

Exploring the Interaction Effects Between Human Resource Systems and Resource Orchestration on Firm Outcomes

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Firms that leverage the interaction of HR systems with resource orchestration are better able to respond to increasing globalization and the inherent complexities and dynamism of operating in these environments. In this paper, we theorize how firms leverage this interaction to influence organizational level outcomes, specifically firm financial performance and organizational learning. In doing so, we both examine how human capital is viewed and answer calls within the literature on how resources are combined to influence firm outcomes. Our work follows Sirmon et al. (2007) framework and spans departmental boundaries making it both relevant and practical to all business disciplines and fields.

Keywords: HR Systems; Human Capital; Resource Orchestration

Introduction

Strategic human resources management (SHRM) research focuses in part, on how firms utilize systems of human resource practices, policies, and processes (i.e., HR systems) to implement firm strategy and affect organizational outcomes by leveraging individual and collective knowledge, skills, abilities, and other characteristics (KSAOs). Strategic Human Capital (SHC) research focuses on how KSAOs and HR systems integrate across levels into firm strategy development (Boon et al., 2018; Fulmer & Ployhart, 2013). SHRM research examines how the collective of individuals in organizations and HR systems help with strategy implementation, while SHC examines how the collective and HR systems might influence strategy formulation. Historically, the two streams of research investigate “what” components of HR systems and “what” individual resources help firms build and sustain competitive advantages (Brymer et al., 2015) through strategy formulation and implementation. In this paper, we theorize about “*how*” firms leverage HR systems and resources in conjunction with each other to affect various organizational outcomes by focusing on the interaction between HR systems and resource orchestration.

HR systems have been shown to amplify financial performance (Bowen & Ostroff, 2004; Huselid, 1995), increase organizational learning (Snell et al., 1996), and contribute to successful financial investment decisions (Molloy et al., 2011). While studies have examined links between HR systems and organizational outcomes, the conditions under which the relationship operates remains unclear, especially across different contexts (Li et al., 2011). Research using resource-based theory (Barney, 1991) and resource orchestration (Sirmon et al., 2011) argues that capabilities interact with managerial resource orchestration to influence firm outcomes (Sirmon et al., 2008; Sirmon et al., 2007). We use these arguments to show how the interactions between HR systems and resource orchestration leads to various outcomes, as opposed to HR systems alone.

We focus on the synergistic effects when resources are bundled and leveraged, and rely on several assumptions. First, we are assuming that organizations are engaging in effective HR policies and procedures which utilize High Performing Work System Practices (HPWS). In doing so, we are taking a truly synergistic approach. Jiang et al. (2012b) discuss that HR research uses one of three approaches or frameworks when discussing how resources are bundled: additive, substitutive, and synergistic. In this paper, we adopt the latter. Each subcomponent of the forthcoming propositions can stand alone. However, alone they do not provide a sustainable advantage in either organizational learning or firm performance, two key tenants of this paper. Resources in this paper cannot substitute for one another and sustain advantage either. While they are additive, this still doesn't work toward sustainability. It is the synergy that is created by the unique combinations of all of the components discussed below that fosters sustainable learning and performance. To further illuminate this fact, consider the following statement by Jing and colleagues (2012b:83): "HR configurations are assumed to be theoretical combinations of HR practices that maximize synergistic effects on outcomes."

This article contributes to the SHRM and SHC literature in two ways. First, we examine the interactions between HR systems and resource orchestration to gain a more complete understanding of conditions influencing the relationship between HR systems and organizational outcomes. Existing research in SHRM and SHC views HR systems as standalone structures that have direct connections to firm outcomes. We describe how HR systems must instead work in tandem with other aspects of a firm's internal environment, bundled by firm managers. We focus on resource orchestration because as the world economy expands and globalization increases, firms that successfully integrate their human capital with internal resource orchestration are able to respond to more dynamic, complex problems in their operating environments (Snell & Dean, 1992), making resource orchestration a key element of a firm's internal environment. This responds to a call in the literature to explore how human capital integrates with other organizational resources and capabilities (Wright et al., 2014).

A second major contribution is that SHRM and SHC studies have often used firm performance as the outcome of interest. We argue that the outcome depends on which resources are bundled with the HR system. For example, we propose that land selection processes (the location of headquarters, plants, etc.) interact with HR systems to increase organizational learning as the firm will use recruitment practices that focus on attracting and selecting individuals most likely to be integrated with the firm's other resources.

We start with a review of the SHRM and SHC research focusing on HR systems. We then review the resource-based theory (RBT) and resource orchestration approach as well as our two outcomes of interest (organizational learning and firm performance) before proceeding to our propositions. We conclude by addressing theoretical and practical implications.

Literature Review

SHRM and SHC research crosses multiple disciplinary and theoretical divides (Wright et al., 2014), and it is important to detail and understand these divides as we build our propositions. Ployhart and colleagues (2014) noted that economics scholars study HR vis-a-vis how investment in employees yields value for the firm, while HR researchers examine how KSAO aggregation leads to unit-level HR emergence. Finally, strategic management scholars explore interconnections among the structure (what it is), function (what it does), and level (where in the organizational hierarchy) of human capital resources and how these shape firm strategies. Within these disciplinary areas, HR is theoretically studied from three perspectives - universalistic, contingency, and configurational (Delery & Doty, 1996). A universalistic perspective assumes that individuals respond similarly to environmental stimuli; contingency focus on context and assumes that individuals react differently based on the internal and external environment (Delery & Doty, 1996); and finally, configurational perspectives assume that HR systems are configured to produce firm outcomes (Guest & Conway, 2011). We draw from all three perspectives to show how configurations of the HR system in the context of firm resource orchestration yield firm outcomes. Specifically, effective use of HR systems with firm resource orchestration activities such as land selection, branding, production processes, and R&D unlock synergies and increase firm financial performance and organizational learning.

HR Systems

Jiang and colleagues (2012b) note that HR systems are the highest level of aggregation for HR activities and represent overall patterns of HR activities. HR systems contain *policies* (programs that focus on different domains like motivation) and *practices* (individual procedures within policies). System composition varies between firms, but internal consistency and synergy between HR systems and firm strategy increases firm outcomes by affecting ability, motivation, and opportunity among employees stronger than simple aggregation of HR activities (Huselid et al., 1997; Jiang et al., 2012a). Similarly, High Performance Work Systems (HPWS) are a subset of HR systems that link overall human capital to firm-level outcomes. HPWS include rigorous selection procedures, internal merit-based promotions, grievance procedures, cross-functional and cross-trained teams, high levels of training, information sharing, participatory mechanisms, group-based rewards, and skill-based pay. HPWS are theoretically and empirically linked to turnover rates, firm productivity, financial performance (Guthrie, 2001; Huselid, 1995; Lepak & Snell, 1999; Messersmith et al., 2011), and organizational learning (Snell et al., 1996). HPWS unlock these firm outcomes most effectively when HR systems complement overall firm strategy. Additionally, HPWS increase organizational learning by building firm-specific skills when tied into firm strategy based on the allocation of individual and collective KSAOs (Bidwell & Keller, 2014). Allocation of KSAOs are facilitated through promotions and transfers, and facilitate information impactedness (when knowledge is known but not easily shifted) by restructuring information that is known but cannot be easily transferred. This information flow is enhanced by high involvement work processes that enhance employee skills, allow participation in firm decision-making, and increase motivation. In these environments, workers have higher skill requirements, discretion is emphasized in work design, and incentives are tied to motivation and commitment leading to higher levels of organizational learning (Pil & MacDuffie, 1996).

HPWS are most effective in highly capital intense industries when market growth is strong, and when industry differentiation for products and services is high as managers use discretion to maximize HR policy utility (Datta et al., 2005). Other contextual factors include industry characteristics that allow increased innovation, speed, and adaptability (Chadwick et al., 2013).

Internal firm contingencies include the strength of the HR system. Bowen and Ostroff (2004) define HR system strength as, “the process by which a consistent message about HRM content can be sent to employees” (207). Stronger systems lead to shared standing and better interpretation of what behaviors are expected and rewarded. Misaligned HR systems negatively affect psychological contracts and yield negative organizational outcomes, such as increased turnover (Peat & Perrmann-Graham, 2019). Finally, we assume that HR system strength yields a common understanding of processes and allows the organization to capitalize on resource orchestration. While employees must attribute meaning to HR systems, they can lead to increased performance through message-based persuasion where employees are convinced of their effectiveness, irrespective of actual efficacy. Strong HR systems lead to high levels of distinctiveness, consistency, and consensus (Bowen & Ostroff, 2004), but full understanding of the HRM-performance relationship requires examination of implementation processes (Guest, 2011).

While these contingencies have some theoretical and empirical support, others (including more robust internal firm contingencies) are underexamined in the literature (Messersmith et al., 2011). By examining how firms bundle and orchestrate other resources in conjunction with HR systems (primarily HPWS), we can more fully understand how they lead to organizational outcomes and how firms adapt to dynamic environments.

The Resource-Based Theory

The Resource-Based Theory (RBT) posits that firms leverage valuable, rare, inimitable, and non-substitutable (VRIN) resources to create competitive advantage (Barney, 1991). RBT researchers examine the link between human capital as an internal, heterogeneous resource and firm strategy (Barney & Wright, 1988), assuming that individual human capital is normally distributed in organizations and labor supply, and demand

is heterogeneous. Human capital is rare (high ability levels are rare), inimitable (contextually linked to historical conditions), causally ambiguous, and rooted in social complexity (Wright et al., 1994).

The core tenants of RBT that are presented throughout this paper follow Conner and Prahalad's (1996) conceptualization which suggests that RBT is knowledge-based versus opportunism-based, which is based strictly on transaction-cost. Firms make strategic decisions (such as where to locate, what labor pools are available, etc.) and are proactive in their intent. When firms are more opportunism-based, or transaction-cost focused, they engage in reactive behaviors. Rather than apply the knowledge that they bring to the firm and using this knowledge to inform decisions which proactively identify locations with access to a qualified workforce (including labor pools, pipelines, and other workforce characteristics), they look simply to the most cost-effective choices and try to fit the rest of the pieces into the puzzle.

Resource Orchestration

Other resources identified within RBT include both tangible assets such as land, building, and financial capital, and intangible assets such as brand, reputation, and trademarks (Priem & Butler, 2001). Traditionally, these resources were viewed as static, but recent refinements include the introduction of resource orchestration, changing the view to a more active employment of firm resources by managers. Resource orchestration is described as process-oriented actions taken by managers to create value by actively structuring, bundling, and leveraging resources within the firm portfolio (Sirmon et al., 2011). This, in turn, allows managers to synchronize processes to pursue competitive advantage in dynamic and complex environments. Whereas the view of firm resources as static answers the “what,” examining resource orchestration answers the “how.” Firms establish processes for how to (re)configure their resources to meet changing environments including reconfigurations of entire labor forces (Wright et al., 2001).

Sirmon et al. (2007) offer a framework wherein firms use resource orchestration to structure their resources through acquisition, accumulation, or divestment; bundle resources through stabilizing, enriching, or pioneering; and leverage their resources through mobilization, coordination, and deployment. These processes are synchronized to leverage firm resources and environmental factors to create and sustain value for the firm. Synchronization goes beyond component resource management (acquisition, accumulation, bundling, and divestment of individual resource types) to take a holistic look at how these resources are structured, bundled, and employed across resource categories (financial, physical, human, etc.) in different contexts.

Prior research has shown that these three processes (structuring, bundling, and leveraging) link to organizational outcomes when synchronized and are separate from the actual resources being managed (Sirmon et al., 2011). Additionally, different strategies and life cycles of firms require different actions related to resource orchestration within these three process domains, and resource orchestration requires collective action from different levels within the firm. However, unlike other forms of resources, a firm's human capital is not inherently owned by the firm but rather by the individual employees (e.g., financial capital and physical assets can be wholly bought and owned by individual firms). Instead, firms match wages to individuals' education, experience, and other characteristics in an attempt to obtain and increase value from human capital (Chadwick, 2017). Additionally, managers maximize value when they coordinate resource structuring, bundling, and leveraging with HR systems designed for specific types of human capital (Chadwick & Flinchbaugh, 2020).

The different processes within resource orchestration interact with the different elements of HR systems to yield different organizational outcomes. The development and deployment of human capital often complements structuring, bundling, and leveraging of other resources, creating complex interdependencies (Kor & Leblebici, 2005). Structuring tangible and intangible resources requires simultaneous selection, promotion, and cross-training of human capital to create building blocks for bundling and reconfiguration of idiosyncratic firm resources. However, doing so requires managers to identify their markets, correctly identify complementarities within the resource bundles, and build network positions that create advantages from the resource orchestration (Schmidt & Keil, 2013). As noted by Dierickx and Cool (1989), bundles of

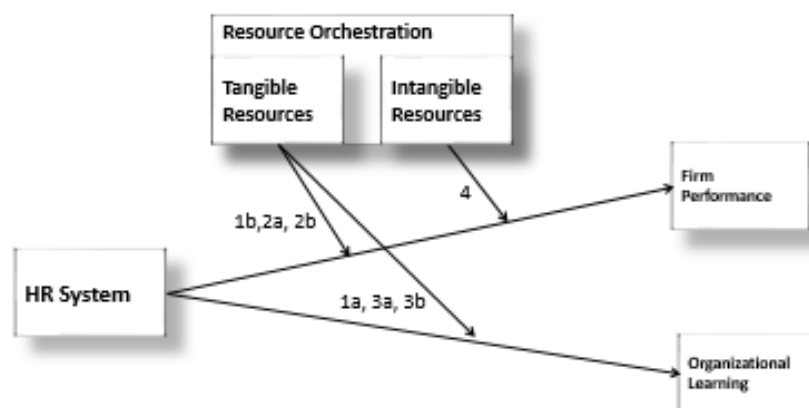
complementary resources must be acquired and/or built together to create value, especially when individual resources take time to develop (i.e., human capital). Additionally, Hitt and colleagues (2006) noted that managers coordinate their resource deployment and reconfigure human capital to successfully implement organizational strategies.

Extending this dynamic perspective, Sirmon et al., (2008) explored the role resource management has on performance through active bundling and deployment of resources. Specifically, they examined human capital on major league baseball teams and how different KSAOs related to batting, pitching, and fielding affects organizational outcomes. Similarly, Monks and Loughnane (2006) found that specific HR bundles create building blocks that fit within the greater strategic determination of resource orchestration, noting that configurations of HR systems with other firm resources matter for firm-level outcomes. Extending these findings, recent research shows that commitment-based HR systems are a crucial mediator between top management attitudes and resource orchestration to organizational learning and firm performance (Chadwick, Super, and Kwon, 2015).

Conceptual Model of HR Systems and Resource Orchestration

With an understanding of the seminal theories as a foundation, we provide a more narrowly focused discernment of what specific tenants of SHRM and RBT are relevant to our propositions. Resource orchestration focuses on the role that the *individual* manager plays within the organization. Past theory in strategic management understudied this crucial role. According to Sirmon et al. (2011: 1391), “the role of managers is the most underdeveloped element in RBT...in terms of the resource-related processes or actions they initiate and oversee.” Hansen, Perry, and Reese (2004: 1280) “conclude that what a firm *does* with its resources is at least as important as *which* resources it possesses.” The current paper uses a resource orchestration lens to unpack the black box on how possessed resources and managerial decisions about those resources are combined and leveraged to increase organizational learning and performance. We use key tenants of both RBT and SHRM research following the framework set forth by Sirmon et al. (2007). We focus on large scale resources that are in direct control of the top management team (such as land selection, building design, production processes, and branding) and how they are leveraged with more intimate resources (human capital) through effective HR systems to increase organizational learning and firm performance (see figure 1). The key is bundling and leveraging, not the resources themselves. This follows a call from Sirmon et al. (2011: 1391), which suggests that “possessing resources alone does not guarantee the development of competitive advantage; instead, resources must be accumulated, bundled, and leveraged, meaning that the full value of resources for creating competitive advantages is realized only when resources are managed effectively.” This suggestion is both practical and relevant and provides a starting position for the current paper. As we discuss, one way to manage, bundle, and leverage these resources is by combining them with effective HR practices which align perfectly with the Sirmon et al. (2007) framework.

Figure 1 – Model of Firm HR Systems and Resource Orchestration



Though outside the scope of this paper, we must also mention dynamic capabilities in relation to our propositions. Much of the foundation of resource orchestration relies upon understanding dynamic capabilities or “the capacity of an organization to purposefully create, extend, and modify its resource base” (Helfat et al., 2007: 4). Understanding this in the current context lies within our choices of resources to formulate the forthcoming propositions. Similar to resource orchestration, research on dynamic capabilities has maintained a premise that is rather general in form. Helfat et al. (2007) explain that this is intentional. The simplicity of the definition allows room for the researcher to define and characterize the particular resources and capabilities under investigation, as long as they are specific and clearly defined.

Organizational Learning and Firm Performance. Organizational learning is a measure of “acquisition, interpretation, storage, and implementation of new knowledge” (Kocoglu et al., 2011: 74). Conceptualized as a firm outcome, it provides an indication of how well the organization is able to learn from and adapt to dynamic, external environments (Namada, 2017). In our paper, we use organizational learning as a measure of how well HR systems interact with resource orchestration via tangible resources such as land selection, R&D efforts, and firm production processes.

While parallel and related to organizational learning, firm performance is also key in understanding the interaction effects of HR systems and resource orchestration, albeit different conceptually from organizational learning. We use firm performance as a measure of market performance or financial health. Evidence suggests that firm performance and organizational learning are related (see Namada, 2017), but it is important to note the differences. Both can be conceptualized as measures of overall organizational performance, but firm performance is specifically capturing how resource orchestration interacts with HR systems to promote the overall market or financial health of the organization via aspects such as superior person-organization fit and increased employee interdependence. While past research has suggested both direct and indirect relationships between organizational learning and firm performance, the two concepts are distinct. While organizational learning is linked to many key organizational processes, such as knowledge acquisition, knowledge sharing, and innovation, this does not always translate into market performance. For example, in 1998, McDonald’s Corporation implemented the highly innovative “Made for You” program in an effort to provide a fresher product to consumers, successfully remodeling and training employees in nearly all of the 13,500 kitchens in the United States. However, this significant innovation and knowledge sharing did not match McDonald’s efficiency-based business strategy and ultimately led to a \$1 billion loss and poor financial performance (Hess & Modica, 2009). Thus, while organizational learning was high, the financial health of the company was significantly hampered.

The following sections delve into how interactions between resource orchestration and HR systems influence organizational level outcomes together. These specific resource orchestration processes were chosen as they are theoretically interesting (incorporating multiple interdisciplinary literature streams), able to be empirically investigated for future studies, and offer practically relevant starting points. The resources and capabilities were chosen in line with Sirmon et al. (2007). The researchers highlight the need for research to demonstrate how SHRM is combined with RBT to accomplish effective resource orchestration. To date, the link between strategy and firm outcomes has had a weak theoretical basis (Batt, 2002), inhibiting empirical examinations. We propose that the *interaction* with resource orchestration provides the mediating effect between HR strategy and firm outcomes, and that this effect is most clear during major development milestones. Thus we chose early developmental orchestration activities, including land selection, building design, branding, and R&D systems, as they are known to have the strongest effect. As will be addressed more fully in the decision section, one of the assumptions that we make in the current research is a temporal one. The propositions in this paper are focusing on the front-end but are not limited to the early stages of organizational development. As such, our propositions delve deep into the structuring and bundling aspects of Sirmon et al. (2007) framework and set the stage for empirical testing of the leveraging aspect.

It is imperative for our propositions to have a solid understanding of the Sirmon et al. (2007) framework within which the components of our propositions are nicely aligned. The framework includes

structuring, bundling, and leveraging. Structuring is defined as the managing of the firm's resources and includes acquiring, accumulating, and divesting. Bundling considers how the firm's resources are combined and includes stabilizing, enriching, and pioneering. Finally, leveraging focuses on how the firm's capabilities create value for customers and wealth for stakeholders. Leveraging consists of mobilizing, coordinating, and deploying.

Land Selection. Where a firm chooses to locate its headquarters, plants, and other physical structures depends on a variety of contingencies. Often, new firms are limited in selection based on financial constraints, human capital availability, and other startup limitations. Once established, and after unlocking new resources, firms have the opportunity to remain in their initial location, move to a new headquarters, or purchase a second headquarters.

Land selection has been viewed in operations research, specifically in terms of supply chain management, as a critical process that increases a firm's ability to respond to dynamic environments and facilitate competitive actions to increase organizational financial performance by optimizing firm logistical requirements (Chou et al., 2008).

Additionally, marketing researchers study land selection related to retail management in terms of population movement to and from retail outlets, traffic flows near retail centers, changes in transportation mechanisms, neighborhood decay and regeneration, obsolescence of technologies, and overall change. Successfully managing these factors allow retailers to increase economic efficiency and social comfort for customers increasing interchange of business. Ultimately, retail selection is a function of markets, labor, supply chains, and raw material management (Nelson, 1958), demonstrating the need to theoretically view this resource more holistically and dynamically.

While historically land selection in management research is usually viewed as a post-hoc, static resource (Miller & Shamsie, 1996) within the framework of RBT, practitioners have noted that firms who utilize a dynamic process approach similar to those in operations and marketing when selecting a new location for a headquarters or facilities can unlock potential synergies in their HR systems (Kimberly, 2013). Firms that view their location as static and limit their land choice due to financial constraints, regulatory restrictions, or only considering their current market, restrict their ability to expand and respond to ever-changing global markets. Infrastructure in terms of transportation, educational systems, and other desirable aspects within land choice increases a firm's access to a more diverse and utilitarian labor force. Specifically, mass transit systems and major airport proximity allow firms to quickly and effectively access supply chains and customers as well as provide a desirable location based on ease of travel for employees. A well-established and operational secondary and higher education system provides a two-fold benefit in terms of desirability for employees with school-age children and access to more highly educated labor pools. Locations also have significant variance in the "friendliness" to larger firms. More business-friendly locations provide firms with tangible benefits such as tax breaks and access to infrastructure as well as intangible benefits such as acceptance in the community. These contextual factors are dynamic with shifting infrastructure systems (e.g., age, new construction), changing demographics (e.g., increasing education rates), and shifting economic centers.

Properly configured HR systems exploit resource availability by enabling firms to recruit, train, and retain the best fit employees for the organization. This process increases performance and organizational learning by putting the best people in the best positions and leveraging unique KSAOs throughout the firm. HR systems are configured for available labor pools (Jiang et al., 2012b) and labor pipelines (Brymer et al., 2014) to exploit these dynamic processes and produce increases in firm performance and organizational learning by attracting, selecting, and retaining employees with the best fit KSAOs. Similar to retail selection above, land selection that incorporates consideration of available labor pools and pipelines will increase recruitment efficiency and optimize hiring logistics by increasing visibility, reducing transportation costs, and increasing opportunities for interchange between candidates and firms. Complementary HR systems use configurations of rigorous selection procedures, internal merit-based promotions, grievance procedures, cross-functional and cross-trained teams, high levels of training, information sharing, participatory

mechanisms, group-based rewards, and skill-based pay to maximize KSAO development and alignment with firm resources to increase organizational learning and financial performance.

Another aspect important to consider in land selection is workforce characteristics. Workforce characteristics incorporates KSAOs but is more inclusive. It is a broad term that is widely used in SHRM research. While some studies choose which specific characteristics are measured, many studies use it as an umbrella term. To better understand the propositions set forth in the current paper, workforce characteristics can be understood as any of the following: qualifications of the job (Galindo-Rueda & Haskel, 2005), education (Dunton et al., 2007), and demographic diversity (Galindo-Rueda & Haskel, 2005). Workforce characteristics also introduce a boundary condition to the current paper. The overarching objectives of the forthcoming propositions are not solely to set the stage for testable hypotheses for each proposition component and subcomponent, but rather to provide an adequate area for open discussion crossing the boundaries between SHRM and RBT using resource orchestration. This will offer an opportunity for collaboration between these two conversations, which will allow researchers to formulate testable hypotheses and more adequately inform practice.

Another boundary condition and assumption that is being made in the forthcoming propositions is a focus on the synergistic effects of bundling. As was mentioned earlier, the objective of the current paper is not strictly to present a list of testable hypotheses, but to begin a conversation which involves both SHRM and RBT. As such, all propositions offered in the current work focus on how research in both areas can inform one another. This is accomplished through understanding the synergistic effects that take place when practices in each area are strategically bundled. While SHRM research has informed us that workforce characteristics are important alone, it is the unique leveraging and bundling of all resources that provides the strongest impact. As stated in Sirmon et al., (2007: 275), using the combination of resources that an organization has at its disposal, and using them effectively, “is at least as important as owning them.” This illuminates the need for not only possessing resources (i.e., a strong labor pool, pipeline, and workforce characteristics), but also being able to employ efficacious HR procedures (i.e., rigorous selection, training, compensation) to use the combination of resources effectively. As such, when any one resource or characteristic is eliminated from the bundling, it would be expected that any interaction effects will likely still be present, but reduced. Furthermore, bundling and leveraging multiple resources available to the organization is critical because it provides the organization with a better opportunity to match the “firm’s internal capabilities with conditions in the external environment” (Sirmon et al., 2007: 284). This aids in the organization’s ability to match its capabilities to the dynamic needs of customers and the market as a whole.

The reduction in synergistic effects of bundling holds true with eliminating any of the bundled resources. To further emphasize this point, consider what would happen if a firm only focuses on workforce characteristics bundled with rigorous selection procedures but does not factor in the labor pool or pipeline in their choice of location. Revisiting the diversity discussion above, having rigorous selection procedures will only increase firm performance and learning if the firm has access to a diverse labor pool. If the organization chooses to locate in an area with a limited labor pool and pipeline, they will not necessarily have access to the employees needed. In fact, if an organization does not choose a location with a sufficient labor pool and pipeline, it may have no choice but to outsource some of its activities (Graf & Mudambi, 2005). While this may be an attractive option in some industries, outsourcing is outside the scope of this paper and is not the end all be all best option for all industries. Rather, what we are considering here are domestic companies that are maintaining domestic operations.

To further understand the potential role that incorporating land selection with labor pool, pipeline, and workforce characteristics can have on organizational learning and firm performance, it is imperative to consider that “using resources is at least as important as possessing or owning them” (Sirmon et al., 2007: 275). When a company has access to better labor pools, and greater selection potential in workforce, this will increase their ability for organizational learning. To further understand organizational learning, it is necessary to consider diversity. While a full discussion of diversity research is outside the scope of this paper, diversity plays a role in the importance of a large labor pool, pipeline, and workforce characteristics. In order for

organizations to improve their organizational learning, they need to remain proactive. One way to remain proactive is to allow the organization access to a diverse set of employees who provide the organization with unique combinations of KSAOs, and have the capability of connecting to a diverse set of customers. Diversity is a key factor in organizational learning and performance from both a micro and macro perspective. Therefore, having access to an organizationally (or industry) appropriate labor pool, pipeline, and other workforce characteristics, gives the organization the ability to engage in rigorous selection procedures by having more options at their disposal. With a limited labor pool, pipeline, and access to other workforce characteristics, the organization is not able to focus on more minute aspects of employee selection (such as diversity in thought, experiences, and demographics). As such, “the strategic response to learning is to be proactive” (Kim, 2006: 81). Proactive in this sense would be to make strategic decisions about where to locate the business to have access to the diverse labor pool, pipeline, and other workforce characteristics. In turn, the organization, by locating as such, will have increased firm performance. The access to a better labor pool, pipeline, and other workforce characteristics “provides firms with a potential capacity for strategic flexibility and the degrees of freedom to adapt and evolve” (Sirmon et al., 2007: 275). This strategic flexibility will allow the organization to adapt to the evolving customer needs and demands, therefore increasing firm performance as it is able to remain relevant at a faster speed as compared to those organizations who are not able to adapt their strategy as quickly based on limited access to labor pools, pipelines, and other workforce characteristics.

Within the Sirmon et al. (2007) framework, land selection links to orchestration through acquisition of resources by accessing desirable labor pools and creating localized human capital pipelines. However, accessing this resource also requires properly configuring HR systems that unlock the potential complementarities in the local environment. Thus, when managers orchestrate land selection with specific HPWS (including rigorous selection procedures, cross-functional and cross-trained teams, high levels of training, and information sharing), firms are able to increase organizational learning through knowledge substitution and knowledge flexibility (Conner & Prahalad, 1996). Firms are also able to utilize sustainable sourcing in the local environment to complement land selection and increase firm performance (Pullman et al., 2009). Amazon provides an illustrative example. On September 7, 2017, Amazon announced a search for a second headquarters to be known as Amazon HQ2 and requested bids from major US Cities that met specific criteria. These include metropolitan areas of at least 1 million residents, international airport proximity, access to mass transit systems, a higher education infrastructure, high level of education in the workforce, business-friendly operating environment, and features that would allow Amazon to “attract and retain” a technical and high-quality workforce (Turner, 2017). To maximize increases in organizational learning and firm performance, Amazon’s HR system focuses on selection, training, and retention efforts on educated employees who desire the same components described in the search criteria. By maximizing the person-organization fit, Amazon maximizes their organizational learning and financial performance.

Proposition 1a: Land selection processes that incorporate labor pools, pipelines, and workforce characteristics interact with HR systems configured using HPWS practices to increase organizational learning.

Proposition 1b: Land selection processes that incorporate labor pools, pipelines, and workforce characteristics interact with HR systems configured using HPWS practices to increase firm financial performance.

Physical Building Design. The physical building and configurations of a workspace provide an interesting and understudied area of organizational resource orchestration. Physical configurations can influence collaboration when they are open, inspire cooperative interactions, and increase team process gains. A full discussion of both team processes and collaboration is outside the scope of this paper, but the physical structures that drive these processes represent a firm resource within the scope of management influence.

Organizations that encourage collaboration in the workplace use open concepts that allow employees to proximally interact with those on whom they are task interdependent (spatial proximity) (Brown, 2008).

When designing HR systems to interact with physical building spaces, managers have two primary choices: design systems that select, train, and retain employees who can work in collaborative environments or select, train, and retain those who are more apt for non-cooperative work environments. Each of these two designs are useful depending on the level and type of task interdependence of the employees. There are several specific types of interdependence to bear in mind when considering which design to choose. Pooled interdependence is when work is completed separately then compiled to create a finished product, service, etc. Sequential interdependence occurs when work is completed in succession, or in consecutive steps. Independent tasks require little to no interdependence. All three of these are best suited for non-cooperative environments. On the other hand, reciprocal interdependence, where team members work on their portion of a task and consult subgroups within the team, and comprehensive interdependence, where tasks are interrelated, both thrive in collaborative environments (Avolio et al., 2009). As not all employees can succeed in both environments, firms that employ HR systems that maximally utilize their employees' abilities to work in environments characterized by different types of interdependence will yield the strongest outcomes.

Whereas land selection represents the acquisition sub-process of structuring, the building design process reflects accumulating within Sirmon et al. (2007) framework. Land selection provides general human capital for the firm through targeted labor pools and pipelines, but firms must first "build" what they have "bought" from the labor market.

Zappos provides an illustrative example of how building design layout interacts with HR systems to maximize organizational outcomes, as the company used an open office concept to foster collaboration at their headquarters in Las Vegas, NV. From their core values, Zappos emphasized open and honest relationships through communication, team spirit, creativity, and a change-focused environment. Demonstrating these values, Zappos designed their office space to minimize personal space and emphasize common areas to increase workplace interactions and foster collaboration. Desks are mobile and ethernet drops plentiful to facilitate employees working in multiple spaces with different collaborative partners. Zappos' workspace density is only 70 feet per employee (Searer, 2013). HR systems that select, train, and retain employees suited for reciprocal and comprehensive task interdependence realize the strongest increases in the relationship with organizational outcomes when using similar building design concepts to Zappos.

Proposition 2a: Firm physical building design processes focused on collaborative environments interacts with HR systems configured to develop collective KSAOs to increase firm performance by promoting reciprocal or comprehensive interdependence

Proposition 2b: Firm physical building design processes focused on non-cooperative environments interacts with HR systems configured to develop individual KSAOs to increase firm performance by promoting pooled interdependence, sequential interdependence, or task independence

R&D. Research and development (R&D) provides a significant strategic risk and reward system for firms. R&D is part of the firm's innovation processes and involves the study of future products, services, and capabilities with a focus on product/service improvement. Based on this, R&D is an innovation effort that increases exploratory organizational learning. With ever increasing R&D intensity, managing this resource is a prime driver of innovation (Kotha & Vadlamani, 1995) and thus organizational learning.

HR systems that focus on knowledge building, creativity, and innovation to drive organizational learning will see the largest increases from interaction with a robust R&D system. HR systems that create human capital pipelines, or repeated interorganizational hiring create focused acquisition of resources by reducing search requirements, simplifying socialization, and integrating employees (Brymer et al., 2014). These human

capital pipelines are essential for competitive strategies based on innovation, product diversification, and continual improvement as they provide a continual source of new employees skilled in innovation.

Within the Sirmon et al. (2007) framework, R&D represents bundling through the sub-components of stabilizing and enriching. R&D processes focus on improvements and innovation, which encapsulates both minor improvements (stabilizing) and extending current capabilities that reach well beyond training employees to do new things (enriching). When combined with production processes and branding, R&D can also be representative of the pioneering subcomponent of bundling. Pioneering involves creating new capabilities to allow the firm to both remain and gain in its competitive position.

Volkswagen ranks as a top R&D firm worldwide, spending more than \$13.5 billion dollars on R&D in 2013 (5.2% of annual revenue) (Casey & Hackett, 2014). These R&D efforts focus on product differentiation, environmental and safety research, and product improvement in an industry that introduces new models and concepts annually. The relationship between Volkswagen's HR system and their exploratory organizational learning will be maximized by a strong emphasis on R&D as they hire from pipelines that are known for R&D focus.

Proposition 3a: HR systems configured to promote knowledge building, creativity, and innovation through HPWS practices interact with firm R&D efforts to increase exploratory organizational learning.

Production Processes. Production process improvement signifies the other branch of innovation: exploitive innovation. This includes both incremental and substantial process improvements with the ultimate goal of reducing defect rates, creating higher quality products or services, reducing waste of other resources, and improving turnaround times to increase efficient use of resources. Quality assurance processes include those that detect defective products or poor service deliveries, improve efficiency, or increase the effectiveness of production or service delivery (Sinha & Noble, 2008).

Successful process improvement yields higher value (and higher satisfaction rates) for customers and efficient flow of resources through supply chains. The increased efficient and effective use of resources lowers operating costs creating a virtuous cycle of efficiency in production. This allows firms to exploit their current resources as a strategic advantage, and these improved processes reduce environmental impacts by reducing wasted resources.

HR systems that focus recruitment, selection, training, and retention on KSAOs related to commitment building, detail-orientation, and maximum output will see the strongest increases in the relationship with firm-level outcomes in firms that continually improve production processes. Innovative creativity is still important in process improvement as in R&D, but the creativity is more focused on exploiting current processes over exploring new areas.

Ford provides an illustrative example of a firm that maximized exploitive innovation as a means of increasing both financial performance and organizational learning. Ford has been known as a leader in production process improvement since the early 1900s when Henry Ford introduced and employed standardization of work, formal assembly lines, and other innovative processes to increase the efficiency of manufacturing. Modern Ford process improvements include the use of a balanced scorecard system to continually track manufacturing with the ultimate goals of cost reduction, customer satisfaction improvement, and lower impact on the environment. Ford exploits its previous innovations by continually improving and changing processes to meet these goals (Jacobsen, 2011).

Ford uses HR systems that focus on recruitment, selection, training, and retention of employees whose KSAOs align with manufacturing process improvement. These include selecting and employing high numbers of Lean Six Sigma Black Belts and Green Belts, employees who have KSAOs related to process improvement, pushing process controls to the lowest level, and sharing successes across the organization as a whole (Jacobsen, 2011). This interaction of focused HR systems with continual process improvement increases

Ford's organizational learning capacity as well as its financial performance as a global leading automotive manufacturer.

Proposition 3b: HR systems configured to promote commitment building, detail-orientation, and maximum output through internal HPWS practices interact with firm production processes to increase exploitive organizational learning.

Branding. Branding is one of the most important aspects of organizational marketing, as brand recognition is a powerful mechanism for attracting and retaining customers. The brand itself is an intangible resource, but successful branding processes build trust and credibility. This increases firm financial performance as people are more likely to purchase goods and services from an organization that they trust (Zentes et al., 2011). Highly effective branding processes create quintessential brands known as “the” something (Google as “the search engine”) or a brand that becomes synonymous with the product or service (e.g., Band-Aid for a sterile bandage). Additionally, successful branding creates additional value by attracting more potential employees allowing the firm to use selective processes for whom they want to employ (Allen et al., 2007).

Brands that successfully achieve a high level of status take on similar qualities to transformational leaders in that employees admire, trust, and respect the leader. Employees in an organization with a strong brand development process take actions to maintain high levels of enthusiasm and commitment to the brand. This can lead to innovation and creativity through intellectual stimulation to continually try new ideas and improve the brand for customers. The interaction between HR systems and branding processes will be strongest when the HR system attracts, selects, trains, and retains employees who both identify with and are committed to the brand. Specifically, employees must have KSAOs that fit with the brand and must be willing to work with the domain of the brand.

Southwest Airlines provides a well-known example of successful branding and an illustrative example of the interaction between HR systems and branding as a dynamic capability. Southwest's guiding principle is to be “THE low fare airline” while maintaining a secondary principle of fun at work for employees (Thomas, 2015). Southwest maintains its position as one of the most well-liked airlines in the United States due to its fun and relaxed atmosphere and focus on people first (both customers and employees). Southwest's heart symbol represents its branding efforts to remind customers and employees of the human element in the industry and is a major inclusion in marketing and recruitment efforts for the firm.

Southwest's HR systems focus on attraction, selection, training, and retention of employees whose KSAOs match the organizational strategy of people first. Southwest ranks employees higher in importance than customers and shareholders, which has led to high levels of employee satisfaction. Additionally, this has had a pipeline effect passed onto customers as well as the bottom line yielding higher levels of customer satisfaction and financial performance.

Proposition 4: Branding processes interact with firm HR Systems configured using effective HPWS practices to attract and retain employees with strengthened identity with the brand, increase commitment, and decrease turnover rates to increase financial performance.

Discussion and Future Research

The interaction between firm resources and resource orchestration provides an interesting and innovative area for study within the SHRM and SHC literature. While traditionally human capital is viewed as a standalone resource, the mechanisms for recruiting, training, retaining, and configuring human capital interact with firm resource orchestration including land selection, physical building design processes, production processes, research and development, and branding processes to increase firm financial performance and organizational learning. As the world increasingly becomes more global, firms face operating environments with ever increasing levels of complexity and dynamism. By leveraging the firm's internal

environment (through resource orchestration), firms can create synergies through the configuration of their HR systems and attract, select, train, retain, and employ the best people to respond to these challenges.

While researchers have examined human capital interactions with other resources, our focus on resource orchestration, the inherent active employment of resources, expands our understanding of how synergies are unlocked by integrating and configuring HR systems with these capabilities. This holistic view of how firms structure, bundle, and employ their resources, including their internal and external labor pools, provides a more complex look at how firms respond to complex and dynamic environments.

Our propositions follow the framework set forth by Sirmon et al. (2007). What remains unexplored in this framework allows for a fruitful area of future research. The components in our propositions appropriately lay the foundation for empirically exploring the accumulating and bundling aspects of that framework. This paper has left the final component, leveraging, relatively untouched. It is our stance that leveraging would be firm- or industry-specific and entail sustained performance and readjustments over time. As such, leveraging would be a promising area for future research, especially through the use of several case studies.

It is important to note that several boundary conditions exist in this paper. In addition to the boundary conditions discussed in presenting the propositions, there is also a temporal focus here. As an organization ages, it becomes better at spotting opportunities (Sirmon et al., 2007). While the bundling of resources is always important, it is most crucial for newer organizations. The more resources that new organizations have at their disposal (including labor pool, pipelines, and workforce characteristics), the better positioned they will be to bundle these resources effectively to result in organizational learning and firm performance. However, as time passes, the organization will have accumulated a significant amount of knowledge and at that point, mobilization and land selection will be key to driving new business. In addition, SHRM theory asserts that “as the organization grows and develops, human resource management programs, practices, and procedures must change and develop to meet its needs” (Baird & Meshoulam, 1988: 116). Even though past research has provided steps or stages to follow as an organization adapts HR procedures to match growth, these steps are anecdotal and provide little consideration to how the needed resources can be orchestrated to enable the adaptation. Therefore, by combining RBT and SHRM theory and considerations, the firm is able to simultaneously utilize both lenses to make external decisions that will match internal HR policies and procedures to allow for this growth and change over time. By ignoring the RBT view of the firm, the organization will be transaction-cost focused and potentially miss the opportunity to provide itself with the external factors (location, labor pool, pipeline, workforce characteristics, reputation, and brand) that will allow it to adapt HRM changes over time. Without allowing HRM programs, practices, and procedures to change over time, critical customer needs and emerging opportunities will be overlooked, and the organization is not likely to sustain growth and/or profitability.

As will be discussed in further detail below, the propositions included in this paper are not all-inclusive or representative of a “one right way” to merge RBT and SHRM theory and practice. Rather, what we have offered is a way to go beyond the simple main effects of each theory and truly integrate and synthesize core tenants of each. In this paper, we have deeply focused on the synergistic effects when resources are bundled and leveraged with effective HR practices. The simple effects and relationships between each subcomponent of the propositions can be found as standalone hypotheses that have been given statistical significance in other research (see Mackey et al., 2014; Messersmith et al., 2011; Datta et al., 2005; Denrell et al., 2003; Hitt et al., 2000; and Teece et al., 1997). Our major contribution is the attention being paid to the combination of two theoretically different lenses: RBT and SHRM. As research and practice in the field of management currently stands, there appears to be two different conversations occurring. One is at the micro, organizationally-internal level, within SHRM. This conversation focuses on decisions, policies, and procedures that happen internal to the firm and include hiring, firing, training, and organizing of personnel. The other conversation is at the macro, organizationally-external level, within strategic management as a whole. This conversation focuses on external resources (such as location and labor pools) and answers the question of why firms exist and how they operate amongst one another in the competitive environment. There are very few instances where RBT and SHRM researchers invite one another to the same table for conversation and integration (for

an exception, see Colbert, 2004). Therefore, the propositions suggested above provide a foundation in which both research areas can begin to speak the same language and gain a more developed understanding of how they can inform one another. By informing one another, the two research streams will be synergistically working together to improve organization learning and performance.

This paper is by no means inclusive of the entire relationship and has its limitations. The exemplar resource orchestration processes included here are only a few of the many processes used by firms to create, allocate, and integrate resources to respond to dynamic and complex environments and were selected due to their being theoretically interesting, able to be empirically investigated, and practically relevant. They also offer the unique benefit of spanning both disciplinary (within the realm of academia) and departmental (within the realm of the organization as a whole) boundaries. Additional resource orchestration processes include those internal and external features that allow firms to integrate, build, or reconfigure resources to achieve maximal organizational outcomes. Next, we detail a few of these as possible areas of future research and focus.

Technological capabilities. Firms employ new technologies with significant variance in approach and levels of success. These technologies increase the need to reevaluate HR systems, especially when technologies replace human KSAOs.

One specific example of technological capabilities is the increasing use of social media in organizations. While traditionally, communication systems were heavily structured, social media fundamentally changes communication networks, processes, and interactions. Social media provides the ability for firms to create user-generated content and provide voice to the entire organization (Leonardi & Vaast, 2017). HR systems in this context must focus on KSAOs related to technological savvy, collaboration, and restraint.

Communicative processes and network management. The communicative interactions within a firm also represent a resource within the management sphere of influence that is causally complex and ambiguous in terms of organizational outcomes. Often firms' tacit knowledge diffuses throughout the organization through interactions that are complex and inimitable. HR systems in this context must focus on KSAOs that foster open communication and conscious management of individual communication networks in the organization.

Intellectual property management. One of the most important resources in an organization is the process for developing and protecting intellectual property. Intellectual property helps firms create and maintain competitive advantage and is strongly linked to financial performance. HR systems in this context must focus on KSAOs related to discretion, secrecy, and commitment to prevent disclosures of intellectual property to competitors.

Another area of future research draws on the Upper Echelons theory to examine how top management teams implement strategies in coordination with HR systems and resource orchestration to maximize financial performance and organizational learning. Historically, SHRM research viewed HR strategy as derivative to firm competitive strategy, however with the increasing number of human resource executives in firms and the recognition of their contributions to firm performance (Chadwick et al., 2016), future research should examine how HR system development is integrated into strategy development by top managers.

Finally, empirical studies of HR system interactions with resource orchestration should employ a variety of methods that match the interdisciplinary studies of SHRM and SHC. Given the causal complexity and assumptions of equifinality in HR systems, configurational techniques, including qualitative comparative analysis using fuzzy sets, should be employed to examine configurations of HR systems and resource orchestration.

Practical Implications

As firms face increasingly complex and dynamic challenges, those who successfully configure their HR systems in conjunction with bundling, managing, and leveraging internal resources are able to attract, retain, and employ the best people for the job. Managers must recognize the important relationships between their capabilities and the HR system to unlock this synergy. By employing recruitment, retention, and incentive

programs in HR systems focused on complementarities with their internal firm resource management, managers can respond to these challenges.

Additionally, managers within organizations must recognize the importance of identifying these complementarities across the organization and leveraging all functional areas in the integration of the HR system with the resource orchestration. This collaboration will help firms attract, select, and retain employees most likely to synchronize with their dynamic processes.

References

- Allen, D. G., Mahto, R. V., & Otondo, R. F. (2007). Web-based recruitment: Effects of information, organizational brand, and attitudes toward a web site on applicant attraction. *Journal of Applied Psychology, 92*(6): 1696–1708.
- Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: current theories, research, and future directions. *Annual Review of Psychology, 60*(1): 421–449.
- Baird, L., & Meshoulam, I. (1988). Managing two fits of strategic human resource management. *Academy of Management Review, 13*(1), 116-128.
- Barney, J. B. 1991. Firm resources and sustained competitive advantage. *Journal of Management, 17*(1): 99–120.
- Barney, J. B., & Wright, P. M. (1998). On becoming a strategic partner: The role of human resources in gaining competitive advantage. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management, 37*(1), 31-46.
- Batt, R. (2002). Managing customer services: Human resource practices, quit rates, and sales growth. *Academy of Management Journal, 45*(3), 587-597.
- Bidwell, M., & Keller, J. R. (2014). Within or without? How firms combine internal and external labor markets to fill jobs. *Academy of Management Journal, 57*(4): 1035–1055.
- Boon, C., Eckardt, R., Lepak, D. P., & Boselie, P. (2018). Integrating strategic human capital and strategic human resource management. *International Journal of Human Resource Management, 29*(1): 34–67.
- Bowen, D. E., & Ostroff, C. (2004). Understanding HRM-Firm Performance Linkages: the role of the “strength” of the HRM System. *Academy of Management Review, 29*(2): 203–221.
- Brown, M. G. (2008). Proximity and collaboration: measuring workplace configuration. *Journal of Corporate Real Estate, 10*(1): 5–26.
- Brymer, R. A., Molloy, J. C., & Chadwick, C. (2015). Strategic Human Capital. *Oxford Bibliographies*.
- Brymer, R. A., Molloy, J. C., & Gilbert, B. A. (2014). Human capital pipelines: Competitive implications of repeated interorganizational hiring. *Journal of Management, 40*(2): 483–508.
- Casey, M., & Hackett, R. (2014). The 10 biggest R&D spenders worldwide. *Fortune*. Retrieved from <http://fortune.com/2014/11/17/top-10-research-development/>
- Chadwick, C. (2017). Toward a more comprehensive model of firms’ human capital rents. *Academy of Management Review, 42*(3), 499-519.
- Chadwick, C., & Flinchbaugh, C. (2020). Searching for competitive advantage in the HRM/firm performance relationship. *Academy of Management Perspectives, (ja)*.
- Chadwick, C., Guthrie, J. P., & Xing, X. (2016). The HR executive effect on firm performance and survival. *Strategic Management Journal, 1*–20.
- Chadwick, C., Super, J. F., & Kwon, K. (2015). Resource orchestration in practice: CEO emphasis on SHRM, commitment-based HR systems, and firm performance. *Strategic Management Journal, 36*(3), 360-376.
- 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*(2): 311–343.
- Chou, S. Y., Chang, Y. H., & Shen, C. Y. (2008). A fuzzy simple additive weighting system under group decision-making for facility location selection with objective/subjective attributes. *European Journal of*

- Operational Research*, 189(1): 132–145.
- 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.
- Conner, K. R., & Prahalad, C. K. (1996). A resource-based theory of the firm: Knowledge versus opportunism. *Organization science*, 7(5), 477-501.
- Datta, D. K., Guthrie, J. P., & Wright, P. M. (2005). Human resource management and labor productivity: Does industry matter? *Academy of Management Journal*, 48(1): 135–145.
- Delery, J. E., & Doty, D. (1996). Modes of theorizing in strategic human resource management: test of universalistic, contingency and configurational performance predictions. *Academy of Management Journal*, 39(4): 802–835.
- Denrell, J., Fang, C., & Winter, S. G. (2003). The economics of strategic opportunity. *Strategic Management Journal*, 24(10), 977-990.
- Dierickx, I., & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management science*, 35(12), 1504-1511.
- Dunton, N., Gajewski, B., Klaus, S., & Pierson, B. (2007). The relationship of nursing workforce characteristics to patient outcomes. *Online J Issues Nurs*, 12(3).
- Fulmer, I. S., & Ployhart, R. E. (2013). “Our Most Important Asset”: A multidisciplinary/multilevel review of human capital valuation for research and practice. *Journal of Management* (Vol. 40).
- Galindo-Rueda, F., & Haskel, J. (2005). Skills, workforce characteristics and firm-level productivity: Evidence from the matched ABI/employer skills survey.
- Graf, M., & Mudambi, S. M. (2005). The outsourcing of IT-enabled business processes: A conceptual model of the location decision. *Journal of International management*, 11(2), 253-268.
- Guest, D. E. (2011). Human resource management and performance: Still searching for some answers. *Human resource management journal* 21.1: 3-13.
- Guest, D., & Conway, N. (2011). The impact of HR practices, HR effectiveness and a “strong HR system” on organisational outcomes: A stakeholder perspective. *International Journal of Human Resource Management*, 22(8): 1686–1702.
- Guthrie, J. P. (2001). High-involvement work practices, turnover, and productivity: Evidence from New Zealand. *Academy of Management Journal*, 44(1): 180–190.
- Hansen, M. H., Perry, L. T., & Reese, C. S. (2004). A Bayesian operationalization of the resource-based view. *Strategic Management Journal*, 25(13), 1279-1295.
- Helfat, C. E., Finkelstein, S., Mitchell, W., Peteraf, M. A., Singh, H., Teece, D. J., & Winter, S. G. (2007). *Dynamic capabilities: Understanding strategic change in organizations*. Carlton: Blackwell.
- Hess, E., & Modica, S. (2009). McDonald's Corporation.
- Hitt, M. A., Bierman, L., Uhlenbruck, K., & Shimizu, K. (2006). The importance of resources in the internationalization of professional service firms: The good, the bad, and the ugly. *Academy of management journal*, 49(6), 1137-1157.
- Hitt, M. A., Ireland, R. D., & Lee, H. U. (2000). Technological learning, knowledge management, firm growth and performance: An introductory essay. *Journal of Engineering and Technology management*, 17(3-4), 231-246.
- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38(3): 635–672.
- Huselid, M. A., Jackson, S. E., & Schuler, R. S. (1997). Technical and strategic human resources management effectiveness as determinants of firm performance. *Academy of Management Journal*, 40(1): 171–188.
- Jacobsen, J. (2011). Ford team uses six sigma to reduce costs while improving environmental impact. *American Society for Quality*, (December): 3–6.
- Jiang, K., Lepak, D., Jia, J. U., & Baer, J. C. (2012a). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of*

- Management Journal*, 55(6): 1264–1294.
- Jiang, K., Lepak, D. P., Han, K., Hong, Y., Kim, A., & Winkler, A. L. (2012b). Clarifying the construct of human resource systems: Relating human resource management to employee performance. *Human Resource Management Review*, 22(2): 73–85.
- Kim, B. Y. (2006). Managing workforce diversity: Developing a learning organization. *Journal of Human Resources in Hospitality & Tourism*, 5(2), 69-90.
- Kimberly, B. (2013). Landscape one are the days of evaluating real. *Site Selection Magazine*.
- Kocoglu, I., Imamoglu, S. Z., & İnce, H. (2011). The relationship between organizational learning and firm performance: The mediating roles of innovation and TQM. *Journal of Global Strategic Management*, 9(3), 72-88.
- Kor, Y. Y., & Leblebici, H. (2005). How do interdependencies among human-capital deployment, development, and diversification strategies affect firms' financial performance? *Strategic Management Journal*, 26(10), 967-985.
- Kotha, S., & Vadlamani, B. L. (1995). Assessing generic strategies: An empirical investigation of two competing typologies in research notes and communications assessing generic strategies: An empirical investigation of two competing typologies in discrete manufacturing industries. *Strategic Management Journal*, 16(16): 75–83.
- Leonardi, P. M., & Vaast, E. (2017). Social media and their affordances for organizing: A review and agenda for research. *Academy of Management Annals*, 11(1), 150-188.
- 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.
- Li, X., Frenkel, S. J., & Sanders, K. (2011). Strategic HRM as process: How HR system and organizational climate strength influence Chinese employee attitudes. *International Journal of Human Resource Management*, 22(9): 1825–1842.
- Mackey, A., Molloy, J. C., & Morris, S. S. (2014). Scarce human capital in managerial labor markets. *Journal of Management*, 40(2), 399-421.
- Messersmith, J. G., Patel, P. C., Lepak, D. P., & Gould-Williams, J. S. (2011). Unlocking the black box: Exploring the link between high-performance work systems and performance. *Journal of Applied Psychology*, 96(6): 1105–1118.
- Miller, D., & Shamsie, J. (1996). The resource-based view of the firm in two environments: The Hollywood film studios from 1936 to 1965. *Academy of Management Journal*, 39(3): 519–543.
- Molloy, J. C., Ployhart, R. E., & Wright, P. M. (2011). The myth of “the” micro-macro divide: Bridging system-level and disciplinary divides. (H. Aguinis, B. K. Boyd, C. A. Pierce, & J. C. Short, Eds.) *Journal of Management*, 37(2): 581–609.
- Monks, K., & Loughnane, M. (2006). Unwrapping the HRM bundle: HR system design in an Irish power utility. *International Journal of Human Resource Management*, 17(11): 1926–1941.
- Namada, J. M. (2017). Organizational learning and firm performance: An empirical investigation in an emerging economy context.
- Nelson, R. L. 1958. *The Selection of Retail Location*. FW Dodge Corporation.
- Peat, D. M., & Permann, J. (2019). Rucksack to backpack: Psychological contracts between veterans and “military friendly” campuses. In *Academy of Management Proceedings* (Vol. 2019, No. 1, p. 19062). Briarcliff Manor, NY 10510: Academy of Management.
- Pil, F. K., & MacDuffie, J. P. (1996). The adoption of high-involvement work practices. (C. Ichniowski, D. I. Levine, C. Olson, & G. Strauss, Eds.) *Industrial Relations*, 35(3): 423–455.
- Ployhart, R. E., Nyberg, A. J., Reilly, G., & Maltarich, M. A. (2014). Human capital is dead; Long live human capital resources! *Journal of Management*, 40(2): 371–398.
- Priem, R. L., & Butler, J. E. (2001). Is the resource-based “view” a useful perspective for strategic management research? *The Academy of Management Review*, 26(1): 22.
- Pullman, M. E., Maloni, M. J., & Carter, C. R. (2009). Food for thought: Social versus environmental

- sustainability practices and performance outcomes. *Journal of Supply Chain Management*, 45(4), 38-54.
- Schmidt, J., & Keil, T. (2013). What makes a resource valuable? Identifying the drivers of firm-idiosyncratic resource value. *Academy of Management Review*, 38(2), 206-228.
- Searer, S. (2013). Office Snapshots tours Zappos HQ. Retrieved from <https://officesnapshots.com/2013/12/16/new-zappos-downtown-las-vegas-headquarters/>
- Sinha, R. K., & Noble, C. H. (2008). The adoption of radical manufacturing technologies and firm survival. *Strategic Management Journal*, 29(9): 943–962.
- Sirmon, D. G., Gove, S., & Hitt, M. A. (2008). Resource management in dyadic competitive rivalry: The effects of resource bundling and deployment. *Academy of Management Journal*, 51(5): 919–935.
- 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.
- 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.
- Snell, S. A., & Dean, J. W. (1992). Integrated manufacturing and human resource management: A human capital perspective. *Academy of Management Journal*, 35(3): 467–504.
- Snell, S. A., Youndt, M. A., & Wright, P. M. (1996). Establishing a framework for research in strategic human resource management: Merging resource theory and organizational learning. *Research in personnel and human resources management* (pp. 61–90).
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic management journal*, 18(7), 509-533.
- Thomas, M. (2015). Strategic principles at Southwest Airlines. *Strategic Direction*, 31(8): 10–12.
- Turner, M. (2017). Amazon is most likely to build its second headquarters in one of these five cities. *Forbes*. Retrieved from <https://www.forbes.com/sites/marciaturner/2017/10/19/amazon-is-most-likely-to-build-its-second-headquarters-in-1-of-these-5-cities/#7305c07e6168>
- Wright, P. M., Coff, R., & Moliterno, T. P. (2014). Strategic human capital: Crossing the great divide. *Journal of Management*, 40(2): 353–370.
- 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.
- Wright, P. M., & McMahan, G. C. (1992). Theoretical perspectives for strategic human resource management. *Journal of Management*, 18(2): 295–320.
- Wright, P. M., McMahan, G. C., & McWilliams, A. (1994). Human resources and sustained competitive advantage: A resource-based perspective. *International Journal of Human Resource Management*, 5(2): 301–326.
- Zentes, J., Morschett, D., & Schramm-Klein, H. (2011). Retail branding and positioning. *Strategic Retail Management* (pp. 179–200). Wiesbaden: Gabler Verlag.