

Comments on the Discussion Paper for Interim Report No. 5 - ACCC Digital Platform Services Inquiry

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The ACCC Digital Platform Services Inquiry issued a discussion paper to consider whether “Australia’s current competition and consumer protection laws, including merger laws, are sufficient to address the competition and consumer harms that have been identified in relation to digital platform services” or whether reform is needed. Digital platforms are increasingly portrayed as acting as “*gatekeepers*” between businesses and end users, a role that affords them great influence on the terms of trade and competitive dynamics in digital markets. This influence can be used for self-serving economic purposes and can be leveraged, along with the characteristics of digital platform markets (especially network effects) to further reinforce their powerful positions, leading to entrenchment. As a result, the paper identifies a number of possible negative consequences on competition, and harm to business users and consumers, including (among many others), reduced incentives to innovate for developers, leaving consumers with less choice, higher prices and/or lower quality products and services across many interrelated markets.

As scholars of competition and innovation who have studied digital platforms over more than a decade, we share some of the concerns being raised in the Discussion Paper, particularly in relation to the points listed above, as well as other aspects related to consumer protection such as possible scams, dark patterns, privacy violation and exploitation of user behavior. We also share the view that existing competition law is inept to capture some of these dynamics; existing tools and frameworks must be upgraded to face the new challenges that competition and innovation in digital markets present.

At the same time, there are risks in failing to consider the additional role digital platforms play as “*gatemakers*”, i.e., as innovation engines that facilitate not just the exchange of value (what in the literature we define as “value exchange”) between business and end users, but also the *creation of value* by providing new opportunities of connecting and interacting as well as new contexts and alternative ways to experience a product or service and benefit from it (what in the literature we define as “use value”). Ultimately, digital platforms do not just connect business users and end users within existing value architectures, that may span single or multiple verticals. They also, and critically so, innovate on these architectures, providing new ways to connect, interact, produce, and consume value.

We see ecosystems¹, not markets, as the relevant locus of competition². Appropriately, we also use the term “ecosystem orchestrator”³ as opposed to gatekeeper/gatemaker connotations. Ecosystem orchestrators use digital platforms to coordinate new forms of “collective enterprise”⁴ in relation to the multiplicity of actors, products and services, and the economic activities between them that cut across markets, value chains and industries. These multiple markets are not independent. They constitute an ecosystem of heterogeneous actors and products that best encapsulate the complementarities and interdependencies taking place among the participating firms (and end users). Practices in one area of the ecosystem may have positive (or negative) spillovers in other areas of the ecosystem. The key question then is whether, and to what extent, specific practices by the ecosystem orchestrators (such as e.g. foreclosing access to their network and data resources to a set of business users) should be forbidden *tout court ex ante* indiscriminately, or allowed based on the expected gains the practice can have for the whole innovation capacity of the ecosystem.

A focus on ecosystems, rather than parcelled markets, would emphasize consideration of *innovation failures*, or the problem of ecosystems not functioning properly⁵ in their capacity as organisational coordination tools for stimulating innovations that need to come together to produce value and create specific value propositions for the consumer. In many cases, these failures emerge because of a lack of effective orchestration. Such active control and coordination by the ecosystem orchestrators are needed to shape innovation directions and align the incentives of external innovators accordingly.

The issue is where do we draw the line between what is “good” and “bad” orchestration power - i.e., when this power is exercised to steer interactions in directions that allow the orchestrator to capture greater value for itself while producing limited benefits (innovation spillovers) for others in the ecosystem. This is an area which we do not fully appreciate the consequences of yet, and the possible harms, and benefits, for (business and end) users. So, we submit, this is a critical task before the ACCC (which is likely to require further analysis) when thinking about whether any new regulation is required.

The ecosystem view can offer though a starting point as per the general logic to follow in the regulatory architecture: Focusing on ecosystem, innovation failures that orchestrators address through their activities (in which case their orchestration power has a positive effective) or the ecosystem failures they cause by constraining rather than enhancing the innovation capacity of business users (and competitors), (in which case their orchestration power has a negative effective). Judging a given practice against its ability to unlock innovation

¹ Jacobides, Cennamo and Gawer 2018. [Towards a theory of Ecosystems](#), Strategic Management Journal.

² Jenny F., 2021. [Competition law and digital ecosystems: Learning to walk before we run](#). Industrial and Corporate Change, vol. 30, Issue 5, October 2021, Pages 1143–1167.

³ See e.g. Jacobides, Cennamo and Gawer (2018), “Towards a theory of Ecosystems”, Strategic Management Journal - <https://doi.org/10.1002/smj.2904>; Cennamo and Santaló (2019), “Generativity tension and value creation in platform ecosystems”, Organization Science - <https://doi.org/10.1287/orsc.2018.1270>.

⁴ See e.g. Jacobides, Cennamo and Gawer 2018. [Towards a theory of Ecosystems](#), Strategic Management Journal.

⁵ In a recent paper, Jacobides, Cennamo and Gawer (2020) lay out a framework to understand the kind of market failures that digital platforms help solve as new organizational models, and the inherent, post hoc “ecosystem failures” that may emerge as a result of these new structures. They distinguish between *functional failures*—problems with the inherent ability of platforms and ecosystems to deliver value to the final customer; and *distributional failures*—issues relating to an orchestrator’s abuse of power and its ability to extract excessive value from its partners and complementors. [Jacobides M., Cennamo C. Gawer A. (2020). Complementarities and externalities in platforms and ecosystems: From value creation to inherent failures. Working Paper: London Business School.]

opportunities for business users and thus addressing innovation failures or rather constraining that capacity can serve as a simple yet powerful overarching guiding principle of a regulatory architecture of the digital platform economy⁶. This form of innovation-based competition can ultimately lead to greater competition not only among a platform's business users (within ecosystems) but also *between* ecosystems, leading to greater contestability of core domains of platform gatekeepers⁷.

We believe that preserving the innovation capacity that digital platforms bring about within and across verticals is important. Below we briefly discuss the role of ecosystem orchestration via digital platforms, and contextualize the view against some of the held presumptions of entry barriers around network effects and data. We then offer some points on the value creation aspect related to data and where we see potential issues, with the practices implemented by orchestrators, but also with the proposed remedies. Finally, we offer some comments on the issue of M&A, suggesting a possible framework to identify potential bottlenecks to value creation (and capture). We offer these remarks in relation to some of the specific questions that the discussion paper asks as per the regulatory tools to implement and specific measures. To keep our commentary brief, we provide our remarks about the general point, and remind for details to the underlying articles these points draw upon.

Value creation in digital platforms

In considering the application of different legislative and regulatory tools to address competition and consumer harms arising from the supply of digital platform services, including *obligations and prohibitions contained in legislation, codes of practice, rule-making powers, measures to promote competition, and third-party access regimes* (Chapter 7 in the ACCC Digital Platform Services Inquiry Discussion Paper), we argue that the ACCC should define those on the basis of the innovation potential of digital platforms. Platforms are generally conceived in the literature as intermediaries that connect different sides of a (potential) market that would not connect as easily otherwise. This perspective allows for a simple, but powerful assessment of a platform in terms of its innovation potential, i.e., its contribution to the overall value created through interactions.

Interactions take place between a business user who produces services, content or products and an end user who consumes those. Each interaction creates a certain benefit at a cost. For example, advertisers pay the cost of placing an ad on a digital platform in exchange for a benefit to them such as when end users click on the ad. The platform provides the algorithm that seeks to optimize 'events' (e.g., a like, a share, a purchase etc.) related to the campaign, while matching user profiles across a population of users that perform those events⁸. End users also benefit from more customized advertising at the cost of providing their data on the

⁶ For a simple, innovation-based framework on regulation of digital platforms see Cennamo C., Kretschmer T., Constantinides P., Alaimo C., Santaló J. (2022). "Business model agnostic? An innovation-centric view of the DMA". Working paper (under review – available upon request from the corresponding author).

⁷ Note that this approach also expands existing competition principles allowing to draw a clear distinction between, for instance, cases in which "market power" is attained from distinctive, superior products and services that benefit consumers (end- and business users) vs. cases in which monopoly power accrues to the orchestrator in the form of "durable market power" from its sole intermediary position to a market gateway that poses harm to the economy, consumers, and entry.

⁸ This is a simplified description of Facebook's app-event optimization campaign strategies. See more here: <https://mobiledevmemo.com/understanding-bid-strategies-in-facebook-advertising/>

platform. Interactions facilitated via a digital platform benefit from a reduction in the overall cost of the interaction (otherwise there would be no justification for the platform to exist).

Now, the extent of a platform's innovation potential depends on which interactions the ecosystem orchestrator facilitates. We distinguish between three interactions⁹, namely, existing, latent and novel interactions. First, a platform can create value by increasing the efficiency of existing interactions. It does so, by providing tools such as search, filter and rank that shift traditional bilateral interactions (e.g., between a buyer and a seller) to multilateral interactions conducted on the platform. Other tools, such as 'pay' or 'buy' buttons, reduce frictions, and improve the user experience to maximize the likelihood of the success of the interaction. Examples of all these tools can be found on platforms such as eBay, Amazon, Uber and Airbnb. Second, a platform can create value by enabling latent interactions that would have been prohibitively costly if the platform did not provide the appropriate tools in the sense that the (expected) benefit does not outweigh the cost of interacting. For instance, a platform like Bandcamp provides a single place for niche and specialized content, which it aggregates. In doing so, it creates demand in the sense that latent interactions, that would have not happened otherwise, are instead made possible. In our terminology, this constitutes an innovation because the overall value created by all interactions increases. Finally, some classes of interactions may not have existed at all prior to the introduction of a platform. While these are similar in their logic to latent interactions, they differ qualitatively. For example, business users on TikTok are provided with several interaction opportunities to promote their products to through power end users (i.e., influencers) that did not exist offline. In this example, end users can become entrepreneurs, building completely new business models with business users. Therefore, this class of interactions constitutes an "innovative field" of interactions and consequently creates value that would not have been created in the absence of a platform.

Unlike overseas jurisdictions such as the European DMA that are business model agnostic, the ACCC is well positioned to apply legislative and regulatory tools that take into consideration our three types of interactions. The European DMA initiative appears by and large guided by the need to fill perceived antitrust enforcement gaps, rather than by distinctive principles and theories of harm¹⁰. In this perspective, the invoked regulatory approach does not reflect the distinctive structural features of digital markets, but rather merely represent enforcement shortcuts, primarily through *obligations and prohibitions*¹¹. We find particularly problematic to design a single regulatory framework which encompasses heterogeneous players on the only premise that they exert gatekeeper power. Instead, we welcome the ACCC's approach of distinguishing more across the different business models, thus introducing regulatory principles based on contingencies, also accounting for the consumer protection and welfare, an aspect which is not explicitly considered in the DMA.

Across the different types of legislative and regulatory tools, we consider *codes of practice* to be the most flexible in providing a tailored approach to assessing a platform in terms of its innovation potential, i.e., its contribution to the overall value created through different types

⁹ Cennamo, C., Kretschmer, T., Constantinides, P., Alaimo, C., and Santalo, J. (2022) Business Model Agnostic? An innovation-centric view of the DMA. *Working Paper*

¹⁰ Giuseppe Colangelo, *The Digital Markets Act and EU Antitrust Enforcement: Double & Triple Jeopardy*, (2022) ICLE White Paper https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4070310

¹¹ Marco Cappai and Giuseppe Colangelo, *Taming digital gatekeepers: the more regulatory approach to antitrust law*, (2021) 41 Computer Law & Security Review 105559

of interactions. We also consider *measures to promote competition* to be appropriate intervention tools in ‘correcting’ interactions in the event that the ecosystem orchestrator’s shifting practices in dynamic digital markets were found to hurt competition or to produce consumer harm. Finally, *access to third parties* could complement the above two tools, especially in relation to access to data, which we discuss below.

Data & how value is created and captured

Our innovation-centric, ecosystem framework applies equally to potential measures to regulating data access by the ecosystem orchestrator and its preferred complementors, whether those are business users or third parties benefiting from such access. Access to aggregated and non-aggregated data – that may include anonymized and personal data – can provide a considerable competitive advantage to an orchestrator relative to smaller rivals, particularly since data can generate learning about the preferences of their end users and help innovate interactions that can serve those end users.

While the principles of *data portability* and *data interoperability* have been previously proposed in different jurisdictions, including the EU, the US and the UK as ways with which to address the competitive advantage of large digital platforms by facilitating consumer switching between some competing digital platform services, these have been found to cause more challenges, as the ACCC itself notes (Chapter 8, Box 8.4 in the ACCC Digital Platform Services Inquiry Discussion Paper). First the data portability principle as supported in the EU’s General Data Protection Regulation (GDPR) has actually generated the opposite effect of what it originally intended to achieve, by increasing the relative market concentration in web tracking technology, further reinforcing the leading position of Google¹², while decreasing investments in European tech startups¹³. Also, the data interoperability principle, aimed at increasing data mobility, without a request from a consumer, is found to raise significant privacy risks and – in a way – contradicts the principle of data portability under informed consent. Platforms and their preferred complementors can use a number of ways to re-identify de-identified personal consumer data¹⁴.

We argue that some *data limitation measures* may be more appropriate than regulating data access, however, such data limitations need to consider our three types of interactions¹⁵. First, when ecosystem orchestrators access and process data generated on their platform by existing interactions of business users or third parties, the exclusive access may negatively impact innovation because it may lead to the replacement existing interactions. For example, if Amazon can access and process data about transactions between end users and third parties on their marketplace, that data create insights that may lead Amazon to replace third party products¹⁶. Second, when ecosystem orchestrators can access and process data generated on their platform by latent interactions, those data may be used to add value to existing

¹² See e.g., recent work by Peukert, Bechtold, Batikas & Kretschmer 2022. “Regulatory spillovers and data governance: Evidence from the GDPR.” <https://pubsonline.informs.org/doi/10.1287/mksc.2021.1339>.

¹³ See for instance the analysis by Jia, Jin & Wagman 2020. “The short-run effects of GDPR on technology venture investment.” https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3278912

¹⁴ Rocher, L., Hendrickx, J.M. & de Montjoye, YA. Estimating the success of re-identifications in incomplete datasets using generative models. *Nat Commun* **10**, 3069 (2019). <https://doi.org/10.1038/s41467-019-10933-3>

¹⁵ Cennamo, C., Kretschmer, T., Constantinides, P., Alaimo, C., and Santalo, J. (2022) Business Model Agnostic? An innovation-centric view of the DMA. *Working Paper*

¹⁶ Zhu F, Liu Q. 2018. Competing with complementors: An empirical look at Amazon.com. *Strategic Management Journal* 39(10): 2618-2642.

interactions, thus, benefiting innovation for business users and third parties. For example, Amazon can access and process data about Prime membership data that create insights into product/service bundles (business transactions + prime services i.e., stocking and shipping services) not previously considered. These complementarities between products and services could add to existing interactions in ways that positively impact innovation for business users and third parties. Finally, ecosystem orchestrators may design novel interactions that produce data which in turn generate innovation spillovers for existing and latent interactions. Consider the case of TripAdvisor and the novel interactions it generates, on ratings and reviewing, together with the data they produce. These data have high innovative potential for end users and third parties, as they would have not been produced without TripAdvisor's interaction design. Combined with data generated by existing or latent interactions, these data may eventually lead to creation of novel services from third parties or to the creation of new business altogether. Therefore, novel interactions produce data with a high innovative potential and may drive more incentives for business users and third parties to develop additional services to add to those new interactions.

Our recommendations on addressing data advantages, follow our broader recommendation to apply *codes of practice, measures to promote competition and access to third parties*. We anticipate that predicting all possible uses of data generated on a digital platform is impossible. Ecosystem orchestrators, but also business users and third parties can adapt and even pivot their business models by leveraging data from existing interactions¹⁷. These adaptations and pivots may have positive (or negative) innovation spillovers in other areas of the ecosystem. Enforcing obligations and prohibitions or providing authorities with rule-making powers may reduce harmful conduct, but with a high risk of killing innovation. We argue that addressing data advantages needs to follow a more flexible approach that considers the innovation potential of a platform along different types of interactions, as those emerge in dynamic digital markets.

M&A by BigTech: When should they be blocked?

In relation to acquisitions, we do share the concern that some deals potentially may be nascent competition deals and/or may foreclose markets. We believe this is more likely the case for situations in which the target has a technology that offers more similar functionalities in terms of the core technological architecture to the acquirer digital platform (or one of its core offerings), and overlaps in terms of types of end users¹⁸. Parker et al. (2021)¹⁹ identify other conditions that might lead to problematic cases, such as e.g., access to relevant data that when combined with those that the ecosystem orchestrator already possesses, become more valuable and might be exclusionary. In other cases, though, notwithstanding the risks of dynamic competition lessening, broader efficiencies in terms of innovation must be accounted for in the analysis. These include the innovation spillover effects that these mergers may create in tech and market related domains, beyond the specific targeted market

¹⁷ Constantinides P. 2022, [Regulating Digital Platforms: Business Models, Technology Architectures, and Governance Rules](#). TechReg antitrust chronicles.

¹⁸ For an analytical framework on assessing potential platform competition in contested domains see Cennamo C. (2021). Competing in digital markets: A platform-based perspective. *Academy of Management Perspectives*, 35(2): 265–291.

¹⁹ Geoffrey Parker, Georgios Petropoulos and Marshall Van Alstyne. (2021). Platform mergers and antitrust. *Industrial and Corporate Change*, Vol. 30, Issue 5.

(see eg., Li & Agarwal 2017’s analysis of Facebook’s Instagram integration)²⁰ or the “innovation failures” within the ecosystem that they help address by providing more aligned incentives for business users to develop and contribute innovation in specific areas and along specific technological trajectories²¹ (see eg., Jacobides, Cennamo, Gawer 2020; Foerderer et al. 2018).

The question then in these cases becomes understanding whether, and to what extents, the new structure of economic relationships that emerges from the acquisition and possible integration is more *likely* to unlock more value for end users as well as business users within the ecosystem than the potential value to be lost from competitors’ lockout from the target market or reduced innovation therein. As Li and Agarwal (2017) show in their analysis of Facebook’s integration of Instagram, while the acquisition reduced innovation activity in the specific target market (of photo editing apps), it also generated important innovation spillovers for other business users in other related (and unrelated) markets. Overall, this created new interactions between business users and end users.

Again, our ecosystem approach, focused on innovation, can offer a tool to assess the impact of mergers. The extent that mergers and acquisitions may replace interactions, existing and potential ones in a specific target market (i.e., be substitutes in the end user’s architecture of choice), versus creating new interactions and thus expanding end user choices (i.e., providing alternatives to the existing end user’s architecture of choice) can be a guiding principle for detecting *ex ante* the presumption of harm with a specific merger.

Elsewhere²², in the case of a specific merger, we discuss this and other counterfactuals to consider when assessing these cases, and submit a more general framework anchored around two specific aspects:

- *Does the integrated service create a strategic bottleneck to the customer journey?*
- *Does the post-merger integrated structure create potential “ecosystem failures”?*

We remind to that discussion for details. As per the specific related questions raised in the Discussion Paper, we believe that beyond the competitive harm, innovation efficiencies for business users resulting from the acquisition as well as “innovation failures” that the acquisition is intended to address must be considered. In this regard, our innovation-centric, ecosystem approach laid out above (and to greater extent in Cennamo et al. 2022²³), can offer a tool to assess *ex ante* the presumption of harm by analyzing the extent the merger replaces

²⁰ Li Z., Agarwal A. (2017). Platform Integration and Demand Spillovers in Complementary Markets: Evidence from Facebook’s Integration of Instagram. *Management Science* 63(10): 3438–3458.

²¹ See e.g., Jacobides M., Cennamo C., Gawer A. (2020). *Complementarities and externalities in platforms and ecosystems: From value creation to inherent failures*. Working Paper: London Business School; and Foerderer J., Kude T., Mithas S., Heinzl A. (2018). Does Platform Owner’s Entry Crowd Out Innovation? Evidence from Google Photos. *Information Systems Research* 29(2): 444–460.

²² Cennamo C., Sokol D. (2021). “Comments on the CMA’s Facebook/GIPHY investigation”, UK CMA Publishing. https://assets.publishing.service.gov.uk/media/6160280b8fa8f5297eda667f/C_Cennamo__D_Sokol_-_Comments_on_CMA_decision_on_Facebook-Giphy_For_Publication.pdf

²³ Cennamo C., Kretschmer T., Constantinides P., Alaimo C., Santaló J. (2022). “Business model agnostic? An innovation-centric view of the DMA”. Working paper (under review – available upon request from the corresponding author).

existing interactions (negative from an innovation point of view), sustains existing interactions (marginal gains, mainly in terms of transactional efficiency), or creates novel interactions (positive from an innovation point of view). While in the first two cases efficiency gains might be attained, they would primarily benefit the gatekeeper rather than the ecosystem. As a result, the ecosystem orchestrator's position will be further reinforced, with possible entrenchment risks. These will accordingly be problematic cases. In the latter case though, we see the prospects of more innovation-based dynamic competition possibly unfolding. Not just at the level of the ecosystem (ie., among platform's business users) but also, and relevantly so, *between* ecosystems governed by distinct orchestrators. A classic example is the case of Google's acquisition of Android, which led not only to more innovation and competition within the mobile apps market, but also and relevantly to greater choice among competing ecosystems for mobile computing.

This tool might be used also for the specific question related to the burden of proof. We would for instance, envision the distinction of the merger's impact according to the three types of interactions discussed above as a general principle identifying the cases most likely to be problematic (and harmful). For those cases, we would welcome a reverse order of the burden of proof: it should be on the merging parties to submit evidence of the lack of competitive harm as well as the innovation efficiencies to be had (for the company but also and importantly for other business users in the ecosystem).