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Virtual HR Departments: Getting Out of the Middle

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Abstract
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Keywords
virtual HR departments, organization, partnerships, information technology, HR, management, practice, research

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ABSTRACT

In this chapter, we explore the notion of virtual HR departments: a network-based organization built on partnerships and mediated by information technologies in order to be simultaneously strategic, flexible, cost-efficient, and service-oriented. We draw on experiences and initiatives at Merck Pharmaceuticals in order to show how information technology in establishing an infrastructure for virtual HR. Then, we present a model for mapping the architecture of HR activities that includes both internal and external sourcing options. We conclude by offering some recommendations for management practice as well as future research.

INTRODUCTION

The transformation of HR today is a natural extension of changes occurring more broadly within firms. Globalization, diversity, intellectual capital, information technology and the like are expanding the scope of organizations, accelerating the pace of change, and placing a premium on organizational agility, flexibility and rapid response. As firms compete more on capabilities, relationships, and new ideas, they are discovering the importance of collaborating with external partners. Doing so allows them to focus resources and their expertise, integrate knowledge from the outside, react quickly to arising opportunities, and deliver better value to customers.

HR departments, not surprisingly, are at the epicenter of these changes. The pressures and priorities HR departments face are at once shaking the foundation of traditional practice and providing the catalyst for organizational innovation (Kemske, 1998). The transformation in HR supports—in fact enables—broader organizational reinvention.

HR Pressures and Priorities

To compete today, HR departments are asked to achieve four seemingly contradictory goals. First, they are being asked to be more strategic. As Alvares noted: “The bottom-line business of human resources must be the delivery and/or development of human capital that enable the enterprise to become more competitive, to operate for maximum effectiveness, and to execute its business strategies successfully” (1997: 9).

Becoming a strategic business partner requires that HR functions be involved in the development, planning, formation and implementation of competency-based strategies. Unfortunately, a recent study of 1050 companies by the Hackett Group (1998) shows that HR professionals typically devote less than a third of their time to the most crucial strategic HR initiatives. Instead, the bulk of their time is still consumed with lower value-added, routine

activities. While the message to engage strategically has been enthusiastically received, many HR functions are hamstrung by their administrative heritage.

Second, HR functions are also being asked to be more flexible (Wright & Snell, 1999). Policies, programs, and practices that were once locked in place are perhaps now antithetical to strategic adaptation. Achieving strategic fit in HR today rarely means stable fit and, increasingly, strategic management means *change* management. When asked to name the skill that had increased most in importance, 1,700 HR professionals indicated that change management was their clear choice (Employee Benefit Plan Review, 1997). Research by Dyer and Shafer (1999) suggests that many successful firms—i.e., agile firms—are those that are both strategically focused and adaptive to change.

The third priority for HR functions is to take a hard line on costs. The typical organization spends approximately $1,500 annually per employee on HR-related issues, but this amount can double or triple in less efficient organizations (Employee Benefit Plan Review, 1997). A portion of these costs is associated with the development and implementation of HR systems and processes themselves, but a good chunk is overhead. Managers are increasingly being asked to prioritize where they can best utilize their time, talents, and resources, and where they can find places to cut. Such cost restrictions are commonplace in strategic HR; the link to strategy is tethered by increased accountability.

Finally, while reinventing themselves to be strategic and flexible, as well as cost conscious, HR functions are still required to provide excellent service to managers and employees. The origins of HR are rooted in employee advocacy, and responsibility for employment relationships will likely continue to be the foundation of HR (Kerr, & Von Glinow, 1997; Ehrlich, 1997; Ulrich, 1997).

In short, HR departments are being charged with being simultaneously strategic, flexible, cost-efficient, and customer-oriented. Unfortunately, the evidence suggests that traditional models of HR are poorly suited for these challenges. Critics charge that HR departments are

often the last bastions of bureaucracy in organizations, and that the command and control approaches they use actually impede rather than facilitate progress to strategic goals (cf., LeTart, 1998; Sparrow & Daniels, 1999).

Merck Pharmaceuticals: Getting Out of the Middle

Merck Pharmaceuticals is keenly aware of the limitations of traditional HR organizations. The company is tackling the issue head-on and has made dramatic strides in its transformation. Merck's guiding vision for HR is to "get out of the middle" between line managers and employees. This means that, rather than being an obstacle to performance and effectiveness, Merck wants to make certain that employees and managers have all the information and resources they need at their fingertips. Merck's goal is to increase service levels while decreasing the HR staff by 50 percent. The company is automating routine administrative functions, making more HR-related activities self-serve via web-based portals, and partnering with external firms that can provide seamless HR services to employees. In so doing, Merck will be able to reduce overhead and administrative costs, increase speed and service levels, and maximize flexibility. And with the resource savings, Merck will be investing more heavily in knowledge management initiatives such as strengthening communities of practice and providing exchange technologies. In a knowledge-based industry such as pharmaceuticals, investments such as these are clearly where the strategic role of HR plays out most directly.

Virtual HR Departments

Achieving all of these goals simultaneously requires a dramatically different approach to HR organization. A virtual HR department is a *network-based structure built on partnerships and mediated by information technologies to help the organization acquire, develop, and deploy intellectual capital*.

The concept of virtual organization borrows from the information technology literature where computers use peripheral storage devices such as a hard drive to augment its active memory (i.e., RAM). The benefit of "virtual memory" is that an operating system such as Windows can manage the swapping of data between the hard disk and active storage so that it appears to the user as if the computer has far more active memory than it actually does (Raymond, 1994).

The analogy between virtual memory and virtual organizations should be obvious. Firms concentrate on their core competencies and outsource peripheral work to other firms, all the while managing the network so that their customer views the relationships as seamless (Davidow & Malone, 1992; Hamel, Doz, & Prahalad, 1989; Mohrman & Lawler, 1997). When done successfully, these virtual firms are able to simultaneously increase efficiency and flexibility. And in these cases, it may truly appear that the organization can do "anything, anytime, anywhere."

Placed in the context of HR, the analogy still applies. Executives are rethinking how they organize the function to make it more flexible and focused while still providing a full complement of HR services. To do so, most firms have increased their reliance on external sources to perform part, if not all, of these HR activities (Brenner, 1996; Snell, 1994; Stewart, 1996). And the external relationships are enabled by information technologies that ensure seamless processing of data, information, and services. To the (internal) customer, the HR department enhances its service capabilities while reducing costs, increasing flexibility and speed.

THE TECHNOLOGY INFRASTRUCTURE FOR VIRTUAL HR

The backbone of virtual HR is information technology (IT). Its impact within HR has been both pervasive and profound. IT allows firms to store and retrieve large amounts of information quickly and inexpensively. It also enables them to rapidly and accurately combine and reconfigure

data to create new information. Further, because it allows them store and quickly use the judgment and decision models developed in the minds of experts, IT systems help firms to institutionalize organizational knowledge. With IT networks, they can communicate more easily and selectively with others in remote parts of the world, thereby allowing for even better use of the information at their disposal (Culnan & Markus, 1987; Rice & Blair, 1984). In that regard, IT can be a potent weapon for lowering administrative costs, increasing productivity, speeding response times, improving decision making, and enhancing customer service. It is also completely vital for coordinating activities with parties external to the firm. Ultimately, IT can provide a data and communications platform that helps HR link and leverage the firm's human capital to achieve competitive advantage.

In the following pages, we present our views on how managers can identify, partition, and prioritize IT applications to support their initiatives in creating virtual HR organization. We focus on three basic influences: First, we discuss the *operational* impact of IT; that is, automating routine activities, alleviating the administrative burden, reducing costs, and improving productivity internal to the HR function itself. A recent study by Aon consulting and the Society for Human Resource Management showed that 62 percent of firms use information technology to automate compensation while over 33 percent use IT for benefits administration (Employee Benefits Plan Review, 1997).

After discussing the operational impact of IT, we describe its *relational* impact; that is, providing managers and employees remote access to HR databases, simultaneously reducing response times and improving service levels. Third, we discuss the *transformational* impact of IT; that is, redefining the scope and function of the HR organization to focus more on strategic issues.

The Operational Impact of IT: Automating and Informing

For many firms, the starting point for IT utilization within HR focuses on improving operational efficiency. Given the heavy administrative burden within HR, efforts to automate

record keeping and routine clerical activities such as payroll and benefits administration makes sense. Systems that simplify transaction processing and computation activities can substantially increasing the volume of work that one person can do. And by eliminating paperwork, automated systems have the potential to reduce organizational overhead (cf. Schmitt, Gilliland, Landis, & Devine, 1993). This is a first step toward virtual HR. While the work is still done, headcount and variable transaction costs are lower (Snell, Pedigo & Kraweik, 1995).

As data processing devices have evolved into more comprehensive information systems (e.g., HRIS), many firms have faced the obstacle of integrating their myriad HR systems and databases. The problem is that IT applications often have been developed in different functional areas of HR (e.g., payroll, benefits, staffing) or geographic regions (e.g., North America, Europe, Asia Pacific). As a consequence, there is frequently limited coordination or compatibility across the systems. At Merck there is a major initiative underway to integrate various systems to create a Global HR Data Warehouse that provides a uniform architecture for HR reporting (e.g., payroll, benefits enrollment, address changes, retirement, etc.). In order to ensure consistency across databases in various locations—a condition necessary for analysis and decision-making on a global scale—IT and HR managers are working together to develop standardized data definitions and coding structures for all transactions. The goal of this project is to establish a comprehensive repository for employee data while simultaneously making the reporting process more timely and accurate.

With integrated systems, information formerly located in one location can now be distributed and accessed globally. Integrated systems not only create a common backbone for information storage and handling, they can be used to reconfigure HR data so managers can customize their queries to their own particular work force needs (Sawhney and Parikh, 2001). For example, audit-and-edit systems can automatically generate reports to satisfy EEO requirements. Overtime, vacation, absentee data, and the like can be tracked to provide

demographic charts and other employee-related information. These applications reveal that IT does not simply automate the HR function, it also "informates" it (Zuboff, 1988: 10). Broderick and Boudreau (1992), for example, pointed out that managers could use decision support systems to initiate data excursions to uncover trends in the data that are critical for improving productivity and workflow. In this way, IT can be a valuable decision-making tool that not only provides the data necessary for HR decisions, but also helps to forge a pathway through that data. Milkovich and Boudreau (1994: 256) put it this way,

> Today the dilemma is not how to get enough data, it is how to maneuver through the sea of data and identify the most important pieces of information. The key is to focus on better decisions, not just producing data faster.

As systems turn data into information and provide intelligent navigation, their value increases. The systems are not simply passive repositories of data; they are decision tools for proactive action.

From this discussion, we can see that IT creates a tendency toward and perhaps a requirement for process improvements within HR. One of the clichés about IT is that it helps us perform the wrong actions a hundred times faster (cf., Madnick, 1991). In a study by Kinnie and Arthurs (1993), nearly three quarters of HR departments never changed their business processes in concert with the introduction of IT. If HR departments simply "throw" technology at whatever they do manually, and never take advantage of the capabilities IT provides, the new system may actually rivet the old way of doing business into place making it even more difficult to change (Schnitt, 1993). As Hammer and Champy (1993) pointed out, "Automating existing processes with information technology is analogous to paving cow paths" (p. 48). In order to gain the improvements in productivity that most organizations seek, it is frequently necessary to reengineer the HR processes that are currently being used (cf., Madnick, 1991; Schnitt, 1993). In general, these changes alter the nature of relationships between HR and line managers and employees.

Relational Impact of IT: Providing Remote Access

While the operational impact of IT focuses on efficiency and productivity improvements within HR, IT also influences HR's relationships with other parties within the organization. IT allows HR to enhance service by providing line managers and employees with remote access to HR databases, supporting their HR-related decisions, and increasing their ability to connect with other parts of the corporation.

At Merck, several HR practices have been redesigned to enable line managers and employees to enter, retrieve, and edit data (by themselves) from remote locations in order to make better decisions. Perhaps the best example is in the area of staffing. Merck's applicant tracking system, called *Joblink* supports the staffing process by tracking application information, scanning resumes, and making the information immediately accessible to line management for systematized skill searches. *Joblink* allows Merck managers to search on-line for internal and external recruits by posting jobs, reviewing resumes of pre-qualified applicants, or running searches of candidates who have been categorized by skill set. An outside vendor who specializes in web-based recruiting administers the system, and acts as a mediator between Merck and broader databases such as Monster.com and Hotjobs.com. But importantly in the context of virtual HR, while the systems are mediated externally, the implementation and connections are seamless to Merck managers.

EasyWeb is another application within Merck that increases managerial connectivity. The system enables managers and employees to access their payroll information, 401(k) data, modify personal information (e.g., address, emergency contacts, etc.), customize their flexible benefit programs, and do retirement planning. Because the system connects individuals to outside vendors (who handle payroll, benefits and the like), the administrative burden for Merck is lower. In addition, because individuals can access and update the information themselves, employees and managers get more accurate and timely service. *MyHRPage* takes this idea further and lets employees and HR professionals create their own web pages based on their

particular needs and circumstances. The system connects them to databases and resources they need to conduct their work (e.g., staffing information, compensation, EEO, and the like). Whereas systems such as this were previously designed from HR's point of view, *MyHR* can be customized to the needs and preferences of the line manager. Similarly, Merck's performance management process provides on-line planning, performance review, employee input, and leadership development all in one integrated package.

By making information accessible on-line, HR can eliminate waste, improve decision quality, reduce cycle time, and enhance flexibility and customization. Just as automatic teller machines revolutionized the banking industry by cutting out the "middle-man," disintermediation within HR can achieve three objectives at once: reducing costs, increasing flexibility, and improving the velocity as well as quality of service (Snell, Pedigo, and Krawiek, 1995; Davidson & Davis, 1992).

However, a valid counter-argument is that IT may simply shift the burden of administration back to line personnel overloading them with irrelevant and uninterpretable data (Huber, 1990). In such cases, IT inhibits rather than enhances the productivity of line managers and doesn't facilitate the progression towards virtual HR. Organizations can avert such problems by providing decision support systems that help line managers and employees diagnose HR-related trends before they surface as problems, perhaps even anticipating their needs in advance. Using intelligent interfaces, systems can prompt managers with on-line notification of upcoming personnel actions such as performance appraisals and salary increases. The systems can generate summary charts on employee demographics, performance, and the like in order to simplify data analysis used for salary planning. In the not-too-distant future, speech technology may eliminate the need for keyboard strokes altogether, and users will be able to simply voice the actions they wish to undertake. These types of IT applications reinforce the idea that true customer service means helping employees do their jobs more effectively, not simply finding methods for reducing HR's workload.

The Transformational Impact of IT: Redefining HR's Scope and Function

While IT can improve operational efficiency within HR, and enhance relational connections with line personnel and outsiders, the transformational impact of IT involves fundamental changes in the scope and function of the HR department. Beyond changing how HR activities are undertaken, IT also redefines the activities HR undertakes.

For example, Merck has been using intranet-based technologies to establish a series of worldwide virtual meetings that bring together HR professionals from different continents. *Dialog 2000: Reinventing HR* is the platform for creating a global HR community that engages Merck's world-wide HR population—including both internal and external partners—in discussions of issues, experiences, and best practices on a variety of topics. Facilitated by Caucus, an outside partner that specializes in virtual meetings, Merck has created a network of secure chat-rooms, on-line newsletters, and discussion groups. As the system evolves, Merck is pushing this capability throughout its HR community by using *NetMeeting*, an intranet product that encompasses video, graphics and voice exchange. Since initiating the system, the response rate to Merck's employee survey has increased to nearly 90 percent.

As technology allows for distributed exchange, HR's reach is dramatically expanded while at the same time its capacity for integration is much better. Particularly in multinational firms trying to coordinate activities worldwide, HR activities can be enormously unwieldy. When information and knowledge are not shared across business units, problems of coordination and control are inevitable. What we have learned is that, these problems shrink dramatically if appropriate enabling technologies are put in place (Snell, Pedigo, & Krawiek, 1995).

A more specific example of HR transformation at Merck can be seen in the evolution of education and training. Rather than relying solely on traditional approaches to learning, Merck is developing a "blended" approach to knowledge management. In combination with traditional classroom experiences, Merck is creating web-based e-learning opportunities as well. For example, in association with Forum Corporation, Merck's Leadership Development Program uses

an on-line 360 degree diagnostic, called *Performance Compass*, which helps managers assess their developmental needs and then connects them to wide array of external training and educational resources. Similarly, Merck has been working with Developmental Dimensions International (DDI) to implement an *On-line Performance and Learning (OPAL)* system that provides coaching tips and leadership development to managers.

Systems such as these don't necessarily replace conventional classroom experiences, but they transform the learning process in several ways. First, individuals can search through a virtual sea of information and customize their own learning. This dramatically reduces employee research time, not to mention the cost savings associated with producing and distributing typical hardcopy reference material. But more importantly, systems such as these facilitate just-in-time skill development by bringing the training to the employees, rather than vice versa (Herren, 1989). In their most advanced forms, *performance support systems (PSS)* use artificial intelligence and hypermedia to "provide just the help a performer needs to do a job, just when the performance needs it, and in just the form in which he or she needs it" (Carr, 1992, p. 32).

The challenge now at Merck is to provide an integrated network of developmental resources for managers that provides them with the very best opportunities while simultaneously reducing the workload within HR. As the transformation occurs, Merck is able to reallocate resources to invest more heavily in real-time knowledge management. In a knowledge-intensive industry such as pharmaceuticals, the processes for creating, combining, transforming and applying knowledge are sources of competitive advantage. Learning is evolving from an only individual level phenomenon to a group and business unit phenomenon as well. And it makes distinctions among terms like knowledge acquisition, creation, and transfer almost indistinguishable—they occur simultaneously. Merck has developed a knowledge management system called *LINK (Leverage Information and Network Knowledge)* to enable research scientists to document and share knowledge and experiences in order to create communities of practice within R&D. A similar system called *PACE (Product and Cycle Time Excellence)* provides an

infrastructure for knowledge sharing within Merck's production and manufacturing organization. From a competitive standpoint, providing world-wide access to a wealth of educational and training materials, and combining this with real-time exchanges of experiences and best practices, is among the best ways to facilitate continuous organizational learning (Richards-Carpenter, 1991a). It is one of the ultimate goals of Merck's virtual HR organization.

MANAGING EXTERNAL PARTNERSHIPS

While IT is the backbone of virtual HR, the network of external partners and exchanges is what gives this form of organizing vitality and flexible execution. Virtual organizations are noted for their collaborative relationships with external specialists (cf. Baker, 1992). The growth of professional employer organizations (PEOs) and other HR service firms has provided functional alternatives that were unavailable just a few years ago. Outside partners allow HR departments to simultaneously respond to increasing complexity while remaining nimble enough to cope with the increasing pace of technological and market changes.

The benefits of outsourcing are becoming well known, particularly in light of the HR priorities and objectives we laid out at the beginning of this chapter (strategic focus, flexibility, cost-containment, and service). Outsourcing can help minimize costs by externalizing routine or low value administrative tasks; thereby enabling HR departments to focus more on value-creating activities (Alvares, 1997; Carrig, 1997; Davidson, 1998; Quinn & Hilmer, 1994). In addition, outsourcing allows managers to allocate resources on an *ad hoc* or just-in-time basis. As the needs of the organization change, managers can contract with external vendors to perform specialized services that the organization cannot perform internally (Dess, Rasheed, McLaughlin, & Priem, 1995). The growth of professional service markets has helped HR staffs shift from traditional specialists to more flexible generalists capable of responding to broader business issues. Not surprisingly, recent evidence suggests that between 77 and 93 percent of firms outsource at least part of their HR function and another significant percentage plans to

increase the role of outsourcing in their HR functions (Davidson, 1998; Jeffay, Bohnnon, Lespisa, 1997).

But for all of the benefits of outsourcing, there are potential downsides as well. Most outsourcing decisions in HR today are driven by cost considerations alone rather than an eye toward broader strategic issues. Executives may recognize the opportunity to cut overhead costs—and purchase skills from an outside source—but their focus tends to be short-term, and the downside ramifications often appear during implementation. According to the Hackett Group's (1998) study,

> Outsourcing remains a major HR cost. The cost to perform outsourced functions can run as high as $415 per employee annually, on average, or 28 percent of total per-employee HR costs. Yet only 1.6 percent of HR time is typically spent managing these third-party suppliers, and the expected reduction in costs often doesn't materialize. The white lie of outsourcing is that it's a silver bullet guaranteed to lower costs and reduce the worry… Instead, costs often increase and headaches multiply because outsourcing is undermanaged and poorly monitored.

In addition to cost considerations, the potential loss of operating control over the specific facets that are externalized is a significant possibility (Dess, et. al., 1995). As firms continue to enter contracts and partnerships with external parties they may find themselves locked into specific arrangements, making it difficult to adapt to changing organizational needs. Related, a continued reliance on external sources may erode HR's internal ability to execute activities critical to competitiveness (cf. Bettis, Bradley, & Hamel, 1990). In these cases, HR may actually decrease its ability to meet and support their firm's strategic objectives if outsourcing is pushed too far or poorly managed.

So the question doesn't seem to be whether outsourcing is a good idea. Rather it seems to be how can HR departments do it well? One of the first issues to be addressed is deciding what should be internalized and what should be externalized, and how can the alternatives be balanced? Beyond that, there are equally important concerns about managing the nature of the relationships with both internal and external parties. All of these issues center

on a common theme: What is the best way to partition resources within a network of relationships while managing the permeable boundaries that distinguish organizations. Technology is part of the equation to be sure, but IT is only an enabler (Davidson, 1998).

Mapping the Architecture of Virtual HR

Over the past few years, researchers have begun to address the architecture of sourcing relationships; focusing on the balance between internalization and externalization of resources. These "make" or "buy" decisions are rooted in transaction cost economics (Williamson, 1993) and the resource based view of the firm (Barney, 1991; Hamel & Prahalad, 1994) as well as broader models of organizational flexibility and change. Quinn (1992), for example, suggests that firms should outsource those activities that are not critical to a firm's success, thereby freeing up resources to focus on core competencies. Functions that are not critical and are not specific to a firm are candidates to be externalized (Saunders, Gebelt, & Hu, 1997).

Lepak and Snell (1998; 1999) summarized much of the literature in this area by way of proposing a model for HR sourcing and employment. The model juxtaposes two strategic considerations—the value created from a resource and its uniqueness (firm-specificity). Based on the combination of value and uniqueness, firms make decisions among four alternative sourcing options.

The value of HR activities. Resources (using this broad term to include knowledge, skills, processes, technologies, databases, relationships and the like) are valuable when they help a firm to enact strategies that improve efficiency and effectiveness, exploit market opportunities, and/or neutralize potential threats (Barney, 1991; Porter, 1985; Ulrich & Lake, 1991; Wright & McMahan, 1992). In the context of virtual HR, the issue of strategic value speaks directly to whether a resource increases the benefits to customers and lowers their associated costs (Beatty & Schneier, 1997; Hamel & Prahalad 1994; Snell, Shadur & Wright, 2001). In the case of HR, there are a host of internal and external customers (i.e., managers,

employees, job applicants, contractors, partners, etc.) who depend directly on HR services. Skills, knowledge, processes and the like that are instrumental for increasing value to these customers—and ultimately to the customers of the firm—are more likely to be internalized. Outsourcing a strategically valuable resource runs the risk of putting the firm at a comparative dis-advantage (Barney, 2001).

The uniqueness of HR activities*.* Along with strategic value of a resource, decisions about sourcing also depend on the extent to which the resource is unique or firm specific (cf. Barney, 1991; Hamel & Prahalad, 1994; Quinn & Hilmer, 1994; Williamson, 1993). At Merck, for example, the HR function has developed a new employee orientation program that is customized around the company's philosophies, values, and culture. The program is run internally, not so much because of the value created, but because it establishes a distinctive identity for the organization.

To the extent that resources are specialized or firm specific, and particularly when they add strategic value, they may prove to a source of comparative advantage and would likely be internalized. However, firms may not have the capability to develop or maintain these assets internally, or they may not make sufficient use of the assets to warrant internalization. In some cases, such as when trying to retain an expert in a specialized area (or more broadly when trying to acquire a firm), firms may attempt to internalize the contract, but be unable to consummate the deal.

However, regardless of whether the resources are internalized or externalized, the point to be gleaned from this is that managing unique resources is qualitatively different from those that are generic. Generic resources can be managed in a transactional manner taking advantage of market efficiencies. Firms would pay the going rate and the exchange could be mediated through arms length negotiations. However, market-based transactions such as these are less applicable when assets are specialized or unique. Instead, the connections tend to be more relational, developed over time through mutual investment, trust, and experience. This

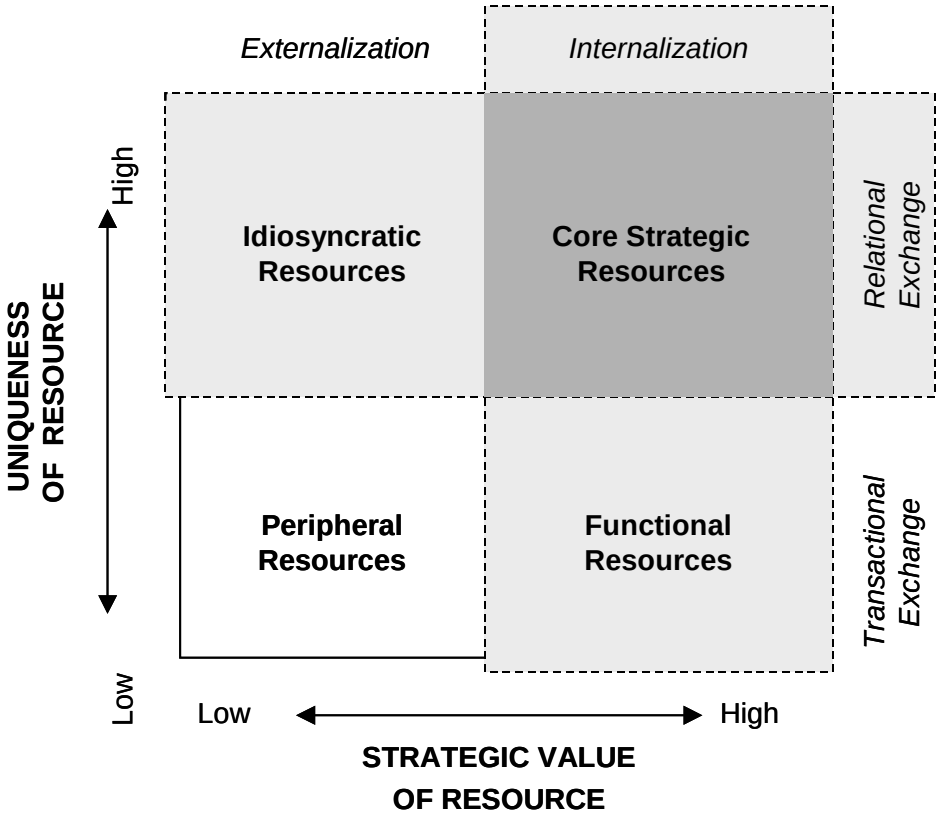
does not necessarily mean that the resources will internalized, only that they will be cultivated on a relational basis (Lepak & Snell, 1999).

Applying the Architecture of Virtual HR

Building on these points, we can conceive of HR activities as spanning two continua: One ranging from transactional to strategic (i.e., low versus high value), and the other ranging from generic to firm-specific (i.e., low versus high uniqueness). As shown in Figure 1, when we combine the dimensions of value and uniqueness, we can develop a better picture of how firms partition and balance their decisions about internalization and externalization. That provides a blueprint for sourcing relationships in the context of virtual HR.

At first blush, it might be tempting to conceive of firms making “wholesale” decisions about internalizing or externalizing an entire functional area. For example, they might handle all staffing activities themselves, and outsource all aspects of benefits administration. More likely, however, firms keep some aspects of an HR process internal and partner externally with vendors who manage other aspects. For example, it is common for firms to maintain control over primary compensation decisions while outsourcing payroll and benefits administration and partnering with consulting firms to conduct wage surveys and job evaluations. Increasingly, this is referred to as “co-sourcing” in that it involves partnering with one or more vendors to share the responsibility for data, technology, administrative processes and communications associated with a particular function (McCormick, 1999).

Figure 1:
Value and Uniqueness as Drivers of Sourcing Decisions



Adapted from Lepak & Snell (1998, 1999)

Our previous discussion of Merck's transitions within training and development illustrates this partitioning within an overall architecture of HR. Merck retains responsibility (and expertise) for overall planning and strategy, but has established several external relationships to manage more operational activities within training and development. Because the core development priorities at Merck center on strengthening communities of practice and continuous learning, these areas are seen as both strategically valuable and a source of inimitable advantage. Merck executives would not consider outsourcing these elements.

In addition, there are other activities that are repeatable and/or broadly deployable (though perhaps not firm-specific) that are also handled internally, but with less involvement or

investment. For example, Merck maintains a small staff of trainers and consultants who work on various initiatives within the company and may be redeployed as projects and priorities change. However, as noted earlier, the firm keeps a constant eye on whether holding these particular assets internally is generating a return commensurate to its investment.

Externally, Merck has a number of interesting partnerships for training and development. Recall, managers utilize an on-line 360-degree diagnostic to access a broad array of educational and developmental opportunities (some on-line and some in traditional classroom settings). While the delivery of the content itself may be contracted with any number of vendors on a "one-off" basis, the development and management of the diagnostic instrument—i.e., Performance Compass—is handled though an ongoing alliance between Merck and Forum Corporation. This highlights the difference between peripheral contract vendors who provide services "off the shelf" in a market setting versus closely associated external partners who co-develop the programs with Merck. The choice between these two forms of externalization hinges on whether the resources are unique or not. While spot contracting may be an ideal option for generic non-proprietary activities, a stronger partnership is likely to be more appropriate when the outcome or product of the relationship needs to be customized to the firm's specific needs.

PUTTING IT ALL TOGETHER

Two fundamental levers—external partnering and information technology—are central to the transformation. Outsourcing and external partnering provide organizations the flexibility to adapt to external changes, the possibility for appropriating outside expertise, the opportunity to reduce overhead costs, and the chance to focus resources on strategic initiatives.

However, developing a network of external partners alone is not sufficient. An axiom of organizational design is that structural differentiation needs to be balanced by forces of integration (cf., Galbraith, 1973; Lawrence & Lorsch, 1967). Without some methods for

coordinating and controlling disparate activities and functions, an organization will literally "dis-integrate" (cf. Davidson, 1998; James, 1997; O'Connell, 1996). As we have seen, the integrative potential of IT is enormous. Problems of time and distance shrink toward zero through shared information and remote communication. And in that regard, IT increases the "art of the possible" for network structures, allowing firms the discretion to contract externally and extend their boundaries more broadly than ever.

But there are other integrative concerns that need to be addressed as we move forward. One of the most important is the management of partner relationships. Apart from initial decisions about what should be retained internally and what should be externalized, firms need to enter into relationships carefully and make certain that the remain mutually beneficial over time. At Merck, for example, choosing an outside partner is heavily influenced by prior reputation and expertise. Even so, the company rarely makes broad-based commitments to a partnership, but rather begins with pilot programs to establish the exchange. There tend to be two over-riding key success factors in these partnerships. First, the company and the external partner need to establish clear expectations of one another. Through specific contracting, the partners establish the terms and conditions of the exchange as well as the resources and time frames for the work. In addition, as the work progresses success depends on frequent and open communications not only to identify potential problems but to develop ways to capitalize on arising opportunities. Over time, Merck works to solidify and enrich the partnerships through initiatives aimed at mutual learning. The company's Annual Strategic Learning Conference, for example, is an forum for bringing Merck staff together with external partners in order to work collaboratively on planning for upcoming years.

These relational elements are very important for cultivating a mutually beneficial partnership with external agents. And in that respect they are a very important integrative mechanism for virtual HR. Although researchers have begun to address the nature of exchanges such as these in the context of social capital, network development, and contingent contracting

(Matusik & Hill, 1998; Nahapit & Ghoshall, 1998; Podolny & Baron, 1997) more research needs to be done within the specific context of HR (Brass, 1995).

In addition to the integrative issues surrounding partner relationships, there are potentially critical issues with regard to the integration of HR systems themselves. Configurational frameworks of HR highlight the potential value of combining HR activities to create performance synergies (cf., Delery & Doty, 1996; Huselid 1995; MacDuffie, 1995). For example, high performance work systems are built on combinations of HR practices that reinforce knowledge development, information sharing, egalitarian relationships, and performance-reward linkages. Staffing, training, job design, performance management, and compensation practices work together to create a mutually reinforcing system of practices, the whole of which has a greater impact than any of the individual practices used in isolation. Early on, executives at Merck recognized the risk of potentially fragmenting their HR systems (and community) when they began to contract externally for particular services. They understood that if care were not taken to manage the integration explicitly, they might compromise the integrity of the overall system. And if that occurred, any short run benefits of cost reductions, flexibility and the like would be more than offset the long-term negative consequences on workforce effectiveness. For that reason, Merck executives retain total control and responsibility for planning and HR strategy.

While a good deal of research has been done recently on HR configurations and internal fit, much less is known about these issues in the context of external partnering, flexible structures, and virtual HR (Wright & Snell, 1999).

CONCLUSION

In this chapter we have tried to explore some of the underlying elements and parameters of virtual HR departments. By first working through the operational, relational, and transformation influences of IT, we hoped to show some of the ways that technologies are reducing the

administrative burden, automating processes, increasing productivity, providing employees and managers with remote access and connectivity, as well as extending the capabilities of the HR function itself. In doing so, we hopefully made clear how IT is enabling HR departments to "do more with less" while simultaneously enhancing its abilities to serve internal customers.

As a second fundamental piece of the equation, we also discussed the ways in which firms are utilizing external partners to perform some portion of their HR activities. The centerpiece of this discussion was a model that juxtaposes the strategic value of resources against their uniqueness. Based on this, we made observations about which HR activities and skills might be kept internal to the firm and which might be externalized. We also made distinctions between types of external relations (i.e., those that are market based versus those that are cultivated through mutual exchange). Ultimately, we laid out some recommendations for managing external relationships and suggested a few avenues for research that stem from these.

What is clear from our work in this area is that the notion of virtual HR is both compelling from a strategic standpoint and seductive from an operational one. The use of information technologies and external partnerships is rapidly expanding in both large and small organizations. And there may be a temptation, even a sense of urgency, about embracing the change.

But as we move forward, it is important to note that investments in neither area have been met with unbridled success, and combing them makes the prospects even more challenging. Our purpose for this chapter was to raise some issues about why firms are making the transformation, as well as the underlying mechanisms for doing so. It is an exciting time for HR to be sure. Rather than being seen merely as the purveyors of routine administrative services, HR departments have the opportunity to contribute substantially to the development of competencies and capabilities needed for competing in today's economy.

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