

Optimal Distinctiveness

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DO

10.24251/HICSS.2023.725

Publication date

Document VersionFinal published version

Published in

Proceedings of the 56th Annual Hawaii International Conference on System Sciences, HICSS 2023

Citation (APA)

Sobota, V. C. M., Ortt, R. J., van de Kaa, G., & van Beers, C. (2023). Optimal Distinctiveness: The Role of Platform Size and Identity. In T. X. Bui (Ed.), *Proceedings of the 56th Annual Hawaii International Conference on System Sciences, HICSS 2023* (pp. 5973-5982). (Proceedings of the Annual Hawaii International Conference on System Sciences; Vol. 2023-January). IEEE. https://doi.org/10.24251/HICSS.2023.725

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Optimal Distinctiveness: The Role of Platform Size and Identity

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Abstract

Recent theoretical advances hold that platforms comprise a second strategic dimension next to size, called identity, which describes the platform's technological and market scope. Letting go of platform size as the main criterion for platform value opens the possibility for platforms to pursue differentiation strategies with a distinct market positioning. The concept of optimal distinctiveness (OD) implies that differentiation can be optimized so that it maximizes performance. In this paper, we draw on recent OD research in and outside of the field of platforms and elaborate on the role of platform size within the distinctiveness framework. We discuss platform size and identity in the context of OD and suggest propositions for future research. The paper contributes to the management of platforms and OD in platform markets by showing how a platform's distinctiveness strategy may depend on its size. We contribute to platform management across various platform sizes and to research on OD in platform markets.

Keywords: Platform, Strategy, Distinctiveness, Conformity, Performance

1. Introduction

Platform leaders usually govern the surrounding ecosystems of complementors and users in that they strategically influence which kind of complementors and users they attract to their platform (Claussen et al., 2013). Two seemingly opposing competitive logics, which prioritize different aspects of value, have emerged, called *winner-take-all* (WTA) and *identity*.

First, dominant platforms such as Google and Facebook have grown remarkably fast and thereby fueled the belief that building scale fast, growing installed base of users and content creators is a successful way to compete in such markets (Arthur, 1996). This would potentially facilitate a WTA outcome (Katz & Shapiro, 1994) and limit the remaining market space for competitors (Cennamo, 2021). This perspective is grounded in network economics theory (Armstrong, 2006; Caillaud & Jullien, 2003) and suggests that platform (network) size

is the main source of value. Positive feedback loops generated by direct and indirect network effects may lead to WTA competitive dynamics (Lee et al., 2006)

Second, recent theoretical advances hold that platforms can compete based on another aspect, called identity, which describes the platform's technological and market scope (Cennamo, 2021). Platform identity as another criterion for platform value opens the possibility for platforms to pursue differentiation strategies with a distinct market positioning that stresses other sources of platform value than size. Besides the possibility for a platform to persist next to bigger competitors, recent research shows that platform owners take strategic decision that are at odds with the WTA logic and resemble a distinctiveness or differentiation approach. Platforms can attain market differentiation by distinct positioning (Bresnahan et al., 2014; Cennamo & Santaló, 2013), superior technological platform capabilities (Zhu & Iansiti, 2012), or differentiated complement and content offerings (Cennamo & Santaló, 2013).

How much to differentiate has long been long on the mind of both academics and practitioners (Deephouse, 1999), seeing that distinct positioning comes with both benefits (competitive advantage) and costs (reduced legitimacy) (Deephouse, 1999; Porter, 1980). As a result, a body of scholarly work developed around the notion of *optimal distinctiveness* (OD), which is a level of distinctiveness that maximizes performance (e.g., Navis & Glynn, 2011; Zhao et al., 2018).

Scholarly work has questioned the unconditional WTA hypothesis (Lee et al., 2006), and suggested that strong-ties network effects outperform classical network effects (Suarez, 2005). However, little is known about how the main driver of value in the WTA framework, size, fits into the OD framework. More specifically, it is yet unknown how OD is contingent on platform size. There is qualitative evidence that OD changes with platform size (Karanovic et al., 2020), as also platform leaders with a distinctiveness strategy also have to attain a critical value of users (Evans & Schmalensee, 2010).

In this paper, we explore the relationship between size, distinctiveness, and performance. We begin by



conceptualizing distinctiveness in platforms at the complement-level. We then review OD research that views OD as balancing of conformity (as a source of legitimacy) and distinctiveness (as a source of competitive benefits). In section 3, we first formulate the boundary conditions of the theorizing. As OD essentially is about determining performance-maximizing levels of distinctiveness, we continue by discussing performance in the context of platforms and how it relates to the competitive logics platform identity and platform size. We infer that platform performance essentially is a moving target, with changing constituents and weights over time. The second part of section 3 proposes performance-maximizing levels of distinctiveness for small platforms. Section 4 concludes by summarizing the main argument and by discussing the scope of the argument.

This paper contributes by integrating the main driver of platform value in the WTA competitive logic, size, with OD research and the competitive logic based on platform identity. By theorizing about OD depending on platform size, we contribute to platform management across various platform sizes, and to research on OD in platform markets (Cennamo & Santaló, 2013; Taeuscher & Rothe, 2021). Although earlier research has accounted for size as part of network effects and feedback loops, but the proposed relationships are not specified for different platform sizes. Further, recent distinctiveness research stresses that there is no stable level of OD (Zhao et al., 2017) and has turned to explaining variance in the distinctiveness-performance relationship.

2. Conceptual background

2.1 Conceptualizing distinctiveness in platforms

We focus on the effect of distinctiveness strategies on performance in technology platforms. We define platforms as "meta-organizations that federate and coordinate constitutive agents who can innovate and compete; create value by generating and harnessing economies of scope in supply or/and in demand; and entail a modular technological architecture composed of a core and a periphery" (Gawer, 2014, p. 1239). The platform owner is the focal firm that creates governance arrangements that participants in the periphery have to follow if they wish to participate in the platform (Eisenmann et al., 2009). The platform provider provides the interface for the platform (e.g., Android as a platform runs on smart phones by multiple producers).

Distinctiveness is concerned with the positioning of an enterprise vis-à-vis its environment (Zhao, 2022). Next to their function as intermediaries, platforms also perform the role of gatekeepers by strategically influencing the type and quantity of complements and complementors that they attract to their platform (Claussen et al., 2013). Although platforms may also offer complements themselves, we would not regard a business as a platform if it did not orchestrate and federate the offerings of independent complementors. Their market positioning hence strongly depends on the complements offered by independent complementors. Platforms may create a distinct market positioning by restricting access to a certain type of complementors (Cennamo & Santaló, 2013). For instance, the sponsors of video game platforms may restrict complementors to genres such as sports and thereby create a distinct offering towards demand-side users. Similar to other studies in the field (Cennamo & Santaló, 2013; Seamans & Zhu, 2014; Taeuscher & Rothe, 2021), we focus on distinctiveness in terms of the platform's complement portfolio in a given category.

This implies that platforms inherently deal with distinctiveness both within the platform ecosystem (distinctiveness of complements relative to other complements offered for the same platform), and between distinctiveness (distinctiveness of a platform's complementary product offerings relative to other platforms (Bu et al., 2021). Platform owners drive complementors to offer a large variety of complementary products (Cusumano et al., 2019). Complementors then compete to based on rankings of their complementary products (Boudreau & Jeppesen, 2015), which platforms owners update frequently to maintain a high level of innovation (Claussen et al., 2013). As there is constant pressure for complements and complementors to even get noticed, such in the case of Apps, we assume that within-organizational distinctiveness for complementary product offerings is mostly governed by complementor competition. Hence, in the following, we focus on between-organization (platform) distinctiveness.

The distinctiveness strategy of a platform may be informed by its identity. One can distinguish between the organizational identity (the identity of the platform owner¹), and the platform identity. Organizational identity is concerned with what others believe an organization to be, or what it claims to be (Ravasi et al., 2020). Organizational identity concerns "the members' consensual understanding of 'who we are as an organization'" (Nag et al., 2007, p. 824). Platform identity is informed by organizational identity, and manifests through the platform's technology and market scope

¹ The platform owner is the focal firm that creates governance arrangements that participants in the periphery have to follow if they wish to participate in the platform (Eisenmann et al., 2009)

(Cennamo, 2021). Organizational and platform identity need not be the same - in some cases, an organization may the owner of several platforms and possess multiple identities (Georgallis & Lee, 2020), such in the case of Apple, which owns both the AppStore and Apple iOS. On the other hand, when an organization owns only one platform, there may be no difference between the organizational identity and the platform identity. We assume that the organizational identity informs only one platform.

There is a strong interrelation between identity and strategy, and identity can be equaled with *being*, whereas strategy resembles *doing*. Strategy oriented towards the future, culture and identity are grounded in the past (Sillince & Simpson, 2010).

2.2 Optimal distinctiveness theory

The bedrock of OD theory lies at the intersection of institutional theory and strategic management. Institutional theorists focus on why organizations are similar (Powell & DiMaggio, 1991). Institutional theory modelled the conformity aspect in OD theory. Work by Deephouse (1996, 1999) suggests that organizations are driven towards conformity as they gain *legitimacy*. In this way, institutional theory set the stage for optimal distinctiveness' conforming aspect. With the underlying mechanisms of legitimacy, it introduced an important aspect for future theorizing on OD.

Offering an opposing perspective to the sameness aspect of institutional theory, strategic management scholars had a focus on differentiation as a source of value. Strategy scholars suggests to differentiate by exploiting what is unique, distinctive, or valuable (Barney, 1991). Firms gain competitive advantage by crafting strategies that utilize environmental opportunities, respond to external threats, and utilize internal strength (Peteraf & Barney, 2003), by finding favorable market contexts (Porter, 1980), creating unique market positions, and by developing valuable, rare and inimitable resources and capabilities (Barney, 1991). Strategic management theory hence contributes the aspect of differentiation and its underlying mechanism competition to OD theory.

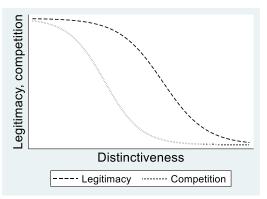
Combining the literatures of strategic management and institutional theory suggests that optimizing a distinct positioning with respect to performance requires the balancing of differentiation and conformity. At large, many studies argue that both legitimacy and competition decrease with increasing distinctiveness². Seeing that reduced competition is beneficial to performance, while reduced legitimacy is disadvantageous, the dilemma, then, is to determine how much to diverge from rivals.

Research on distinctiveness has evolved in two camps. One camp holds that the distinctiveness logic requires firms to diverge enough to be perceived as distinct and to reduce competition, whereas differentiating too much foregoes revenues and scale economies from catering to the populous middle markets. This suggests that moderately distinct positioning strikes a balance between these opposing forces (Deephouse, 1999), and consequently ensures optimal performance (Zhao et al., 2017). Various studies find evidence in support of this N-relationship between distinctiveness and performance (Deephouse, 1999; Roberts & Amit, 2003). This mechanism is shown schematically in Figure 1 (Haans, 2019). The dashed line in the left panel represents legitimacy, the dotted line represents competition. Following the described logic, competition drops quicker than legitimacy. Assuming equal strength of the two factors, this model leads to the performance effect as shown in the right panel of Figure 1.

Despite its plausibility, other studies argue that distinctiveness may only be advantageous when brought to high levels as moderate distinctiveness may not suffice to reduce competition and simultaneously incur a lack of focus and insufficient demand (Jennings et al., 2009; Zott & Amit, 2007). For example, Cennamo and Santaló (2013) find a U-shaped relationship between distinctiveness and market share in the contest of video game consoles, with moderate distinctiveness leading the lowest performance. Similarly, Jennings et al. (2009) find that law firms show the lowest productivity when deviating moderately from the industry norm for employment systems. High conformity or high deviation result in better productivity. Zott and Amit (2007) show that balancing efficient and novel business model design reduces performance. In Figure 2, legitimacy (dashed line) diminishes quicker than competition (dotted line). Assuming equal strength of the two forces results in a U-shaped relationship between distinctiveness and performance.

case of fund seeking on crowdfunding platforms confirms their prediction of a strictly positive relationship between distinctiveness and performance.

² In the specific case of novelty-seeking audiences, this need not be the case. Täuscher, Bouncken, and Pesch (2021) argue that ventures can be legitimate just because and not despite their distinctive position in the eyes of novelty-seeking audiences. Their empirical work in the



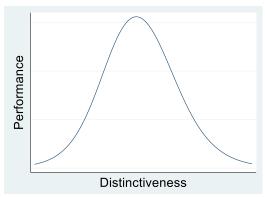
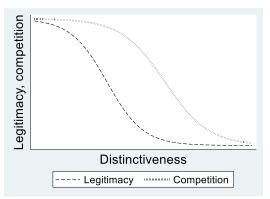


Figure 1. Distinctiveness and Performance: Π-shaped (adapted from Haans, 2019, p. 8)



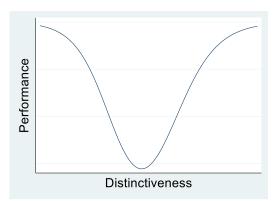


Figure 2. Distinctiveness and Performance: U-shaped (adapted from Haans, 2019, p. 8)

Haans (2019), however, suggests these two camps should not be interpreted as inconsistent as there is agreement in studies that develop inverted-U (Ω , hereafter) or U-shaped effects in that both acknowledge the two mechanisms described above, legitimacy and competition. Rather, Figure 1 and Figure 2 in combination show that the shape of the mechanism depends on the relative strength of legitimacy and competition at each point in the curve. In Figure 1, competition falls as distinctiveness increases, and legitimacy only decreases later, resulting in a Ω -shape. In comparison, Figure 2, the drop in legitimacy occurs before the drop in competition, resulting in a U-shape (Haans, 2019).

Though very insightful, this model rests on implicit assumptions. First, an additive effect as assumed above requires the individual effects of legitimacy and competition to be similar in strength. All other confounding factors need to be taken care of. While this model has been used across domains, the precise shape of the mechanism may depend on specific characteristics of platforms. For instance, once the platform's position is protected by network effects, the relative strength of legitimacy may dwindle. This may explain why some platforms turn to excessive value capture, such squeez-

ing the margins of complementors (Rietveld & Schilling, 2020). The next section focusses on OD research in the domain of platforms.

3. Towards an optimal distinctiveness perspective on platform size

Our theorizing focusses on markets that permit the existence of various platforms next to each other, such as the MOOC market, donation platforms, crowdsourcing, or online labor platforms. Such markets usually show one or more of the following characteristics. Low switching costs (Eisenmann et al., 2006) allow users to use several specialist platforms with differentiated offerings rather than one generalist platform (Taeuscher & Rothe, 2021). Local network effects entail that the presence of specific users such as relatives or friends drives platform value more than the pure size of its installed base (Lee et al., 2006). With local network effects, users may choose a lagging platform over the leading one.

3.1 Platform performance and platform size

Platforms create value by purposefully aligning loosely coupled actors that contribute complementary

products and services towards a central value proposition (Jacobides et al., 2018). Platforms rely on complementary products to cater to heterogeneous user demands (Sun et al., 2016), and enabling users to tailor the platform to their specific needs by drawing on unique combinations of complements (Garud et al., 2008). At the very least, platforms facilitate interaction between suppliers of goods and services (complements) offered by complementors. This can fuel positive direct and indirect network effects (Clements & Ohashi, 2005; Corts & Lederman, 2009). This also entails that value creation increasingly occurs externally (Parker et al., 2017), as reflected in platforms' market capitalizations per employee, which often are many times higher than in non-platform firms³.

To account for value creating outside of the firm, we conceptualize platform size as including the various sides of the platform. In a technological sense, a platform may be defined as an extensible code base (Tiwana et al., 2010) that third-party complementors build on to create complementary products or services offered to users. What complicates the matter is that roles are not necessarily static - users of a specific side may join another side at another moment in time, which is known as side switching (Gazé & Vaubourg, 2011) or prosumption (Ritzer & Jurgenson, 2010). But in multi-sided platforms, the roles need not be confined to two dimensions. Hence, platform size is defined as including the relevant sides of a platform. This entails that both multi-sided platforms such as Craigslist and eBay, as well as platforms with higher-order complementarities such as iOS would qualify as platforms.

If participation levels do not meet the critical value (Evans & Schmalensee, 2010), direct and indirect network effects may be negative, and a downward spiral is set off. This means that challenges for a platform change relative to its *size*. In the following, we see size as relative. We define size in terms of the platform's number of users and complements. A small platform is small relative to other market players, and not dominant. A large platform is one of the bigger if not biggest platforms in the market, but not dominant. A dominant platform would have more that 50% market share.

Which level of distinctiveness is optimal strongly depends chosen outcome that is maximized (Durand & Haans, 2022). Parker, van Alstyne, and Choudary (2016) suggest that performance indicators for platforms may be different for start-up platforms, growing platforms, and mature platforms.

A start up platform will most likely prioritize intermediation and the minimization of interaction failure up In light of constraints such as a critical value of participation in the platform, platform performance likely takes the form of a moving target, as the strategic goals of platforms are likely to change over time. However, as long as the platform has not yet reached the critical mass of users, increasing platform size will. We suggest that size may be a good indicator of performance as long as the critical size of the platform is not reached. But after the platform has surpassed threshold participation, other performance proxies may complement or even replace size as proxies for performance, even in the context of a platform that competes based on identity.

Proposition 1: If a platform has not (yet) reached the critical mass of users, platform performance can be proxied as size, independent of whether the platform strives for value based on size or identity.

In the WTA framework, the value that a platform creates is mainly driven by size. In such situations, the platform's performance is strongly dependent on size, which may justify the use of size as a proxy for performance. Recent distinctiveness studies used proxies for performance such as market share in terms of installed base (Cennamo & Santaló, 2013; Zhao et al., 2018), online attention (Taeuscher & Rothe, 2021), and number of downloads and reviews of apps (Barlow et al., 2019; van Angeren et al., 2022). In that sense, distinctiveness studies on platforms frequently use the intermediation itself as proxy for performance, rather than the

until it has reached the critical mass of users and complementors (Parker et al., 2016). Up until that moment, the number of users and complementors, which together constitute the size of the platform, successful intermediation, and the value gained by users and complementors, are important performance measures of platforms. A platform that has surpassed the critical mass of users and complementors and these are deriving sufficient value from the platform, it may shift its strategic focus on monetization, the balance of sides (complementor to user ratio), and frequency and repetition of interaction. For example, a platform may try to convert users into paying users by offering additional value at a cost. The balancing of the relative size of a platform's sides can help avoid negative network effects, such as in the case of driver downtime due to insufficient demand in the case of Uber. A platform that has achieved a self-sustaining business model can be seen as a matured platform. At this point, repeated and increasing activity on the platform may indicate platform performance, next to standard business performance indicators such as profitability, revenues, and the like.

³ https://blog.cfte.education/platform-based-financial-institutions-are-valued-over-10x-more-per-employee-than-traditional-fis/

outcome of the intermediation, such as profits or revenues, as it is the case in distinctiveness studies outside of the platform-field (e.g., Haans, 2019).

It is also noticeable that most of these measures carry an aspect of platform size (number of users, number of downloads). Distinctiveness, and hence prioritizing other aspect of value than size may lead to a smaller platform size (Piskorski et al., 2008), although it need not (Cennamo & Santaló, 2013). The following examples highlight that conceptualizing performance narrowly as size may not be appropriate. For instance, the online dating platform eHarmony rejects membership for up to 20% of potential users to single out segments it does not wish to serve. Instead of accepting a wide user base, it screens potential users on a multitude of aspects such as lifestyle, values, or personality that then are fed to the user platform and matching algorithm, amongst others, to enable matches based on long-term compatibility (Piskorski et al., 2008). This barrier towards participation leads to self-selection among potential users, and this focus has enabled eHarmony to convert three times more members into paying members as compared to rival platforms, despite aggressive winnertake-all strategies.

Similarly, Apple handles a restrictive approval policy for app developers which increases the burden and cost to innovation for complementors if they wish to develop for and connect to the users of their platform (Claussen et al., 2013). Such restrictive policies that increase affiliation costs for users and complement serve the purpose to induce platform-specific investments that cannot be easily redeployed elsewhere and ties participants to the platform's overall objective and identity (Jacobides et al., 2018). They also show that maximum size may not be on every platform's agenda. A narrow focus on platform size does hence not capture all strategic options that platforms face.

Observation 1: If performance is universally proxied with size, smaller platforms competing based on platform identity cannot achieve high performance.

3.2 Distinctiveness, platform size, and platform performance

As we have argued in the preceding section, performance of platforms has various aspects that change in relative importance as the platform reaches and surpasses the critical size. In the following we, use PERFORMANCE to indicate a weighted combination of performance aspects according to whether the platform has surpassed the critical mass or not.

With switching costs, platforms may benefit from offering both specialized and generic content, as users that consume specialist content may also demand generic content (Cennamo & Santaló, 2013). However,

with low switching costs and in the presence of large generalist platforms, it is likely that conforming market positions are sufficiently served by the large platforms. In this context, small platforms may have to seek distinct market positions as to being recognized next to larger competitors.

In the start-up phase of a platform's existence, distinctiveness and PERFORMANCE may be mutually constitutive (Karanovic et al., 2020). In this phase, achieving the critical mass of participation in the platform is a priority (Parker et al., 2016). Legitimacy may arise because of and not just in spite distinctiveness, meaning that distinctiveness and legitimacy may be mutually enabling (Zhao et al., 2017), such as in the case of novelty-seeking audiences (Taeuscher et al., 2021). While distinctiveness may decrease cognitive legitimacy (an organization's comprehensibility), it may improve its normative legitimacy, which is an organization's perceived congruence with an audience's normative expectations (Suchman, 1995).

Platforms can translate their organizational identity into a distinctiveness strategy that then fuels their initial growth. For example, in the market for stock photography, it is common for end users to buy stock photos from an intermediary that aggregates images from various artists and manages sales and licensing. One of the founding ideas behind Stocksy was to do justice to complementing artists offering stock photography by creating fair conditions. Based on this distinct positioning towards complementors, the complementing artists who joined first helped attract their sort via their personal networks. In its early days, the selection of complementing artists was rigorous and intake was capped to avoid competitive tensions between complementors (Karanovic et al., 2020).

Stocksy's distinctiveness strategy is what sets the platform apart from competitors. A small but high-quality selection of complementors drove its initial growth of both end-users and complementors. Positioning itself well outside the mainstream protected it from competition. Hence, for small venture the competitive benefits of 'standing out' at highly distinct positions are likely more attractive than more moderate positions. This means that having a distinct positioning that is antithetical to mainstream stock photography companies may have helped attract early complementors to the platform. A large platform may also be able to distance itself from a conforming position in the market, and perhaps even more effectively so. However, we predict that a small platform will have to rely on a distinct positioning to be noticed.

It is unlikely that small platforms will be able to reach combinations of legitimacy and competition that make it worthwhile to pursue conforming positions. At conforming positions, a small platform will have to compete based on similar attributes as a larger platform. Due to its size, it will not be able to offer a similar depth and breadth of both market and technical attributes. For this reason, the mimicking of competitive moves, network design, technology design, and complementor offerings has been mostly associated with situations shoulder to shoulder-style WTA competition (Cennamo, 2021). Such strategizing will most likely be found in larger or dominant platforms. For this reason, we anticipate that conforming positions are least attractive to small platforms. Hence:

Proposition 2: For small platforms, high levels of distinctiveness are optimal with respect to PERFOR-MANCE.

Whether moderate levels of distinctiveness are beneficial to small platforms depends on how much competition is reduced. Research has shown that platforms operate in different markets (Livengood & Reger, 2010). How important individual markets are to the platform will differ, and the platform may not respond to competitors that are not perceived to operate in markets that are close to the platform's identity. If a moderately distinct platform is perceived as sufficiently different by the main competitors, then moderate distinctiveness can offer sufficient protection to avoid fierce competition.

It is, however, ambiguous whether moderately distinct positions will be distinct enough so that users perceive the small platform as such. As argued above, small platform conceivably build legitimacy at distinct positions. On balance, we expect that moderately distinct positions are likely not significantly more attractive to small platforms than conforming positions.

Proposition 3: For small platforms, moderate levels of distinctiveness are only marginally more beneficial to PERFORMANCE than conforming positions.

4. Discussion and conclusion

In this paper, we build on accounts that question the unconditional winner-take-all (WTA) approach (Lee et al., 2006) by suggesting that platforms too can pursue classical strategic options such as distinctiveness (Cennamo & Santaló, 2013). From the WTA approach follows that size is (one of) the most important drivers of platform value. Optimal distinctiveness research suggests that distinctiveness has both costs and benefits and that a performance maximizing (optimal) level of distinctiveness can be determined. We contribute to these literatures by integrating one of the most important variables from the WTA framework, size, into the distinctiveness framework. We argue that a platform's size has

We have focused our exploration on markets in which several platforms can coexist. Such markets are usually characterized by, for instance, low switching costs (Eisenmann et al., 2006) or local network effects (Lee et al., 2006). Seeing that platforms can prioritize different aspects of platform value such as platform identity or platform size (Cennamo, 2021) implies that platforms are likely to be of different sizes and that size plays a different role in the evaluation of platform performance. We argue that that performance universally proxied as size would mean that small(er) platforms cannot achieve high performance and relate the choice of performance measure to different phases of platform development (Parker et al., 2016). We also argue that, under the above-mentioned conditions, it is optimal for a small platform to aim for high distinctiveness. We do so by suggesting propositions as a basis for future research. This research may guide managers by highlighting conditions under which high distinctiveness may optimize performance, and by discussing how this depends on the platform's size.

Some limitations apply. The conclusions may change when the main goal of the platform is to collect data that fuels other services, rather than a business that strives for profitability in its own right. For instance, Google launched Android mainly to drive its other services and platforms such as Search and Google Maps and distributed it freely. It that case, increasing platform size in terms of number of users likely is the relevant performance measure across platform stages.

Further, this study assumes that platforms differentiate via their complement offerings. But there may be situations where the complementary product offerings are difficult to differentiate. See for example Fairbnb, a platform similar to Airbnb, which essentially offers the same service. Although distinct in terms of complements (much lower choice of houses), this is unlikely to offer superior value to users. It likely offers value to its users based on its organizational identity rather than its complementary product offering, as it aims to overcome some of the social repercussions attributed to Airbnb (e.g., rising real estate prices, or community fragmentation) based on its cooperative structure (reinvesting parts of their profits into local communities) and policies (e.g., one-house limit per user)⁴.

Our work may be further expanded by theorizing about optimal distinctiveness strategies for other platform sizes than small platforms. Further, while we argue that the relevance of different aspects of performance changes, future research could consider changes in the

implications for its distinctiveness strategy, by highlighting mechanisms through which this effect could manifest.

⁴ https://fairbnb.coop/manifesto-2/

environment in which the platform competes. Organizations can also possess more than one platform, with different identities between platform, and potentially also multiple identities per platform. Future research could explore how these conflicts affect distinctiveness strategies

5. References

- Armstrong, M. (2006). Competition in two-sided markets. *The RAND Journal of Economics*, *37*(3), 668–691. https://doi.org/10.1111/j.1756-2171.2006.tb00037.x
- Arthur, W. B. (1996). Increasing Returns and the New World of Business. *Harvard Business Review*, 74(4), 100.
- Barlow, M. A., Verhaal, J. C., & Angus, R. W. (2019). Optimal distinctiveness, strategic categorization, and product market entry on the Google Play app platform. *Strategic Management Journal*, 40(8), 1219–1242. https://doi.org/10.1002/smj.3019
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120.
 - https://doi.org/10.1177/014920639101700108
- Boudreau, K. J., & Jeppesen, L. B. (2015). Unpaid crowd complementors: The platform network effect mirage. *Strategic Management Journal*, *36*(12), 1761–1777. https://doi.org/10.1002/smj.2324
- Bresnahan, T., Orsini, J., & Yin, P.-L. (2014). *Platform Choice by Mobile App Developers*. NBER working paper.
- Bu, J., Zhao, E. Y., Li, K. J., & Li, J. M. (2021). Multilevel optimal distinctiveness: Examining the impact of within- and between-organization distinctiveness of product design on market performance. *Strategic Management Journal*, 1–30. https://doi.org/10.1002/smj.3377
- Caillaud, B., & Jullien, B. (2003). Chicken & Egg: Competition among Intermediation Service Providers. *The RAND Journal of Economics*, *34*(2), 309–328. JSTOR. https://doi.org/10.2307/1593720
- Cennamo, C. (2021). Competing in Digital Markets: A Platform-Based Perspective. *Academy of Management Perspectives*, 35(2), 265–291. https://doi.org/10.5465/amp.2016.0048
- Cennamo, C., & Santaló, J. (2013). Platform competition: Strategic trade-offs in platform markets. *Strategic Management Journal*, *34*(11), 1331–1350. https://doi.org/10.1002/smj.2066
- Claussen, J., Kretschmer, T., & Mayrhofer, P. (2013). The Effects of Rewarding User Engagement: The Case of Facebook Apps. *Information Systems Research*, 24(1), 186–200. https://doi.org/10.1287/isre.1120.0467

- Clements, M. T., & Ohashi, H. (2005). Indirect network effects and the product cycle: Video games in the US, 1994-2002. *The Journal of Industrial Economics*, 53(4), 515–542. https://doi.org/10.1111/j.1467-6451.2005.00268.x
- Corts, K. S., & Lederman, M. (2009). Software exclusivity and the scope of indirect network effects in the U.S. home video game market. *International Journal of Industrial Organization*, 27(2), 121–136. https://doi.org/10.1016/j.ijindorg.2008.08.002
- Cusumano, M. A., Gawer, A., & Yoffie, D. B. (2019). The Business of Platforms: Strategy in the Age of Digital Competition, Innovation, and Power. Harper Business.
- Deephouse, D. L. (1996). Does isomorphism legitimate? *Academy of Management Journal*, 39(4), 1024–1039.
- Deephouse, D. L. (1999). To be different, or to be the same? It's a question (and theory) of strategic balance. *Strategic Management Journal*, 20(2), 147–166. https://doi.org/10.1002/(SICI)1097-0266(199902)20:2<147::AID-SMJ11>3.0.CO;2-Q
- Durand, R., & Haans, R. F. J. (2022). Optimally Distinct? Understanding the motivation and ability of organizations to pursue optimal distinctiveness (or not). *Organization Theory*, 16.
- Eisenmann, T. R., Parker, G. G., & Van Alstyne, M. W. (2006). Strategies for Two- Sided Markets. *Harvard Business Review*, 84(10), 92.
- Eisenmann, T. R., Parker, G. G., & Van Alstyne, M. W. (2009). Opening platforms: How, when and why? In *Platforms, Markets and Innovation* (pp. 131–162). Edward Elgar Publishing.
- Evans, D. S., & Schmalensee, R. (2010). Failure to Launch: Critical Mass in Platform Businesses. *Review of Network Economics*, 9(4). https://doi.org/10.2202/1446-9022.1256
- Garud, R., Jain, S., & Tuertscher, P. (2008). Incomplete by design and designing for incompleteness. *Organization Studies*, 29(3), 351–371. https://doi.org/10.1177/0170840607088018
- Gawer, A. (2014). Bridging differing perspectives on technological platforms: Toward an integrative framework. *Research Policy*, 43(7), 1239–1249. https://doi.org/10.1016/j.respol.2014.03.006
- Gazé, P., & Vaubourg, A.-G. (2011). Electronic platforms and two-sided markets: A side-switching analysis. *The Journal of High Technology Management Research*, 22(2), 158–165. https://doi.org/10.1016/j.hitech.2011.09.007
- Georgallis, P. P., & Lee, B. (2020). Toward a theory of entry in moral markets: The role of social movements and organizational identity. *Strategic Organization*, 18(1), 50–74. https://doi.org//10.1177/1476127019827474

- Haans, R. F. J. (2019). What's the value of being different when everyone is? The effects of distinctiveness on performance in homogeneous versus heterogeneous categories. *Strategic Management Journal*, 40(1), 3–27. https://doi.org/10.1002/smj.2978
- Jacobides, M. G., Cennamo, C., & Gawer, A. (2018). Towards a theory of ecosystems. *Strategic Management Journal*, 39(8), 2255–2276. https://doi.org/10.1002/smj.2904
- Jennings, J. E., Jennings, P. D., & Greenwood, R. (2009). Novelty and new firm performance: The case of employment systems in knowledge-intensive service organizations. *Journal of Business Venturing*, 24(4), 338–359. https://doi.org/10.1016/j.jbusvent.2008.03.003
- Karanovic, J., Berends, H., & Engel, Y. (2020). Managing the Identity-Size Paradox in Platforms: The Case of Platform Cooperatives. *Academy of Management Proceedings*, 2020(1), 21166. https://doi.org/10.5465/AMBPP.2020.21166abstract
- Katz, M. L., & Shapiro, C. (1994). Systems Competition and Network Effects. *Journal of Economic Perspectives*, 8(2), 93–115. https://doi.org/10.1257/jep.8.2.93
- Lee, E., Lee, J., & Lee, J. (2006). Reconsideration of the Winner-Take-All Hypothesis: Complex Networks and Local Bias. *Management Science*, 52(12), 1838–1848.
 - https://doi.org/10.1287/mnsc.1060.0571
- Livengood, R. S., & Reger, R. K. (2010). That's Our Turf! Identity Domains and Competitive Dynamics. *Academy of Management Review*, *35*(1), 48–66. https://doi.org/10.5465/amr.35.1.zok48
- Nag, R., Corley, K. G., & Gioia, D. A. (2007). The Intersection of Organizational Identity, Knowledge, and Practice: Attempting Strategic Change Via Knowledge Grafting. Academy of Management Journal, 50(4), 821–847. https://doi.org/10.5465/amj.2007.26279173
- Navis, C., & Glynn, M. A. (2011). Legitimate Distinctiveness and The Entrepreneurial Identity: Influence on Investor Judgments of New Venture Plausibility. *Academy of Management Review*, *36*(3), 479–499.
- Parker, G. G., Van Alstyne, M. W., & Choudary, S. P. (2016). Platform revolution: How networked markets are transforming the economy and how to make them work for you (1st ed.). WW Norton & Company.
- Parker, G. G., Van Alstyne, M. W., & Jiang, X. (2017).

 Platform ecosystems: How developers invert the firm. *MIS Quarterly*, 41(1), 255–266. https://doi.org/10.25300/MISQ/2017/41.1.13
- Peteraf, M. A., & Barney, J. B. (2003). Unraveling the resource-based tangle. *Managerial and Decision*

- Economics, 24(4), 309–323. https://doi.org/10.1002/mde.1126
- Piskorski, M. J., Halaburda, H., & Smith, T. (2008). *EHarmony*. Harvard Business School Case. https://hbsp.harvard.edu/product/709424-PDF-ENG
- Porter, M. E. (1980). Competitive strategy: Techniques for analyzing industries and competitors. Free Press.
- Powell, W. W., & DiMaggio, P. J. (Eds.). (1991). *The New Institutionalism in Organizational Analysis*. University of Chicago Press. https://press.uchicago.edu/ucp/books/book/chicago/N/bo3684488.html
- Ravasi, D., Tripsas, M., & Langley, A. (2020). Exploring the strategy-identity nexus. *Strategic Organization*, *18*(1), 5–19. https://doi.org/10.1177/1476127019900022
- Rietveld, J., & Schilling, M. A. (2020). Platform Competition: A Systematic and Interdisciplinary Review of the Literature. *Journal of Management*, 47(6), 1528–1563.
- Ritzer, G., & Jurgenson, N. (2010). Production, Consumption, Prosumption: The nature of capitalism in the age of the digital 'prosumer'. *Journal of Consumer Culture*, *10*(1), 13–36. https://doi.org/10.1177/1469540509354673
- Roberts, P. W., & Amit, R. (2003). The Dynamics of Innovative Activity and Competitive Advantage: The Case of Australian Retail Banking, 1981 to 1995. *Organization Science*, *14*(2), 107–122. https://doi.org/10.1287/orsc.14.2.107.14990
- Seamans, R., & Zhu, F. (2014). Responses to Entry in Multi-Sided Markets: The Impact of Craigslist on Local Newspapers. *Management Science*, 60(2), 476–493. https://doi.org/10.1287/mnsc.2013.1785
- Sillince, J. A. A., & Simpson, B. (2010). The strategy and identity relationship: Towards a processual understanding. In B. Joel A.C. & J. Lampel (Eds.), *The Globalization of Strategy Research* (Vol. 27, pp. 111–143). Emerald Group Publishing Limited. https://doi.org/10.1108/S0742-3322(2010)0000027008
- Suarez, F. F. (2005). Network Effects Revisited: The Role of Strong Ties in Technology Selection. *Academy of Management Journal*, 48(4), 710–720. https://doi.org/10.5465/amj.2005.17843947
- Suchman, M. C. (1995). Managing Legitimacy: Strategic and Institutional Approaches. *Academy of Management Review*, 20(3), 571–610. https://doi.org/10.5465/amr.1995.9508080331
- Sun, L., Rajiv, S., & Chu, J. (2016). Beyond the more the merrier: The variety effect and consumer heterogeneity in system markets. *International Journal*

- of Research in Marketing, 33(2), 261–275. https://doi.org/10.1016/j.ijresmar.2015.05.010
- Taeuscher, K., Bouncken, R., & Pesch, R. (2021). Gaining Legitimacy by Being Different: Optimal Distinctiveness in Crowdfunding Platforms. *Academy of Management Journal*, 64(1), 149–179. https://doi.org/10.5465/amj.2018.0620
- Taeuscher, K., & Rothe, H. (2021). Optimal distinctiveness in platform markets: Leveraging complementors as legitimacy buffers. *Strategic Management Journal*, 42(2). https://doi.org/10.1002/smj.3229
- Tiwana, A., Konsynski, B., & Bush, A. A. (2010). Research Commentary—Platform Evolution: Coevolution of Platform Architecture, Governance, and Environmental Dynamics. *Information Systems Research*, 21(4), 675–687. https://doi.org/10.1287/isre.1100.0323
- van Angeren, J., Vroom, G., McCann, B. T., Podoynitsyna, K., & Langerak, F. (2022). Optimal distinctiveness across revenue models: Performance effects of differentiation of paid and free products in a mobile app market. *Strategic Management Journal*, *n/a*(n/a), 1–35. https://doi.org/10.1002/smj.3394
- Zhao, E. Y. (2022). Optimal Distinctiveness: A New Agenda for the Study of Competitive Positioning of Organizations and Markets (1st ed.). Cambridge University Press. https://doi.org/10.1017/9781108990561
- Zhao, E. Y., Fisher, G., Lounsbury, M., & Miller, D. (2017). Optimal distinctiveness: Broadening the interface between institutional theory and strategic management. *Strategic Management Journal*, 38(1), 93–113. https://doi.org/10.1002/smj.2589
- Zhao, E. Y., Ishihara, M., Jennings, P. D., & Lounsbury, M. (2018). Optimal Distinctiveness in the Console Video Game Industry: An Exemplar-Based Model of Proto-Category Evolution. *Organization Science*, 29(4), 588–611. https://doi.org/10.1287/orsc.2017.1194
- Zhu, F., & Iansiti, M. (2012). Entry into Platform-Based Markets. *Strategic Management Journal*, *33*(1), 88–106. https://doi.org/10.1002/smj.941
- Zott, C., & Amit, R. (2007). Business Model Design and the Performance of Entrepreneurial Firms. *Organization Science*, 18(2), 181–199. https://doi.org/10.1287/orsc.1060.0232