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# Dynamizing human resources: An integrative review of SHRM and dynamic capabilities research

Paula Apascaritei<sup>\*</sup>, Marta M. Elvira

*IESE Business School, University of Navarra, Camino del Cerro del Águila 3, 28023 Madrid, Spain*

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## ABSTRACT

Human resource management (HRM) systems have been extensively analyzed in academic research yet limited attention has been paid to the role of HRM dynamic capabilities (DC) and their impact on resources and practices, employee well-being and firm performance. Our study bridges this gap by defining a new categorization of HRM DC based on their ultimate aims: building knowledge, advancing social integration and developing reconfiguration-enhancing mechanisms. In parallel, we offer an integrative framework to shed light on how strategic human resource management (SHRM) can accelerate HRM DC development. Through this conceptual process model and typology of capabilities, we deepen the discussion around the core components of HRM systems, HRM DC, and their effects on resources and practices, employee well-being and performance. In practical terms, HRM DC represent a promising driver of sustainable long-term organizational growth by enabling firms to boost their strategic agility and capacity to navigate in the presence of environmental dynamism.

## 1. Introduction

Human resource management (HRM) systems play a critical role in helping firms obtain a competitive advantage (Jiang, Lepak, Hu, & Baer, 2012; Ployhart & Moliterno, 2011) and advance employee well-being (Farndale & Paauwe, 2018; Guest, 2017; Peccei & Van De Voorde, 2019). While the link between strategic human resource management (SHRM) and performance is widely recognized, the intervening mechanisms remain unclear and are seemingly hidden in a “black box” (Delery & Roupni, 2017; Guest, 2011; Jiang, Takeuchi, & Lepak, 2013). Regarding the HRM-performance connection, research to date has primarily focused on HRM behavioral mediators, such as collective engagement (Barrick, Thurgood, Smith, & Courtright, 2015), organizational culture (Ngo & Loi, 2008), and collective motivation (Zhao & Chadwick, 2014).

In contrast, in the years following the Wright, Dunford, and Snell (2001) proposal to combine SHRM and dynamic capabilities (DC), few studies have considered the specific role of DC in the HRM-performance relationship. Indeed, a review of the HRM-performance relationship yielded only a few DC as mediating constructs, with organizational ambidexterity, learning capacity and human resources (HR) flexibility among the notable exceptions (Jiang et al., 2013). As Chadwick and Flinchbaugh observe, research on HRM DC “may be a key but largely overlooked place within the HRM-firm rents causal chain where persistent firm-level heterogeneity resides” (2021, p. 197). In this 2021 study, they posit four ways to develop SHRM beyond the general recommendations of universalistic HRM systems, one of which is gaining a more in-depth understanding of HRM DC as the mediators of this relationship.

<sup>\*</sup> Corresponding author.

*E-mail addresses:* [paula.apascaritei@gmail.com](mailto:paula.apascaritei@gmail.com) (P. Apascaritei), [melvira@iese.edu](mailto:melvira@iese.edu) (M.M. Elvira).

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Given DC's potential to influence firm outcomes, we offer a new framework that combines SHRM and DC literature (Helfat & Peteraf, 2003; Teece, Pisano, & Shuen, 1997) by establishing a typology of HRM capabilities – i.e., knowledge-building, social integration, and reconfiguration-enhancing capabilities – and developing a model that sheds light on the underlying mechanisms of the HRM-DC-outcomes interplay. Subsequently, we advance propositions to explain how HRM practices promote the development of DC, and how DC contribute to resource and practice change, employee well-being and performance.

By combining research on SHRM and DC, we contribute to the literature in several ways. Conceptually, we extend the strategic scope of HRM beyond its behavioral effects on employees to firm-level capabilities, a domain previously overlooked by research (Chadwick & Flinchbaugh, 2021; Jiang et al., 2013; Schilke, Hu, & Helfat, 2018). Moreover, we address previous calls to explore the agentic roles of managers and employees and social implications in DC formation (Kurtmollaiev, 2020; Wright, 2021), as well as respond to earlier criticisms of the SHRM literature by considering the capabilities of firms to build and transform their resource base (Chadwick & Dabu, 2009; Greer, Lusch, & Hitt, 2017). We also focus on the outcomes of DC beyond firm performance by explaining their role in shaping organizational change (Schilke et al., 2018; Verona & Zollo, 2011) and employee well-being (Farndale & Paauwe, 2018; Guest, 2017; Peccei & Van De Voorde, 2019).

DC have a strategic and practical role by enabling firms to better adapt and evolve amid disruptive environments (Teece, 2011), shaped by internal and external change alike (Doz, 2020). Notwithstanding, tensions can arise in the pursuit of organizational goals, thwarting the development of DC as a result of contradictory operational requirements. As Smith et al. (2017, p. 1) describe, “*stability and change, empowerment and alienation, flexibility and control, diversity and inclusion, exploration and exploitation, social and commercial, competition and collaboration, learning and performing*” are just some of the organizational paradoxes that firm leaders and employees face. Tensions also arise when executives are forced to downsize in response to declining demand, while at the same time seeking to retain qualified talent and preserve employee well-being and job stability (Tsai & Yen, 2020). The same occurs when HRM systems aimed at enhancing involvement generate higher levels of stress by intensifying employee workloads (Boxall, Huo, Macky, & Winterton, 2019). For employees, these resultant tensions might include striking a balance between organizational goals and a satisfying work-life harmony and overall well-being (Guest, 2017).

These tensions underline the importance of further study on HRM DC and their integration with relevant HRM theories (Schilke et al., 2018), since they offer firms a framework to “*navigate shifting landscapes*” (Harney & Collings, 2021) and reconcile the contradictory demands they confront. Through HRM DC, we are able to gain a more nuanced understanding of why some firms have a comparative advantage in uncertain environments and how their dynamic and intrinsically-evolving nature bolsters organizational agility.

In sum, we argue that integrating HRM and DC allows us to define the construct of HRM capabilities and illustrate unique combinations of practices and resources that favor DC via an iterative process. DC are notoriously difficult to define and develop, and also require a fine-grained understanding of human behavior to avoid backfiring (Boxall et al., 2019; Coff, 1997; Kaufman, 2020; Wright, 2021). For this reason, HRM can significantly contribute to the DC framework by incorporating both capabilities and human agency and extending previous literature focused primarily on advantages in strategic factor markets (Campbell, Coff, & Kryscynski, 2012; Chadwick, 2017; Delery & Roumpi, 2017). In this study, we explore how DC can be developed through HRM resources and practices, and advance several caveats about potential obstacles.

## 2. Review of relevant SHRM research for strategic capabilities

SHRM is defined as “*the study of HRM systems (and/or subsystems) and their interrelationships with other elements comprising an organizational system...*” (Jackson, Schuler, & Jiang, 2014, p. 2). An HRM system is “*a dynamic bundle of HR practices that is deliberately designed to achieve the organization's goals*” (Jiang et al., 2012, p. 73). These systems comprise sets of policies and practices on multiple aspects of HRM, among them, recruitment, training, job design, employee communications, appraisals and compensation (Boxall et al., 2019; Jiang, Lepak, Hu, & Baer, 2012; Posthuma, Campion, Masimova, & Campion, 2013). Likewise, HRM systems shape – and are shaped by – situational factors such as managing organizational relations with trade unions, employment institutions and labor markets (Beer, Boselie, & Brewster, 2015; Boxall et al., 2019; Farndale & Paauwe, 2018; Gooderham, Mayrhofer, & Brewster, 2019).

Scholars have proposed different classifications of HRM systems, including high-performance work practices (Huselid, 1995), high-involvement systems (Batt, 2002; Boxall et al., 2019), high-commitment HR systems (Arthur, 1994), supportive HRM (Beltrán-Martín & Roca-Puig, 2013; Lin, Sanders, Sun, Shipton, & Mooi, 2016) and other strategically targeted systems (Jackson, Schuler, & Jiang, 2014) that consider the desired outcome and importance of employees in reaching organizational goals (Lepak & Snell, 1999; Posthuma, Campion, Masimova, & Campion, 2013). In theory, HRM systems equip employees with the requisite knowledge and abilities and extrinsic and intrinsic motivations to perform their work, as well as opportunities to make an organizational impact and advance their career path (Delery & Roumpi, 2017; Huselid, 1995; Jiang, Lepak, Hu, & Baer, 2012). By enhancing employees' abilities, motivation, and opportunities, HRM systems are assumed to positively affect performance (Batt, 2002) in two central frameworks of strategic management, namely, the resource-based view and the behavioral theory of the firm.

As per the resource-based view (RBV), HRM systems enable organizations to select and develop their human capital base (Becker & Gerhart, 1996). Based on RBV, these collective human capital resources generate a competitive advantage when they are valuable, rare, inimitable and non-substitutable (Barney, 1991). The behavioral theory of the firm (Jiang et al., 2013; Schuler & Jackson, 1987) posits that HR practices encourage certain positive behaviors and attitudes, while recognizing also the implications of cost-reduction strategy, which may be at odds with employee interests. The effect of HRM systems is mediated through behavioral factors hidden in a “*black box*” between HRM and performance (Jiang et al., 2013). These factors include turnover rates (Batt, 2002) and a social climate of trust (Collins & Smith, 2006).

Beyond the scope of behavioral theory (Kaufman, 2015b, 2015a), the processes concealed in the “black box” (Jiang et al., 2013) have not been adequately examined, nor has the role of agency in SHRM been sufficiently conceptualized (Kraaijenbrink, Spender, & Groen, 2010). In response, various researchers have suggested integrating dynamic capabilities framework (DCF) and SHRM (Barreto, 2010; Chadwick & Flinchbaugh, 2021; Colbert, 2004; Khatri, Gupta, & Varma, 2017). Given the critical importance of talented individuals and entrepreneurial managers to DCF, this theory provides a solid framework for integration with SHRM (Teece, 2011) and foundation to analyze the strategic capability processes underlying the HRM system-performance relationship.

### 3. Review of the dynamic capabilities framework

Tracing its roots back to Penrose’s work, the dynamic capabilities framework examines how firms change resources and competencies through dynamic capabilities (Teece, 2011). In our exploration of HRM DC, we adopt the widely used definition of DC, understood as “the firm’s ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments” (Teece et al., 1997, p. 516). In line with this definition, change is implicit to DC, which act upon resources and capabilities. By enhancing the effectiveness of coordination and improvement processes and resource allocation (Wollersheim & Heimeriks, 2016), DC can serve as a source of a competitive advantage, improving resource deployment, fostering learning and mitigating the risk of organizational failure (Teece, 2007).

DC differ from operational capabilities in that operational capabilities ensure survival in stable environments and “allow an organization to make a living in the present, while dynamic capabilities alter the way an organization makes its living (Helfat & Winter, 2011)” (Fainshmidt, Pezeshkan, Lance Frazier, Nair, & Markowski, 2016, p. 1351), thus rendering them strategic (Di Stefano, Peteraf, & Verona, 2014; Peteraf, Di Stefano, & Verona, 2013).

A common criticism of the DCF is the confusion stemming from the numerous definitions of capabilities. Some scholars argue that the field is not yet consolidated and the variation at the theoretical level is reflected in empirical studies (Barreto, 2010; Laaksonen & Peltoniemi, 2018; Peteraf et al., 2013; Schilke et al., 2018; Wilden, Devinney, & Dowling, 2016). These issues of construct definition and measurement require greater conceptual clarity and empirical testing (Di Stefano et al., 2014; Felin, Foss, Heimeriks, & Madsen, 2012; Giudici & Reinmoeller, 2012; Helfat & Martin, 2015; Teece, 2014). While recognizing these deliberations, our research differentiates between operational and dynamic capabilities, and focuses on the latter.

Table 1 summarizes the main aforementioned insights on both SHRM and DCF. By incorporating DC, SHRM is enriched by addressing previous criticisms such as the absence of the managerial role, tautological reasoning, and focus on behavioral mediators. In addition, DC add a longitudinal dimension to SHRM by enabling the modification of the resource base and practices over time impacting organizational outcomes. At times, strategically focused HRM systems increase performance at the expense of employee well-being (Van De Voorde, Pauwe, & Van Veldhoven, 2012). For this reason, we espouse a broader definition of organizational performance, with HRM systems designed to benefit the bottom line, as well as employee welfare (Guest, 2017). In the remaining sections, we examine how the integration of DC and SHRM addresses the aforementioned critiques, while recognizing the importance of applying DC mindfully to consider organizational contextual factors.

### 4. Framework for HRM dynamic capabilities

Building upon the preceding review of SHRM and DCF, we develop a framework to define and explore DC for HRM. Per the existing definitions of capabilities (Schilke et al., 2018), we suggest that HRM DC allow firms to build, integrate and reconfigure existing HR resources and practices. In Fig. 1, we present a model in which HRM resources and practices shape organizations’ HRM DC, thereby contributing to employee well-being, performance and change, the latter defined as modification or transformation by addition, subtraction or development. Well-being refers to employee outcomes beyond job performance, as measured by physical, psychological, happiness and work-related assessments. Firm performance centers on the financial dimension of performance and, for our purposes, includes effectiveness, that is, the successful achievement of desired objectives.

In particular, the causal process chain in this model represents the missing organizational link between DC and the conceptualizations outlined by Schilke et al. (2018) and Verona & Zollo, 2011. In the Schilke et al. study, the authors construct “a comprehensive meta-framework” (p. 422) by incorporating numerous antecedents, mechanisms, moderators, consequences and typologies of DC. In this study, we focus on the mechanisms specific to HRM DC. For their part, Verona & Zollo, 2011 review the micro-foundations of DC

**Table 1**  
Comparison of SHRM and the dynamic capabilities framework.

	SHRM	Dynamic capabilities framework
Construct of interest	HRM systems: “a dynamic bundle of HR practices that is deliberately designed to achieve the organization’s goals” (Jiang et al., 2012 p. 73)	Dynamic capabilities: “the firm’s ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments” (Teece et al., 1997, p. 516)
Outcomes studied	<ul style="list-style-type: none"> <li>• Employee outcomes</li> <li>• Proximal measures of performance</li> <li>• Organizational performance</li> </ul>	<ul style="list-style-type: none"> <li>• Resource and practice change</li> <li>• Organizational performance</li> </ul>
Main theories	Resource-based view Behavioral theory	Dynamic capabilities framework

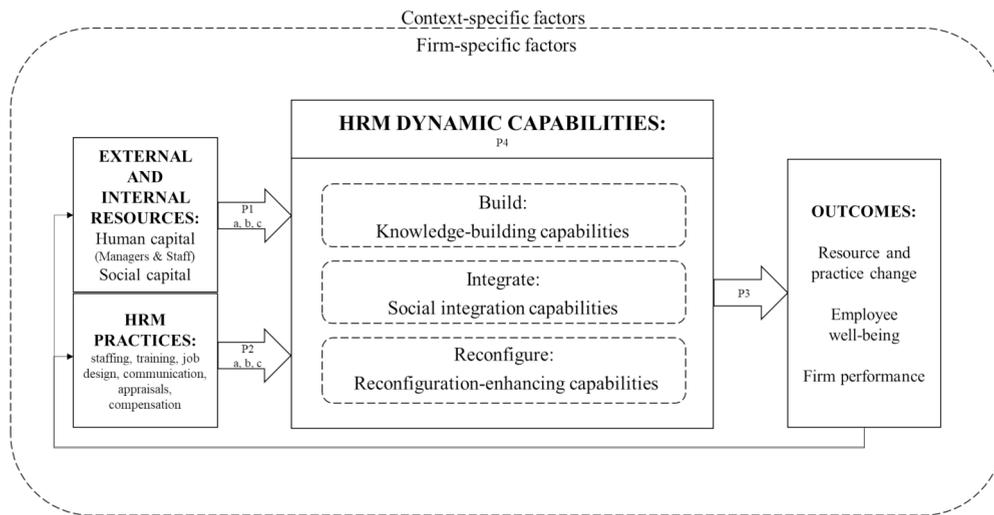


Fig. 1. A process model of HRM dynamic capabilities at the unit level.

by exploring the role of human motivation, behaviors and identity. From these models, we zero in on the organizational level to elucidate the role of HRM systems and resources in the creation of DC and how DC bridge HRM systems and performance. As suggested by Chadwick and Flinchbaugh (2021), HRM DC can potentially explain firm differences in adapting in disruptive environments. In our model, we dive into their suggestion and attempt to spell out how HRM DC mediate the relationship between HRM practices and firm performance by focusing, specifically, on organizational-level processes. In addition, we classify HRM DC based on previous literature and illustrate the mechanisms inside this mediation.

In the model depicted in Fig. 1, we posit that HRM resources and practices determine whether specific HRM DC will emerge in the organization, as in the cases of knowledge management and transfer capabilities (Roberson, Holmes, & Perry, 2017; Welch & Welch, 2018), social integration (Kleinbaum & Stuart, 2014; Schenkel & Teigland, 2017) and reconfiguration capability (Bell, Brown, & Weiss, 2018; Beltrán-Martín, Roca-Puig, Escrig-Tena, & Bou-Llusar, 2008).

In particular, we differentiate among three types of HRM DC according to their role in knowledge building, integration and reconfiguration. First, HRM DC that spark knowledge building include knowledge management and learning capabilities. These DC allow firms to accumulate and store knowledge and apply it as a lever for innovation.

Second, HRM DC for social integration are relational capabilities encompassing both internal and external dimensions. Internally, the capabilities associated with social capital pertain to employee networks among peers and across hierarchical levels and functions. Externally, the social integration capability facilitates the management of inter-organizational knowledge-sharing networks, engagement with target audiences and connections with key institutional labor market agents.

Lastly, reconfiguration-enhancing capabilities involve the ability to redesign assets at the team or unit level. Coordination and deployment of resources, which combined enable the firm to merge and transform its organizational capital, are the core pillars of this capability.

Our study highlights these three dimensions as the underlying building blocks of HRM. As recognized in multiple management theories (Zahra, Neubaum, & Hayton, 2020), knowledge is a vital organizational asset, which, together with skills and abilities, represents a key element of human capital resources (Ployhart & Moliterno, 2011) and the primary motivation behind firms' decision to hire employees. No organization can thrive or survive without knowledge at the individual level. In this regard, HRM DC as a knowledge driver represents a first step in a (chrono)logical development of capabilities.

Another HRM building block is social integration since firms would be incapable of reaching their organizational objectives without employee alignment around a common goal (Lengnick-Hall, Lengnick-Hall, Neely, & Bonner, 2021). Finally, reconfiguration HRM DC allow firms to transform and adapt, offering a platform to renew knowledge-building and social integration DC. The possibility of iteration and of DC modifying organizational resources, practices and capabilities is the defining aspect of the "dynamic" in DC (Chadwick & Flinchbaugh, 2021). Feedback and amplification processes render permeable boundaries among HRM DC, as represented by the dotted boxes in Fig. 1. This permeability also stems from HRM practices' capacity to contribute to the development of multiple capabilities at the same time. Thus, while not exhaustive, this HRM DC typology illustrates the most-researched areas regarding HRM DC. As HRM DC gain traction, new types of HRM DC can emerge and the relations among them can adopt various forms, from additive to multiplicative.

In parallel, environmental, internal and other contextual factors will influence which capabilities are developed, as also shown in Fig. 1. For the sake of parsimony, we advance principles for HRM DC which should hold beyond these idiosyncratic factors and assume our proposed mechanisms to apply ceteris paribus.

## 5. Human and social capital in relation to HRM DC

Resources are considered as antecedents of DC and include organizational attributes and knowledge, as well as physical, human and social capital. They are “*firm-specific assets that are difficult if not impossible to imitate*” (Teece et al., 1997, p. 516). Resources are considered strategic when they are advanced by operational and dynamic capabilities and contribute to creating a competitive advantage.

The potential for value creation is found at the intersection of resources and capabilities (Chadwick, 2017; Chadwick & Dabu, 2009), with human capital and social capital, in particular, serving as the driving forces of multiple capabilities (Hsu & Wang, 2012). These include adaptability (Bell et al., 2018); functional capabilities for marketing, R&D and production (Bendig, Strese, Flatten, da Costa, & Brettel, 2018; Mahoney & Kor, 2015; Roberson et al., 2017; Schenkel & Teigland, 2017); new product development and innovation (Donate, Peña, & Sánchez de Pablo, 2016; Lin & Sanders, 2017; Quintana-García & Benavides-Velasco, 2016; Zhao & Chadwick, 2014); ambidexterity (Fu et al., 2017; Papachroni, Heracleous, & Paroutis, 2016); learning capacity (Welch & Welch, 2018); DC for client interaction (Lin et al., 2016); and sustainability (Strauss, Lepoutre, & Wood, 2017). In the following sections, we outline the mechanisms by which a firm’s human and social resources can contribute to DC formation under *ceteris paribus* conditions, as well as examine circumstances that can hinder their success.

### 5.1. Knowledge-building capabilities

In light of employees’ role as knowledge holders, human capital and knowledge-building capabilities are intrinsically linked. Employees who hold a unique combination of skills, autonomy, work ethics and high standards are especially relevant to DC (Teece, 2011). For organizations, the capacity to attract and retain this brand of employees and facilitate their learning through knowledge- and skill-building can represent a comparative advantage, all else being equal.

Under the umbrella of knowledge-building capabilities, we merge several knowledge-related DC as proposed in the literature. Starting with organizational leadership, previous studies have underlined the essential role of managers in building the firm’s human capital through their actions, policies and procedures (Arthur, Herdman, & Yang, 2016). Based on their managerial dynamic capabilities including their leadership style (Leih & Teece, 2016), core-self evaluations (Bendig et al., 2018), context-specific knowledge and social capital (Kotabe, Jiang, & Murray, 2017), managers often directly build and develop the workforce they manage.

In terms of DC, managers are not relegated to the abstract principal monitoring employees. Rather, Teece (2011) proposes a model of an entrepreneurial manager who takes an active role in the organization and reorganization of company assets, identifies opportunities within and outside the organization, and contributes to shaping the environment. Arthur et al. (2016) find empirical support for their conceptual model of how top management’s beliefs on HR effectiveness positively impact HRM implementation and perception. Indeed, managers and leaders, and their managerial dynamic capabilities are important microfoundations of organizational dynamic capabilities, and play a critical role in the implementation of HRM practices and development of DC (Apascaritei, 2019; Bitencourt, de Oliveira Santini, Ladeira, Santos, & Teixeira, 2020; Felin, Foss, Heimeriks, & Madsen, 2012; Helfat & Martin, 2015; Kor & Mesko, 2013; Nayak, Chia, & Canales, 2020).

According to Teece (2011), leadership is essential for sustaining DC, correcting organizational initiatives that have veered off course, and exploiting synergies between structure and capital. Entrepreneurial managers know that a diverse and motivated workforce can apply accumulated knowledge to advance innovation in the presence of a supporting framework (Donate et al., 2016; Lin & Sanders, 2017). Additional empirical evidence is observed in a sample of Spanish firms, which found targeted and collaborative HRM practices and human and social capital associated with innovation DC (Donate et al., 2016). Similarly, in a sample of Chinese automotive firms, Zhao and Chadwick (2014) found that competence alone is not enough to maximize performance in new product development. Instead, workers need the opportunity and the motivation to acquire the requisite capabilities to achieve optimal outcomes.

It should be noted that managers also have the capacity to undermine capability development. In particular, a leadership style inconsistent with the HRM system can wield a detrimental effect by sending employees incongruent signals (Leroy, Segers, van Dierendonck, & den Hartog, 2018). Unethical or abusive managerial behaviors also harm employees by diminishing trust, eroding social relations, subverting careers and intensifying levels of stress. At the firm level, ill-used managerial agency should increase turnover, diminish firm attractiveness for employees, decrease productivity and negatively impact overall firm performance (Detert, Treviño, Burris, & Andiappan, 2007). Additionally, managers are bounded rationally. Subject to biases, isolation, and imperfect decision making, they could prioritize self-serving motives and political considerations over organizational goals (Teece, 2011).

In addition to top management, knowledge-building capabilities have also been studied within the general workforce. Human capital diversity has been proposed as an antecedent of capabilities unique to the knowledge accrued by diverse employees (Roberson et al., 2017). Diversity enriches firms’ cultural knowledge base and can consequently expand knowledge-building capabilities (Roberson et al., 2017). The cultural diversity of employees often brings a unique blend of languages to the firm, which can be useful in fostering learning and facilitating the transfer of knowledge (Welch & Welch, 2018). Human capital relevant for knowledge-building capabilities also entails employee cognitions and behaviors. In dynamic contexts, employee identification, adaptability and proactivity is key to ensuring DC respond to evolving environmental demands (Strauss et al., 2017).

Since employees seldomly work in complete isolation, social relations also contribute to knowledge-building capabilities. The relational ties that individuals bring to the firm can lead to new avenues for recruitment, knowledge acquisition and potential clients (for a comprehensive review, see Lengnick-Hall, Lengnick-Hall, Neely, & Bonner, 2021). Collectively, emotional and relational processes like collective engagement (Barrick et al., 2015) can encourage attitudes that facilitate learning and knowledge building. In

consequence, human and social capital precede knowledge-building capabilities.

That said, employees may withhold effort or refuse to share knowledge, especially if they see HRM practices as a potential threat to their well-being (Guerci, Hauff, & Gilardi, 2019). Indeed, HRM practices affect diverse physical and emotional dimensions of well-being and frequently involve tradeoffs. Performance-pay and several autonomy-enhancing practices have been found to negatively impact employee health yet increase other psychological or relational dimensions of well-being, as documented by Guerci and colleagues (2019) in a sample of companies in Germany.

Thus, HRM leaders operate in a context of employment relationships where individuals display emotions, free will and behaviors, which are fueled by diverse motivations and interests (Boxall et al., 2019; Coff, 1997; Kaufman, 2020; Wright, 2021). Managers may also be unable to attract the talent required for knowledge-building capabilities due to labor market constraints and challenging economic contexts (Delery & Roumpi, 2017). Similarly, since employees have voice and exit options, the consequences of turnover on performance can be positive or negative depending on the employee's human capital and social ties (Felps et al., 2009). These considerations illustrate the pitfalls of the path to DC development in organizations' quest for a competitive advantage.

Thus far, we have clarified how human capital underpins knowledge-building DC, underscoring the need for employee motivation and opportunity, in addition to skills and abilities, to achieve optimal organizational outcomes (this issue is further developed in Section 6). We have also elaborated on the role of leadership and the potential challenges of human capital being "human" (Boxall et al., 2019; Coff, 1997; Kaufman, 2020; Wright, 2021). After the company consolidates its knowledge base, social integration is the key step to ensuring that employees contribute to organizational objectives.

## 5.2. Social integration capabilities

Employees are embedded in social relationships, which can help or hinder organizational operations (Bendig et al., 2018; Fu et al., 2017; Jiang & Liu, 2015). Through a solid understanding of formal and informal social structures, managers are better able to foresee how change will affect knowledge building and organizational reconfiguration (Kleinbaum & Stuart, 2014; Schenkel & Teigland, 2017).

Previous literature has proposed several links between social integration and DC that are relevant for firm performance. First, the employee's function in a social network impacts the type and level of DC. As an example, Schenkel and Teigland (2017) issue a word of warning regarding laying off employees who are actively involved in the firm's social network during organizational downsizings (as gatekeepers, connectors, brokers or core members), since doing so can potentially debilitate DC and performance. Second, social network characteristics can significantly affect a firm's DC integration and reconfiguration since the relational structures resultant from employee connections and the speed at which they adapt (i.e. "network responsiveness") can determine how fast or slow the workforce responds to shifts in organizational strategy (Kleinbaum & Stuart, 2014). In consequence, a limited understanding of social capital can severely limit DC sustainability.

Third, managers can develop superior organizational capabilities through employees' social capital. In their 2017 study of Irish professional service firms, Fu and colleagues find that HRM systems in place to promote human and social capital positively contribute to the emergence of the DC of ambidexterity and organizational performance. Evidence consistently suggests that intraorganizational social connections allow information to freely flow, enhancing learning, social integration and the creation of a shared identity (Bendig et al., 2018; Jiang & Liu, 2015).

Finally, employees' emotions represent another important element of human and social capital toward developing an organization's social integration capabilities. In their study on emotional regulation in dyads and its effects on firm partnerships, Jarvenpaa and Majchrzak (2016) propose three emotional-regulation DC that enable participants in dyadic knowledge-sharing relations to build, integrate and transform behaviors and relations, as well as protect key interests to avoid under- or over-sharing information. Hence, employee social capital and human capital (emotional, behavioral and cognitive) each contribute to shaping social integration capabilities.

Social integration capabilities are useful for managing external relationships with customers, competitors and institutions. Relations with customers can be enhanced by customer-linking capabilities, "defined as a firm's capability in creating and maintaining close customer relationships" (Lin et al., 2016, p. 22), as well as marketing capabilities that allow firms to foster DC for managing customer relations (Bendig et al., 2018). With regards to competitors, firms can develop alliance and knowledge management capabilities to acquire knowledge from external sources (Roberson et al., 2017). In terms of relations with institutions, political networking capability is the "top managers' ability to network with government officials and legislators to acquire critical external resources, including financial and marketing resources, and social connections with government agencies" (Kotabe et al., 2017, p. 1133) a capability which is key in international business. Similarly, developing relations with unions to benefit both the employees and the HRM professionals might represent another externally-oriented social integration capability (Cook, MacKenzie, & Forde, 2020).

That said, excessive social capital could also sabotage social integration capabilities. Organizations with tighter social connections offer fertile terrain for rapid emotional contagion – particularly dissatisfaction – resulting in contagious turnover and erosion of organizational human and social capital (Felps et al., 2009). Other negative effects include the ossification of relational structures, the division of employees into groups with potentially conflicting and self-serving interests, and the opportunity costs of maintaining relationships (Pillai, Hodgkinson, Kalyanaram, & Nair, 2017). In this regard, social capital fosters social integration capabilities yet most likely entails diminishing marginal returns.

In summary, employees' human and social capital matters for the type of HRM capabilities built. Previous literature has identified structural and relational capabilities as social integration-related DC that impact firm performance. In our study, we suggest that ceteris paribus, network positions, knowledge structures and employee social connections could affect the degree and type of DC

developed.

### 5.3. Reconfiguration-enhancing capabilities

Reconfiguration-enhancing capabilities depend on employee flexibility and HR coordination (Wright & Snell, 1998). The first dimension of employee flexibility refers to the malleability of workers' skills and abilities. The more malleable the human capital is, the greater the firm's functional flexibility since the organization can adapt and deploy the workforce to reflect their evolving needs (Bell et al., 2018; Beltrán-Martín, Roca-Puig, Escrig-Tena, & Bou-Llusar, 2008). The second dimension of HR coordination reflects the degree to which the HRM system can effectively deploy employees with adaptable skills (Way et al., 2015). For instance, HRM practices related to team formation can offer firms flexibility if strategic teams are aligned with organizational goals and configured according to team members' expertise, complementarity and potential for reconfiguration (Bell et al., 2018).

In addition to employee flexibility and HR coordination, the development of reconfiguration-enhancing capabilities also depends on managers' human capital, including their personality traits (Herrmann & Nadkarni, 2014; Nadkarni & Herrmann, 2010). Managers who promote employees' willingness to adapt their behaviors and malleable skills in unforeseen circumstances elevate the firm's ability to withstand strategic change by maximizing the workforce's adaptability through greater functional flexibility and coordination (Beltrán-Martín & Roca-Puig, 2013; Way et al., 2015; Way, Wright, Tracey, & Isnard, 2018).

Flexibility also refers to ambidexterity, defined as the organization's ability to exploit the status quo in tandem with exploring new opportunities (O'Reilly & Tushman, 2013). Papachroni et al.' (2016) case study illustrates how firms manage the tensions of conflict and paradox stemming from the pursuit of ambidexterity, pointing to the significance of employees' perceptions on the usefulness of conflict. Organizational choices on how to effectively address these emerging conflicts are critical. Smith & Lewis (2011) outlined possible several paths, from acceptance or separation of conflicting pursuits to the integration of the paradoxical dimensions. However, the implementation of these alternatives is not straightforward, with challenges amplified in uncertain environmental contexts. Job stress and conflicting demands negatively affect employee well-being and can lead to stress, burnout and other adverse health outcomes (Dahl, 2011; Goh, Pfeffer, & Zenios, 2016; Van De Voorde et al., 2012).

In addition to functional flexibility, reconfiguration often encompasses employee turnover, whether voluntary or involuntary. When turnover is voluntary, firms with reconfiguration capabilities will recover more quickly from the loss of employees, since they can train other workers to assume these tasks and/or boast a sufficiently effective pipeline to recruit and integrate new employees (Holtom & Burch, 2016). Involuntary turnover (downsizing) allows firms to readjust the fit with workforce competencies in the face of organizational change, whether internally or externally driven. When downsizing is perceived as "responsible", the negative repercussions on remaining employees and firm performance are mitigated (Schenkel & Teigland, 2017; Tsai & Yen, 2020). Notwithstanding, involuntary turnover disrupts employee well-being for both leavers and stayers regardless of firm-level outcomes (Harney, Fu, & Freaney, 2018). When turnover forms part of regular managerial practice, it decreases overall employment stability and can severely compromise general well-being at the societal level (Bonet, Elvira, & Visintin, 2021).

In summary, managerial and employee behavioral flexibility and the ability to balance conflict and paradox are the keystones of reconfiguration-enhancing capabilities. Reconfiguration-enhancing DC appear relevant for firm performance and stem from human and social capital. While this type of "resource fluidity" is important for firm agility (Doz, 2020), we advise firms to consider the larger social implications of reconfiguration capabilities, especially in the case of downsizing.

To conclude, we argue that resources are the antecedents of DC, with human and social capital resources underpinning knowledge-building, social integration and reconfiguration-enhancing capabilities. Through DC, human and social capital allow firms to endure and adapt to uncertain, complex and volatile environments (Way et al., 2018). By the same token, human and social capital also lead to the development of capabilities that positively affect firm performance (Fu et al., 2017), facilitate knowledge exploitation (Strauss et al., 2017) and increase flexibility (Way et al., 2015). Tensions naturally arise in managing HRM systems, with employees resisting and/or opposing changes. Nevertheless, *ceteris paribus*, we propose that the presence of these resources should facilitate DC development. Our first proposition is as follows:

**Proposition 1.** Human and social capital resources enhance the development of firms' HRM (a) knowledge-building, (b) social integration and (c) reconfiguration-enhancing DC.

## 6. HRM practices and HRM dynamic capabilities

A central proposition in the SHRM literature is that HRM systems shape firms' human capital resources, including the knowledge, skills and abilities of their employees (Collins & Smith, 2006; Fu et al., 2017; Jiang, Lepak, Hu, & Baer, 2012; Zhao & Chadwick, 2014). We extend this argument by proposing that certain HRM practices should also magnify firms' abilities to develop HRM DC.

In particular, selective staffing, targeted retention, extensive training and development practices influence acquired organizational knowledge through hiring (Chatterji & Patro, 2014) and the knowledge developed within units (Mahoney & Kor, 2015). By hiring high-skill employees, companies can extend organizational knowledge. The technology sector exemplifies this practice by acquiring small firms to integrate groups of professionals as opposed to individual workers, thus ensuring the transfer of explicit and tacit knowledge (Chatterji & Patro, 2014).

Moreover, development and training practices expand the "experiential knowledge" of processes, transmitted by performing daily activities and tasks (Mahoney & Kor, 2015). Both acquired and internally developed knowledge helps firms amplify their learning and knowledge management capabilities. However, knowledge building requires an effective system to foster employees' socio-cognitive

integration. HRM practices for capability development need to be carefully designed to avoid overwhelming employees and/or diminishing employee well-being or positive outcomes (Preenen, Dorenbosch, Plantinga, & Dhondt, 2019). Firms should recognize that simply adding new or fashionable work design practices, will not automatically result in capability development (De Spiegelaere, Van Gyes, & Van Hootegem, 2012).

In firms with global operations, HRM practices should consider selecting and training individuals for multicultural contexts and cultivate HRM capabilities relevant for international business scenarios. For example, HRM practices aimed at increasing the languages spoken within the firm can foster the development of a linguistic HRM capability (Welch & Welch, 2018). Practices aimed at facilitating the use and coordination of these linguistic resources and individuals' cultural knowledge of context-appropriate behaviors allow multinational organizations to adapt and gain legitimacy in the host country (Elg, Ghauri, Child, & Collinson, 2017). While some firms have proven themselves highly adept at managing global business operations, capabilities for international business are notoriously difficult to develop (Reiche, Lee, & Allen, 2019). In consequence, HRM practices that reflect the firm's unique context can promote relevant firm-specific HRM DC, although few companies succeed at this endeavor.

HRM practices can also influence the social integration DC of firms through the relationships they foster. When HRM practices offer workers a certain degree of autonomy to organize their time to cultivate formal and informal employee encounters, they can contribute to strengthening the organization's social fabric and ability to develop social integration. For example, HRM practices promoting informal cooperation and knowledge sharing help increase collaboration at the unit level (Fu et al., 2017). This process of social consolidation is both dynamic and iterative as social relationships develop over time (Schenkel & Teigland, 2017). Thus, work design HRM practices are most likely to produce social integration capabilities as the social capital of the organization is built and relationships deepen. It is important to note that, despite its potential benefits, autonomy can also exert a detrimental effect on employees' behaviors by overtaxing them and increasing insecurity (De Spiegelaere et al., 2012). Autonomy in team configurations is mainly helpful in initiatives that entail a certain degree of complexity and hence demand freedom of action and responsiveness to unpredictable demands (Cordery, Morrison, Wright, & Wall, 2010). In short, in order for autonomy to benefit HRM DC, further study of the context-specific factors that can impact this HRM practice is required.

Reconfiguration-enhancing DC are built through HRM motivation and coordination practices. In terms of HRM practices, like pay for performance, i.e. the way the incentive and benefits system is designed, influence individual and collective motivation (Foss & Lindenberg, 2013; Gerhart & Fang, 2014; Zhao & Chadwick, 2014). Motivated employees are more likely to pursue organizational goals (Gottschalg & Zollo, 2007) through innovation and proactive behaviors, thus increasing the firm's reconfiguration capability (Strauss et al., 2017). Nonetheless, designing effective pay-for-performance policies is challenging given their potential for misapplication and their negative effects on employee mental health (Dahl & Pierce, 2020).

Next, the HR function and operational capabilities of HRM departments enable the daily management and coordination of workers (Bondarouk & Ruël, 2012; Minbaeva, 2018). Regarding the HR function, digitalization can expand HR's strategic component by improving coordination capabilities (Bondarouk & Ruël, 2012). In a study of an organization in Belgium, the HR function improved its perception among employees introducing and successfully implementing HRM software (Bondarouk & Ruël, 2012). This effect was not strong and was contingent on employee acceptance, again indicating the influence of agency on HRM practices outcomes. With regard to HRM operational capabilities, human capital analytics is a promising capability to help HR staff make informed and timely decisions on employee deployment and configuration (Minbaeva, 2018). That said, its long-term impact on the HRM capabilities landscape is still unknown.

In addition to HRM systems' technological and structural dimensions, a supportive HRM system potentially improves adaptability by increasing employee flexibility and client-facing abilities (Beltrán-Martín & Roca-Puig, 2013; Lin et al., 2016). These systems include the use of adequate motivational tools and platforms to facilitate communication between management and employees (Beltrán-Martín & Roca-Puig, 2013; Lin et al., 2016). In two separate studies (2016), Lin et al. show that the fit between supportive HRM systems that value employees' well-being and work experience and integrate customer-oriented strategies improve firm performance by fostering the development of "customer-linking capabilities." Beltrán-Martín and Roca-Puig (2013) found that job enrichment and supportive HR are positively associated with employee skill flexibility, which, in turn, is associated with behavior flexibility. As a result, these HRM practices can boost reconfiguration capabilities by increasing employees' willingness and motivation to adjust to organizational needs.

Despite their benefits, frictions can emerge when introducing HRM practices. Based on the SHRM process model presented by Wright & Nishii, 2013, these frictions occur at three seminal points in time: intention, implementation and interpretation (perception) of HRM systems. For firms, the challenge resides in designing and applying HRM practices that avoid negative employee perceptions. When HRM practices involve differential treatment based on position or talent, for instance, workers may deem them unfair, viewing them as an unequal allocation of resources across the workforce (Marescaux, De Winne, & Brebels, 2021; Rofcanin et al., 2019).

Even general HRM systems that don't specifically target high-potential employees have uncertain outcomes when it comes to their interpretation and acceptance by staff. As an example, the decision to combine temporary and permanent staff negatively affects employee behavior if perceived as a sign of the firm's shift toward a cost-reduction strategy (Way, Lepak, Fay, & Thacker, 2010). As noted by Boxall and colleagues (Boxall et al., 2019), high-involvement HRM systems do not always improve employee or organizational outcomes, especially when even well-intended HRM practices add to the workload and physical and psychological stress. In short, while there is reason to believe that HRM practices promote capability development, a number of internal factors may impede this mechanism.

External factors, such as union intervention, could also limit the implementation of HRM systems. Indeed, the hypothesis that certain HRM systems lead to work intensification and hence to an increase in worker strikes does not seem far-fetched (Kaufman, 2020). Yet recent work proposes that HRM should partner with unions, which can act as efficient communicators of workforce policy

changes, and guardians of the implementation of HRM practices (Cook, MacKenzie, & Forde, 2020). Based on HRM DC, firms could better evaluate their relations with unions and worker's associations to ensure collaboration and mutual benefits (De Prins, 2021), and develop specific HRM DC for this purpose.

In addition, HRM systems need to be coherently designed and implemented. The clearer and more transparent the intended HRM outcomes, the better able employees are to incorporate the policies into their work and act according to the boundaries set by the organization (Ostroff & Bowen, 2016). HRM practices are rarely implemented in isolation but rather take the form of HRM systems or bundles of practices (Jiang, Lepak, Han, et al., 2012). Thus, the effects of such practices can be additive, synergistic, or subtractive if they are intended to elicit opposing behaviors (Jiang, Lepak, Han, et al., 2012). Therefore, HRM practices related to knowledge building, social integration and reconfiguration should be implemented while considering other existing practices, their effects and the overall alignment of the HRM system.

Cost is another aspect of HRM practices. Selective staffing procedures, extensive training and competitive compensation denote significant expenditures and diverse levels of cost-effectiveness. For this reason, the cost of HRM practices needs to be sufficiently compensated by the resulting capability development and other benefits to ensure the investment is worthwhile (Boxall, 2013). HRM practices can also result in indirect costs at individual and societal levels by diminishing employee morale and destabilizing the relationship between organizational and employee benefits (Bonet, Elvira, & Visintin, 2021; Guest, 2017).

Regarding these concerns, a review of existing research suggests that employees and employers both benefit when organizations leverage strategically focused HRM systems (Peccei & Van De Voorde, 2019; Van De Voorde et al., 2012). While mutual gains exist, HRM systems also negatively impact employee health (Van De Voorde et al., 2012).

Based on the existing evidence, HRM practices are conceptually and empirically relevant to building firms' HRM DC. Different HRM practices will help develop concrete aspects of the workforce, such as performance, quality of service, innovation and flexibility. HRM system design needs to consider the potential roadblocks it might face, among them, possible misinterpretation by employees or lack of coherence and focus. For this reason, when they incorporate employee well-being concerns, HRM practices and capabilities are strategically focused on achieving organizational goals. In our study, we define strategically focused HRM systems as those that are coherently designed and implemented while considering contextual factors. The result is a strong HRM system (Ostroff & Bowen, 2016) that aligns with strategic and organizational objectives (Buller & McEvoy, 2012). Thus, we submit that keeping other variables constant, firms with strategically focused HRM practices will be better equipped to develop HRM capabilities.

**Proposition 2.** Strategically focused HRM practices enhance the development of firms' HRM (a) knowledge-building, (b) social integration and (c) reconfiguration-enhancing DC.

## 7. Integration: How dynamic capabilities enhance the understanding of the HRM-performance relationship

### 7.1. HRM dynamic capabilities and organizational outcomes

According to Teece et al. (1997), DC act on "internal and external competences" yet most studies focus on the impact of DC on performance. While resources are the antecedents of DC, DC also aim to change resources (Wright et al., 2001), a relationship that necessitates further investigation (Schilke et al., 2018). In order to better understand the outcome of HRM DC, our conceptual model contemplates both interpretations, assuming that capabilities affect resources as well as employee well-being and performance. Given the function of DC to build, integrate and reconfigure assets, their effect will directly impact resources, practices and employees, which, in turn, impact performance (Fu et al., 2017; Jiang, Lepak, Hu, & Baer, 2012). The following sections elaborate on each of these three DC outcomes in turn.

First, HRM DC can generate change by enhancing HRM system and human and social capital. In Fig. 1, we illustrate this process via a feedback loop from resource change to external and internal resources. For example, when traditional recruitment pipelines are disrupted, knowledge-building HRM capabilities could lead to the development of new HRM practices that reinforce firm attractiveness in the eyes of job applicants. Increased job attractiveness changes the firm's access to external, and eventually internal, resources. Thus, HRM DCs could enable firms to rapidly adjust practices to adapt to new environmental conditions. We posit that different types of HRM DC coexist in the firm and could be continually employed in response to disruptions, thus producing change in an iterative and developmental process. In addition, coexisting capabilities will affect each other: for instance, as social integration DC act within the firm, the knowledge-building DC will also develop and change in consonance with DC lifecycle stages (Helfat & Peteraf, 2003).

Second, a well-designed HRM system can bolster employee well-being, encourage the adoption and legitimacy of work-life-balance practices, and promote positive employment relations by cultivating fairness, trust and employee voice (Guest, 2017). For example, welfare-enhancing HRM policies can be an outcome of organizational learning and knowledge-building HRM DC: as the HRM department learns about the needs of its workforce through formal or informal channels, it should elaborate more targeted and effective practices. Social integration HRM DC can contribute to an organizational culture promoting collaboration, mental health and social fabric that supports employees while navigating the challenges of organizational change. Reconfiguration-enhancing capabilities should offer channels for organizational flexibility that do not segregate the workforce. Through HRM technology, firms with HRM DC could develop enhanced capability for workforce adaptation and offer employment stability superior to levels found in firms without HRM DC. Additionally, the surplus value created via HRM DC could free up resources for welfare-enhancing purposes. Thus, the HRM DC developed through HRM systems should facilitate the deployment of new practices and quick adaptation of existing ones to help meet employees' evolving personal and professional needs in the face of disruptive internal and external circumstances.

On the downside, excessive organizational change may overwhelm employees cognitively and emotionally as they try to adopt and adapt to new processes and practices (Liu & Perrewé, 2005). In addition, HRM DC centered on a short-term human capital strategy – for instance, those whose capabilities include job standardization and cost control mechanisms – also run the risk of undercutting employee well-being (Chadwick & Flinchbaugh, 2021). As Verona & Zollo (2011, p. 537) caution, adaptation via DC “does not necessarily generate better fit with a rapidly changing environment, since the direction of change requirements might be wrongly perceived.”

Third, firm performance is the distal outcome of HRM DC. Both knowledge-building and social integration HRM capabilities are needed to generate knowledge flows that promote innovation and increased financial performance, as measured by initial public offering benchmarks (Quintana-García & Benavides-Velasco, 2016). Knowledge-building and integration HRM capabilities can contribute to superior firm growth (Fu et al., 2017), while reconfiguration capabilities are needed to attain financial performance in uncertain environments (Way et al., 2018). For its part, a more diverse and integrated workforce is increasingly essential to strengthen market access, stakeholder engagement and operational performance (Roberson et al., 2017; Welch & Welch, 2018). As an example, in a study on the HRM DC in the healthcare sector, senior managers influence client-oriented performance measured by the quality of organizational services, by encouraging proactive behaviors among employees (Khatri, Gupta, & Varma, 2017). Consequently, it can be said that HRM DC can affect firm performance as measured by financial, market and quality indicators.

Naturally, these positive effects are not a given. Although the possibility of failure has been underexplored in DC literature, the lack of attention to contextual variables (Farndale & Paauwe, 2018) and multiple stakeholder perspectives (Beer et al., 2015) can moderate firm performance. At the same time, the failure to consider the role of human will and agency (Coff, 1997; Kurtmollaiev, 2020; Wright, 2021) and their broader effects on society and employee well-being (Peccei & Van De Voorde, 2019; Van De Voorde et al., 2012) could undercut organizational reputation.

In consequence, firms would be wise to contemplate both the “added value” perspective and broader “moral value” view of business (Farndale & Paauwe, 2018; Paauwe & Farndale, 2017), which encompasses the impact of business practices on employees, the local community and other stakeholders. In this regard, firms should adopt a humanistic approach in order to gain a deeper understanding of interplay between HRM practices and HRM DC and their contribution to employee well-being. As depicted in the HRM model posited by Beer et al. (2015), performance can also extend to evaluating its effects on the local community and society as a whole, in light of HRM DC’s capacity to increase environmental protection by encouraging sustainable business practices or its contributions to social responsibility initiatives aligned with the firm’s CSR objectives.

In conclusion, HRM DC affect organizational resources, competencies, and financial and market results through different mechanisms, and disregarding their “duty of care” would be an oversight (De Cieri & Lazarova, 2021). HRM DC can help build a more sustainable, responsible firm in benefit of multiple stakeholders, as summarized in the following proposition:

**Proposition 3.** HRM DC (knowledge-building, social integration, and reconfiguration-enhancing capabilities) enhance organizational outcomes (resource and practice change, employee well-being, and performance).

## 7.2. The mediating role of HRM dynamic capabilities

The preceding propositions examine how human and social capital resources and HRM practices affect HRM DC. Next, we explain how HRM DC impact performance by homing in on the intervening effects of HRM DC in the HRM-performance link. Conceptually, HRM DC mediate the effect of the diversity of human capital on performance and stakeholder relationships through “group functioning” by facilitating market access, knowledge management and strategic flexibility, to mention only a few mechanisms (Roberson et al., 2017). Empirically, dynamic capabilities mediate the effect between intellectual capital and firm performance: organizations with intellectual capital have access to varied and unique resources that can be transformed into output by competent employees through knowledge-building and reconfiguration DC (Hsu & Wang, 2012).

For the development of HRM DC, knowledge and skills are essential but must be combined with human will, behavior and opportunity in order to trigger organizational change (Kurtmollaiev, 2020). Furthermore, human action is enabled by empowering employees to build capabilities through formal and informal means (Wohlgemuth, Wenzel, Berger, & Eisend, 2019). At the same time, engaged employees are more likely to trust their employers and in turn promote social integration and positive employment relations that increase organizational effectiveness (Guest, 2017). For this reason, human capital, human action, social capital and their interactions can contribute to knowledge-building, social integration and reconfiguration DC, with consequences on employee and organizational outcomes.

Human and social capital resources have the strongest effect on performance when effectively supplemented by organizational practices since the potential of DC lies in orchestration and complementarity (Sirmon, Hitt, & Ireland, 2007; Sirmon, Hitt, Ireland, & Gilbert, 2011; Teece, 2011). Yet HRM practices do not automatically result in performance. Rather, they foster knowledge building and transfer, innovation, and adaptability, which should ultimately influence resource change, employee well-being, innovation, market access and effectiveness. Employees hired using selective staffing practices aimed at ensuring complementarities with other employees and resources should more easily socially integrate in their teams and form positive social relations, consequently enhancing well-being (Jiang & Liu, 2015). Similarly, a workforce that benefits from formalized training practices can develop its human capital resources and improve HR flexibility (Beltrán-Martín & Roca-Puig, 2013). Extensive training can also lead to the emergence of social networks and a shared language for knowledge transfer, fostering the learning capacity necessary to drive innovation and market responsiveness (Chang, Gong, Way, & Jia, 2013). As mentioned in the previous section, it is important to note that these processes and the mediation mechanism are implicitly subject to the same limitations of human agency, implementation and employee perception.

When compensation practices are perceived as fair, they increase employee motivation and behavioral flexibility, which in turn

increases customer service effectiveness (Beltrán-Martín, Roca-Puig, Escrig-Tena, & Bou-Llusar, 2008). In addition, this perception of fairness also promotes greater levels of trust and social cooperation among employees, easing tensions in ambidexterity and positively affecting growth and relative firm performance (Fu et al., 2017). These underlying mechanisms highlight how HRM contributes to HRM DC.

Another way in which DC affect change and performance is through the labor market since firms can use HRM practices to exploit market failures and influence mobility constraints (Campbell, Coff, & Kryscynski, 2012; Delery & Roumpi, 2017). In their 2017 study, Delery and Roumpi propose that HRM practices influence job mobility, helping firms retain valuable employees through a more positive perception of their position's desirability and diminished view of external options. Since job embeddedness and the acquisition of firm-specific knowledge grow over time, we suggest that the formation of mobility constraints emerge in parallel to the development of HRM DC. That is, when new employees join the firm, the existing HRM DC facilitate the building and integration of their knowledge via socialization, team integration, training initiatives, etc. *Ceteris paribus*, once these employees are integrated, they will actively engage in HRM DC formation and hence participate in the reconfiguration of DC. It is worth noting that our proposed mechanisms represent a best-case scenario. While previous empirical research has found support for the projected relations, significant boundary conditions apply to each individual study. As outlined in previous sections, human agency and contextual factors can undermine these mechanisms.

In sum, we expect HRM DC to mediate the relationships among human and social capital resources, HRM practices and organizational outcomes. The main mechanisms offered include leveraging and complementarity by building and integrating knowledge, transforming resources for organizational purposes, and adapting in the face of change.

**Proposition 4.** HRM DC (knowledge building, social integration, and reconfiguration-enhancing capabilities) mediate the effect of HRM practices and resources on organizational outcomes (resource and practice change, employee well-being and performance).

## 8. Discussion

Based on a review and synthesis of the relevant literature concerning SHRM and DC, this study offers an original joint framework that strives to extend the HRM-performance connection beyond its proverbial "black box" and provide insight into its organizational impact. In this pursuit, we centered on the following three core objectives: developing an HRM DC model, integrating an agentic perspective into the SHRM-DCF framework, and understanding better the effects of HRM DC on corporate resources and practices, employee well-being and performance. To this end, we also address calls for research on the potential of HRM DC to uncover an important component that bolsters firms' ability to excel in uncertain environments (Chadwick & Flinchbaugh, 2021).

Regarding the first aim, we provide extensive evidence to suggest that HRM practices and resources play a role in generating DC. We identified relevant work on HRM DC and developed an integrative process model of HRM and DC. To better elucidate the focus of this model, we offer concrete types of HRM DC derived from HRM practices and resources, i.e., knowledge-building, social integration and reconfiguration-enhancing capabilities, that firms can leverage to optimize their resources and ability to adapt in uncertain contexts. Following this logic, we developed propositions concerning the causal links between HRM practices and resources, DC and their consequences by building upon existing theoretical and empirical work (Schilke et al., 2018; Verona & Zollo, 2011).

Regarding the second aim, we discuss the role of managers and employees in shaping HRM DC, arguing that organizations led by entrepreneurial managers are adaptable and sustainable and better equipped to build economic wealth (Teece, 2011). Similarly, employees contribute to the development of HRM DC through their human capital. More importantly, we highlight the tensions inherent in designing HRM systems that elicit DC development: high-involvement systems may be detrimental to well-being if they aggravate stress and increase workload. HRM systems can backfire if they are not implemented and perceived as intended, or if they foster a sense of unfairness and discrimination. Such challenges are intrinsic in managerial and employee agency.

Concerning the third aim, we suggest that HRM DC influence the following three types of outcomes: resource and practice change, employee well-being, and performance. The proximal outcome of HRM DC are resources and practices; for example, if a firm can build knowledge, this creative process should expand its knowledge capital. Furthermore, HRM DC can augment employee well-being by promoting positive employment relations, e.g., social integration will make leaders better attuned to employee needs. Finally, notwithstanding caveats stemming from organizational tensions, firms with robust HRM DC are more likely to achieve a sustainable competitive advantage, thrive and contribute to economic growth.

Grounded in the DCF, we propose that HRM DC are most efficient in dynamic, uncertain and high-risk contexts, an assumption with theoretical and empirical support (Schilke, 2014; Way et al., 2018). In these environments, firms can benefit from HRM DC to rapidly build, integrate and reconfigure their workforce and HRM practices. This process is iterative and developmental, as resources, practices and capabilities are adjusted as the environment changes.

Future research could analyze the boundary condition represented by other organizational characteristics not addressed herein, namely, their influence on the level of optimal investment in HRM and, consequently, HRM DC. Size, the internal and external configuration, and the importance of HRM are only some factors that intervene in determining the optimal level of HR investment (Farndale & Paauwe, 2018; Kaufman & Miller, 2011). Firms that rely on control-based HRM systems, for instance, may have reduced need for social integration capabilities. It is also plausible that smaller firms, which benefit less from high-investment HR systems, will also reap fewer benefits from developing certain HRM DC (Chadwick, Way, Kerr, & Thacker, 2013; Helfat & Winter, 2011); for example, the advantages of knowledge-building and reconfiguration-enhancing capabilities could outweigh social integration capabilities. There are other important questions to address: When is the best stage in the life of a firm to build HRM DC? Is there a sufficient scope for developing social integration capabilities? What level of HRM DC is sufficient to improve a firm's competitive position? What

business contexts require increased reconfiguration capabilities? In short, DC cannot be considered a universal best practice. Rather, their application and development should reflect each firm's unique organizational characteristics and context (Farndale & Paauwe, 2018).

Regarding the outcomes of HRM DC, we have focused on two understudied key outcomes such as resource and practice change and employee well-being, both of which are directly relevant to HRM research. Nevertheless, these two outcomes in turn affect firm performance (Fu et al., 2017; Jiang, Lepak, Hu, & Baer, 2012), which is the firm-level outcome more often studied in the DC framework. Future research can explore whether the model entails serial mediation, as also suggested by previous research (Fu et al., 2017; Guest, 2017; Jiang et al., 2013; Van De Voorde et al., 2012), to illustrate the strategic consequences of HRM DC. Research questions related to this point concern, for example, which dimensions of employee well-being are critical for performance, or which HRM practices and resources have a significant impact.

Empirically, we offer several propositions to be tested via mixed methods, a research methodology that remains scarce in the DC domain (Pezeshkan, Fainshmidt, Nair, Lance Frazier, & Markowski, 2016; Schilke et al., 2018). By enriching quantitative evidence with qualitative insight into the daily underpinning of processes, this approach could offer a deeper, more nuanced understanding of how HRM DC are built and integrated and how they foster organizational adaptability. Similarly, multilevel and longitudinal research could reveal the mechanisms of this process model while respecting its inherent "dynamic" capabilities. Using these methods also addresses more concrete questions: Are the antecedents of DC additive or multiplicative? Does capability building at one level compensate for a lack thereof at others? Do capability spillovers occur? Can social integration DC help overcome work stress triggered by organizational change? At which level do reconfiguration capabilities have the greatest impact on performance? These questions merit detailed exploration.

By integrating SHRM and DC, we make essential conceptual and practical contributions. First, we extend the literature concerning SHRM by proposing a single research direction that overcomes the frequently-criticized circular logic of the field (Kaufman, 2015b; Khatri, Gupta, & Varma, 2017) with the consideration of asset complementarity and introduction of HRM DC. We counter the failure of this circular logic in defining "valuable resources" by illustrating how human capital resources and HRM can directly affect resource and practice change and competitive advantage through their cospecialization and the development of HRM DC, as in the case of development capabilities (Garavan, Shanahan, Carbery, & Watson, 2016).

We contribute to the SHRM and the DC literature by offering a new category of capabilities, namely, HRM DC. While previous studies addressed other types of functional capabilities useful in specific contexts, i.e., alliance formation, new product development, marketing, technology and R&D, HRM capabilities to date have been understudied (Schilke et al., 2018). We subsequently propose three types of capabilities to develop and transform human capital sources: capabilities for knowledge building, social integration, and reconfiguration. Integrating the logic of DC with HRM provides a dynamic view of workforce development.

At the same time, we also address the call to broaden the view of DC by considering human agency: we illustrate the role of leadership, and explore some of the challenges in the path to DC development (Kurtmollaiev, 2020). In addition to the role of managers and employees, we expand DC in the relational domain (Schilke et al., 2018). As a result, network positions and characteristics are integrated and linked to resource and practice change and adaptation. By addressing the social integration capability, the relational aspects of HRM systems become interwoven in a firm's capabilities.

As a final contribution, we explore the role of HRM DC in shaping employee outcomes. HRM systems and DC are better designed by considering the potential adverse effects on employees (Guest, 2017). At the societal level, HRM DC should encourage perceptions of the fairness, decency and legitimacy of human work and employment conditions (Beer, Boselie, & Brewster, 2015; Boxall & Purcell, 2011).

Global managers can leverage this framework to gain a stronger grasp of the impact of organizational resources and practices amid an uncertain, highly competitive and increasingly digitalized landscape. By understanding how their workforce helps develop HRM DC, managers can discover new ways to simultaneously promote employee well-being and the realization of organizational objectives. DC can also promote environmental sustainability if broader knowledge-building capabilities reinforce firms' innovation in this pursuit. The social integration of employees within the firm and the local community implies shared interests, which can increase organizational sensitivity to stakeholders. Leaders who form part of the social network should have a greater awareness of governance issues and ability to adopt preemptive measures to avoid unnecessary risks. An adaptable organization that reflects digitalization speed avoids employees' skill atrophy and larger-scale adverse effects on society like unemployment. HRM DC improve a firm's position to acquire and effectively share knowledge, to integrate employees, and implement resource and practice change grounded on new information, core competencies relevant for companies worldwide.

## 9. Conclusion

In this article, we propose the integration of SHRM and DCF to extend the understanding of the HRM-performance relationship and inspire further research concerning its underlying mechanisms. Through a three-pronged HRM DC approach, i.e., knowledge-building, social integration, and reconfiguration-enhancing capabilities, organizations operating in fast-paced, dynamic environments can harness the synergies between HRM resources and capabilities, ultimately reinforcing their strategic agility in an era of unparalleled change and disruption characterized by exponential technological advances, environmental sustainability imperatives, and social and political unrest.

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## References

- Apascaritei, Paula (2019). *Three essays on strategic human capital*. University of Navarra: Doctoral dissertation.
- Arthur, J. B. (1994). Effects of human resource systems on manufacturing performance and turnover. *Academy of Management Journal*, 37(3), 670–687.
- Arthur, J. B., Herdman, A. O., & Yang, J. (2016). How top management HR beliefs and values affect high-performance work system adoption and implementation effectiveness. *Human Resource Management*, 55(3), 413–435. <https://doi.org/10.1002/hrm.21672>
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Barreto, I. (2010). Dynamic capabilities: A review of past research and an agenda for the future. *Journal of Management*, 36(1), 256–280. <https://doi.org/10.1177/0149206309350776>
- Barrick, M. R., Thurgood, G. R., Smith, T. A., & Courtright, S. H. (2015). Collective organizational engagement: Linking motivational antecedents, strategic implementation, and firm performance. *Academy of Management Journal*, 58(1), 111–135. <https://doi.org/10.5465/amj.2013.0227>
- Batt, R. (2002). Managing customer services: Human resource practices, quit rates, and sales growth. *Academy of Management Journal*, 45(3), 587–597.
- Becker, B. E., & Gerhart, B. (1996). The impact of human resource management on organizational performance: Progress and prospects. *Academy of Management Journal*, 39(4), 779–801.
- Beer, M., Boselie, P., & Brewster, C. (2015). Back to the future: Implications for the field of HRM of the multistakeholder perspective proposed 30 years ago. *Human Resource Management*, 54(3), 427–438. <https://doi.org/10.1002/hrm.21726>
- Bell, S. T., Brown, S. G., & Weiss, J. A. (2018). A conceptual framework for leveraging team composition decisions to build human capital. *Human Resource Management Review*, 28(4), 450–463. <https://doi.org/10.1016/j.hrmr.2017.06.003>
- Beltrán-Martín, I., & Roca-Puig, V. (2013). Promoting employee flexibility through HR practices. *Human Resource Management*, 52(5), 645–674. <https://doi.org/10.1002/hrm.21556>
- Beltrán-Martín, I., Roca-Puig, V., Escrig-Tena, A., & Bou-Llusar, J. C. (2008). Human resource flexibility as a mediating variable between high performance work systems and performance. *Journal of Management*, 34(5), 1009–1044. <https://doi.org/10.1177/0149206308318616>
- Bendig, D., Strese, S., Flatten, T. C., da Costa, M. E. S., & Brettel, M. (2018). On micro-foundations of dynamic capabilities: A multi-level perspective based on CEO personality and knowledge-based capital. *Long Range Planning*, 51(6), 797–814. <https://doi.org/10.1016/j.lrp.2017.08.002>
- Bitencourt, C. C., de Oliveira Santini, F., Ladeira, W. J., Santos, A. C., & Teixeira, E. K. (2020). The extended dynamic capabilities model: A meta-analysis. *European Management Journal*, 38(1), 108–120. <https://doi.org/10.1016/j.emj.2019.04.007>
- Bondarouk, T., & Rüel, H. (2012). The strategic value of e-HRM: Results from an exploratory study in a governmental organization. *The International Journal of Human Resource Management*, 24(2), 391–414. <https://doi.org/10.1080/09585192.2012.675142>
- Bonet, R., Elvira, M. M., & Visintin, S. (2021). Voluntary turnover in the Spanish cultural and institutional context. In D. G. Allen, & J. M. Vardaman (Eds.), *Global talent retention: Understanding employee turnover around the world (Talent management)* (pp. 149–166). Bingley: Emerald Publishing Limited.
- Boxall, P. (2013). Mutuality in the management of human resources: Assessing the quality of alignment in employment relationships. *Human Resource Management Journal*, 23(1), 3–17. <https://doi.org/10.1111/1748-8583.12015>
- Boxall, P., Huo, M. L., Macky, K., & Winterton, J. (2019). High-involvement work processes and systems: A review of theory, distribution, outcomes, and tensions. *Research in Personnel and Human Resources Management*, 37, 1–52. <https://doi.org/10.1108/S0742-730120190000037002>
- Boxall, P., & Purcell, J. (2011). *Strategy and Human Resource Management* (3rd). Basingstoke, UK: Palgrave Macmillan.
- Buller, P. F., & McEvoy, G. M. (2012). Strategy, human resource management and performance: Sharpening line of sight. *Human Resource Management Review*, 22(1), 43–56. <https://doi.org/10.1016/j.hrmr.2011.11.002>
- Campbell, B. A., Coff, R. W., & Kryscynski, D. (2012). Rethinking sustained competitive advantage from human capital. *Academy of Management Review*, 37(3), 376–395. <https://doi.org/10.5465/amr.2010.0276>
- Chadwick, C. (2017). Towards a more comprehensive model of Firms' human capital rents. *Academy of Management Review*, 42(3), 499–519. <https://doi.org/10.5465/amr.2013.0385>
- Chadwick, C., & Dabu, A. (2009). Human resources, human resource management, and the competitive advantage of firms: Toward a more comprehensive model of causal linkages. *Organization Science*, 20(1), 253–272. <https://doi.org/10.1287/orsc.1080.0375>
- Chadwick, C., & Flinchbaugh, C. (2021). Searching for competitive advantage in the HRM-firm performance relationship. *Academy of Management Perspectives*, 35(2), 181–207. <https://doi.org/10.5465/amp.2018.0065>
- Chadwick, C., Way, S. A., Kerr, G., & Thacker, J. W. (2013). Boundary conditions of the high-investment human resource systems-small-firm labor productivity relationship. *Personnel Psychology*, 66, 311–343. <https://doi.org/10.1111/peps.12015>
- Chang, S., Gong, Y., Way, S. A., & Jia, L. (2013). Flexibility-oriented HRM systems, absorptive capacity, and market responsiveness and firm innovativeness. *Journal of Management*, 39(7), 1924–1951. <https://doi.org/10.1177/0149206312466145>
- Chatterji, A., & Patro, A. (2014). Dynamic capabilities and managing human capital. *Academy of Management Perspectives*, 28(4), 395–408. <https://doi.org/10.5465/amp.2013.0111>
- Coff, R. W. (1997). Human assets and management dilemmas: Coping with hazards on the road to resource-based theory. *Academy of Management Review*, 22(2), 374–402.
- Colbert, B. A. (2004). The complex resource-based view: Implications for theory and practice in strategic human resource management. *Academy of Management Review*, 29(3), 341–358. <https://doi.org/10.5465/AMR.2004.13670987>
- Collins, C. J., & Smith, K. (2006). Knowledge exchange and combination: The role of human resource practices in the performance of high-technology firms. *Academy of Management Journal*, 49(3), 544–560. <https://doi.org/10.5465/AMJ.2006.21794671>
- Cook, H., MacKenzie, R., & Forde, C. (2020). Union partnership as a facilitator to HRM: Improving implementation through oppositional engagement. *The International Journal of Human Resource Management*, 31(10), 1262–1284. <https://doi.org/10.1080/09585192.2017.1399431>
- Cordery, J. L., Morrison, D., Wright, B. M., & Wall, T. D. (2010). The impact of autonomy and task uncertainty on team performance: A longitudinal field study. *Journal of Organizational Behavior*, 31(2–3), 240–258. <https://doi.org/10.1002/job.657>
- Dahl, M. S. (2011). Organizational change and employee stress. *Management Science*, 57(2), 240–256. <https://doi.org/10.1287/mnsc.1100.1273>
- Dahl, M. S., & Pierce, L. (2020). Pay-for-performance and employee mental health: Large sample evidence using employee prescription drug usage. *Academy of Management Discoveries*, 6(1), 12–38. <https://doi.org/10.5465/amd.2018.0007>
- De Cieri, H., & Lazarova, M. (2021). “Your health and safety is of utmost importance to us”: A review of research on the occupational health and safety of international employees. *Human Resource Management Review*, 31(4), Article 100790. <https://doi.org/10.1016/j.hrmr.2020.100790>

- De Prins, P. (2021). 'Beyond the clash?': Union-management partnership through social dialogue on sustainable HRM. Lessons from Belgium. *German Journal of Human Resource Management: Zeitschrift für Personalforschung*. <https://doi.org/10.1177/2397002221995807>
- De Spiegelaere, S., Van Gyes, G., & Van Hootehem, G. (2012). Job design and innovative work behavior: One size does not fit all types of employees. *Journal of Entrepreneurship, Management and Innovation*, 8(4), 5–20. <https://doi.org/10.7341/2012841>
- Delery, J. E., & Roumpi, D. (2017). Strategic human resource management, human capital and competitive advantage: Is the field going in circles? *Human Resource Management Journal*, 27(1), 1–21. <https://doi.org/10.1111/1748-8583.12137>
- Detert, J. R., Treviño, L. K., Burris, E. R., & Andiappan, M. (2007). Managerial modes of influence and counterproductivity in organizations: A longitudinal business-unit-level investigation. *Journal of Applied Psychology*, 92(4), 993–1005. <https://doi.org/10.1037/0021-9010.93.2.328>
- Di Stefano, G., Peteraf, M., & Verona, G. (2014). The organizational drivetrain: A road to integration of dynamic capabilities research. *Academy of Management Perspectives*, 28(4), 307–327. <https://doi.org/10.5465/amp.2013.0100>
- Donate, M. J., Peña, I., & Sánchez de Pablo, J. D. (2016). HRM practices for human and social capital development: Effects on innovation capabilities. *The International Journal of Human Resource Management*, 27(9), 928–953. <https://doi.org/10.1080/09585192.2015.1047393>
- Doz, Y. (2020). Fostering strategic agility: How individual executives and human resource practices contribute. *Human Resource Management Review*, 30(1), Article 100693. <https://doi.org/10.1016/j.hrmr.2019.100693>
- Elg, U., Ghauri, P. N., Child, J., & Collinson, S. (2017). MNE microfoundations and routines for building a legitimate and sustainable position in emerging markets. *Journal of Organizational Behavior*, 38(9), 1320–1337. <https://doi.org/10.1002/job.2214>
- Fainshmidt, S., Pezeshkan, A., Lance Frazier, M., Nair, A., & Markowski, E. (2016). Dynamic capabilities and organizational performance: A Meta-analytic evaluation and extension. *Journal of Management Studies*, 53(8), 1348–1380. <https://doi.org/10.1111/joms.12213>
- Farndale, E., & Paaue, J. (2018). SHRM and context: Why firms want to be as different as legitimately possible. *Journal of Organizational Effectiveness*, 5(3), 202–210. <https://doi.org/10.1108/JOEPP-04-2018-0021>
- Felin, T., Foss, N. J., Heimeriks, K. H., & Madsen, T. L. (2012). Microfoundations of routines and capabilities: Individuals, processes, and structure. *Journal of Management Studies*, 49(8), 1351–1374. <https://doi.org/10.1111/j.1467-6486.2012.01052.x>
- Felps, W., Mitchell, T., Hekman, D., Lee, T., Holtom, B., & Harman, W. (2009). Turnover contagion: How coworkers' job embeddedness and job search behaviors influence quitting. *Academy of Management Journal*, 52(3), 545–561. <https://doi.org/10.5465/AMJ.2009.41331075>
- Foss, N. J., & Lindenberg, S. (2013). Microfoundations for strategy: A goal-framing perspective on the drivers of value creation. *Academy of Management Perspectives*, 27(2), 85–102. <https://doi.org/10.5465/amp.2012.0103>
- Fu, N., Flood, P. C., Bosak, J., Rousseau, D. M., Morris, T., & O'Regan, P. (2017). High-performance work systems in professional service firms: Examining the practices-resources-uses-performance linkage. *Human Resource Management*, 56(2), 329–352. <https://doi.org/10.1002/hrm.21767>
- Garavan, T., Shanahan, V., Carbery, R., & Watson, S. (2016). Strategic human resource development: Towards a conceptual framework to understand its contribution to dynamic capabilities. *Human Resource Development International*, 19(4), 289–306. <https://doi.org/10.1080/13678868.2016.1169765>
- Gerhart, B., & Fang, M. (2014). Pay for (individual) performance: Issues, claims, evidence and the role of sorting effects. *Human Resource Management Review*, 24(1), 41–52. <https://doi.org/10.1016/j.hrmr.2013.08.010>
- Giudici, A., & Reinmoeller, P. (2012). Dynamic capabilities in the dock: A case of reification? *Strategic Organization*, 10(4), 436–449. <https://doi.org/10.1177/1476127012457977>
- Goh, J., Pfeffer, J., & Zenios, S. A. (2016). The relationship between workplace stressors and mortality and health costs in the United States. *Management Science*, 62(2), 608–628. <https://doi.org/10.1287/mnsc.2014.2115>
- Gooderham, P. N., Mayrhofer, W., & Brewster, C. (2019). A framework for comparative institutional research on HRM. *The International Journal of Human Resource Management*, 30(1), 5–30. <https://doi.org/10.1080/09585192.2018.1521462>
- Gottschalg, O., & Zollo, M. (2007). Interest alignment and competitive advantage. *Academy of Management Review*, 32(2), 418–437. <https://doi.org/10.5465/amp.2007.24351356>
- Greer, C. R., Lusch, R. F., & Hitt, M. A. (2017). A service perspective for human capital resources: A critical base for strategy implementation. *Academy of Management Perspectives*, 31(2), 137–158. <https://doi.org/10.5465/amp.2016.0004>
- Guerci, M., Hauff, S., & Gilardi, S. (2019). High performance work practices and their associations with health, happiness and relational well-being: Are there any tradeoffs? *The International Journal of Human Resource Management*, 1–31. <https://doi.org/10.1080/09585192.2019.1695647>
- Guest, D. E. (2011). Human resource management and performance: Still searching for some answers. *Human Resource Management Journal*, 21(1), 3–13. <https://doi.org/10.1111/j.1748-8583.2010.00164.x>
- Guest, D. E. (2017). Human resource management and employee well-being: Towards a new analytic framework. *Human Resource Management Journal*, 27(1), 22–38. <https://doi.org/10.1111/1748-8583.12139>
- Harney, B., & Collings, D. G. (2021). Navigating the shifting landscapes of HRM. *Human Resource Management Review*, 31(4), Article 100824. <https://doi.org/10.1016/j.hrmr.2021.100824>
- Harney, B., Fu, N., & Freaney, Y. (2018). Balancing tensions: Buffering the impact of organisational restructuring and downsizing on employee well-being. *Human Resource Management Journal*, 28(2), 235–254. <https://doi.org/10.1111/1748-8583.12175>
- Helfat, C. E., & Martin, J. A. (2015). Dynamic managerial capabilities: Review and assessment of managerial impact on strategic change. *Journal of Management*, 41(5), 1281–1312. <https://doi.org/10.1177/0149206314561301>
- Helfat, C. E., & Peteraf, M. A. (2003). The dynamic resource-based view: Capability lifecycles. *Strategic Management Journal*, 24, 997–1010. <https://doi.org/10.1002/smj.332>
- Helfat, C. E., & Winter, S. G. (2011). Untangling dynamic and operational capabilities: Strategy for the (N)ever-changing world. *Strategic Management Journal*, 32(11), 1243–1250. <https://doi.org/10.1002/smj.955>
- Herrmann, P., & Nadkarni, S. (2014). Managing strategic change: The duality of CEO personality. *Strategic Management Journal*, 35(9), 1318–1342. <https://doi.org/10.1002/smj.2156>
- Holtom, B. C., & Burch, T. C. (2016). A model of turnover-based disruption in customer services. *Human Resource Management Review*, 26(1), 25–36. <https://doi.org/10.1016/j.hrmr.2015.09.004>
- Hsu, L.-C., & Wang, C.-H. (2012). Clarifying the effect of intellectual capital on performance: The mediating role of dynamic capability. *British Journal of Management*, 23(2), 179–205. <https://doi.org/10.1111/j.1467-8551.2010.00718.x>
- Huselid, M. A. (1995). The impact of human resource management on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38(3), 635–672. <https://doi.org/10.2307/256741>
- Jackson, S. E., Schuler, R. S., & Jiang, K. (2014). An aspirational framework for strategic human resource management. *Academy of Management Annals*, 8(1), 1–56. <https://doi.org/10.1080/19416520.2014.872335>
- Jarvenpaa, S. L., & Majchrzak, A. (2016). Interactive self-regulatory theory for sharing and protecting in interorganizational collaborations. *Academy of Management Review*, 41(1), 9–27. <https://doi.org/10.5465/amp.2012.0005>
- Jiang, J. Y., & Liu, C. W. (2015). High performance work systems and organizational effectiveness: The mediating role of social capital. *Human Resource Management Review*, 25(1), 126–137. <https://doi.org/10.1016/j.hrmr.2014.09.001>
- Jiang, K., Lepak, D. P., Han, K., Hong, Y., Kim, A., & Winkler, A. L. (2012). Clarifying the construct of human resource systems: Relating human resource management to employee performance. *Human Resource Management Review*, 22(2), 73–85. <https://doi.org/10.1016/j.hrmr.2011.11.005>
- Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, 55(6), 1264–1294. <https://doi.org/10.5465/amj.2011.0088>
- Jiang, K., Takeuchi, R., & Lepak, D. P. (2013). Where do we go from here? New perspectives on the black box in strategic human resource management research. *Journal of Management Studies*, 50(8), 1448–1480. <https://doi.org/10.1111/joms.12057>

- Kaufman, B. E. (2015a). Evolution of strategic HRM as seen through two founding books: A 30th anniversary perspective on development of the field. *Human Resource Management*, 54(3), 389–407. <https://doi.org/10.1002/hrm.21720>
- Kaufman, B. E. (2015b). Market competition, HRM, and firm performance: The conventional paradigm critiqued and reformulated. *Human Resource Management Review*, 25(1), 107–125. <https://doi.org/10.1016/j.hrmmr.2014.08.001>
- Kaufman, B. E. (2020). The real problem: The deadly combination of psychologisation, scientism, and normative promotionalism takes strategic human resource management down a 30-year dead end. *Human Resource Management Journal*, 30(1), 49–72. <https://doi.org/10.1111/1748-8583.12278>
- Kaufman, B. E., & Miller, B. I. (2011). The firm's choice of HRM practices: Economics meets strategic human resource management. *Industrial and Labor Relations Review*, 64(3), 526–557. <https://doi.org/10.1177/001979391106400306>
- Khatri, N., Gupta, V., & Varma, A. (2017). The relationship between HR capabilities and quality of patient care: The mediating role of proactive work behaviors. *Human Resource Management*, 56(4), 673–691. <https://doi.org/10.1002/hrm.21794>
- Kleinbaum, A. M., & Stuart, T. E. (2014). Network responsiveness: The social structural microfoundations of dynamic capabilities. *Academy of Management Perspectives*, 28(4), 353–367. <https://doi.org/10.5465/amp.2013.0096>
- Kor, Y., & Mesko, A. (2013). Dynamic managerial capabilities: Configuration and orchestration of top executives' capabilities and the firm's dominant logic. *Strategic Management Journal*, 34(2), 233–244. <https://doi.org/10.1002/smj.2000>
- Kotabe, M., Jiang, C. X., & Murray, J. Y. (2017). Examining the complementary effect of political networking capability with absorptive capacity on the innovative performance of emerging-market firms. *Journal of Management*, 43(4), 1131–1156. <https://doi.org/10.1177/0149206314548226>
- Kraaijenbrink, J., Spender, J.-C., & Groen, A. J. (2010). The resource-based view: A review and assessment of its critiques. *Journal of Management*, 36(1), 349–372. <https://doi.org/10.1177/0149206309350775>
- Kurtmollaiev, S. (2020). Dynamic capabilities and where to find them. *Journal of Management Inquiry*, 29(1), 3–16. <https://doi.org/10.1177/1056492617730126>
- Laaksonen, O., & Peltoniemi, M. (2018). The essence of dynamic capabilities and their measurement. *International Journal of Management Reviews*, 20(2), 184–205. <https://doi.org/10.1111/ijmr.12122>
- Leih, S., & Teece, D. J. (2016). Campus leadership and the entrepreneurial university: A dynamic capabilities perspective. *Academy of Management Perspectives*, 30(2), 182–210. <https://doi.org/10.5465/amp.2015.0022>
- Lengnick-Hall, C. A., Lengnick-Hall, M. L., Neely, A. R., & Bonner, R. L. (2021). Something old, something new: Reframing the integration of social capital into strategic HRM research. *Academy of Management Perspectives*, 35(3), 535–556. <https://doi.org/10.5465/amp.2018.0028>
- Lepak, D. P., & Snell, S. A. (1999). The human resource architecture: Toward a theory of human capital allocation and development. *Academy of Management Review*, 24(1), 31–48. <https://doi.org/10.2307/259035>
- Leroy, H., Segers, J., van Dierendonck, D., & den Hartog, D. (2018). Managing people in organizations: Integrating the study of HRM and leadership. *Human Resource Management Review*, 28(3), 249–257. <https://doi.org/10.1016/j.hrmmr.2018.02.002>
- Lin, C. H. V., & Sanders, K. (2017). HRM and innovation: a multi-level organisational learning perspective. *Human Resource Management Journal*, 27(2), 300–317. <https://doi.org/10.1111/1748-8583.12127>
- Lin, C. H. V., Sanders, K., Sun, J. M. J., Shipton, H., & Mooi, E. A. (2016). From customer-oriented strategy to organizational financial performance: The role of human resource management and customer-linking capability. *British Journal of Management*, 27(1), 21–37. <https://doi.org/10.1111/1467-8551.12142>
- Liu, Y., & Perrewé, P. L. (2005). Another look at the role of emotion in the organizational change: A process model. *Human Resource Management Review*, 15(4), 263–280. <https://doi.org/10.1016/j.hrmmr.2005.12.001>
- Mahoney, J. T., & Kor, Y. (2015). Advancing the human capital perspective on value creation by joining capabilities and governance approaches. *Academy of Management Perspectives*, 29(3), 296–308. <https://doi.org/10.5465/amp.2014.0151>
- Marescaux, E., De Winne, S., & Brebels, L. (2021). Putting the pieces together: A review of HR differentiation literature and a multilevel model. *Journal of Management*, 47(6), 1564–1595. <https://doi.org/10.1177/0149206320987286>
- Minbaeva, D. (2018). Building credible human capital analytics for organizational competitive advantage. *Human Resource Management*, 57(3), 701–713. <https://doi.org/10.1002/hrm.21848>
- Nadkarni, S., & Herrmann, P. (2010). CEO personality, strategic flexibility, and firm performance: The case of the Indian business process outsourcing industry. *Academy of Management Journal*, 53(5), 1050–1073. <https://doi.org/10.5465/AMJ.2010.54533196>
- Nayak, A., Chia, R., & Canales, J. I. (2020). Noncognitive microfoundations: Understanding dynamic capabilities as idiosyncratically refined sensitivities and predispositions. *Academy of Management Review*, 45(2), 280–303. <https://doi.org/10.5465/amr.2016.0253>
- Ngo, H.-Y., & Loi, R. (2008). Human resource flexibility, organizational culture and firm performance: An investigation of multinational firms in Hong Kong. *The International Journal of Human Resource Management*, 19(9), 1654–1666. <https://doi.org/10.1080/09585190802295082>
- O'Reilly, C. A., & Tushman, M. L. (2013). Organizational ambidexterity: Past, present, and future. *Academy of Management Perspectives*, 27(4), 324–338. <https://doi.org/10.5465/amp.2013.0025>
- Ostroff, C., & Bowen, D. E. (2016). Reflections on the 2014 decade award: Is there strength in the construct of HR system strength? *Academy of Management Review*, 41(2), 196–214. <https://doi.org/10.5465/amr.2015.0323>
- Paaauwe, J., & Farndale, E. (2017). *Strategy, HRM and performance: A contextual approach* (2nd). Oxford, UK: Oxford University Press.
- Papachroni, A., Heraclous, L., & Paroutis, S. (2016). In pursuit of ambidexterity: Managerial reactions to innovation–efficiency tensions. *Human Relations*, 69(9), 1791–1822. <https://doi.org/10.1177/0018726715625343>
- Peccei, R., & Van De Voorde, K. (2019). Human resource management–well-being–performance research revisited: Past, present, and future. *Human Resource Management Journal*, 29(4), 539–563. <https://doi.org/10.1111/1748-8583.12254>
- Peteraf, M., Di Stefano, G., & Verona, G. (2013). The elephant in the room of dynamic capabilities: Bringing two diverging conversations together. *Strategic Management Journal*, 34(12), 1389–1410. <https://doi.org/10.1002/smj.2078>
- Pezeshkan, A., Fainshmidt, S., Nair, A., Lance Frazier, M., & Markowski, E. (2016). An empirical assessment of the dynamic capabilities–performance relationship. *Journal of Business Research*, 69(8), 2950–2956. <https://doi.org/10.1016/j.jbusres.2015.10.152>
- Pillai, K. G., Hodgkinson, G. P., Kalyanaram, G., & Nair, S. R. (2017). The negative effects of social capital in organizations: A review and extension. *International Journal of Management Reviews*, 19(1), 97–124. <https://doi.org/10.1111/ijmr.12085>
- Ployhart, R. E., & Moliterno, T. P. (2011). Emergence of the human capital resource: a multilevel model. *Academy of Management Review*, 36(1), 127–150. <https://doi.org/10.5465/amr.2009.0318>
- Posthuma, R. A., Campion, M. C., Masimova, M., & Campion, M. A. (2013). A high performance work practices taxonomy: Integrating the literature and directing future research. *Journal of Management*, 39(5), 1184–1220. <https://doi.org/10.1177/0149206313478184>
- Preenen, P. T. Y., Dorenbosch, L., Plantinga, E., & Dhondt, S. (2019). The influence of task challenge on skill utilization, affective wellbeing and intrapreneurial behaviour. *Economic and Industrial Democracy*, 40(4), 954–975. <https://doi.org/10.1177/0143831X16677367>
- Quintana-García, C., & Benavides-Velasco, C. A. (2016). Gender diversity in top management teams and innovation capabilities: The initial public offerings of biotechnology firms. *Long Range Planning*, 49(4), 507–518. <https://doi.org/10.1016/j.lrp.2015.08.005>
- Reiche, B. S., Lee, Y. T., & Allen, D. G. (2019). Actors, structure, and processes: A review and conceptualization of global work integrating IB and HRM research. *Journal of Management*, 45(2), 359–383. <https://doi.org/10.1177/0149206318808885>
- Roberson, Q., Holmes, O., & Perry, J. L. (2017). Transforming research on diversity and firm performance: A dynamic capabilities perspective. *Academy of Management Annals*, 11(1), 189–216. <https://doi.org/10.5465/annals.2014.0019>
- Rofcanin, Y., Berber, A., Marescaux, E., Bal, P. M., Mughal, F., & Afacan Findikli, M. (2019). Human resource differentiation: A theoretical paper integrating co-workers' perspective and context. *Human Resource Management Journal*, 29(2), 270–286. <https://doi.org/10.1111/1748-8583.12224>
- Schenkel, A., & Teigland, R. (2017). Why doesn't downsizing deliver? A multi-level model integrating downsizing, social capital, dynamic capabilities, and firm performance. *The International Journal of Human Resource Management*, 28(7), 1065–1107. <https://doi.org/10.1080/09585192.2015.1130734>

- Schilke, O. (2014). On the contingent value of dynamic capabilities for competitive advantage: The nonlinear moderating effect of environmental dynamism. *Strategic Management Journal*, 35(2), 179–203. <https://doi.org/10.1002/smj.2099>
- Schilke, O., Hu, S., & Helfat, C. E. (2018). Quo vadis, dynamic capabilities? A content-analytic review of the current state of knowledge and recommendations for future research. *Academy of Management Annals*, 12(1), 390–439. <https://doi.org/10.5465/annals.2016.0014>
- Schuler, R. S., & Jackson, S. E. (1987). Linking competitive strategies with human resource management practices. *Academy of Management Perspectives*, 1(3), 207–219. <https://doi.org/10.5465/AME.1987.4275740>
- Sirmon, D. G., Hitt, M. A., & Ireland, R. D. (2007). Managing firm resources in dynamic environments to create value: Looking inside the black box. *Academy of Management Review*, 32(1), 273–292. <https://doi.org/10.5465/amr.2007.23466005>
- Sirmon, D. G., Hitt, M. A., Ireland, R. D., & Gilbert, B. A. (2011). Resource orchestration to create competitive advantage: Breadth, depth, and life cycle effects. *Journal of Management*, 37(5), 1390–1412. <https://doi.org/10.1177/0149206310385695>
- Smith, W. K., & Lewis, M. W. (2011). Toward a theory of paradox: A dynamic equilibrium model of organizing. *Academy of Management Review*, 36(2), 381–403. <https://doi.org/10.5465/amr.2009.0223>
- Smith, W. K., Lewis, M. W., Jarzabkowski, P., & Langley, A. (2017). *The Oxford handbook of organizational paradox*. Oxford, UK: Oxford University Press.
- Strauss, K., Lepoutre, J., & Wood, G. (2017). Fifty shades of green: How microfoundations of sustainability dynamic capabilities vary across organizational contexts. *Journal of Organizational Behavior*, 38(9), 1338–1355. <https://doi.org/10.1002/job.2186>
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350. <https://doi.org/10.1002/smj.640>
- Teece, D. J. (2011). *Dynamic capabilities and strategic management: Organizing for innovation and growth* (2nd). Oxford, UK: Oxford University Press.
- Teece, D. J. (2014). The foundations of enterprise performance: Dynamic and ordinary capabilities in an (economic) theory of firms. *Academy of Management Perspectives*, 28(4), 328–352. <https://doi.org/10.5465/amp.2013.0116>
- Teece, D. J., Pisano, G. P., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533.
- Tsai, C. F., & Yen, Y. F. (2020). Moderating effect of employee perception of responsible downsizing on job satisfaction and innovation commitment. *The International Journal of Human Resource Management*, 31(15), 1913–1937. <https://doi.org/10.1080/09585192.2018.1424014>
- Van De Voorde, K., Paauwe, J., & Van Veldhoven, M. (2012). Employee well-being and the HRM-organizational performance relationship: A review of quantitative studies. *International Journal of Management Reviews*, 14(4), 391–407. <https://doi.org/10.1111/j.1468-2370.2011.00322.x>
- Verona, G., & Zollo, M. (2011). The human side of dynamic capabilities: A holistic learning model. In M. Easterby-Smith, & M. A. Lyles (Eds.), *Handbook of organizational learning and knowledge management* (2nd, pp. 535–550). Chichester, UK: Wiley.
- Way, S. A., Lepak, D. P., Fay, C. H., & Thacker, J. W. (2010). Contingent workers' impact on standard employee withdrawal behaviors: Does what you use them for matter? *Human Resource Management*, 49(1), 109–138. <https://doi.org/10.1002/hrm.20336>
- Way, S. A., Tracey, J. B., Fay, C. H., Wright, P. M., Snell, S. A., Chang, S., & Gong, Y. (2015). Validation of a multidimensional HR flexibility measure. *Journal of Management*, 41(4), 1098–1131. <https://doi.org/10.1177/0149206312463940>
- Way, S. A., Wright, P. M., Tracey, J. B., & Isnard, J. F. (2018). HR flexibility: Precursors and the contingent impact on firm financial performance. *Human Resource Management*, 57(2), 567–582. <https://doi.org/10.1002/hrm.21867>
- Welch, D. E., & Welch, L. S. (2018). Developing multilingual capacity: A challenge for the multinational Enterprise. *Journal of Management*, 44(3), 854–869. <https://doi.org/10.1177/0149206315594846>
- Wilden, R., Devinney, T. M., & Dowling, G. R. (2016). The architecture of dynamic capability research identifying the building blocks of a configurational approach. *Academy of Management Annals*, 10(1), 997–1076. <https://doi.org/10.1080/19416520.2016.1161966>
- Wohlgemuth, V., Wenzel, M., Berger, E. S. C., & Eisend, M. (2019). Dynamic capabilities and employee participation: The role of trust and informal control. *European Management Journal*, 37(6), 760–771. <https://doi.org/10.1016/j.emj.2019.02.005>
- Wollersheim, J., & Heimeriks, K. H. (2016). Dynamic capabilities and their characteristic qualities: Insights from a lab experiment. *Organization Science*, 27(2), 233–248. <https://doi.org/10.1287/orsc.2016.1053>
- Wright, P. M. (2021). Rediscovering the “human” in strategic human capital. *Human Resource Management Review*, 31(4), Article 100781. <https://doi.org/10.1016/j.hrmr.2020.100781>
- Wright, P. M., Dunford, B. B., & Snell, S. A. (2001). Human resources and the resource based view of the firm. *Journal of Management*, 27(6), 701–721. <https://doi.org/10.1177/014920630102700607>
- Wright, P. M., & Nishii, L. H. (2013). Strategic HRM and organizational behaviour: Integrating multiple levels of analysis. In D. Guest, J. Paauwe, & P. Wright (Eds.), *HRM and performance: Achievements and challenges* (pp. 97–110). Hoboken, NJ: Blackwell Publishing.
- Wright, P. M., & Snell, S. A. (1998). Toward a unifying framework for exploring fit and flexibility in strategic human resource management. *Academy of Management Review*, 23(4), 756–772.
- Zahra, S. A., Neubaum, D. O., & Hayton, J. (2020). What do we know about knowledge integration: Fusing micro- and macro-organizational perspectives. *Academy of Management Annals*, 14(1), 160–194. <https://doi.org/10.5465/annals.2017.0093>
- Zhao, Z. J., & Chadwick, C. (2014). What we will do versus what we can do: The relative effects of unit-level NPD motivation and capability. *Strategic Management Journal*, 35(12), 1867–1880. <https://doi.org/10.1002/smj.2184>