Dynamism and realignment in the HR architecture: Online labor platform ecosystems and the key role of contractors

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Abstract
Given the widespread contribution of independent contractors to organizational innovation and competitive advantage, it is timely to reassess assumptions about the HRM practices appropriate to their management and the rationale for organizations to work with them. In the original and highly influential HR architecture model of Lepak and Snell (1999), contractor status is viewed as an outcome of the low value and/or low uniqueness of human capital resulting in the proposition to externalize and manage them using either none or minimal compliance-based HRM practices. Developments in digital technologies and algorithmic management epitomized by online labor platforms prompt us to reconsider these assumptions and to challenge the proposed links between value/uniqueness of human capital, employment mode and HRM practices that are assumed by the HR architecture model. Using insights from online labor platforms, we argue that the significant benefits to firms of working with contractors, coupled with the possibilities offered by algorithmic management to efficiently monitor and regulate their behavior, provide a compelling reason for organizations to choose external employment modes even when workers are key to value creation. We challenge the alignment and stability of the relationships proposed by the HR architecture model, and offer propositions to extend the model by reconsidering the rationale for, and nature of, HRM practices associated with contractors. This reassessment is both timely and relevant given the growing prominence of business models where externalizing workers is central alongside the development of new forms of algorithmic human resource management to control them.

KEYWORDS
HR and technology, inter-organizational environment, performance management, recruitment, selection, strategic HR

1 | INTRODUCTION

The rise of online labor platforms (OLPs) like Uber, Fiverr, and Upwork has stimulated interest in how human resource management (HRM) practice and theory apply to gig workers (Duggan et al., 2020; Kuhn & Maleki, 2017; Meijerink & Keegan, 2019). In most countries, gig workers are classified as independent contractors by OLPs (Vallas & Schor, 2020). In the highly influential HR architecture model, Lepak & Snell (1999, p. 39) propose that organizations adopt a contractor employment mode for “human capital that is generic and of limited
strategic value.” In a footnote to their work extending the model, Kang, Morris & Snell (2007, p. 244) reinforce this stating: “Contract workers generally offer noncore and low-level skills and knowledge, and thereby have relatively little potential to help modify and renew core knowledge bases of a firm.” Lepak & Snell (1999, p. 40) originally conceived that limited or no HRM activities apply to contractors due to “limited value-creating potential.” The message reinforced by the model is that contractors are not key to value creation. By default, they are excluded from (many) HRM activities (Cross & Swart, 2022; McKeown & Pichault, 2021).

This message is at odds with both the growth in contracting in almost every sector of the global economy (Cappelli & Keller, 2013; Spreitzer et al., 2017) and the rise of OLPs (Kässi & Lehdonvirta, 2018; Meijerink & Arets, 2021; Vallas & Schor, 2020). It is timely to ask questions about the intersections between HRM and the employment of contract-based gig workers (Kuhn et al., 2021). Is the choice to pursue a model based predominantly on contractors aligned with the fact that “many innovative companies want to have it both ways. They exercise a significant degree of control over the workforce—whose performance is central to the core business—in line with the employment model but without being held accountable as employers” (Aloisi & De Stefano, 2020, p. 49: emphasis added)? How does this influence what HRM practices are deployed to manage gig workers? In their recent wide-ranging analysis of Lepak and Snell’s (1999) model, Luo et al. (2021) call for a closer examination of OLPs who raise significant but unexplored challenges for the assumptions underpinning the model. Considering these challenges is likely to “greatly extend the HR architecture model” (Luo et al., 2021, p. 267).

This article considers the alignment between the value/ uniqueness of human capital, employment mode and HRM practices based on insights from OLPs. Technology advances associated with algorithmic management, and business models based on a platform rather than a pipeline rationale (Van Alstyne et al., 2016) influence how OLPs use HRM practices. While some HRM practices are aligned with systems aiming at compliance, as the HR architecture model predicts in the case of independent contractors, practices are also deployed that aim for productivity enhancement and even commitment. By situating the HR architecture in the context of wider platform ecosystems and the deployment of algorithmic management, we show how the alignment between human capital characteristics, employment modes, and HRM practices is not what the model predicts. We further examine how pressures from the institutional context impact on OLPs’ efforts to maintain their preferred contractor-based model leading to dynamism in the alignment between employment modes and HRM practices.

This article is structured as follows. After reviewing the core assumptions underpinning the HR architecture, we discuss the strategic goals of OLPs, the ecosystems within which they operate, and HRM practices found in platform ecosystems. We contrast these practices with the original HR architecture model and formulate propositions on the realignment between human capital value/uniqueness, employment modes, and HRM practices. We consider the theoretical implications of the algorithmic management of contractors in a growing range of industries for HRM scholarship and practice and identify areas for future research.

2 | THE HR ARCHITECTURE: CORE ASSUMPTIONS

Lepak and Snell (1999) introduced the HR architecture model to go beyond the idea that firms make or buy human capital (i.e., the knowledge, skills, and abilities of workers). The model predicts that firms both develop (make) human capital within the bounds of the firm as well as relying on the external labor market to access (buy) human capital. Which of these employment modes is chosen depends on the value and uniqueness of the human capital concerned. Human capital value refers to “the ratio of strategic benefits to customers derived from skills relative to the costs incurred” (Lepak & Snell, 1999, p. 350). Workers with high levels of value are seen as core to a firm’s competitive advantage (Barney, 1991) and have employment contracts with the firm to ensure their skills are developed and deployed correctly (Williamson, 1975) and are aligned to the organization’s strategic goals (Barney, 1991).

Human capital with limited strategic value is acquired by means of an external employment mode. Market-based transactional relationships deliver cost-effective compliance of workers while low strategic value renders their further skill development unnecessary. The uniqueness dimension refers to the firm specificity (Becker, 1964; Williamson, 1975) of human capital and whether skills are in limited supply in the external labor market (Lepak & Snell, 1999). Unique skills are developed internally (Williamson, 1975) in order to protect the firm’s competitive advantage (Barney, 1991), while generic human capital is acquired from the external labor market and subject to low levels of further investment (Becker, 1964). The HR architecture juxtaposes the value and uniqueness dimensions, underpinned by assumptions regarding efficiency and ease of monitoring and control (Williamson, 1975), to derive four quadrants that link human capital characteristics with employment modes and HRM systems (Lepak & Snell, 1999).

2.1 | Internalizing human capital through employment

Quadrant 1 represents human capital that is valuable, unique, and retained within the firm using an “internal development” employment mode. Employment relationships in this quadrant are open-ended, involving mutual investment by the employee and employer in developing firm-specific skills (Lepak & Snell, 1999). To maintain organization-based employment relationships (Rousseau, 1995; Tsui et al., 1995), firms rely on a commitment-based HRM system that promotes job autonomy, empowerment, promotion from within, continuous training, and appraisal emphasizing employee contributions to strategic objectives (Lepak & Snell, 2002).

Human capital in Quadrant 2 is valuable yet widely available in the external labor market. Firms face tensions as they are motivated...
both to internalize valuable skills while limiting further development to avoid losing returns on investment (Becker, 1964; Lepak & Snell, 1999). Human capital in Quadrant 2 is “bought” from the external labor market and internalized without further investment in employees’ skills (i.e., “acquisition” mode). Lepak and Snell (1999) envision a symbiotic employment relationship where employee and employer engage as long as each benefits from the relationship with an employment contract offered in return for loyalty (Rousseau & Parks, 1993). An associated market-based HRM system comprises comprehensive staffing practices, limited training to increase short-term productivity, appraisal that emphasizes efficiency, and market-based wages (Lepak & Snell, 2002).

2.2 | Externalizing human capital through contracting

While human capital in Quadrants 1 and 2 is internalized through employment, contracting is used for workers in Quadrants 3 and 4. Quadrant 3 represents human capital that is widely available in the labor market and of little strategic value to the firm. Firms use a “contracting” employment mode, establishing transactional relationships with workers (Tsui et al., 1995) based on short-term economic exchanges. Contractors are kept at arms-length by the firm and managed by means of none or minimal compliance-based HRM practices. There is little incentive to invest in HRM practices beyond enforcing compliance with rules. Hourly or piece-based pay prevail alongside job simplification, limited autonomy, and minimal training or appraisal (Lepak & Snell, 2002).

Human capital in Quadrant 4 is unique and of limited strategic value creating a paradox: Firms do not need to internalize these skills (Barney, 1991) yet externalizing them exposes the firm to supplier’s opportunism and difficulties monitoring how human capital is deployed (Williamson, 1975). The HR architecture proposes an “alliance” employment mode where co-specialized assets (i.e., assets that create value only through the combined effort of the worker and hiring firm) are developed (Lepak & Snell, 1999). Co-specialized assets (Parkhe, 1993) are developed by means of collaborative-based HRM systems such as staffing for collaborative skills, training for team building purposes, team-based performance appraisal, and group-based incentive plans (Lepak & Snell, 2002).

Summarizing, the HR architecture proposes a configurational approach to the management of human capital where alignment is sought among human capital characteristics (i.e., value and uniqueness), employment modes (i.e., employment vs. contracting), and HRM practices (i.e., coherent bundles; Kang et al., 2007; Lepak & Snell, 1999; Luo et al., 2021). Following assumptions about the ease and efficiency of monitoring how human capital is deployed by workers (Williamson, 1975), the internal employment mode is only favored when human capital is seen as valuable. Contracting is favored when value is seen as low. Alignment in the HR architecture model between human capital characteristics, employment mode and HRM practices is challenged by the business model, employment strategy, and HRM practices of OLPs. To explore this, we begin by discussing how human capital value is created in platform ecosystems and consider the critical roles of monitoring and regulating performance through the algorithmic management of gig workers. We discuss HRM practices used to manage platform-based contractors and the dispersal of these in platform based HRM ecosystems. Finally, we highlight dynamics in OLPs’ HRM practices linked with broader institutional forces that further undermine the alignments proposed by the HR architecture model.

3 | VALUE CREATION IN PLATFORM ECOSYSTEMS

OLPs are relatively new forms of organizing contract-based work underpinning “millions of transactions a day across disaggregated workforces” (Jarrahi et al., 2021, p. 1). Using machine learning, big data, and algorithmic management (Lee et al., 2015; Meijerink, Boons, et al., 2021; Prassl, 2018) to connect gig workers with requesters of short-term labor services (De Stefano & Aloisi, 2018), the business model is premised on creating and extracting value from transactions between workers who are not employed by platforms and requesters of labor services. To intermediate two-sided markets for labor services, OLPs establish an ecosystem: A set of autonomous actors that are interdependent in value creation based on the externalization, utilization, and monitoring of how workers deploy their human capital in serving requesters of labor services (Meijerink & Keegan, 2019; Prassl, 2018). Following Van Alstyne et al. (2016), OLPs differ from conventional “pipeline” business organizations in that no one entity fully owns and controls the assets (e.g., human capital) which are central to value creation (Aloisi, 2020; Jacobides et al., 2018). In pipeline business models, human capital inputs are converted into outputs with higher value through optimization of the value chain according to strategic (HR) goals set by the organization. This involves control and integration of resources in linear activities aimed at end-consumers.

Platform ecosystems differ: Platforms do not “own” the human capital of workers who create value and do not enter employment relationships with platform workers (Aloisi, 2020; Jacobides et al., 2018). Instead, platform firms use algorithm based technology to closely monitor and regulate external (human) resources in an effort to ensure work quality and reliability in servicing requesters’ needs. Furthermore, from a HR perspective, value in conventional pipeline business models is created by managing human capital according to a guiding HR philosophy or set of principles. It is this philosophy and those principles that integrate and align actors’ behaviors (Waldkirch et al., 2021), determine which employment mode is appropriate for which worker, and as a consequence which (coherent) set of HRM practices should be implemented. In the case of OLPs, contracting is itself a core strategic goal and employment is avoided at all costs. This raises questions as to how platforms integrate the efforts and behavior of contractors who are externalized by platform firms even though they constitute valuable human capital that is central to OLPs’ business goals. To discuss this, we examine interactions between actors who operate both centrally and ancillary to platform ecosystems, and the HRM practices deployed within these ecosystems.
TABLE 1 First-tier actors in platform ecosystems

<table>
<thead>
<tr>
<th>Actor</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gig workers</td>
<td>Freelance workers performing tasks that organizations and/or consumers outsource via an online labor platform.</td>
<td>Uber’s partner drivers, Task Rabbit’s taskers, Deliveroo’s riders, Doordash’s dashers</td>
</tr>
<tr>
<td>Requesters</td>
<td>Organizations and/or individual consumers that outsource work to freelance gig workers via online labor platforms.</td>
<td>Businesses using Upwork’s platform to access services from Upworkers, Customers ordering food using the Deliveroo App</td>
</tr>
<tr>
<td>Platform firms</td>
<td>Organizations matchmaking between gig workers and requesters by means of an online labor platform. They control the platform technology, the intellectual property, and the data generated from workers and requesters. Perform key governance roles including making rules of engagement for other first-tier ecosystem actors, setting standards and ensuring workers and requesters comply involving decisions on inclusion/exclusion of actors and conditions that trigger activation or deactivation from apps.</td>
<td>Uber, Deliveroo, Lyft, Upwork, Task Rabbit, Amazon Mechanical Turk, Care.com, Taptal, Wonolo, EY GigNow, PWC Talent Network, WAG!, Handy, Meituan, Ola</td>
</tr>
</tbody>
</table>

3.1 Platform ecosystems and first-tier actors

Across most OLPs, we can identify minimally three key actors that make up a platform ecosystem (Meijerink & Keegan, 2019): gig workers, requesters, and platform firms (see Tables 1 and 2).

3.1.1 Gig worker

First, “classic” gig workers are often called app-workers (Howcroft & Bergvall-Käreborn, 2019) and include independent contractors performing on-location activities such as food delivery, ride-hailing, and other in-person services coordinated on-demand via app by a platform firm (De Stefano, 2015). Another important category is crowdwork (Berg et al., 2018) where contractors are less visible and work exclusively online (Gray & Suri, 2019). Crowdworkers number in their millions on platforms like Upwork, Fiverr, and Freelancer (Kässi et al., 2021). According to the Oxford University-based Online Labor Index,⁴ the top occupations of crowdworkers globally include software development and technology, creative and multimedia, and writing and translation. The gigs performed by crowdworkers vary from repetitive, atomistic activities such as photo-tagging and other so-called “human-in-the-loop” microtasks related to AI and machine learning (Gray & Suri, 2019; Grønsund & Aanestad, 2020) to broader assignments such as developing code and designing logos. Crowdworkers are usually highly educated contractors (Berg et al., 2018), their numbers are steadily growing (Kässi et al., 2021), and most work in Asia followed by Europe, North America, and South America (Lehdonvirta, 2018; Lehdonvirta et al., 2019). As independent contractors rather than employees of an organization (Duggan et al., 2020; Stanford, 2017) gig workers

TABLE 2 Second-tier actors in platform ecosystems

<table>
<thead>
<tr>
<th>Actor</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unions</td>
<td>Traditional labor unions</td>
<td>IWGB</td>
</tr>
<tr>
<td></td>
<td>New/grass-root labor unions</td>
<td>App Drivers and Couriers Union (ADCU)</td>
</tr>
<tr>
<td>Activists</td>
<td>Groups of workers, some affiliated with single platforms, campaigning to improve gig workers’ terms and conditions</td>
<td>Turker Nation, MTurk Forum, Turkopticon, Gig Workers’ Rising, Industrial Workers of the World (IWW), Worker Info Exchange (WIEx)</td>
</tr>
<tr>
<td>Campaign</td>
<td>#deliverunion: The Deliveroo-cyclists in IWW (Lieman, 2018)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Worker Info Exchange (WIEx) (Van Doorn &amp; Badger, 2020)</td>
<td></td>
</tr>
<tr>
<td>Rival platforms</td>
<td>Competitors for requesters and workers</td>
<td>Various depending on platform business model</td>
</tr>
<tr>
<td>Regulators and</td>
<td>Decisions can undermine or support platform firms claims regarding employment status of gig workers</td>
<td>Labor Law Courts, Government Departments of Employment</td>
</tr>
<tr>
<td>Courts of Law</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investors</td>
<td>Set conditions for when platform firms need to be profitable which may influence decisions on HRM activities</td>
<td>Softbank, Amazon</td>
</tr>
</tbody>
</table>
3.1.2 | Requesters

Requesters is a term for contracting firms and/or individual customers who use online labor platforms to find gig workers (Kuhn & Maleki, 2017) to complete a bewildering array of tasks from the fairly recognizable meal deliveries (Deliveroo, Meithuan, Ele.me, Yummy, and Zomato) to administrative assignments (Upwork, Fiverr), training AI models (e.g., Amazon Mechanical Turk), and creative work like graphic design (e.g., 99Designs, freelancer.com), or computer programming (Toptal, Arc.dev, and Flexiple). While some gigs are once-off lasting only seconds or minutes (Jarrahi et al., 2021), others involve repeated transactions over time (e.g., a freelance chef who is matched more than once with a restaurant; Kuhn, 2016). Longer gigs are offered by newly established platforms in traditional sectors like consulting sometimes lasting weeks or months. Examples include EY's GigNow and PWC's Flexible Talent Network platforms.²

3.1.3 | Platform firms

Finally, platform firms are first-tier actors in platform ecosystems. Defined as “for-profit firms that use technology to facilitate the filling of immediate short-term service labor needs, either remotely or in person, with workers who are officially considered independent contractors” (Kuhn & Maleki, 2017, p. 184), they own the technological infrastructure that orchestrates interactions between gig workers and requesters. Platform firms set rules of the game for gigs by designing algorithms to monitor and direct performance. They set charges (e.g., fees or commissions) and control access to the interfaces through which workers and requesters are matched (Prassl, 2018; Rosenblat & Stark, 2016; Wood et al., 2019a; Wood et al., 2019b). They also control the data generated by transactions (Lee et al., 2015; Van Doorn & Badger, 2020). The rules they set can be traced to a key strategic aim which is to establish so-called network effects (Katz & Shapiro, 1985).

3.1.4 | Interactions between first-tier actors and network effects

The business model of platform firms is to generate revenue by charging fees or commissions per match made between requesters and gig workers (Prassl, 2018). The aim of platform firms is to increase the number of transactions and to scale up through network effects (Meijerink & Keegan, 2019; Vallas & Schor, 2020; Van Doorn & Badger, 2020). Network effects (Katz & Shapiro, 1985) refer to what happens when platforms increase in value because they attract more users on both sides of the market, providing incentives for even more actors on both sides to join the online marketplace orchestrated by the platform firm. For gig workers, membership of a large-scale platform ecosystem offers potential for reliable and consistent work opportunities. For requesters, it offers reliable and consistent access to workers.

Once established, network effects create a reinforcing cycle. Platform firms increase the value they can create and capture as they become more powerful and other platform firms withdraw from the market or fail (Daskalova et al., 2021; Prassl, 2018). Network effects create both barriers to entry for competitor platforms and incentives for gig workers (and requesters) to remain with the platform. Achieving network effects is difficult, however, as it entails managing interactions between gig workers and requesters who are independent and reside outside the boundaries of a platform firm (Jacobides et al., 2018; Van Alstyne et al., 2016). Platform firms create more than just a market space but also govern ecosystem interactions through managerial fiat and control. They corral other actors to create value despite the platform firm not owning or employing these actors or resources (Gawer, 2021). Algorithmic management and control over workers are core tools in achieving these aims (Prassl, 2018; Rosenblat, 2018; Vallas & Schor, 2020).

3.2 | Platform ecosystems and second-tier actors

The interactions and value creation processes among the first-tier ecosystem actors are situated in a wider context of second-tier actors: Institutional actors like trade unions, labor courts, and regulators as well as activists (i.e., journalists, politicians), rival platform firms (operating their “own” ecosystem), and investors in platform firms, and so on. In recent years, trade unions focus more on OLPS (Vandaele, 2018) linked with growing recognition of the limitations of mobilizing only those workers with standard employment relationships (Jansen & Sluiter, 2019). Union interventions in gig work cases raise the status and visibility of gig workers and put pressure on governments and regulators to pay attention to platform firms’ labor standards (Tassinari & Maccarone, 2020). Grassroots activists (e.g., Turker Nation) try to influence platform firms by campaigning to improve working conditions for gig workers (Irani & Silberman, 2013; Panteli et al., 2020) and influence broader societal views on how gig workers are managed. Vandaele (2018, p. 4) notes that “emerging patterns hint at a possible co-existence or combinations of mainstream trade unions and other unions and union-like organizations defending platform workers’ needs and interests.”

Labor courts and regulators at national and supranational levels including the EU increasingly intervene in how platform firms operate from a worker perspective (De Stefano & Aloisi, 2018; Zekić, 2019). Across markets and jurisdictions, considerable variability, and dynamism prevails in the nature and extent of legal intervention in the management of gig workers. The same platform firm, in the same country and at the same time, can face differing decisions by courts at different levels regarding the employment status of gig workers (Lieman, 2018; Zekić, 2019).

Rival platform firms influence value creation processes among first-tier ecosystem actors by competing to attract platform workers.
(and requesters) in efforts to create network effects themselves (Rietveld & Schilling, 2021). Given that gig workers are independent contractors, they are nominally free to choose for whom they work. Rival platform firms create opportunities for multihoming (Meijerink & Keegan, 2019) putting pressure on platforms trying to create network effects. Finally, platform firms are often financed by investors like Softbank, Ikea, and Amazon. As start-ups, they rely on venture capital from investors who exert influence on how they create and capture value and how fast they gain network effects (Frenken et al., 2020; Kuhn et al., 2021; Van Doorn & Badger, 2020).

4 | REALIGNING THE HR ARCHITECTURE TO ACCOUNT FOR OLPs

4.1 | Realignment of human capital characteristics and employment modes

The original HR architecture model predicts that workers with strategically valuable human capital will be internalized as employees. Following Lepak & Snell (1999, p. 33), “internalization of employment is appropriate when it allows organizations to more effectively monitor employee performance and ensure that their skills are deployed correctly and efficiently (Williamson, 1975).” The externalization of workers with valuable human capital is not envisaged by the HR architecture model. However, the pivot from pipeline to platform business models (Van Alstyne et al., 2016), where firms create value based on external resources, changes the role that contractors play, from a theoretical perspective, in realizing strategic goals. Advances in algorithmic management open new opportunities for controlling the behavior of workers who are formally not employees. Gig workers hired through OLPs are both contractors and also strategically valuable to platform firms (Aloisi & De Stefano, 2020). Their value is realized in two ways.

First, as discussed earlier, platform firms rely on contractors (whether online crowdworkers or on-location app workers) to deliver consistent and reliable services for requesters as a prerequisite for platform firms to earn commissions or fees which is core to their business model. Upwork, for example, earns over two-thirds of its revenues from the commissions and fees paid by contractors using the platform and the other third from commissions and fees paid for by business clients.3 Accordingly, platform firms seek liquidity in transactions between gig workers and requesters (Frenken et al., 2020) to ensure both parties can reliably and consistently make successful matches. The higher the number of contractors, the more valuable the platform is to requesters as the chances of making a successful match are progressively higher the more workers are available at a given time (Van Alstyne et al., 2016). The higher the number of requesters, the more valuable platform participation is for gig workers who have higher chances of reliably gaining work. By extension, successfully growing the numbers of workers and requesters attached to the platform makes it more profitable for the platform firm, and more advantageous to investors (Birch & Cochrane, 2021).

Second, the choice to internalize valuable human capital is also linked with the efficiency and ease with which performance can be monitored to determine that skills are deployed correctly (Williamson, 1975). OLPs rely on algorithmic management to monitor and control gig workers and influence their performance. By automating HR-related decision-making in areas such as selection, appraisal, compensation, and workforce management (Lee et al., 2015; Meijerink, Boons, et al., 2021). OLPs achieve control over workers while cutting costs that would otherwise be spent on hiring human managers (Meijerink & Arets, 2021). Paradoxically, externalizing gig workers makes them more valuable to the platform by lowering the cost of supervising them (Aloisi & De Stefano, 2020) and by avoiding accountability for costs associated with the standard employment relationship such as pensions, sick pay, paid holiday leave, and other social security provisions (Aloisi & De Stefano, 2020; Spreitzer et al., 2017). OLPs, therefore, use technology to externalize workers without ceding control over their performance in ways we traditionally associate with contractors (Gandini, 2019; Kellogg et al., 2020; Newlands, 2021; Veen et al., 2020). OLPs only pay for the time workers are active on apps or crowdwork platforms.

To ensure requesters have reliable on-demand access to workers, platforms typically engage in over-hiring workers (Dube et al., 2020; Rosenblat, 2018; Wood et al., 2019b). This commodifies the human capital of gig workers (Wood et al., 2019a) by driving down their uniqueness and scarcity in the platform ecosystem (Huang, 2022). Empirical research indicates that platforms favor requesters in disputes with contractors as well as in decisions on balancing supply/demand for labor (Prassl, 2018; Rosenblat, 2018) because they represent the more elastic side of the market (Dube et al., 2020). Platform firms routinely over-hire gig workers rather than risk under-supply for fear requesters will leave the platform ecosystem (Prassl, 2018; Rosenblat, 2018).

By creating an oversupply of gig workers, the uniqueness of their knowledge, skills, and abilities is reduced creating a highly flexible labor pool from which to source matches for requesters’ needs. While the HR architecture predicts that gig workers would reside in Quadrant 2 (i.e., high value/low uniqueness), this prediction does not hold. On the contrary, OLPs source their human capital using an external employment mode (De Stefano & Aloisi, 2018; Kuhn & Maleki, 2017; Schor & Vallas, 2021; Vallas & Schor, 2020) which minimizes labor costs and increases the value of human capital to the platform firm. By deploying algorithmic management, OLPs can efficiently monitor and control gig workers who are externalized through contracting. OLPs, therefore, epitomize advances in digital technologies and algorithmic management that are changing the basis upon which decisions are made to internalize or externalize workers. The deployment of algorithmic management and involvement of first- and second-tier actors in distributed multiactor HRM ecosystems leads to realignment between human capital characteristics, employment modes, and HRM practices. Accordingly, we propose the following:
<table>
<thead>
<tr>
<th>Platform</th>
<th>Compliance</th>
<th>Productivity</th>
<th>Commitment</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upwork</td>
<td>Performance appraisal based on compliance with preset behaviors, procedures and standards</td>
<td>Comprehensive selection using difference sources: E.g., Double layer algorithm plus client screening many gig candidates Performance appraisal based on: • objective quantifiable results • assessing the quality and the quantity of output</td>
<td>Empowerment/autonomy to make decisions Include a wide variety of tasks Emphasizes promotion from within the platform: e.g., Top-Rated Badge Training to develop platform specific skills/knowledge: e.g., Global discussion forum using Freelance Gurus, Moderators Building platform literacies Performance appraisal based on input from multiple sources: e.g., Online ratings; broad collection of metrics on worker behavior; subjective feedback from requesters</td>
<td>Seppänen et al. (2020) Waldkirch et al. (2021) Bucher et al. (2021) Sutherland et al. (2020) Jarrahi &amp; Sutherland (2019) Kinder et al. (2019)</td>
</tr>
<tr>
<td>Amazon Mechanical Turk</td>
<td>Extreme simplification of tasks Jobs are well defined Performance appraisal based on compliance with preset behaviors, procedures and standards Compensation based on primarily short-term performance</td>
<td>Performance appraisal based on: • objective quantifiable results • assessing the quality and the quantity of output</td>
<td>Empowerment/autonomy to make decisions Include a wide variety of tasks Emphasizes promotion from within the platform: e.g., Master Turker Qualifications Performance appraisal based on input from multiple sources: e.g., Online ratings; broad collection of metrics on worker behavior subjective feedback from requesters</td>
<td>Dube et al. (2020) Irani &amp; Silberman (2013) Panteli et al. (2020)</td>
</tr>
<tr>
<td>Deliveroo</td>
<td>Jobs are well defined Performance appraisal based on compliance with preset behaviors, procedures and standards Compensation based on primarily short-term performance</td>
<td>Jobs which are standardized throughout the industry Performance appraisal based on: • objective quantifiable results • assessing the quality and the quantity of output Compensation based on market-wage: e.g., New market premium rates Compensation based on individual incentives/ bonuses</td>
<td>Empowerment/autonomy to make decisions Pre-employment training to develop platform specific skills/knowledge Performance appraisal based on input from multiple sources: e.g., Online ratings; broad collection of metrics on worker behavior subjective feedback from requesters.</td>
<td>Meijerink, Keegan, &amp; Bondarouk (2021) Veen et al. (2020) Goods et al. (2019) Newlands (2021) Waters &amp; Woodcock (2017)</td>
</tr>
<tr>
<td>Uber</td>
<td>Jobs are well defined Pre-employment training focusing on compliance with rules, regulations and procedures Performance appraisal based on compliance with preset behaviors, procedures and standards Compensation based on primarily short-term performance</td>
<td>Jobs are standardized throughout the industry Training to improve current job performance Performance appraisal based on: • objective quantifiable results • assessing the quality and the quantity of output Compensation based on market-wage: e.g., Surge pricing Compensation based on individual incentives/ bonuses</td>
<td>Empowerment/autonomy to make decisions Pre-employment training to develop platform specific skills/knowledge Performance appraisal based on input from multiple sources: e.g., Online ratings; broad collection of metrics on worker behavior subjective feedback from requesters.</td>
<td>Rosenblat (2018) Rosenblat &amp; Stark (2016) Taft (2018) Möhlmann &amp; Zalmanzon (2017) Lee et al. (2019) Prassl (2018)</td>
</tr>
</tbody>
</table>
Proposition 1a. OLPs rely on an external employment mode to source the human capital of gig workers which is strategically valuable to them.

Proposition 1b. Despite relying on their valuable human capital, OLPs choose the “contracting” employment mode for gig workers in order to keep gig workers outside the platform firm’s boundaries while monitoring and controlling them using algorithmic management.

Proposition 1c. OLPs limit the uniqueness of gig workers’ human capital by commoditizing their labor which further reduces labor costs and increases value.

4.2 | OLPs use hybrid HRM systems to manage gig workers

The HR architecture predicts that workers inside the organization’s boundaries are core workers, and therefore subject to the HRM principles of the firm (Bowen & Ostroff, 2004; Lepak & Snell, 1999), while those workers “outside” the organization are non-core and subject to limited or no HRM (principles or activities) at all (Kinnie & Swart, 2020; McKewon & Pichault, 2021). Workers with valuable human capital are subject to high-commitment (Quadrant 1) or productivity-based HRM systems (Quadrant 2) (Lepak & Snell, 1999), while those with human capital of limited value are managed by means of compliance-based (Quadrant 3) or collaborative-based HRM system (Quadrant 4). The coherence of bundles of HRM activities, guided by a particular HR philosophy (e.g., commitment, productivity, or compliance based; Lepak & Snell, 1999) is contradicted by OLPs. Research summarized in Table 3 shows that gig workers are simultaneously subject to hybrid type HRM activities where commitment, productivity and compliance-based HRM activities are all present. For Table 3, we chose two examples of each of app work and crowdwork to illustrate the use of hybrid systems of commitment, productivity, and compliance-based HRM activities. We expect that these platforms represent the deployment of hybrid HRM in platform ecosystems more generally.

Monitoring compliance with requesters’ needs is core to HRM in OLPs. Gig workers in crowdwork platforms like Upwork and Fiverr are tightly controlled through algorithm-based appraisal systems (Sutherland et al., 2020; Wood et al., 2019b) and are subject to electronic surveillance (e.g., using screenshots) (Waldkirch et al., 2021). OLPs also use compliance-based pay practices like piece-based pay, and appraisal against strict pre-set standards (e.g., degree to which a meal deliverer works during peak hours; Meijerink, Keegan, & Bondarouk, 2021; Veen et al., 2020).

In addition to these compliance-based HRM practices, platform workers are also subject to what are traditionally viewed as commitment-based HRM practices such as job autonomy (Sutherland et al., 2020; Wood et al., 2019b). Even in classic gig or app work such as performed using the Deliveroo platform, Meijerink, Keegan, and Bondarouk (2021) and Veen et al. (2020) show that workers have significant job autonomy. This legitimizes the claims that gig workers are independent contractors (Frenken et al., 2020; Meijerink, Keegan, & Bondarouk, 2021; Shapiro, 2018). Deliveroo also offers development workshops to riders which is aligned with commitment-based HRM systems.

Some platforms use selective selection techniques traditionally associated with productivity-based HRM systems (Lepak & Snell, 2002) but they do not use comprehensive selection (Cross & Swart, 2022) which indicated that contractors are generally subject to extensive forms of selection. Contradicting expectations based on the HR architecture model, selection practices used by platform firms include background checks and platform curated online tests which precede additional selection methods applied by clients to pre-screened workers (Waldkirch et al., 2021). Several platforms advertise stringent selection practices to attract new customers by building institutional trust (Meijerink & Keegan, 2019). Wonolo advertise their “pre-screened worker pool” to both contractors and clients, while Toptal describe their rigorous vetting of talent as a feature of their approach to selecting contract workers.

Theoretically, the hybrid nature of HRM approaches combining compliance-, commitment-, and productivity-based practices to manage contractors in OLPs is at odds with the HR architecture model where consistency, coherence, and clarity in bundles of mutually reinforcing HRM practices are emphasized (Lepak & Snell, 1999; Luo et al., 2021). Accordingly, we propose the following:

Proposition 2. Gig workers are subject to hybrid bundles of HRM activities that are traditionally part of commitment-, productivity-, and compliance-based HRM systems.

4.3 | Strategically valuable HRM practices are dispersed in multiactor HRM ecosystems

OLPs contradict the idea that core HRM activities are kept in-house by organizations to ensure coherence and strategic alignment (Lepak & Snell, 1999). In the original model, intraorganizational actors design and administer core HRM activities (Farndale, Scullion, & Sparrow, 2010; Purcell & Hutchinson, 2007), while noncore activities (e.g., payroll administration) are outsourced (Lepak et al., 2005; Lepak & Snell, 1998). To ensure internal and external alignment of HRM activities, coordination is done by corporate HR departments and/or business unit management (Farndale, Paauwe, & Boselie, 2010). OLPs do not use internal HR actors when executing their core HRM activities. They disperse activities including selection and performance management among other platform ecosystem actors (Meijerink, Keegan, & Bondarouk, 2021). First and foremost, OLPs outsource performance management to requesters through online rating systems for workers. On the platform Upwork, there are multiple forms of requester-based rating systems such as a dynamic
Job Success Score (JSS) and a Top-Rated Badge (Seppänen et al., 2020; Sutherland et al., 2020). Amazon Mechanical Turk (AMT) has “Master Qualifications” which workers can only attain based on consistently high requester ratings. Uber’s star rating system outsources performance rating to passengers (Rosenblat, 2018) showing how intertwined requesters are in performance management in platform ecosystems. Attracting and retaining requesters relies on gaining their trust in transactions with gig workers which is achieved by using ratings to manage worker behavior and even as the sole basis to deactivate (i.e., dismiss) workers. OLPS deploy algorithmic management to aggregate customer ratings, acting on this often without any human intervention (Curchod et al., 2020; Prassl, 2018; Wood et al., 2019b). This delegation of performance appraisal to requesters allows OLPS to cut costs that would otherwise be spent on hiring human managers to supervise or direct gig workers. This aligns with evidence showing that firms which require a greater amount of effort on the part of customers (i.e., so-called customer co-production) are less likely to invest in HR capacities of managers in these firms (Skaggs & Youn, 2004).

Second, OLPS disperse HRM activities to avoid reclassification court cases and threats to the legitimacy of their contractor-based business model. Dispersing core performance management tasks to other actors, human, and non-human, allows platform firms to avoid the appearance that they employ workers or direct their behavior. By using algorithmic management rather than human supervisors, OLPS directive control of workers is stealth-like (Meijerink, Boons, et al., 2020; meijerink, Keegan, & Bondarouk, 2021). This delegation of performance appraisal to requesters allows OLPS to cut costs that would otherwise be spent on hiring human managers to supervise or direct gig workers. This aligns with evidence showing that firms which require a greater amount of effort on the part of customers (i.e., so-called customer co-production) are less likely to invest in HR capacities of managers in these firms (Skaggs & Youn, 2004).

Proposition 3. OLPS disperse HRM activities to other ecosystem actors to uphold gig workers’ contractor status and monitor and control workers to achieve network effects.

4.4 Dynamic connections between human capital characteristics, employment mode, and HRM practices in platform ecosystems

Lepak and Snell (1999) link dynamics in the HR architecture with human capital becoming more or less valuable/unique due to strategic investments in employees’ (firm-specific) skills, and changes in firm strategies or new technologies making current skills obsolete. Such dynamics also occur in platform ecosystems, for example, when rival platform firms enter the market or when gig work becomes automated (e.g., self-driving cars replacing Uber drivers). There are however additional reasons why gig workers experience changes in how platforms want to work with them (as employees or as independent contractors) as well as the HRM practices platforms use to manage them. To understand these, a broader view of the pressures on platform firms’ HRM choices by second-tier platform ecosystem actors is required.

Second-tier platform ecosystem actors (i.e., labor unions, policy makers, and labor courts) occupy the institutional environment in which first-tier platform actors operate. Push-pull dynamics occur between the first- and second-tier actors which shape employment modes and HRM activities (Meijerink, Keegan, & Bondarouk, 2021). The choice by platforms to adopt one employment mode and/or bundle of HRM practices is linked not only to their strategic rationality as suggested by the original HR architecture model (Brand et al., 2019; Luo et al., 2021) but also to broader institutional factors. To (temporally) defuse pressures from institutional sources and to avoid legal scrutiny, actions by regulators, or attention from media or activists, OLPS may alter either the status of gig workers (even if temporarily), the way gig workers are outsourced (e.g., subcontracting to other agencies), or else the nature of HRM practices that are deployed. Reclassification court cases focus on which employment mode is seen as legitimate and whether gig workers are independent contractors subject to an “external” employment mode (i.e., Quadrant 3 or 4) or employees working via an “internal” employment mode (i.e., Quadrant 1 or 2). Such cases cause OLPS to adjust their HRM practices and attempt to realign them with the appropriate (i.e., external) employment mode (Meijerink, Keegan, & Bondarouk, 2021).

When Deliveroo in the Netherlands changed from hiring workers as employees to hiring them as contractors, the associated terms and conditions offered under the new freelance model exposed Deliveroo to legal scrutiny in labor disputes (Meijerink, Keegan, & Bondarouk, 2021). Deliveroo subsequently abandoned performance appraisal schemes that initially served to control gig workers’ performance. This move proved to be unsuccessful as the court later ruled that Deliveroo workers should be classified as employees (Zekić, 2019). A recent London employment tribunal examined Uber’s claims not to employ drivers with the judge noting a tendency in Uber’s language about workers toward “fictions” and “twisted language” (Prassl, 2018, p. 45), referencing contradictions between what the platform claims in recruitment material regarding autonomous working conditions (e.g., commitment-oriented HRM) versus actual methods of algorithmic management more in line with contracts of service (e.g., compliance-oriented HRM).

Despite on-going court cases and dynamism inherent in HRM practices in platform ecosystems, evidence of a switch to internal employment modes is not (yet) evident. OLPS lobby governments (Rosenblat, 2018) and seek electoral support for legalization (Carosa, 2020) legitimizing their use of HRM practices (from the HR architecture’s Quadrants 1 and 2) to control gig workers in similar
ways to employees. Attempts by a coalition involving Lyft and Uber to influence labor regulations in California are a good example. Uber initially changed its HRM practices (i.e., did away with platform-set fee system allowing drivers to set their own prices). This change in compensation strategy was implemented as a response to a California law called AB-5 that would classify app-based drivers as employees. The change to compensation aligned (temporarily) with the independent contractor status of Uber drivers. However, the change was reversed when Uber saw an increase in passenger cancellations of over 100% thus threatening its aims to create and maintain network effects. The subsequent passage of “Proposition 22” exempted Uber and other ride-hailing platforms from worker reclassification demands of AB-5 (Carosa, 2020).

These dynamics may soon become evident in Europe. The European Parliament recently adopted the “Directive on Improving Working Conditions in Platform Work” (EU, 2021) establishing the legal presumption of an employment relationship between the OLP and a gig worker in cases where OLPs control certain elements of work performance. Seen through an HR architecture lens, this implies that OLPs are legally obliged to institute an “internal” employment mode when they rely on commitment- and/or productivity-based HRM activities. The likely responses of OLPs will be to either (temporarily) abandon selected HRM activities (from Quadrants 1 and 2) to ensure their continued reliance on independent contractors (employment modes from Quadrant 3 or 4) is seen as legitimate, or to seek exceptions to regulations which insist on employment contracts for gig workers such as California’s Prop22. At the same time, OLPs will likely continue to rely on hybrid HRM systems whenever they can. Exercising control over freelancers by means of HR practices is at the heart of their business model and essential to their strategic goal to create network effects (see Proposition 2). We therefore propose the following:

**Proposition 4.** Institutional pressures emerging at different times and in different places lead OLPs to change commitment- and productivity-based HRM activities, seek exceptions to regulations pertaining to employment rights, or adopt (temporarily) some version of “internal” employment mode to source the human capital of gig workers within institutional constraints.

5 | DISCUSSION

Developments in digital technologies and algorithmic management epitomized by OLPs prompt us to reconsider the core assumptions of the HR architecture model. We summarize these in Table 4 which gives an overview of (our propositions on) how OLPs bring about realignment and dynamism in the HR architecture.

Proposed links between value/uniqueness of human capital, employment mode, and HRM practices break down and become dynamic in the context of OLPs. The economic benefits to firms of working with contractors, coupled with the possibilities offered by algorithmic management to efficiently monitor and regulate their behavior, offer explanations for externalizing workers as contractors despite their strategic value to the OLP. Contradicting the HR architecture model, OLPs externalize core human capital upon which their performance and strategy is based (De Stefano & Aloisi, 2018) and use novel forms of algorithmic management to regulate their performance. Instead of developing few or no (compliance-based) HRM practices for contractors as predicted by the HR architecture model, OLPs strategically combine HRM practices from multiple systems aiming at compliance, productivity enhancement, and even commitment. Although the default for platforms is to “buy,” they are subject to pressures from the institutional context as they try to maintain their contractor-based model. These institutional pressures explain observations about the dynamism of links between employment mode and HR practices, opening new ways to think about these connections in light of advances in algorithmic management and dispersed multiactor HR in platform ecosystems.

5.1 | Theoretical implications

As evidence mounts that contracting is on the rise (Cappelli & Keller, 2013; Spreitzer et al., 2017), it is important for HRM scholars to move beyond assuming that the label “contractor” is a sign of marginal value, and hence of little HRM concern. The side-lining of contractors from HRM scholarship is linked with the view embedded in the HR architecture that they offer low value to organizations. Despite growing evidence that contractors add significant value to organizations, drive innovation, and augment the capabilities of internal employees (Burke, 2012; McKeown & Pichault, 2021; Sulbout et al., 2021), HRM scholarship continues to view contractors through the architecture lens and fails to engage seriously with the HRM implications that contractors raise for organizations. Our contribution is to challenge the proposed links between value/uniqueness of human capital, employment mode, and HRM practices that are assumed by the HR architecture model but which no longer hold. Based on insights from OLPs, not only do these links no longer hold but more importantly, they do not guide organizations appropriately in the management of workers who are designated as contractors.

We have also shown how OLPs combine practices from different HRM systems and disperse HRM practices to other ecosystem actors to uphold the freelance status of contractors. Even though the HR architecture assumes that internal HRM actors will develop and implement coherent bundles of HRM practices, OLPs demonstrate how contractor-based business models may well be aligned with hybrid HRM practices aiming for commitment, productivity, and compliance. One issue this raises is how HRM specialists in more conventional organizations interact with others (e.g., agencies, suppliers) in managing the contributions and work conditions of contractors. To the extent that contractors contribute to innovation and performance in firms, ignoring them seems incongruous, and not in the interests of HRM scholars.

Advances in algorithmic management offer platforms the opportunity to monitor performance and regulate the behavior of external
worker status, or negotiate to redefine workers’ rights in the gig economy. OLPs can change practices which are relevant and appropriate for contractors. We have shown that when institutional pressures become too great, OLPs may suspend, alter, or drop HRM practices, or (temporarily) internalize workers, to avoid legitimacy threats that could damage their ongoing activities. OLPs constantly test and navigate institutional rules to maintain contractor-based models even while exercising power over workers through algorithmic management. That OLPs can change worker status, or negotiate to redefine workers’ rights in the gig economy, suggests that the choice to internalize or externalize workers is driven by push–pull dynamics deriving from both institutional pressures as well as strategic business goals. HRM scholars must embrace the complexities posed by institutional dynamics impacting on the growing gig workforce.

Cross & Swart (2022, p. 3) argue for the need to expand HRM theorizing and consider “actors who are neither bound by the directive control of an organization nor subject to mutual obligations as seen in an employment relationship.” The authors rightly question the neglect of independent contractors in HRM scholarship and raise the ethical implications of this that undermine the role of HRM scholarship, in general, to consider all workers, not just employees. However, based on our analysis, we have shown that OLPs use contractors who are not subject to mutual obligations of an employment relationship but are bound by directive control of platforms through their HRM activities. More attention needs to be paid to assumptions that a lack of mutual rights or obligations typically associated with standard employment relationships automatically means contractors are not subject to direct forms of control. Contractors are often bound by novel forms of control even though they are not employees (Meijerink & Keegan, 2019; Prassl, 2018; Schor & Vallas, 2021; Veen et al., 2020). The interlocking actions of platform firms, requesters and algorithmic management and control constitute new forms of directive control exercised in the management of contractors. Such control is also exercised through hybrid HRM practices that originate from different HRM systems and which combine efforts to manage behavior through compliance, through productivity enhancing practices, and even though practices aiming to commit workers and win their motivation (Waldkirch et al., 2021; Wood et al., 2019b).

Our contribution is therefore to shed light not only on a long-neglected group of workers in HRM scholarship but also on the changing nature of HRM practices for contactors who are integral to many

### TABLE 4 Realignment of the human resource architecture model for OLPs: Propositions

<table>
<thead>
<tr>
<th>HR architecture model assumptions</th>
<th>OLPs and the HR architecture</th>
<th>HR architecture realignment when contractors brought back in</th>
<th>Link to Propositions</th>
</tr>
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<tbody>
<tr>
<td>Workers with valuable human capital are internalized</td>
<td>Gig worker have valuable human capital for OLP and are externalized</td>
<td>Realignment of human capital characteristics and employment modes</td>
<td>Propositions 1a and 1b</td>
</tr>
<tr>
<td>Uniqueness and value are distinct and unrelated human capital characteristics</td>
<td>Platforms increase value of gig worker human capital by decreasing their uniqueness through commoditizing gig workers and lowering costs associated with using them for the platform</td>
<td>Realignment of how human capital characteristics relate to each other</td>
<td>Proposition 1c</td>
</tr>
<tr>
<td>Contractors subject to no HR practices or practices from single, compliance oriented HRM system</td>
<td>Gig workers are managed using practices from hybrid HRM systems: Compliance, productivity, and commitment systems</td>
<td>Realignment of HRM practices for contractors</td>
<td>Proposition 2</td>
</tr>
<tr>
<td>Internal HR actors design and manage valuable HRM practices</td>
<td>HRM is dispersed among ecosystem actors to uphold contractor status and monitor and control workers to achieve network effects</td>
<td>Realignment of HR practice characteristics and how they are designed and sourced</td>
<td>Proposition 3</td>
</tr>
<tr>
<td>Strategic rationality as main source of dynamism in choice of employment mode</td>
<td>In addition to strategic rationality, institutional pressures and interactions in the ecosystem between core and ancillary actors drive dynamism in employment modes and/or HRM practices applied to manage gig workers</td>
<td>Realignment of assumptions about why employment mode changes to incorporate institutional pressures as well as strategic rationality of the organization</td>
<td>Proposition 4</td>
</tr>
</tbody>
</table>
(platform) businesses. HRM activities that are applied in platform ecosystems may also be used for contractors in traditional organizations, and perhaps for employees also. Bringing contractors back in can revitalize HRM scholarship in contexts where workers are managed across and outside organizational boundaries, and where core HRM activities are dispersed among actors from different organizations using technologies that enable and extend algorithmic management of workers.

**6 | FUTURE RESEARCH**

Building on the analysis offered in this article, more research is needed on the nature of HRM in contexts where organizations use contractors. Studying OLPs can ease long-standing problems for researchers by offering insights on HRM issues usually embedded in relationships with disaggregated procurement and hiring managers (Keegan et al., 2012) and by providing access to contractors, who are notoriously fragmented as a group (Cross & Swart, 2022). Research on the HRM activities applied to manage them, and the legitimacy concerns these activities raise, have important practical as well as theoretical implications for a range of HRM actors dealing with contractors. Questions such as what HRM activities are used, who designs them, and what outcomes arise for worker motivation, legality, stability of labor supply, and quality of attachment between workers and the organizations, are all important.

A closely related area for future research is the growing complexity and dynamism of HRM systems. Snell and Morris (2021) highlight constant change to HRM practices in dynamic HRM ecosystems. They focus on the need to reintegrate changing HRM practices into coherent and strategically focused systems because interactions are myriad and in flux. This dovetails with our observations on the dynamic and emergent properties of HRM practices in OLP ecosystems due to push-pull dynamics between different institutional and organizational actors in and peripheral to the ecosystem. However, the alignment and consistency that is important in the study of organizational HRM systems, and even relatively stable interorganizational systems like InterOrganizational Project Teams (IPTs) (Flyvbjerg, 2014) are only partially relevant to understanding OLPs’ HRM ecosystems. In light of deliberate strategies of institutional complexity and hybridity on the part of platforms firms (Meijerink, Keegan, & Bondarouk, 2021), more research is needed on HRM practices of different actors. Can requesters influence the quality of HRM practices for gig workers? Do these dynamics settle over time as OLPs either achieve network effects or fail? What is/are the target(s) of alignment in such complex HRM ecosystems?

Not only are contractors often excluded from HRM practices that are relevant to their development, they are also excluded from many voice channels that exist for workers on standard employment relationships. Future research could address what contractors do to be heard, how effective these channels are, and how organizations respond to calls for more contractor voice (Keegan & Meijerink, 2022). OLP research highlights the importance of second-tier ecosystems actors in influencing gig worker voice (Gegenhuber et al., 2021; Tassinari & Maccarrone, 2020). Second-tier actors make visible the behavior of platform firms and expose conditions which the platform’s direct employees or other stakeholders may perceive as undesirable or unjust. Platform worker activists have successfully mobilized traditional and social media, and online communities, to raise scrutiny of HRM practices in platform ecosystems (Irani & Silberman, 2013; Vandaele, 2018). If the trend to hire more people through platforms continues, addressing voice issues will be critical given the links between worker voice and issues like trust, innovation, engagement, and wellbeing (Detert & Edmondson, 2011) as well as contractors’ experiences of decent work.

Finally, contractors deserve to be treated with respect and dignity by organizations which implies responsibilities, long left unexamined, for HRM agents of organizations using contract workers (Kuhn et al., 2021; Lamers et al., 2022). The specter of platform-based gig workers being refused access to toilet facilities by the organizations engaging them to carry out work is a grim and visible manifestation of what can happen when workers are treated as of marginal strategic value and consequently externalized, excluded, and ignored. While this is one, albeit visible manifestation, contractors hired through platforms may experience other forms of less visible exclusion and exploitation (Gray & Suri, 2019). When HRM scholars ignore a group of workers and assume they are subject to no HRM practices because they are not traditional employees (Dundon & Rafferty, 2018), HRM scholarship runs the risk of becoming irrelevant, failing to address core issues such as decent work and ethical HRM practices. The study of OLPs and their HRM activities can bring focus to gaps in HRM scholarship when workers are excluded, even though clearly creating value for organizations. Their exclusion means organizations have little insight into their treatment and whether ethical norms regarding wellbeing, dignity, and respect are upheld. This evidently needs to change if HRM research is to remain relevant for the study of work.

**7 | CONCLUSION**

Our analysis of OLPs challenges the alignment in the HR architecture model between the value/uniqueness of human capital, employment modes, and HRM practices. While the ideas in this article align with criticism of the original HR architecture model that it overlooked actors and institutions external to the organization, we also raise new questions about how HRM activities for contractors are shaped by algorithmic management and new forms of control. The HR architecture model can be extended and enriched by incorporating perspectives that allow contractors to come to the fore, and for the HRM activities developed to manage them to be recognized and systematically studied, rather than overlooked. Platforms are interesting for HRM theorizing precisely because the management of contractors involves the orchestration of resources within ecosystems that do not belong to any single organization. However, as we argue here, platforms do control workers using digital technologies and algorithms that involve customers and others in managing workers’ performance.
In this way, we contribute to current debates on how HRM theorizing can include contractors, while also contributing to debates about whether contractors are free from directive control, or simply subject to novel forms of control with consequences for HRM beyond platform ecosystems. Reconsidering the HR architecture by bringing contractors back in provides a long-awaited chance to extend HRM scholarship in a meaningful and inclusive way.

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Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

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