MGM*, C(2022) 1723 final (EC, 2022); EC Decision in *Meta/Kustomer*.

that grant rival ecosystems access to those products. Indeed, in *Microsoft/Activision*, while the concern was one of input foreclosure rather than an ecosystem theory of harm, remedies were accepted that ensured access to Activision's content to Microsoft's rivals.³¹ In *Booking/Etraveli*, the EC's concern was that adding Etraveli's flight OTA to Booking's ecosystem would give Booking an advantage over rivals in acquiring customers for its accommodation OTA. A remedy was proposed that would show consumers, at the point of flight booking, a selection of accommodation OTAs, including rivals.³² The intention was for this choice screen to extend any advantage in customer acquisition gained by Booking from the merger to rivals.^{33, 34}

The extent to which this is effective however would depend on the nature of the relevant products and the benefits that the merger would achieve. For instance, in situations where the benefits would be derived from adjusting the related product in order to integrate it into the merged entity's ecosystem, then granting access to rivals may not yield the same benefits to those rivals, and as such may not resolve the ecosystem concern. A careful, case by case analysis of the theory of harm and the proposed remedies would be required to assess situations such as this.

IV. CONCLUSION

The economic characteristics of digital ecosystems tend to be such that expanding them, either in terms of scale or scope, has significant potential to give rise to benefits across a broad set of products. Mergers, which, by their nature, may expand digital ecosystems can therefore be a tool to derive significant benefits to consumers. The objective of merger control, and of any remedies it imposes, is to prevent harm to consumers, not to neutralize transactions that, on balance, would benefit them. This must not be forgotten, and should play a central role both in the assessment of ecosystem mergers and in the design of any remedies applied to them.

Mergers between digital ecosystems, which involve broad sets of products, can also give rise to a range of theories of harm. If, having carefully assessed these against any efficiencies the merger may yield, the evidence suggests that the merger would harm consumers, then remedies may be considered in order to resolve the harm while allowing the transaction to proceed.

Structural remedies are often preferred by competition authorities. In the ecosystem context, however, they raise three specific challenges that may, in some cases, prove decisive. First, divested products may not be able to operate effectively once removed from the ecosystem in which they were embedded. Second, the elements of an ecosystem may be so interrelated that it is not possible structurally to separate the harmful elements from the benign. Third, the theory of harm may be so closely linked to the benefits of the transaction that traditional structural remedies cannot remove the one without also removing the other. More creative structural remedies may resolve some of these issues, although these would require both the right combination of products to be divested and a purchaser capable of putting them to efficient use.

In light of these challenges, in some of these cases, behavioral remedies may therefore be a better alternative, as they would allow more of the benefits to be retained, while still removing the prospect for harm. These have been accepted by competition authorities in several cases. They are not, however, a universal solution: a careful case-by-case analysis of both the theory of harm and the proposed remedy is required in each instance.

31 EC Decision in *Microsoft/Activision*, Section II. A Consumer License and II. B Steaming Provider License.

32 EC Decision in *Booking/Etraveli*, para. 1196.

33 *Ibid.*, paras. 1206–1208.

34 This proposal was rejected for several reasons, including that the algorithms controlling the carousel would be subject to Booking's control, which would be difficult to monitor (*ibid.*, paras. 1319–1320, 1325), and it did not give rivals access to other forms of cross selling of flights and accommodation that Booking would have access to post-merger (*ibid.*, para. 1324).



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